

# **Community Economic Development Research Project**

## **Macro Trends and Sector Commentaries – Phase I**

**Prepared for:**

**Atlantic Canada Opportunities Agency  
and  
Office of Economic Development**

**Prepared by:**

**Gardner Pinfold Consulting Economists Limited  
in association with  
The Terrain Group**

**November 29, 2004**

# Table of Contents

---

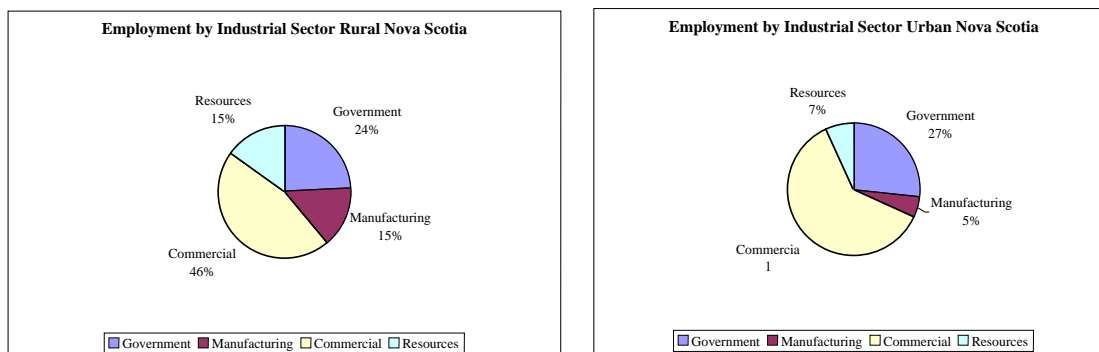
	<i>page</i>
I. Macro Trends	1
1. Introduction	1
2. Context	1
3. Macro Trend Discussion	3
II. Sector Commentaries	9
1. Fishery	9
2. Forestry	12
3. Agriculture	16
4. Tourism/Culture	20
5. Boatbuilding	22
6. Construction/Specialty Trades	24
7. Minerals – Non-Oil and Gas	26
8. Energy	29
9. Service Sector	31
10. Manufacturing	34
11. Science Industries and Other Knowledge-Based Activity	36
III. Summary of Opportunities	39
IV. Case Studies	41
Bibliography	47
Appendix: A: Economic Forecasts	
B: List of Contacts for Phase I	
C: Sector Employment by County	
D: Demographic Trends	

# I. Macro Trends

---

## 1. Introduction

Economic activity in rural Nova Scotia is generated by a fundamentally different mix of sectoral activity when compared to the urban economy in the province. Recently, the Rural Communities Impacting Policy (RCIP) project prepared a report titled *Painting the Landscape of Rural Nova Scotia*. In that report, they contrasted the nature of employment by sector as is shown in the figure below. The rural economy shows greater diversification in that employment is not dominated by any one sector. However, the relative importance of commercial/service sector is lower in the rural economy versus urban. It has been this sector that has been growing most significantly in recent years. Also, in the rural economy, we see greater dependence on the traditional resource sectors. Most of these sectors have been faced with economic challenges over the past number of years. In large part, the manufacturing activity based in rural Nova Scotia is tied directly to the performance of the resource sectors.

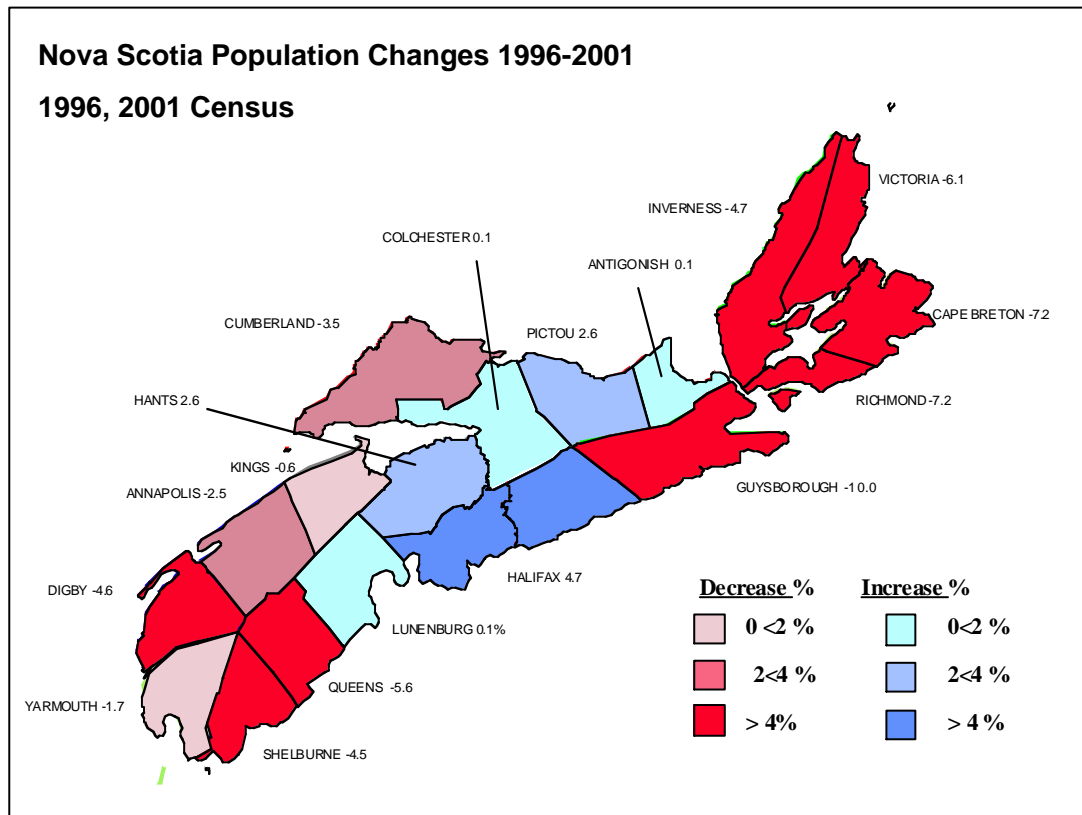


## 2. Context

The rural economy in Nova Scotia is facing many challenges that are threatening the quality of life and the potential for a prosperous future. Over the past 30 years, the rural economy has undergone a significant restructuring with a shift from the primary sectors to a more service-based economy. Although, as noted above, the service sector in the rural economy does not account for as large a percentage of this economy as in the urban economy. Much of the growth in Nova Scotia's overall economy is attributable to the service sector.

In Nova Scotia, the economic importance of the primary sector and its associated processing of primary goods still serve as the economic lifeblood of many communities.

Perhaps the most disturbing trend facing rural Nova Scotia has been the demographic change that has been taking place. Young people are leaving rural Nova Scotia and relocating to either the Halifax Regional Municipality or outside of the province. The map of the province shown below illustrates the distribution and magnitude of the changes to population by county. Those counties that are bright red experienced a loss of population of 4% or more between 1996 and 2001. Cape Breton, southwest Nova Scotia and Guysborough County all experienced significant declines. Counties within an hour's drive of HRM tended to not experience the same level of decline.



The reasons the population is declining are multi-faceted but of great significance has been the perception by young people that economic opportunities are not accessible to them as long as they stay in rural Nova Scotia. The outcome associated with a decline in the population of young people is that an older demographic is left behind which will result in a disproportionate burden on the health care system and other public services. Also, from an economic standpoint, the lack of household formation by younger people will ultimately impact on the economic prosperity as many small businesses will not survive without the availability of younger consumers fully participating in the economy.

It is ironic that many young people have left due to the lack of economic opportunity and now many existing businesses that operate in the rural areas are finding they cannot source adequate skilled workforces to meet their needs. This phenomena is having a double-edged impact. It is hurting existing businesses and it is making it difficult for rural areas to respond to new emerging economic opportunities. Without new rural employment opportunities, the decline in population can only continue.

The decline of the rural economy in Nova Scotia is not unique. It is also happening at a regional, national or for that matter, a North American level. The reasons for the decline are multi-faceted. Many of the same factors that have impacted other areas are also impacting on Nova Scotia.

Much of the “new economy” economic activity has been emerging in urban centres. The growth in these sectors has been enticing young people with appropriate education and skills to move to these centres to pursue careers.

In the past ten years, the world economy has not been kind in terms of providing good prices for commodities such as those produced by the primary sectors. Much rationalization has occurred in these primary sectors due to soft markets. More recently, during the past three years, poor economic conditions in the United States has also affected the performance of the primary sectors dependent on U.S. export markets. Trends related to both economic growth, commodity prices have turned around and are discussed in the next section.

Another factor that has impacted on rural Nova Scotia's economy has been the resource availability to the primary sectors. As has been well documented, the collapse of the groundfish fishery has caused significant disruption to the province's fishing industry at both the harvesting and processing level. Virtually all underground coal mining in the province has shut down and the agriculture sector has continued to shrink in terms of the number of farms.

In order for economic development officials to assist rural Nova Scotia in abating the decline and to stimulate incremental economic activity, an understanding of the potential impact of macro trends is necessary.

Pressing issues are beginning to arise in rural Nova Scotia where the out migration of youth and continued aging of the population now means that rural communities face challenges responding to economic opportunities due to the emerging shortages of skilled workers. Even some of the traditional industries such as agriculture and the fishery are facing shortages of seasonal labour forces to assist with crop harvesting or fish processing.

The sector commentaries that follow also reveal that many sectors are challenged with retaining skilled workers who are lured to other jurisdictions by higher wages. The skills issue is multi-faceted and complex and consequently requires more focused government and private sector attention.

In some jurisdictions, similar labour force issues are dealt with by utilizing immigrant workers. Nova Scotia has, to date, had limited success attracting immigrants to rural parts of the province. Thus, the impact on the labour force of young people leaving is not currently being affected by immigrants choosing to locate in rural Nova Scotia. These factors will continue to affect the overall labour supply in rural areas. This, in turn, will impact on business decisions with respect to location analysis.

### **3. Macro Trend Discussion**

The purpose of this report is to examine macro economic trends as they relate to key economic sectors in the rural Nova Scotia economy. Key macro trends considered for each of the sectors include:

- exchange rates
- interest rates
- economic growth in important markets
- general economic performance of the sector
- impacts of various regulatory factors
- population changes

These trends have been examined based on the recent past and where possible projected into the future. Many of these trends serve as the economic drivers of the sectors and help to explain past performance and expected future performance. In addition to the straight macro trends for some industries, particularly primary sectors, past performance and future potential are highly influenced by the availability of raw materials or resources. The status, to the extent known, of the availability of these resources are also noted for each sector. In turn, the expected future performance gives rise to identifying potential sectors or areas of opportunity for rural Nova Scotia generally. Sector outlooks are also considered with judgment applied in terms of how opportunities could manifest in rural Nova Scotia.

Readers are cautioned that opportunities noted are meant to be consistent with the macro trends examined.

### **Exchange Rates**

In the past two years, the Canadian dollar has appreciated significantly against its United States counterpart. Economic sectors dependent on exports to the United States can be adversely affected by such a significant change in rates. It is reported that overall trade in Canada has not been as negatively affected as might have been expected. For some of the major commodities such as forest products, the change in exchange rates has been offset by an improvement in commodity prices. For other sectors such as the fishery or boat building, it has meant lower returns to producers. The impact on tourism has been less definitive as lower tourism activity has been attributed to other negative factors that have occurred at the same time. The outlook for the value of the Canadian dollar is to remain very close to its current level over the next two years (see Appendix).

### **Interest Rates**

Both the Canadian economy and world economy have enjoyed a sustained period of low interest rates. This has facilitated capital investment in many industrial sectors. It has also directly contributed to a rise in commercial and residential construction activity. In fact, there has been a virtual boom in residential construction throughout North America including Nova Scotia. This has generated great demand for various building products and construction work. It is expected that interest rates have bottomed out but that future increases will be introduced gradually (see Appendix).

### **Economic Growth**

A significant part of the rural economy is based on the traditional resource sectors and associated manufacturing. These sectors account for much of the overall value of exports from the province. Demand for these products is driven by the general economic performance of the destination country economies. In general, there has been a strengthening of the economy throughout North America and significant growth of the Chinese economy and other emerging economies is also impacting on the prospects for improved trade. These improved markets have resulted in better prices for many commodities, although not all sectors have benefitted. Fish products are reported to be yielding stagnant or falling prices for both wild-based fisheries, as well as aquaculture-based production. For some sectors, improved economic performance should lead to increased disposable incomes that will help sectors that sell directly to consumers such as the boat building industry or tourism-based enterprises. Economic forecasters are generally positive about growth

rates over the next two years (see Appendix). In fact, the Conference Board of Canada projects a 2.6% rate of growth in GDP for Canada over the period 2005–2015.

### **General Economic Performance**

For each sector reviewed in Chapter II, we summarize recent past performance and indicate expected outlook for next 2-3 years. The results are shown in the following table. Most sectors seem to have relatively positive outlooks as the recovering North American economies are resulting in stronger markets. Even those industries hurt by changes in exchange rates seem to be holding their own in terms of shipments. The fishery still has challenges associated with the globalization taking place in this industry. The performance of the service sector in the rural economy as well as the new economy-based industries remains to be seen as niche opportunities and the availability of skilled workers determine prospects.

### **Population Changes**

One of the greatest challenges that rural Nova Scotia is faced with is the out-migration of young people. This trend shows no sign of abating in the near term as young people are moving to larger centres to take advantage of educational opportunities as well as work opportunities. As a result, many traditional sector employers are now reporting significant challenges in recruiting suitable workforces. Members of this younger demographic also represents an important market for such sectors of the economy as the service and construction sectors. They are also the demographic that tends to offer science-based industries with potential employees.

### **Other Factors**

Many of our sectors have been affected by other factors that have influenced their economic performance. Some are trade related such as the softwood lumber dispute and the closing of the border to beef exports. The World Trade Organization negotiations will have the potential impacts to the Nova Scotia-based agriculture sector. Others are based on the new phyto sanitary requirements for food imports to the United States that are affecting fish and agriculture product movement and even the movement of lumber unless treated in certain ways. Health scares such as SARS and West Nile Virus have also impacted on the tourism industry.

The following text table sets out a summary of how the various macro trends are affecting the sectors examined in this study.

### Impacts of Various Macro Factors on Sectors

<b>Sector</b>	<b>Exchange Rates</b>	<b>Interest Rates</b>	<b>Economic Growth in Markets</b>	<b>General Economic Performance Past/Expected</b>	<b>Other</b>
<b>Fishery</b>	Increase in Canadian dollar resulted in lower returns.	Minor factor in sector.	Recovering U.S. economy good for sector.	Sector has had resource issues. Now faces competition due to globalization.	
<b>Forestry</b>	Increase in Canadian dollar resulted in lower returns.	Low interest rates helped construction sector demand for wood products.	Recovering U.S. economy good for sector.	Poor economy affected paper industry. Outlook is better. Lumber prices are at record levels.	Softwood lumber dispute.
<b>Agriculture</b>	Sector not as dependent on export markets.	Has helped with operating loan expense.	Globalization impacts on this sector.	Trend has been poor. Future prospects better for crops.	Mad Cow and Avian Flu detrimental. World Trade Organization negotiation.
<b>Tourism</b>	Recent rise in Canadian dollar has impacted.	Minor factor .	Recovering economies should help industry.	Sector hit hard by 9/11 and other factors, including exchange rates and poor weather.	Mad Cow, SARS, West Nile, gasoline prices, war in Iraq, overall U.S. economy.
<b>Boat Building</b>	Low dollar enabled industry to enter U.S. market.	Low rates stimulated investment by fishermen.	Recovering U.S. economy should help lobster industry.	Recent growth outlook positive.	
<b>Construction Trades</b>	Not a factor.	Big factor driving construction activity in NS.	Recovering economies good as long as higher interest rates not the result.	Excellent in past, should be good in future.	HRM economic performance
<b>Minerals</b>	Increase in Canadian dollar resulted in lower returns.	As it influenced construction sector.	Recovering economy good for sector.	Good in the past – good for the future. Resource dependent.	Public perception of mineral development projects.



<b>Sector</b>	<b>Exchange Rates</b>	<b>Interest Rates</b>	<b>Economic Growth in Markets</b>	<b>General Economic Performance Past/Expected</b>	<b>Other</b>
<b>Energy</b>	Better returns to products exported.	Low rates helped with investment.	Good energy markets good for sector.	Good energy markets.	Due to high cost of oil interest renewed in alternatives. Industry also cites regulatory barriers exist related to offshore development projects.
<b>Services</b>	Low dollar helped establish call centres. Other parts of sector not as affected.	Limited. Except how it impacts consumer confidence.	Service markets growing and expected to continue.	Retail tied to consumer confidence. Position of Canada as host to call centres and out sourcing position.	India has emerged as competitor. Big Box stores impact on small town retail.
<b>Manufacturing</b>	Increase in Canadian dollar resulted in lower returns.	Helped with investment.	Growth in key markets helpful.	Sector must innovate to stay competitive.	Globalization could impact as well as ability to retain skilled workers, e.g., welders, machinists.
<b>Science Industries</b>	Low dollar can help.	Makes investment attractive.	Positive for sector but must have products.	Product specific but seen as growth area.	Needs much R&D and regulatory approvals. Private sector capacity to invest in sector is a significant issue.



## II. Sector Commentaries

---

In total, eleven sectors have been assessed against macro trends. Each sector is discussed in terms of a general background, a commentary on what have been the key drivers and trends related to the sector in rural Nova Scotia, and comments on opportunities for the sector are provided. The commentaries are written from a general rural Nova Scotia perspective.

*Industry historical lifeblood of communities throughout rural Nova Scotia.*

### 1. Fishery

Industry is the historical lifeblood of numerous coastal communities throughout Nova Scotia. The fishery throughout the province is multi-faceted with different species being dominant at different times. Nova Scotia has the largest fishing industry in Canada with more than 8,500 people employed in primary fishing. Along with aquaculture, seafood processing, boat and shipbuilding, and port operations, the cluster employs over 17,000 people and generates almost 4% of Nova Scotia's GDP. The preliminary value of fish landings for 2002 was \$731 million. Nova Scotia aquaculture operations produced over four thousand metric tonnes of fin and shellfish with a market value of close to \$20 million dollars. Fish and fish products account for approximately 20% of Nova Scotia's exports.

*Primary fishery dependent on resource availability and market condition.*

#### Commentary – Key Drivers – Trends

The state of the fishery in Nova Scotia tends to be a function of resource availability and market condition. The collapse of the ground fishery caused significant change in the industry with many plants going out of business or diversifying into other species. Shellfish, including lobster, crab and scallop, are now the most important species in terms of landed value. On the processing side, there has been significant consolidation as large firms have acquired smaller companies. This trend is expected to continue in the future.

*Collapse of ground fishery caused diversification.*

Processing requirements or opportunities associated with these shellfish species has traditionally been limited. Exchange rates have provided favourable market conditions in the past number of years. The recent upturn of the Canadian dollar has not impacted dramatically on the industry aside from lower returns to producers.

*Cost of licenses barrier to entry by young people.*

The cost of fishing licenses, especially lobster, is thought to be a barrier to entry for young people to the industry.

*Resource availability has impacted processing sector.*

Aquaculture has had challenges associated with the licensing process and establishing commercially-viable species. Finfish producers face major competition from foreign producers in Chile and Norway.

