## Demographic Review of Hastings County

For

Hastings Children's Aid Society

By

## The Community Development Council of Quinte

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## Demographic Review of Hastings County

Introduction – Rationale	In the spring of 2003, the Hastings Children's Aid Society initiated a Demographic Review of the area served by the Society as part of its strategic planning exercise. This Demographic Review aims to inform the Hastings Children's Aid Society in its strategic planning process by identifying and reporting on a number of issues affecting <i>quality of life</i> in the region. Doing so provides some context surrounding the needs of the community with whom the Hastings Children's Aid Society works and to better understand the challenges faced by the Hastings Children's Aid Society in the provision of services. This context can help to enhance decision-making processes associated with establishing strategic priorities now and for the long-term.
Strategic Planning	Through this Demographic Review, more than 50 indicators have been identified and researched. These indicators encompass all aspects of individual and community well being and have been selected based upon an approach that focuses on building and sustaining "healthy communities". <i>Healthy Community Planning</i> is a model that "recognizes that in addition to our genetic characteristics, lifestyle, or access to health or sick care services, our health is also strongly influenced by social, economic, and environmental factors." <sup>ii</sup> As such, a number of determinants of health and well being, that is, those factors that contribute to the well being of individuals, families and communities now and for the long-term, have been identified as <i>Indicators of Well Being</i> within this report. These indicators have been monitored, whenever possible over a period of time so as to identify community progress and to identify trends affecting quality of life within the region.
Community Well Being	As well, this demographic review contains important social analysis affecting quality of life within the region. This analysis establishes a framework for understanding the implications of community progress or setbacks on quality of life and more directly, on the individuals and families with whom the Hastings Children's Aid Society works.

## Hastings Children's Aid Society

Over the past five years, the Hastings Children's Aid Society has seen rapid change in how child protection services are delivered in the region and across the province. These changes have included the introduction of new systems, new legislation, new standards, and new tools. The Society has seen a dramatic increase in service demands over the years. This increase has been exacerbated, in part, by the complexity of situations with which the Hastings Children's Aid Society has been involved. This is a trend that has been echoed across the province. Specifically, as a result of a study commissioned by the Ontario Association of Children's Aid Societies, The Ontario Incidence Studies of Reported Child Abuse, it has been determined that "between 1993 and 1998, the estimated number of child maltreatment investigations increased 44% in Ontario from 44,900 to 64,800." " While improved detection and reporting mechanisms can be attributed to the increase in the number of investigations that take place in Ontario, the introduction of the Risk Assessment Model and standardized practices in the sector can also be seen as primary factors underlying the increase in the number of investigations that occur.<sup>iv</sup> Specifically, amendments to the Child & Family Services Act, the legislation that governs the activities of child protection organizations in Ontario, introduced new standards to which the Hastings Children's Aid Society and other child welfare organization must comply. One of these standards includes response times. For example, where investigations might have transpired over a period of 21 days in the past, the Hastings Children's Aid Society must now respond within seven days. At the same time, the new Risk Assessment Model lowered the threshold for at risk behaviours. As a result, greater numbers of investigations must now take place in shorter time frames.

In order to understand the relationship of the Hastings County Children's Aid Society to provincial trends it is first necessary to identify child welfare organizations from across the Province with similar geographies, demographics, social, economic, and quality of life scenarios. To that end, the following communities have been identified as communities that, to some extent, simulate local conditions.

They are:

- Frontenac
- Stormont, Dundas, and Glengarry
- Kawartha Haliburton
- Algoma
- Nipissing Parry Sound
- Sarnia-Lambton
- Brant

## Provincial Counterparts

The following highlights the demographic similarities and differences of communities across the province. These communities serve as benchmarks to which The Hastings Children's Aid Society can monitor its service delivery and spending ratios, in large part, due to a similar urban/rural mix, population demographic, and socio-economic condition.

#### Table 1: Total Population

Total Population			
	1996	2001	% Change
Hastings County	126,099	125,915	-0.1
Algoma	125,455	118,567	- 5.5
Brant County	114,564	118,485	+ 3.4
Frontenac County	136,365	138,606	+ 1.6
Kawartha — Haliburton	115,606	117,510	+ 1.2
Nipissing – Parry Sound	84,832	82,910	- 2.3
Sarnia — Lambton	126,971	128,975	- 1.6
Stormont, Dundas, Glengarry	111,301	109,522	- 1.6
	·	•	
Ontario	10,753,573	11,410,046	+ 6.1
		Source: 2001 Ce	nsus Data, Stats Can

The charts above and on the following page clearly indicate that each of the communities to which Hastings has been compared is similar in composition to that of the region served by The Hastings Children's Aid Society. This is an important element to consider in understanding the individuals with whom specific child welfare organizations work. In essence, it is our assumption that communities that share population sizes and population composition, will in all likelihood, experience many of the same successes and challenges in providing for its residents.





Source: 2001 Census Data, Stats Can

#### Table 2: Total Land Area

Despite the similarities that exist in composition, each of the communities with whom Hastings County has been compared spans diverse geography in total land area. The closest comparable community with regard to land mass is the Kawartha-Haliburton region, despite a difference of roughly 750 sq. km. Predictably, the most dramatic differences exist when comparing Hastings County to regions of northern Ontario.

,		
		Total Land Area
		2001
Has	stings County	5,978.34 sq. km
	Algoma	48,737.22 sq. km.
	Brant County	1,092.94 sq. km.
Fron	tenac County	3,672.77 sq. km.
Kawartha	<ul> <li>Haliburton</li> </ul>	5,225.08 sq. km.
Nipissing —	Parry Sound	26,286.9 sq. km.
Sarni	a — Lambton	3,116.34 sq. km.
Stormont, Dunda	as, Glengarry	3,307.16 sq. km.
	Ontario	907,655.5 sq. km.
	Sourc	e: 2001 Census Data, Stats Can

#### Table 3. Family Characteristics

2001	Total # of Families	% Families Married or Common Law	% Of Families Led by Lone Parent	% Of Lone Parent Families Led by Females	% Of Lone Parent Families Led by Males
Hastings County	37,145	85.3%	14.7%	80.6%	19.4%
Algoma	35,380	83.5%	16.5%	79.5%	20.5%
Brant County	33,675	81.2%	15.9%	80.5%	19.5%
Frontenac County	38,415	84.7%	15.3%	82.7%	17.3%
Kawartha — Haliburton	34,125	85.6%	14.4%	83.9%	16.1%
Nipissing — Parry Sound	36,265	85.6%	14.3%	81.5%	18.5%
Sarnia – Lambton	57,185	86.0%	14.0%	81.2%	18.8%
Stormont, Dundas, Glengarry	31,690	86.6%	13.4%	80.2%	19.8%
Ontario	3,190,990	84.8%	15.2%	82.5%	17.5%
Source: 2001 Censu	us Data, Stats Can				

With just marginal differences, family composition in Hastings County generally resembles family composition in each of the communities studied. There are fewer lone-parent families as a percentage of the total number of families in Hastings County than that of the Province. While the percentage of female-led families is marginally lower than that of the Province, the percentage of male-led lone parent families exceeds the Province. Surprisingly, all but two regions in the study area also exceeded the percentage of male led lone parent families than that for Ontario.

#### Table 4. Median<sup>y</sup> Family Income

2001	Median Family Income - All Families		Median family income — Two Adult Families		% of Median Income (All Families)	Median Income Lone Parent Families		% of Median Income (All Families)
Hastings County	\$	49,138	\$	53,449	108.8%	\$	25,409	51.7%
Algoma	\$	49,365	\$	54,695	110.8%	\$	22,933	46.5%
Brant County	\$	57,059	\$	62,385	109.3%	\$	30,021	52.6%
Frontenac County	\$	57,560	\$	63,093	109.6%	\$	28,893	50.2%
Kawartha — Haliburton	\$	46,270	\$	49,606	107.2%	\$	27,701	59.9%
Nipissing-Parry Sound	\$	47,392	\$	51,184	108.0%	\$	25,455	53.7%
Sarnia – Lambton	\$	58,290	\$	63,847	109.5%	\$	28,449	48.8%
Stormont, Dundas, Glengarry	\$	50,451	\$	54,065	107.2%	\$	25,689	50.9%
Ontario	\$	61,024	\$	66,476	108.9%	\$	33,724	55.3%
Source: 2001 Census Data, Stats Can								

## Summary of Key Findings:

- Each of the communities to which Hastings has been compared is similar in composition to that of the region served by The Hastings Children's Aid Society and yet, excluding Northern Ontario, Hastings County covers the largest geographic boundary within the study area.
- Total Median Family Incomes and Two Adult Family Incomes in Hastings County are among the lowest of the eight study areas, ahead only to Kawartha-Haliburton and Nipissing-Parry Sound.
- Lone Parent families have fared poorer in Hastings County than seven other Ontario communities studied, ahead only to Algoma. At \$25,409, the median income for Lone Parent Families in Hastings County is just 52 % of the median income for all families.
- Families in Hastings County rated consistently below that of the Province, most dramatically in Total Median Family Income, a difference of almost \$12,000.

