

CITY OF NANAIMO

THE HARBOUR CITY



Progress Nanaimo 2006 Indicator Summary Report

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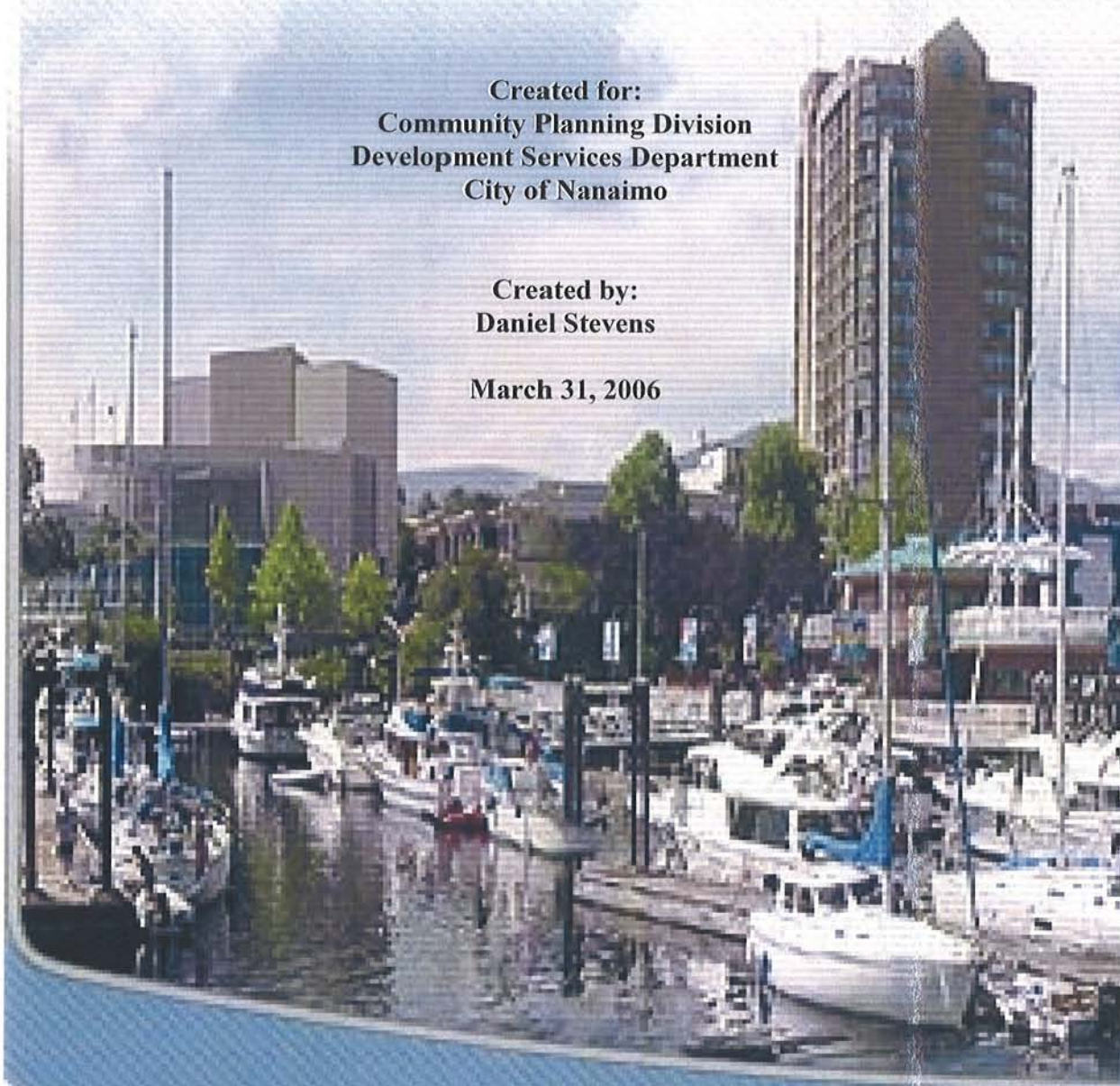


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Preface

This report is the result of a three month long project focused on evaluating the effectiveness of the goals and objectives laid out in Nanaimo's official community plan, *Plan Nanaimo*. The goal of the project is to assess how Nanaimo is doing as a City in 2006, and at the same time look at how Nanaimo has performed over the last decade by comparing the 2006 results with the results from *Progress Nanaimo 1998*. This report illustrates how Nanaimo has developed and changed, and how it is performing in respect to *Plan Nanaimo*.

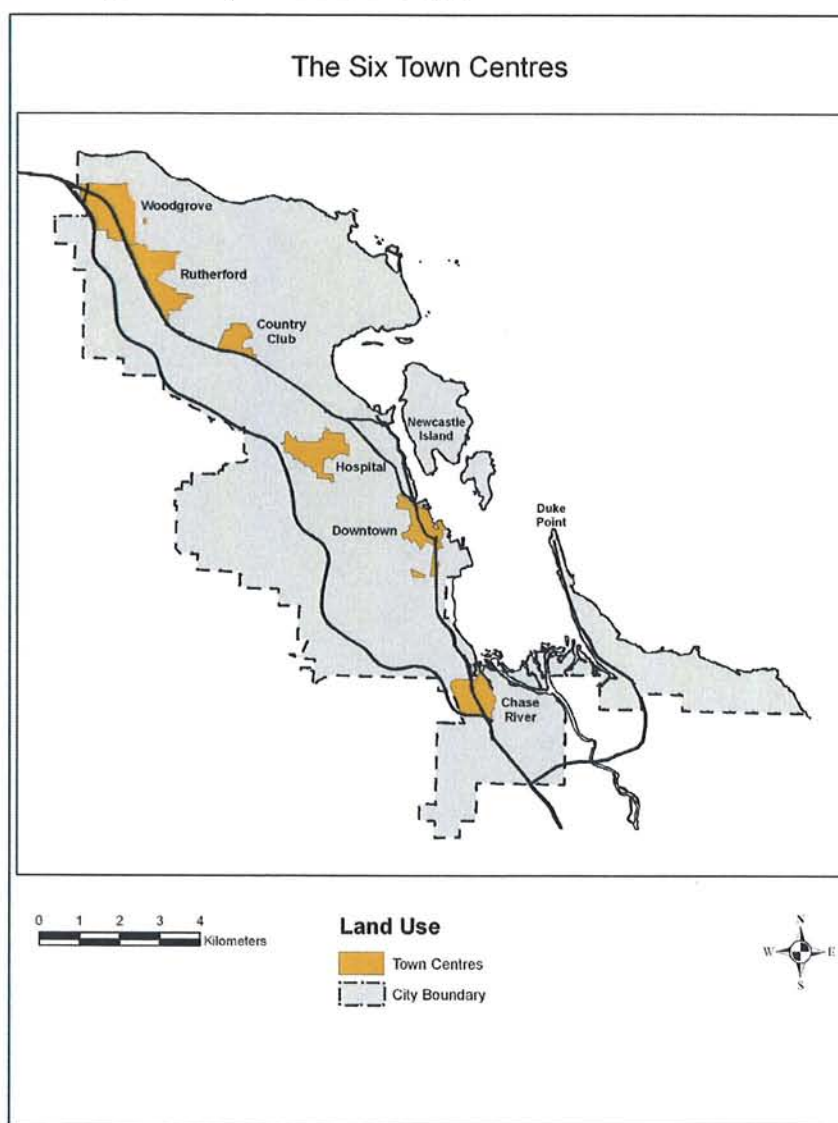
The specific indicators and measurements included in this report were adopted from the *Progress Nanaimo 1998* report. Although the project involved recalculating indicators that have been previously calculated, it was not as simple as inputting a few parameters to produce accurate results. The process involved gathering the necessary data over several weeks from many different sources, and then examining, questioning, understanding, and organizing it. Almost all of the data for this project had to be converted from one format to another, projected, overlaid, and incorporated in with all the other data. The indicator data requirements and methodology had to be gone over numerous times in order to gain a working knowledge of the data and the indicators themselves. Many times the original data from *Progress Nanaimo 1998* had to be gone back to and directly examined again, as it was sometimes the only way to determine how to proceed with a current task. This process of revisiting eight to ten year old data often uncovered more questions than answers. Comparing 2006 results to past results occasionally revealed inconsistencies, which led to more in-depth investigations into what the reality of the situation was and is. Some of the inconsistencies were never fully examined and understood, as it would require a significant amount of time and effort that is beyond the scope of this project. Most notable of the inconsistencies involves population comparisons. The method used to acquire population statistics for specific, custom-shaped areas had to be altered to accommodate changes to census boundaries (enumeration areas were used in 1998, which have since been replaced with dissemination areas that have different boundaries). Furthermore, the most recent population statistics were from the 2001 Canada Census, and the ones used in *Progress Nanaimo 1998* are from the 1996 Canada Census.

The project evolved from a seemingly simple recalculation of previously determined indicators into what has been deemed a study in 'forensic GIS'. This report is an analysis of the City of Nanaimo's planning and development achievements over the last 10 years. Many people have contributed time, effort, and data to help this project be completed and hopefully it provides insightful analysis for future reports, reviews and comparisons.

Progress Nanaimo 2006 Indicator Summary

Indicator 1a: Number of residential units per hectare (uph) in Town Centres, to determine if densities to support services in the Town Centres are being achieved.

The average residential density in Town Centres is 7.3 units per hectare, which is an increase from 5.8 uph in 1996 (1998 data not available). Across Town Centres, residential density ranged from 2.8 to 10.7 uph. Rutherford, Country Club, and the Hospital Town Centres experienced significant increases in residential density, Downtown, and Chase River Town Centres showed moderate increases, and Woodgrove Town Centre shows a moderate decrease in residential density. The boundary of the Downtown Town Centre was altered, resulting in much of its residential section being removed from the Town Centre. Residential density in Town Centres is still well below the target density of 100 to 150 uph.

