

# *Methodology and Data*

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## Goal One

### GROSS DOMESTIC PRODUCT (GDP)

This measure indicates the long-term growth rate of the Alberta economy as measured by the three-year annual average growth rate of real GDP.

	<u>1998-01</u>	<u>1999-02</u>	<u>2000-03</u>	<u>2001-04</u>	<u>2002-05</u>
Canada	4.2%	3.4%	2.3%	2.7%	2.6%
Alberta	3.0%	3.4%	2.4%	3.3%	4.0%

*Source:* Statistics Canada – Provincial Economic Accounts, and Finance

*Note:* Historical data revised by Statistics Canada.

GDP is a measure of the value of all final goods and services produced in Alberta in a given year. Using data from Statistics Canada, the growth rates for real GDP are calculated and the rates averaged over a three-year period. As cyclical variations are common in Alberta, a longer-term trend growth rate is presented, using a three-year annual average growth rate.

This measure was adjusted in 2005-06, to report real GDP instead of nominal GDP. Nominal dollars refer to today's dollar while real numbers are adjusted for inflation. Real GDP is a better measure of growth compared to nominal GDP because it removes distortions created by rising (falling) prices. Also, a compounded average – instead of a simple average – is now used to calculate the three year annual average growth rate. The Compounded Annual Growth Rate is a mathematical formula that provides a “smoothed” growth rate and is a more representative measure of annual growth over a number of years.

### DISTRIBUTION OF GROSS DOMESTIC PRODUCT (GDP)

This measure is an indicator of diversification of Alberta's economy as it measures the percentage of real GDP produced by selected industry sectors.

	<u>1999-01</u>	<u>2000-02</u>	<u>2001-03</u>	<u>2002-04</u>	<u>2003-05</u>
	(percentage)				
<b>Distribution of Gross Domestic Product (GDP)</b>					
Three-year average of the percentage of real GDP by selected industry sectors:					
Agriculture and Forestry	2.9	2.5	2.3	2.3	2.5
Mining and Energy	17.6	16.7	16.3	16.3	16.0
Manufacturing	10.4	10.2	9.8	9.7	9.8
Construction and Utilities	10.3	10.6	10.6	10.4	10.6
Business and Commercial Services	9.6	9.9	10.1	10.1	10.0
Other Services	49.2	50.1	51.0	51.2	51.1

*Source:* Statistics Canada – Provincial Economic Accounts, and Economic Development

*Note:* Some historical data for 1999-01, 2000-02 and 2001-03 revised by Statistics Canada. Statistics Canada revises results annually.

Based on the data from Statistics Canada, the percentage of real GDP by selected industry sectors is calculated each year. The percentage of real GDP for each of the chosen industry sectors is averaged over a three-year period. As Alberta's economy is susceptible to cyclical variations, the three-year period reflects diversification more precisely. The selected industry sectors encompass agriculture and forestry, mining and energy, manufacturing, construction and utilities, business and commercial services and other services, including financial, insurance, real estate, educational, public administration, retail and wholesale services.

### PERSONAL DISPOSABLE INCOME

Personal disposable income is defined as gross personal income less personal direct taxes and other current transfers to government by persons, including Canada Pension Plan contributions and Employment Insurance premiums. Personal disposable income per capita is obtained by dividing an economy's total personal disposable income by its population for the year. Current or nominal dollars refer to today's dollars and have not been adjusted for inflation.

<u>Province</u>	<u>2004</u>	<u>2005p</u>
	(dollars)	
AB	26,961	28,672
ON	24,619	25,223
BC	22,543	23,339
QC	21,631	22,123
MB	21,412	21,705
SK	21,412	21,953
NS	21,095	21,942
NB	20,303	20,888
PE	19,899	20,326
NL	19,516	20,163
CAN	23,378	24,099

*Source:* Statistics Canada – Provincial Economic Accounts

*Note:* Historical data revised by Statistics Canada.

*p – preliminary*

## INVESTMENT IN MANUFACTURING AND SERVICE INDUSTRIES

This measure tracks the value of new capital expenditures on construction, machinery and equipment in Alberta's manufacturing and service industries.

<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
11.7	11.8	12.5r	13.1	14.0p

*Source:* Statistics Canada, and Economic Development

*Note:* Historical data revised by Statistics Canada.

r – revised

p – preliminary

Statistics Canada surveys all industries once a year about their actual past years' capital investments, as well as their intended investments for the current year. About 27,000 Canadian companies are surveyed with a response rate in excess of 75%. Data are reported in the Statistics Canada's Private and Public Investment in Canada, Intention publication. The estimates for the manufacturing sector come from this document. For services, the following industries are aggregated: transportation and warehousing; information and cultural industries; wholesale trade; retail trade; finance and insurance; real estate rental and leasing; professional, scientific and technical services; management of companies and enterprise; administrative and support, waste management; arts, entertainment and recreation; accommodation and food services; and other services. Excluded are: housing, primary industries, construction and institutions (e.g., public administration, health and education).

## GOVERNMENT SUPPORT FOR INNOVATION

Innovation is comprised of science and technology and also other sources of new ideas that lead to new and improved products and services. Science and technology is comprised of Research and Development and also Related Science Activities, which are reported annually by all Government of Alberta ministries in a Statistics Canada report. (The most recent is Scientific Activities of the Government of Alberta 2004-05 and 2005-06 Estimates Survey Results, March 2006.)

Innovation and Science introduced the Innovation Program in 2004, the first year in which this

expense appears. Two line items are used from financial statements in Economic Development – Annual Reports.

The Innovative Energy Technology Program in Energy supports the adoption and use of innovative energy technologies. It provides royalty adjustments to a number of specific pilot and demonstration projects that use innovative technologies to increase recoveries from existing reserves and encourage responsible, development of oil, natural gas and in-situ oil sands reserves. For the purposes of this measure the royalty adjustment is treated equivalent to, and reported as if it were, a Government of Alberta expense.

The actual total expense for the Government of Alberta is the line item total expense found in the consolidated statement of operations published in the Government of Alberta Annual Report and also presented in the executive summary and the consolidated financial summary. The most recent data are used, hence the total expense data for 2001-02 is the re-stated value from the 2002-03 annual report, and the total expense data for 2002-03 is the re-stated value from 2003-04 annual report.

	<u>2000-01</u>	<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>
	Current \$ (thousands)				
S&T (Stat Can)	263,794	317,744	333,421	313,546	362,593
Innovation Program				0	737
ED Inv & Trade	14,658	14,381	12302	16255	13,490
ED Ind & Reg Dev	7,414	7,352	7305	7918	9,847
IETP					2,246
Total Innovation	285,866	339,477	353,028	337,719	388,913
GOA Expense	19,038,000	20,865,000	20,685,000	21,883,000	24,329,000
S&T as % GOA spending	1.50%	1.63%	1.71%	1.54%	1.60%

*Source:* Statistics Canada and Government of Alberta Annual Report

## SPONSORED RESEARCH AT ALBERTA UNIVERSITIES

This measure provides the value of sponsored research at Alberta universities. The funding sources include the provincial government, industry and non-profit organizations, and the federal government.

Sponsored research revenues are those received outside of the university regular operating grant and include both research grants and research contracts. This performance measure reflects research capability in Alberta through the success

of its major universities in attracting sponsored research funding from several sources.

The data are provided to Innovation and Science by the University of Alberta, University of Calgary, University of Lethbridge and Athabasca University. The universities submit the data using a template and guidelines that outline the information required and specific instructions regarding how the revenue should be reported. This ensures that the data submitted is comparable across universities. The universities derive the data from financial statements and supplementary schedules. The reported data are compiled and organized by Innovation and Science in the Research Funding at Alberta Universities Report.

	<u>2000-01</u>	<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>
	(\$millions)				
Total	368.8	437.5	434.2	583.7	650.5

*Source: Research Funding at Alberta Universities 2004-05 Report, Innovation and Science*

**Goal Two**

**EMPLOYMENT RATES OF ALBERTANS AGED 25-34 BY HIGHEST LEVEL OF EDUCATION**

This measure identifies the annual percentage of Albertans aged 25-34 who are employed by level of education. Results are presented for Albertans aged 25-34 with high school completion, a post-secondary certificate or diploma, and with a university degree. “Albertans aged 25-34” were selected as they are the group most likely to reflect recent effects of Alberta’s learning system.

**High School**

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Canada	78%	77%	79%	79%	79%
Alberta	83%	82%	84%	81%	82%

**Post-Secondary Diploma or Certificate**

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Canada	84%	85%	85%	86%	86%
Alberta	86%	87%	87%	87%	87%

**Post-Secondary Degree**

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Canada	84%	84%	84%	84%	84%
Alberta	87%	86%	88%	85%	85%

*Source: Statistics Canada – Labour Force Survey*  
*Note: Employment rates are derived from a special tabulation for Education and Advanced Education.*

The employment rates are annual averages for the calendar year. The Canadian sample size for the monthly Labour Force Survey was 53,372 households over the reporting period. Alberta’s sample size corresponds to its share of the population. In 2005, between 5,017 and 5,262 Alberta households were surveyed each month (an average of 5,130 per month), with information provided on between 10,059 and 10,493 individuals per month. Of these, about 1,719 to 1,921 individuals each month are aged 25-34. The coefficient of variation (CV) (the standard error as a percentage of the reported result) was 1.0% for Canada and 2.5% for Alberta for all three categories of graduates. The employment rates for post-secondary diploma or certificate, and for those with a university degree were restated by Statistics Canada, and may vary slightly from those reported in Advanced Education’s 2004-05 Annual Report. The differences are not significant.

Additional information on the Labour Force Survey Methodology and interpreting CV’s is available on pages 18-25 of the Guide to Labour Force Survey. Catalogue no. 71-543-GIE (Revised February 2006), available online from Statistics Canada: [www.statcan.ca](http://www.statcan.ca).

