

COMPARING BC'S PERFORMANCE – REACHING OUR POTENTIAL

Volume I – External Performance Review: Inter-Provincial and International

Backgrounder

The BC Progress Board has two mandates:

- Benchmarking BC's performance over time and relative to other jurisdictions; and,
- Providing strategic advice to the Premier and government on measures to improve BC's economic performance and its social policy supports.

The Board reports in detail on seventy-one indicators and provides supplementary comparisons or analysis on topics of interest to explain data issues and provide further relevant information and commentary. The foundation of the Board's reporting consists of six core targets related to two overall goals for British Columbia. Twenty-six additional inter-provincial performance indicators, nine province-state metrics, and nine international comparisons shed further light on BC's overall economic and social performance. On a regional basis, twenty-one performance indicators provide an overview of urban-regional performance. These comparisons are supplemented by inter-regional comparisons where data permits.

Taken together with the investigative topic boxes, these comparisons provide the most comprehensive effort available benchmarking BC's economic and social performance externally (relative to other jurisdictions) and internally (urban versus rural and inter-regionally) on key outcome performance indicators.

Economy, Innovation and Education

In 2001, the Progress Board recommended that British Columbia work towards two overarching goals, with the first goal being: *Make BC a Leader in Economy, Innovation and Education in Canada by 2010*. To anchor this objective, the Board reports BC's progress on three core target measures: economic growth, standard of living and jobs.

- **Economic Growth**: Target 1st or 2nd among the provinces in the growth of real GDP per capita by 2010. In 2004, BC ranked third for the annual growth of real GDP per capita; this is the same rank as in 2003 and up from BC's fifth ranked performance in 2002. BC ranked fourth for the level of real GDP per capita in 2004. Over the ten-year period 1995-2004, BC was tenth in the country for annual average improvement on this basic performance measure. Importantly, revised data show that BC placed above the national average growth rate of real GDP per capita in 2002 for the first time since 1993, and remained above the national average during 2003 and 2004.
- **Standard of Living**: Target 1st or 2nd among the provinces for the level of real personal disposable income per capita by 2010. In 2004, BC held onto its third place rank among the ten provinces for the level of real personal disposable income per capita. BC continued to rank tenth for ten-year (1995-2004) improvement in this core target, unchanged from last year's benchmarking report.
- **Jobs**: Target 1st or 2nd for the employment rate by 2010. In 2004, BC ranked fifth for the employment rate (age 15-64) among Canadian provinces, an increase from its sixth place rank in 2003 and seventh in 2002. BC's ten-year progress rank (1995-2004) remained in tenth place among the provinces, despite robust job growth in 2003 and 2004.

The report contains thirteen additional performance indicators that provide further information on BC's inter-provincial economic performance; note that the most recent year of data and the relevant rank are provided in brackets. Seven registered strong performance, ranking between first and third among the provinces: real average hourly wages (2004, ranked from the perspective of workers, 2nd); taxpayer supported debt (2004/05, 2nd); top personal marginal income tax rate (2005, 2nd); provincial deficit/surplus (2004/05, 2nd); net interprovincial migration (2004/05, 2nd); business gross fixed capital formation (2004, 3rd); and, university completion for those aged 25-54, (2004, 2nd). Five performance indicators registered middling performance (ranked between fourth and seventh): productivity (2004, 6th); per capita tax burden (2004/05, 6th); secondary school graduates (2003, 6th); research and development spending as a percent of GDP (2002, 4th); and, employment in natural and applied sciences (2004, 5th). One indicator registered in the weak category (i.e., ranked between eight and ten): total exports per capita (2004, 8th).

This year's report includes several supplementary topic boxes on *economy, innovation and education*:

- **Productivity Growth and Income** - Productivity growth is fundamental to increasing the amount individuals have to spend or save and, therefore, each individual's material standard of living. It also underpins sustainable economic growth. Unfortunately, productivity growth in both Canada and BC has been stagnant for the past few years. Concerted focus needs to be placed on stimulating productivity growth to ensure higher standards of living in BC.
- **Infrastructure, Market Connectivity and Economic Growth** - Transportation and communication infrastructure are essential ingredients in the effort to increase productivity levels and promote economic growth. A host of statistics illustrate BC's overall infrastructure performance.
- **Discussion of Employment Measures** - Employment in BC grew by 2.3 percent between 2003 and 2004 for a third place rank in Canada, and by 1.7 percent per year on average between 1995 and 2004 for a sixth place rank for 10-year improvement. British Columbia's unemployment rate over the past decade ranged from a high of 8.9 percent in 1998 to a low of 7.2 percent in 2000 and 2004.
- **Historical Comparison of Core Targets 1 through 3** – Data from 1971 through 2004 for the first three Core Targets – economic growth, standard of living, and jobs – highlight that BC's economic performance needs to continue to improve to match both the performance of other jurisdictions and its own historical performance. BC fell below the national average growth rate for real GDP per capita in twelve of the last twenty years; however, BC placed ahead of the national average in 2002 and remained there in 2003 and 2004.
- **Productivity** - Canada's productivity growth and therefore overall labour productivity have lagged behind the US over the past two decades. Although Canada has had strong economic performance since 1995, our productivity vis-a-vis the US has deteriorated, especially since 2000. In 2004, Canada's business sector productivity was 74 percent of the United States level, the lowest since the 1950s; it has been deteriorating compared to other jurisdictions as well. British Columbia had a labour productivity advantage within Canada in several industries and industry groups, but had a disadvantage overall in 2004.
- **Exports, Imports and the Balance of Trade** – The real value of exports from BC grew by 4.9 percent and imports grew by 6.4 percent between 2003 and 2004. Both of these growth rates were above the 1990 - 2004 BC average. British Columbia continues to be a highly trade intensive economy that exports the majority of its goods internationally (67.5% of

exports). For 2004, BC's top international exports were: Wood Products (32.4%); Pulp and Paper Products (16.0%); and, Energy Products (14.5%).

- **Business Tax Competitiveness** - BC and Canada share many of the successful ingredients of the world's top economic growth performers (Hong Kong, Korea, Singapore and Ireland) including a highly educated population, advanced transportation and communications infrastructure, and export-oriented production. One missing element is a competitive effective corporate tax rate. Influencing this is Canada's high aggregate effective tax rate; second only to China among 36 competitor countries in 2005, and almost three times levels in Ireland and six times those of Singapore. In Canada, BC has the fourth highest rate, 7.0 percentage points higher than Alberta.
- **Benchmarking Key Business and Personal Tax Rates** - British Columbia's top marginal personal income tax rate is the second lowest among the provinces in 2005, at 43.7 percent, second to Alberta's 39.0 percent. Among the provinces, BC's basic personal amount - the amount of income one can earn without paying income tax - is the third highest at \$8,676; Alberta has the highest at \$14,523 and Quebec's is \$9,330. BC has the third lowest federal/provincial small business income tax rates and third lowest general corporate tax rate for 2005.
- **Head Offices** - Corporate head offices provide economic benefits directly, through the hiring and training of local residents and the use of local business services, and indirectly, through their contribution to the local skilled labour force, the local economy as a whole, and activities that support the community. Various government policy decisions - on tax rates, infrastructure investment, and the regulatory environment - have a significant impact on a company's head office location decision. For these reasons, the number of head offices in an area over time can be a useful indicator of the strength of a local economy and its business attractiveness. In 2004, BC had the fourth highest proportion of the largest 500 company head offices among the provinces at 11.6 percent, behind first place Ontario (45.4%), second place Quebec (19.4%) and third place Alberta (14.0%).
- **Size of Government** - BC's government spending as a percent of GDP for 2004/05 was the third lowest among the provinces at 25.1 percent, behind Alberta (18.7%) and Ontario (23.5%). Research indicates that the relative size of a jurisdiction's government sector may negatively affect competitiveness, and increases in the size of government beyond optimal levels may produce little in terms of social progress.
- **Population Changes in BC** - Between 1990 and 2005, BC enjoyed the highest growth in overall population of any Canadian province, with growth of 29.3 percent, bettering Alberta (27.9%), Ontario (21.8%) and the Canadian average (16.5%). After five years of net outflow of people to other provinces between 1997/98 and 2002/03, net inter-provincial migration to BC was positive in 2003/04 and 2004/05.
- **Immigration as Enabler and Growth Agent for BC** - Throughout the history of BC, immigration has been a key driver of both population and economic growth. In Canada, the foreign-born share of the population grew from 3.7% in the 1950s to 18.4% in 2001. For 2001, 2002 and 2003 the net international migration to Canada accounted for the majority (60%) of population growth. Debate surrounding the true economic and social impacts of immigration in BC will increase in the coming years, as demographic shifts necessitate heightened future dependence on immigration as a source of economic growth.
- **Education and Technology: Access to Computers at School** - Computer skills are increas-

ingly becoming an essential part of basic K-12 education and literacy. A first – and integral – step to gaining computer literacy is the ability to access and use computers at school. Internationally, Canada ranks below the US, Australia, and New Zealand (among others) in terms of number of 15-year-old students per computer. Interprovincially, BC ranks seventh, right at the Canadian average of five students per computer.