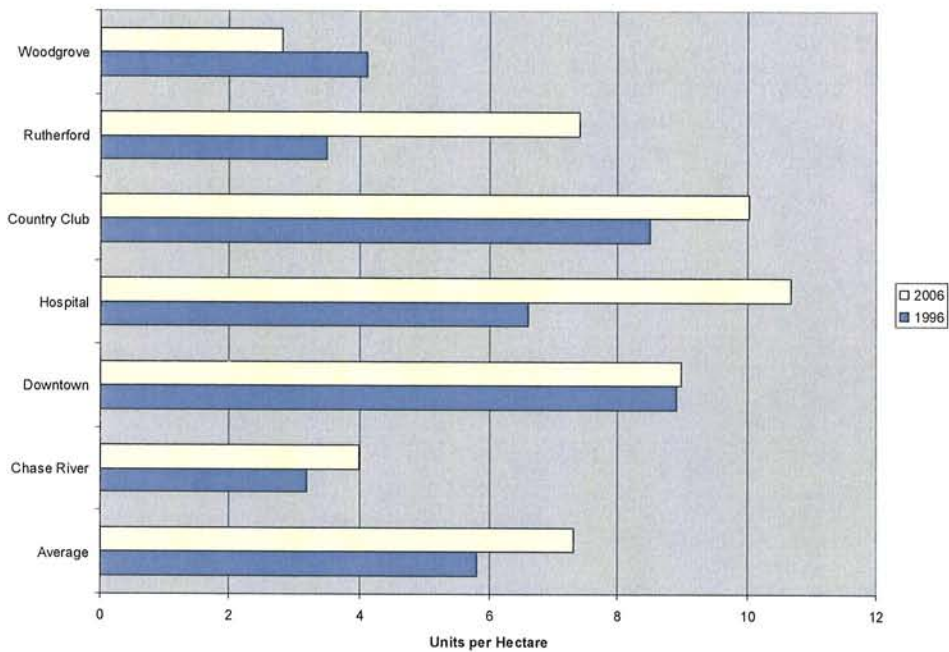


Source: City of Nanaimo GIS data

Town Centre	1996 (uph)	2006 (uph)	Difference in uph from 1996 to 2006
Woodgrove	4.1	2.8	-1.3
Rutherford	3.5	7.4	+3.5
Country Club	8.5	10.0	+1.5
Hospital	6.6	10.7	+4.1
Downtown	8.9	9.0	+0.1
Chase River	3.2	4.0	+0.8
Average	5.80	7.32	+1.5

Source: B.C. Assessment Authority, City of Nanaimo GIS data, Progress Nanaimo 1998

Graph 1a: Residential densities in Town Centres, 1996-2006



Source: B.C. Assessment Authority; City of Nanaimo GIS data; Progress Nanaimo 1998

Indicator 1b: Proportion of land in different uses to determine if Town Centres contain a mix of uses.

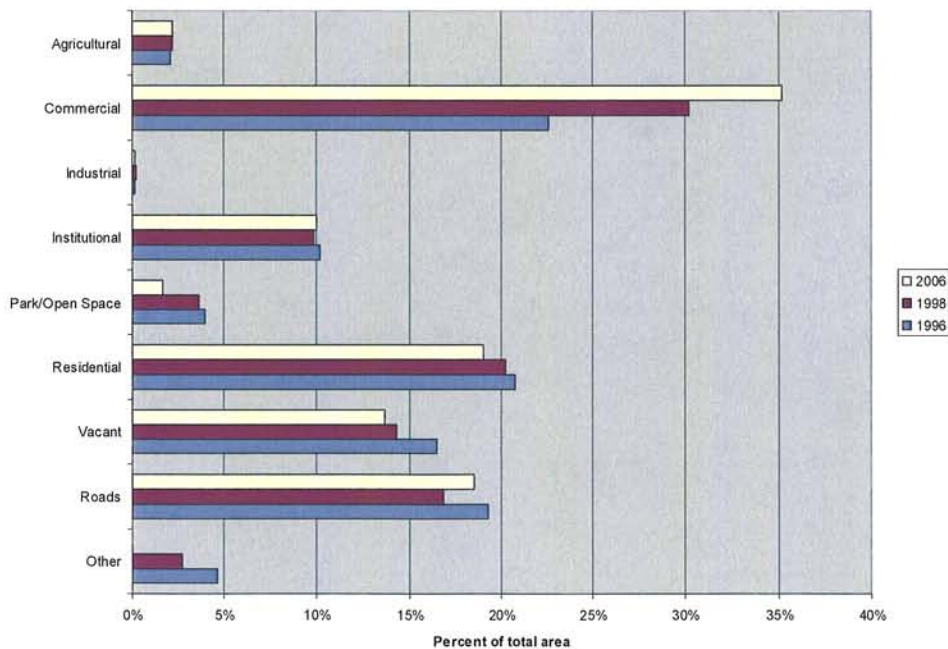
The proportion of Commercial land uses in Town Centres experienced significant increases from 1996 to 1998 and from 1998 to 2006. The proportion of Agricultural, Industrial, and Institutional land uses remained virtually the same from 1996 to 1998, through to 2006. Park and Open Space, Residential, and Vacant land uses all decreased slightly from 1996 to 1998, and from 1998 to 2006. The proportion of Road area in Town Centres fluctuated from 1996 to 2006, however it is difficult to exactly determine the area of Roads, so the fluctuation may not be entirely accurate. When calculating this indicator in 1996 and 1998, some areas were classified as Other (not falling into any of the land uses). When calculating this indicator in 2006, these areas were classified based upon land use zoning rather than actual use. This is the reason why Other land uses are all at 0% in 2006.

Table 1b: Mix of land uses (actual) in Town Centres, 1996-2006 (percent of total area)

	Chase River			Country Club			Downtown			Hospital			Rutherford			Woodgrove			Average		
	1996	1998	2006	1996	1998	2006	1996	1998	2006	1996	1998	2006	1996	1998	2006	1996	1998	2006	1996	1998	2006
Agricultural	1%	1%	1%	0.0%	0.0%	0%	0.0%	0.0%	0%	0.0%	0.0%	0%	0.0%	0.0%	0%	11.9%	12.3%	12%	2.1%	2.2%	2.2%
Commercial	21%	29%	28%	16.4%	39.0%	44%	26.8%	28.0%	45%	12.1%	16.3%	17%	26.1%	32.1%	32%	33.0%	36.8%	45%	22.6%	30.2%	35.2%
Industrial	0%	0%	0%	0.0%	0.0%	0%	0.8%	1.1%	1%	0.0%	0.0%	0%	0.0%	0.0%	0%	0.0%	0.0%	0%	0.1%	0.2%	0.2%
Institutional	5%	4%	1%	14.9%	14.8%	15%	9.7%	7.9%	9%	24.3%	23.9%	25%	0.7%	2.9%	3%	7.2%	5.8%	7%	10.2%	9.8%	10.0%
Park/Open Space	6%	4%	0%	0.5%	0.5%	1%	3.7%	3.0%	1%	5.8%	6.3%	2%	6.4%	6.2%	6%	1.6%	1.8%	0%	4.0%	3.7%	1.7%
Residential	25%	23%	30%	25.4%	22.5%	22%	23.5%	23.8%	9%	22.3%	21.5%	23%	20.3%	22.5%	18%	7.6%	7.7%	12%	20.7%	20.2%	19.0%
Vacant	18%	14%	18%	3.4%	4.3%	4%	5.7%	5.4%	8%	24.9%	20.6%	15%	29.5%	26.9%	32%	17.5%	14.5%	5%	16.5%	14.3%	13.7%
Roads	17%	17%	22%	39.4%	18.1%	14%	24.8%	27.6%	28%	6.5%	10.3%	19%	11.1%	9.2%	9%	17.3%	18.4%	19%	19.3%	16.8%	18.5%
Other	9%	8%	0%	0.1%	0.8%	0%	4.9%	3.2%	0%	4.2%	1.1%	0%	6.0%	0.2%	0%	3.9%	2.8%	0%	4.7%	2.7%	0.0%

Source: B.C. Assessment Authority; City of Nanaimo GIS data, Progress Nanaimo 1998

Graph 1b: Average land use percentages across all Town Centres, 1996-2006



Source: B.C. Assessment Authority; City of Nanaimo GIS data; Progress Nanaimo 1998

Indicator 2a: The number of entries in the heritage register to track additions to and deletions from the inventory.

In September 2002 the Heritage Register was created by Council Resolution. At the time of creation, the Heritage Register included 141 buildings, 6 cemeteries, and 6 structures. In 2006, the Heritage Register now includes 145 buildings, 6 cemeteries, and 6 structures.

Indicator 2b: The number of recommendations from the Heritage Action Plan that have been implemented.

In 2006, more than half of the Heritage Action Plan's recommendations have been implemented. Of the fifteen recommendations, eight are *Completed*, two are *On-Going*, and three are *In Progress*. This shows a substantial increase from 1998, when two of the recommendations had been implemented.

Indicator 3a: Density in the neighbourhood area to monitor the Plan's target densities of 15 units per hectare (uph) in neighbourhoods and 8 uph in suburban neighbourhoods.

Suburban residential density in 2006 is 4.2 uph, which is up from 3.7 uph in 1996. Neighbourhood residential density also experienced a slight increase from 5.9 uph in 1996 to 6.0 in 2006.