**LITERACY AND NUMERACY GRADE 9**

The provincial government administers standardized tests in core subjects annually to students in grades 3, 6 and 9. This measure indicates the percentage of students enrolled in Grade 9 who met or exceeded the acceptable standard on Grade 9 Provincial Achievement Tests in mathematics and language arts. Grade 9 Provincial Achievement Tests in mathematics and language arts are used as proxy measures of literacy and numeracy, as adult literacy surveys are not conducted regularly. Achieving the acceptable standard on the mathematics and language arts tests in Grade 9 indicates that students have the fundamental skills to become literate and numerate adults.

	<u>2000-01</u>	<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>
Math	66%	65%	63%	66%	68%
Language Arts	79%	79%	78%	78%	78%

*Source: Education*

Students normally take the Grade 9 Provincial Achievement Tests at age 14 to 15. The results are based on the total enrolment of Grade 9 students. Provincial Achievement Tests are based on the curriculum and are developed with extensive involvement from classroom teachers, and input from other educators, business and community groups, to ensure that the standards reflect public expectations.

The standards are set for each test by a committee of teachers and are then held constant by statistical methods in subsequent years.

The international results of the Adult Literacy and Life Skills Survey (ALLS), conducted in 2003, were released in May 2005 (The Daily, May 11). This study tested more than 23,000 Canadians on their skills proficiency in four domains: prose, document, numeracy and problem-solving. Skills were rated on the basis of levels 1 (lowest) to 5 (highest). The first study report, Learning a Living: First Results of the Adult Literacy and Life Skills Survey: 2003, presents the international results of the first round of data collection in the ALLS survey, and includes results for Canada, Bermuda, Italy, Norway, Switzerland, the United States and the Mexican state of Nuevo Leone. A Canadian report, Building on our Competencies: Canadian Results of the International Adult Literacy and Skills Survey, released in November 2005 (the Daily, November 30), presents provincial results and specific national findings.

The 2003 Adult Literacy and Life Skills study builds on the International Adult Literacy Survey (1994-1998) and is a joint project of the Government of Canada, the United States National Centre for Education Statistics (NCES), and the Organization for Economic Cooperation and Development. Statistics Canada is the international coordinator of the project. The report on international results (Learning a Living: First Results of the Adult Literacy and Life Skills Survey: 2003) is available on the Statistics Canada website: <http://www.statcan.ca>, Cat. #89-603-X, as is the Canadian report (Building on our Competencies: Canadian Results of the International Adult Literacy and Skills Survey), Cat. #89-617-X.

**EDUCATIONAL ATTAINMENT OF ALBERTANS**

Statistics Canada’s Labour Force Survey collects information on the highest level of education achieved by various age groups. This measure tracks the percentage of the population aged 25-34 who reported having completed high school and the percentage of the population aged 25-64 who reported completing post-secondary programs. These age groups were selected as they reflect the direct output of Alberta’s education system.

**High School**

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Canada	89%	89%	90%	90%	91%
Alberta	90%	89%	89%	90%	91%

**Post-Secondary**

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Canada	54%	55%	56%	57%	58%
Alberta	56%	57%	56%	56%	58%

*Source:* Statistics Canada – Labour Force Survey  
*Note:* High school and post-secondary completion are derived from a special tabulation for Education and Advanced Education

The data reported are annual averages for the calendar year, compiled from monthly survey results. Between 5,017 and 5,262 Alberta households were surveyed each month in 2005 (an average of 5,130 per month), with information provided on between 10,059 and 10,493 individuals each month. The coefficient of variation (the standard error as a percentage of the reported result) is 1.0% for both the Alberta data and the Canadian data.

**LIFELONG LEARNING**

Albertans are encouraged to keep learning and realizing their goals. This measure reports the percentage of survey respondents (Albertans aged 17 and over) who are satisfied that adult Albertans are able to access the education or training they want. The percentage reports the weighted average result of questions asked of two components of the public: adult learners (those who reported taking education or training in the last 12 months) and adult Albertans who did not take education or training in the last 12 months. Data for 2005-06 are from the report “2005-06 Satisfaction with Education in Alberta, Public/Adult Learners/Adult Non-Learners;”

April, 2006; prepared for Advanced Education by Compustat Consultants Inc.

<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
63%	73%	72%	69%	79%

*Source: Advanced Education and Education*

3,000 Albertans were surveyed. Results of the survey are valid at a 95% confidence interval with  $\pm 1.8\%$  margin of error. In 2001-02, the sample size was only about 1,200. Consequently, a somewhat larger confidence interval of 2.7 percentage points above or below the reported values is associated with the result for 2001-02. Furthermore, the sample size changes from year to year in order to reach the desired confidence level for both adult learners and other adult Albertans.

The wording of the question asked of adult learners was clarified in the 2002-03 survey. In previous years, adult learners were asked about their satisfaction that “most adults are able to access the education or training they want.” Starting in 2002-03, adult learners were asked about their satisfaction that “you are able to access the education or training you want.” Adult Albertans who did not participate in education or training in the prior year are asked a slightly different question: “How satisfied are you that most adults are able to access the education or training they want.”

The survey instruments for these surveys use four-point response scales (“very satisfied/satisfied/dissatisfied/very dissatisfied” or “strongly agree/agree/disagree/strongly disagree”), depending on the question. Although not asked, “don’t know” responses and refusals are recorded as well. Results presented are the combined percentages of respondents who were “very satisfied/satisfied” or who “strongly agreed/agreed.”

#### **ADULT PARTICIPATION IN LEARNING**

Adult participation in learning helps Albertans realize their potential. This measure presents the percentage of adult Albertans 25+ who indicated that they had taken some education or training in the last 12 months, as reported in annual surveys conducted for Advanced Education and Education

(same survey as for the lifelong learning measure above). Information on age ranges is gathered from respondents, which enables reporting on the participation rate of Albertans 25+ in education and training.

<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
30%	30%	28%	29%	31%

*Source: Advanced Education and Education*

Data for 2005-06 are from the report “2005-06 Satisfaction with Education in Alberta, Public/Adult Learners/Adult Non-Learners;” April, 2006; prepared for Advanced Education, by Compustat Consultants Inc. 3,000 Albertans were surveyed. Results of the survey are valid at a 95% confidence interval with  $\pm 1.8\%$  margin of error. In 2001-02, the sample size was only about 1,200. Consequently, a somewhat larger confidence interval of 2.7 percentage points above or below the reported values is associated with the result for 2001-02. Furthermore, the sample size changes from year to year in order to reach the desired confidence level for both adult learners and other adult Albertans.

#### **SKILL DEVELOPMENT**

This measure indicates the percentage of employers who were “satisfied” or “very satisfied” with learning system graduates, including high school, post-secondary and apprenticeship graduates. Response options are: “very satisfied,” “satisfied,” “dissatisfied,” and “very dissatisfied.” “Don’t know” and “no response” are also recorded. It is a direct indicator of the match between workforce skill levels and job requirements, which supports the competitiveness of Alberta businesses.

In the 2001-02 and 2003-04 surveys, respondents were asked about overall satisfaction with learning system graduates (both high school and post-secondary graduates). In the 2001-02 survey, “post-secondary graduates” included graduates of degree, diploma and certificate programs. In the 2003-04 survey, “post-secondary graduates” included graduates of degree, diploma, certificate and apprenticeship programs. Results for 2005-06 reported in Measuring Up 2006 are based on the question, “Thinking about the recent \_\_\_\_ (TYPE OF

GRADUATE: i.e., degree, diploma, certificate, journey person or high school) graduates from Alberta's learning system you have working for your company, please rate your OVERALL level of satisfaction with the skills and quality of work of each type of graduate. The 2005-06 result is based on a simple average of the result for each of these five graduate types. This provides a result giving equal weighting to each type of graduate and avoids a skewing of the result in favour of the categories with the largest number of graduates.

<u>2001-02</u>	<u>2003-04</u>	<u>2005-06</u>
90%	89%	90%

*Source: Advanced Education and Education*

Results are reported from telephone surveys of employers conducted by an external consultant every second year, with the most recent survey conducted in 2005-06 by R.A. Malatest and Associates. In both 2001-02 and 2003-04, about 2,000 Alberta employers responded to the survey, while in 2005-06, there were 2,200 respondents. According to the 2004 Alberta Business Monitor, there were 37,075 businesses in Alberta. Thus, obtaining 2,200 survey responses produced results with a margin of error of  $\pm 2.0\%$  19 times out of 20. In 2001-02, 797 employers responded to the questions on employer satisfaction with recent graduates and in 2003-04, there were 760 respondents. In 2005-06, there were 1,439 responses to the new question on employer satisfaction with learning system graduates. Since most respondents provided an answer about more than one type of learning system graduate (i.e., high school, diploma, certificate, degree, apprenticeship), the actual number of respondents to this question is unknown.

## Goal Three

### TOTAL GOODS EXPORTS

This measure tracks international commodity exports, including primary agriculture, primary forestry, fishing and trapping, mining and energy, and manufactured goods measured in current dollars.

<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
		(\$billions)		
57.1r	48.9r	57.0r	66.8r	79.2e

*Source: Statistics Canada and Economic Development*

*Note: Historical data for 2001-04 revised by Statistics Canada.*

*r – revised*

*e – estimate*

The total value of international commodity exports is based on data reported in Statistics Canada's World Trade Atlas and in Canadian International Merchandise Trade. Re-exports means exports of goods that have previously entered Canada and are leaving in the same condition as when first imported.

### LABOUR PRODUCTIVITY

This measure was adjusted in 2005-06 to be consistent with the Statistics Canada productivity methodology. Finance calculates labour productivity by using real Gross Domestic Product (GDP) at basic prices per hours worked for all jobs. GDP at basic prices is derived from GDP at market prices, but excludes indirect taxes and subsidies on products.