*Fishery will remain important sector in rural Nova Scotia.*

Processing plants have had difficulty accessing sufficient resources. Latest examples are the salt fish operations that are now not able to compete in terms of price with the Chinese outbidding for purchases of frozen fish.

### **Opportunity Discussion**

The fishery will remain an important component of the rural economy in Nova Scotia at large. Future prospects for various fish stocks are always uncertain due to management practices and biological factors. The lobster and scallop fishery have been stable. Groundfish prospects are seen to be improving, especially in southwest Nova Scotia for haddock and hake.

As has been well documented, the fishery has survived through tremendous challenges on both a resource availability and market front. The groundfish industry is about to experience a substantial increase in haddock quota at a time when prices are declining rapidly.

*Wild fishery has cachet. Industry must be innovative in product development and marketing.*

Industry has become more innovative and must continue in that manner. There is reported to be a cachet with products associated with the wild fishery. It is time for industry to become even more creative or the opportunity associated with a rebounding resource (haddock) will be lost. Traditionally, many processors in Nova Scotia have prospered selling products as commodities. New and innovation approaches to produce development and marketing strategies are required or more plant closures could occur.

Lobster landings have been at a high level in southwest Nova Scotia, but doubtful it can get much better. Other parts of the province have reported declines in lobster landings. Markets have only offered a stagnant price. Very little processing of lobster takes place in the province as the industry does ship out a fair quantity, particularly soft-shelled that gets processed in other provinces.

*Food trends positive for seafood industry.*

Scallop fishery is a significant industry with limited on-shore processing. The in-shore component of the industry has significantly improved its management so that now the in-shore provincial fishery is well managed with predictable resource availability.

Overall food trends see seafoods and fish on the rise. But industry is very fragmented in Nova Scotia and difficult to coordinate on a marketing side. Growth of Halifax, in terms of population and food sophistication, has boded well for the industry and has offered a significant local market for high-end products.

*Lack of interest among young people in industry.*

Many existing licence holders in the fishery will be retiring in the next ten years and will open up opportunities for new owner operators. There seems to be a lack of interest from the youth in pursuing fishing careers as they are deterred by the high cost associated with licence acquisition.

*Niche markets have potential.*

Small to medium-sized processing plants that can develop niche products for higher value-added markets may have success. Production of commodity-based output will meet competition from Asian producers.

*Commodity markets will meet global competition.*

- Access to major U.S. fresh market will continue to offer opportunities provided efficient transportation services are available.
- Future aquaculture development will continue to meet challenges as business is highly competitive and access to coastal areas will remain difficult.

*Land-based aquaculture may have more future than aquatic.*

The fishing industry has played a role in the emergence of new products based on waste from fish processing. One example is the production of fish oil for nutraceuticals. Another is the utilization of fish meal as a feed stock for the aquaculture industry and for fur farmers.

Aquatic-based aquaculture may be uncertain but there is opportunity for land-based development, including halibut, arctic char and abalone.

## 2. Forestry

*Forest industry accounts for significant share of rural economy.*

The forest harvesting and wood products industries, including paper production, account for a significant share of the rural economy in Nova Scotia. Forest industries represent approximately 10,000 employees and over 2% of provincial GDP. The larger mills such as Bowater, Kimberly Clark, and Stora Enso support activities in surrounding areas and are key economic drivers in many communities across Nova Scotia. Lumber, pulp and paper account for nearly 20% of provincial exports. The number of small businesses within the cluster has declined between 1999 and 2003 with the exception of timber tract operations and some wood products industries such as kitchen cabinet manufacturing. Compared to other provinces such as British Columbia, Quebec and New Brunswick, the province does not currently have a large specialization in value-added wood industries.

### Commentary – Key Drivers – Trends

*Current use of forest resources are sustainable.*

According to planning officials at the Department of Natural Resources, forest resources that support the processing industry are harvested at an annual level that is sustainable. This suggests current resources are meeting the requirements of the existing processing sector.

*Industry suffered from over capacity and low prices.*

The forest products industry in Nova Scotia has suffered through a period of low prices for the various commodities that it produces. These low prices were a result of significant over-capacity in the industry worldwide and poor general economic performance affecting product demand. Countervail duties also affected returns to lumber producers at a time of low prices. Stora has invested significantly in Port Hawkesbury to introduce a higher grade of paper. Although they continue to press for lower power rates, suggesting their need to lower their cost of production, they are continuing to invest in their facilities. They are the last roundwood pulp purchaser although we understand they are looking at closing their wood room and moving to chip utilization. If they invest in their own sawmill capacity to secure chips, this could have a significant impact on other sawmills in the province. The other papermills are reported to be operating as per usual with no rumours of major changes in terms of either capacity increases or decreases. However, Bowater and Kimberly Clark are part of multi-national companies and other agendas can emerge that could impact local operations or see diversification occur. Also, we must be aware that our mills tend to be small by world standards, which could present challenges related to overall productivity.

*Recently, prices have*

The improvement in market prices for pulp and paper products has

*improved.*

in part been offset by the change in exchange rates. Industry observers suggest prices are still not where they need to be to ensure long-term viability. Of concern is a recent Toronto Dominion Bank report that suggests forest products prices may have peaked.

The lumber industry is currently enjoying a period of record prices. In part, this is attributable to the hurricane damage experienced in the United States. These impacts will likely be limited to the period of reconstruction. However, the industry has suffered through a protracted period of low prices and great uncertainty due to the softwood lumber dispute. This has caused some bankruptcies to occur as well as a significant accumulation of debt that now hampers potential for investment.

There continues to be some raw forest resources leaving the province to be processed in other jurisdictions that are short of resources such as Newfoundland.

Other factors affecting this sector include:

- Over supply of processing capacity worldwide in the pulp and paper industry has impacted on industry performance.
- China and Russia are beginning to emerge as market influencers in the global market on both sides of the supply and demand equation.
- In 2003, China matched its supply and demand. If size of market increases could become unbalanced and create markets for other producing areas.
- In 2002-03, paper industry hampered by over-capacity in virtually every industry segment.
- The recovery in commodity prices suggests that rising demand is impacting on over capacity issues.
- With the improving global economy, demand for higher quality paper has also risen. This bodes well for the Stora operation at Port Hawkesbury.
- Despite these improved market conditions, industry analysts still expect there to be over-capacity related to most aspects of the paper industry.
- Russia still has potential to emerge as a major producer.

*Employment levels quite stable. Some displacement of workers by technology.*

*Paper industry suffered through period of low prices.*

*Good demand for wood products due to construction sector activity.*

*Fortunes for paper industry should be at least stable.*

*Outlook for lumber good in short term; longer term concerns.*

Production and employment have been relatively stable at processing facilities in the province, although there has been a general downward trend in overall employment, as increased use of technology has displaced workers in the sector. There has also been an increase in the use of mechanical harvesters in the harvesting sector displacing forest workers. The paper industry has been faced with a prolonged period of low prices and increasing environmental standards. The wood products industry, dominated by sawmills, has suffered due to the uncertainty associated with the softwood lumber dispute (although this has not been as big an issue in the Maritimes as the rest of Canada).

New home construction (as a result of low interest rates) throughout North America has been booming, resulting in good demand and prices for lumber.

### **Opportunity Discussion**

The harvesting sector is dependent on the performance of the processing sector. Industry analysts suggest that with the improving North American economy, the economic growth occurring in Asia, the demand and resulting price for paper-related products, should improve to even higher levels than those experienced now although TD Bank suggests the peak may have been reached.

Overall, outlook for the pulp and paper industry in Nova Scotia is expected to be at least stable. Export Development Canada is predicting that the forestry sector will have the highest export growth among all of Nova Scotia's sectors in the short term. Difficult to comment on potential for product diversification in this sector in the future.

The outlook for lumber prices over the next year is also positive, although there is concern that there will be upward pressure on interest rates that could reduce new home construction demand over the next number of years. Financial constraints will impact on the ability of this sector to diversify products in the future.

Many forest dependent economies have diversified into more value-added production. In many jurisdictions, the forest resource is managed so that non-timber products can be produced and marketed. The forests can also be promoted for recreation-type use.

There are no known proposals for large-scale, value-added processing facilities in the province. Although the plywood and OSB industry is also enjoying strong markets, the Nova Scotia resource is not as suitable to these products i.e. we have limited aspen and hemlock.



*Other value-added opportunities oriented to finished and semi-finished products selling to retailers and wholesalers.*

A recent report completed for ACOA noted that key future external markets for niche value-added (non-paper and non-lumber) will be in the United States, central Canada and Europe. The niche products will involve more finished and semi-finished products being sold to retailers and wholesalers. This value-added sector could provide the source of product diversification in the future. This report notes many challenges faced by this segment of the industry, including shipping costs, competition from China and Russia, raw material prices, high insurance costs, availability of skilled workers and high taxes.

*Important sector in many parts of rural Nova Scotia.*

*Sector has been facing challenges. Number of farms decreasing.*

*Green house and horticulture good performance. Wild blueberry has been big growth industry.*

### 3. Agriculture

This is an important and traditional sector in many parts of rural Nova Scotia. It is especially important in the Annapolis Valley and in the area between Halifax and Truro. With the growth in the blueberry industry, some areas with marginal farmland have also become important agriculture areas.

As a cluster, this group includes primary agriculture, agricultural services and food processing. The cluster employs over 12,000 people and generates approximately 3% of Nova Scotia's GDP. In 2001, there were almost 4,000 enumerated farms operating in the province, most of which are relatively small in size and produce products such as cattle, dairy, apples or blueberries. Employment in primary agriculture continues to decline in every province due to increased efficiencies in agricultural production. However, employment has increased over the past decade in food processing industries such as meat, poultry, bakery, and confectionary products. Overall, global trends are presenting challenges for many industries within Nova Scotia's agri-food cluster that will require attention to developing high quality, customer-driven products through innovation.

#### Commentary – Key Drivers – Trends

The traditional agriculture sector in Nova Scotia has faced much adversity and challenges brought on by poor markets, trade developments and the mad cow disease. The number of farms has declined significantly in the province as smaller farms have simply gone out of production or have been consolidated with larger operations.

The non-supply managed livestock industries beef and pork have suffered from poor returns. The supply managed chicken industry has performed well while the turkey industry has faced net return challenges. The dairy sector has been stable although there is a significant trend toward consolidation. The negotiations at the World Trade Organization continue to be a concern for these supply-managed industries. The beef sector has been devastated by the mad cow disease and associated boarder closings. The greenhouse and horticultural industries have performed better. The wild blueberry industry has experienced the greatest growth over the past 20 years and is benefitting from increased awareness associated with health attributes and convenience.

The cranberry industry has also experienced significant growth and continues to grow. Export markets are becoming increasingly important.

*Christmas trees solid industry.*

The Christmas tree industry was a significant beneficiary of the low Canadian dollar as most trees have been marketed to the northeast United States. The improved U.S. economy helped to offset the impact of the increase in the Canadian dollar.

The processed food industry in North America is dominated by large multi-faceted companies. The sector enjoys steady growth and seems immune from economic upswings and downswings. Historically, there is a high level of merger and acquisition activity and the industry is becoming more global. Consumer trends and demographics drive the demand for goods from this sector. Dieting, obesity and fitness trends all contributed to the sector.

The bottled water industry is considered to be part of food and beverage industry that offers promise. In the United States growth in sales averaged 11% between 1997 and 2002. Similar trends are reported in Canada. A recent report on New England Market Prospects for Canadian Producers (winter 2003) done by the International Market Analysis Research Group, noted that competition in the industry is increasingly strong. A small number of large distribution companies corner the distribution networks and purchase smaller bottlers. The study suggested the best prospects for Canadian companies lie in expanding areas such as flavoured waters and energy waters.

Over the years, there have been several examples where local processed food businesses have started based on local supply then firms are either bought out or evolve into major processors (Sarsfield Pies, Highliner, Bell Isle Foods, McCains).

### **Opportunity Discussion**

*Outlook for livestock not positive aside from chicken.*

The number of farms operating in Nova Scotia is likely to continue to decline. In general terms, the outlook for the livestock sector is not positive aside from the supply-managed chicken and dairy industries. Decreased production for other livestock is likely. The outlook for crop production is more positive although crops do face significant price competition from high production areas in the United States.

*Crop production more positive.*

Nova Scotia Fruit Growers are one commodity group that is taking proactive steps to find new opportunities. They are undertaking a new strategy aimed at developing new products. The Fruit Growers are looking at non-food uses associated with by-products i.e. nutraceutical, as well as other food products.

*Niche production opportunities may have to be pursued, as many parts of the industry are small scale by both national and international standards.*

A recent proposal, although not progressing at the moment, may offer incite to potential opportunities in the agriculture industry in Nova Scotia. A group proposed to use the closed Avon Food processing plant to process flax. They wanted to test produce a thousand acres of flax, a new crop in Nova Scotia. The marketing notion was to ultimately promote Nova Scotia flax as a “GMO free production area” giving the industry a significant marketing message and niche. However, failure to gain support of potential growers has held up the initiative.

The Avon Food facility closing may be the “canary in the coal mine” where a number of plants in Nova Scotia are owned by multinationals that operate with questionable economics due to economies of scale.

On the production side, must in future match production size with unique opportunities and specialized value-added processing. Fruit growers have recognized these circumstances and are being pro-active. Others must follow suit.

Idea that agriculture industry in province plays a role in feeding world is a fallacy. The potential for large-scale commodity related production in Nova Scotia simply does not exist. The industry must look for other new food opportunities that have potential on a niche market basis. Will take concerted effort related to research and development and a dramatic mindset change.

The blueberry industry is one agriculture sector that may offer opportunity to expand production in terms of area. Focus of industry has been to increase productivity of existing landbase over past 10 years as opposed to increasing production area. Returns to producers seem to have been sufficient that significant investment in capital is occurring at both the production and processing level. Growers Association is very strong and active on the research and development front.

Blueberry markets developed from zero in Japan to very significant. Industry has yet to even target India and China.

Eastern Canada has certain natural advantages for wild blueberry production. These include having acid soils and remote production locations.

*Brand development and niche markets have potential.*

*Value-added opportunities exist.*

Some local agri-food producers have taken advantage of opportunities presented by developing brand recognition and selling into niche markets. Value-added products have also experienced successful increases in production such as the apple pie market and the production of wild blueberry juice. Within the Christmas tree industry, significant value has been added through wreath and other ornament production.

The grape industry and associated farm wineries have grown in the past 10 years<sup>1</sup>. Grape production has increased from about 80 acres in 1992 to 250 acres in 2003. There are now six wineries in operation with one or two new operators expected in the next few years. Grape production is increasing at the rate of about 20 acres per year.

The farm wine policy of the province does ensure local grape growing opportunities are supported as new wineries open. The industry now has good experience with site selection and variety selection.

Officials at Agra Point, who provide technical support to the industry, are optimistic that considerable land base is suitable in the Annapolis Valley to support the successful cultivation of grapes. It is also notable that the real economic value of this industry relates to the production of wine and the tourism impacts associated with visits to wineries. Primary grape production currently is valued at less than \$1.0 million dollars per year in Nova Scotia.

*Organics may also present opportunities.*

Interest in organic products is increasing and Nova Scotia could be positioned to provide products from an area perceived to be without the existence of an industrial economy. The identification of more value-added opportunities will drive the increase in production. Organic foods are growing rapidly as a market segment with increasing interest in food safety and healthy products. Products are now widely available at most supermarkets and specialty stores. In the United States, the industry is expected to reach \$30 billion by 2007 with a five-year compound growth rate of 21%.

Popular products include fresh produce, non-dairy beverages, breads and grains, packaged foods and dairy products. There are now standards defined for organic products.

Organics is seen as area of potential but is quickly becoming mainstream and will present challenges to gain shelf space moving from niche to mainstream production and distribution requirements must be met competitively. Organic horticulture may be an opportunity for growth.

<sup>1</sup> The Tangled Vine: Winegrowing in Nova Scotia, Autumn 2003.

*Tourism industry has become important industry in rural areas.*

*Culture industry fast growing sector.*

*Investment in industry enhances lifestyle and provides positive environment to attract businesses.*

*Period of sustained growth interrupted in 2003 by set of extraordinary events.*

## 4. Tourism/Culture

The tourism industry has developed into an important source of imported economic activity for rural communities in Nova Scotia. The industry does tend to be seasonal with the concentration of business in the June to October period. The industry caters to other Canadians, Americans and some Europeans. Nova Scotia residents and particularly those who live in Halifax Regional Municipality are also an important market for rural destinations.

The business of culture has been recognized as one of Nova Scotia's Foundation Industries in the province's economic growth strategy titled *Opportunities for Prosperity*. According to the strategy, it has emerged as one of the fastest growing sectors with its value approaching \$1 billion. The cultural industry includes a considerable body of activity – publishing, film, broadcasting, music industries, the arts including performing and visual arts, heritage institutions and numerous individual artists. Also related to economic development is the contribution culture makes to enhanced quality of life, a positive environment to attract business and also in providing assistance to market Nova Scotia products internationally, and makes an important contribution through strategic links to the tourism and educational sectors.

### Commentary – Key Drivers – Trends

The tourism industry did enjoy a period of sustained growth through the 1990s and early 2000s. The events of 9/11 have really changed people's travel patterns. Both nationally and provincially the industry was also negatively affected in 2003 by the war in Iraq, SARS, a soft American economy and even the mad cow disease.

Nova Scotia was reported to have not been as adversely affected as other places. It is unclear at this point to the extent that the increase in the value of the Canadian dollar is impacting on the industry. Also, many operators have reported a significant financial impact to their business as a result of high insurance costs. It is reported some businesses have ceased operation due to the rising insurance costs.

Early reports suggest this season has been sluggish. The improvement of the Canadian dollar will also make travelling abroad more appealing to Canadians. However, the increase in the price of motor gas could also influence Atlantic Canadians to travel closer to home.

In Nova Scotia, HRM has been the strongest regional destination. Many tourists use this as a base to take day trips to attractions outside the city. It is also reported that visitors are looking for specific activities to compliment the local scenery.

*Culture in all forms embedded in roots of communities.*

The cultural sector also adds to the tourism product of the province. As a result of the recognition of this sub-sector in Nova Scotia's overall economic strategy, the sector has been through the process of developing its own Culture Sector Strategy for the province. As the sector strategy notes, culture in all of its forms, is embedded in the roots of Nova Scotia communities. The culture sector attracts financial and human resources, some people are well paid and a diverse range of revenue sources including grants from the Canada Council have evolved. There are many successful cultural enterprises spread throughout rural Nova Scotia.

### **Opportunity Discussion**

*Industry considered strategic target. Outlook good for small business in accommodation and food sector.*

Both the provincial government and industry partners have set out strategies that are designed to significantly increase the size of the tourism industry in Nova Scotia. The rural area will also benefit from whatever success is achieved. Small business research conducted by the Bank of Montreal sees growth in accommodation and food service sectors at 20% over 2002-2007. They consider prospects for this type of business to be high. Throughout the province there has been an emergence of higher-end accommodation and dining.

*Queens County some success in winter tourism.*

Queens County is an example where some success has been achieved in attracting winter-based tourism through the efforts of White Point Beach Resort. Additional opportunities related to winter get-aways can be marketed to residents of HRM. There are also positive trends related to eco-tourism in rural areas, given the abundance of wilderness and coastal access that can be taken advantage of.

*Long-term outlook for sector is good as people retire with good incomes.*

Over the longer term, as people retire with comfortable incomes, specialty niche products can be marketed that combine the rural natural assets with the cultural assets that have evolved.