Funding Child Welfare Funding for Ontario Child Welfare Organizations is calculated using a complicated formula tied to a funding framework established by the Government of Ontario. In the fiscal year 2001-2002 the Province of Ontario allocated a total of \$818,858,255 to the funding framework to support child welfare organizations across the Province.

The following chart demonstrates the funding framework allocations to the specific communities included as study areas in this report.

#### Figure 2: Funding Framework 2001-2002



The chart above indicates that the allocation to Hastings County is among the highest of all study areas, followed closely by Kawartha-Haliburton. Funding is volume driven based upon the total number of children in care, cases served, and investigations undertaken. Determining services is governed by comprehensive standardized screening, risk assessment, and investigation protocols that child welfare organizations are mandated to use to determine intervention and support activities for families.

#### Figure 3: Expenditures to 2002



Source: Ontario Association of Children's Aid Societies Funding and Services Analysis, April 1,2001 – March 31,2002.

Clearly, the trend as indicated in Figure 3 demonstrates an increase in spending by each of the child welfare organizations contained in the study area. The most dramatic incline is that related to expenditures of the Hastings Children's Aid Society. Additional local analysis will help us to understand how that is.

Hastings Children's Aid Society:	Governed by a Board of Directors, the Hastings Children's Aid Society employs 132 full-time and 41 part-time workers to administer and deliver Child Protection Services in Hastings County.
	As the following charts demonstrate, the Hastings Children's Aid Society touches the lives of thousands of children and their families each year. The number of individuals with whom they work continues to increase from year to year.

#### Figure 4: All Cases Requiring Response in Calendar Year 2000 to 2002



The Hastings Children's Aid Society saw a 19.8% increase in cases opened over a three-year period, an increase of 568 cases in 2002 over calendar year 2000. The chart above includes those considered "opened' because an investigation was required and those for an investigation has not been required. Last year, The Hastings Children's Aid Society opened cases equivalent to roughly three per cent of the total population of Hastings County.

New Cases Opened by Calendar Year By Geography									
2000 2001 20									
North Hastings	282	275	291						
Belleville	1077	1156	1415						
Central Hastings	171	226	390						
Deseronto	95	105	24						
Quinte West	694	719	841						
South Central Hastings	154	178	3						
Tyendinaga	36	21	57						
Other	349	583	407						
Total	2858	3263	3428						

The table above demonstrates the total number of cases opened by geography. In the calendar year ending December 31, 2002, the greatest number of cases opened involved residents of the City of Belleville at roughly 41% of the total Hastings Children's Aid Society Caseload. Quinte West comprised 25% of the total caseload (made up predominantly of Trenton Ward residents), followed by Central Hastings at 11%.

Between 1990 and 2002, the Hastings Children's Aid Society saw a 77% increase in the total number of children admitted to care. Stringent risk identification factors can be attributed, in part, to the increase; however, the complexity of issues facing families must also be considered. This is described in greater detail later in this report.

#### Figure 5: Children Admitted To Care



# Figure 6: Family Services

Hastings Children's Aid Society Family Services







Months

Figure 8: Children In Care

Children in Care 2000 - 2004



Figure 9: Children In Care By Resource Type 2000-2004



Children In Care By Resource Type 2000 - 2004

Li T

111,839

126,798

109,082

89,780

Total Days

Figure 10: Average Number of Children in Care By First Day of Month

Children in Care on First Day of the Month From Sept-01 to Apr-03



## Summary of Key Findings:

- Between 1990 and 2002, the Hastings Children's Aid Society experienced a 77% increase in the total number of children admitted to care.
- Residents of the City of Belleville comprise roughly 41% of the total Hastings Children's Aid Society Caseload, followed by Quinte West residents at 25%.
- The Hastings Children's Aid Society saw a 19.8% increase in new cases opened over a three-year period, an increase of 568 cases in 2002 over calendar year 2000.
- The Hastings Children's Aid Society opened cases equivalent to roughly three per cent (3%) of the total population of Hastings County in 2002.
- Resources provided through Regular Foster Care and Specialized Foster Care has seen the greatest increases throughout the study period.
- The number of children who have become wards of the Crown has swelled to nearly double in 2003/4 over 2000.
- The Hastings Children's Aid Society can track key trends by season as it relates to admissions to care. Specifically, late fallearly winter sees increased numbers of admissions. Likewise, June and August saw peak admissions. Tracking admissions by date helps the Hastings Children's Aid Society to plan for seasonal stresses on human and financial resources. Ideally, community based planning would also coincide with CAS planning to reduce the stresses felt by families during these times of year.

Local Conditions	The well being of community is impacted by four primary sectors. They are: the economy, social well being, health, and the environment. The following basic demographics provide some context pertaining to the communities and individuals supported by the Hastings Children's Aid Society.
Basic Demographics	Specifically, basic demographics, coupled with Census data, tax filer information, and other statistics help us to understand community need and in turn, the community's capacity to respond to the needs of its members.

#### Table 6: Total Population – Population Change Between Census Years

Population Change Total Population										
	1991 1996 200									
Hastings County	123,355	126,099	125,915							
Prince Edward County	23,763	25,046	24,905							
Ontario	10,075,879	10,753,573	11,410,046							
City of Belleville	44,869	46,195	45,986							
City of Quinte West	n/a	41,676	41,409							

Note: Murray Township was not a part of Hastings County until after 1996. All 1991 and 1996 totals have been adjusted to include to Murray Township Source: 1996, 2001 Census Data, Zephyr

#### Table 7: Population by Age

	Hastings	County	Prince Cou	Edward Inty	City of B	elleville	Quinte	West	Ontario	
	2001	1996	2001	1996	2001	1996	2001	1996	2001	1996
0-4	6,680	8,165	1,020	1,340	2,395	1,395	2,300	2,955	671,250	734,170
5-14	17,170	17,845	3,140	3,275	5,625	2,740	6,125	6,380	1,561,500	1,480,055
15-19	8,820	8,470	1,650	1,610	3,195	1,560	2,950	2,800	769,420	698,000
20-24	7,070	7,195	1,075	1,175	3,245	1,600	2,120	2,260	718,420	703,475
25-44	34,600	37,415	5,865	6,655	12,400	6,805	12,215	18,725	3,518,010	4,863,980
45-54	18,020	15,550	3,790	3,290	6,390	2,750	5,780		635,280	
55-64	13,335	12,290	3,255	2,960	4,420	2,120	4,335	4,125	1,064,000	939,795
65-74	11,180	11,080	2,895	2,795	4,130	2,360	3,315	3,360	818,165	793,470
75+	9,055	7,960	2,200	1,945	4,190	2,245	2,270	2,200	654,005	540,635
Source: 2001, 19	96 Census	nyr	Ī							

The preceding chart reveals some interesting facts about the region. Specifically, as a region, the number of young children declined in 2001 over 1996; the same is true provincially. Children aged 0-14 comprise 19% of the total population in Hastings County, 17% in Prince Edward and 19.5% of the population provincially. And yet, the City of Belleville experienced a mini-baby boom in 2001 over 1996, having seen an increase in excess of 100% over 1996.

Indeed, unlike trends generally identified regionally and provincially, with the exception of older adults, trends in the City of Belleville were most dissimilar to regional and provincial trends.

Most startling, however, is the aging population in the region. Older adults comprise 22% of the population of Ontario, an increase of less than one percent over 1996. Older adults comprise 27% of the population of Hastings County and 34% in Prince Edward County. Locally, each study area exceeded the provincial average, including the City of Belleville at 28% and Quinte West at 24%. An aging population, coupled with an increasing number of children in the region, presents communities, and more directly, mid-aged families with specific challenges, especially as it relates to that which is referred to as the "sandwich generation", those responsible for providing for the needs of children and parents. Likewise, community infrastructure, including health and social services must keep pace with the growing needs of its constituents.

#### Table 8: Census Population Counts, Projections, and Rates of Change: 1996, 2001, 2008

The following chart summarizes the population counts for the jurisdictions examined from the 1996 and 2001 censuses, as well as population projections to 2008, and all associated rates of change:

Jurisdiction	Census 1996	Change 96-01 (%)	Census 2001	Change 01-08 (%)	Projections To 2008*
Belleville	46,195	-0.5	45,986	N/A	N/A
Quinte West	41,676	-0.6	41,409	N/A	N/A
Hastings	126,099	-0.1	125,915	4.4	131,460
Prince Edward	25,046	-0.6	24,901	12.5	28,010
Ontario	10,753,573	6.1	11,410,046	12.2	12,797,360
Source: Ontario Popul					

Local and Provincial Population Counts, Projections And Rates of Change, 1996, 2001 And 2008 (N/A = Not Available)

While the July 2000 scenario is the most recent available, the projections should be viewed as estimates only, and incorporating a margin of error because they are based on data from the 1996 census. The Ontario Ministry of Finance will, at some future date, update these projections to incorporate data from the 2001 census. As an example of the margin of error present in the projections, consider the following chart, which compares the population projected (in 2000), for 2001 with the actual 2001 population data from the census:

#### Table 9: Comparison Of Population Projections With Actual Census Data, 2001

Jurisdiction	Census 2001	Projections 2001	Margin Of Error (%)
Hastings	125,915	125,690	-0.2%
Prince Edward	24,901	26,590	6.8%
Ontario	11,410,046	11,816,120	3.6%

The margin of error should be borne in mind when considering the discussion of results in section (2) below.