<u>Province</u>	<u>2004</u>	<u>2005</u>
	(Real GDP (\$) Per Hour Worked)	
AB	39.54	40.73
ON	38.14	39.10
QC	35.47	36.25
BC	35.44	35.79
NL	35.75	35.74
SK	34.83	35.67
MB	31.41	32.33
NB	30.10	30.24
NS	29.57	29.46
PE	26.34	26.14

*Source: Statistics Canada – Provincial Economic Accounts, and Finance*



## VALUE-ADDED EXPORTS

This measure tracks Alberta's international value added exports including manufactured goods, and services measured in current dollars.

<u>2001</u>	<u>2002</u>	<u>2003</u> (\$billions)	<u>2004</u>	<u>2005</u>
23.3	22.1	21.3r	25.1r	26.4e

**Source:** Statistics Canada, and Economic Development

**Note:** Historical data revised. The value of export trade in 2003 and 2004 as presented in *Measuring Up 2005* were preliminary and have since been revised to incorporate more current data.

r – revised

e – estimate

Economic Development uses Statistics Canada data to monitor the value of goods exported to other countries. Statistics Canada prepares the data monthly and publishes it in Canadian International Merchandise Trade.

The total value of Alberta's international goods exports is equivalent to Statistics Canada's published numbers, apart from a correction for ethylene glycol exports for years prior to 2002 (ethylene glycol exports were added to Alberta exports, which were previously attributed to other provinces. As a result, \$164 million was added for 2001). For manufactured goods, export data by commodity from Statistics Canada are used to determine industry-specific export values, using Statistics Canada classifications. A concordance table is obtained from Statistics Canada that allocates each commodity exported into a specific industry. This concordance table is then modified to reflect unique characteristics of Alberta's economy. For example, natural gas liquids are moved from manufacturing to mining. Estimates for other services are developed in-house by Economic Development, based on various Statistics Canada surveys.

## TOURISM INDUSTRY REVENUE

This measure tracks the annual value of all tourism industry revenue in Alberta. This includes expenditures made in Alberta by visitors from overseas, the United States, other Canadian provinces and residents of Alberta.

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
	(\$billions)			
Tourism Revenue	5.4	4.3	5.0r	5.3e

**Source:** Statistics Canada, Canadian Travel Survey and International Travel Survey, and Economic Development

**Note:** Historical data revised. The value of tourism industry revenue in 2004 as presented in *Measuring Up 2005* was preliminary and has since been revised to incorporate more current data.

r – revised

e – estimate

The total value of tourism industry revenue in Alberta is derived by Economic Development from the data published by Statistics Canada in the Canadian Travel Survey (renamed in January 2005 to Travel Survey of Residents of Canada) (Cat. No. 87-504-XPB) and the International Travel Survey (Cat. No. 66-001). Final year-end data for both surveys are usually not available until August of the following year.

The estimate for 2005 is based on travel statistics that provide an indication of demand, such as Customs counts at Alberta's land and airports, deplanements at Calgary and Edmonton International Airports, anecdotal information from the Pre-Summer Tourism Operator Survey, and gate counts at Banff, Jasper, Waterton Lakes and Elk Island National Parks. In addition, occupancy rate information collected by Smith Travel Research is used to determine the demand for fixed-roof lodging in the Mountain Parks, Edmonton and Calgary. Domestic data produced by the Canadian Tourism Research Institute are also applied in estimating demand from Alberta's key domestic markets, of British Columbia, Saskatchewan and Ontario. In addition to indicators of demand, estimates of the Travel Price Index are forecast into the future to assist with tourism revenue projections.

## GOAL FOUR

### WELL-BEING OF CHILDREN

The Market Basket Measure (MBM) is a measure of low-income reported by Human Resources and Skills Development Canada and reflects differences in costs of living across Canada. This measure provides an estimate of the percentage of children who live in families with incomes at or above the MBM low-income thresholds.

<b>Province</b>	<b>% of children (2000)</b>
NL	68
BC	76
NS	80
MB	80
SK	80
PE	82
NB	83
QC	85
AB	85
ON	86
CAN	83

*Source:* Human Resources and Skills Development Canada

*Note:* Current MBM thresholds data were not available at time of publication.

The estimated cost of a specific basket of goods and services is referred to as the MBM threshold. People are considered to have low-income if the family's disposable income is less than their MBM threshold. Income to purchase the basket is based on family income, minus income taxes, payroll taxes, child care costs incurred to enable parent(s) to work, alimony, child support payments made by non-custodial parents, and out-of-pocket health care expenses including dental care, prescriptions, glasses, and disability aids.

The basket is calculated for a reference family of four (two adults and two children). To purchase the "market basket," the family must have sufficient disposable income to purchase nutritious food, buy clothing for work and social occasions, house themselves in their community, and pay for transportation and other expenditures. The costs of the items in the basket vary across the country and are adjusted for different family sizes and configurations.

### SOCIAL AND EMOTIONAL DEVELOPMENT/ PARENTING SKILLS

The results for this measure are based on data from the National Longitudinal Survey of Children and Youth (NLSCY), administered by Statistics Canada and Social Development Canada. The NLSCY is a long-term survey designed to track child development and well-being from birth to early adulthood. The survey includes information about how a child's family, friends, activities, school, and community affect their learning, behaviour, and health. The survey follows a representative sample of children, who were aged 0-11 years at the first cycle of the study (1994-95) and collects information on these children at two-year intervals and will continue until they reach adulthood. In each subsequent two-year cycle, as the initial cohort of children gets older, an additional sample of children is added. Responses to questions are scored and overall results are obtained by using a cut off point or threshold to identify children displaying or not displaying the level of behaviour or attribute. Data determined to be unacceptable are not included in the reporting. For instance, data in which insufficient numbers of cases were available to draw statistically valid results were excluded. Additionally, data on children living in the Territories, children living on reserve, and children living in institutions are not included in the reporting.

#### Social and Emotional Development

Behaviour scales are used to assess the child's emotional problems/anxiety and pro-social behaviour. The person most knowledgeable of the child answers the questions associated with the behaviour. The survey questions used to calculate the social development result capture different age-related aspects of behaviour such as how a child interacts with him/herself, with strangers, with parents, and with objects such as toys. The margin of error is  $\pm 2.8\%$  at the 95% confidence level. The survey questions used to calculate the emotional development result deal with whether the child appears unhappy, depressed or nervous, indicating the presence of emotional problems/anxiety. The margin of error is  $\pm 2.8\%$  at the 95% confidence level.

In 2000-01 NLSCY data collection for social development, the Pro-Social Scale used for 1998-99 was replaced with the Personal-Social Scale using “Ages and Stages Questionnaires.” As a result, 1998-99 percentages are not applicable for ready comparison with those for subsequent years.

**Social Development**

	<u>1998-99</u>	<u>2000-01</u>	<u>2002-03</u>
Alberta	not applicable	91.0%	85.9%
Canada	applicable	88.5%	84.3%

**Emotional Development**

	<u>1998-99</u>	<u>2000-01</u>	<u>2002-03</u>
Alberta	87.8%	89.1%	83.8%
Canada	86.2%	86.5%	83.3%

**Source:** Statistics Canada and Social Development Canada – National Longitudinal Survey of Children and Youth (NLSCY)

**Note 1:** Data is provided through the Early Childhood Agreement by Statistics Canada and Social Development Canada.

**Note 2:** Statistics Canada calculated the 2002-03 percentages using the cut-off points from 1998-99 data series. To maintain and improve comparability of year-over-year results, the 2000-01 percentages were recast (recalculated) using the 1998-99 cut-off points as well. However, recasting of the 2000-01 percentages does not affect the target status for the measures as reported in 2004-05 Measuring Up report.

Parenting Skills

The survey questions used to calculate the parenting skills result capture a parent’s interaction with the child, such as praising the child and playing games with the child. The person most knowledgeable of the child answers the survey questions. The margin of error is ±1.2% at the 95% confidence level.

	<u>1998-99</u>	<u>2000-01</u>	<u>2002-03</u>
Alberta	89.3%	93.5%	94.3%
Canada	88.0%	90.0%	93.3%

**Source:** Statistics Canada and Social Development Canada – National Longitudinal Survey of Children and Youth (NLSCY)

**Note 1:** Data is provided through the Early Childhood Agreement by Statistics Canada and Social Development Canada.

**Note 2:** See Note 2 in Social and Emotional Development.

**GOAL FIVE**

**LIFE EXPECTANCY AT BIRTH**

This measure identifies Albertans’ life expectancy at birth. Life expectancy is greater where individuals live in a healthy physical environment, eat a healthy diet, engage in regular physical activity, enjoy a positive work environment, and have better access to quality health care.

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Male	77.1	77.0	77.4	77.5	77.8
Female	82.0	82.4	82.0	82.3	82.6

**Source:** Health and Wellness, Vital Statistics Registry, Alberta Health Care Insurance Plan Stakeholder Registry – Alberta data (2004)

The 95% confidence interval for Alberta life expectancy estimates is about ±0.2 years. Life expectancy at birth is an estimate of the number of years that a person born in that year will live, based upon current mortality statistics.

**SELF-REPORTED HEALTH STATUS**

This measure identifies Albertans’ self-reported health status. How people rate their own health is affected by a variety of factors including chronic disease, disability, temporary illness and mental health.

**18-64 years**

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
	(percentage)				
Good	25	27	26	27	30
Very Good	40	40	39	42	34
Excellent	23	23	23	20	24

**Source:** HQCA Satisfaction with Healthcare Survey 2006 – Health Quality Council of Alberta (HQCA); Public Survey about Health and the Health System in Alberta, for 2002-2005; Health and Wellness

Data are collected through a telephone survey of 4,780 randomly selected Alberta households (n=4,064). The 95% confidence interval for this question is one percent above or below the reported results.