Table 3a: Residential density in neighbourhood and suburban neighbourhood areas

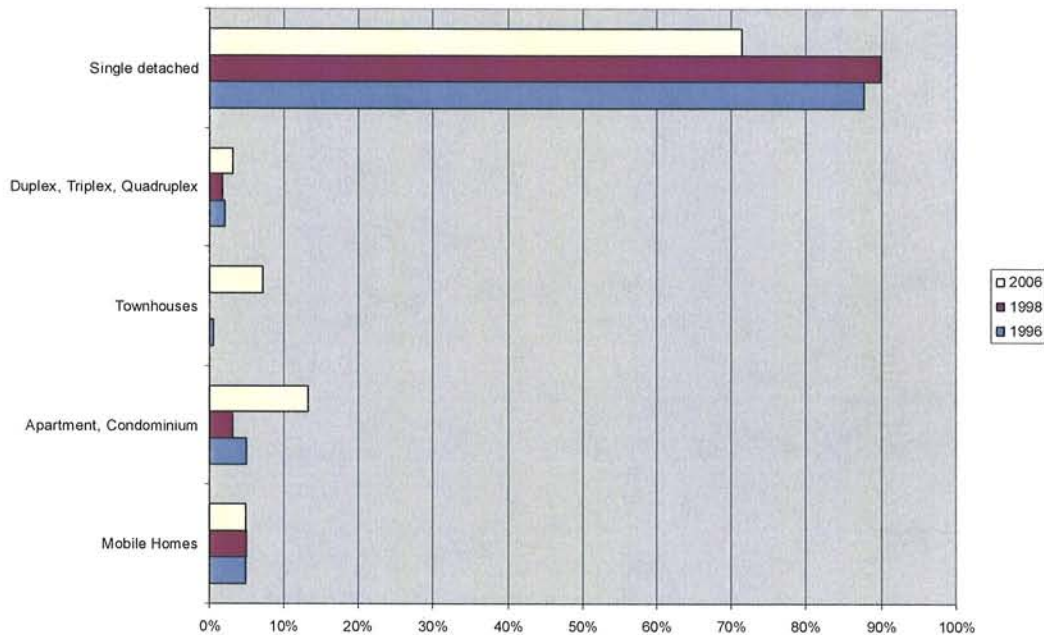
Neighbourhood Areas			
Year	# of Units	Hectares	Units per hectare
2006	24139	4000.3	6.03
1996	21320	3595.1	5.93
Difference	2819	405.2	0.10
Suburban Areas			
Year	# of Units	Hectares	Units per hectare
2006	2247	533.9	4.21
1996	1528	418.4	3.65
Difference	719	115.5	0.56

Source: B.C. Assessment Authority, City of Nanaimo GIS data, Progress Nanaimo 1998

Indicator 3b: Mix of housing types indicating the proportion of properties that are single-detached, semi-detached (duplex, triplex, etc.), mobile homes, ground-oriented townhouses and non-ground-oriented attached units.

Single-detached houses continue to be the dominant house type in neighbourhood areas, accounting for 71% of residential houses. This is a significant decrease in the overall proportion of housing types, which is desirable. Since 1998, the proportion of townhouses, semi-detached houses (duplex, triplex, quadruplex), and apartments/condominiums experienced healthy increases. Mobile homes have maintained their proportion of about 5% since 1996.

Graph 3b: Housing Types in Neighbourhood areas, 1996-2006



Source: B.C. Assessment Authority; City of Nanaimo GIS data; Progress Nanaimo 1998

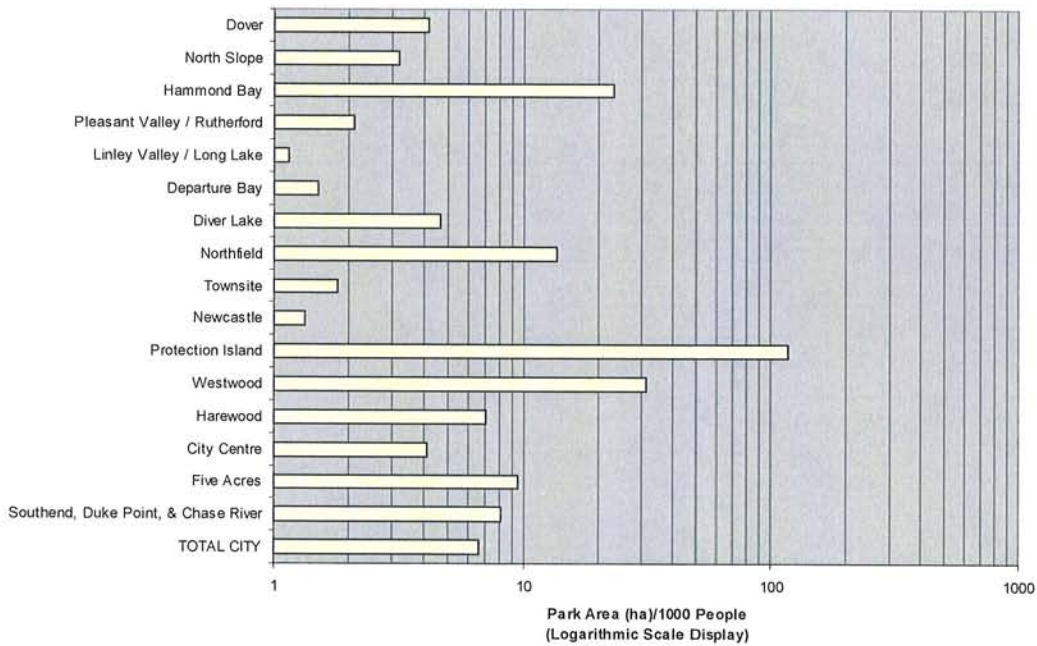
Indicator 3c: Accessibility to commercial services showing the proportion of neighbourhood areas that are within 500 meters (considered to be average maximum walking distance) of commercial services.

In 2006, 67% of all properties in neighbourhoods are within 500 meters of commercial services. This is an increase from 61% in 1996. Being within a close proximity to commercial services provides residents with more opportunity to walk or cycle to basic services.

Indicator 4a: Total park area and park area per capita in the city as a whole and in identifiable neighbourhoods.

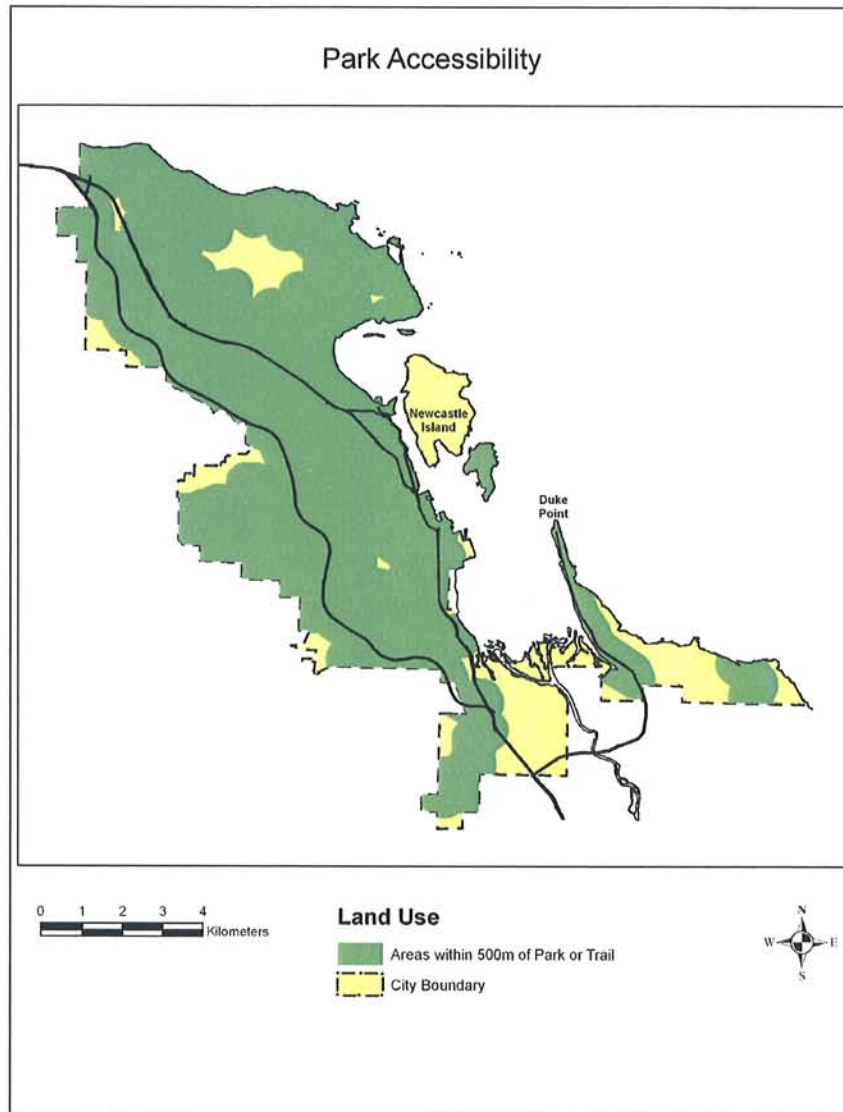
In 2006, the park area (ha)/1000 people calculation for the City as a whole remains the same at 6.6 ha of City Park per 1000 people. Protection Island has by far the most amount of park land per capita. Westwood, Hammond Bay, and Northfield planning areas all have more than double the amount of park area per capita than the City average. North Slope, Pleasant Valley/Rutherford, Linley Valley/Long Lake, Departure Bay, Townsite, and Newcastle planning areas all have less than half of the City average of park area per capita. The neighbourhood areas used for this indicator are based on planning area boundaries, which in some cases may not coincide with people’s expectations. Furthermore, only city parks are considered in this indicator as they are managed by the City, provincial parks and other park-like areas are not factored in. The Newcastle area used for this indicator does not include Newcastle Island. The section of Linley Valley that is a city park is not completely inside the Linley Valley/Rutherford area, it is actually part of Hammond Bay and Departure Bay areas as well. Finally, park area in this indicator does not include lakes, but it does include the area around lakes if it is a city park.

