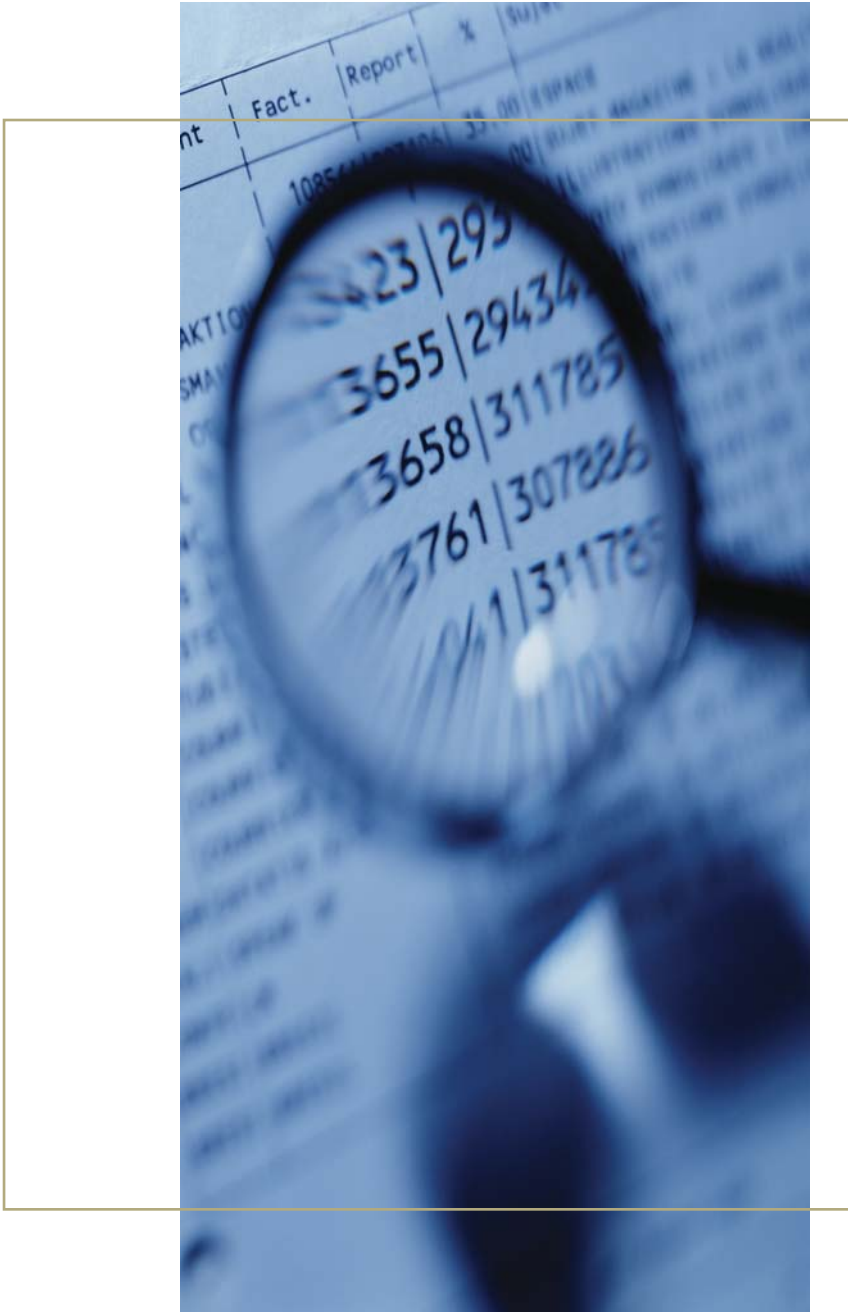


# *Closing Our Prosperity Gap*

A Working Paper of the  
Voluntary Planning  
Sector Committee on  
Economic Growth and  
Competitiveness



## **VOLUNTARY PLANNING**

*A Citizens' Policy Forum*

The Committee developed a model to evaluate Nova Scotia's economic performance relative to its North American peers. Using an OECD study of 'Drivers of Economic Growth', the Committee identified and explored ways to narrow our Performance Gap. This model can, and should, be used as an ongoing tool to track performance, identify areas of strength and weakness at either the provincial or community level, and help channel programs and policy to improve our economic performance and prosperity.



# *letter to voluntary planning board members*

I am pleased to submit this report, "Closing Our Prosperity Gap" from Voluntary Planning's Sector Committee on Economic Growth and Competitiveness, to the Board of Voluntary Planning.

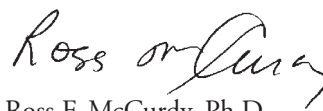
This report is intended to complement the Nova Scotia government's already well-developed economic growth agenda as articulated in Opportunities for Prosperity (OFP). This agenda calls for increased transparency and emphasizes the need for all Nova Scotians to become engaged in our economic issues. The OFP document reports a number of economic challenges facing us, including a decline in income levels and an aging population. My committee was moved by these facts and set out on a path to address and help close the prosperity gap. We believe the problem belongs to all Nova Scotians and we should all contribute to the solution.

The Prosperity Gap Model as reported in this working paper is intended to benchmark Nova Scotia today against a group of its peers. This model identifies the magnitude of the gap, as well as the contributions of the factors composing it. The working paper then assesses the key drivers known to improve economic performance and identifies those which would help close Nova Scotia's prosperity gap. Because of the ever-green nature of the data used in the model and the uniqueness of the selected peer group, the work as described in this paper should be viewed as a strategic approach to the Nova Scotia situation. The model's components and conclusions are intended to be a strong beginning of an action plan to close the identified prosperity gap. Although the prosperity gap, its principal components and the drivers required to reduce the gap were considered on a provincial basis, the analyses can be extended to the community level.