To assess self-reported health status, this measure reports on Albertans 18 years of age and over who were asked: “In general, compared with other people your age, would you say your health is excellent, very good, good, fair, or poor?” This measure reports on the reported health status as “excellent,” “very good,” or “good.”

## PARTICIPATION IN HEALTHY BEHAVIOUR

This measure identifies Albertans' participation in healthy behaviour.

	<u>Exercise Regularly</u>	<u>Healthy Body Mass Index</u> (percentage)	<u>Healthy Eating</u>
2001	52	49	33
2003	56	47	39
2005	55	46	39

*Source: Statistics Canada – Canadian Community Health Survey, 2005*

The Canadian Community Health Survey includes questions about eating habits, type and level of physical activity, and the respondent's height and weight, from which the Body Mass Index is calculated using the international standard. In Measuring Up 2005, Healthy Body Mass Index was referred to as Acceptable Weight. This survey of Canadians aged 12 years and older (except for healthy body mass index (18 years and older) is conducted every two years, and includes a wide range of questions about the health and health practices of residents in each province. Data excludes non-respondents. Approximate sample size for Alberta is 12,000 households, which provides a 95% confidence interval of about one percentage point above or below the reported results.

## EASE OF ACCESS TO PHYSICIAN SERVICES

This measure identifies the perception of ease of access to physician services, based on a statistically significant population sample. In regards to ease of access, the 2006 survey uses a different context and placement of questions than the surveys done in previous years, which may account for the reduction in the rating for ease of access to physician services.

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Physician	84%	86%	85%	86%	78%

*Source: HQCA Satisfaction with Healthcare Survey 2006 – Health Quality Council of Alberta (HQCA); Public Survey about Health and the Health System in Alberta, for 2002-2005; Health and Wellness*

Data are collected through a telephone survey of 4,780 randomly selected Alberta households. The question is asked only of respondents who report having received services from a physician within

the past 12 months (n=3,921). The 95% confidence interval for this question is one percent above or below the reported results

To assess ease of access to physician services, Albertans 18 and over were asked: "How easy or difficult was it for you to obtain physician services you received most recently from a physician in Alberta? Would you say it was very easy, easy, a bit difficult, or very difficult?" This measure reports on access as "easy" or "very easy."

## EASE OF ACCESS TO HOSPITAL SERVICES

This measure identifies the perception of ease of access to hospital services, based on a statistically significant population sample. In regards to ease of access, the 2006 survey uses a different context and placement of questions than the surveys done in previous years, which may account for the reduction in the rating for ease of access to hospital services.

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Hospital	73%	72%	73%	72%	67%

*Source: HQCA Satisfaction with Healthcare Survey 2006 – Health Quality Council of Alberta (HQCA); Public Survey about Health and the Health System in Alberta, for 2002-2005; Health and Wellness*

Data are collected through a telephone survey of 4,780 randomly selected Alberta households. The question is asked only of respondents who report having received services at a hospital (including in-patient, out-patient, or emergency services) in Alberta within the past 12 months (n=1,730). The 95% confidence interval for this question is two percent above or below the reported results.

To assess ease of access to hospital services, Albertans 18 and over were asked: "How easy or difficult was it for you to get hospital services you received most recently from a hospital in Alberta? Would you say it was very easy, easy, a bit difficult, or very difficult?" This measure reports on access as "easy" or "very easy."

**PUBLIC RATING OF HEALTH SYSTEM OVERALL**

This measure identifies Albertans’ rating of the health care system and the quality of medical services it provides.

<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
62%	65%	65%	67%	65%

*Source: HQCA Satisfaction with Healthcare Survey 2006 – Health Quality Council of Alberta (HQCA); Public Survey about Health and the Health System in Alberta, for 2002-2005; Health and Wellness*

Data are collected through a telephone survey of 4,780 randomly selected Alberta households (n=4,744). The 95% confidence interval for this question is one percent above or below the reported results.

To assess public rating of health system overall, Albertans 18 and over were asked: “Thinking broadly about Alberta’s health care system and the quality of medical services it provides, how would you describe it overall? Would you say it is excellent, good, fair, or poor?” The measure reports on the overall rating as “excellent” or “good.”

**Goal Six**

**ECONOMIC STATUS OF ALBERTANS**

This measure includes the percentage of people who live in families with incomes at or above the Market Basket Measure (MBM) low-income thresholds.

(See Methodology for Well-Being of Children)

<u>Province</u>	<u>% of People (2000)</u>
NL	77
BC	80
NS	84
PE	85
SK	86
NB	86
MB	87
QC	88
AB	88
ON	89
CAN	87

*Source: Human Resources and Skills Development Canada*  
*Note: Current MBM thresholds data were not available at time of publication.*

**PERSONS WITH DEVELOPMENTAL DISABILITIES (PDD) FUNDED SERVICES**

The Family and Guardian Satisfaction Survey is conducted to determine the overall satisfaction of families/guardians (public and private) with the PDD-funded services received by their family member or person for whom they provide guardianship. As this is a biennial survey, the following procedures relate to the most recent results available (i.e., 2004-05). The population consisted of all legal guardians, including public guardians, and/or family members in the absence of a legal guardian of individuals receiving PDD-funded services in Alberta. Regional offices distributed the questionnaire to families/guardians by mail on September 10, 2004. A total of 1,554 questionnaires were received by the beginning of November 2004 for a response rate of 37.1%. Of these questionnaires, 1,298 (83.5% of questionnaires received) included responses for all three questions used in the analysis.

The three survey questions used to calculate overall satisfaction dealt with whether the services met the person’s needs, whether they were satisfied overall that the services provided enhanced the person’s quality of life and whether they were satisfied overall that the person’s services helped him or her to be a part of the community as much as desired. Responses of “strongly agree” and “agree” were combined to “agreed” to indicate satisfaction.

Response of “strongly disagree” and “disagree” were combined to indicate dissatisfaction. Cases with no responses or responses of “don’t know” or “does not apply” on any of the three questions were not used in the final computation. Results were then obtained by computing the mean average for the three questions. Data were analyzed with SPSS software. The results are accurate within ±1.64%, 19 times out of 20.

<u>2000-01</u>	<u>2002-03</u>	<u>2004-05</u>	<u>2005-06</u>
90.4%	88.7%	85.8%	n/a

*Source: Seniors and Community Supports, based on the Persons with Developmental Disabilities Family and Guardian Satisfaction Survey*

## Goal Seven

### EDUCATIONAL ATTAINMENT OF ABORIGINAL ALBERTANS AGED 25-34

This measure indicates the percentage of Aboriginal Albertans aged 25-34 living off-reserve who report they have completed high school and the percentage who report they have completed post-secondary education.

#### High School

	<u>2003</u>	<u>2004</u>	<u>2005</u>
Alberta	76% <sup>r</sup>	73% <sup>r</sup>	76%

#### Post-Secondary

	<u>2003</u>	<u>2004</u>	<u>2005</u>
Alberta	42% <sup>r</sup>	41% <sup>r</sup>	39%

*Source:* Statistics Canada – Labour Force Survey

*Note:* High school and post-secondary completion are derived from a special tabulation for Education and Advanced Education.

*Revisions to the historical data are due to updates in the source data from Statistics Canada. Data provided by Statistics Canada for this measure in previous years were based only on the “non-student” Aboriginal population. Data for previous years were updated by Statistics Canada to include all Aboriginals (students and non-students) and prior years’ completion rates were recalculated.*

*r – revised*

Statistics Canada’s Labour Force Survey collects information on the highest level of education achieved by various age groups for the off-reserve Aboriginal population of Alberta. The population aged of 25-34 year olds was selected to reflect the direct outputs of Alberta’s Kindergarten to Grade 12 and post-secondary systems. The data reported are annual averages for the year.

Between 206 and 237 Aboriginal households in Alberta were surveyed each month in 2005, with information provided on between 85 and 130 Aboriginal individuals aged 25-34 each month. The coefficient of variation (the standard error as a percentage of the reported result) is 7.5%, indicating that year-to-year variation in results should be treated with caution.

## ABORIGINAL AFFAIRS

This measure indicates the public approval rating of the Alberta government on Aboriginal relations, compared to the average rating of the four nearest provinces.

<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
(higher than average rating of four nearest provinces)				
12%	12%	10%	9%	6%

*Source:* Environics Research Group Limited: Focus Canada report, and Aboriginal Affairs and Northern Development

Four times per year, Environics Research Group Ltd. conducts a national opinion poll surveying the views of Canadians regarding the performance of their provincial and federal governments in various areas of governance. The results for each quarterly poll are reported in the Focus Canada Report (2005-1, 2005-2, etc.). During each poll, a sample of Albertans is asked to indicate their approval or disapproval of the way their provincial government is performing in the area of Aboriginal and native issues. The approval ratings from the four surveys each year are averaged to indicate the percentage of citizens approving of their provincial government’s annual performance. These results are compared to the average approval rating for the four nearest provinces (British Columbia, Saskatchewan, Manitoba and Ontario).

For the first quarter 2005 survey, Environics completed telephone interviews with 2,022 adult Canadians between March 11 and April 6, 2005. The margin of error for the entire sample was  $\pm 2.2\%$ , 19 times out of 20. The margin of error is greater for results pertaining to each province due to smaller sample size. In the first quarter 2005 survey, 200 interviews were conducted in Alberta, with a margin of error of  $\pm 6.9\%$ . The margins of error for the four provinces nearest to Alberta were as follows: British Columbia  $\pm 6.6\%$ ; Saskatchewan  $\pm 8.8\%$ ; Manitoba  $\pm 8.8\%$ ; Ontario  $\pm 4.0\%$ .

## Goal Eight

### PROVINCIAL CREDIT RATING

This measure indicates Alberta's blended credit rating for domestic debt relative to British Columbia, Ontario and Canada.