#### Table 10: Population Projections by Age Group, 2001-2008: Counties of Hastings and Prince Edward

In the local study areas, population demographic trends by age underlie some potentially significant economic issues, including a declining population of one working age group, and increases in the populations of age groups that have greater service needs (*e.g.* healthcare) and greater economic dependency.

The relative percentages of the age cohorts from 2001 vs. 2008 are compared, for Hastings & Prince Edward Counties, combined in the following chart:

Hastings & Prince Edward Counties Combined					
Ago Cobort	% Of Total				
Age conort	2001	2008			
0 -14	18.3	15.8			
15-24	13.6	13.8			
25-34	11.7	13.6			
35 – 44	16.2	13.0			
45 - 54	13.8	15.3			
55 – 65	10.2	11.8			
65+	16.3	16.7			

## Summary of Key Findings:

Table 11: Predominant Languages

- There is a significant reduction in the youngest demographic (0-14 years) from 18.3% of the population in 2001 to 15.8% in 2008.
- There is a projected increase in the 65+ age group from 16.3% in 2001 to 16.7% in 2008.
- From ages 15 to 34, there is a steady relative increase projected from 2001 to 2008. The 15 to 24-age cohort is expected to grow from 13.6% in 2001 to 13.8% in 2008, while the 25 to 34 age group is projected to significantly grow from 11.7% to 13.6% for the period.
- A sharp downturn is projected for the 35 to 44 age group, which represented 16.2% of the population in 2001, but is expected to fall significantly to 13% in 2008.
- From age 45 onward, the relative percentage of the population is projected to grow steadily, from 13.8% (2001) to 15.3% (2008) for the 45 to 54 group, from 10.2% (2001) to 11.8% (2008) for the 55 to 64 group, and from 16.3% (2001) to 16.7% (2008) for the 65+ cohort.
- The steady increase in the 45-years+ population reflects both the aging of the 'baby boomers' and the immigration of
  retirees from outside the local area.
- The significant drop in population, in both absolute numbers and relative percentages, of the 35 to 44 age group, is important because this cohort represents the peak-earning group in the population (*i.e.* the top net producers). Combined with the projected increase in the 65+ age group, which is largely retired and by definition 'dependent' (*i.e.* net consumers), the outlook is for probable greater transfer dependency for Hastings and Prince Edward Counties.
- The projected demographic changes have potentially significant implications for various sectors within the local economy, including 'Hospitals', 'Physicians and Other Health Practitioners', and 'Other Health and Social Services'. The increase in the 65+ age cohort will put additional service demands on these sectors that are already currently experiencing staffing shortages. Moreover, the previously mentioned drop in the 35-44-age cohort will accompany this increase in the 65+ age group. The net effect more demand combined with less supply underscores the need to both retain, and attract, workers to the region.

Total Population by Knowledge of Official Languages	Knowledge of English Only		Knowledge of French Only		Knowledge of English and French		Knowledge of Other Languages	
	1996	2001	1996	2001	1996	2001	1996	2001
Hastings County	92.7%	93	.19	2.1	6.6	.21	N/A	4.69
Prince Edward County	94.5	93.7	.04	1.3	5.2	.14	N/A	4.93
Ontario	72.8	70.6	4.1	4.3	.71	.33	22.4	24.7
Belleville	93.1	92.3	1.03	1.23	.34	.27	5.58	6.17
Quinte West	90.7	91.6	4.15	4.2	.53	.24	4.65	3.91

Source: 1996, 2001 Census Data

Clearly, English is the predominant language in the region. With the exception of Quinte West, where a higher percentage of people are Francophone than elsewhere in the study region, knowledge of other languages consistently exceeds French only or English/French throughout the region. Surprisingly the second most frequently spoken language in Hastings County is German. As well, Quinte West is home to Canada's large air base, which might explain to some degree the higher Francophone community. Nonetheless, there is an implication to service delivery where English is not the primary language spoken in families.

Residents of the region are predominantly Canadian-born. Visible Minority and Aboriginal Populations comprise just a margin of the population.

#### Table 12: Citizenship

	Canadian born		Foreign Born		Aboriginal Population		Visible Minority	
_	1996	2001	1996	2001	1996	2001	1996	2001
Hastings	98.3	91.8	1.66	7.9	1.9	2.8	2.22	2.4
Prince Edward	89.6	88.1	8.4	7.9	1.7	1.5	0.9	0.8
Ontario	72.9	71.6	25.3	26.6	1.3	1.7	15.8	18.9
City of Belleville	89.5	88.5	8.9	9.1	2.1	2.3	3.1	3.7
City of Quinte West	89.9	91.4	8.6	7.8	1.2	1.8	2.2	1.8

## Local Conditions

Economics

The Small Data Division of *Statistics Canada* releases a variety of data and tables commonly known as Tax Filer Profile Data on an annual basis. This data provides details on all citizens who have filed an income tax return. The data is aggregated and reported by postal code. There is, approximately, a two-year delay in the reporting of this data; hence, the most recent tax filer data available is for the 2000 tax year and is included in this report. Additionally, this report and the analysis include the five consecutive years leading up to the most current data (1996-2000).

Given the source of data, the sample size for the region and this report is 100%. There has been no suppression of data as the postal code areas are large enough to fall outside suppression levels. In comparison, nearly all data collected in a Census year is based on a sample size of 20% - 1 in 5 households.

When all of the indicators are considered together, a 'snapshot' of the local economy - from the standpoint of personal income and economic dependency - begins to emerge. It is the integration of the various indicators that provides insight into the economic well being of the region's citizens.

Each of the indicators is explained and examined, with emphasis placed on 2000 values/comparisons and rates of change from 1996 to 2000. The data and analysis presented flows from two supporting documents: *Summary of Parameters (1996-2000)* and *Parameter Totals and Rates of Change (1996-2000)*.

#### (A) Source of Income Indicators

(1) <u>Total Income</u> represents income from *all* sources, and is the most general income category.

In 2000, all local jurisdictions trailed the province of Ontario. Belleville had the highest average annual total income (\$29,329) that was 86.1% of the province as a whole (\$34,066). Hastings County, at \$25,261 (74.2% of Ontario), had the lowest total income level.

Significantly, from 1996 to 2000, all of the local rates of growth of average annual total income have been below the provincial rate (19.4%). Hastings County achieved a 14.8% growth rate, Belleville posted growth of 14.5%, while Prince Edward County was at 14.4%. Quinte West's growth for the period was only 12.3%.

Clearly, the total income gap between the local jurisdictions and the province has widened since 1996.



Female average annual total incomes were just under 65% of male incomes in all local jurisdictions (except Quinte West at only 58%), which nonetheless compare favourably with the province as a whole (58.5% of male average annual total incomes).

(2) <u>Employment Income</u> refers to income from all sources of employment, including wages, salaries & commissions and self-employment.

In 2000, the local jurisdictions all trailed the province (\$35,277) in terms of average annual employment income. At the high end, Belleville (\$28,009) was at 79.4% of the province, while Prince Edward County (\$24,421), at 69.2% of Ontario, posted the lowest average employment income.

Since 1996, the gap between the local jurisdictions and the province has been widening. While the provincial average annual employment income grew by 19.5% to 2000, the greatest increase locally (Prince Edward) was only 16.2%. Hastings (13.2%), Quinte West (10.6%) and Belleville (10.5%) were all well below the provincial growth rate for the same period.

Figure 12: Average Annual Employment Income



In 2000, the gender gap was lower in the local jurisdictions than it was in Ontario, where women on average earned 60.7 cents for every dollar earned by men. The corresponding local rates were as follows: 72.4 cents in Prince Edward, 67.8 cents in Hastings, and 64.5 cents in Belleville. The one exception was Quinte West where, on average, women earned 59 cents for every dollar earned by men.

The relatively low average annual employment incomes in the local area go a long way in explaining the low average annual total incomes discussed in (1) above.

(3) <u>Wages, Salaries & Commissions (WS&C)</u> represent conventional 'paid' employment, a subset of Employment Income.

The highest wage levels locally in 2000 were in Belleville (\$27,605), but this still represented only 77.8% of the Ontario level. Next was Quinte West at 76.7% (\$27,204) of the province, followed by Hastings at 73.3% (\$25,985), and Prince Edward at only 72.6% (\$25,746) of Ontario.

From 1996 to 2000, the local average annual 'Wages, Salaries & Commissions' grew by 13.1% in Hastings, 12.8% in Prince Edward, 8.8% in Quinte West, and 8.7% for Belleville, while the province as a whole enjoyed 18.5% growth for the same period. Once again, the gap between the province and the local jurisdictions is widening. It is noteworthy that Belleville's average annual 'Wages, Salaries & Commissions' actually dropped from 1999 to 2000 (from \$27,665 to \$27,605). Belleville was the only jurisdiction examined where a drop occurred from 1999 to 2000.

Clearly, the positive growth in local 'Wages, Salaries & Commissions' has to be considered along with the decline in average local 'Wages, Salaries & Commissions' relative to the province as a whole.