As mentioned, this working paper is an excellent complement and supportive linkage to the Nova Scotia government's growth agenda. The agenda includes: the government's annual corporate plan; the 2000 economic strategy, "Towards Prosperity"; the 2001 energy strategy, "Seizing the Opportunity"; the education strategy, "Learning for Life"; the creation of the Premier's Advisory Council on Innovation; the creation of the Office of Economic Development and the establishment of Nova Scotia Business Inc.; the commitment to small business through the funding made available through Credit Unions; the expansion of early-stage venture capital through InNOVAcorp; the support of research and development through the Nova Scotia Education Trust Fund; and the support of value-added manufacturing through the creation of InNOVAcorp's Knowledge Park. The purpose of this work is to help the reader understand the nature of the prosperity gap and present a framework to assess and create prioritized options to close the gap.

The Committee believes the prosperity gap can be closed in a much shorter period than it has taken to create it, providing there is focused action. The Committee agrees with the government's strategy, Opportunities for Prosperity, that communities throughout the province must play a key role in closing the gap and the province must provide the overall leadership. Closing this gap will improve our standard of living by increasing our economic performance, which will have the effect of expanding average household income and increasing the tax base, allowing more resources for essential services such as health care and education and ultimately leading to debt reduction.

Yours truly,



Ross F. McCurdy, Ph.D.

Chair, Economic Growth and Competitiveness Sector Committee

## *executive summary*

When Nova Scotia was benchmarked against a North American group of comparable provinces and states, it ranked 15th among 16 jurisdictions in GDP per capita in 2002. This ranking was not always the case. In 1981, we ranked 4th among these peers. Over the past two decades our economy has grown, but not as quickly as that of our peers. Today, Nova Scotia's GDP per capita is 22% lower than that of the mean of the peer group.

This gap can be narrowed. The Committee believes that with a concerted effort and focus on the right issues, Nova Scotia can return to the position of prominence it once held. The aim of this report is to shed light on our prosperity gap. Once the nature of the gap is understood, the drivers needed to close it can be selectively applied to improve economic performance, and ultimately, enhance the quality of life for all Nova Scotians.

This report summarizes the process the Committee undertook to choose a peer group, defines how the Committee chose to express prosperity, and identifies those factors that influence the prosperity gap. The Committee discovered the 22% prosperity gap can be explained primarily by two factors: lower productivity (output, or value produced per hour worked) and fewer working age people being employed. Also, it found Nova Scotia's urban and rural economies each play important and mutually supporting roles in closing this prosperity gap.

The Committee devised a roadmap to improve the province's economic performance, using the work of the Organization for Economic Cooperation and Development (OECD) as a guide and focusing on three drivers of economic growth: education, trade and innovation (research and development).

A study of these drivers reveals weaknesses and opportunities. Regarding education, the Committee found that the number of Nova Scotians with less than high school equivalency is 50% higher than the mean of the peer group. Among working age people with less than high school equivalency, fewer than 3 in 10 are employed, versus 7 in 10 of those Nova Scotians who have high school equivalency or better. Also, only 15% of Nova Scotians over 25 years old have university degrees; the mean of our peer group is 20%. Trade performance and innovation also reveal gaps and avenues of significant opportunity for improving economic performance. Nova Scotia ranks 10th out of 10 Canadian provinces in trade, despite the fact our province increased its international exports by more than 90% from 1992 to 2002. In 2002, while Nova Scotia's total R&D ranked 3rd among its peer group of 16, its business funded R&D ranked 10th.

Improving our population's high school equivalency rate and increasing our trade are key to closing our prosperity gap. Nova Scotia's system of innovation could play a major role in helping increase our trade. Since both our rural and urban economies have unique and supporting roles to play in closing Nova Scotia's prosperity gap, the Committee believes the improvements required should be considered at the community level. The Regional Development Authorities (RDAs), which represent our communities, should be given both the responsibility and the accountability for devising plans and implementing actions to close the gaps. The Committee's prosperity model for the province can be extrapolated to the community level. The collective actions of all RDAs, coordinated at the provincial level, should lead to the closing of our prosperity gap and the regaining of Nova Scotia's position of prominence among our peers.

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# *introduction*

Nova Scotians should want a strong, diversified economy.

A rich range of career and job opportunities, a strong social fabric, a solid expanding tax base — all are by-products of a healthy economy. A weak, stagnant, narrowly-based economy promotes loss of talent, tax revenues and opportunities; career paths are paved outside the province; public services are reduced; problems born of poverty and social disparity are created.

Nova Scotians should care about our economic performance, but accessible information is essential to informed, public discussion. The Committee believes it is useful and arguably essential to initiate an ongoing assessment of Nova Scotia's economic performance. A wider public awareness of economic performance and its impact on Nova Scotians' lives, both collectively and as individuals, will support positive change.

This document outlines key findings, and formulates specific strategies and recommendations for improving Nova Scotia's economic performance. The Committee hopes it may also serve as a tool in promoting a deeper, public dialogue.



# the task

The Voluntary Planning Sector Committee on Economic Growth and Competitiveness was assembled in November 2002 by the Board of Voluntary Planning to benchmark Nova Scotia's competitiveness, productivity and economic progress, and to report to the Board on appropriate measures to enhance the province's performance.