Year	Alberta	Ontario	B.C.	Canada
1998	AA+	AA-	AA	AAA
1999	AA+	AA-	AA	AAA
2000	AA+	AA-	AA-	AAA
2001	AAA	AA-	AA-	AAA
2002	AAA	AA	AA-	AAA
2003	AAA	AA	AA-	AAA
2004	AAA	AA	AA-	AAA
2005	AAA	AA	AA	AAA
2006	AAA	AA	AA+	AAA

*Source:* Finance; and Standard and Poor's Rating Services, Moody's Investors Service Limited, and Dominion Bond Rating Service

A credit rating is an independent credit rating agency's assessment of the future ability of an organization to repay its long-term debt, and a method of comparing the quality of different bond issues. A blended rate is an average (rounded) of the domestic debt credit ratings issued by the following credit rating agencies: Standard and Poor's Rating Services; Moody's Investors Service Limited; and Dominion Bond Rating Service. The highest possible rating is AAA.

### ACCUMULATED DEBT

The *Fiscal Responsibility Act* sets out the government's minimum required schedule to repay the \$12.5 billion of accumulated debt that was remaining as of March 31, 2000 over a maximum of 25 years. The legislation includes five-year milestones for repayment of the accumulated debt.

Accumulated debt includes the outstanding consolidated debt of the General Revenue Fund (GRF), the debt of the Alberta Social Housing Corporation (net of borrowing from the GRF) and the government's liability for school construction.

The following table shows the province's accumulated debt less funds locked into the Debt Retirement Account. The maturities of the investments of the Debt Retirement Account have been matched to the maturities of the accumulated debt obligations.

### Fiscal Year End

2001-02	2002-03	2003-04	2004-05	2005-06
5.7	4.7	3.7	zero	zero

(\$billions)

*Source:* Government of Alberta, Consolidated Financial Statements for the year ended March 31, 2006

### TAX LOAD

Tax load, or tax effort, compares actual tax revenues generated within a province to the revenue that the province would generate if it were taxed at national-average tax rates. Tax load is expressed as an index with the average provincial tax load equal to 100 basis points.

Province	2004-05	2005-06
	(percentage)	
AB	75.2	78.7
ON	101.4	100.0
BC	99.5	100.8
NS	99.9	100.8
NB	102.5	105.1
MB	110.0	109.3
NF	107.1	109.4
PE	104.9	110.4
QC	114.0	113.6
SK	116.2	117.5

*Source:* Federal Department of Finance, and Alberta Finance

*Note:* Historical data revised by Federal Department of Finance.

This measure of tax load includes: personal and business taxes; provincial-municipal taxes including property taxes, non-renewable resource revenues and net income from commercial operations; and revenue from premiums, fees and licenses, including health care premiums. Each year, the provinces report these tax revenues to the federal government as part of the reporting requirements for the Equalization program. The territories are excluded from this calculation because they are not part of the Equalization program.

National average tax rates are calculated by dividing total national tax revenue by the national tax base. The revenue that the province would generate if it taxed at national rates is equal to the national-average tax rate multiplied by the provincial tax base for each of the tax categories. Provincial tax load is equal to the ratio of actual provincial revenues divided by the results of the previous calculation multiplied by 100.

The data to calculate the tax load are obtained from the Federal Department of Finance, and the tax load data are derived by Alberta Finance.

#### **GOVERNMENT FINANCIAL ACCOUNTABILITY**

This measure reports the percentage of Albertans satisfied with the information they receive from the Alberta government on the government's financial performance.

<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
67%	57%	55%	59%

*Source: Environics Research Group Limited: Focus Alberta report, and Finance*

It reports information from a telephone survey conducted for Public Affairs Bureau. In 2006, 1,000 adult Albertans in rural and urban areas were interviewed. Albertans were asked the following question: "How satisfied are you with the information you receive from the Alberta government on the government's financial performance?" The results are reliable to within  $\pm 3.0\%$ , 19 times out of 20.

### **Goal Nine**

#### **FEDERAL/PROVINCIAL RELATIONS**

This societal measure indicates the public approval rating of the Alberta government in federal/provincial relations as a percentage of the average ratings of the four closest provinces.

<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
119%	107%	100%	88%	92%

*Source: Environics Research Group Limited: Focus Canada report, and International and Intergovernmental Relations*

Environics Research Group Ltd. conducts a quarterly national opinion poll surveying the views of Canadians regarding the performance of their provincial and federal governments in various areas of governance. The results for each quarter are reported in a Focus Canada Report (2005-2, 2005-3, etc.). Albertans are asked to rate their approval or disapproval of the way the Government of Alberta is handling federal/provincial relations. The average of the four quarterly surveys shows the percentage of Albertans approving of the government's yearly

performance. These results are compared to the average approval rating of the citizens of four other provinces (British Columbia, Saskatchewan, Manitoba and Ontario) for the federal/provincial performance of their respective governments.

The margin of error for a stratified probability sample of the size used for the survey is  $\pm 2.2$  percentage points, 19 times out of 20. The approximate margin of error is greater for results pertaining to each of the provinces. For the March 2006 survey, the percentage point margin of error for each of the provinces is: Ontario ( $\pm 4.0$ ), Manitoba ( $\pm 8.7$ ); Saskatchewan ( $\pm 8.7$ ); Alberta ( $\pm 6.9$ ); and British Columbia ( $\pm 6.5$ ), 19 times out of 20.

#### **ALBERTANS' SATISFACTION WITH THEIR LOCAL GOVERNMENTS**

This measure reports the percentage of Albertans satisfied with their local governments.

<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
80%	79%	79%	80%

*Source: Albertans Satisfaction with their Municipal Government survey, and Municipal Affairs*

Information was collected through a telephone survey, conducted by an independent research firm, of 1,000 randomly selected adult Albertans in rural and urban areas from September 23 to September 27, 2005. The results are accurate to within  $\pm 3.1\%$ , 19 times out of 20.

### **Goal Ten**

#### **PERCEIVED SERIOUSNESS OF CRIME IN THE NEIGHBOURHOOD**

This measure identifies the percentage of Albertans that feel crime is not a serious problem in their neighbourhood.

<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
65%	62%	55%	60%	60%

*Source: Justice and Solicitor General and Public Security, Survey of Albertans*

This was a new measure in the 2005-06 Government of Alberta business plan. While the question of perceived seriousness of crime in the neighbourhood has been included in public opinion surveys conducted by Justice and



Solicitor General and Public Security in previous years, this is the first time that the result is being reported in Measuring Up.

Data for the perceived seriousness of crime in the neighbourhood are collected through a telephone survey conducted for Justice and Solicitor General and Public Security. Consistent with surveys in previous years, 750 Albertans 18 years of age and over were interviewed, thereby, providing a margin of error that is no greater than ±3.6% at the 95% confidence level.

### **VIOLENT AND PROPERTY CRIME RATE**

The Violent Crime and Property Crime Rates compare Alberta's crime rate per 100,000 population to those of British Columbia, Saskatchewan and Manitoba. The rate is defined as the total number of Criminal Code of Canada incidents involving youth and adults. Crime statistics are collected using the Uniform Crime Reporting Survey, a common survey used to measure police-reported crime in each Canadian jurisdiction. Many factors may influence police-reported crime statistics: reporting by the public to the police; reporting to Canadian Centre for Justice Statistics by the police; the impact of new initiatives such as changes in legislation, policies or enforcement practices; and, demographic, social and economic changes. Population data from Statistics Canada are used to convert reported crime into crime rates per 100,000 population.

#### Violent Crime Rate

This measure expresses Alberta's violent crime rate in comparison to the other three western provinces. Violent crime involves offences that deal with the application, or threat of application of force to a person. These include homicide, attempted murder, various forms of sexual and non-sexual assault, robbery and abduction. Traffic incidents that result in death or bodily harm are not included.

<u>Province</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
	(per 100,000)			
Alberta	1,102	1,078r	1,101r	1,087
British Columbia	1,223	1,210	1,214r	1,195
Manitoba	1,617	1,638	1,630r	1,602
Saskatchewan	1,833	1,853r	2,060r	2,006

*Source: Canadian Crime Statistics, Canadian Centre for Justice Statistics*

*r – Historical data revised by the Canadian Centre for Justice Statistics.*

#### Property Crime Rate

This measure expresses Alberta's property crime rate in comparison to the other three western provinces. Property crime includes incidents involving unlawful acts with the intent of gaining property, but do not involve the use or threat of violence against an individual. Theft, breaking and entering, fraud and possession of stolen goods are examples of property crimes.

<u>Province</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
	(per 100,000)			
Alberta	4,413	4,674r	5,130r	5,064
Manitoba	5,134	4,964	5,593r	5,699
Saskatchewan	5,967	5,795r	6,618r	6,238
British Columbia	6,484	6,536r	6,963r	6,763

*Source: Canadian Crime Statistics, Canadian Centre for Justice Statistics*

*r – Historical data revised by the Canadian Centre for Justice Statistics.*

### **WORK STOPPAGES**

This measure refers to the percentage of collective bargaining agreements (CBAs) that have been successfully negotiated and ratified by the parties involved without a work stoppage.

<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
98%	93%	99%	99%	98%

*Source: Human Resources and Employment*

Human Resources and Employment (HRE) collects data on the number of CBAs settled without a work stoppage and the number of legal strikes/lockouts. This measure does not include data on illegal strikes and lockouts. This measure is reported by fiscal year and is calculated by HRE using the following formula:

$$\% \text{ of CBAs settled without a work stoppage}^* = \frac{(\# \text{ of settled CBAs} - \# \text{ of settlements})}{\# \text{ of settled CBAs}} \times 100\%$$

*\* This measure includes data from all contracts under the Alberta Labour Relations Code and the Police Officers' Collective Bargaining Act. Contracts covered under other legislation are excluded (i.e., contracts under the Public Service Employees Relations Act, Federal jurisdiction, the Post-Secondary Learning Act).*

## WORKPLACE LOST-TIME CLAIM (LTC) RATE

The LTC rate represents the probability, or risk, of disabling injury or disease to a worker during a period of one year's work. The measure indicates the number of lost-time claims per 100 person-years worked to indicate increases or decreases in this risk.