With the exception of Quinte West, where females earned, on average, 59.9 cents for every dollar earned by men, the local areas outperformed the province as a whole, where, on average, women earned only 60.9 cents for every dollar earned by their male counterparts. In Prince Edward, women earned 69.8 cents for every dollar earned by men, and in Hastings and Belleville, the rate was 67.5 cents and 67.4 cents, respectively.

#### Figure 13: Average Annual Wages, Salaries & Commissions



(4) <u>Self-Employment Income</u> is the other component of employment income. Self-employment incomes have grown significantly, locally and provincially, since 1996. In the local area, growth of average annual self-employment income has actually outperformed that of the province as a whole.

#### Figure 14: Average Annual Self-Employment Income



From 1996 to 2000, Hastings County achieved a 52.7% increase in average annual self-employment income, while Quinte West and Prince Edward also posted impressive increases of 47.7% and 41.8% respectively. Belleville had the lowest rate of increase at 34%, but still outperformed the province at 32.2%.

While these gains have continued to close the gap with the province, 2000 average annual selfemployment incomes in the local area, except for Belleville, remain far below the provincial average of \$17,567. Quinte West is at 69.6% (\$12,233) of Ontario; Prince Edward is at only 56.3% (\$9,892), while Hastings posted a dismal 45.2% (\$7,943).

There has been growth since 1996; it is however tempered somewhat by the low self-employment incomes persisting locally in 2000. Only Belleville, at 101.3% (\$17,788) of the province, departed from the local trend.

Gender differences are most pronounced in this employment income category, with the exception of Prince Edward County where female tax filers earned, on average, 72.3 cents for every dollar earned, on average, by male tax filers. The provincial average for women in 2000 was only 53.3 cents. Hastings

exceeded the province with an average for women of 60.2 cents, but Quinte West and Belleville posted dismal averages of 35.6 cents and 31.1 cents, respectively.

#### (4-A) Percentage of Employed Tax filers with Only Self-Employment Income

Self-employment incomes remain far below conventional 'paid' employment incomes ('Wages, Salaries & Commissions') in all geographies, including the province, where the 2000 average annual selfemployment income (\$17,567) is just under half of the average annual 'Wages, Salaries & Commissions' income (\$35,469). In Hastings, the 2000 self-employment income average (\$7,943) is only 30.6% of the 'Wages, Salaries & Commissions' average (\$25,985).

Given the great disparity between 'Wages, Salaries & Commissions' and self-employment incomes, it is important to determine the percentage of employed tax filers who derive their employment income *solely* from self-employment. While 8.4% of the province's employed tax filers were solely self-employed in 2000, Prince Edward and Hastings Counties had 14.6% and 12.2% of employed tax filers, respectively, solely self-employed. Belleville, at 6.8%, and Quinte West, at 5.5%, had solely self-employed rates below that of Ontario as a whole.

Paradoxically, *higher* rates of 'self-employment only' were roughly correlated with *lower* self-employment incomes and *greater* disparities between 'Wages, Salaries & Commissions' and self-employment incomes. This strongly suggests that the local area's solely self-employed, especially in Hastings and Prince Edward Counties, are largely self-employed through necessity, rather than choice, due to a shortage of conventional, 'paid' employment. Further evidence of this is provided by relatively *low* 2000 employment rates (see *Employment Rate Estimates* below), as well as *high* unemployment rates and *low* employment and participation rates for the local area from the 2001 census.

Female tax filers are solely self-employed at rates below that of their male counterparts in all jurisdictions, but there are no gender differences with respect to the trends and correlations noted previously with respect to solely self-employed tax filers as a whole.

(B) Government Transfer Indicators: Economic Dependency Ratios

Economic dependency refers to the amount of government assistance an area receives in the form of transfer payments. It is measured by the Economic Dependency Ratio (EDR), which relates total annual government dollar transfers going into a region to the total annual employment income earned within the region. The higher the Economic Dependency Ratio, the more economically dependent the region is on government transfers.

Economic Dependency Ratios are calculated for Total Government Transfers, as well as for three specific transfer types: Employment Insurance, Social Assistance, and the Goods and Services Tax (GST) Credit.

(1) <u>Total Transfers</u> reflect all government assistance to a region. In 2000, all of the local jurisdictions had significantly higher economic dependency than Ontario as a whole, with all local Economic Dependency Ratios exceeding the provincial Economic Dependency Ratio of 13.3. The greatest dependency was in Prince Edward (Economic Dependency Ratio = 29.0), which was 118.2% higher than Ontario. Hastings was next with an Economic Dependency Ratio of 26.2, which was 96.8% higher than the provincial Economic Dependency Ratio. Belleville, with an Economic Dependency Ratio of 24.3, was 82.9% higher than Ontario. Quinte West, with the lowest economic dependency in the local area (Economic Dependency Ratio = 22.3), was still 68% higher than the province as a whole.

Female economic dependency is greater than male dependency in all jurisdictions examined. The largest differential is in Quinte West, where female economic dependency is 147% higher than that for males. The provincial differential is 131.6%. Belleville, Hastings, and Prince Edward all outperformed the province, but still posted higher female economic dependencies of 112.7%, 80%, and 67.6% of men, respectively.

Economic dependency has been declining in all jurisdictions since 1996, but the 1996-2000 rate of decline for the province (24.4%) exceeds that of all of the local jurisdictions. Economic dependency declined by 20.9% in Hastings, 18.3% in Prince Edward, 16.6% in Belleville, and 15.8% in Quinte West.

The lower rates of decline in the local area equate to a widening economic dependency gap relative to the province as a whole. Once again, the local change is in the right direction, but in relative terms, the magnitude of the change is not great enough to close the widening gap with the province.

#### Figure 15: Economic Dependency



(2) <u>Employment Insurance [EDR(EI)]</u> The local areas also lead the province as a whole in Employment Insurance dependency.

The 2000 Employment Insurance Economic Dependency Ratio is 1.1 for the province as a whole. The local jurisdictions all posted Employment Insurance Economic Dependency Ratio values in excess of the province: Hastings was 99.6% greater than Ontario (at 2.1), Prince Edward was 57.8% higher (1.7), Quinte West was 47.9% greater (Employment Insurance Economic Dependency Ratio of 1.6). The lowest local Employment Insurance Economic Dependency Ratio was posted by Belleville (1.5), which was still 45% greater than Ontario.

Female Employment Insurance dependency exceeded that of male tax filers in all jurisdictions, beginning with the province as a whole, where the female Employment Insurance Economic Dependency Ratio is 106% higher than that of males. With the exception of Quinte West, where female Employment Insurance dependency is 114.3% greater than that for males, the local areas all had smaller gender differences with respect to Employment Insurance dependency compared to the province as a whole. These relatively smaller gender differences are due to higher local male Employment Insurance dependency relative to Ontario. In Belleville, Hastings, and Prince Edward, female Employment Insurance dependency exceeded that of males by 91.9%, 39.4%, and 37.6% respectively.

Since 1996, local employment insurance dependency has declined. Prince Edward and Quinte West, with declines of 50.2% and 48.2%, respectively, exceeded the provincial decline of 46.8%. Hastings was not far behind with a decline of 42.8% for the period. The lowest rate of decline was in Belleville at 31%.

It is noteworthy that Belleville's Employment Insurance dependency actually *increased* by 6.5% from 1999 to 2000 - the *only* increase in economic dependency that has occurred in *any* of the five jurisdictions studied in any year since 1996. Given the *decrease* in 'paid' employment (wages, salaries & commissions) for Belleville in this same year, the indications are that a significant downturn in the local employment situation occurred to adversely affect 1999-2000 Employment Income and Employment Insurance parameters. One of the events that did transpire in this period and was a likely factor for Belleville was the downsizing and layoffs at the Nortel facility.

#### Figure 16: Economic Dependency – Employment Insurance



(3) <u>Social Assistance [EDR (SA)]</u> In 2000, social assistance dependency was much higher in the local area than in the province as a whole (Social Assistance Economic Dependency Ratio = 1.5). In 2000, the highest local social assistance dependency was in Quinte West with a Social Assistance Economic Dependency Ratio of 3.8 (148.6% higher than the province as a whole). Belleville (Social Assistance Economic Dependency Ratio = 3.5) posted a social assistance level 129.1% greater than Ontario, and Hastings was 117.5% higher (Social Assistance Economic Dependency Ratio = 3.3). The lowest local social assistance dependency was in Prince Edward County, with a Social Assistance Economic Dependency Ratio of 2.8, which was still 82.5% greater than Ontario as a whole.

Female dependence on social assistance is 148.6% higher than for men in the province as a whole, and 185.4% higher in Quinte West. In the other local jurisdictions, the gender differential is somewhat less but still very significant. In Belleville and Hastings, female Social Assistance Economic Dependency Ratio values are 129.1% and 117.5%, respectively, higher than the corresponding values for males. Prince Edward County had the lowest gender differential, but social assistance dependency was still 82.5% higher for female tax filers than for their male counterparts.

Social assistance dependency has declined across all jurisdictions examined from 1996 to 2000, but the local rates of decline are all less than the provincial rate (46.6%). The highest rate of decline was in Hastings (40.9%), followed by Belleville (38.6%), Prince Edward (37.7%), and Quinte West (29.6%). Consequently, in relative terms, the gap between the local jurisdictions and the province has been widening since 1996.