The first task the Committee addressed was to develop an indicator system to measure and track Nova Scotia's economic progress. The system will provide industry, academia and government with a tool to track changes and identify trends and opportunities for improvement. The Committee further believes an indicator system will help Nova Scotians understand the linkages between economic performance and quality of life.

The Committee considered the numerous indicator systems available and chose GDP per capita as its primary indicator. GDP per capita is a measure of the total value of goods and services produced by a province or jurisdiction, divided by its population. A country's standard of living is usually measured by comparing one country's GDP per capita with another. The standard of living is an important determinant of our quality of life.

The term 'quality of life' is generally used as an overarching concept. It not only encompasses income but also includes social and economic factors which contribute to our well-being, such as personal safety, access to education and lifelong learning, vibrant communities, good health and a clean environment.

The Committee took advantage of the fact that GDP per capita can be broken down into measurable components, as depicted in Table 1: intensity, labour force utilization (labour force participation and employment rate), profile, and productivity. Understanding these components helped the Committee understand our province's strengths and identify areas where improvement can be realized. Table 1 shows the relationship between GDP/capita and its constituents. When each component is shown in expanded form and cancellations are made, the relationship is proven.

Secondly, the Committee identified a peer group against which to benchmark Nova Scotia's performance. The Committee considered extensively both European and North American jurisdictions, and ultimately adopted an approach used by the Ontario Institute for Competitiveness and Prosperity. The Committee is grateful for the Institute's generosity in sharing this parallel work.

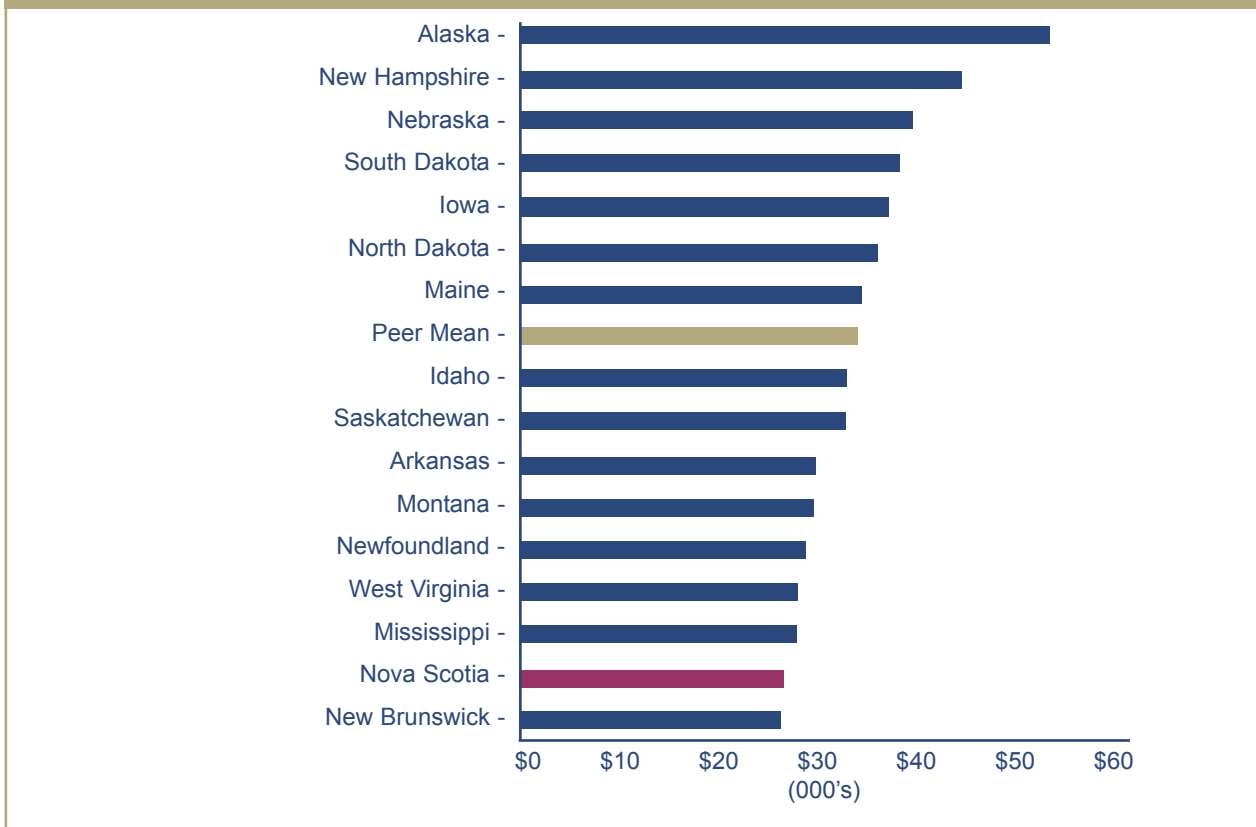
**Table 1 Components of GDP per capita**

GDP per capita	=	Profile	x	Participation rate	x	Employment rate	x	Intensity	x	Labour productivity
↓		↓		↓		↓		↓		↓
$\frac{\text{GDP}}{\text{Population}}$	=	$\frac{\text{working-age pop.}}{\text{Total population}}$	x	$\frac{\text{Labour force}}{\text{working-age pop.}}$	x	$\frac{\text{Employment}}{\text{Labour force}}$	x	$\frac{\text{Hours worked}}{\text{Employment}}$	x	$\frac{\text{GDP}}{\text{Hours worked}}$

Using North America as the area of focus, peer group selection criteria were based on population (0.5 to 3 million people) and level of urbanization (40-70% urban). Three other provinces (Saskatchewan, Newfoundland, and New Brunswick) and 12 American states (Maine, New Hampshire, Idaho, Alaska, North Dakota, South Dakota, Nebraska, Iowa, West Virginia, Arkansas, Mississippi and Montana) met these criteria.