*Development of cultural entrepreneurs is essential.*

Again, the cultural strategy provides direction that can form the basis of opportunities for the sector in the future. The strategy sees an important next step to promote further growth and development and sales of cultural products. The development of cultural entrepreneurs (people who develop business concepts using cultural activities as the basis) is essential. Also development of a range of products for the tourist market is complimentary. Community development will be supported by providing infrastructure to support cultural economic development. Cluster strategy may make sense.

*Culture infrastructure essential as well.*

*Cluster strategy potential.*

## 5. Boatbuilding

*Boatbuilding industry has long history in rural Nova Scotia.*

As early as the 1840s, yachts were being built in Nova Scotia. The last great shipbuilding boom came during the First World War when the demand for shipping led to the construction of hundreds of sailing ships, including the elegant "Tern" (three masted) schooners and the famous Grand Banks schooners. In the years after the Second World War, although large-scale shipbuilding had all but disappeared, the building of small craft both for commerce and pleasure continued. Wood remained the principal building material until the 1970s. Today builders also work with fiberglass, steel and aluminum. They use computerized design equipment and the latest composite construction techniques. Yachts of every description, from traditional to groundbreaking, are currently being built at yards around the province. Today, boatbuilding is a significant industry in southwest Nova Scotia.

The Nova Scotia Boatbuilders Association released the results of a Fiscal Revenue Impact Study<sup>2</sup> that shows that the boatbuilding industry is one of Nova Scotia's fastest growing manufacturing sectors at an average rate of 51.6% from 1995-2002. Specifically, the sector has made a significant contribution to the provincial economy. Sales of \$83.7 million in 2002 generated total household income of \$53.9 million, 2,104 person years of employment and added \$67.2 million to the provincial GDP.

### Commentary – Key Drivers – Trends

*Industry hit hard by downturn in ground fishery. Diversification to pleasure craft successful.*

In the early 1990s, the boatbuilding industry went into decline due to the significant downturn in the ground fishery. The industry made a partial transition to pleasure craft and did enjoy a rebound in demand for fishing vessels by the end of the 1990s. In 2000, there were roughly 45 boatbuilding companies in Nova Scotia.

Nova Scotia Boatbuilders Association has started their own apprenticeship program in partnership with Nova Scotia Department of Education.

*Markets on east coast of the United States most important.*

Markets along the Eastern Seaboard are significant and there is recognition that boats made in Nova Scotia are high quality with good value. Boatbuilders are selling to wealthy baby boomers, who are acquiring luxury retirement items.

<sup>2</sup> Nova Scotia Boatbuilders Association Fiscal Revenue Impact Study, December, 2003.



*Industry is investing in capacity.*

AF Theriault & Son Ltd. (Meteghan River) currently employs 150 full-time positions as a response to increased demand. It is increasing production and plans to export more vessels to the United States. The company builds fishing vessels for Atlantic Canada and pleasure vessels mainly for the U.S. market.

To assist growth in the industry, the Nova Scotia Office of Economic Development created a credit facility to help boatbuilders access assistance for financial issues.

### **Opportunity Discussion**

*Both fishing and pleasure craft market positive.*

The boat building industry based in rural Nova Scotia has successfully diversified and now services two different types of markets, fishing vessels and pleasure craft. The outlook for both segments is positive. The lucrative southwest Nova Scotia lobster fishery is providing significant business for the industry. The low Canadian dollar permitted the industry to develop the American pleasure boat market. The fishing industry should at least maintain its current level of demand for new vessels. Despite the rise in the Canadian dollar, with the improvement in the U.S. economy, demand prospects for pleasure vessels should also remain strong. Opportunities for diversification exist for fulfilling a demand for custom and semi-custom pleasure boats for export.

*Skilled workers will remain a challenge for this industry.*

There is also a suggestion that smaller coastal patrol vessels could be acquired by the Canadian government. The scale of these vessels suggests this may be a new market opportunity for Nova Scotia boat builders. The challenge of the availability of a skilled workforce will continue for the foreseeable future.

The Boatbuilders Association is very concerned about the availability of skilled workers and potential apprentices. They feel future opportunities available to the industry could be constrained by this issue.

*Many small firms based in rural Nova Scotia.*

*Strong growth in residential construction.*

*Rural contractors do work in HRM.*

*Consumers finding it difficult to find contractors.*

## 6. Construction/Specialty Trades

One of the key types of employers in the rural economy of Nova Scotia is small Specialty Trade Contractors. In fact, there are in excess of 2,000 such firms in rural Nova Scotia. Sixty to seventy percent of these firms employ 1-4 employees. Most sell their services to the residential new home construction and renovation markets. These firms tend to be non-unionized and do not work on large commercial or industrial projects.

### Commentary – Key Drivers – Trends

Across the economy, there has been a significant increase in residential-related construction activity. This is equally true for both rural and urban areas, although the greatest growth has been in the urban HRM market. Industry observers advise that many rural contractors commute to HRM to take on projects. Much of the new home development in HRM has taken place in areas outside of the urban core. Most of these areas facilitate commuting in from rural areas by being adjacent to the 100 series highways providing access to the South Shore, Valley and Truro area-based contractors. The trend toward greater economic activity in this sector has been driven by a variety of factors including low interest rates, and economic growth in HRM. Increasing real estate prices and a tight real estate market has meant many people purchase existing homes with the intent to carry out extensive renovations.

According to officials at Canada Mortgage and Housing Corporation, many consumers are reporting great difficulty in acquiring services of reliable and capable contractors. Because of the significant urban demand and the draw of companies from the rural areas, the availability of contractors to take on work in rural areas is also reported as tough. Within this sector, there has also been much industry concern that there is an emerging shortage of skilled trades workers for this sector. Important to note that this is not an export-oriented industry. One of the challenges for rural areas is to ensure youth do not leave, as they will be an important source of skilled trades people required by this industry.

*HRM is forecast to grow over next 20 years.*

*Opportunities will be available for sector, provided skilled workers available.*

### **Opportunity Discussion**

HRM is forecast to grow in population over the next 20 years. Estimates range from about 30,000 persons (APEC) to about 100,000 persons (this forecast by the Conference Board assumes no new major oil and gas development projects). This population growth will ensure a continued demand for residential related construction.

Changing demographics will also drive demand for residential construction in rural Nova Scotia. As the population ages and retirees relocate to rural areas, there will be a demand for suitable housing.

Interest rates are expected by most analysts to rise gradually over the next few years. This could slow some of the growth but is not expected to reverse the trends. There are also concerns about development restriction coming into force in HRM that could limit new home construction, promote more renovation and promote more activity in adjacent municipalities.

We believe there will be opportunity for growth in the number of contractors, provided a skilled workforce is available. Efforts must be made to ensure there are sufficient opportunities for apprenticeship in the skilled trade required by this sector. If not, future opportunities could be constrained for rural contractors.

*Industrial minerals industry important in some rural areas.*

*Production of industrial minerals stable.*

## **7. Minerals – (non oil and gas)**

The mineral industry in Nova Scotia does account for a significant volume and value of exports. Until recently (closure of Devco), coal production was the leading mineral produced. Mineral production is now dominated by various industrial minerals including gypsum, stone, sand/gravel and salt. At the present time, there are virtually no metallic minerals produced in Nova Scotia. All mineral production occurs in rural areas.

Approximately 3,000 people are employed in the industry that accounts for 1% of provincial GDP. Approximately 7 million tonnes of gypsum are produced annually, accounting for 80% of the total Canadian production. About 7.5 million tonnes of crushed stone aggregate and 900,000 tonnes of salt are produced annually, for both domestic and export markets. Although the mineral industry has been declining in terms of its relative contribution to the economy, there have been recent start-ups in areas such as granite, limestone and marble.

### **Commentary – Key Drivers – Trends**

Production of the industrial minerals has been maintained at fairly consistent levels over the past number of years. The economic fortunes of existing producers are largely tied to the economic performance of both Canada and the United States. The construction industry is the largest consumer and with the low interest rates and positive economic growth, these sectors have performed well.

Gypsum is the largest mineral export from Nova Scotia. Gypsum is produced in Hants and Halifax Counties, as well as in the Strait of Canso area. All producers are reported to have available sufficient resources to sustain production for the foreseeable future (long term). Most of the production is currently exported directly to the northeast United States. Although the United States is also a significant producer of gypsum, there is no major production on the U.S. Eastern Seaboard. Demand is driven primarily by construction industry through wallboard and the manufacture of portland cement. Recently, the only value-added facility using gypsum in Nova Scotia reopened in the Strait of Canso. There has been an ongoing desire to make better economic use of this primary resource through value-added activities. There are additional major gypsum resources at Murchyville, Halifax County, that could be developed within the next number of years.

*Further development faces public concerns.*

There are two major salt mining operations in Nova Scotia. Much of the production is aimed at a deicing market throughout eastern Canada and the northeast United States. The potential world resources for salt are practically unlimited and salt content of oceans is inexhaustible. Although there is ongoing research into alternatives for de-icing, economics favour traditional salt thus far. Both operations in Nova Scotia have sufficient resources available to sustain production for many years.

Development of new sources of industrial minerals is challenged in rural Nova Scotia as residents have significant concerns about the environmental and esthetic impacts of such projects. At the present time, there are two examples where proposed stone quarries are being challenged – at White’s Point on Digby Neck and on Cox Heath Mountain in Cape Breton.

### **Opportunity Discussion**

*Preparing tender for mineral rights at Donkin*

Beyond the existing production of industrial minerals noted above, there are other active mineral ventures opening in rural Nova Scotia. There are also other potential opportunities emerging as resources are defined and markets emerge. Recently, a new quartz mine opened in Yarmouth County. The Department of Natural Resources also reports that there are emerging opportunities for limestone and marble development in Cape Breton, as well as further definition and promotion of newly discovered clay resources in southern Cape Breton. The province has also accepted four proposals to explore, develop and reclaim areas of Sydney coal field. The province is also preparing a tender for mineral rights at the Donkin coal field in Cape Breton.

An often under-estimated segment of the mining industry is the secondary processing that takes place in the province associated with industrial minerals. There are many examples of diverse and technically-advanced operations that sell product both locally and throughout the world. These operations provide examples of how economic opportunities can be pursued based on these minerals.

As noted, the construction industry is the ultimate consumer of many of the products including aggregates, clay and shale, gypsum, limestone building stone. Products manufactured using these materials include cement (1 firm), concrete (27 firms), decorative and structural concrete (23) products, clay bricks and liners (1), gypsum (2), fibreboard (1), and dimension stone (13).

Although there is limited current production on the metallic minerals side in the province, there has been a history of such development. There is currently reported to be encouraging new gold exploration taking place in eastern and southern Nova Scotia.

*Forecast of stronger US economy good for industry.*

The availability of skilled workers could also affect this sector. The existing major mining operations have relatively older workforces that will be reaching retirement age in the near future. Many of the jobs are related to heavy machinery operation and mechanical maintenance.

Existing producers should be able to maintain current production levels, given known resource availability. Economic forecasts for a stronger U.S. economy bodes well for this industry over the medium term. Long-term potential is good for a demand for product from Nova Scotia, given our proximity by bulk carrier vessels to the east coast of the United States. Environmental concerns, significant transportation costs, high energy costs, associated provincial regulation, and public opposition will represent significant challenges to growth and profitability in this industry. Potential of metallic minerals is uncertain. Considerable efforts have gone into development projects in the past, but additional resources must be identified or technology breakthroughs must occur to stimulate economic opportunities in the metallic sector.

*Onshore oil and gas sector activity has emerged in rural Nova Scotia.*

*Further development onshore, resulting from offshore expansion not expected over next 4-5 years.*

*High oil prices have stimulated interest in alternative energies.*

## 8. Energy

The energy sector has emerged as an important source of economic activity in rural Nova Scotia. Major offshore oil and gas developments have led to significant support facility construction and pipeline construction on-shore.

There has also been economic activity associated with the exploration for on-shore oil and gas reserves. Wind generation is currently being actively assessed and piloted in the province.

The oil and gas sector has made a substantial contribution to growth of Nova Scotia's GDP in recent years. Along with electricity generation, this industry employs 4,300 people and in 2002 accounted for close to 5% of provincial GDP. Looking ahead, short-term growth in the oil and gas sector is now uncertain with the lack of recent offshore discoveries.

### Commentary – Key Drivers – Trends

With the development of an oil project and a major offshore gas project, Nova Scotia's offshore became a significant area of opportunity for the oil and gas industry. Recent offshore exploration has met with very minimal success, which in turn seems to have dampened the enthusiasm for the prospects for a major industry to emerge in Nova Scotia. Several major offshore energy companies have opted out of plans to conduct major exploration programs. These companies cite, in part, the regulatory system in Nova Scotia as one of the barriers to their investment.

Oil prices have increased significantly over the past year due to supply constraints, inventory concerns and political troubles in the Middle East. These high prices normally serve to stimulate increased interest and activity in offshore exploration; this does not seem to be happening as it relates to Nova Scotia's offshore. However, the high oil prices do seem to be stimulating interest in alternative energy sources. This price impact, along with the Nova Scotia Energy Strategy, has led to significant interest and activity related to wind-generated electricity in the province.

*Alternative energy offers more immediate opportunity.*

### **Opportunity Discussion**

Although there is some debate among analysts about the future direction of oil prices, it is probably safe to assume there will not be any major on-shore activities associated with new offshore oil and gas development over the medium term. Alternative energy development represents a more immediate opportunity for rural areas. It is reported that renewable energy sources are the fastest growing areas of power production in North America. There are currently test generation projects being conducted in the province by Nova Scotia Power, as well as by private interests. One company has installed two wind turbines at Pubnico Point with plans to install 15 more. It is reported that this wind farm will be able to generate enough electricity for 10,000 to 13,000 homes. Another private company is assessing sites on the South Shore as part of their plan to produce 750 gigawatt hours annually (enough to power 38,000 homes). Technical issues exist related to this source of energy. The inconsistent rate of production due to variability in wind strength makes it difficult for utilities to depend on this source of power. However, wind technology has advanced considerably in the past ten years.

A liquefied natural gas (LNG) terminal has been proposed to be located at Bear Head on the Strait of Canso. The proposed plant has a projected \$450 million capital cost. The LNG would arrive at the plant by huge ships from Qatar and Algeria and then be transported to markets in the northeast United States by pipeline. The project would consist of a marine terminal, land-based storages and a re-gasification plant. It is reported that the Maritimes and Northeast Pipeline could be expanded to carry this LNG to market. There is also a proposed LNG project for the Saint John area of New Brunswick. Projects such as these are examples of how the establishment of oil and gas industry infrastructure can lead to additional economic opportunities for rural areas.

The proposed petro-chemical plant for Goldboro, Guysborough County is another direct example of the kind of spin-off opportunity the oil and gas industry and the emergence of LNG can generate for local communities. Also, employees at these types of facilities are well paid (\$60,000 per year in Alberta petro chemical industry) and provide opportunities for local businesses to serve these workers. A company has acquired land and is proposing a \$4.3 billion facility that would include an LNG receiving terminal, a storage facility and a 200 megawatt power plant. If developed, it would provide 500 jobs during its operating phase.

The spin-off opportunities associated with wind generation job creation relate mainly to construction with a limited requirement for an operating workforce. Perhaps the greatest opportunity will be for local companies that develop wind projects to export their services to other markets.



## 9. Service Sector

We review this sector under three sub-headings:

- **Producer Services** – services that are provided to businesses.
- **Consumer Services** – services provided to individual citizens or community visitors (retail, personal business, etc.).
- **Lifestyle/Recreational Services** – services provided to both individual citizens and visitors, including dining and accommodation, recreation services and various galleries, museums and entertainment venues.

Access to quality business support services such as marketing, management consulting, human resources and training, accounting, financial and legal services is essential for all businesses to remain competitive in Nova Scotia. The business support services sector in Nova Scotia accounts for approximately 3% of Nova Scotia's GDP.

New customer contact centres have added over 16,000 jobs to the provincial economy. Looking to the future, the industry will likely not continue to enjoy the same level of growth due to a number of economic challenges such as the threat of U.S. protectionist legislation, offshore competition and a shortage of skilled workers.

### Commentary – Key Drivers – Trends

*Service sector source of greatest economic growth in rural areas.*

As has been well documented, the service economy is experiencing the greatest growth of all economic sectors in both urban and rural areas. Producer services tend to have the greatest growth where there is some concentration of business activity. Rural areas tend to offer fewer opportunities to this part of the sector. In part, this is explained by the fact that many people living in rural areas commute to urban areas for well-paying jobs. This suggests that consumer-based services, such as retail trade and other personal services have been able to grow supported by the relatively high average income earned by rural residents who are able to earn higher incomes through their willingness to commute.

Even with this trend, it is important to note that various centres like Bridgewater or New Minas act as regional service centres for many residents of either the South Shore or the Annapolis Valley, respectively. This can impact on retail and services offered in other small towns throughout rural Nova Scotia.

*Lifestyle and recreational service industry also growing in rural areas.*

The lifestyle/cultural/recreational services are a fast growing component of economies in North America, with evidence of this growth apparent in rural Nova Scotia as well. These services are also an important offering to the tourism industry. The importance of culture was noted in another section.

*Call centre industry could serve as transitional industry.*

*Developed higher skills workforce to the industry that becomes available to other industries.*

### **Opportunity Discussion**

Producer services tend to offer the best type of jobs in the services economy, as they are relatively high skilled and high paying. The outlook for these kinds of positions is tied to general business development that occurs in rural areas. Call centres are an example of a producer service that has done well. There is debate on whether this activity will continue to offer opportunities. The call centre industry has provided an opportunity for local workforce to improve skills and can play the role of a transitional industry to other high skill opportunities as they emerge.

Exports of services continue to grow as new information and communications technologies are increasing the tradability of services. Services account for 12% of total Canadian exports, less than the worldwide average of 19%. With slower population growth in the province, prospects to increase employment in the province may lie with exporting business services. Although it appears the call centre industry is at the peak of the growth cycle, opportunity may exist in other services such as training, transition, management consulting or security and investigation services.

Outsourcing by U.S. firms is a growing trend. This outsourcing is occurring for both the IT support functions and even in manufacturing such as electronics manufacturing. Although much of the outsourcing is reported to go to India and the Far East, the Globe Mail recently reported that Canada is also benefitting from this trend. Although wage rates in Canada are higher than India and the Far East, they are still lower for IT professionals as opposed to the U.S. Canada offers advantages over India and the Far East including primarily a cultural factor. There is also a renewed interest by U.S. firms in locating call centers in Canada as opposed to other countries, such as India. The outsourcing trend is driven by firms' decisions to concentrate on their own core competencies and let other specialists provide associated services.

According to a recent report on the service industry prepared by the United Nations, the total market for all offshore services exports was estimated at \$32 billion (US) in 2001. Most was reported to be supplied by Ireland, India, Canada and Israel (in that order). The greatest opportunity for growth was cited as the outsourcing of IT enabled services that is expected to grow from \$1.3 billion in 2002 to \$24 billion in 2007. These types of business services include:

- Computer and data processing,
- Accounting and bookkeeping,
- Management consulting and public relations,
- Research and development,
- Training services.

Given Nova Scotia's experience with the development of the call centre industry and the concept that it is a transitional industry, Nova Scotia could well benefit from further outsourcing opportunities.