Graph 4a: Park Area (ha)/1000 people in 2006



Source: 2001 Canada Census; City of Nanaimo GIS data

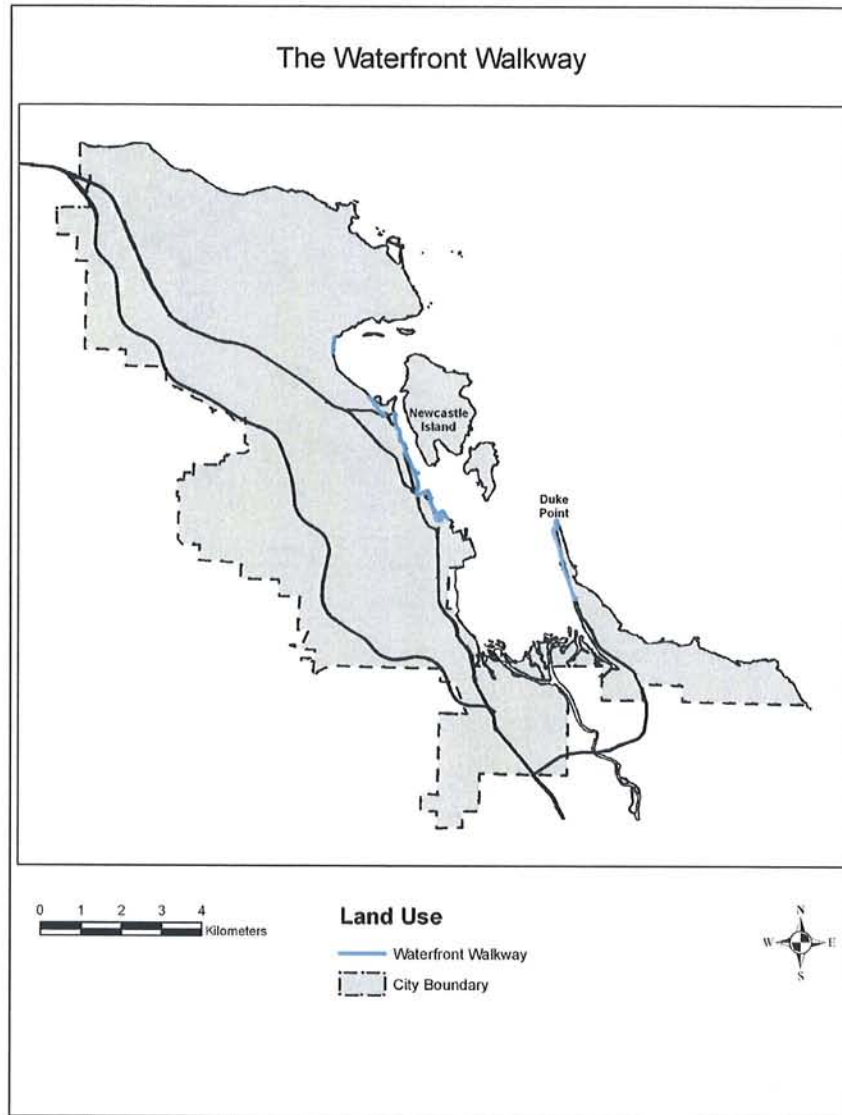
Indicator 4b: Proportion of neighbourhood areas that lie within 500 meters of a park or trail (500 m is considered a maximum walking distance for most people).
In 2006, 86% of all neighbourhood areas are within 500 meters of a park or trail. This proportion has increased from 84% in 1998.



Source: City of Nanaimo GIS data

Indicator 5: The length (in kilometres) of the Waterfront Walkway was used to indicate public access to the marine waterfront.

In 2006, the Waterfront Walkway length is 7.8 kilometres in length, an increase from 6.4 kilometres in 1998. This indicator includes waterfront trails located between Departure Bay and Downtown, and the Jack Point/Biggs Park trails.



Source: City of Nanaimo GIS data

Indicator 6: The proportion of enterprise areas being used for their designated purpose is used to assess the adequacy of enterprise areas in providing the land base for economic development in Nanaimo.

Overall, there has been an increase in the proportion of consistent land uses within all the types of enterprise areas – Industrial, Service industrial, and Research, Education, & Development.

Industrial Enterprise Areas

From 1998 to 2006, the total area of Industrial lands increased by two hectares. The proportion of Industrial lands that have consistent land uses increased from 51% in 1998 to 56% in 2006. Inconsistent land uses decreased from 12% in 1998 to less than 5% in 2006. Vacant Industrial lands increased from 37% in 1998 to 40% in 2006.

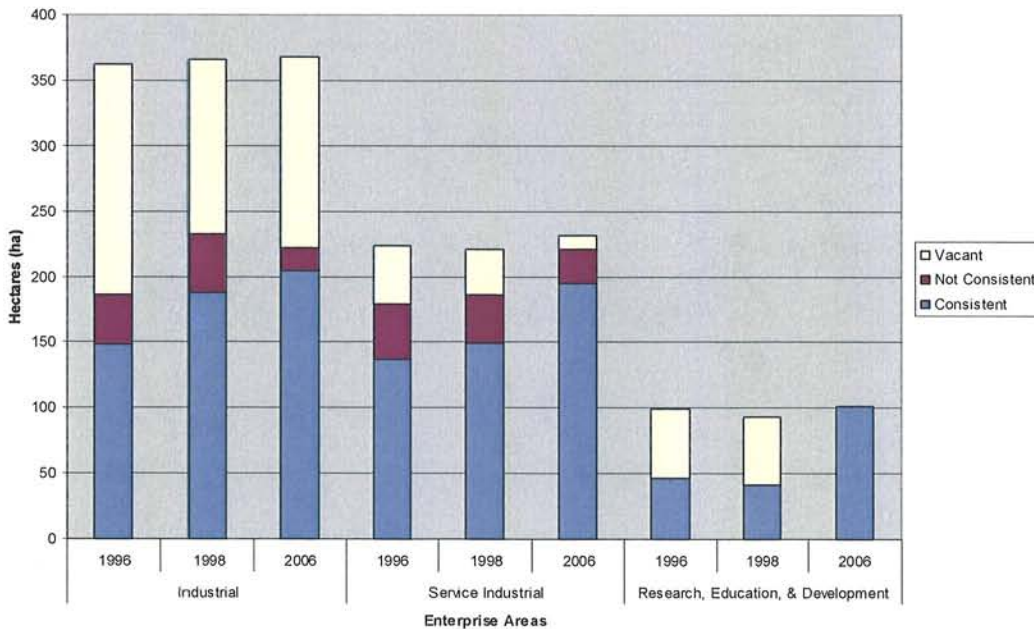
Service industrial Enterprise Areas

From 1998 to 2006, the total area of Service industrial lands increased by more than ten hectares. The proportion of Service industrial lands that have consistent land uses increased from 68% in 1998 to 84% in 2006. Inconsistent land uses decreased from 16% in 1998 to 11% in 2006. Vacant lands decreased from 16% in 1998 to less than 5% in 2006.

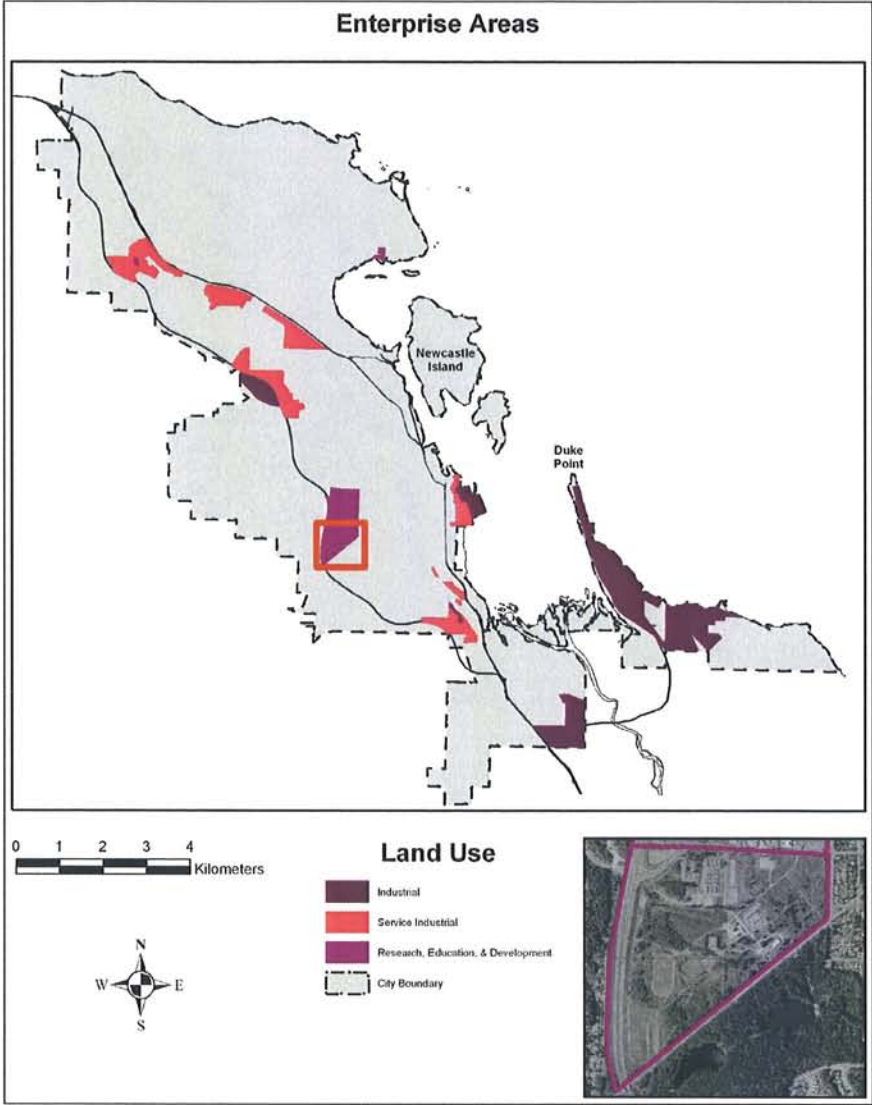
Research, Education, & Development Enterprise Areas

From 1998 to 2006, the total area of Research, Education, & Development lands increased by just over eight hectares. The proportion of Research, Education, & Development lands that have consistent land uses increased from 44% in 1998 to 100% in 2006 (the increase in consistent land uses is due to changes as to what land uses are considered consistent). All Research, Education, & Development lands are being used for their designated purpose, however a significant portion of the lands are occupied by the Department of National Defence (DND) base located adjacent to Malaspina University-College. The DND base is currently underdeveloped, but it is not technically vacant (see inset air photo on Enterprise Areas map on page 13).

Graph 6: Proportion of enterprise areas used for designated purpose, 1996-2006



Source: B.C. Assessment Authority; City of Nanaimo GIS data; Progress Nanaimo 1998



Source: City of Nanaimo GIS data

Indicator 7: The concentration of air-borne fine particulate matter and Ozone are used as the air quality indicator in Nanaimo.