The collection of jurisdictions (Figure 1) is of special interest to Nova Scotia not only because of their size and structure but because they represent areas that share similar characteristics (e.g. one or more of the following attributes: similar backgrounds, resource endowments or economic mixes). All but one of them, New Brunswick, have higher living standards than Nova Scotia as measured by GDP per capita.

**Figure 1 Peer Group GDP per capita 2002**

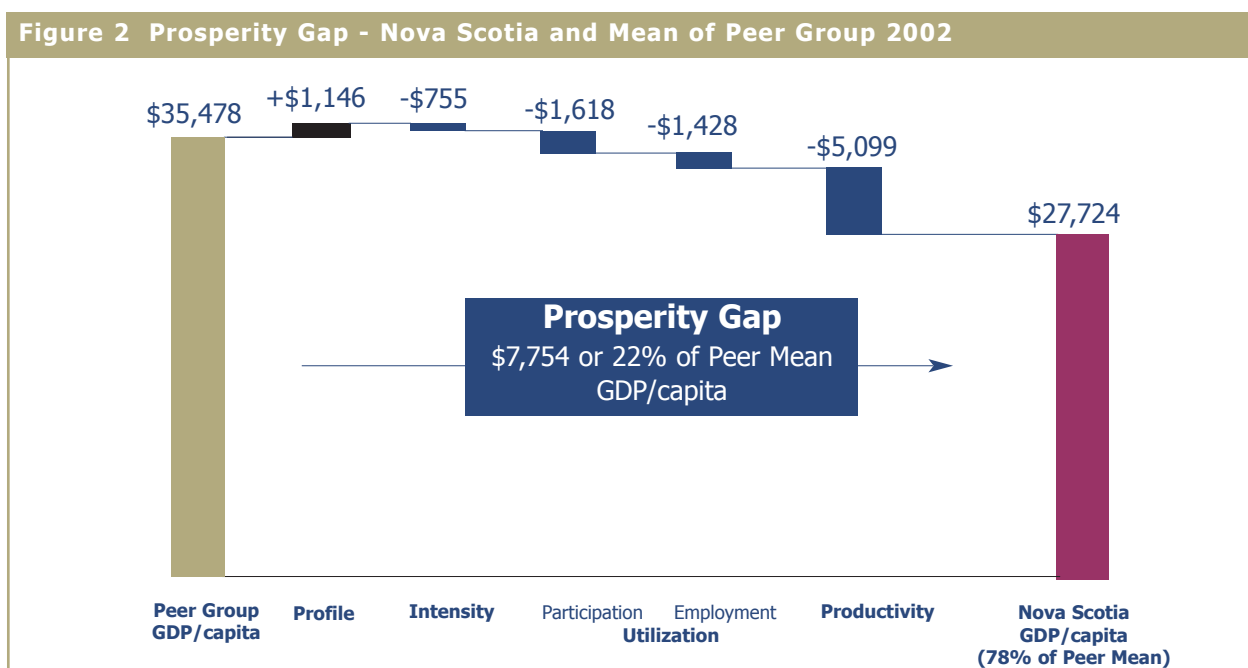


Source: Statistics Canada, U.S. Census Bureau

# tracking performance

When Nova Scotia's economy (GDP per capita) was compared to its peer group (mean GDP per capita for 16 jurisdictions), the Committee observed a prosperity gap of \$7,754 per capita for 2002. Nova Scotia's economy under-performed by \$7.4 billion compared to the mean of its peer group.

GDP per capita was broken out into its components — profile, intensity, utilization and productivity — to better understand why Nova Scotia is under-performing. The results of these analyses are captured in Figure 2.



Source: Statistics Canada, U.S. Census Bureau, U.S. Bureau of Economic Analysis, U.S. Bureau of Labour Statistics

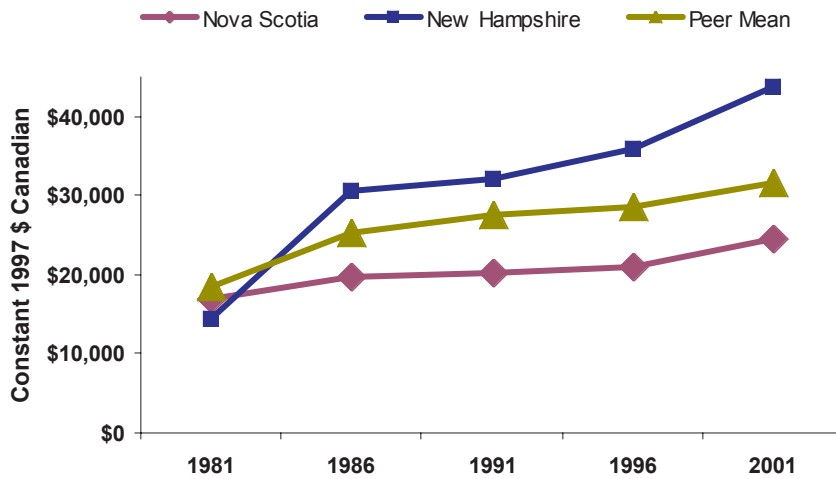
When compared with its peer group Nova Scotia's lower productivity accounts for \$5,099 of the \$7,754 gap; \$3,046 is the result of lower labour force utilization; and \$755 is the result of a shorter work week. These factors are partially offset by a \$1,146 gain, resulting from a higher proportion of the Nova Scotia population being within the working age range.