#### Figure 17: Economic Dependency – Social Assistance



#### Social Assistance Beneficiaries:

As the previous chart indicates, relative to the province as a whole, the region has significantly high economic dependency on social assistance. Coupled with an increased understanding of income as indicated previously, additional analysis can be undertaken as it relates to the number of people and/or percentage of the population who are impacted by social assistance and low income. The chart below tracks social assistance recipients and their beneficiaries (excluding disability support) throughout Hastings County.

#### Figure 18: Average Monthly Social Assistance Beneficiaries



In this chart, we have selected 1990 to serve as a base study year. The economic recession of the late eighties had just ended. Communities across the Province were reportedly, at that time, anticipating economic recovery.

As the chart indicates however, the region has failed to recover from the recession of the late 1980's. The 1990's saw a political shift resulting in significant changes to the way in which social assistance was delivered. Specifically, the impact of a 21.8% cut to social assistance rates in1995, aimed at reportedly increasing the incentive for social assistance recipients to find work, coupled with increasingly narrow eligibility requirements is seen in the chart through the declining trend line between 1996 and 1998, the implementation period. And yet, the number of social assistance recipients peaked again in 1999 with an average number of social assistance beneficiaries exceeding 10, 000 people on average each month that year. Recovery from 1999 has been at a slower pace annually than at any other time in the study period and continues to exceed the immediate post-recession base year.
When factoring in the number of individuals in receipt of Ontario Disability Support (a separate arm of social assistance income support), the figures are equally staggering, especially put into the context of total regional population. In 1990, for example, the base year, 14,811 people were in receipt of income support through social assistance, 12 per cent of the total population. In 1997, the peak year in the study period, 17% of the total population was in receipt of social assistance.

#### Figure 19: Average Monthly Social Assistance (All Social Assistance) Beneficiaries



<u>GST Credit [EDR (GST)]</u> The GST credit is only available to lower income tax filers, and is inversely correlated with income level (*i.e.* the credit declines as income increases up to the eligibility threshold). GST dependency (as measured by the GST Economic Dependency Ratio)), is an indicator of the predominance of lower income tax filers in an area. Moreover, given the absence of median income data in this analysis, average income levels can be considered along with the GST Economic Dependency Ratio, since average incomes can be somewhat biased upward by the presence of a relatively small number of high income tax filers.

GST credit dependency is significantly higher in all of the local jurisdictions relative to Ontario as a whole: 79.2% higher than the provincial level in Hastings, 74.2% in Prince Edward, 54.1% in Belleville, and 47% in Quinte West.

Female GST credit dependency was much higher than that for males in all jurisdictions examined, beginning with the province as a whole, with a female GST Economic Dependency Ratio 152.3% higher than that for males. Locally, relative to male GST dependency, female dependency was 180.6% higher in Quinte West, 146.9% higher in Belleville, 103.3% higher in Hastings, and 94.7% higher in Prince Edward.

Since 1996, GST credit dependency has been on the decline in all of the jurisdictions examined, but the local rates of decline have not kept pace with that of the province as a whole (33.9%): the greatest decline was in Prince Edward (29.8%), followed by Hastings (28.5%), Belleville (27.1%), and Quinte West (25.3%).

#### Figure 20: Economic Dependency – GST



#### (C) Employment Rate Estimates

(1) Introduction - Understanding and Using the Employment Rate

The <u>Employment Rate (E Rate)</u> is defined as the percentage of the *working age population* (population 15 years and older) that is *employed* at a given point in time. This is in contrast to the often-cited 'Unemployment Rate', which is supposed to reflect the percentage of the *Labour Force* that is *unemployed* at a given point in time.

For rural and other small population areas (in this case, the Quinte Region), the Unemployment Rate has no relevance or value in local economic analysis in *non-census years*. The Unemployment Rate is reported every month by Statistics Canada in the *Labour Force Survey (LFS)*. However, there is a problem with the use of the Labour Force Survey in small population areas due to inadequate statistical sampling in these areas.

The Labour Force Survey aggregates and reports data on the basis of large urban areas and large geographic units called 'Economic Regions'. The Quinte area is contained within Economic Region 515 (ER 515), which contains all of the counties of Prince Edward, Hastings, Lennox & Addington, Frontenac, and Renfrew. Most of the statistical sampling within Economic Region 515 is from Kingston, with much of

the remaining sampling conducted in Belleville and Quinte West. If Kingston data is segregated from the rest of the Economic Region 515 data, what remains from Economic Region 515 is not statistically significant. Consequently, most of the sampling is conducted outside of Hastings and Prince Edward Counties, and therefore no inferences or conclusions can be drawn relative to the local area. By contrast, in census years, local sampling *is* adequate, and therefore valid economic and labour force indicators *can* be calculated from census data, but only every five years.

A further problem exists in using the Unemployment Rate: the narrow definition of who is actually 'unemployed'. The restrictive definition of 'unemployment' inherent in government unemployment statistics excludes a large number of people who are, for all intents and purposes, actually unemployed, particularly in rural and small population areas. This understatement of 'official' unemployment hampers an objective analysis of local labour market indicators. By contrast, the Employment Rate is unencumbered by definitional issues, is an excellent labour market indicator, and can be estimated from annual tax filer data.

In terms of government-derived (as opposed to community -derived) data, tax filer profile data is the only reliable annual local data in rural and small population areas in non-census years.

The local jurisdictions examined all trail the province in rates of employment. The province posted a 63.1% employment rate in 2000 (in the June Labour Force Survey reference week). By comparison, the 2000 local employment rate estimates were as follows: Quinte West: 60%, Belleville: 58%, Prince Edward: 56.5%, and Hastings: 53.6%.

#### Figure 21: Employment Rate



Male, female, and total employment rate estimates all exhibited the identical jurisdictional ranking, but female employment rate estimates were approximately 10 percentage points lower than male employment rate estimates throughout the study area.

#### Table 13: Employment Rate Estimates

Region	Employment Rate Estin	nates — 2000	
	Males	Females	Total
Hastings	58.3	48.9	53.6
Prince Edward	61.7	51.4	56.5
Belleville	63.2	53.4	58.0
Quinte West	65.8	54.6	60.0
Ontario	68.7	58.0	63.2

#### (D) Labour Force Indicators - 2001 Census

Statistical sampling, as indicated previously, *is* adequate in census years. Consequently, valid labour force indicators can be calculated from census data for the local jurisdictions of interest.

Working Age Population (Population 15+)	The portion of the population that is 15 years of age or older.
Labour Force	The portion of the working age population that is either employed or unemployed and actively seeking employment.
Employed	The portion of the labour force that is employed
Unemployed	The portion of the labour force that is unemployed and actively looked for
onempioyed	work in the previous 4 weeks.
Participation Rate	The percentage of the working age population that is in the labour force.
Employment Rate	The percentage of the working age population that is employed
Unemployment Rate	The percentage of the labour force that is unemployed
Full-year, full-time	Employment for 30+ hours per week for the entire year (52 wks)
Part-time	Employment that is less than full-year, full-time

The following definitions apply to the Labour force indicators discussed below:

#### Table 14: Regional Labour Force Characteristics

Labour Force Indicators (2001 Census) Local Jurisdictions Vs. Ontario (T = Total, M = Male, F = Female)

Labour Force	Ontari	0		Hastin	gs		Prince	Edward	1	Bellev	ille		Quinte	West	
Indicator	Т	М	F	Т	М	F	Т	М	F	Т	М	F	Т	М	F
Participation Rate (%)	67.3	73.4	61.5	61.3	68.1	55.0	58.4	63.6	53.6	62.8	69.7	56.5	63.3	70.4	56.4
Employment Rate (%)	63.2	69.1	57.6	56.7	62.8	50.9	54.9	59.7	50.5	58.1	64.2	52.5	58.6	65.2	52.3
Unemployment Rate (%)	6.1	5.8	6.5	7.6	7.7	7.4	6.0	6.1	5.9	7.5	7.8	7.1	7.4	7.5	7.4
Full-Year, Full- time Rate (%)	55.1	61.8	47.7	52.0	59.3	43.8	50.0	55.2	44.3	52.6	60.2	44.3	53.6	62.3	43.6
Part-Time Rate (%)	44.9	38.2	52.3	48.0	40.7	56.2	50.0	44.8	55.7	47.4	39.8	55.7	46.4	37.7	56.4

In 2001, the province as a whole outperformed the local study area in all of labour force indicators. Locally, there was a definite pattern in the performance of the jurisdictions in all indicators: Quinte West was followed by Belleville, which was in turn followed by Hastings, and then by Prince Edward. The one exception was Prince Edward's unemployment rate, which was the lowest of any jurisdiction.

The low unemployment rate in Prince Edward is at least partly a reflection of this jurisdiction's low participation rate - the lowest in any area examined. The restrictive definition of 'unemployed' used by Statistics Canada, in particular with respect to the 4 week period (see definition above), results in an

understated unemployment rate: a number of unemployed individuals are consequently classified as 'not participating in the labour force' (instead of 'unemployed'), which effectively lowers both the participation and unemployment rates.