- **Foundation Skills Assessment (FSA) Results** - In 2004/05, 79% of BC grade four and 77% of grade seven students met or exceeded expectations in reading comprehension. Meanwhile, 93% of grade four students and 90% of grade seven students achieved this threshold in writing. Fully 87% of grade fours, and 83% of grade sevens met or exceeded expectations in numeracy.
- **Education Spending and Outcomes** - British Columbia spends more, on a per student basis, than most other provinces. Using real (\$1992) figures, BC's spending was the second-highest in 1996/97 through 1998/99 and 2002/03 and the highest from 1999/00 through 2001/02. As with health care spending and outcomes, a simple review of per student spending levels and education outcome measures does not suggest any clear causal relationship between spending levels and performance outcomes.
- **Post-Secondary Education and Trades Training** - The proportion of the Canadian population with a post-secondary certificate, diploma or degree has increased significantly since 1990. The proportion in Canada has increased by 14.8 percentage points, from 41.5 percent in 1990 to 56.3 percent in 2004. The proportion has not increased as quickly in BC but BC's proportion (58.1%) was 1.8 percentage points above the national average in 2004. In 2004, 10.6 percent of Canadians aged fifteen and older had recognized trades training. The ratio in BC was an above average 11.5 percent.
- **Canada and US Comparative University Completion** - In 2000, 17.7% of Canadians and 25.0% of Americans (25 years and older) held a bachelor degree or higher. By 2004, the Canadian ratio had increased to 19.8% and the US ratio to 27.0%, narrowing the US-Canada gap by 4.8% between 2000 and 2004. Among provinces and states, British Columbia ranked 48th with a university completion rate of 19.9%, up from 18.1% in 2000. BC and Ontario (which placed 42nd with a 22.6% rate) were the only Canadian provinces with university completion rates higher than any of the US states.
- **Universities and Intellectual Property Commercialization** - Universities and other post-secondary institutions account for a significant portion of innovation in Canada. In 2002, the higher education sector accounted for 26.7% of Canada's research personnel (33.4% of BC's) and, in 2003, 16% of Canada's Gross Expenditures on Research and Development (GERD). Although universities have always been a source of ideas through research and development, over the past few years Canadian post-secondary institutions have been making large scale advances in commercialization.
- **Internet Connectivity and Closing the Digital Divide** – Internet access is growing quickly in Canada. The ability to access the Internet means being able to retrieve large amounts of information and easily access many otherwise inaccessible services. British Columbia, at 70.6 % in 2003, had the highest percentage of households connected to the Internet in the province; the Canadian average was 64.2%. Despite this, an urban/rural connectivity divide - though improving - continues to exist in BC.
- **Productivity and R&D Expenditures** – Research and development (R&D) creates technological change, which fuels innovation processes and eventually makes new products and

services that make business more efficient, thereby increasing overall productivity. Results from US studies strongly suggest that R&D spending has a positive influence on productivity with a rate of return that likely exceeds that of conventional investments. Though often separated, public and private R&D have positive spillover effects on each other, as does foreign R&D on domestic productivity.

- **High Skill Employment and Innovation** – The connection between education and innovation is traditionally linked to professions directly involved in R&D, specifically those in the natural and applied sciences and in particular, engineering. The growing prominence of the knowledge-based economy, however, means an increasingly broad-based focus on skill development, education and training is critical for economic and social progress.

Environment, Health and Society

The second overarching goal is: Make BC a leader in Canada on Environment, Health and Society in Canada by 2010. To anchor this objective, the Progress Board's report includes three specific targets:

- **Environmental Quality:** Target 1st among the provinces for environmental quality by 2010. BC's first place overall rank in 2003 on the Board's environmental quality index, which averages provincial performance on urban air quality, greenhouse gas emissions per capita, and protected areas, remains unchanged since the first Progress Board report. Data limitations continue to prevent ten-year progress reporting.
- **Health Outcomes:** Target 1st among the provinces for health outcomes by 2010. In 2002, BC ranked first among the provinces based on an average of its performance rankings for life expectancy at birth, cancer mortality, cardiovascular disease mortality, infant mortality and potential years of life lost, unchanged from its first place position in 2001 and 2000.
- **Social Condition:** Target 1st or 2nd in Canada for social condition by 2010. In 2003, BC ranked ninth in social condition based on an average of its performance rankings for the percent of families and unattached individuals with income below the after-tax low income cut-off (LICO), the low birth weight rate, the personal and property crime rate, the percent of the population on income assistance and the percent of total unemployment designated as long-term.