Nanaimo measures the concentration levels of fine particulate matter (PM2.5) and Ozone on an hourly basis, using an analyzer located at the Regional Office of the Ministry of Environment, Lands and Parks (MELP) on Labieux Road. The measurements are then be classified using the Air Quality Index (AQI), based on federal guidelines. From January 1999 to December 2004, more than 99.5% of Nanaimo’s air quality measurements were classified as “good” according to the AQI. The remaining readings, less than 0.5% of the total, were classified as “fair”. There were no “poor” air quality readings for PM2.5 or Ozone from 1999 to 2004. There has been and continues to be much research focused on the AQI in Canada, subsequently the classification system utilized in the *Progress Nanaimo 1998* report is no longer used so direct comparisons are difficult. The majority of air quality readings for 1998, shown in *Progress Nanaimo 1998*, were “good”, but there were seven months that had some “fair” readings, and almost 7% of October 1998 readings were “poor”. However, these readings were based on a more stringent classification system.

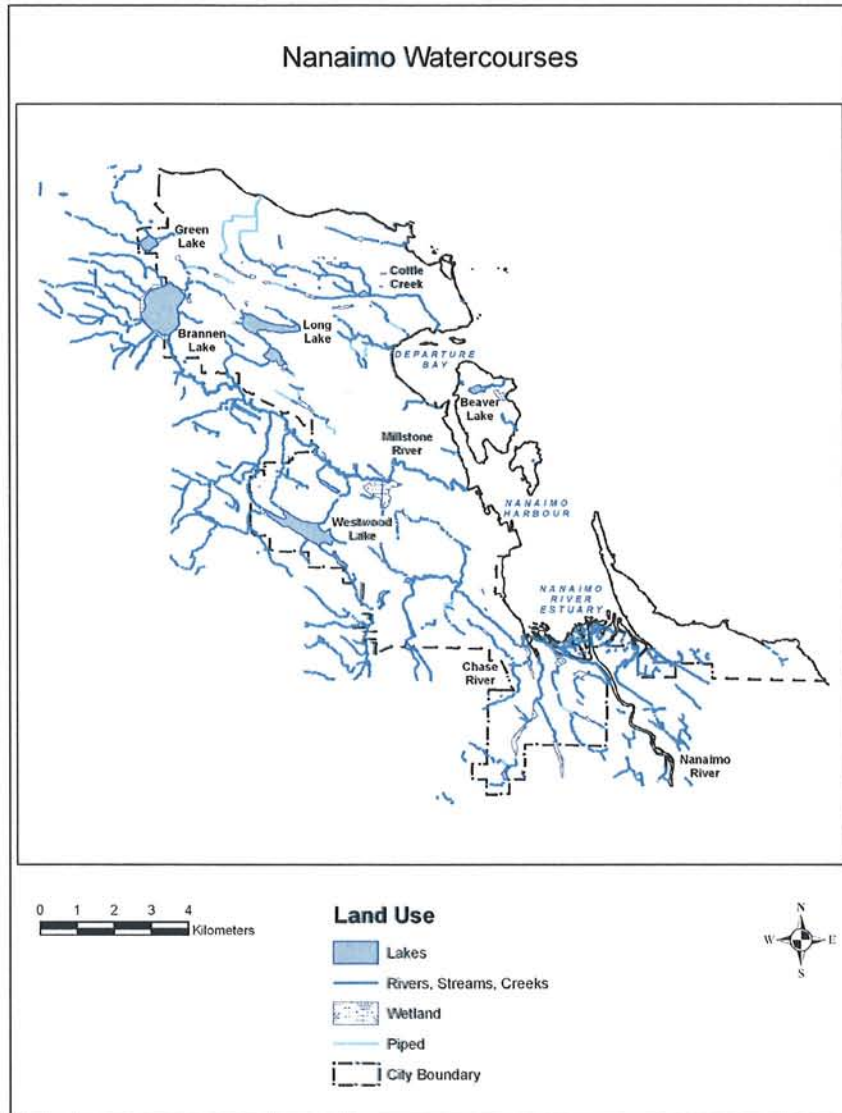
Table 7: 2006 Air Quality Index Classification

Air Quality Index Classification	PM2.5 levels (micrograms/m³)	Ozone levels (parts per million)	What it means:
Good	0-25	less than 0.05	"Good" air quality indicates that people with healthy lungs are unlikely to experience any noticeable impact from air pollutants.
Fair	26-50	0.05-0.08	"Fair" air quality indicates that people with sensitive respiratory systems may experience discomfort. Most healthy people would not experience any effect.
Poor	51-100	0.08-0.15	"Poor" air quality indicates that many people may experience some discomfort such as a dry throat or watery eyes. People with sensitive respiratory systems could experience greater discomfort.

Source: Environment Canada

Indicator 8: Nanaimo Watercourses

Progress Nanaimo 1998 contained an indicator that showed the relative occurrence of fish in Nanaimo's creeks and rivers. The results were based on a 1993-94 Nanaimo urban stream enhancement study. There has been no similar study performed in the Nanaimo area since the last one, so there is no new data to present at this time.



Source: City of Nanaimo GIS data

Indicator 9a: Number and area of Environmentally Sensitive Areas (ESAs) identified in Plan Nanaimo to reflect any losses resulting from new development and additions as our knowledge of the location, distribution, and significance of Nanaimo's ecosystems grows. In 2006, there are 175 sites designated as ESAs, with a combined total area of 753 hectares. In 1998, there were 167 sites covering 786 hectares. This shows that the number of sites has increased, but the total area has decreased since 1998.

Table 9a: Status of ESAs, 1998-2006

ESA Type	2006								1998		
	Number of Sites	Area (ha)	Protected by Parks (ha)	% Protected by Parks	Protected by DPA (ha)	% Protected by DPAs	Not Protected (ha)	% Not Protected	Number of Sites	Area (ha)	% in parks or reserves
COASTAL BLUFF	8	14.2	1.7	12%	10.1	71%	4.1	29%	8	14.2	12%
TERRESTRIAL HERBACEOUS	23	45.5	10.4	23%	44.1	97%	1.4	3%	23	36.6	26%
SPARSELY VEGETATED	5	8.9	3.0	34%	6.1	69%	2.8	31%	5	8.9	34%
WOODLAND	7	39.9	12.6	32%	18.0	45%	20.2	51%	7	43.2	32%
OLDER FOREST	3	26.4	2.4	9%	26.3	100%	0.2	1%	3	20.6	12%
RIPARIAN	36	88.6	27.2	31%	71.8	81%	12.8	14%	28	110.8	34%
WETLAND	61	255.9	126.0	49%	232.1	91%	22.1	9%	64	260.1	49%
SUBTOTAL	143	479.4	183.3	38%	408.5	85%	63.6	13%	138	494.4	40%
SEASONALLY FLOODED*	15	67.6	0.0	0%	49.2	73%	18.4	27%	12	67.6	0%
SECOND GROWTH FOREST*	17	205.8	39.7	19%	118.9	58%	85.1	41%	17	223.6	18%
TOTAL	175	753	223	30%	576.6	77%	167.1	22%	167	785.6	30%

*Considered environmentally important but not necessarily sensitive.

NOTE: Due to the difficulty of defining the location of river banks, water-related DPAs were measured from river centerlines instead. The result of this is that the area Protected by DPAs in this table are less than the actual area protected.

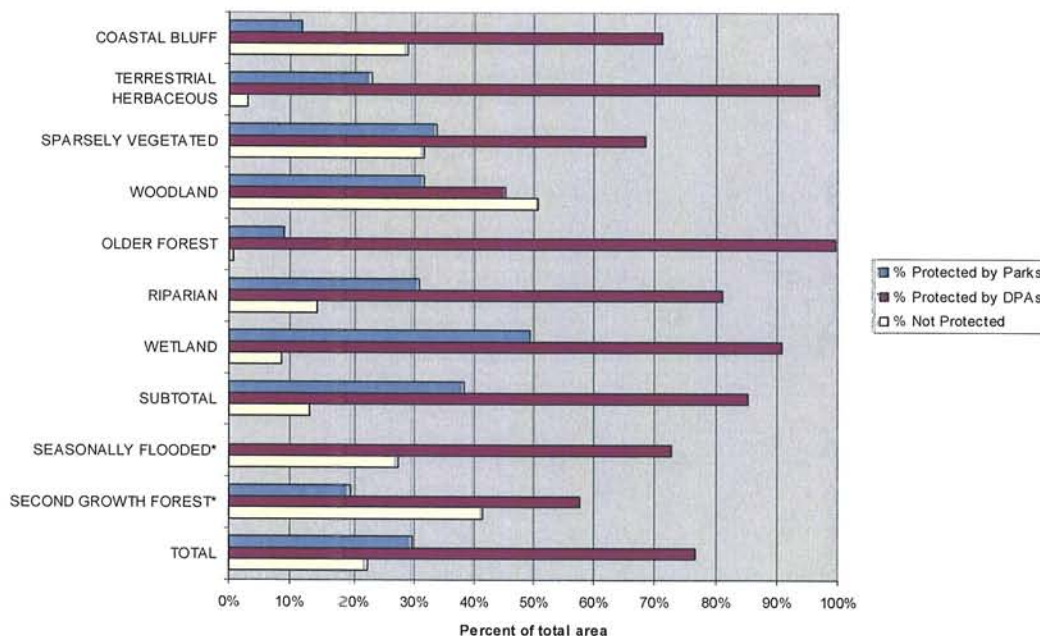
NOTE 2: % totals may not add up to 100% due to rounding.

Source: City of Nanaimo GIS data, Progress Nanaimo 1998

Indicator 9b: Proportion of ESA area protected to reveal the effectiveness of environmental protection efforts. ESA protection is defined as inclusion of the area in a park or nature reserve (city, regional, provincial or private).