<u>2001</u>	<u>2002</u>	<u>2003</u> (LTC rate)	<u>2004</u>	<u>2005</u>
3.1r	2.9r	2.8r	2.5r	2.4

*Source: Human Resources and Employment, and Workers' Compensation Board*

*r – revised. Past Workplace Lost-time Claim Rate results were revised in 2005 to reflect improvements in the data collection methodology, resulting in strengthened industry coverage and a stricter definition of a lost-time claim due to exclusion of claims where workers returned to modified work after an injury and had no time lost.*

The Alberta Workers' Compensation Board (WCB) records a LTC when a worker, his/her physician, or his/her employer submits an injury report form. The WCB collects this information and provides the data files to Human Resources and Employment (HRE) for analysis. The LTC rate is reported by calendar year and is calculated by HRE using the following formula:

$$\text{LTC Rate} = \frac{\text{Number of LTC} \times 100}{\text{Estimated Person-Years}^*}$$

\* One person-year is equivalent to one full-time worker working for one year, or 2,000 hours worked.

Factors that impact the lost-time claim rate include: the effectiveness of government and industry programs in promoting workplace health and safety, individual employee efforts, and economic conditions.

## EFFECTIVENESS OF HUMAN RIGHTS PROTECTION

This measure identifies the percentage of adult Albertans who indicated that human rights are well protected in Alberta.

<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
85.7%	83.7%	84.8%	87.6%	86.7%

*Source: Community Development – Survey of Albertans*

The Community Development Survey of Albertans is an annual province-wide telephone survey of 1,000 adult Albertans. Research Innovations Inc. conducted this survey using a random sample stratified by age group, gender

and geographic location to be representative of Alberta's population. Results are based on the combined total of adult Albertans who indicated human rights are "fairly well" or "very well" protected in Alberta, the top two categories of a four-point rating scale. The wording of this measure was revised slightly in both the Government of Alberta and Community Development 2005-08 business plans to better reflect the survey question. The measure's intent remains the same and results continue to be comparable with previous years.

All interviews were conducted in February 2006 by trained and experienced interviewers. Question order was randomly rotated to minimize potential question order bias. Interviews were monitored while in progress and 10% of each interviewer's work was directly monitored. The response rate was 56%. Data were analyzed with STATXP software. The margin of error is ±3.2% at the 95% confidence level. Results may be affected by issues, events and legislative matters concerning human rights, both in the province and in other jurisdictions around the world, media coverage, demographics and respondents' historical and personal circumstances and experiences.

## Goal Eleven

### DRINKING WATER SAFETY INDICATOR

The Drinking Water Safety Indicator is comprised of three separate sub-measures that collectively provide an indicator of the performance of regulated waterworks facilities in delivering safe drinking water to Albertans.

	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
<b>Facility Design Standards</b>			
Number of regulated facilities	544	545	554
Number of facilities meeting newest (1997) standards	377	409	432
Number of facilities meeting pre-1997 standards	167	136	122
<b>Facility Operational Requirements</b>			
Number of incidents	59	45	35
Number of facilities where incidents occurred	40	35	28
<b>Water Quality</b>			
Number of incidents where health-related limits were exceeded	48	69	60
Number of facilities where incidents occurred	47	49	51

*Source: Environment*

Under the *Environmental Protection and Enhancement Act*, Environment regulates waterworks facilities that provide drinking water to Albertans, including campgrounds and rural subdivisions that use surface water sources, and all waterworks in villages, towns, and cities.

#### The Facility Design Standards

This sub-measure is based on an assessment of a regulated drinking water facility's design against the 1997 Alberta Environment design standards. These standards are revised every five to ten years. In January 2006, new standards were introduced and will be utilized in the next reporting period. Environment staff update these assessments throughout the year and report the results annually. The reported results indicate the number of facilities that have been maintained or upgraded to meet the latest requirements.

#### The Facility Operational Requirements

This sub-measure shows incidents where required conditions have not been met and could lead to water quality concerns. Regulated drinking water facilities operate under conditions of an approval or registration issued under the *Environmental Protection and Enhancement Act*. Facilities are required to self-report non-compliance and, in addition, Environment annually inspects regulated facilities and reports the number of non-compliance incidents. The target of 20 relates to the original results from 2003-04; however, these data were re-stated last year, so the target does not directly relate to the result. Targets have been adjusted accordingly in subsequent business plans.

#### The Water Quality

This sub-measure shows incidents where a water quality parameter (chemical, physical or bacteriological) were unsatisfactory and identifies the total number of these non-compliance incidents on a provincial basis. Regulated drinking water facilities must report on the quality of the treated water against specified limits. Alberta has adopted the health-related limits of the Guidelines for Canadian Drinking Water Quality published by Health Canada as

well as establishing performance requirements. Most health-related limits are a concern if the water is consumed over a long period of time (i.e., many years), while performance requirements are of a more immediate concern. Intervention is needed in either case, and may range from a public health advisory, preventing the consumption of the water, to a requirement to upgrade a waterworks facility. The target of 31 relates to the original results from 2003-04; however, these data were re-stated last year so the target does not directly relate to the result. Targets have been adjusted accordingly in subsequent business plans.

#### **RIVER WATER QUALITY INDEX**

The River Water Quality Index is used to evaluate water in Alberta's major river systems with respect to four groups of variables: metals, bacteria, nutrients and pesticides. Results from these four groups are combined to provide an indication of overall water quality. River water quality is reported because the effects of human activities are generally more diverse and easier to measure in rivers than in lakes. The Index can be used to show relative differences in water quality between rivers, between sites on the same river (e.g., upstream and downstream from developed areas) and over time. Such differences highlight degradation or improvement that has a human cause.

The majority of Index values show no trend toward degradation in water quality. In 2004-05, the quality of Alberta's major rivers was generally rated "good" to "excellent."

	2001-02	2002-03	2003-04	2004-05
	(Index)			
<b>OLDMAN RIVER</b>				
Upstream of Lethbridge	96	77	90	96
Downstream of Lethbridge	95	75	89	94
<b>BOW RIVER</b>				
Upstream of Calgary	100	100	98	100
Downstream of Calgary	86	92	90	89
<b>RED DEER RIVER</b>				
Upstream of Red Deer	91	95	94	93
Downstream of Red Deer	93	90	90	89
<b>NORTH SASKATCHEWAN RIVER</b>				
Upstream of Edmonton	98	97	98	98
Downstream of Edmonton	86	90	74	74
<b>SMOKY/PEACE RIVERS</b>				
at Watino	94	90	91	87
at Ft Vermilion	88	91	93	82
<b>ATHABASCA RIVER</b>				
at Athabasca	99	93	97	90
at Old Fort	97	94	95	92

*Source: Environment*

**Index Guidelines**

96 - 100	Almost always met; "Best" Quality (Excellent).
81 - 95	Occasionally exceeded, but usually by small amounts; threat to quality is minimal (Good).
66 - 80	Sometimes exceeded by moderate amounts; quality occasionally departs from desirable levels (Fair).
46 - 65	Often exceeded, sometimes by large amounts; quality is threatened, often departing from desirable levels (Marginal).
0 - 45	Almost always exceeded by large amounts; quality is significantly impaired and is well below desirable levels; "Worst" Quality (Poor).

Data for the River Water Quality Index are collected monthly at a number of locations throughout the province. These stations make up the provincial Long-Term River Network. Stations upstream and downstream from agricultural, industrial or municipal areas are compared to examine the overall impact of these developments on river water quality. Index values for a sub-set of these stations from the province's six major river systems show changes in water quality that have occurred over the past several years.

Monthly water quality samples are collected at two locations for each of the province's six major river systems. An Index value is calculated for each of four variable groups for data collected between April and March, representing both a fiscal and a "water" year:

- metals (22 variables measured quarterly);
- nutrients (6 variables measured monthly, includes oxygen and pH);
- bacteria (2 variables measured monthly); and
- pesticides (17 variables measured four times through the summer).

Index values for the four variable groups are then averaged to produce an overall Index of surface water quality that can be tracked over time.

The formula used to calculate Index values for each group is based on three statistical attributes of water quality with respect to desirable levels (defined by water quality guidelines in most cases):

- scope – the total number of water quality variables that do not meet guidelines;
- frequency – the number of individual measurements for all variables combined that do not meet guidelines; and
- amplitude – the amount by which measurements do not meet guidelines.

Variables in the first three groups (metals, nutrients and bacteria) are compared to guidelines listed in Surface Water Quality Guidelines for Use in Alberta. Where a number of guidelines exist for one variable, the guideline for the most sensitive use (recreation, agriculture or the protection of aquatic life) is typically chosen. Drinking water guidelines are not considered, since surface water should not be used for drinking without first being treated. The Index calculator is periodically revised to keep current with updates in National Water Quality Guidelines.

Variables in the fourth group (pesticides) are evaluated based on whether they can be detected in a water sample. This conservative approach was adopted because some pesticides do not yet have official guidelines and, unlike metals, nutrients and bacteria, do not occur naturally in the environment.

## AIR QUALITY INDEX (AQI)

This measure indicates the number of “good,” “fair,” “poor” and “very poor” air quality days.

	<b>“Good” Days</b> (percent)	<b>Good</b>	<b>Fair</b>	<b>Poor</b>	<b>Very Poor</b>
		(number of days)			
2002*	96	352	12	0	0
2003**	96	351	14	0	0
2004***^	97	357	9	0	0
2005***	99	360	5	0	0

*Source: Environment, Wood Buffalo Environment Association, Peace Airshed Zone Association, Parkland Airshed Management Zone, and Fort Air Partnership*

\* Based on data from eight stations.