There are thirteen additional indicators used to measure BC's performance on **environment, health and society**; note the most recent year of data and the relevant rank are provided in brackets. Eight of the performance indicators registered strong performance, ranking between first and third among the provinces: air quality (2003, 3rd); greenhouse gas emissions per capita (2003, 3rd); protected areas (2003, 1st); life expectancy at birth (2003/04, 1st); cancer mortality (2002, 1st); cardiovascular disease mortality (2002, 2nd); potential years of life lost (2002, 1st); and, low birth weight rate (2003, 3rd). Infant mortality (2002, 5th), and income assistance (2003, 5th) were the two middling performance indicators. Low income cut-offs (2003, 10th); personal and property crime rate (2004, 9th); and, long-term unemployment (2004, 8th) were the three with weak performance.

This year's report also contains a number of special topic boxes related to **environment, health and society**. Brief highlights follow:

- **Additional Environmental Measures** - The 'environment' is not easily summarized - especially in cross-jurisdictional comparisons - in any single indicator. To supplement our

core environmental quality index and the three indicators that underpin it, a number of additional measures less commonly used and frequently without comparison in other jurisdictions may enhance our understanding of BC's overall environmental performance. Of 46 monitored bodies, BC's water quality index showed 20 rated as excellent, 7 as good, 7 as fair, 4 as marginal and 8 as poor. In 2002 British Columbians generated 936 kg of non-hazardous solid waste per person, making BC the fourth lowest producer among the provinces. British Columbia's rate of diversion, the proportion of generated waste which is recycled off-site, was 29% in 2002, second only to Nova Scotia's 30%.

- ***British Columbia and International Protected Areas*** - BC's natural diversity has been a distinct element in the province's unique environmental heritage. British Columbia has increased its protected areas from 6.1% of the provincial land base in 1992 to 13.0% in 2003, the highest level in the country. The Canadian provincial average is 8.4%.
- ***British Columbia and Species at Risk*** - Living in Canada's most biologically diverse province brings a number of challenges in terms of balancing economic growth and population increases with the protection of our natural ecosystems. In order to better understand the province's numerous species, several provincial and federal organizations identify and track species at risk or in danger of extinction. Growing numbers of species at risk need to be interpreted with caution.
- ***The New Health Outcomes Index*** - The introduction of the Health Outcomes Index coincides with an expansion of the BC Progress Board's benchmarking of health indicators. New to our core reporting structure this year are: cardiovascular disease mortality; infant mortality; and, potential years of life lost. With the exception of infant mortality these topics have been covered in previous reports as supplemental information; from this year forward, all three are included as performance indicators.
- ***Comparative Wait Times*** - While timely access to treatment is without doubt a significant factor in judging our healthcare system, "wait times" are just one indicator of the relative effectiveness and overall performance of the sector. Despite this, they have become an important barometer of the health of the system and a measure by which healthcare quality is frequently judged. Measuring and comparing wait times across jurisdictions is both complex and challenging.
- ***Health Care Spending and Health Outcomes*** - Government spending on health care has been growing in real terms for decades and likely will continue to grow as Canada's population ages. In 2004/05 preliminary provincial rankings, BC placed fifth in overall provincial government health care spending per capita at \$2,683. Similar to education spending and outcomes, a causal connection between high health care spending and health outcomes should be done with considerable caution.
- ***Health Risk Factors*** - Cancer and heart disease remain the biggest causes of death in Canada overall and in British Columbia. Both share common risk factors – obesity, inactivity, poor eating habits, and tobacco use – which are controllable. The prevalence of these risk factors in BC is low relative to other provinces, with 18% of men and 20% of women classified as obese in BC in 2004, and 15% of those 15 and over classified as current smokers.
- ***Preventive Health Care*** - Health care costs consume a significant portion of BC's public finances, or fully 43% of the total provincial budget in 2005/06 (\$11.6 billion). These costs will likely continue in the near future as BC's demographics reflect an ageing population.

Because of their potential to prolong life and generate savings, predictive and preventive health care will be of increasing importance as BC and Canada age.