Parks or nature reserves encompass all or part of 71 ESAs, covering 223 hectares or 30% of the total ESA area. New development permit areas (DPAs) have been introduced since 1998, which encapsulate more ESAs than before, thereby providing increased protection to the areas. In 2006, 576 hectares, or 77% of the total ESA area, are located in DPAs (some of which may overlap parks or nature reserves). DPAs regulate development to avoid or minimize negative impacts on the environment, but do not offer the same level of protection as parks or nature reserves. A total of 167 hectares, or 22% of the total ESA area, are not protected by a park, nature reserve, or development permit area.

Graph 9b: Status of ESAs in 2006



Source: City of Nanaimo GIS data

Indicator 10a: Land area inside and outside the Urban Containment Boundary (UCB).

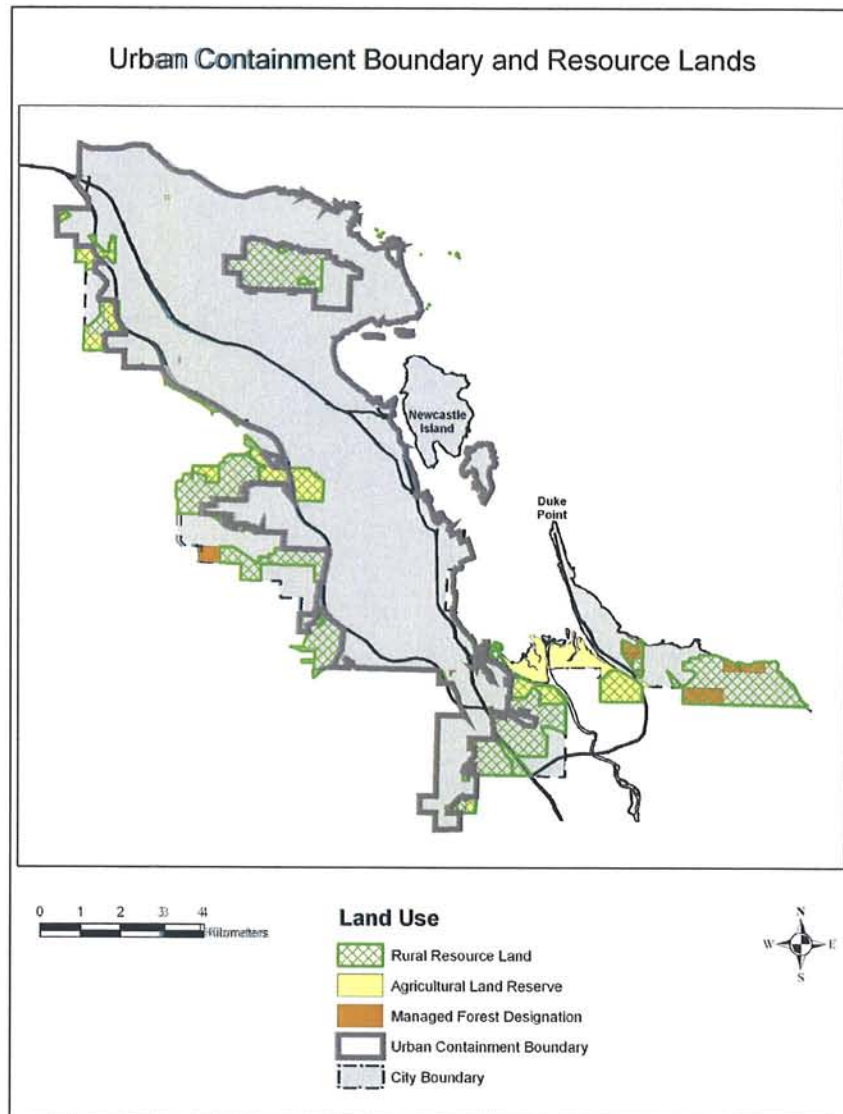
This indicator will reveal adjustments to the UCB.

The results for this indicator shown in *Progress Nanaimo 1998* are inconsistent with the methodology and technical report results. Furthermore, all attempts to reproduce the results found in *Progress Nanaimo 1998* have been unsuccessful. Comparisons between 1998 and 2006 for this indicator may not be accurate. From 1998 to 2006, the area inside the UCB decreased by 61 hectares, and the area outside the UCB increased by 56 hectares. Despite the changes, the proportion of area inside/outside the UCB has remained about the same.

Indicator 10b: Population inside and outside the Urban Containment Boundary (UCB).

The target is to focus new population growth inside the UCB.

The methodology for calculating population by specific areas has changed from 1998 to 2006, new developments in the software utilized have increased the accuracy, however the change in methodology makes direct population comparisons questionable, and likely inaccurate. In 2006, the population living inside the UCB is 69,476, which is 95.2% of the City's total population. The population living outside the UCB is 3,519, which is 4.8% of the total population. The proportion of people living inside the UCB has decreased by almost 4%, with that segment of the population moving outside the UCB.



Source: City of Nanaimo GIS data

Table 10: Land and population inside and outside the UCB

	1996		1998		2006*	
	Inside UCB	Outside UCB	Inside UCB	Outside UCB	Inside UCB	Outside UCB
Area in ha (%)	6,193 (71%)	2,546 (29%)	6,223 (72%)	2,389 (28%)	6,162 (72%)	2,445 (28%)
Population	69,504 (99.1%)	626 (0.9%)	not available	not available	69,476 (95.2%)	3,519 (4.8%)

*Source: *2001 Canadian Census; City of Nanaimo GIS data; Progress Nanaimo 1998*

Indicator 11: Nanaimo Parkway

The Progress Nanaimo 1998 report contained an indicator that looked at the percentage of the Parkway that had a buffer of undeveloped land on both sides. This indicator was not calculated for this report.

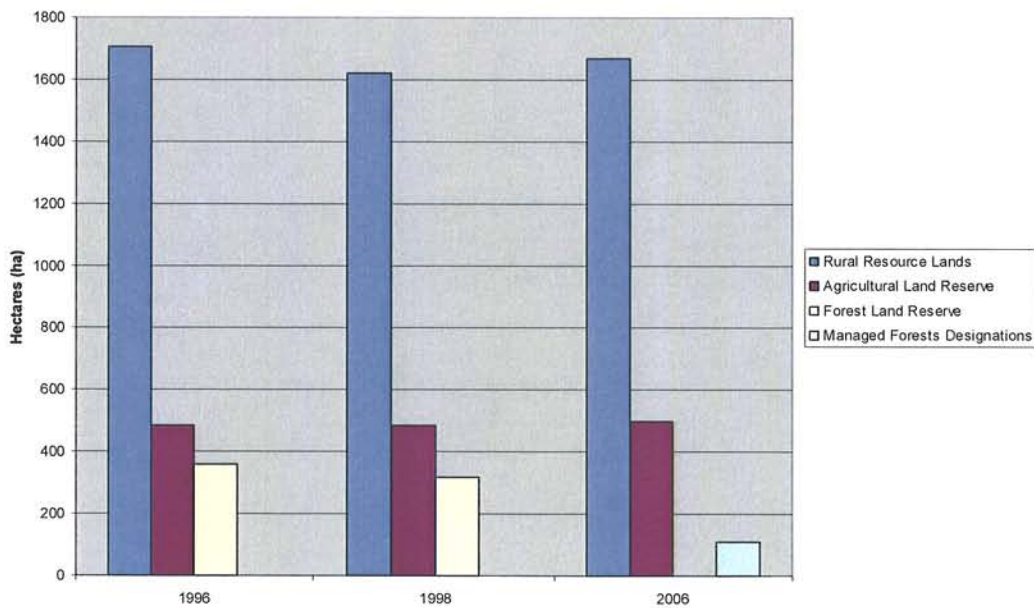
Indicator 12a: Total area of the Rural Resource Land (RRL) designation to indicate whether this area is being converted to other uses over time. Lands in the Agricultural Land Reserve (ALR), Forest Land Reserve (FLR), and Managed Forest Designation (MFD) are monitored as components of this total area.

From 1998 to 2006, the total area of Rural Resource Lands increased by 46 hectares. 15 of those 46 hectares are designated as Agricultural Land Reserve. The Forest Land Reserve is no longer used, however Managed Forest Designations have been introduced which are similar to FLR lands. In 2006, 110 hectares of RRL land is included in a MFD.

	1996	1998	2006
Rural Resource Lands (ha)	1704	1622	1668
Agricultural Land Reserve (ha)	485 (28%)	485 (30%)	500 (30%)
Forest Land Reserve (ha)	358 (21%)	317 (20%)	-
Managed Forests Designations (ha)	-	-	110 (7%)

Source: City of Nanaimo GIS data; Progress Nanaimo 1998

Graph 12a: Area and proportion of Rural Resource Lands, Agricultural Land Reserves, Forest Land Reserves, and Managed Forests Designations

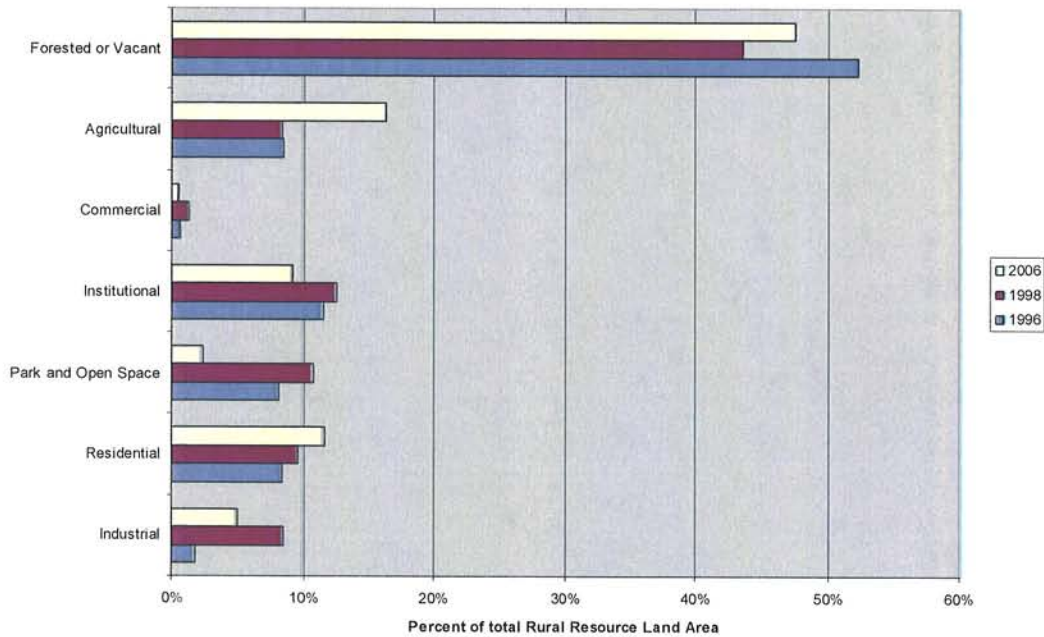


Source: City of Nanaimo GIS data; Progress Nanaimo 1998

Indicator 12b: Land uses in Rural Resource Lands to assess whether or not the current uses area appropriate for the Rural Resource designation.