The Committee also looked at the performance of the Nova Scotia economy over the past two decades, relative to the peer group. The results of this analysis are captured in Figure 3.

In 1981, Nova Scotia's GDP per capita ranked 4th within the peer group. By 2001 that ranking had dropped to 15th. By way of contrast, New Hampshire moved from 9th to 2nd position during this period, with an increase of 224% in GDP per capita (real growth). Nova Scotia's economy during this same period grew by 45%, compared to 76% growth for the mean of the peer group.

Nova Scotia's prosperity gap has slowly increased over the past 20 years. About two-thirds of the current gap is the result of lower productivity and the other one-third is attributable to lower labour force utilization.

**Figure 3 Prosperity Gap 1981 - 2001**



NS Rank	4	14	14	15	15
NH Rank	9	2	3	2	2
Prosperity Gap vs. Mean	-\$1,524	-\$5,433	-\$7,162	-\$7,673	-\$7,016

Source: Statistics Canada, U.S. Bureau of Economic Analysis

The Committee took the analysis a step further to gain an understanding of how urban and rural economies are performing. Using income as a proxy for GDP, the Committee calculated the GDP per capita for Nova Scotia's urban and rural areas. This analysis produced a GDP per capita for urban Nova Scotia of \$32,258 compared to \$24,757 for the rest of the province.

Analysis of each peer group jurisdiction showed a similar gap between the urban and rural areas. Comparing urban Nova Scotia with the urban areas of the peer group, it was found that the gap was \$7,927 per capita; similarly, the rural gap was calculated at \$7,532 per capita.

**Table 2 Nova Scotia Urban & Rural Performance Relative to Peer Group 2002**

	<b>Province</b>	<b>Urban</b>	<b>Rural</b>
Prosperity Gap	\$7,754	\$7,972	\$7,532
• Profile	15%	24%	10%
• Intensity	-10%	-11%	-9%
• Utilization	-39%	-37%	-41%
• Productivity	-66%	-77%	-59%

Source: Statistics Canada, U.S. Census Bureau, U.S. Bureau of Economic Analysis, U.S. Bureau of Labour Statistics

Table 2 shows the gap between Nova Scotia and the peer group for the province as a whole and for both the urban and rural areas. It also shows the percentage of the gap attributable to each component of GDP per capita, and that the gap between urban and rural Nova Scotia is similar to the differences the peer group is experiencing. Further, the only component where there is a significant difference is profile, which is dependent on our demographics.

In both urban and rural parts of the province, the gaps for intensity, utilization and productivity are of a similar magnitude, suggesting these are areas where policy options could be considered. Clearly, both rural and urban economies have important roles to play in closing Nova Scotia's prosperity gap. Stated another way, both rural and urban areas have similar gaps to close for Nova Scotia to reach the mean of the peer group.



# strategies for closing the gap

The Committee used the work of the Organization for Economic Cooperation and Development (OECD) to help identify important drivers of economic growth as a basis for identifying Nova Scotia's strengths and areas for attention. Table 3 summarizes the key findings of OECD's work.

Among the seven drivers that can positively influence GDP, the Committee examined four — education, trade, R&D, and physical capital. It chose to explore Nova Scotia's performance in relation to three of these drivers and notes that further work needs to be done regarding physical capital.

**Table 3 OECD Key Drivers & Relative Impact**

<b>Driving Factor</b>	<b>Definition</b>	<b>Change</b>	<b>Impact</b>	<b>Typical Change Over '80s and '90s in OECD</b>
Human Capital	Average Years of Education	+ 1 Year	4%-7%	+ 1.5 years in G7
Physical Capital	Business Investment as % GDP	+ 1 pct. pt	1.3%	Variable
R&D	Business R&D as % GDP	+ 0.1 pct. pt.	>1.2%	About 0.1 pct. pt.
Trade Exposure	Exports & Imports as % GDP	+ 10 pct. pts.	4%	About 10 pct. pts.
Tax Burden	Government Revenue	+ 1 pct. pt.	(0.6%)-(0.7%)	About 1.5 pct. pts.
Inflation Level	Final Consumption Deflator	- 1 pct. pt.	0.4%-0.5%	About 4 pct. pts.
Inflation Variability	Standard Deviation	- 1 pct. Pt.	2%	About 2/3 pct. pts.

Source: OECD "Growth Project" - Peter Nicholson, March 2003

## *Driver #1: Education*

A 27-year analysis of 21 OECD countries reveals the most significant change in GDP per capita was associated with investments in human capital, namely increasing the average years of education of the population. A comparison of the educational attainment of Nova Scotians with that of the peer group is presented in Table 4.

**Table 4 Educational Attainment 2000 (%of population > 25 years)**

	<b>Less Than High School</b>	<b>At Least High School</b>	<b>Diploma, Certificate, Degree or Some Post-Secondary Training</b>	<b>University Degree</b>
Alaska	12	88	62	26
Arkansas	23	77	42	17
Idaho	14	86	55	21
Iowa	11	89	51	22
Maine	15	85	49	23
Mississippi	26	74	45	19
Montana	14	86	55	25
Nebraska	11	89	57	25
New Brunswick	32	68	48	12
New Hampshire	12	88	58	30
Newfoundland	37	63	49	10
North Dakota	14	86	57	23
<b>Nova Scotia</b>	<b>30</b>	<b>70</b>	<b>56</b>	<b>15</b>
Saskatchewan	30	70	50	13
South Dakota	13	87	54	24
West Virginia	25	75	36	14
<b>Peer Mean</b>	<b>20</b>	<b>80</b>	<b>50</b>	<b>20</b>
Canada	26	74	55	18
United States	18	82	52	25

Source: Statistics Canada, U.S. Census Bureau

A great strength of Nova Scotia is the proportion of the population with post-secondary education; the province ranks 4th within its peer group for the proportion of population in this group. Nova Scotia's ranking is ahead of the peer mean and both the Canadian and the U.S. averages. However, the proportion of our population with at least a university degree is below the peer mean as well as below the Canadian and U.S. averages.