In all jurisdictions examined, females trailed males by a significant margin with respect to participation, employment, and full-year/full-time rates, while provincially; female unemployment rates were higher than male rates. By contrast, in all of the local jurisdictions, male unemployment rates were greater than female rates. Relatively high rates of local unemployment are at least partly responsible for this local trend.

### Summary of Key Findings:

In tax year 2000 (the most recent year for which tax filer profile data is available), the local jurisdictions examined trailed the province as a whole by a significant margin in every income category. Within the local area, for every income category, Belleville had the highest incomes, followed by Quinte West, with Prince Edward and Hastings Counties having the lowest incomes.

In terms of income growth since 1996, the local results are somewhat mixed, with the local jurisdictions showing improvement in absolute terms, but falling further behind the province as a whole in relative terms, resulting in widening gaps between average provincial and local incomes. The one notable exception to this trend is Average Self-Employment Income growth, where the local jurisdictions achieved greater growth from 1996 to 2000 than the province as a whole.

Low self-employment incomes and relatively high rates of sole self-employment in Hastings and Prince Edward strongly suggest that self-employment is often a substitute for conventional 'paid' employment because there is a local shortage of the latter. The local 2001 census indicators, when combined with 2000 tax filer data, further support the concept that local self-employment often stems from necessity rather than choice.

Local self-employment incomes have also grown at a much faster rate than Ontario's since 1996, even though local average annual self-employment incomes, with the exception of Belleville's, remain far below the provincial level.

Gender differences were significant in every income category, with average annual incomes of female tax filers ranging from approximately 58% to 70% of those of their male counterparts. In all income categories, the gender gap was smaller in the local jurisdictions relative to the province as a whole, with the exception of Quinte West, where the gender gap was slightly greater than Ontario. The one income category that was somewhat atypical was self-employment, where the gender gap ranged from approximately 31% to 72% of male average annual incomes, and both Belleville and Quinte West fell well below the provincial average of 53.3%.

Gender differences are also observed with respect to 2001 census labour force indicators. In all jurisdictions examined, including the province as a whole, female participation, employment, and full-year/full-time rates are significantly below those of males. However, local female unemployment rates are all lower than male unemployment rates, unlike Ontario as a whole, where the reverse is true.

The latest (2001) census data reveals that the local jurisdictions had relatively high unemployment rates and levels of part-time work, combined with low employment and participation rates. Employment rate estimates from 2000 tax filer data are consistent with employment rates from the 2001 census, and indicate that all of the local jurisdictions trail the province as a whole. Female employment rates were approximately 9 to 12 percentage points below male rates in all jurisdictions examined.

The local jurisdictions also have far greater levels of economic dependency than the province as a whole, including dependency on employment insurance, social assistance, and the GST credit. There has been a decline in local economic dependency, but the rates of decline have been less than the provincial rate. Consequently, the results are once again mixed, with improvement in absolute terms, but with a widening economic dependency gap, relative to the province, since 1996.

Belleville's Employment Insurance dependency actually increased from 1999 to 2000 (by 6.5%). Combined with decreased 'paid' employment incomes in Belleville in this same year, the indications are that some negative event occurred in the Belleville economy to adversely affect 1999-2000 'Wages, Salaries & Commissions' and Employment Insurance parameters. One likely explanation is the closing of the Nortel facility.

The region has failed to recover from that recession as it relates to the number of individuals in receipt of social assistance in the region. This, despite a dramatic political shift resulting in significant changes to the way in which social assistance was delivered across the province.

There are some positive developments revealed by the analysis of the most recent (2000) tax filer data. While average local incomes have not grown as quickly as their provincial counterparts (except for average self-employment incomes), they have grown steadily since 1996. The slight drop in Belleville's average 'paid' employment income (0.2%) in 2000 is probably a consequence of a "one time" occurrence in the local economy and not the start of a new downward trend.

# Local Conditions

Education

Traditionally a relationship exists between community economic well-being and education attainment levels.

Based upon the information contained in the chart below, there have been some real shifts in education attainment levels in the region between Census years. Greater numbers of individuals have less than a high school certificate over 1996 in each of the communities contained in the study area. This is a trend that echoes that of the Province as a whole, however, the incline in 2001 over 1996 is greatest in the City of Quinte West than elsewhere in the region.

#### Table 15: Education Attainment Levels

% Of population Aged 20 and over	Less than hig certifica	h school te	High Schoo	l Certificate	Trades Cer Other Non-	tificate or University	Univer	rsity
	2001	1996	2001	1996	2001	1996	2001	1996
Ontario	17.7	11.7	28.1	49.4	29.04	45.9	23.6	18.8
Hastings County	25.4	11.9	30.0	44.0	34.49	31.2	10.1	12.9
Prince Edward County	21.5	14.3	27.3	40.8	36.63	30.7	14.3	14.2
City of Belleville	21.3	9.6	30.4	48.5	33.50	43.1	14.6	10.7
Quinte West	24.8	8.7	29.8	47.3	37.24	42.1	8.3	7.3

Source: Statistics Canada, 2001, 1996 Census, Zephyr

The City of Belleville is only marginally behind Quinte West in this regard. With a greater number of individuals without a high school certificate comes a decline in the number of individuals with a high school certificate. This would seem to indicate that indeed, without a significant incline in other areas, greater numbers of individuals are, in all likelihood, early school leavers. Local statistics are not available on the number of early school leavers as a result of inconsistencies that exist in collecting this information. The collection of information is also tied to political policies associated with how school boards are funded in the region, making this statistic almost impossible to acquire with any degree of integrity. Consequently, additional analysis cannot take place at this time.

Overall, the region lags behind the province as whole in 2001 in all but one area as it pertains to Education Attainment Levels. Trades certificates or other non-university certification, including community college diplomas/certificates, is the only area that exceeded that of the Province. The close proximity of Loyalist College and its satellite campuses may factor into the region's higher ratings in this area. The number and percentage of university-educated residents, on the other hand, is significantly below that of the province. That said, the City of Belleville and the City of Quinte West both saw increases, albeit small, in the percentage of the population that has been university educated.

Education Attainment levels contribute to the economic sustainability of communities, especially as it relates to attracting jobs and services to the region. As long as there is a relatively low skilled labour force, the region will continue to experience economic hardships. Specifically, businesses requiring skilled workers will experience difficulty maintaining a viable workforce. Likewise, economic developers and Cities will face challenges in attracting and sustaining industry in the region or will have to resign themselves to attracting industries that require relatively low skilled workers. Doing so creates a cycle from which community has a difficult time recovering. Low skilled workers, for example, are often low wage earners. With low wages, individuals and families struggle to meet their basic food, clothing, and shelter needs. Housing markets, for example, are impacted, as is the service industry as community members dedicate their financial resources to meeting their basic needs. Traditionally, tax arrears are higher in geographic areas with significantly high numbers of low wage earners. Consequently, the need for social and health services also increases.<sup>vi</sup>

#### Graduate Destinations:

There are two Anglophone and Francophone school boards and two private secondary institutions serving students in the study area. There is no consistency among these organizations in the statistics they maintain. The following table summarizes the statistics that are available with regard to graduate destinations immediately after graduation in the 2001-2002 academic year:

### Table 16: Grade 12 & OAC Enrolment with Regional Break-out

Board	96-97	97-98	98-99	99-00	00-01	01-02
Hastings & Prince Edward District	2,367	2,314	2,344	2,305	2,187	2,067
School Board						
Algonquin & Lakeshore Catholic	593	668	665	644	671	
District School Board	555	000	005	077	0/1	
Albert College (Grade 7 - OAC)	N/A	48	49	57	61	59
Quinte Christian High School	32	16	22	15	16	16
Totals	2,992	3,046	3,080	3,021	2,935	

### Table 17: Destinations After High School

Destination	Hasting Edwai Schoo	gs & Prince rd District I Board**	Algo Lakesho Distri B	nquin & ore Catholic ct School oard	Albert (	College	Quinte C High S	hristian chool
	#	%	#	%	#	%	#	%
Directly to the workplace	351	17			0	0	2	12.5
Apprenticeship/ Skills Training	103	5				0	0	0
College	868	42	N/A		6	10.3	7	43.75
University	538	26			50	84.7	2	12.5
College & University***	124	6			0	0	0	0
Other	83	4			3 (yr off)	5	5 (extra courses)	31.25
Grade 12 & OAC Enrolment (01- 02)	2067	100			59	100	16	100

# Destinations Of Graduates Immediately Following Graduation (2001-2002)\* (N/A = Not Available)

\* Data is presented as provided by each individual school board or institution.

\*\* Data is based on student applications prior to graduation, not actual destinations.

\*\*\* College & University' represents students applying to both college and university.

#### Table 18: Standardized Testing: Reading

In 1998, the Government of Ontario introduced standardized testing for all grades three and six students across the Province. Despite some implementation difficulties that took place in years I and II, and political opposition, standardized testing has become a tool through which progress can be monitored over time. Below are the results of standardized testing in the region through the two largest school boards. Level 3, as indicated below in colour is the provincial standard. The charts below monitor student performance in relation to the Provincial Standard.