Many of the call centres are located in rural Nova Scotia, thus there is potential to expand and diversify to take advantage of these opportunities.

The consumer services sector growth should be promising as well. However, the out-migration of youth could limit the expansion of the sector. The age structure of the rural economy could result in a greater dependence on pension income as opposed to earned income. If, as retirements occur, younger workers take on positions and choose to maintain residence in the rural area, then the sector could benefit the impact of greater pension and earned income flowing through communities' economies.

Lifestyle – culture – recreation, again these services are in part dependent on the population dynamic. Demand for these kinds of services is certainly on the increase. If appropriate public investment is made in infrastructure, such as cultural assets and recreational facilities, then this sector could expand and make an overall contribution to lifestyle appeal and ability to attract residents and new businesses.

Public investment in such cultural-based infrastructure would certainly be consistent with Professor Richard Florida's concept of the Creative Class and its role in stimulating economic development.

*Manufacturing based in rural areas account for significant share of province's exports.*

*Sector has benefitted from low Canadian dollar.*

*Firms that have done best are those investing in innovation and technology.*

*Low cost labour countries can provide competition.*

## 10. Manufacturing

This sector has been one of the most important sources of employment for rural areas of the province. In fact, much of manufacturing activity in the province takes place within the rural economy and accounts for the largest share of provincial manufactured exports. Much of the manufacturing is directly connected to the value-added processing for our primary sectors – the fishery, forestry and agriculture. The prospects for value-added processing were discussed in the sector-specific sections. In rural Nova Scotia, several hundred establishments exist with a range of employees.

Nova Scotia exports approximately \$550 million annually of primary and advanced manufactured products such as machinery, parts and electrical components and transportation equipment. Nova Scotia's leading export in this cluster is railway equipment. Nova Scotia also leads the country in exports of a few niche products such as parking metres.

Between 1996 and 2001, employment growth in the cluster has been lagging compared to the national average. There has also been a decline in the number of small businesses across many metalworking industries. However, there are recent signs that the cluster is experiencing a rebound<sup>3</sup>.

### Commentary – Key Drivers – Trends

The manufacturing sector is often dependent on foreign markets for its sales. This global competition and market circumstance determines success. Also, for those sectors dependent on the primary sectors, availability of raw material can also be an important determinant. In recent years, this sector has been the beneficiary of the low Canadian dollar that has helped with the sector competitiveness in the global economy. Firms that have done well in this sector are those that have invested in innovation and technology, some of which has come at the expense of employment levels. Other firms have been forced to diversify both products produced and market. National Sea Products is a prime example of making a transition from being primarily a fish processing company to one that now produces high value-added frozen food products. Competition from low-cost labour countries such as China have also impacted on the sector in Nova Scotia (salt fish being one example).

<sup>3</sup> A recent study undertaken by ACOA provides more detail on the manufacturing sector in Nova Scotia. The study is called "Machining, Precision Machining, & Welding Industry Assessment", Novus Consulting Group Ltd., November 15, 2004.

*Recruitment not seen as viable strategy. Retention, expansion and new start-ups seen to have greatest potential.*

### **Opportunity Discussion**

Literature on rural economic development certainly casts doubts on the merits of recruitment of new manufacturing activity in rural areas. This body of literature points to strategies related to retention and expansion of existing operations, new business starts by local entrepreneurs and the fostering of industrial cluster activity. With the improvement of the U.S. economy, economic conditions in our prime markets have improved. The benefits of this have been partially offset by the increase in the value of the Canadian dollar. Without doubt, this sector must continue innovating and keeping abreast or ahead on technology investment.

A major impact on Rural Nova Scotia will result from the economic fortunes of three Michelin Tire facilities located throughout the province. This firm is highly influenced by the motor vehicle sector throughout the world economy. BMO expects this sector to increase spending in 2005 with the general improvement to the North American economy leading to greater truck transportation activity.

With the right combination of entrepreneurial interest and available skill sets, non-traditional manufacturing businesses have emerged in rural Nova Scotia. Firms involved in advanced manufacturing such as Composites Atlantic, have thrived in the rural economy. Many other examples exist as well. Tesma International is another example of a firm in Cape Breton where 300 persons produce precision automobile components for export markets.

In part, Nova Scotia's future prosperity lies in its ability to improve productivity (i.e. lean manufacturing) in the manufacturing sector.

Nova Scotia lags behind other provinces in adding value to its natural resources. There are significant obstacles to improving this situation as existing processing industries are experiencing difficulties such as skill retention (i.e. the ability to retain skilled workers who could earn higher wages in other provinces) and increased competition from low-cost producers from outside the province.

In April 2004, Alberta launched a value-added strategy entitled *Securing Tomorrow's Future*, which outlines the steps necessary to refocus Alberta's economic strategies, adding knowledge and innovation to the province's traditional commodity sectors and to new and emerging sectors in order to keep Alberta globally competitive. Nova Scotia could take a similar course of action in supporting the renewal of many of its industries. For instance, by adding new technologically-advanced features, opportunities exist to make Nova Scotia's products safer, healthier or more environmentally-friendly than those of offshore competitors as well as taking advantage of lean manufacturing.

*Field of bioscience contributing to new economy in rural areas often integrated to traditional sectors.*

*Science sector in rural areas certainly not burgeoning as yet.*

*Potential has been shown.*

*Access to high skills and capital essential.*

## 11. Science Industries and Other Knowledge-Based Activity

The drivers of economic growth are changing. New technologies, globalization and greater knowledge-based skills from labour are serving as the underpinnings of new high-growth economic activity. In rural Nova Scotia, there are examples of emerging businesses in the field of Bioscience that provide concrete examples of how this new economy activity can integrate traditional sector activity with new science-based opportunities.

A few examples include:

- Ocean Nutrition has established a facility in Mulgrave to extract fish oil for nutraceutical purposes.
- Ocean Produce International cultivates and moderates unique strains of seaweed for nutritional and pharmaceutical purposes.
- Kenny and Ross Ltd. produces by-product of fish meal.
- Acadian Sea Plants–Irish moss for food.

Nova Scotia's life-science industry accounts for less than 1% of GDP. The life sciences sector has emerged as a lead sector in the global knowledge economy. Internationally, it is estimated at \$500 billion annually and growing at a rate of 20% a year. Although Nova Scotia does not have a large concentration of companies in this growing field, the province is home to several leading firms.

### Commentary – Drivers – Trends

Although examples can be cited of firms establishing operations in rural Nova Scotia, this is certainly not a burgeoning new industry sector as yet. Many economic jurisdictions throughout the world have identified these sectors as a target for local development. To date, much of the activity in Nova Scotia relates in some form to one of the traditional sectors and the development of new products that have required research and development. Much of the research and development tends to be undertaken at universities or other research facilities often located in urban areas. The commercialization of new products that evolve from this research is the kind of economic activity that can develop in rural areas. Ocean nutrition is a good example of where research conducted in an urban economy has seen its commercialization and its associated production evolve in the rural economy. This does serve to point to the potential but must be considered against other key ingredients for this type of economic activity to emerge. Firms need access to a well-educated and highly-skilled workforce and also access to capital to be involved in this type of activity.

*Canada's innovation strategy targeted to industry.*

*For rural economies to participate, must be able to provide high-skilled workforce.*

These same factors will present challenges to further development in rural Nova Scotia.

### **Opportunity Discussion**

Industries in this sector are expected to lead the economy in terms of economic growth in the foreseeable future. Development requires significant research effort, commercialization activity could take place in rural areas. This will be followed by the successful entrance into export markets. Research is expensive and requires significant up-front investment. Once products are developed, identifying appropriate distribution channels and obtaining regulation approvals will not be insignificant challenges.

Canada's innovation strategy is targeted toward facilitating activity in this type of industry. How support activity gets to firms in rural areas remains to be seen. In order to participate, rural communities must encourage the attainment of higher skills among their workforces and retain their youth.





### III. Summary of Opportunities

---

Based on the sector profiles, we have prepared a summary table of suggested opportunities that emerge based on the examination of the macro trends. Each opportunity is briefly described for each sector and an overall rating for potential is provided.

#### Summary of Opportunities for Rural Nova Scotia as They Relate to Macro Trends

Sector	Opportunity	Rating
Fishery	Much of fish product landed is exported in fresh form as the highest value. Processing opportunities limited. Aquaculture challenging. New innovation products and marketing approaches offer potential.	Limited
Forestry	Traditional part of industry should be stable. New value added opportunities related to semi and finished products.	Medium
Agriculture	Production of blueberries may have potential to increase. Wine industry should grow on a slow and steady basis. Value-added opportunities could be explored.	Medium
Tourism/Culture	Province has strong assets and good position in existing industry. Sector will grow in longer term. Recent setbacks should be overcome in long term. Culture is emerging industry – challenge is that government is an important source of investment dollars – uncertain commitment to sector.	Medium
Boat Building	Overall prospects for industry are solid.	High
Construction Trades	Prospects for demand for these contractors is strong. Will need skilled workers.	Medium/High
Minerals	Given Nova Scotia's strategic location relative to the East Coast, U.S. commodities that are moved by bulk carrier will continue to offer opportunity. Environmental opposition to development will affect opportunities.	Medium
Services	As long as local economics are stable, outlook for growth opportunities in service sector are positive. Offshoring trends are positive for those areas with established call centre operations.	Medium
Manufacturing	Small-scale opportunities serving niche markets but not large-scale firms.	Medium
Science Based	Recognized as important future growth sector. Absence of university and highly educated rural workforce make opportunities challenging.	Medium



## IV. Case Studies

---

As part of the sector analysis research, we have examined a number of case studies where rural economic development based on sector activity has been undertaken. For this report, we provide a brief description summary and key lessons learned.

Case Study	Description	Lessons Learned	Reference
Revelstoke, BC	As large-scale employers left town, unemployment soared to 25% in Revelstoke and in 1986 over one third of the houses were on the market. Through community-wide planning and municipal support, the town was able to reduce unemployment to 10% in the late 1990s.	<ul style="list-style-type: none"> <li>➤ Revelstoke City Hall takes an incubation, not intervention, approach to supporting community development – the municipality has helped develop organizational capacity within the community.</li> <li>➤ The city has become fully engaged in the development of the community as a partner in the Revelstoke Community Forest Corporation and in other ventures, such as the development of the Mount MacKenzie ski area.</li> <li>➤ Revelstoke has a local development system rather than just a collection of programs.</li> </ul>	<a href="http://www.blockinternetservices.com/~brianarm/tooltech_A PX.html">http://www.blockinternetservices.com/~brianarm/tooltech_A PX.html</a>
Rural Oregon	The state government created the Wood Product Competitiveness Corporation (WPCC) in 1991, but it has evolved into an independent trade association. The WPCC devises and coordinates strategies to improve and promote competitiveness of the secondary wood products industry (especially SMEs).	<ul style="list-style-type: none"> <li>➤ Rural firms can increase their ability to compete by developing a broad range of niche products vs competing in commodity markets</li> <li>➤ Impending wood supply shortages made it necessary to identify alternative resource supplies – they did this through new methods of using lower grade wood.</li> <li>➤ Flexible networks of small firms make it possible to pool resources for economies of scale in marketing, R&amp;D, worker training and products development.</li> </ul>	Okagaki, A. <i>et al.</i> 1998. Strengthening Rural Economies: programs that target promising sectors of a local economy. Centre for Community Change. Washington, DC.
Rural Alaska	The Alaska Village Initiatives (AVI), created in the late 1960s, is an economic development organization designed to serve people in rural Alaska. AVI created Alaska Village Tours in 1987; it promotes a theme (native culture) rather than a destination and this provides opportunity for community-based tourism across the state.	<ul style="list-style-type: none"> <li>➤ Marketing is key. Tourism tour products must be marketed to tourists before they leave home.</li> <li>➤ It is possible to compete with vertically integrated tourism companies by creating a product based on a network of small businesses for marketing and promotional purposes and to facilitate delivery of financial and technical assistance.</li> </ul>	Okagaki, A. <i>et al.</i> 1998. Strengthening Rural Economies: programs that target promising sectors of a local economy. Centre for Community Change. Washington, DC.

Case Study	Description	Lessons Learned	Reference
<p>Gussing, Austria (pop. 4000)</p>	<p>Before 2000, there was a steady outflow of youth from Gussing. In 2000, the town turned from imported fossil fuels to local wood scraps and canola oil to meet its electricity and home heating needs. Since then, two large flooring factories (650 jobs) have set up in Gussing and 400 visitors come to the town each week to learn about their technology. Additional employment was created in the energy plant.</p>	<ul style="list-style-type: none"> <li>➤ Creating energy using local resources has reduced energy costs and made the town a more attractive location for businesses to relocate.</li> <li>➤ Complementary processes are efficient and result in attractive cost savings (e.g., Heat produced as a byproduct of the electricity generating process is used to meet 98% of the town’s home heating needs.)</li> <li>➤ Close ties with researchers keeps communities abreast of new innovations and universities and colleges provide a venue for testing new innovations.</li> <li>➤ Money previously spent on imported fuel is now spent within the community.</li> <li>➤ An ever-growing number of youth are staying in and returning to the community.</li> </ul>	<p>Fairclough, I. 2004, June 3. Speaker tells how town was revived. The Halifax Herald.</p>
<p>Mankato, Minnesota (pop. 30,000)</p>	<p>Local expertise in wireless technology developed over the mid-late 1900s due to a nearby manufacturer. The knowledge cluster related to wireless technologies in Mankato grew as highly skilled labour struck out on their own and filled niches created by nearby industry in need of wireless technologies. Two local educational institutions provide complementary training in wireless technology. The Wireless &amp; communications Technology Alliance provides leadership and organizational capacity to the cluster.</p>	<ul style="list-style-type: none"> <li>➤ The cluster is successful because it “fits” within the community – they have history that fostered expertise, educational capacity, and proximity to centres of diverse product demand.</li> </ul>	<p>Munnich, L. <i>et al.</i> 2002. Rural knowledge clusters: The challenge of rural economic prosperity. Reviews of Economic Development Literature and Practice: 12. USEDA.</p>

Case Study	Description	Lessons Learned	Reference
<p>Alexandria, Minnesota (pop. &lt;10,000)</p>	<p>The Centre for Automation and Motion Control (CAMC) at Alexandria Technical College serves as a broker of knowledge in automation technologies.</p>	<ul style="list-style-type: none"> <li>➤ A historical automation knowledge base in packaging technology has been “cross-fertilized” into process technology for local manufacturers, creating productivity gains.</li> <li>➤ The local technical college has played a central role in the automation and motion control technology cluster. The college maintains a close relationship with local companies.</li> <li>➤ The community built on a base of knowledge (packaging technology) that existed within the community.</li> </ul>	<p>Munnich, L. <i>et al.</i> 2002. Rural knowledge clusters: The challenge of rural economic prosperity. Reviews of Economic Development Literature and Practice: 12. USEDA.</p>
<p>Rural Indiana</p>	<p>The Discovery Park at Purdue University was created to help rural entrepreneurs create economic opportunities by combining discovery with innovation. The park has two complementary goals – 1) To provide a place where scientists from different backgrounds and interact and share ideas that spark innovation and 2) To commercialize innovations through interaction among scientists and entrepreneurs.</p>	<ul style="list-style-type: none"> <li>➤ Innovation evolves from interdisciplinary interactions.</li> <li>➤ New opportunities can be discovered through interaction among the scientists and entrepreneurs.</li> <li>➤ Higher education, private sector and governance are all key to transforming a region’s economy.</li> </ul>	<p>Drabenstott, M. <i>et al.</i> 2004. 2003 Annual Report: Innovations in rural governance. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of rural America, Federal Reserve Bank of Kansas City, January 2004.</p>
<p>Elsa and Edcouch, Texas (combined pop. 10,000)</p>	<p>The annual income for 90% of region’s households was less than \$10,000 and a college placement program sent best high school graduates “away” to Ivy League schools. The community created a school- and community-based Centre for Research and Development. Seeing graduates as strong community assets, the Centre re-engaged graduates using an email list-serve, through which graduates could contribute ideas and strategies for projects at home.</p>	<ul style="list-style-type: none"> <li>➤ Graduates throughout the country can continue to contribute to their “home” communities even after they’ve gone elsewhere.</li> <li>➤ Student engagement in the economic prosperity of their community created an awareness and interest in entrepreneurship and economic and community development.</li> <li>➤ Draw on community assets.</li> <li>➤ Collaboration among business leaders, educators, community activists and city officials was effective.</li> </ul>	<p>Anonymous. 2002. Technology and Grit at the Grassroots: information technology, community engagement, and jobs in distressed rural communities. National Centre for small Communities. [www.smallcommunities.org]</p>

Case Study	Description	Lessons Learned	Reference
Oklahoma	The Oklahoma Alliance for Manufacturing Excellence Inc. was initiated by the private sector to support firms in rural towns develop partnerships to gain competitive advantages in the global marketplace. The alliance has assisted over 1800 manufacturers and has helped create 1200 new manufacturing jobs.	<ul style="list-style-type: none"> <li>➤ The alliance benefited from private, education and government participation.</li> <li>➤ Support from the alliance was especially valuable during weak economic times.</li> <li>➤ Educating employees (using the Lean technique) has created savings for firms through increased efficiency.</li> </ul>	Drabenstott, M. <i>et al.</i> 2004. 2003 Annual Report: Innovations in rural governance. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of rural America, Federal Reserve Bank of Kansas City, January 2004.
Northeast Minnesota	By 1999, the downturn in mining had greatly affected the economic landscape of Northeast Minnesota. Increased regional cooperation among the universities/colleges created a regional perspective led to a regional strategy and partnerships.	<ul style="list-style-type: none"> <li>➤ Regional cooperation among educational institutions led to a more effective and efficient system that could better meet community needs and that firms were more inclined to work with.</li> <li>➤ A regional approach in rural areas can serve component communities well through efficiencies and cooperation.</li> </ul>	Drabenstott, M. <i>et al.</i> 2004. 2003 Annual Report: Innovations in rural governance. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of rural America, Federal Reserve Bank of Kansas City, January 2004.
Pipestone, Minnesota	Low commodity prices and high farm expenses make it difficult for rural families to continue farming. The Kas Brothers developed a wind farm in 2001, the first farmer-owned commercial farm in the US.	<ul style="list-style-type: none"> <li>➤ A wind farm is a viable opportunity – the Kas brothers’ farm is expected to yield \$30-40,000/year for the first 10 years and \$100-140,000/year thereafter.</li> <li>➤ Wind farms can help stimulate the local economy when they make use of local contractors in construction and local banks for financing.</li> </ul>	

Case Study	Description	Lessons Learned	Reference
McCormick County and the Savannah River Valley, South Carolina	The Savannah Valley Authority contracted a residential development company to develop a planned retirement/recreation community, Savannah Lakes Village (SLV), including 5,100 home sites, extensive recreational facilities and business properties to serve village needs. Within 8 years, more than 3,000 lots were sold and construction was completed on 236 residences and village infrastructure.	<ul style="list-style-type: none"> <li>➤ In the eighth year (1995), activity at SLV had resulted in 610 jobs and \$18.8 million dollars in income – such benefits were expected to increase as 80 units would be added to the development each year. Tax revenue from SLV residents came to almost \$1.1 million dollars.</li> <li>➤ SLV residents also contribute to human capital - they are active in civic and public service organizations.</li> <li>➤ SLV was attractive to retirees due to its climate, attractive countryside and access to a lake. Public support and an experienced retirement community developer also contributed to the success.</li> </ul>	Schaeffer, P. and S. Loveridge (eds.). 2000. Small Town and Rural Economic Development: A Case Studies Approach. Praeger Publishers. Westport, CT.
Parishville, New York (pop. 1,900)	SunFeather Natural Soap Company was established in 1979 with an initial investment of \$15 and has grown to employ 18-20 people and enjoys over \$1,000,000 in sales annually, worldwide.	<ul style="list-style-type: none"> <li>➤ Using a mail-order approach and distributing product across the country and internationally has allowed the company to overcome their remote location. (Note: The internet has had a minimal impact.)</li> <li>➤ After publishing her first book about soap-making, the owner experienced a dramatic increase in sales.</li> <li>➤ SunFeather has prospered by supplying to an undersupplied niche and building a product line that revolves around a core niche product.</li> </ul>	Schaeffer, P. and S. Loveridge (eds.). 2000. Small Town and Rural Economic Development: A Case Studies Approach. Praeger Publishers. Westport, CT.