The proportion of the population that has not achieved high school equivalency is a major weakness for Nova Scotia; we are 50% behind the peer mean and considerably less favorable than either the Canadian or U.S. averages. If Nova Scotia reached the mean value of the peer group, we would have 63,000 more Nova Scotians with high school equivalency.

Nova Scotia's 2002 unemployment rate was 10%. The unemployment rate for individuals who have not achieved high school equivalency was 16%. This compares with an 8% unemployment rate for those individuals with at least high school equivalency. Respectively, the corresponding participation rates are: 63% for the province overall; 38% among those who have not achieved high school equivalency; and 73% among those with at least high school equivalency.

These factors are important because, in considering the prosperity gap between Nova Scotia and its peer group (Figure 2), the Committee found one-third of the gap was related to less favorable labour utilization rates in Nova Scotia (i.e. both a higher unemployment rate and a lower participation rate).

Increasing the proportion of our population that has achieved high school equivalency to the mean of the peer group would go a long way toward closing the prosperity gap attributable to labour utilization. If this province's utilization rate were equal to the mean of the peer group, 39,000 additional Nova Scotians would be employed. As stated, our province's utilization problem occurs predominantly in the population that has not achieved high school equivalency. Among that group, only 3 of 10 are actually employed. As age increases, the percentage without high school certificates increases dramatically (Table 5).

In 2002, 62% of Nova Scotians who had not achieved high school equivalency were not participating in the labour force. Among the remaining 38% who were in the labour force, 16% were unemployed.

**Table 5 Educational Attainment by Age, 1996 (% of the population)**

Age	Less Than High School		High School Only		Diploma, Certificate or Some Post-Secondary Training		University Degree	
	NS	Canada	NS	Canada	NS	Canada	NS	Canada
20 - 24	20	19	13	15	53	55	14	11
25 - 34	21	19	11	14	50	47	18	20
35 - 44	26	22	12	17	46	44	16	17
45 - 54	34	29	9	15	42	39	15	17
55 - 64	51	47	8	12	33	31	8	10
> 64	64	61	7	10	23	22	6	6

Source: Statistics Canada, 1996 Census

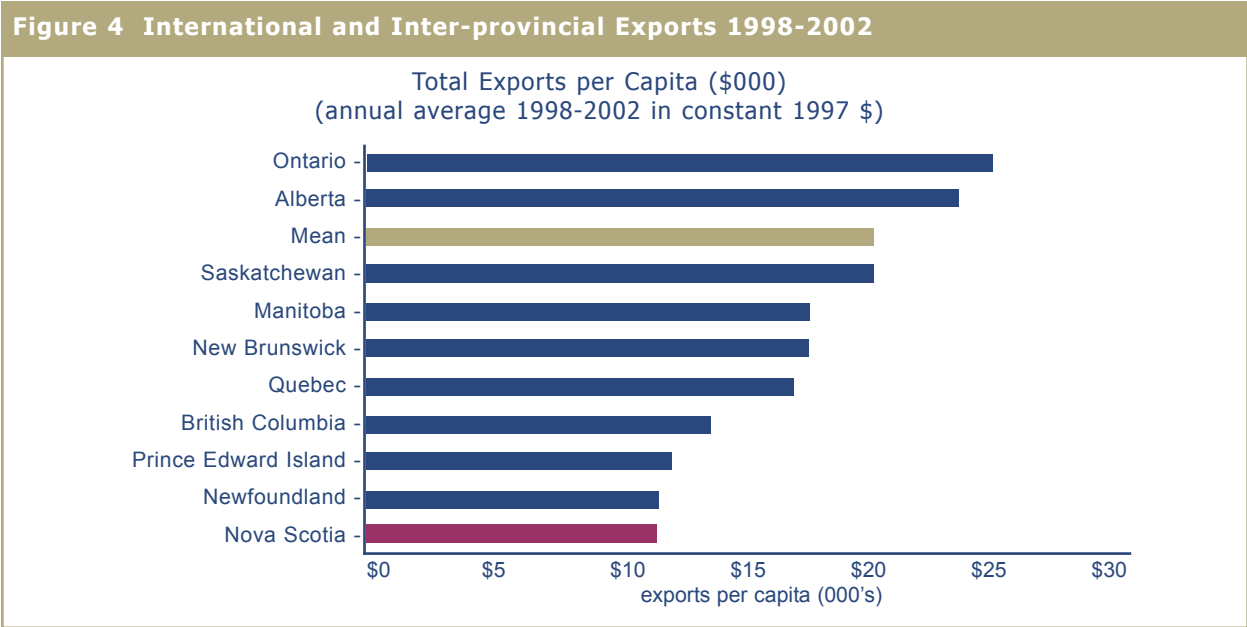
*Driver #2: Trade*

The Committee was unable to obtain comparable trade data from the U.S. peer states and therefore was restricted to comparing Nova Scotia's performance to that of the other Canadian provinces. It is envisioned that follow-on work will gather the appropriate data and carry through with a full peer review of trade.