2002 Grade Three Testing Results	Algonguin & Lakeshore District School Board	Hastings & Prince Edward District School Board	Ontario
Total # of Classes	67	63	
Total # of Students	1002	1359	136,888
Overall Level of Achievement in Reading - Level 1	131	132	12,320
Overall Level of Achievement in Reading - Level 2	291	366	36,960
Overall Level of Achievement in Reading - Level 3	395	542	61,600
Overall Level of Achievement in Reading - Level 4	35	59	6,844
Total % of All Students Meet or Exceed Provincial			
Standard	42.9	44.2	50
		Source: eqa	aoweb.eqao.com

#### Table 19: Standardized Testing: Writing

2002 Grade Three Testing Results	Algonguin & Lakeshore District School Board	Hastings & Prince Edward District School Board	Ontario
Total # of Classes	67	63	
Total # of Students	1002	1359	136,888
Overall Level of Achievement in Writing - Level 1	37	62	2,738
Overall Level of Achievement in Writing - Level 2	394	537	45,173
Overall Level of Achievement in Writing - Level 3	418	535	65,706
Overall Level of Achievement in Writing - Level 4	58	67	10,951
Total % of All Students Meet or Exceed Provincial			
Standard	47.5	44.3	55.9
		Source: eqa	aoweb.eqao.com

### Table 20: Standardized Testing: Mathematics

2002 Grade Three Testing Results	Algonguin & Lakeshore District School Board	Hastings & Prince Edward District School Board	Ontario
Total # of Classes	67	63	
Total # of Students	1002	1359	139,725
Overall Level of Achievement in Mathematics - Level 1	58	106	6,986
Overall Level of Achievement in Mathematics - Level 2	350	408	37,726
Overall Level of Achievement in Mathematics - Level 3	431	544	67,069
Overall Level of Achievement in Mathematics - Level 4	48	99	13,972
Total % of All Students Meet or Exceed Provincial			
Standard	47.8	47.3	58
		Source: eqa	aoweb.eqao.com

Clearly, fewer than 50 per cent of all students involved in standardized testing scored sufficient to meet or exceed the provincial standard in reading, writing, and mathematics.

# Summary of Key Findings:

- Between Census years, greater numbers of individuals have less than a high school certificate over 1996 in each of the communities contained in the study area. This is a trend that echoes that of the Province as a whole.
- Overall, the region lagged behind the province as whole in 2001 in all but one area as it pertains to Education Attainment Levels. That said, greater numbers of students are choosing to make community colleges their destination after high school than the workforce or University.
- As long as there is a relatively low skilled labour force, the region will continue to experience economic hardships. Specifically, businesses requiring skilled workers will experience difficulty maintaining a viable workforce.
- Fewer than 50 per cent of all students involved in standardized testing scored sufficient to meet or exceed the provincial standard in reading, writing, and mathematics

# Local Conditions

Traditionally, when a high incidence of low income meets low education attainment levels, communities can often see its impact through increased social ills. This has already been demonstrated in reviewing the relationship between the economy, education, and children and family needs. Specifically, where the economy declined, the number of social assistance beneficiaries increased. Likewise, so too did the number of children admitted to care of the Hastings Children's Aid Society.

Crime

Crime is yet another area where communities can see the impact of community quality of life on the well-being of its residents. Policing in Hastings County is provided by both municipal and provincial police departments. Therefore statistics are not regionally available. As a result, only the larger urban centers have been included for the purpose of this study. They have been provided by the municipal police services to the Canadian Centre for Justice Statistics. Statistics have not been gathered for communities served exclusively by the Ontario Provincial Police.

Table 21: Criminal Justice Statistics

Source: Canadian Centre for Justice Statistics

Overall, the crime rate in the City of Belleville has continued to creep upwards over the study period. Specifically, the number of Theft Under charges has inclined while Assaults and Break and Enters are declining. That said, however, more startling is the declining conviction rate. In all likelihood, prosecutors are dropping charges as part of negotiated plea bargains.

The number of charges laid against adult males is roughly 4:1 over charges against adult women.

Table 22: Criminal Justice: Youth

59 9 8 0 1 З 0 0 δ 0 0 0 1999 Female Youth Charged  $\sim$ 4 002 87 2000 0 - 1 0 0 0 8 9 0 0 -32 6  $\infty$ 87 -2001 293 48 45 50 10 6 0 2 1999 266 Male Youth Charged 2000 268 4 0 2 2 0 4 2001 Criminal Justice Statistics - City of Belleville otal Theft of Motor Vehicle otal Offensive Weapons otal Crimes of Violence otal Assault (level 1-3) otal Sexual Assault otal Break & Enter otal Criminal Code otal Stolen Goods otal Theft Under otal Prostitution otal Theft Over otal Abduction otal Robbery otal Assault otal Fraud otal Drugs

Source: Canadian Centre for Justice Statistics

including Assaults, Sexual Assaults, and Possession of Offensive Weapons. The number of Theft Under and Drug charges against male youths increased dramatically Overall, youth crime saw an increase in 2000 over 1999 but a decrease in 2001 over 2000. The same is true in specific categories, especially crimes of violence in 2001 over preceding years. Charges for possession of offensive weapons peaked in 2000.

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Table 23: Criminal Justice: Quinte West

Criminal Justice Statistics - City of Quinte West

	Actu	al Incide	nts	Rate F	er 100,00	0C	Cleared	d by Cha	rge	Cleare	d Othen	vise	Adult M	ale Char	ged	Adult Fe	male Ch	arged
	2001	2000	1999	2001	2000	1999	2001	2000	1999	2001	2000	1999	2001	2000 1	666	2001 2	000	1999
Total Criminal Code	4781	2954		10924	6730		1587	782		436	387		426	325		85	53	
Total Crimes of Violence	473	345		1081	786		279	175		37	91		134	103		34	Ξ	
Total Assault	448	334	344	1024	761	783	267	169	206		91	86	125	98	109	34	Ξ	35
Total Assault (level 1-3)	337	264	294	770	601	669	213	131	317		63	77	91	76	06	31	6	33
Total Sexual Assault	80	45	38	183	103	86	28	17	22		പ	9	21	13	15	0	0	-
Total Abduction	2	0	ŝ	ß	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Total Robbery	21	7	7	48	16	16	1	4	2	-	0	0	6	ഹ	2	0	0	0
Total Break & Enter	593	396	404	1355	902	920	94	55	60	14	19	11	46	33	46	∞	m	ŝ
Total Theft of Motor Vehicle	213	148	135	487	337	307	29	16	14	∞	4	4	12	7	7	2	0	0
Total Theft Over	18	27	10	41	62	23	ŝ	m	2	2	-	-	-	2	$\sim$	0	-	0
Total Theft Under	937	795	745	2141	1811	1697	108	58	99	84	95	76	48	30	29	14	14	10
Total Stolen Goods	61	37	25	139	84	57	63	36	32	2	2	—	14	7	4	2	2	2
Total Fraud	122	88	101	279	200	230	54	35	41	22	21	30	30	10	22	Ξ	7	Ð
Total Prostitution	0		0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Offensive Weapons	917	28	37	2095	64	84	467	21	29	വ	വ	Ŋ	വ	4	∞	0	-	0
Total Drugs	105	29	61	240	99	139	78	28	51	0	0	2	25	14	20	9	0	4
- (		-																

Source: Canadian Centre for Justice Statistics

Despite similar population composition, the number of charges laid in the City of Quinte West is roughly 33% lower than in the City of Belleville. Whereas the City of Belleville saw violent crime decline in 2001, Quinte West saw a substantial increase in Violent Crime. Likewise, Break & Enter, Theft, and Drug charges also saw significant increases in 2001 over 2000 in Quinte West.

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Table 24: Criminal Justice: Quinte West Youth

1999 0 9 0 0 З З 0 0 4 0 0 0 0 Female Youth Charged 2000 28 6 6 9 - 0 0 -0  $\sim$ 00 00 б 2001 17  $\infty$ 0 0  $\sim$ 00 00 0 0  $\sim$ 5 1999 36 32 1 0 3 0 21 24 2000 18 110 110 0 0 0 0 0 0 0 0 0 0 0 0 109 4  $\sim$ 0 Male Youth Charged 2001 184 48 5 5 24 24 4 0 26 10 0 04 Criminal Justice Statistics — City of Quinte West Source: Canadian Centre for Justice Statistics otal Theft of Motor Vehicle otal Offensive Weapons otal Crimes of Violence otal Assault (level 1-3) otal Sexual Assault otal Break & Enter otal Criminal Code otal Stolen Goods otal Theft Under otal Prostitution otal Theft Over otal Abduction otal Robbery otal Assault **Fotal Drugs** otal Fraud

also saw increases in 2001 over 2000. A recent local study involving 74 youth in the year 2000 saw teens responding to specific questions pertaining to perceptions The number of charges laid against Male Youth in the City of Quinte West is comparable at 3.8% of all charges to that in the City of Belleville at 4%. Charges against Female Youth comprise less than 1% of all charges. Crimes of violence saw dramatic increases in 2001 over 2000. Theft Under and Possession of Stolen Goods of youth crime. Respondents believed that peer pressure, boredom, and lack of social activities are key factors for youth becoming involved in crime.<sup>wi</sup>

# Summary of Key Findings:

- Overall, the crime rate in the City of Belleville has continued to creep upwards over the study period. Specifically, the number of Theft Under charges has inclined while Assaults and Break and Enters are declining.
- The number of charges laid against adult males is roughly 4:1 over charges against adult women in the City of Belleville.
- Measuring the number of youth charged in any given year presents only a snapshot of youth crime in the region as it does
  not serve to measure relatively minor offences for which charges have not been laid. That said, alternative measures or
  warnings are not reflected in the reported figures.
- Despite similar population composition, the number of charges laid in the City of Quinte West is roughly 33% lower than in the City of Belleville.
- Quinte West saw a substantial increase in Violent Crime. Likewise, Break & Enter, Theft, and Drug charges also saw significant increases in 2001 over 2000 in Quinte West.
- Teen respondents in a local survey believed that peer pressure, boredom, and lack of social activities are key factors for youth becoming involved in crime.