\*\* Based on data from ten stations.

\*\*\* Based on data from twelve stations.

^ Data for 2004 have been restated to ensure data from all 12 stations are included.

The Air Quality Index (AQI) is calculated from outdoor concentrations of five major air pollutants monitored at stations across the province. In 2005, the AQI was calculated hourly at twelve continuous monitoring stations, three each in Edmonton and Calgary, two in Fort McMurray, and one in each of Fort Saskatchewan, Grande Prairie, Lethbridge and Red Deer. The pollutants used to calculate the AQI are carbon monoxide, fine particulate matter (PM<sub>2.5</sub>), nitrogen dioxide, ozone and sulphur dioxide. Measurements of at least four of the five pollutants must be available to calculate the AQI, and PM<sub>2.5</sub> must be one of the pollutants. The AQI number is used to determine whether the quality of the air is “good,” “fair,” “poor” or “very poor.” These categories are derived using formulas based on air quality objectives under the *Environmental Protection and Enhancement Act* and the National Ambient Air Quality Objectives.

In 2003, the AQI was modified to include hourly measurements of small particulates (PM<sub>2.5</sub>). PM<sub>2.5</sub> are particles that are small enough to be inhaled into the lungs and, depending on their composition, may be a human health concern. In 2004, data for one of the 12 stations was not initially available. Data for 2004 have been restated to ensure data from all 12 stations are included.

## MUNICIPAL SOLID WASTE TO LANDFILLS

This measure tracks the kilograms per capita of municipal solid waste going into landfills.

<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
(kilograms per capita)			
761	796	800	806

*Source: Environment*

This measure tracks the kilograms per capita of municipal solid waste going into municipal landfills in Alberta, and includes waste from the Residential, Industrial/Commercial/Institutional, and the Construction/Renovation/Demolition sectors. The calculation is based on the kilograms of municipal solid waste sent to each landfill, and the population served by each applicable landfill. The measure is calculated using Municipal Affairs’ official provincial population list. The calculation can also be further divided to illustrate urban and regional disposal amounts. The information is collected from landfills with weigh scales, and is voluntarily provided. Approximately 83% of Alberta’s population is served by reporting landfills. Estimates are used for the remaining population, and are derived by multiplying measured urban and measured regional per capita disposal rates with unmeasured urban (if applicable) and unmeasured regional populations.

## GOAL TWELVE

### VISITOR SATISFACTION WITH PROVINCIAL HISTORIC SITES, MUSEUMS AND INTERPRETIVE CENTRES

This measure indicates the percentage of visitors to provincial historic sites, museums and interpretive centres who were satisfied overall with their experience.

<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>
98.6%	97.9%	97.7%	97.7%	98.5%

*Source: Community Development – Heritage Facilities Visitor Survey*

The satisfaction level of visitors at provincial historic sites, museums and interpretive centres is determined through Community Development’s Heritage Facilities Visitor Survey. This measure reports the satisfaction level of “independent”

visitors, not including school groups, tours or other groups; after-hours visitors to facilities; people attending education programs; or visitors attending facilities for special functions. A private research firm, Infact Research and Consulting Inc. was responsible for survey and questionnaire design, training ministry staff to coordinate and conduct the survey, data quality control, analysis and report preparation. Another firm, Alberta WP & Data Services, conducted data entry and verification. Overall results were determined using the top two combined response categories of a five-point rating scale for the categories “excellent,” “good,” “neither good nor poor,” “poor” and “very poor.” A multi-stage, stratified systematic random sample was used, and each facility was sampled independently. More than 5,500 interviews were processed at 16 facilities across the province, and 99.6% of respondents who completed the survey answered the overall satisfaction question. The margin of error is ±1.3% at the 95% confidence level. The Tyrrell Field Station was not surveyed in 2005-06 because it was closed for construction during the survey period.

The sample was based on two seasons, winter 2004-05 and summer 2005. Winter data were estimated from actual winter survey data collected for 2002-03, and adjusted to represent the winter of 2004-05. Surveying during winter is conducted on an occasional basis only, as the winter period makes up a relatively small proportion of visitation. Summer data were collected from May to September 2005. Results may have been impacted by the addition of new exhibits, renovated facilities, visitors’ expectations and previous experiences.

**VISITOR SATISFACTION WITH PROVINCIAL PARKS AND RECREATION AREAS**

This measure indicates the percentage of visitors who were satisfied overall with the services and facilities at Alberta’s provincial parks and recreation areas.

<b><u>2003-04</u></b>	<b><u>2004-05</u></b>	<b><u>2005-06</u></b>
90.4%	90.9%	91.1%

*Source: Community Development – Camper Satisfaction Survey*

The level of visitor satisfaction at provincial parks and recreation areas is determined through Community Development’s Camper Satisfaction Survey. The survey includes a representative cross-section of 93 provincial parks or recreation area campgrounds according to size (visitation), management method and geography. Only automobile accessible campgrounds where visitation is greater than 1,050 occupied campsite nights are included. A random sample of adult campers is surveyed at approximately 24 campgrounds per year on a four-year rotational cycle. Although 24 campgrounds were identified to be surveyed in 2005-06, one campground was excluded from the analysis due to inadequate sample size and two campgrounds did not participate due to flooding. Overall results are determined through the combined response categories of “very satisfied” and “satisfied,” the top two categories of a five-point rating scale. The sample size was 2,050, with data collected from June to September 2005. Results were calculated with Statistical Analysis System software. The margin of error is ±1.97% at the 95% confidence level. Results may have been influenced by several factors, including interactions with other visitors, programs offered during the visit, awareness of facilities and services, service provided by contractors and park staff and the age, condition and cleanliness of facilities.

**PARTICIPATION IN SPORT AND RECREATION**

This measure indicates the percentage of adult Albertans who participate in sport and recreational activities in a given year.

<b><u>2001-02</u></b>	<b><u>2002-03</u></b>	<b><u>2003-04</u></b>	<b><u>2004-05</u></b>	<b><u>2005-06</u></b>
84.5%	82.6%	80.4%	83.4%	82.4%

*Source: Community Development – Survey of Albertans*

The Community Development Survey of Albertans is an annual province-wide telephone survey of 1,000 adult Albertans. Research Innovations Inc. conducted this survey using a random sample stratified by age group, gender and geographic location to be representative of Alberta’s population. Respondents were asked if they had participated in a recreational activity such as walking, bicycling, skiing, golfing,

skating, swimming and amateur sports in the past year.

All interviews were conducted in February 2006 by trained and experienced interviewers. Question order was randomly rotated to minimize potential question order bias. Interviews were monitored while in progress and 10% of each interviewer’s work was directly monitored. The response rate was 56%. Data were analyzed with STATXP software. The margin of error is ±3.2% at the 95% confidence level. Results may be affected by external influences such as lifestyle choices, disposable income, user fees and demographic changes, such as the general trend of an aging population.

**PARTICIPATION IN ARTS AND CULTURAL ACTIVITIES**

This measure indicates the percentage of adult Albertans who attend or participate in arts and cultural activities in a given year.

<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
88.9%	89.2%	85.5%	87.2%	88.8%

*Source: Community Development – Survey of Albertans*

The Community Development Survey of Albertans is an annual province-wide telephone survey of 1,000 adult Albertans. Research Innovations Inc. conducted this survey using a random sample stratified by age group, gender and geographic location to be representative of Alberta’s population. Respondents were asked if they had personally attended or participated in a broad range of arts and cultural activities in the last year.

All interviews were conducted in February 2006 by trained and experienced interviewers. Question order was randomly rotated to minimize potential question order bias. Interviews were monitored while in progress and 10% of each interviewer’s work was directly monitored. The response rate was 56%. Data were analyzed with STATXP software. The margin of error is ±3.2% at the 95% confidence level.

**GOAL THIRTEEN**

**SENIORS’ AVERAGE TOTAL INCOME**

This measure indicates the average total income for seniors. To calculate the average income for seniors, the total income amount is divided by the number of seniors (65+) receiving income, then multiplied by 1,000. For example, the 2002 the calculation was:

$$\text{Average total income for 2002} = \$9,429,655 / 316,690 = \$29.776 \times 1,000 = \$29,776$$

These amounts were adjusted to 2003 constant dollars. The average income is multiplied by the Consumer Price Index (CPI) for 2003 and the amount is divided by the CPI of the year in question. See the table below for the CPI used.

**Alberta All Items**

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
CPI	113.4	117.4	120.1	124.2	129.7

*Source: Statistics Canada – Small Area and Administrative Data Division, Seniors Data, Table 5, Sources of Income of Senior Individuals by Age Group*

For example, the 2002 calculation was: Average total income for 2002 in 2003 constant dollars =  $\$29,776 \times 129.7 / 124.2 = \$31,094$

**Non-government Funded Sources of Income and Government Transfers**

Non-government funded sources of income consist of: wages, salaries and commissions; self-employment; investment; Canada/Quebec Pension Plan; other pensions; RRSP; and other income.

Government transfers include: employment insurance; Old Age Security/Net Federal Supplements; Canada Child Tax Benefit; Goods and Services Tax Credit/Harmonized Sales Tax Credit; Workers’ Compensation; Social Assistance; and Provincial Refundable Tax Credits.

To calculate the percentage of total income that comes from each area, the amount of income from a particular category (e.g., self-employment) of income was divided by the total income amount.

For example, for 2002, self-employment equals 2.37% of total income.

$$(\$223,563 / \$9,429,655 = 0.0237 * 100 = 2.37\%)$$

To calculate all non-government funded sources of income and government transfers, the same calculation is done for each of the components and totalled.