When compared with its sister provinces, Nova Scotia ranked 9th out of 10 provinces for domestic and international exports for the period 1992-1998. The province realized a 78% increase in international trade during this period, while domestic trade increased by 23%.

This level of growth continued from 1998-2002, whereby Nova Scotia's exports (total) increased by 23%. During this same time period, the average growth in Canadian exports (total) increased by 17%. Despite Nova Scotia's strong export performance, our ranking dropped to 10th position, trailing the other Canadian provinces (Figure 4).

If Nova Scotia is to close its prosperity gap and regain its position of prominence, our economy must grow. Where will this growth come from?



Source: Statistics Canada

Table 6 reflects the composition of Nova Scotia's GDP, segmented by goods and services, as well as the value of goods and services being exported. The committee compared the value of Goods Nova Scotia is exporting against the GDP for the goods produced, and then compared our relative ranking with the rest of the country (figure 5).

<b>Table 6 Nova Scotia Economy: Goods &amp; Services 1998-2002 (5-Year Average - Current \$)</b>		
	<b>GDP</b>	<b>Value of Total Exports</b>
Goods	\$ 5.9 B	\$ 8.2 B
Services	\$18.5 B	\$ 3.2 B
Total	\$24.4 B	\$11.5 B

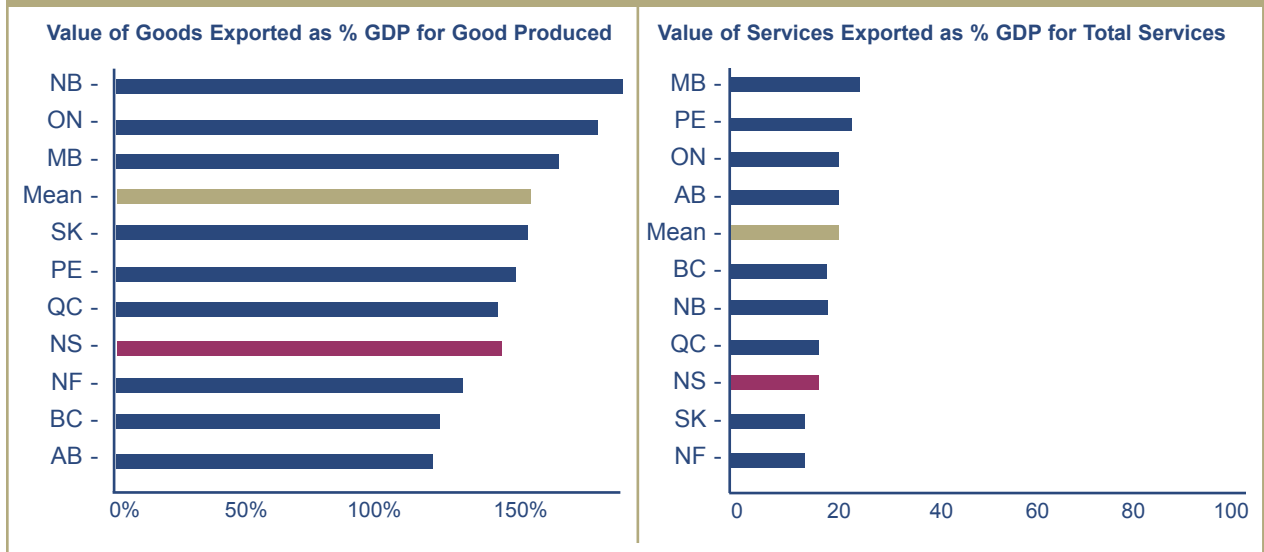
- **Goods** consist of agriculture, forestry, fishing, mining, oil & gas, utilities, resource industries, manufacturing and construction.
- **Services** consist of transportation & warehousing, wholesale trade, information & culture, finance and insurance, real estate, professional, technical & scientific services, administration & support, waste management, educational, health care & social assistance, arts, entertainment & recreation, accomodation and food, public administration and other services.

Source: Statistics Canada, NS Department of Finance

During the time period, 1998-2002, Nova Scotia ranked sixth, tied with Quebec. An eight percent improvement in goods exports would place Nova Scotia at the Canadian average. The committee also compared the value of service exports against the GDP for the total service sector and then compared our relative ranking with the rest of the country. During this same time period, 1998-2002, Nova Scotia ranks 8th in the country. A 24 percent improvement in our service exports would be required to bring Nova Scotia to the Canadian average.

Our trade must expand in order for our prosperity gap to disappear. The most likely way this will occur is through value-adding to both our service and manufacturing sectors. Innovation is the key to making this happen. Enhanced innovation will go a long way to addressing our prosperity gap. We will eliminate our prosperity gap by increasing output of goods and services by 24% over the 2002 level. At this level our GDP per capita will be equal to the mean of our peers.

Figure 5 Value of Exports (International & Interprovincial) vs. GDP (1998-2002)



Source: Statistics Canada

### *Driver #3: Research, Development and Innovation*

Innovation is Nova Scotia's 'quiet engine' — the key to building our export base in terms of increasing value-added manufacturing and enhancing the value of services.

R&D is an important 'proxy' indicator for the level of innovation in an economy. Nova Scotia performs well on total R&D per capita compared with its peers, primarily because of the strength of its university and federal government laboratory funded R&D. However, the Committee found that business R&D expenditures per capita are less favourable, as depicted in Table 7. Nova Scotia's business R&D ranks 10th among its peers. 'Placement of venture capital' is another proxy for how well a jurisdiction is translating the benefits of its R&D into tangible benefits in the economy. The mean venture capital placement for the peer group is \$25 per capita, while Nova Scotia's placement is just below the mean at \$20 per capita. For every \$10 of R&D performed within the peer group, \$1 of venture capital is placed — a 10:1 ratio. In Nova Scotia, the ratio is 19:1. This data suggests to the Committee that Nova Scotia is a very strong player in the university and government laboratory led R&D, but falls short in translating this into benefits that will contribute to the growth of the economy.