Forested or Vacant lands are by far the most common land use in Rural Resource Lands, as was found in 1996 and 1998. Since 1998, agricultural land uses in RRLS have doubled in area. However, Park and Open Space land uses have dropped to ¼ of what they were in 1998. (NOTE: Some of the land classified as Agricultural may actually be Vacant or Forested. Some of the properties in these areas were classified based on land zoning, in cases where the actual land use data was not available).

Graph 12b: Land use in Rural Resource Lands



Source: B.C. Assessment Authority; City of Nanaimo GIS data; Progress Nanaimo 1998

Indicator 13a: Transportation mode used to commute to work, based on data from the 1996 and 2001 Canada Censuses.

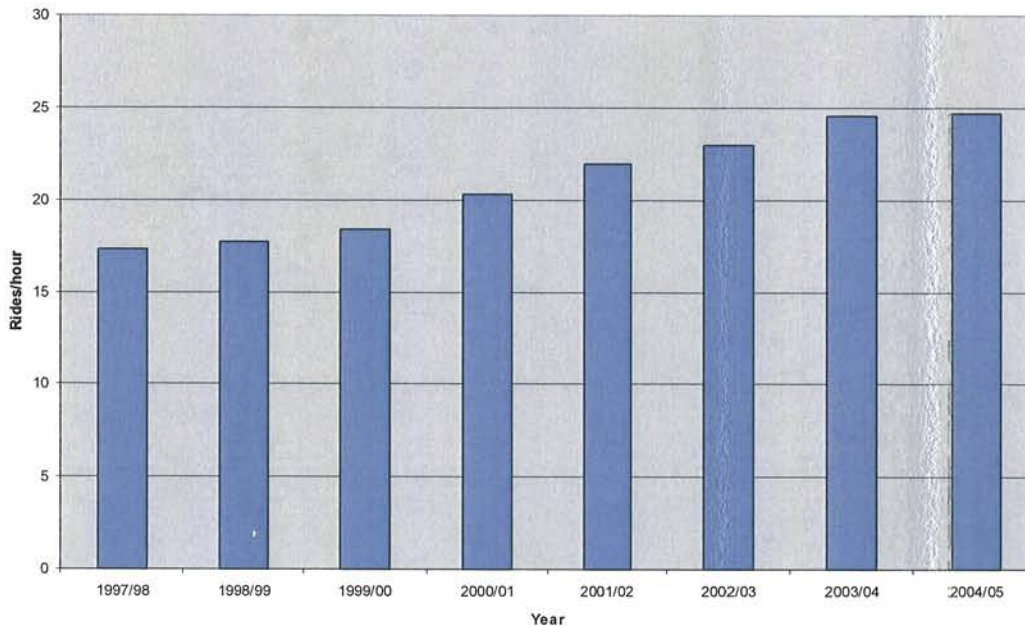
88% of the 34,235 commuters in Nanaimo use a car to commute to work, which is 6% more than the BC average. 93% of the Nanaimo car commuters were in single occupant vehicles, which is a 3% increase from 1998. For the most part, the percentages are very similar to 1998 statistics, with the main difference being that the number of commuters in Nanaimo increased by more than 8,000 people.

Table 13a: Transportation mode used to get to work			
Transportation Mode	Nanaimo (34,235 total commuters)	B.C.	Canada
Vehicle, single or shared	88%	82%	81%
Transit	3%	8%	11%
Bike	2%	2%	1%
Walk	6%	7%	7%
Motorcycle, taxi, other	1%	1%	1%
34,235 total commuters in Nanaimo			
93% of Nanaimo car users in single occupant vehicle			
<i>Source: 2001 Statistics Canada Census</i>			

Indicator 13b: Use of public transit; see if Nanaimo is moving toward the Regional District's transit target of 25 rides/hour.

By 2005, ridership on Nanaimo public transit has steadily increased to 24.6 rides per hour, which is a mere 0.4 rides/hour less than the 2003 target of 25 rides/hour. The number of rides/hour has increased every year from 1998 to 2005.

Graph 13b: Use of public transit



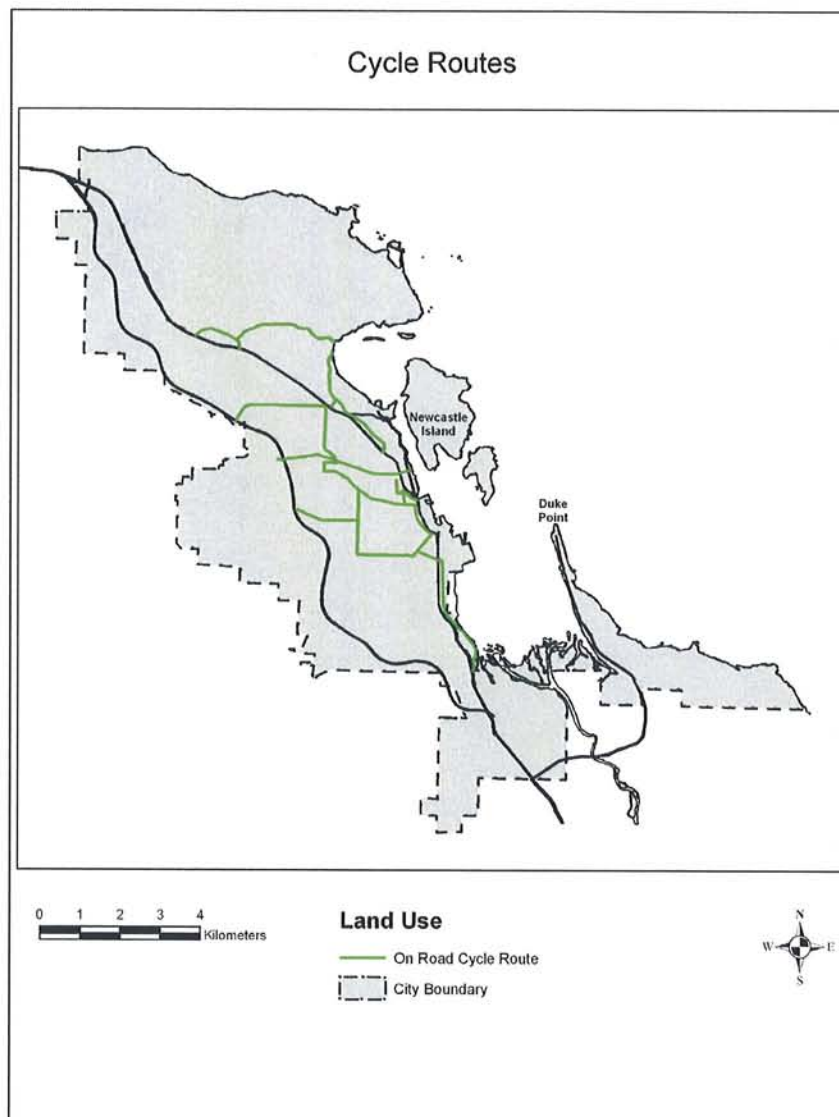
Source: B.C. Transit

Indicator 13c: Kilometers of roads in Town Centres with sidewalks; the target is 100% sidewalk coverage on both sides of streets in all town centres.

There are just over 62 kilometres of roads in the six Town Centres, 47% of which have raised sidewalks. This is still short of the target of 100% sidewalk coverage in all Town Centres, but it is a substantial increase from 31.6% sidewalk coverage in 1998. The Downtown has the highest sidewalk coverage at 60%. Chase River has the least amount at 11%, and the rest of the Town Centres have sidewalk coverage percentages of 45-50%.

Indicator 13d: Kilometers of signed or marked on-road cycle routes; to see what proportion of *Plan Nanaimo*'s designated Cycle Routes are marked.

In 2006, almost 30 kilometres of Nanaimo's roads are marked as on-road cycle routes, which is 5% of the City's roads. This is an increase of 8 kilometres of marked, on-road cycle routes since 1998.

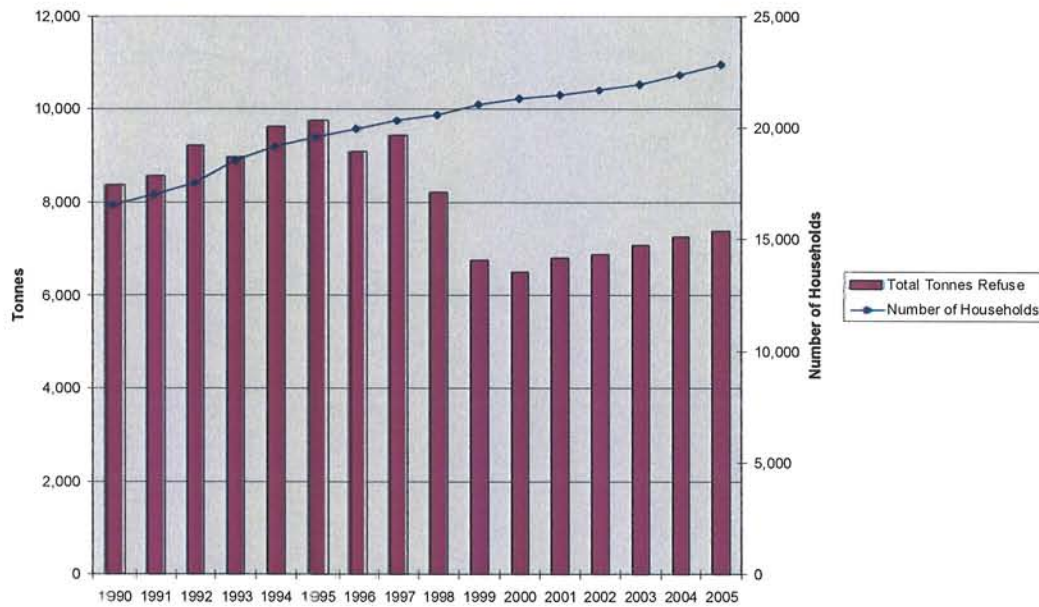


Source: City of Nanaimo GIS data

Indicator 14a: Annual kilograms of refuse per household based on the households served by the City's curbside pickup program.