# Appendix A – Summary Table: Economic Forecasts

<b>Toronto Dominion Bank (June 24, 2004)</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Canada</b>				
Real GDP <sup>1</sup>	3.4	2.0	2.8	3.5
Consumer Expenditure <sup>1</sup>	3.4	3.1	3.2	3.2
Durable goods <sup>1</sup>	8.3	2.0	0.5	2.2
Business Investment <sup>1</sup>	-4.0	3.2	5.5	7.2
Residential Construction <sup>1</sup>	14.5	7.5	7.2	-1.9
Exports <sup>1</sup>	1.1	-2.4	5.9	4.9
Imports <sup>1</sup>	1.4	3.8	6.1	5.1
Labour Force <sup>1</sup>		2.2	1.3	1.4
Employment (000s)			211	239
Employment <sup>1</sup>	2.2	2.2	1.7	1.6
Unemployment (%)	7.6	7.6	7.3	7.1
Pers. Disposable Income <sup>1</sup>		3.0	4.2	5.5
CPI (Y/Y)	2.2	2.8	1.9	1.9
Housing Starts (000s)	205	218	219	185
Central Bank Rate <sup>1</sup>			2.75	4.25
Canadian Dollar (vs US)			78.00	79.00
<b>United States</b>				
Real GDP <sup>1</sup>	2.2	3.1	4.8	4.1
<b>BMO Financial Group (March 19, 2004)</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Canada</b>				
Real GDP <sup>1</sup>	3.3	1.7	3.0	3.4
Employment <sup>1</sup>	2.2	2.2	1.4	1.1
Unemployment Rate (%)	7.6	7.6	7.5	7.5
Housing Starts (000 units)	205	220	200	180
Retail Sales <sup>1</sup>	6.0	3.1	3.5	4.4
Consumer Prices <sup>1</sup>	2.2	2.8	1.4	1.2
<b>Nova Scotia</b>				
Real GDP <sup>1</sup>	4.4	1.8	2.7	3.3
Employment <sup>1</sup>	1.2	1.8	1.3	1.4
Unemployment Rate (%)	9.7	9.3	9.2	9.1
Housing Starts (000 units)	5.0	6.1	5.3	4.2
Retail Sales <sup>1</sup>	5.4	0.7	2.5	3.3
Consumer Prices <sup>1</sup>	3.0	3.4	0.6	0.9

<b>CIBC (April 20, 2004)</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Canada</b>				
Real GDP <sup>1</sup>	3.3	1.7	2.5	3.2
Final Domestic Demand <sup>1</sup>		3.6	3.2	3.3
Personal Consumption <sup>1</sup>		3.3	2.7	2.9
Residential Construction <sup>1</sup>		7.5	6.2	3.3
Exports <sup>1</sup>		-2.1	3.7	4.6
Imports <sup>1</sup>		4.0	4.9	5.0
Consumer Price Index <sup>1</sup>	2.2	2.8	1.6	1.8
Unemployment Rate <sup>1</sup>	7.6	7.6	7.5	7.4
Employment <sup>1</sup>	2.2	2.2	1.4	1.5
Housing Starts (000s)	205	220	206	191
Real Disposable Income <sup>1</sup>	2.7	1.1	2.1	2.7
<b>United States</b>				
GDP at Market Prices <sup>1</sup>	4.3	5.2	4.4	5.1
Real GDP in \$1997 <sup>1</sup>	3.3	1.7	2.5	3.2
<b>Scotiabank Group (May 28, 2004)</b>	<b>1990-02</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Canada</b>				
Real GDP <sup>1</sup>	2.7	1.7	2.3	3.0
Consumer Prices <sup>1</sup>	2.3	2.7	1.5	2.0
Employment <sup>1</sup>	1.3	2.2	1.5	1.0
Unemployment Rate (%)	9.0	7.6	7.4	7.3
Personal Disposable Income <sup>1</sup>	3.8	2.8	3.0	4.1
Real Consumer Spending <sup>1</sup>	2.4	3.3	2.9	3.0
Housing Starts (000s)	154	218	210	184
Population <sup>1</sup>	1.1	0.9	0.9	0.9
<b>Nova Scotia</b>				
Real GDP <sup>1</sup>	2.2	0.9	2.2	2.7
Consumer Prices <sup>1</sup>	2.3	3.4	1.1	1.6
Employment <sup>1</sup>	0.9	1.6	1.5	0.8
Unemployment Rate (%)	11.4	9.3	9.4	9.3
Personal Disposable Income <sup>1</sup>	3.1	2.8	2.8	3.6
Real Consumer Spending <sup>1</sup>	1.9	2.7	2.7	2.6
Housing Starts (000s)	4.4	5.1	4.4	4.1
Population <sup>1</sup>	0.3	0.2	0.2	0.1
<b>United States</b>				
Real GDP	2.9	3.1	5.0	3.6

<b>Atlantic Provinces Economic Council (Fall, 2003)</b>				
<b>Canada</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	
GDP Growth <sup>1</sup>	3.3	2.0	3.1	
Employment Growth <sup>1</sup>	2.2	2.0	1.3	
Unemployment rate (%)	7.6	7.7	7.7	
Housing Starts (000s)	205	215	190	
Retail Sales <sup>1</sup>	6.0	3.9	4.0	
Inflation (% change in CPI)	2.2	2.8	1.5	
Interest Rates (90 day t-bill) <sup>2</sup>	2.6	2.6	3.1	
Exchange Rates (Can\$/US\$) <sup>2</sup>	0.63	0.76	0.77	
<b>Conference Board of Canada</b>				
<b>Performance and Potential 2003-04</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005-15</b>
Real GDP Growth at Market Prices	3.3	1.9	3.2	2.6 <sup>4</sup>
CPI Inflation Rate (%)	2.2	2.9	1.9	2.0 <sup>4</sup>
Unemployment Rate (%)	7.6	7.9	7.8	7.9 <sup>5</sup>
Prime Rate (%)	4.2	4.8	4.6	6.6 <sup>5</sup>
Exchange Rate (US/Canada)	0.637	0.709	0.691	0.720 <sup>5</sup>
<b>Prov Outlook Exec Sum (Spring 04)</b>				
<b>Canada</b>		<b>2003</b>	<b>2004</b>	<b>2005</b>
GDP at Basic Prices (\$millions)		1,127,941	1,171,791	1,224,346
(% from previous year)		5.4	3.9	4.5
GDP at Basic Prices (millions \$1997)		1,012,891	1,040,511	1,071,804
(% from previous year)		2.1	2.7	3.0
Employment (000s)		15,745	16,054	16,406
(% from previous year)		2.2	2.0	2.2
Unemployment (%)		7.6	7.2	6.7
Retail Sales		316,993	40,277	42,548
(% from previous year)		3.1	2.7	5.4
GDP as Basic Prices per Capita (\$pp)		35,705	36,797	38,146
(% from previous year)		4.4	3.1	3.7
GDP as Basic Prices per Capita (\$1997pp)		32,036	32,674	33,394
(% from previous year)		1.2	1.9	2.2
Employment Rates (per 1,000 people)		498	504	511
(% from previous year)		1.3	1.1	1.4
Disposable Income per Capita (\$pp)		22,722	23,420	24,511
(% from previous year)		1.9	3.1	4.7
Personal Income per Capita (\$pp)		29,378	30,259	31,627
(% from previous year)		1.8	3.0	4.5

<b>Nova Scotia</b>			
GDP at Basic Prices (\$millions)	26,067	26,845	27,773
(% from previous year)	6.1	3.0	3.5
GDP at Basic Prices (millions \$1997)	23,200	23,611	24,072
(% from previous year)	3.0	1.8	2.0
Employment (000s)	436	441	449
(% from previous year)	1.7	1.2	1.8
Unemployment (%)	9.3	9.6	9.1
Retail Sales	9,238	9,497	9,936
(% from previous year)	0.7	2.8	4.6
GDP as Basic Prices per Capita (\$pp)	27,853	28,645	29,620
(% from previous year)	5.9	2.8	3.4
GDP as Basic Prices per Capita (\$1997pp)	24,790	25,194	25,673
(% from previous year)	2.8	1.6	1.9
Employment Rates (per 1,000 people)	465	471	479
(% from previous year)	1.5	1.1	1.7
Disposable Income per Capita (\$pp)	20,641	21,384	22,408
(% from previous year)	2.6	3.6	4.8
Personal Income per Capita (\$pp)	26,192	26,916	28,177
(% from previous year)	2.8	2.8	4.7

- <sup>1</sup> Annual Percent Change
- <sup>2</sup> Year-end Figures
- <sup>3</sup> Scotia Economics Estimate
- <sup>4</sup> Average annual compound percent change
- <sup>5</sup> Average

# Appendix B – List of Contacts for Phase I

---

Mary Kenny  
Executive Director  
Atlantic Homebuilding and Renovation Sector  
Council

David Amirault  
Senior Representative  
Bank of Canada

Lisa Anderson  
Executive Director  
Nova Scotia Fisheries Sector Council

Gregory Landry  
Planning & Development Officer  
Office of Economic Development

Mary-Jo MacKay  
Tourism Development Officer  
Tourism and Culture

Peter MacQuarrie  
Director, Program Development  
Natural Resources

Jorg Beyeler  
Director, Forestry  
Natural Resources

Elaine Myers  
Policy & Economics  
Fisheries and Oceans Canada

Don McNair  
Centre for Community Enterprise

David Sangster  
General Manager  
Wild Blueberry Producers Association of Nova  
Scotia

Denny Morrow  
Executive Director  
Nova Scotia Fish Packers Association

David McCulloch  
Housing Analyst  
Canada Mortgage and Housing Corporation

Karen McNutt  
Research & Statistical Officer  
Tourism and Culture

Michael MacDonald  
Geologist  
Natural Resources

John Lewis  
Horticulture Crops  
AgraPoint

Alan Grant  
Manager, Business Management & Economics  
Agriculture and Fisheries

Michelle Colussi  
Centre for Community Enterprise

Sandra Canning  
Market & Trade Officer  
Agriculture & Agri-Food Canada

David Chaundy  
Senior Economist  
Atlantic Provinces Economic Council

# Appendix C. Sector Employment by County

---

This Appendix, prepared by the Atlantic Provinces Economic Council (APEC), provides estimates of the share of employment by county for ten of the eleven sectors discussed in this report. It is intended to help rural regions understand the relevance of the sector commentaries for their current industry profile. The Appendix also identifies counties that have a high dependence upon a particular sector or a large employer.

These estimates are intended to indicate broad employment patterns rather than provide precise employment estimates (see Explanatory Notes below). Employment levels fluctuate considerably, both during the year and from year to year, reflecting the seasonal nature of some industries, the business cycle, order levels and firm-specific hiring and layoff patterns.

## Explanatory Notes

These estimates are based upon the number of jobs within a county. Workers may travel to these jobs from neighbouring counties. These estimates therefore show where the jobs are located, not where the workers live.

These estimates are derived from data on the number of establishments in Statistics Canada's Business Registry, which provides information on employment size ranges, not actual employment levels. As such, there is a degree of uncertainty surrounding these estimates, particularly for counties with small aggregate employment levels such as Richmond, Guysborough and Victoria. Readers should therefore focus on the broad employment patterns revealed by these estimates.

It was not possible to provide estimates for Science Industries and Other Knowledge-Based Activity. Classifications of science or knowledge intensive industries are available but these are of limited use in detailed geographical analyses such as this one, where the behaviour of individual firms is much more significant than any industry-level benchmark. Firms in this sector are therefore included as part of the manufacturing or services sectors. (For a more detailed discussion of ICT and science industries in Atlantic Canada see APEC, 2004, "ICT and Science Industries: Their Role in Atlantic Canada's Economy," *Atlantic Report*, vol. 38, no. 4, Winter, pp. 2-7).

## Description of the Tables

Fig. A1 provides estimates of the share of employment (jobs) by county for ten of the eleven sectors identified in this report, plus the remaining government sector (including health and education). This table helps readers understand the relevance of the sector commentaries for their current industry profile, and their degree of dependence upon particular sectors. The table also highlights (in bold) sectors where the largest firm accounts for more than an estimated 5% of the jobs in a county (except for Guysborough and Richmond counties where total employment levels are too small).

Fig. A2 shows the number of firms (i.e., establishments) by county for ten of the eleven sectors identified in this report, plus the remaining government sector (including health and education).

**Fig. A1. Estimated Share of Employment (Number of Jobs) by Sector and County, Nova Scotia, 2004 (%)**

	NS	Shel	Yar	Dig	Que	Lun	Ann	King	Hant	Hal	Col	Cum	Ant	Pict	Guys	Inv	Rich	CB	Vict
<i>Total</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<i>Fishing/Fish Processing</i>	3	38	23	<b>19</b>	5	4	6	0	0	0	0	1	3	1	18	6	12	3	9
<i>Forestry/Forest Products</i>	3	2	1	6	<b>24</b>	7	5	1	11	1	7	4	5	6	11	<b>14</b>	4	1	3
<i>Agriculture/Food Processing</i>	3	1	2	8	1	2	5	19	5	1	5	11	4	2	3	1	2	1	1
<i>Minerals (excl. oil/gas)</i>	0	0	0	0	0	0	0	0	1	0	0	2	0	1	3	1	0	0	1
<i>Energy</i>	1	0	0	0	1	0	0	0	0	1	0	0	1	0	5	0	0	0	0
<i>Construction</i>	6	2	4	3	4	5	5	5	9	6	4	4	8	4	4	8	7	6	3
<i>Boat Building</i>	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Other Manufacturing</i>	6	3	4	1	0	<b>13</b>	<b>7</b>	<b>6</b>	9	4	11	10	1	<b>18</b>	7	0	1	2	1
<i>Tourism &amp; Culture</i>	10	5	8	8	12	10	11	10	8	11	9	8	11	10	5	13	12	11	35
<i>Services</i>	41	33	43	27	26	31	35	34	38	47	41	29	33	34	22	33	35	43	25
<i>Health/Education/Government</i>	26	13	15	26	26	27	26	25	18	27	23	32	33	26	23	25	26	32	21

**Bold** indicates that the largest firm in a sector accounts for more than an estimated 5% of the jobs in the county.

**Fig. A2. Number of Firms (Establishments) by Sector and County, Nova Scotia, June 2004**

	NS	Shel	Yar	Dig	Que	Lun	Ann	King	Hant	Hal	Col	Cum	Ant	Pict	Guys	Inv	Rich	CB	Vict
<i>Total</i>	54251	1518	2107	1444	667	2911	1230	3422	2255	22727	2971	1871	1223	2414	518	1457	487	4217	726
<i>Fishing/Fish Processing</i>	3176	660	607	267	77	62	71	22	0	216	17	71	113	163	88	230	52	268	191
<i>Forestry/Forest Products</i>	1537	29	47	100	50	197	56	80	117	208	184	72	69	118	58	57	21	50	23
<i>Agriculture/Food Processing</i>	2116	18	53	88	18	124	100	478	188	179	230	242	99	116	27	66	13	56	17
<i>Minerals (excl. oil/gas)</i>	81	2	1	3	0	4	6	2	7	22	6	4	4	4	1	2	0	11	1
<i>Energy</i>	81	0	1	1	1	1	1	3	1	58	1	0	2	0	3	3	1	3	1
<i>Construction</i>	6395	97	173	140	89	376	146	431	371	2821	344	190	127	259	56	167	67	472	53
<i>Boat Building</i>	121	31	17	10	0	14	0	1	1	19	0	1	4	4	3	2	2	8	4
<i>Other Manufacturing</i>	1188	21	50	26	11	86	35	58	58	505	84	59	17	53	11	11	9	79	15
<i>Tourism &amp; Culture</i>	4557	73	131	117	55	275	101	233	146	1973	196	146	78	190	41	192	58	435	109
<i>Services</i>	31320	543	926	628	325	1591	643	1851	1250	15049	1732	963	610	1354	201	647	242	2442	271
<i>Health/Education/Government</i>	3679	44	101	64	41	181	71	263	116	1677	177	123	100	153	29	80	22	393	41

Source: APEC/Statistics Canada.



# Appendix D. Demographic Trends

---

This Appendix, prepared by the Atlantic Provinces Economic Council, provides a brief graphical analysis of some of the recent and projected demographic and employment trends in rural Nova Scotia that were discussed in Section 1 of this report.

For further details and an explanation of the methodology behind the estimates presented here, see Atlantic Provinces Economic Council (2003), *Urbanization and the Aging Population: What's Ahead for Atlantic Canada?* (Halifax: APEC), or visit [www.apec-econ.ca](http://www.apec-econ.ca).

## **The aging population and outmigration of young people explain the recent population decline in rural Nova Scotia.**

The population of rural Nova Scotia declined by 2% between 1996 and 2001 reflecting a decline in the natural population and outmigration (see Fig. A3). Low fertility levels and increasing life expectancy are contributing to an aging population in Nova Scotia. However, the older age structure in rural Nova Scotia, compared to Halifax, contributes to its lower birth rate and higher death rate. Net outmigration from rural Nova Scotia is concentrated among the 20-34 years age group (see Fig. A4). These young people are moving to Halifax and to other cities in Canada.

## **A steady drop in the number of young workers and a fast-approaching decline in the number of older workers will be more pronounced in rural areas of Nova Scotia.**

These demographic trends have significant implications for the size and composition of the workforce. (The increased numbers of older and retired workers will also have important repercussions for health and social service costs and delivery in rural areas, with any consolidation likely to favour regional delivery centres.) The low fertility rate will contribute to a steady decline in the number of young people available for work in Nova Scotia (see Fig. A5). By contrast, as the baby boomers move into retirement, large numbers of older workers will leave the workforce. These trends will be more acute in rural Nova Scotia, where employers can expect a sharper drop in the number of young workers available and a larger decline in the number of older workers (see Fig. A6). Export-orientated businesses will need to re-evaluate their human resource strategies, developing more innovative recruitment practices, targeting non-traditional labour force groups, investing in technology and upgrading the skill level of their employees.

## **The rural economies of Nova Scotia are more seasonal than Halifax and account for the majority of the seasonal workforce in the province.**

Between 2000 and 2004, average employment in the peak summer months (June through August) in South West Nova was about 12% higher than in the winter months (January through March). In northern Nova Scotia and the Annapolis Valley this seasonal variation was over 10%. By contrast, the seasonal variation in employment in Halifax was just over 5%, similar to the national average (see Fig. A7.)