	1999	2000	2001	2002	2003
Average Total Income*	\$29,920	\$30,020	\$31,897	\$31,094	\$30,251
Non-government funded					
Sources of income	75.3%	75.5%	76.8%	76.2%	76.2%
Government transfers	24.7%	24.5%	23.2%	23.8%	23.8%

Source: Statistics Canada – Small Area and Administrative Data Division

\* In 2003 constant dollars.

**SELF-REPORTED HEALTH STATUS**

This measure identifies Albertans’ self-reported health status. How people rate their own health is affected by a variety of factors including chronic disease, disability, temporary illness and mental health.

**65 years and over**

	2002	2003	2004	2005	2006
	(percentage)				
Good	30	33	31	33	33
Very Good	30	33	32	32	33
Excellent	18	14	15	13	20

Source: HQCA Satisfaction with Healthcare Survey 2006 – Health Quality Council of Alberta (HQCA); Public Survey about Health and the Health System in Alberta, for 2002-2005; Health and Wellness

Data are collected through a telephone survey of 4,780 randomly selected Alberta households (n=662). The 95% confidence interval for this question is three percent above or below the reported results.

To assess self-reported health status, this measure reports on Albertans 65 years of age and over who were asked: “In general, compared with other people your age, would you say your health is excellent, very good, good, fair, or poor?” This measure reports on the reported health status as “excellent,” “very good,” or “good.”

**GOAL FOURTEEN**

To enhance reporting and enable the ministry to compare condition ratings across the facility types, a facility condition index (FCI) was adopted as a basis for determining the condition rating of each facility. The FCI is the ratio of the cost to correct current and future (five year) physical condition deficiencies, relative to current facility replacement values.

In concert with the Government of Alberta’s Capital Planning Initiative (CPI), three measures (“good,” “fair” and “poor”) were developed to aid in making sound capital funding decisions.

The interpretation of FCI values for building infrastructure is as follows:

Condition	FCI Definition	CPI Definition
Good	Facilities with an FCI of less than 15%	Adequate for intended use and expected to provide continued service life with average maintenance.
Fair	Facilities with an FCI that is equal to or greater than 15%, or equal to or less than 40%	Aging components are nearing the end of their life cycle and require additional expenditures for renewal or refurbishing.
Poor	Facilities with an FCI of greater than 40%	Upgrading is required to comply with minimum codes or standards and deterioration has reached the point where major repairs or replacement are necessary.

Infrastructure in “good” or “fair” condition is rated as acceptable.

**PHYSICAL CONDITION OF HEALTH FACILITIES**

The cost to correct physical deficiencies in health facilities was obtained through evaluations conducted by professional consultants or qualified staff of the Health Regions, and reviewed by the Health Regions and Infrastructure and Transportation. In cases where facility evaluation data were incomplete, Infrastructure and Transportation estimated the total physical deficiency costs, based on ongoing working knowledge obtained through on-site participation. Replacement values were determined using factors, such as construction type, maintenance responsibility type, location, and gross building area.



	<u>2003-04</u>	<u>2004-05</u> (percentage)	<u>2005-06</u>
Good	84	71	n/a
Fair	11	25	n/a
Total	95	96	n/a

**Source:** *Infrastructure and Transportation, Regional Health Authorities*

*n/a* An actual result for 2005-06 is unavailable at this time due to a restructuring of the ministry and the lack of a complete data set from external sources. The result for this performance measure will be reported in the 2005-06 Infrastructure and Transportation annual report.

## PHYSICAL CONDITION OF LEARNING FACILITIES

### Schools

This measure reports the percentage of total schools in acceptable (“good” or “fair”) condition, out of the total number of schools rated.

In the initial 1999-00 condition assessments, a non-weighted point scoring system was used for the number and type of deficiencies. Those schools with a point rating between 0 and 399 were in “good” condition; those between 400 and 799 points were in “fair” condition; those with 800 or more points were considered to be in “poor” condition.

Since 2004, Infrastructure and Transportation has been in the process of conducting follow-up assessments on the original 1999-00 assessments. The difference in the approach is:

- Staged implementation – rather than evaluating all schools at once in one short timeframe, the objective for this round of assessments is to implement an ongoing process whereby a school will be assessed once every five years on a rotational basis.
- FCI – rather than focusing on reporting a raw score, the FCI is calculated to comply with the approach used in other facility assessments. Although the end result for an FCI might differ from the previous approach, it still identifies a “good,” “fair,” and “poor” rating.

Unlike the original 1999-00 assessments, which used a point based approach, the facility re-evaluations calculate the FCI. The FCI is the ratio of forecasted costs to correct physical deficiencies relative to the replacement value. This ratio is then expressed as a percentage based on the same three-point scale used in the 1999-00 assessments: i.e., “good,” “fair” and “poor.”

Independent, third-party contractors, who have expertise in facility evaluations, conducted all of the reviews of school facilities.

Data are the result of condition assessments of school facilities owned by school boards and funded by Infrastructure and Transportation and do not include outreach facilities.

	<u>2002-03*</u>	<u>2003-04*</u> (percentage)	<u>2004-05**</u>	<u>2005-06**</u>
Good	52	52	61	61
Fair	42	42	36	34
Total	94	94	97	95

**Source:** *Infrastructure and Transportation*

\* These results have been converted to allow comparison to those generated by the current FCI methodology.

\*\* These results include facilities that have been evaluated under the new FCI methodology and facilities that have had their condition converted from the previous methodology.

### Post-Secondary Institutions

This measure is a percentage of the total institutions (area) rated in “good” or “fair” condition using FCI.

	<u>2003-04</u>	<u>2004-05</u> (percentage)	<u>2005-06</u>
Good	45	51	55
Fair	39	37	35
Total	84	88	90

**Source:** *Infrastructure and Transportation*

The index ratio compares the total cost of deficiencies to the replacement value of the facility. The total cost of deficiencies was calculated by taking the estimated cost of remedial work recommended for the next five years to bring the current condition level to either “good” or “fair.” The cost is then adjusted for factors such as location, contingency and consultant fees. Data are based on 2000-01 evaluations made by external consultants, which are updated annually by facilities managers and

deposited in Infrastructure and Transportation's Building and Land Information Management System.

### PHYSICAL CONDITION OF GOVERNMENT-OWNED AND OPERATED BUILDINGS

This measure reports the percentage (based on replacement costs) of government-owned and operated buildings in acceptable ("good" or "fair") physical condition (area). Replacement cost is based on average dollars per square metre.

	<u>2001-02</u>	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
	(percentage)				
Good	55	50	47	44	43
Fair	42	47	49	53	53
Total	97	97	96	97	96

*Source: Infrastructure and Transportation*

The FCI is the percentage of the total estimated value of the maintenance and renewal requirement over the next five years divided by the building replacement cost. Condition is based on an assessment of five major building systems. Each system is given a condition rating from one to six, and a weighted average of the five systems produces the overall building rating. Buildings with an overall rating of one, two or three are considered "poor," four is considered "fair," and five or six are considered "good."

Under FCI the overall percentage of acceptable facilities remained at 97%, although some facilities moved from "fair" to "good" condition and vice versa. As more data is collected using FCI methodology, it will eventually replace the previous condition rating scale.

### PHYSICAL CONDITION OF PROVINCIAL HIGHWAYS

This measure reports the percentage of provincial highways with pavement in acceptable ("good" or "fair") physical condition.

	<u>2002-03</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>
	(percentage)			
Good	65.8	65.5	65.5	63.0
Fair	23.0	23.3	23.3	24.1
Total	88.8	88.8	88.8	87.1

*Source: Infrastructure and Transportation*

The International Roughness Index (IRI) measures the roughness of roads and is used as an indicator of the overall physical condition of

provincial highways. The identification of roads as "good," "fair," or "poor" relies on standards established as a result of a comprehensive research study conducted on the government's behalf by the University of Calgary in 2002 of condition and other performance measures. The values are categorized by road classification and are based on one-kilometre segments. The source IRI data was collected and processed by independent consultants. Data received was reviewed and used by Infrastructure and Transportation staff in the performance measure analysis.

After existing "good," "fair," or "poor" segments are identified, anticipated work activities and pavement deterioration rates are incorporated to determine future performance targets.

### EFFECTIVE WATER MANAGEMENT INFRASTRUCTURE

This table shows the percentage of Alberta's government-owned and operated water management infrastructure that is in acceptable ("fair" or "good" Capital Planning Initiative (CPI) rating) physical condition (based on replacement value). Assets include dams, canals, and control structures. The three external factors that affect the results for this measure are: necessary upgrades to water management infrastructure; costly damage to water management infrastructure from flood or other acts of nature; and changes in legislation that require costly alterations to water management infrastructure.

	<u>1999</u>	<u>2004*</u>	<u>2005</u>
	(percentage)		
Good	90.10	93.33	95.55
Fair	5.80	6.14	3.58
Total	95.90	99.47	99.13

*Source: Environment*

\* estimate

The CPI rating criteria used is as follows:

<u>Condition Rating</u>	<u>Textual Value</u>	<u>Meaning</u>	<u>Equivalent CPI Rating</u>
2	Excellent	New or like new requiring minimal maintenance.	Good
4	Good	Fully operational and requiring normal maintenance.	Good
6	Fair	Operational but requiring considerable ongoing maintenance.	Fair
8	Marginal	Operational but requiring excessive ongoing maintenance or failure may be possible during a major event.	Poor
10	Poor	Not operational or failure may be imminent or occurred.	Poor

Assessments are done by a combination of internal staff and independent consultants on the basis of visual inspections and discussions with staff that are familiar with the operation of the infrastructure. Where initial inspections identify potential problems, a more detailed analysis utilizing engineering techniques is employed to confirm the nature and extent of the problems. Due to the large number of water management structure assets, assessments are done on a rotational basis.