The number of households served by the City's curbside pickup program has continually increased from 1990 to 2005; 22,833 households were served in 2005. From 1999 to 2005 the total amount of refuse collected annually has been less than any year from 1990 to 1998, despite the increase in the number of households served. However, since 2000 the annual amount collected has been increasing every year.

Graph 14a: Total refuse collected annually and number of households served by City collection service

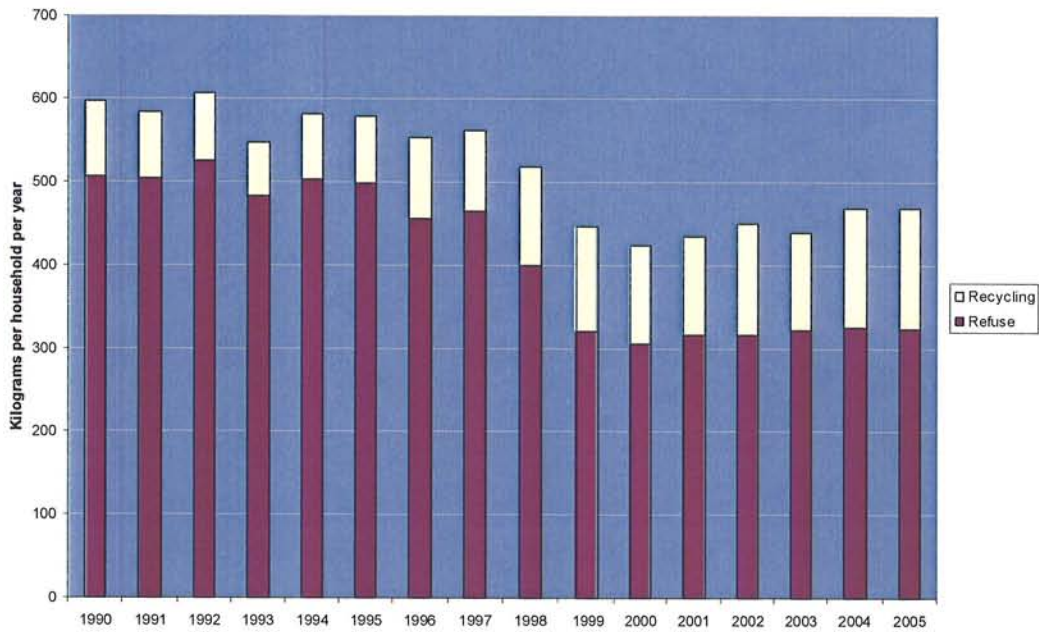


Source: City of Nanaimo Public Works

Indicator 14b: Annual kilograms of recyclables per household based on the households served by the City's curbside pickup program.

The amount of recycled material collected by the City's curbside pickup program has increased 61% since 1990, or 23% since 1998. More recycled material was collected in 2005 than any other year, and 2005 was also the first year since 2000 that the amount of refuse per household experienced a decrease.

Graph 14b: Household recycling and refuse trends



Source: City of Nanaimo Public Works

Indicator 15: The status of the initiatives presented in *Plan Nanaimo* is the indicator used to assess progress in implementing the Plan.

In 2006, 28 of the 73, or 38%, initiatives have been completed, and another 28 initiatives (38%) are in progress. This shows that much progress has been made since 1998, when 16% were completed and 21% were in progress.

Table 15: Status of *Plan Nanaimo* Initiatives

Category	Project	Status
Neighbourhood Plans (including associated Neighbourhood Village Concept Plans - NVCPs)	Chase River/Fielding Road Southend	Completed Incomplete
	Harewood (including Bruce and Eighth, Bruce and Tenth, and Wakesiah and Jingle Pot NVCPs)	Wakesiah and Jingle Pot NVCP completed but not adopted
	Brechin (including Sealand and Terminal Park NVCPs)	Incomplete
	Departure Bay (including Departure Bay NVCP)	Process Initiated
	Hammond Bay (including Williamson Road NVCP)	Partial Adoption
	Wellington Townsite area	Incomplete
	Northfield and Bowen Roads NVCP	Incomplete
	Other neighbourhood plans including suburban and rural neighbourhood areas	
	Old City Neighbourhood Plan	Complete
Town Centre Structure Plans	Southgate	Incomplete
	Downtown	Complete
	Townsite/Hospital	Incomplete
	Country Club	Incomplete
	Rutherford	Incomplete
	Woodgrove Regional Shopping	Complete but not adopted
Mainstreet Study	Mainstreet location review, and development of engineering and urban design Guidelines	Complete
Parks and Open Space	Review of PRC Master Plan for consistency with growth centre policies, designations	Incomplete
	New Downtown Library Facility	Complete
Waterfront	Waterfront Trailway to Departure Bay	Feasibility studies and talks with landowners have occurred in 2005
	Waterfront Trailway to Nanaimo River estuary	Approx. 8 acres acquired at 1160 Island. Hwy. South. Further property may be acquired as available through development
Housing	Establish Housing Legacy Fund	Started \$8,146 as of Oct 2005
	Secondary Suites Strategy	Included in Zoning Bylaw
	Municipal Property Standards Bylaw (to protect rental housing stock)	Considered as part of the Sec. Suites but Council decided not to proceed.
	Monster Home Policies	Included in Zoning Bylaw
Heritage	Comprehensive Heritage Management Plan	Action Plan completed and ongoing implementation

Views and Gateways	View Shed Guidelines	Covered in some areas by Parkway Design Guidelines and Downtown Plan
Environment	Environmental Impact Assessment Guidelines (see Community Impact Assessment Guidelines below)	Complete through several MOU's signed with the Province and Fed's
	Municipal Construction in ESAs Guidelines	Complete
	Geotechnical Assessment Guidelines (Guidelines for the Preparation of Geotechnical Reports)	Complete
	Steep Slope Zoning Amendments and Development Guidelines	Complete
	Erosion Control Standards and Practices	Complete (Brochure) Inclusion of Erosion and Sediment Control Specifications in the Engineering Standards and Specifications – in progress 2005
	ESA Trail Guidelines	Complete
	ESA Inventories – Used to inform DPA's	Complete
	Creation of DPA 24	Complete
	Covenant Tracking System (for ESAs)	Incomplete – however DPA's meet the intent of this.
	Estuary Management Plan	Completion due fall 2005 & Implementation due summer 2006
	Climate Change Plan with measurable indicators	Completion due spring 2006
Greenways	Millstone Greenway implementation	Started and ongoing.
	Other Greenways: identify, plans	Parks established a trail plan in the mid 90s for the entire city. Much of this has been completed. Parks is considering a Linley Valley greenway system plan.
Mobility - transit	Bus service strategy	Completed
	Bus shelter program	Completed & ongoing implementation
	Transit ridership trend reporting	Annual Reports
	Long-range transit strategy for east Vancouver Island	Incomplete
Mobility - cycling and walking	Cycle Route Signage program	Complete and ongoing
	Cycling Facility Regulations and Design Guidelines	Complete
	Cycle travel trend reporting - annual	ongoing
	Walking trend reporting – annual progress reviews	ongoing
	Pedestrian route/sidewalk development plan	Complete and ongoing
	Construction of E&N Trailway	The following Trailways have been completed: <ul style="list-style-type: none"> •Walley Creek, Lost Lake, Cottle Lake, NeckPoint area. •E&N Trailway partially complete. •Diver Lake trail and boardwalk system initiated.

Mobility - vehicle use	Municipal trip reduction program	Greenhouse Gas Reduction Report to include trip planning Other initiatives: •Bike to work week •Computer technology for tele-working •Bike storage facilities •Showers/change rooms
	Park and ride development plan	Incomplete
	Traffic and Transportation Needs Study	Complete
	Subdivision Mobility Guidelines	Informally implemented
	Street Landscaping Program	Some standards adopted – Ongoing implementation
	Review of Engineering Standards for roads and services	Ongoing and official review in progress
Services	Stormwater Management Policy review	In progress
	Water conservation program	Ongoing water metering. Water use block pricing. Public education brochures. Low flush toilets installed in some municipal bldgs. However, the City could be doing much more within its own facilities. Watering restrictions program. A Climate Change study due spring 2006 may be used to inform a green buildings policy.
Zoning Bylaw Amendments	Cluster housing development	Guiding principle of Steep Slopes. Ongoing review of individual applications.
	Steep slope development (zoning)	Complete
	Industrial zoning review	Incomplete
	Vehicle parking requirements in Growth Centres	Parking Commission Feasibility Study Curr. Planning initiating study of commercial parking.
	Cycle parking facilities in zoning bylaw	Incomplete
Plan review and amendment	Establish Plan Nanaimo Review Committee	Complete (PNAC)
	Plan Nanaimo bi-annual audit process	Done once
	Plan amendment application procedure	Complete
	OCP Notification Requirements	Completed
	OCP Signage Required for Applications	Completed
	Consultation with Neighbourhood Associations	Process Completed & Ongoing implementation
Development proposal review	Community Impact Assessment Guidelines	Incomplete
	Amenity Package Guidelines	Incomplete
	Process for review, update DCCs	Process established – next review due 2006/7 after OCP review
	The City will work towards a concurrent rezoning and development permit review process for all rezoning applications on lands in Development Permit Areas.	Complete

Source: City of Nanaimo Development Services