Overall, the rural regions outside of Halifax account for about 56% of full-year employment but 73% of seasonal employment in Nova Scotia (see Fig. A8). This partly reflects the fact that the

---

employment base of some seasonal industries, such as agriculture, forestry, fishing, mining and manufacturing, is largely located outside of Halifax. However, the seasonal employment in tourism-related sectors and in construction is also disproportionately located in the rural areas. By contrast, the seasonal workforce in (retail) trade is largely located in Halifax.

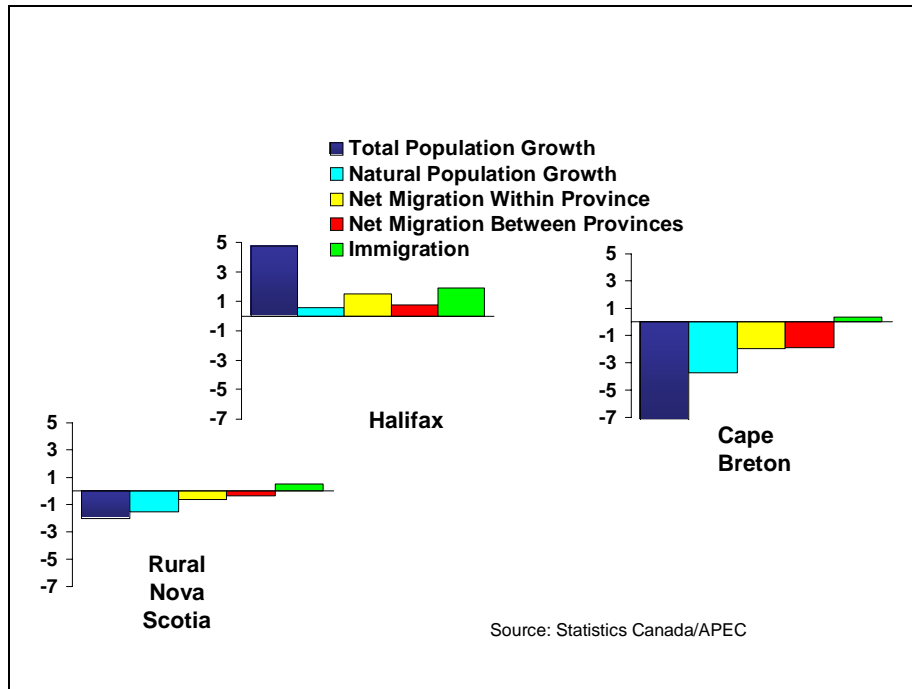
The seasonal nature of core industries in rural regions can have a significant impact on related industries (such as seafood wholesaling and transportation). It is also affecting the choices of young people who are less inclined to enter some of these seasonal industries.

**Primary and goods-producing industries are likely to experience a decline in employment with significant impacts in rural areas of Nova Scotia.**

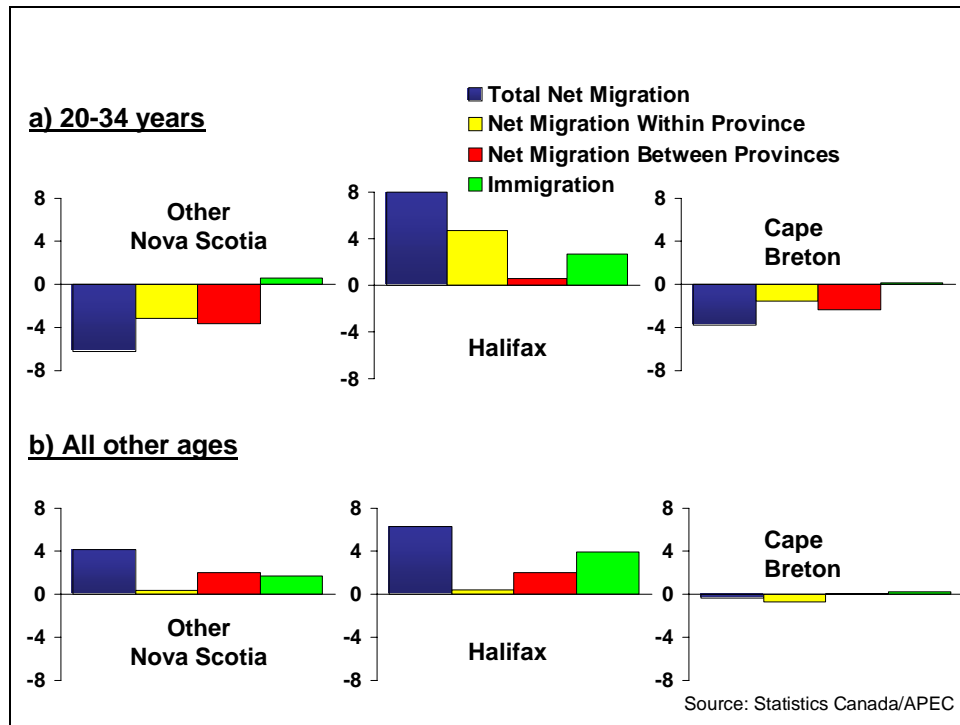
Several factors will put downward pressure on employment in some of the core industries in rural Nova Scotia, such as agriculture, fishing, forestry and manufacturing (see Fig. A9). These include the limited scope for further increases in renewable resource extraction and production and the need to improve competitiveness and productivity, reflecting pressures such as a higher Canadian dollar and intensified international competition from countries such as China. Aggregate employment in these industries is projected to decline over the next twenty years, with most of these declines in rural areas (see Fig. A10). Employment in the service sector will continue to grow (with the exception of the education sector, where the decline in the number of children and students will restrain growth).

This brief analysis highlights some of the longer-term macroeconomic trends influencing the economies of rural Nova Scotia and, as such, provide a status quo projection. The actual outcomes will be somewhat different, and this report has identified the scope for new business opportunities, which may arise from local entrepreneurial growth and outside investment (e.g., the recent growth in call centres in Nova Scotia and potential liquefied natural gas and petrochemical industries).

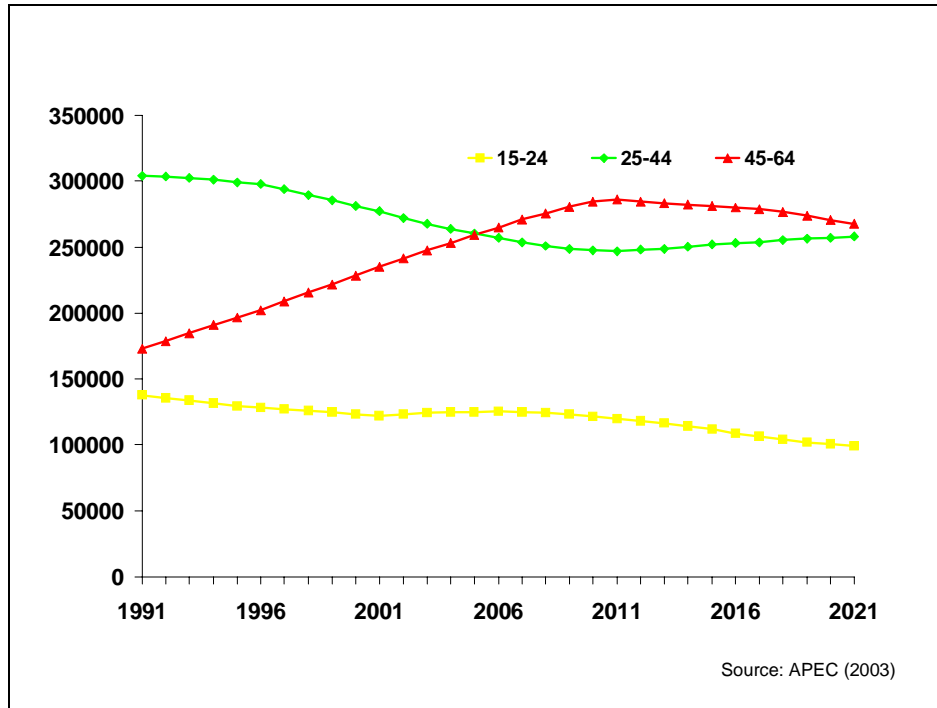
**Fig. A3: Contributors to Population Growth, Nova Scotia, 1996-2001 (per cent change)**



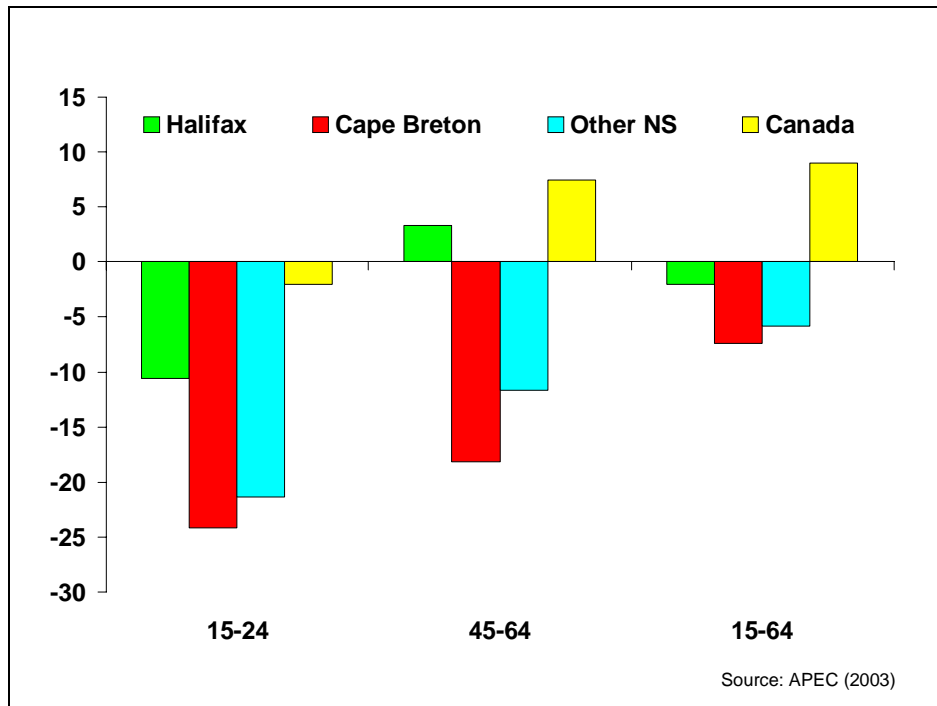
**Fig. A4: Net Migration by Age, Nova Scotia, 1996-2001 (thousands)**



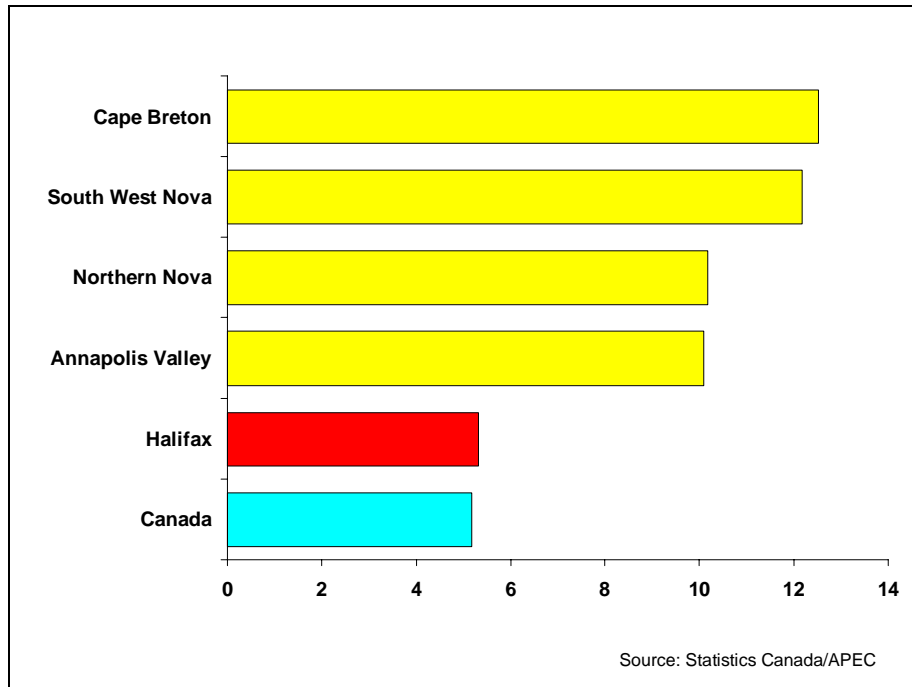
**Fig. A5: Nova Scotia's Working Age Population, 1991-2021**



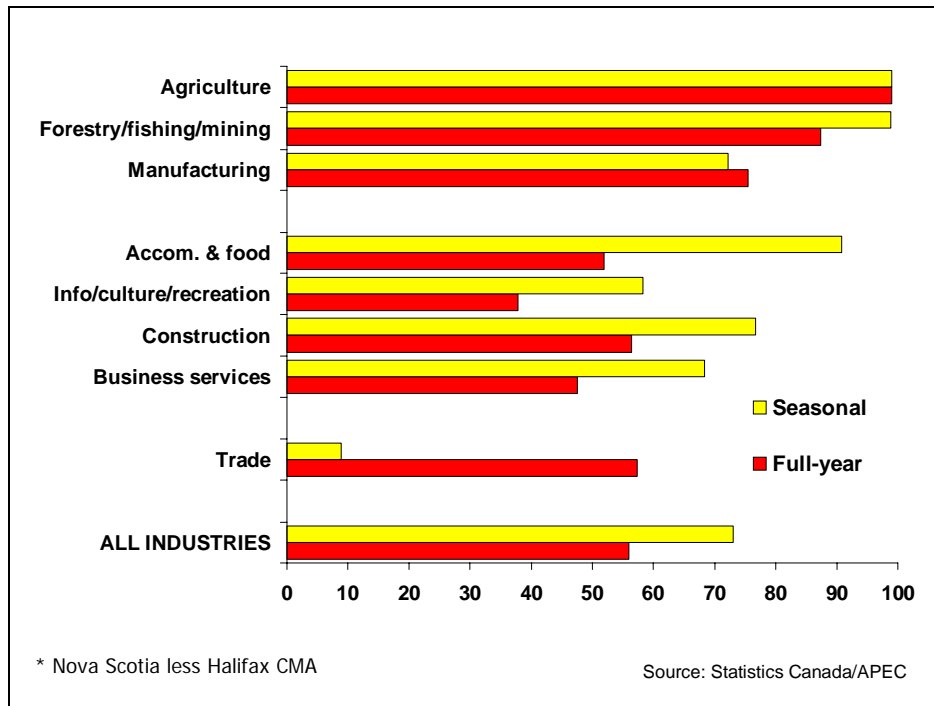
**Fig. A6: Projected Change in Nova Scotia's Population by Age Group, 2011-2021 (%)**



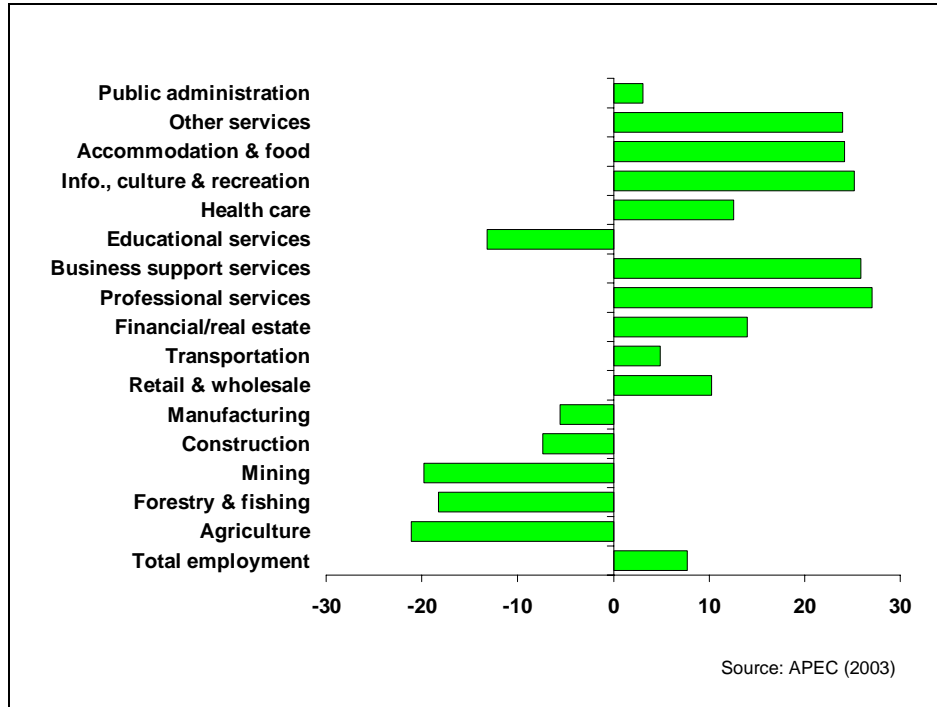
**Fig. A7: Employment in Peak Summer Months (June-August) Relative to Employment in Winter Months (January-March), Average 2000-2004, Nova Scotia (%)**



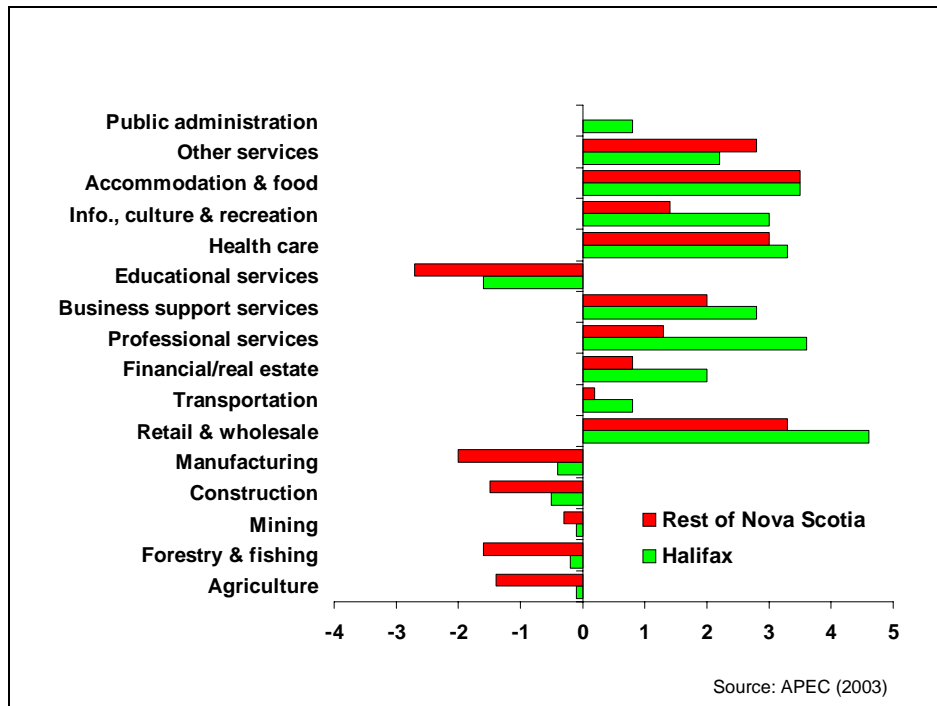
**Fig. A8: Estimate Share of Full-Year and Seasonal Employment by Industry in Rural Nova Scotia\*, Average 2000-2004 (%)**



**Fig. A9: Projected Change in Employment by Industry, Nova Scotia, 2001-2021 (%)**



**Fig. A10: Projected Change in Employment by Industry, Nova Scotia, 2001-2021 (thousands)**



# Bibliography – Phase I

---

Apedaile, L. P. 2003. The New Rural Economy. Retrieved July 9, 2004, from <http://nre.concordia.ca/nre-reports.htm>.