- ***The New Social Condition Index*** - The introduction of the Social Condition Index coincides with an expansion of the BC Progress Board's benchmarking of social indicators. New to our formal reporting structure this year are income assistance and long-term unemployment.
- ***Low Income Incidence Measures*** - The use of Low Income Cut-Offs (LICO) as a benchmark is justifiably criticized due to the relative nature of the measure. Using LICO, it is possible for everyone in society to be better off, yet have no reduction in low income, since relatively speaking the people at the lower end of the spectrum will still be spending a larger portion of their income on the basics of food, clothing, and shelter. An alternative measure is to estimate the cost of a basket of necessities and keep track of the number of people who cannot afford that basket, called the Market Basket Measure (MBM). LICO, nonetheless, remains the best of a flawed menu of "unofficial measures."
- ***Persistence of High LICO Ratios in British Columbia*** - British Columbia has historically had a high Low Income Cut-Off (LICO) ratio based on the percentage of families under the (1992 base) after-tax low income line. Between 1990 and 2003, BC had two eighth place ranks, and four each of seventh, ninth and last place ranks. The low income rate (LIR) gap between in BC is often explained by differences in employment engagement. For example, families in Vancouver were almost twice as likely to have no connection whatsoever to the labour market as families in Toronto (10.2% versus 5.3%). Little or none of the LIR gap was explained by demographic factors such as family size, age, immigrant status, education and enrolment status.
- ***Crime Rates in North American Metropolitan Centres*** - A common way to monitor crime levels is to examine police-reported crimes. Statistics Canada recently investigated crime data as reported in Canada and the United States. The results show that, consistent with ranks reported for British Columbia, Vancouver has the highest combined violent and property rate among major Canadian and American cities. While Vancouver has high property crime rates it ranks better on violent crimes, with rates well below those found in all the US cities profiled except Boston.
- ***The Underground Economy*** - A portion of BC's economic activity is never recorded in official statistics. Although the existence of the underground economy is widely acknowledged, the fact that it is hidden makes determining its size and economic impact difficult. Estimates of the size of the total underground economy in Canada – both legal and illegal – range from 11.7% to 15.3% of GDP.

Supplemental US Comparisons

The Progress Board has continued its supplemental comparisons of BC performance relative to the states of Washington, Oregon and California and the provinces of Alberta, Ontario and Quebec, where there is comparable cross-jurisdictional data. The most recent year of data and the relevant rank are provided in brackets in the following list.

On six indicators of ***economy, innovation and education***, none placed in the **strong** category (i.e., first or second place). For three indicators, BC placed in the **middling** category (rank between three and five) – economic growth (real GDP per capita, 2004, 4th), top marginal personal income tax rate (2005, 3rd), and net inter-provincial (state) migration (2004, 3rd). BC registered **weak** performance (sixth or seventh rank) on standard of living (real personal disposable income per capita, 2004, 6th), jobs (employment to population ratio, 2004, 6th), and, research and development spending as a percent of GDP (2002, 6th).

Turning to supplemental US comparison measures for *environment, health and society*, comparable data are available for three indicators. The most recent year of data and the relevant rank are in brackets. British Columbia placed in the strong category for urban air quality (2003, 1st) and the low birth weight rate (2003, 1st). British Columbia placed in the weak performance category for personal and property crime (2004, 7th).

Supplemental North American Comparisons

Supplementing the US State and Key Competitors comparison, are further indicators using all sixty-one sub-national jurisdictions in North America, i.e., the Canadian provinces, the 50 US states and the District of Columbia. Comparisons are presented for two core targets and four performance indicators. The classification categories range from first place to twentieth for strong, twenty-first to fortieth for middling and forty-first to sixty-first for weak.

British Columbia earned weak designations for three indicators: real personal disposable income per capita (54th, 2004), employment rate (45th, 2004) and personal and property crime rate (61st, 2003). British Columbia had middling ranks for net inter-provincial (state) migration (22nd, 2004) and research and development as a percent of GDP (38th, 2002). British Columbia had a strong rank for the low birth weight infant rate (3rd, 2003).

Supplemental International Comparisons

This year's report continues to include supplemental international indicators benchmarking BC against the 30 member nations of the Organization for Economic Cooperation and Development.

Similar to US supplemental comparisons, the Progress Board has benchmarked BC where comparable data are available. The most recent year of data and the relevant rank are in brackets. For *economy, innovation and education*, BC's performance is middling on all five of the available indicators: economic growth (real GDP per capita, 2003, 16th), jobs (employment to population ratio for the working age population, 2004, 11th), international exports of goods and services (2003, 17th), gross fixed capital formation (2004, 14th), and, R&D as a percent of GDP (2002, 19th).

For *environment, health and society*, BC placed strong on two performance indicators, life expectancy at birth (2003, 2nd) and low birth weight rate (1994 - 2003 average, 8th). For greenhouse gas emissions BC was weak in an OECD context (2002, 22nd).