**Table 7 R&D by Source per Capita 2000**

	<b>Total R&amp;D/capita (CND dollars)</b>	<b>Federal R&amp;D/capita (CND dollars)</b>	<b>Higher Education R&amp;D/capita (CND dollars)</b>	<b>Business R&amp;D/capita (CND dollars)</b>
Idaho	1104	17	69	1034
New Hampshire	625	29	147	474
<b>Nova Scotia</b>	<b>385</b>	<b>94</b>	<b>259</b>	<b>69</b>
Saskatchewan	366	62	274	68
Iowa	347	8	173	184
<b>Mean</b>	<b>320</b>	<b>37</b>	<b>123</b>	<b>220</b>
Alaska	313	120	207	14
Newfoundland	258	57	190	34
Nebraska	256	15	147	116
West Virginia	253	57	49	130
Maine	250	4	55	158
North Dakota	228	40	127	79
New Brunswick	204	36	142	44
Montana	188	39	133	31
Mississippi	180	66	92	36
Arkansas	170	17	59	102
South Dakota	113	18	44	58

Source: Science & Engineering Indicators 2002, Statistical Abstract of the United States & Statistics Canada

The Committee is impressed by many of the exciting developments in the life sciences, information technology, and advanced manufacturing sectors in Nova Scotia, such as Ocean Nutrition Canada, Kytogenics Pharmaceuticals Ltd. (formerly Chitogenics Ltd.), Composites Atlantic Limited and others. The Committee believes developments like these, and more of them, will produce the added value we need in our goods and services to achieve the levels of growth Nova Scotia requires to shrink our prosperity gap.

# *recommendations*

Generating the same GDP per capita as the mean of its peer group, Nova Scotians would see after-tax household income increase by \$12,500 and government tax revenues increase by at least \$1 billion. The Committee recommends the following goals and actions for improving the province's economic performance.

Specifically, it recommends that Nova Scotia:

- use a peer group as a yardstick for monitoring the province's economic progress on an annual basis;
- move the province's economic performance (GDP per capita) to the mean of our peer group within 10 years;
- increase the number of Nova Scotians who have at least high school equivalency to the mean of the peer group;
- enhance exports, focusing on both urban and rural areas and on goods and services sectors;
- encourage and support more business innovation, including R&D, and business collaboration with researchers in academia and in government research organizations;
- give Regional Development Authorities (RDAs), our community-based development agencies, responsibility and accountability for realizing specific goals at the community level, including improving labour force participation rates and increasing trade exposure;
- monitor performance against the peer group on an ongoing basis, and communicate our province's performance widely to stakeholders;
- develop a sustained communications program to inform Nova Scotians about economic performance and its impact on the standard of living; and
- encourage existing organizations, both public and private, to engage in a coordinated approach to address these issues, including a central policy coordination point within government.

# *conclusion*

The Committee hopes this initial review will prove to be a useful tool.

Further debate and analysis is strongly recommended and the Committee believes subsequent analysis should consider using GDP as well as other indicators such as Genuine Progress Index, Human Development Index, etc. The Committee also believes consideration, at that time, should be given to these and other questions: What role should immigration play in closing our prosperity gap and growing our economy? How can tax policies help achieve our goals? What needs to be done to create the attitude required to achieve these goals?

Finally, the Committee notes the following areas require further study to better understand how these factors affect our economic performance: labour force factors, including age profile of the workforce; productivity; education, including differences in educational attainment by gender; capital market issues and taxation; the role of physical capital; private sector R&D role and drivers; migration (urban and rural); immigration and emigration; exports; international competitiveness; the role of government, including taxation; and regional development.



# definitions

- **Profile** represents the ratio of working age (15-64) population to total population.
- **Participation rate** is the portion of the working age population who are either employed or actively seeking employment.
- **Employment rate** is the portion of those participating to those who are employed.
- **Utilization rate** is the portion of the working age population who are employed. It combines participation and employment rates.
- **Intensity** represents the average number of hours worked per employed person per week or other period of time.
- **Productivity** represents the average value of output produced per hour worked for a period of time. This term is commonly called labour productivity.
- **Prosperity gap** is the difference in GDP per capita between two areas, expressed either in Canadian dollars or as a percentage (in this document).
- **Gross Domestic Product (GDP)** is the output of goods and services produced by labour and property in a region over a period of time.
- **Trade exposure** is a combination of exports plus imports, usually shown as a percentage of GDP.
- **Working age group** is defined as that part of the population between ages of 15 and 64.
- **Urbanization** - Statistics Canada and the U.S. Census Bureau use three different measures to differentiate urban and rural areas. The Committee used two of these in its work:
  - In selecting the peer group, the Committee used the 'urban area' designation: an area with a population of at least 1000 and no fewer than 400 persons per square kilometre.
  - In segmenting jurisdictions between urban and rural, for purposes of comparing economic performance, the Committee used the 'census metropolitan area' (CMA) as the basis for selecting urban areas. In simple terms, this includes areas with greater than 100,000 people.

It should be noted that the U.S. Census Bureau definitions for 'urban area' and 'metropolitan areas' (MA) are very similar and were also used for comparative purposes.

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