Atlantic Canada Opportunities Agency. 2004. Queens County Profile.

Atlantic Canada Opportunities Agency, February 2003. Value-Added Wood Products Study, O'Halloran Campbell Consultants Limited.

Atlantic Canada Opportunities Agency, November 1998. The Wood Industry in Atlantic Canada: A Focus on Value-Added, <http://www.acoa.ca/e/library/policy.shtml>

Atlantic Provinces Economic Council (APEC) and The Bank of Nova Scotia. May, 2004, Report Card.

Atlantic Provinces Economic Council, January 2003. The Forest Industry in the Nova Scotia Economy. <http://www.apec-econ.ca/publicat.htm>

Azmier, J. and L. Lozanski. 2004. Fighting the Odds: Rural Development Strategies for Western Canada. Building the West Report #30. Retrieved on May 17, 2004 from <http://www.cwf.ca>.

Bollman, R. 2000. Rural and Small Town Canada: An Overview. Statistics Canada and Rural Secretariat, Agriculture and Agri-Food Canada. Publication 21F0018XIE. Retrieved June 25, 2004 from <http://www.statcan.ca:80/english/freepub/21F0018XIE/free.htm>.

Brett, C. 2003. Demographic Trends and Implications for Public Policy. Royal Commission on Renewing and Strengthening Our Place in Canada, Retrieved on May 17, 2004 from <http://www.gov.nf.ca/publicat/royalcomm/research/Brett.pdf>.

Canadian Rural Partnership. Ottawa, Canada. 2004. Rural Communities as the Cornerstone Quarterly Report: Roundtable Discussions October to December 2003. Retrieved April 19, 2004 from [http://www.rural.gc.ca/dialogue/report/quarter2\\_e.phtml](http://www.rural.gc.ca/dialogue/report/quarter2_e.phtml).

Canadian Rural Partnership. Ottawa, Canada. 2003, Winter. The Rural Times: Quarterly National Newsletter for Rural Canadians. Retrieved April 19, 2004 from [http://www.rural.gc.ca/newsletter/vol3/issue3\\_e.phtml](http://www.rural.gc.ca/newsletter/vol3/issue3_e.phtml) - 5.

Canmac Economics Ltd. December, 2003. Nova Scotia Boatbuilders Association Fiscal Revenue Impact Study.

Canmac Economics Ltd. (Date Unknown) Colchester Regional Development Agency's Economic Sector Strategy. Retrieved June 3, 2004 from <http://www.corda.ca/>.

---

---

Coastal Communities Network. Pictou, Canada. 2004. *Between the Land and the Sea: The Social and Economic Importance of Wharves and Harbours in Nova Scotia*. 2004. [<http://www.coastalcommunities.ns.ca>]

The Conference Board of Canada. Ottawa, Canada. 2003. *Spring Provincial Outlook Executive Summary*.

The Conference Board of Canada. Ottawa, Canada. 2003. *Performance and Potential 2003-04: Defining the Canadian Advantage*. [<http://www.conferenceboard.ca/pandp/default.htm>]

Copeland, B. 2003. *Services in the New Economy: Research Issues*. Industry Canada Research Publication Program. Discussion Paper No. 13. Ottawa, Canada.

Department of Economic Development and Tourism. Region of Queens Municipality. Liverpool, Nova Scotia *Retail Opportunities*.

Durand, M. 2003. *Profile of Culture Activities in Nova Scotia: Culture Counts-Counting on Culture*. Statistics Canada, Culture Statistics Program and Nova Scotia Tourism and Culture Department. Canada.

Economic Development and Tourism Department, Region of Queens Municipality. Liverpool, Canada. 2003. *Region of Queens Municipality Tourism Strategy*. [<http://www.regionofqueens.com/index.asp?id=20>]

The Economist. October 2, 2004. *The Dragon and the Eagle (Special Survey on China's Economic Role): A Survey of the World Economy*.

The Economist. November 13, 2004. *A World of Work: A Survey of Outsourcing*.

Fellegi, I. 1996. *Understanding Rural Canada: Structures and Trends*. Statistics Canada Publication 21F0016XIE. Retrieved April 19, 2004 from [[http://www.statcan.ca/english/freepub/21F0016XIE/rural96/html/one\\_file/rural\\_e.htm](http://www.statcan.ca/english/freepub/21F0016XIE/rural96/html/one_file/rural_e.htm)].

Flemming, W. 2003, *Region of Queens Municipality Tourism Strategy*. Retrieved June 10, 2004 from [<http://www.regionofqueens.com/index.asp?id=20>].

Hirsch, T. 2004. *Counting the Cost: Impact of the Rising Loonie on Western Commodity Exports*. Building the New West Report #27. Canada West Foundation. Retrieved on May 17, 2004 from [<http://www.cwf.ca>].

Industry Canada. Micro. 9:2. 2003. [[http://strategis.ic.gc.ca/epic/internet/ineas-aes.nsf/en/h\\_ra01878e.html](http://strategis.ic.gc.ca/epic/internet/ineas-aes.nsf/en/h_ra01878e.html)]

Interpretation Resources. Amherst, Nova Scotia. January 27, 2004. *Community Profile: Queens County*.

---



---

Interpretation Resources. 2003. Community Profile: Queens County. Lunenburg-Queens Regional Development Authority. Liverpool, Canada.

International Market Analysis Research Group, Winter 2003. United States New England Region: Bottled Water Sector. [http://www.dec-ced.gc.ca/asp/Publications/publications\\_ext\\_detail.asp?LANG=EN&DOCUMENT\\_ID=676&CLASS\\_ID=&SEL\\_MENU=REG\\_GEO&FICHER\\_RETOUR=doc\\_region\\_geo.asp](http://www.dec-ced.gc.ca/asp/Publications/publications_ext_detail.asp?LANG=EN&DOCUMENT_ID=676&CLASS_ID=&SEL_MENU=REG_GEO&FICHER_RETOUR=doc_region_geo.asp)

Locke, W. and S. Lynch. 2003. What Does Newfoundland and Labrador Need to Know About the Knowledge-Based Economy to Strengthen its Place in Canada? Royal Commission on Renewing and Strengthening Our Place in Canada. Retrieved on May 17, 2004 from [http://www.csiic.ca/PDF/Locke\\_1.pdf](http://www.csiic.ca/PDF/Locke_1.pdf).

R. A. Malatest & Associates Ltd. 2002. Rural Youth Migration: Exploring the Reality Behind the Myths, A Rural Youth Discussion Paper. Rural Secretariat, Agriculture and Agri-Food Canada. Ottawa, Canada.  
[\[http://www.rural.gc.ca/researchreports/youth2002/cover\\_e.phtml\]](http://www.rural.gc.ca/researchreports/youth2002/cover_e.phtml)

McCarthy, L. 2000. Competitive Regionalism: Beyond Individual Competition. Reviews of Economic Development Literature and Practice: 2. U.S. Economic Development Association.

Nova Knowledge, October 2003. Knowledge Economy Report Card: 2003, [www.novaknowledge.ns.ca](http://www.novaknowledge.ns.ca).

Nova Scotia Economic and Tourism, Nova Scotia Department of Finance. 1998-1999 Nova Scotia Manufacturers Guide.  
[\[http://www.gov.ns.ca/finance/publish/publicationsb.asp?id=Pub01\]](http://www.gov.ns.ca/finance/publish/publicationsb.asp?id=Pub01)

Nova Scotia Department of Finance. Halifax, Nova Scotia. 2003. Nova Scotia Statistical Review. Statistics Division. Retrieved May 21, 2004 from <http://www.gov.ns.ca/finance/statistics/agency/>.

Nova Scotia Department of Finance. Halifax, Nova Scotia. 2003. Nova Scotia Trade 2002. Statistics Division. Retrieved May 21, 2004 from <http://www.gov.ns.ca/finance/statistics/agency/>.

Nova Scotia Department of Natural Resources, Information Circular ME 53, 1998. Secondary Processing of Industrial Minerals in Nova Scotia.  
<http://www.gov.ns.ca/natr/meb/ic/ic53.htm>

Nova Scotia Department of Tourism. 2004. Tourism 2004 Outlook.  
[\[http://www.gov.ns.ca/dtc/pubs/insights/docs/eco\\_forecast\\_2004.pdf\]](http://www.gov.ns.ca/dtc/pubs/insights/docs/eco_forecast_2004.pdf)

Novus Consulting Group Ltd. November, 2004. Machining, Precision Machining, & Welding Industry Assessment. Prepared for ACOA & CAC.

---

---

Price Waterhouse Coopers. 2004. Global Forest and Paper Industry Survey: 2003 Edition, <http://www.pwc.com/forestry>

Queens Strategic Economic Development Planning Group. 2002. A Working Plan for Queens: A Strategic Economic Development Strategy.

Queens Strategic Economic Development Planning Group. Queens County, Canada. 2002. A Working Plan for Queens: A Strategic Economic Development Strategy.

Region of Queens Municipality. 2004. Region Statistics, Retrieved June 2, 2004 from <http://queens.ca/index.asp?id=82>.

Retallack, L. 2004, June. Acknowledging the Gaps in Our Knowledge Economy: A Call for Clear Thinking on High Tech in Nova Scotia. AIMS Commentary. Retrieved July 5, 2004 from <http://www.aims.ca/commentary/gaps.pdf>.

Rural Communities Impacting Policy (RCIP) Project, Nova Scotia, Canada. 2003. Painting the Landscape of Rural Nova Scotia. [<http://www.ruralnovascotia.ca/RCIP/RuralReport.htm>].

SGE Acres Limited. 2003, February. Suitability Analysis/Long Term Development Master Plan. Region of Queens Municipality Planning Department.

Sopuck, R. 2004, March 27. China – The Emerging Economic Powerhouse. Rural Renaissance Notes. Winnipeg, Manitoba: Frontier Centre for Public Policy. Retrieved from [http://www.fcpp.org/publication\\_detail.php?PubID=719](http://www.fcpp.org/publication_detail.php?PubID=719).

Sopuck, R. 2001, July 11. Rural Areas Can Grow Strong on the Information Highway. Rural Renaissance Notes. Winnipeg, Manitoba: Frontier Centre for Public Policy. Retrieved from [http://www.fcpp.org/publication\\_detail.php?PubID=153](http://www.fcpp.org/publication_detail.php?PubID=153).

Sopuck, R. 2001, January. Creating a New Rural Renaissance. Perspectives: Thoughts from the Advisory Board. Winnipeg, Manitoba: Frontier Centre for Public Policy. Retrieved from [http://www.fcpp.org/publication\\_detail.php?PubID=259](http://www.fcpp.org/publication_detail.php?PubID=259).

Target Nova Scotia. 2004. Retrieved June 2, 2004 from <http://www.targetnovascotia.com>.

United Nations, 2004. World Investment Report 2004: The Shift Toward Services. <http://www.unctad.org/Templates/Page.asp?intItemID=1397&lang=>

University of New Brunswick in partnership with the Atlantic Canada Opportunities Agency. February 28-March 1, 2001. Adding Value to Wood Products in Atlantic Canada – A Stakeholders View of the Issues. Report on the Roundtable on Value-Added Wood Products in Atlantic Canada. Hosted by the Wood Science and Technology Centre. <http://www.acoa.ca/e/library/policy.shtml>

Walters, W. 2004. Growing Pains in Sou'west Nova. The Navigator. 7:5.

---

---

## **Fisheries Resource Conservation Council**

Fisheries Resource Conservation Council. Ottawa, Ontario. 2004. 2004/2005 Conservation Requirements for Groundfish Stocks on the Scotian Shelf and in the Bay of Fundy (4VWX5Z). [<http://www.frcc-ccrh.ca>]

Fisheries Resource Conservation Council. Ottawa, Ontario. 2004. 2004/2005 Conservation Requirements for Groundfish Stocks in the Gulf of St. Lawrence. [<http://www.frcc-ccrh.ca>]

Fisheries Resource Conservation Council. Ottawa, Ontario. 2003. 2003/2004 Conservation Requirements for Groundfish Stocks on the Scotian Shelf and in the Bay of Fundy (4VWX5Z), in Subareas 0, 2 + 3 and Redfish Stocks. [<http://www.frcc-ccrh.ca>]

Fisheries Resource Conservation Council. Ottawa, Ontario. 2002. Conservation Requirements for George's Bank Groundfish Stocks. [<http://www.frcc-ccrh.ca>]

## **Data Sets**

Central Region Harvest Statistics: 1998-2002 & Potential Wood Supply for 2001-05. Received May 19, 2004. Nova Scotia Department of Natural Resources.

Eastern Region Harvest Statistics: 1998-2002 & Potential Wood Supply for 2001-05. Received May 19, 2004. Nova Scotia Department of Natural Resources.

Landed Quantities and Landed Values for Queens County, Nova Scotia 2001, 2002 and Estimated Quantities and Values for 2003, 2004. Received May 18, 2004. Fisheries and Oceans Canada, Policy and Economics, Maritimes Region.

Nova Scotia Harvest Statistics: 1998-2002 & Potential Wood Supply for 2001-05. Received May 19, 2004. Nova Scotia Department of Natural Resources.

Statistics Canada Business Register. December 2003. Received May 12, 2004. Statistics Canada.

Western Region Harvest Statistics: 1998-2002 & Potential Wood Supply for 2001-05. Received May 19, 2004. Nova Scotia Department of Natural Resources.

---

---

## **Nova Scotia Open to the World**

Adamski, P. 2003. Everybody's Business. Nova Scotia Open to the World. Winter 2003. Progress and Nova Scotia Business Inc., Halifax, Canada.

Adamski, P. and T. Mason. 2004 Nova Scotia Open to the World. Spring 2004. Cachet Crops.

Devereaux, L. 2003. The Business of Science. Nova Scotia Open to the World. Winter 2003. Progress and Nova Scotia Business Inc., Halifax, Canada.

Fitzpatrick, J. 2000. All Wheel Drive. Nova Scotia Open to the World. Summer 2000. Atlantic Progress and Nova Scotia Economic Development. Halifax, Canada.

Fitzpatrick, J. 2002. A Talent for Customer Service. Nova Scotia Open to the World. Spring 2002. Atlantic Progress and Nova Scotia Business Inc., Halifax, Canada,

Higgins, S. 2003. A Taste for Success. Nova Scotia Open to the World. Autumn 2003. Progress and Nova Scotia Business Inc., Halifax, Canada.

Lund, S. 2003. The Time is Right. Nova Scotia Open to the World. Autumn 2003. Progress and Nova Scotia Business Inc., Halifax, Canada.

Mason, T. 2001. Catch the Wave. Nova Scotia Open to the World. Spring 2001. Atlantic Progress and Nova Scotia Economic Development. Halifax, Canada.

Mason, T. 2003. A Natural Fit. Nova Scotia Open to the World. Autumn 2003. Progress and Nova Scotia Business Inc., Halifax, Canada.

Mason, T. 2003. Motor City. Nova Scotia Open to the World. Winter 2003. Progress and Nova Scotia Business Inc., Halifax, Canada.

Radcliffe, N. 2000. Just the Facts. Nova Scotia Open to the World. Summer 2000. Atlantic Progress and Nova Scotia Economic Development. Halifax, Canada.

Sampson, M. 2000. Model Boats. Nova Scotia Open to the World. Summer 2000. Atlantic Progress and Nova Scotia Economic Development. Halifax, Canada.

Yarr, K. 2001. Fast Forward. Nova Scotia Open to the World. Winter 2000/2001. Atlantic Progress and Nova Scotia Economic Development. Halifax, Canada.

---

---

## Bank Reports

Alexander, C., M. Lévesque, E. Lascelles and G. Manning. 2004, June 24. TD Quarterly Economic Forecast. TD Economics, TD Financial Group. Toronto, Canada.

[\[http://www.td.com/economics\]](http://www.td.com/economics)

Burleton, D., M. Lévesque, E. Lascelles, C. Alexander and G. Manning. 2004, March 11. TD Quarterly Economic Forecast TD Economics, TD Financial Group. Toronto, Canada.

[\[http://www.td.com/economics\]](http://www.td.com/economics)

Burleton, D. and M. Curtis-Irving. 2004, January 15. Regional Economic Outlook. TD Economics, TD Financial Group. Toronto, Canada. [\[http://www.td.com/economics\]](http://www.td.com/economics)

CIBC World Markets. Toronto, Canada. June 17, 2004. Start Me Up: A Look at New Entrepreneurs in Canada. Economics & Strategy.

Lovely, W. 2004, July 9. Economic Flash. Economics & Strategy, CIBC World Markets. Toronto, Canada. [\[http://research.cibcwm.com/res/Eco/EcoResearch.html\]](http://research.cibcwm.com/res/Eco/EcoResearch.html)

Lovely, W. 2004, June 11. Economic Flash. Economics & Strategy, CIBC World Markets. Toronto, Canada. [\[http://research.cibcwm.com/res/Eco/EcoResearch.html\]](http://research.cibcwm.com/res/Eco/EcoResearch.html)

Lovely, W. 2003, November 18. Provincial Forecasts. Economics & Strategy, CIBC World Markets. Toronto, Canada.

[\[http://research.cibcwm.com/res/Eco/EcoResearch.html\]](http://research.cibcwm.com/res/Eco/EcoResearch.html)

Manning, G. 2003, October 3. Global Economic Outlook. TD Economics, TD Financial Group. Toronto, Canada. [\[http://www.td.com/economics\]](http://www.td.com/economics)

O'Neill, T. 2004, May. Commodity Price Report. BMO Financial Group Economics Department. Toronto, Canada. [\[http://www.bmo.com/economic/index.html\]](http://www.bmo.com/economic/index.html)

O'Neill, T. 2003, October 30. Sectoral Outlook. BMO Financial Group Economics Department. Toronto, Canada. [\[http://www.bmo.com/economic/index.html\]](http://www.bmo.com/economic/index.html)

O'Neill, T. 2003, October 30. Regional Outlook. BMO Financial Group Economics Department Toronto, Canada. [\[http://www.bmo.com/economic/index.html\]](http://www.bmo.com/economic/index.html)

O'Neill, T. 2003, June 19. Commentary. BMO Financial Group Economics Department. Toronto, Canada. [\[http://www.bmo.com/economic/index.html\]](http://www.bmo.com/economic/index.html)

O'Neill, T. 2003, June. Small Business Research. Vol. 2. BMO Financial Group Economics Department. Toronto, Canada. [\[http://www.bmo.com/economic/index.html\]](http://www.bmo.com/economic/index.html)

O'Neill, T. 2003, March 2. Bocwatch. BMO Financial Group Economics Department. Toronto, Canada. [\[http://www.bmo.com/economic/index.html\]](http://www.bmo.com/economic/index.html)

---

---

Rubin, J., A. Shenfeld, W. Lovely, P. Buchanan and L. Preston. 2004, April 20. Forecast. Economics & Strategy, CIBC World Markets. Toronto, Canada.

[<http://www.cibcwm.com/research>]

Rubin, J., A. Shenfeld, W. Lovely, P. Buchanan and L. Preston. 2004, January 20. Forecast. Economics & Strategy, CIBC World Markets. Toronto, Canada.

[<http://www.cibcwm.com/research>]

Tal, B. 2004, July 9. Canadian Employment Quality Index. Economics & Strategy, CIBC World Markets. Toronto, Canada. [<http://www.cibcwm.com/research>]

Tal, B. 2004, February 4. Canadian Entrepreneurs and Retirement. Economics & Strategy, CIBC World Markets. Toronto, Canada. [<http://www.cibcwm.com/research>]

Tal, B. 2003, September. Canadian Small Business - A Growing Force. Economics & Strategy, CIBC World Markets. Toronto, Canada. [<http://www.cibcwm.com/research>]

Webb, M., and S. Maylon. 2004, May 28. Global Economic Research Provincial Pulse: The Provincial Outlook, 2004-2005. Scotia Economics. Toronto, Canada.

[[http://www.scotiacapital.com/English/bns\\_econ/ppoutlook.pdf](http://www.scotiacapital.com/English/bns_econ/ppoutlook.pdf)]

### **Case Studies – Profiled**

Barkley, D. and M. Henry. 2000. Local Economic and Fiscal Impacts of a Planned Retirement Community in South Carolina. In Schaeffer, P. and S. Loveridge (Eds.). *Small Town and Rural Economic Development: A Case Studies Approach* (Chapter 10, pp. 69-79). Westport, CT: Praeger Publishers.

Centre for Community Enterprise. Port Alberni, B.C. 2003. Revelstoke B.C. In Perry, S. (Ed.). *Tools & Techniques for Community Recovery & Renewal* (Appendix A). Retrieved July 6, 2004 from <http://www.cedworks.com/tools.html>.

Chugh, R. 2000. Tale of a Successful Small Business in a Rural Community. In Schaeffer, P. and S. Loveridge (Eds.). *Small Town and Rural Economic Development: A Case Studies Approach* (Chapter 32, pp. 261-270). Westport, CT: Praeger Publishers.

Drabenstott, M., J. Henderson, N. Novack and B. Abraham. 2004, January. 2003 Annual Report: Innovations in Rural Governance. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainStMain.htm>.

Fairclough, I. 2004, June 3. Speaker Tells How Town was Revived. The Halifax Herald.

Maritime Noon. June 1, 2004. CBC Radio One. Halifax, Nova Scotia.

---

---

Munnich, L., G. Schrock, K. Cook. 2002. Rural Knowledge Clusters: The Challenge of Rural Economic Prosperity. Reviews of Economic Development Literature and Practice: 12. U.S. Economic Development Association.

National Centre for Small Communities. 2002. Technology and Grit at the Grassroots: Information Technology, Community Engagement, and Jobs in Distressed Rural Communities. Retrieved June 10, 2004 from <http://www.smallcommunities.org>.

Okagaki, A., K. Palmer, and N. Mayer. 1998. Strengthening Rural Economies: Programs that Target Promising Sectors of a Local Economy. Centre for Community Change. Washington, DC. [[http://www.huduser.org/Publications/pdf/ccc\\_rural.pdf](http://www.huduser.org/Publications/pdf/ccc_rural.pdf)]

U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy. 2003. Electricity from the Wind: Economic Development for Rural Communities. Retrieved July 10, 2004 from [http://www.eere.energy.gov/windpoweringamerica/docs/economic\\_development.doc](http://www.eere.energy.gov/windpoweringamerica/docs/economic_development.doc).

### **Case Studies – Not Profiled**

Headwaters Regional Development Commission. (Date Unknown). In the Spotlight: Kelliher - A Small Town with Big Plans. Retrieved July 15, 2004 from [http://www.hrdc.org/In the Spotlight.htm](http://www.hrdc.org/In%20the%20Spotlight.htm).

Anonymous. (Date Unknown) Case Studies; Groups C: Rural Efforts. In: *V. M. Hernandez-Gantes, R. P. Sorensen, A. H. Nieri Fostering Entrepreneurship through Business Incubation: The Role and Prospects of Postsecondary Vocational-Technical Education (Report 2: Case Studies) (MDS-895)*. Retrieved July 15, 2004 from <http://www.vocserve.berkeley.edu/abstracts/MDS-895/895-CASE-4.html>. (3 Case Studies)

Colussi, M. 2003, Summer. Out of the Development Box. Making Waves Vol. 14, No. 2. Centre for Community Enterprise. Retrieved July 18, 2004 from <http://www.cedworks.com/customer/home.php>.

Colussi, M., S. Perry, M. Lewis and G. Leowen. 2002, Spring. From This Earth. Making Waves Vol. 13, No. 1. Centre for Community Enterprise. Retrieved July 18, 2004 from <http://www.cedworks.com/waves03.html>.

Frank, F. 1999, Spring. Planning in Lower Post. Making Waves Vol. 9, No.1. Centre for Community Enterprise. Retrieved July 18, 2004 from <http://www.cedworks.com/customer/home.php>.

Lewis, M. (Date Unknown) The Oregon Benchmarks. Building a Base for Change in British Columbia. Centre for Community Enterprise. Retrieved July 18, 2004 from [http://www.cedworks.com/files/pdf/papers/OBM\\_Tillamook.pdf](http://www.cedworks.com/files/pdf/papers/OBM_Tillamook.pdf).

---

---

Richard, P. 2004, Spring. Transformed by Community Economic Development. Making Waves Vol. 15, No. 1. Centre for Community Enterprise. Retrieved July 2, 2004 from <http://www.cedworks.com/waves.html>.

Winnington-Ingram, P. Community Co-Operatives. Making Waves Vol. 12, No. 4. Centre for Community Enterprise. Retrieved July 18, 2004 from <http://www.cedworks.com/customer/home.php>.

Schaeffer, P. and S. Loveridge (Eds.). *Small Town and Rural Economic Development: A Case Studies Approach*. Westport, CT: Praeger Publishers. (22 additional case studies reviewed).

### **APEC Reports**

Beale, E., P. Brannon, D. Chaundy and K. Tran. 2003. Fall. Atlantic Report. Vol. 38, No.3.

Beale, E., P. Brannon, D. Chaundy and N. Fitzgerald. 2003, Spring. Atlantic Report. Vol. 38, No. 1.

Beale, E., P. Brannon, D. Chaundy and T. Morren. 2002, Spring/Summer. Atlantic Report. Vol. 37, No. 1 & 2.

Beale, E., P. Brannon, D. Chaundy and F. Reinhardt. 2002. Winter. Atlantic Report. Vol. 36, No. 4.

Beale, E., P. Brannon, D. Chaundy. 2001. Fall. Atlantic Report. Vol. 36, No. 3.

Beale, E., P. Brannon, D. Chaundy. 2001. Summer. Atlantic Report. Vol. 36, No. 2.

Beale, E., P. Brannon, D. Chaundy and M. Holden. 2001. Spring. Atlantic Report. Vol. 36, No. 1.

### **Main Street Economist**

Barkema, A. and M. Drabenstott. 2000, December. How Rural America Sees its Future. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2000.htm>.

Drabenstott, M. 2003, March. New Troubles at Rural Factories: New Implications for Rural Development. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2003.htm>.

---



---

Drabenstott, M. 2002, February. Exploring Agriculture's New Frontier. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2002.htm>.

Drabenstott, M. 2000, March. New Rural Policies for a New Century. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2000.htm>.

Drabenstott, M. 2000, February. Has Main Street Shared in the Nation's Economic Boom? The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2000.htm>.

Drabenstott, M. and N. Novack and B. Abraham. 2003, June. Main Streets of Tomorrow: Growing and Financing Rural Entrepreneurs. The Main Street Economist Commentary on the Rural Economy, Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2003.htm>.

Drabenstott, M. and K. Sheaff. 2002, June. The New Power of Regions: A Policy Focus for Rural America. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2002.htm>.

Drabenstott, M. and K. Sheaff. 2002, September. A New Generation of Rural Policy: More Lessons from Abroad. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2002.htm>.

Drabenstott, M. and K. Sheaff. 2001, June. Exploring Policy Options for a New Rural America. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2001.htm>.

Drabenstott, M. and K. Sheaff. 2001, March. Looking to the States for New Rural Policies. The Main Street Economist Commentary on the Rural Economy, Centre for the Study of Rural America, Federal Reserve Bank of Kansas City, Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2001.htm>.

Drabenstott, M. and K. Sheaff. 2000, November. Rural Policy Lessons from Abroad. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2000.htm>.

---

---

Henderson, J. 2004, April. Wildlife Recreation: Rural America's Newest Billion Dollar Industry. The Main Street Economist Commentary on the Rural Economy, Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainStMain.htm>.

Henderson, J. 2003, August. Seizing High-Skill Services in Rural America. The Main Street Economist Commentary on the Rural Economy, Centre for the Study of Rural America, Federal Reserve Bank of Kansas City, Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2003.htm>.

Henderson, J. 2002, January, Will the Rural Economy Rebound with the Rest of the Nation? The Main Street Economist Commentary on the Rural Economy, Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2002.htm>.

Henderson, J. 2002, August. Are High-Growth Entrepreneurs Building the Rural Economy? The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2002.htm>.

Henderson, J. and N. Novack, 2003, January. Building New Competitive Advantages for the 21st Century. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2003.htm>.

Johnson, S, 2001, July. Focusing on Differences: A New Approach for Rural Policy? The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2001.htm>.

McDaniel, K. 2003, May. Thinking Regionally, Acting Locally: Emerging Rural Regions in the U.S. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2003.htm>.

McDaniel, K. 2002, November. Venturing into Rural America. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2002.htm>.

McDaniel, K. 2000, September. Can Scenic Amenities Offer Rural Gain Without Pain? The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2000.htm>.

---

---

Novack, N. 2002, October. The Income Divide in Rural America. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2002.htm>.

Novack, N. 2001, August. Producer Alliances in the New Agriculture. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2001.htm>.

Rosenfield, S. and K. Sheaff. 2002, May. Can Regional Colleges Make a Difference in Rural America? The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2002.htm>.

Stahir, B. 2000. May. Rural America's Stake in the Digital Economy. The Main Street Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2000.htm>.

Weiler, S. 2004. March. Racing Toward New Frontiers: Helping Regions Compete in the Global Marketplace. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainStMain.htm>.

Wilkerson, C. 2001, December. Trends in Rural Manufacturing. The Main Street Economist Commentary on the Rural Economy. Centre for the Study of Rural America, Federal Reserve Bank of Kansas City. Retrieved July 12, 2004 from <http://www.kc.frb.org/RuralCenter/mainstreet/MainSt2001.htm>.

## **Newspapers**

Aversa, J. "Rate Hikes on Horizon". Associated Press. *In: The Chronicle Herald* 9 June 2004, p. E4.

Avery, S. "Tech Sector Predicted On-Track for Profits Over Next 12 Months". *The Globe and Mail* 21 June 2004, p. B14.

*The Canadian Press. In: The Chronicle Herald.* "Farm Incomes Shrink to Worst Levels in 25 Years, Statistics Canada Reports". 28 May 2004, p. C3.

*The Chronicle Herald.* "Frontline Safety Gains Major Offshore Training Contract with Petrobras". 6 July 2004, p. F5.

*The Chronicle Herald.* "How's Our Information Technology Sector Doing?" 5 July 2004, p. C2.

*The Chronicle Herald.* "Shipyard Adding Jobs". 19 June 2004, p. F1.

---

---

*The Chronicle Herald*. "Productivity Upgrades Needed, Bank Study Says." 15 June 2004, p. C5.

*The Chronicle Herald*. "Traveling in Record Numbers." 27 May 2004, p. C6.

Cox, K. "N.S. Offshore Energy Suffers Setback." *The Globe and Mail* 5 July 2004, pp. B11, B12.

Cox, K. "Clearwater Trawls for Fresh Opportunities." *The Globe and Mail* 22 May 2004, p. B3.

Crane, D. "Politicians Should Focus on Curbing Oil Use." *The Halifax Herald Limited* 1 June 2004, p. F2.

Crane, D. "Canada's Place in World Changing." *The Halifax Herald Limited* 25 May 2004, p. F6.

*The Daily News*. "Atlantic Retailers Lead Sales." 2 June 2004. Retrieved June 2, 2004 from <http://www.hfxnews.ca/MainPage.aspx?/PageType=FullStory&PartialStory=No&StoryID=15676>.

Dobson, C. "Agriculture, Fisheries Will Face Many Challenges Through 2004." *The Chronicle Herald* 30 January 2004, p. E5.

Erskine, B. "A Better Daily Grind." *The Chronicle Herald* 15 June 2004, pp. C1, C2.

*The Globe and Mail*. "Domestic Travel Retains Appeal." 21 June 2004, p. T4.

*The Globe and Mail*. "Inflation Outlook Halts Losses." 22 May 2004, p. B12.

Graham, M. "Converges Call Centre Lays Off 90." *The Chronicle Herald* 19 May 2004, p. D2.

Hoare, E. and C. Mellor. "N.S. Opens Arms to New Economy." *The Chronicle Herald* 3 June 2004. pp. C3, C4.

Hoare, E. "Still Building Gains." *The Chronicle Herald* 7 July 2004, p. E1.

Heinzl, J. "China Feasts on Canada's Resources." *The Globe and Mail* 22 May 2004, p. B6.

Ingram, M. "Higher Oil Could be Here to Stay." *Globeandmail.com*. 5 May 2004. Retrieved May 7, 2004 from <http://www.theglobeandmail.com/servlet/story/RTGAM.20040505.wmathlater0505/BNPrint/Business/>

Little, B. "Economy Gets Back on the Fast Track." *The Globe and Mail* 1 June 2004, pp. B1, B5.

---

---

Little, B. "High Gasoline Prices Take a Larger Slice of Retail Dollar." Globeandmail.com. 17 May 2004. Retrieved May 19, 2004 from <http://www.theglobeandmail.com/servlet/ArticleNews/TPPrint/LAC/20040517/RLITT17/Columnists/>

Luciw, R. "Distant Early Warning." Globeandmail.com. 28 May 2004. Retrieved May 31, 2004 from <http://www.theglobeandmail.com/servlet/story/RTGAM.20040526.warnings2005/BNPrint/Business/>

MacDonald, J. "Antigonish Has Potential." *The Chronicle Herald* 15 June 2004, p. C2.

Marron, K. "Tighter Security Pushes Shipping Into 21<sup>st</sup> Century." *The Globe and Mail* 6 July 2004, p. B11.

Mellor, C. "Rum Running History Baked in a Cake." *The Chronicle Herald* 15 June 2004, p. C4.

Mellor, C. and S. Proctor. "Where Are the Tourists?" *The Chronicle Herald* 9 July 2004, pp. C1, C2.

Mellor, C. and T. Peters. "At Least Our Ships Have Come In." *The Chronicle Herald* 9 July 2004, pp. C1, C2.

Myrden, J. "A Powerful Energy Plan." *The Chronicle Herald* 9 July 2004, p. C2.

Myrden, J. "Testing the Wind Offshore." *The Chronicle Herald* 6 July 2004, pp. F1, F3.

Myrden, J. "\$24m to Harness the Wind." *The Chronicle Herald* 6 July 2004, p. F3.

Myrden, J. "Offshore Licenses Expire." *The Chronicle Herald* 1 July 2004, pp. C1, C3.

Myrden, J. "Hoping for a Big Hit." *The Chronicle Herald* 23 June 2004, pp. E1, E2.

Myrden, J. "Oil Firm Prepares for Drilling in 2007." *The Chronicle Herald* 23 June 2004, pp. E1, E2.

Myrden, J. "Exporting is Key to Science Sector Growth." *The Chronicle Herald* 17 June 2004, pp. C1, C3.

Peters, T. "Community Fund Has 'Worked Well'." *The Chronicle Herald* 23 June 2004, p. E6.

Peters, T. "Acid Test." *The Halifax Herald Limited* 20 June 2004. Retrieved June 21, 2004 from <http://www.herald.ns.ca/stories/2004/06/20/pBusiness123.raw.html>.

Peters, T. "Gelatin Greases Growth." *The Chronicle Herald* 14 June 2004, p. C1.

---

---

Peters, T. "Allendale Electronics Finds Niche." *The Chronicle Herald* 9 June 2004, pp. E1, E2.

Peters, T. "East Jeddore Fish Processor Seeks Recipe for Survival." *The Chronicle Herald* 27 May 2004, p. C2.

Pitts, G. "Hong Kong Can Provide 'Fast Track' to China." *The Globe and Mail* 22 June 2004, p. B4.

Pottinger, M. "Power Shortages Raise Costs, Generate Discord in China." *The Globe and Mail* 9 July 2004, p. B8.

Proctor, S. "Wind Knocked of Sales of NSP Sustainable Power Plan." *The Chronicle Herald* 7 July 2004, p. E1.

Proctor, S. "B.C. Firm Begins Quartz Mining in Yarmouth County." *The Chronicle Herald* 6 July 2004, p. F6.

Proctor, S. "By the Bountiful Sea." *The Chronicle Herald* 11 June 2004, p. C1.

Proctor, S. "Province Falls Behind." *The Chronicle Herald* 29 May 2004, p. E1.

Proctor, S. "End of Line for Fishing Gear Business." *The Chronicle Herald* 27 May 2004, p. C1.

Proctor, S. "Weak U.S. Dollar Hurts Clearwater." *The Chronicle Herald* 18 May 2004, p. E2.

Proctor, S. "The Atlantic Tiger." *The Chronicle Herald* 19 May 2004, p. D4.

Ray, R. "Soaring Steel Prices Put Pressure on Rents." *The Globe and Mail* 22 June 2004, p. B14.

Rent, S. "A Berry Good Crop." *The Chronicle Herald* 30 January 2004, p. E4.

Rent, S. "A Great Place to Do Films." *The Chronicle Herald* 30 January 2004, p. E3.

Rent, S. "Energy, Life Sciences Sectors Going Strong." *The Chronicle Herald* 30 January 2004, p. E5.

Rent, S. "Madrid Forging Strong Future." *The Chronicle Herald* 30 January 2004, p. E3.

Rent, S. "Military Major Employer in Province." *The Chronicle Herald* 30 January 2004, p. E1.

Robinson, A. "Mining Industry Booming." *The Chronicle Herald* 15 June 2004, p. C5.

Smith, A. "Boat Building a Sinking Industry." *The Chronicle Herald* 16 June 2004, p. B4.

---

---

Taylor, R. "Good News-Inflation is Driving Up Costs." *The Chronicle Herald* 28 May 2004, p. C1.

Taylor, R. "N.S. Exporters Increasing Trade with China." *The Chronicle Herald* 14 May 2004, p. C1.

Ware, B. "Company Soars Along." *The Chronicle Herald* 1 June 2004, pp. F1, F6.

Weber, T. "Inflation Jumps." *Globeandmail.com*. 20 May 2004. Retrieved May 26, 2004 from <http://www.theglobeandmail.com/servlet/story/RTGAM.20040520.wepi0520/BNPrint/Business/>

Wells-Hopey, D. "NSHBA Looking Forward to Positive, Progressive Year." *The Chronicle Herald* 30 January 2004, p. E4.

Wile, P. and E. McLean-Wile. "Why Agriculture is an Election Issue." *Bridgewater Bulletin and Progress Enterprise* 23 June 2004, p. A21.

Won, S. "U.S. Ruling on China Furniture to Benefit Canada." *The Globe and Mail* 22 June 2004, p. B6.

---

---