### Local Conditions

Housing is fundamental to individual well-being and considered a basic necessity of life. Moreover, recent studies have determined that without adequate housing, families are more likely to experience stress in other areas of their lives. Indeed, housing is where the economy is most likely to intersect with social needs in terms of monitoring and measuring community well-being.

Housing

Housing demographics help us to understand the depth and scope of community's capacity to respond to the needs of its residents.

#### Table 25: Housing: Private Dwellings

	Total Number of	Occupied Private Dwellings	
	Rented	Rented	Rented
	1991	1996	2001
Hastings County	14,846.00	15,525.00	14,960
County	1,844.00	2,030.00	1,815
Ontario	n/a	1,387,745.00	1,346,990
City of Belleville	7,666.00	7,830.00	7,770
City of Quinte West	3,234.00	4,740.00	4,455
	Total Number of	Occupied Private Dwellings	
	Owned	Owned	Owned
	1991	1996	2001
Hastings County	30,981	32,895	34,450
Prince Edward County	6,791	7,525	7,755
Ontario	n/a	2,515,150	2,816,220
City of Belleville	10,154	10,520	11,500
City of Quinte West	5,698	10,775	11,380

The table above reveals that the numbers of households that rent their primary dwelling increased consistently throughout the region in 1996 over 1991 and yet, the number of renters declined in the year 2001. At the same time, the number of people who owned their primary residence increased consistently in the region, a trend which continued into 2001.

#### Table 26: Housing: Rental Housing Costs

Average Gross I	Housing Costs (M	lonthly)	
	Rented	Rented	Rented
	1991	1996	2001
Hastings County	\$572.00	\$595.86	\$614.00
Prince Edward County	\$555.90	\$559.00	\$580.00
Ontario	\$548.16	\$679.00	\$753.00
City of Belleville	\$581.75	\$619.77	\$632.00
City of Quinte West	\$532.58	\$595.26	\$618.00

Rental Fees have climbed between three and four per cent in the region between Census years while the Province saw a significant increase in 2001 over 1991. The limited economic growth locally (as indicated previously) may account, to some extent, for the minimal increases in rents in the region as rental fees often coincide with that the market can bear.

### Table 27: Housing: Home Ownership Costs

Average Gross Ho	ousing Costs (M	lonthly)	
	Owned	Owned	Owned
	1991	1996	2001
Hastings County	n/a	\$698.07	\$733.00
Prince Edward County	n/a	\$672.00	\$686.00
Ontario	\$692.33	\$882.00	\$964.00
City of Belleville	\$619.77	\$738.09	\$788.00
City of Quinte West	\$538.16	\$743.76	\$760.00
Source: Zep	ohyr,Compusearc	h, , Census Data,	1996, 2001

Housing costs, on the other hand, have seen substantial increases in the region, more so in the City of Belleville than elsewhere in the region. Quinte West also saw a large increase in homeownership costs during the previous decade.

Traditionally, financial institutions and government considers a household to have high shelter costs when costs exceed thirty percent of one's net income. While figures are not yet available from the 2001 Census, the following chart illustrates the total number of renters and owners with high shelter costs in the two previous Censuses.

The number of tenants with high shelter costs increased substantially in 1996 over 1991. Given the marginal declines seen elsewhere in the report, it is perfectly appropriate to assume that there is likely to be some decline in 2001 over 1996, but that figures will remain significantly higher than figures from the 1991 Census. That said, it is likely that the region will continue to exceed Provincial averages in all subsets except in Quinte West where fewer percentages of tenants pay in excess of 30% of net income toward meeting their housing needs.

The number of home owners with high shelter costs, however, was slightly lower than the Provincial average in all sub-sets with the exception of homeowners in the City of Belleville which was exceedingly high in comparison to all other communities in the study area.

#### Table 28: Housing: High Shelter Costs

		<u> </u>		
% of All Tenants with High Shelter Costs				
	1991	1996	2001	
Hastings County	16.01	48.6		
Prince Edward County	27.9	45.3		
Ontario	29.4	44.1		
City of Belleville	32.9	51.8		
City of Quinte West	23.7	39.7		
% of All Home Owners with High Shelter Costs				
	1991	1996	2001	
Hastings County	14.6	17.2		
Prince Edward County	17.4	18.0		
Ontario	16.3	18.5		
City of Belleville	13.7	26.0		
City of Quinte West	12.9	15.6		
	Source: Comm	unity Well Bein	g Index, 2001	

The above table also indicates that rental housing costs are likely to be lower outside the urban centres given that the average in the region is substantially lower than the average in each of the two most densely populated cities in the region.

Given what we know about average rents and housing costs in the region, when coupled with the economics within the region, we are able to ascertain the total income necessary to meet the housing needs of individuals and families.

As the chart below indicates, regional average rents plus housing costs exceeds the averaged monthly gross income in the region by roughly \$380.00 each month. This translates to a gross deficit of roughly \$3,404 each year. Rent, of course, is paid out of net income, therefore, families are likely to experience an even greater shortfall each year.

#### Table 29: Housing: Base Shelter Costs

Base Shelter Costs				
		Monthly	Annually	
Average Re	ent	\$614.00	\$7,368.00	
Electrical (average 12,000 k wh/annum) <sup>viii</sup>		\$77.12	\$925.44	
Water Consumption (average 75,000/annum) <sup>ix</sup>		\$17.91	\$214.92	
GST on home heating		\$7.61	\$91.32	
Total Base Housing Costs (minus maintenance and insurance)		\$716.64	\$8599. 68	
А	Net Income Necessary to Meet 30% of Shelter Costs <sup>x</sup>	\$2,485.76	\$28,665.60	
В	Minus Total Gross Income from all sources (see Figure 7 above)	\$2,105.83	\$25,261.00	
С	Surplus/Deficit (A-B)	-\$379.93	-\$3,404.6	

Data from the 2001 Census has already demonstrated (Table 26 above) that the cost of home ownership is generally higher than the cost of rental housing, a difference of roughly \$119.00 monthly (or \$1428 annually). Since average gross income from all sources (Figure 7 earlier in the report) does not differentiate between homeowners and tenants, homeowners with high shelter costs would likely experience even greater hardship.

With high shelter costs and income shortfalls, families are more likely to require support to meet some of their necessities of life. The following few pages demonstrate the depth of housing support needs in the region. For example, Belleville Community Trust, along with its relatively new sister organizations in the region, was established to assist families meet some of their necessities of life during emergencies. Community Trust is supported by the County Government through Ontario Works and the United Way of Quinte. The chart on the next page breaks down the housing and utilities costs subsidized by Belleville Community Trust as a percentage of their total annual budget.

#### Figure 22: Community Trust Allocations: Necessities of Life



Clearly, Belleville Community Trust supports community residents most often as it relates to meeting their housing and utility costs. This trend is, indeed, predictable given what we know about Basic Shelter Costs in the region as per Table 27 above. Yet, despite the considerable contribution Community Trust makes toward improving the quality of life of individuals and families in the region, it continues to serve as a band-aid solution to a deeper, more profound community issue: insufficient income.

Traditionally, high shelter costs and income shortfalls (as demonstrated above) result in the need for increased social housing and assisted housing within communities. The most popular of all social housing is non-profit housing and public housing, traditionally administered by regional governments or not for profit boards of directors. Roughly 80% of tenants living in non-profit housing are individuals living on a low income<sup>xi</sup>. They pay 30% of their household income for rent. The other 20% of tenants in non-profit housing pay market rents. Public housing, on the other hand, is owned by the Ontario government (formerly through the Ontario Housing Corporation) and is managed by local Service Managers administered through the regional government.

As the following chart indicates, the region has seen both peaks and valleys in the numbers of families on social housing waiting lists, and yet, despite a decline in 1999, the number of families on social housing wait lists has remained somewhat static.

#### Figure 23: Social Housing Wait Listsxii



#### Figure 24: Transitional Housing For Youth



Youth Habilitation Quinte Inc. (Youthab) provides a cooperative housing program for youth in the region. As such, thirteen houses located throughout Hastings & Prince Edward Counties are administered as transition and cooperative housing for youth. Within cooperative housing, a variety of services are provided to young people, many of whom are living on their own for the very first time. Despite a high reached in 1995, between 1997 and 2001, the numbers of young people housed through Youthab remains fairly consistent.



Figure 25: Hastings Housing Resource Centre: Emergency Housing Needs

Figures from the Hastings Housing Resource Centre demonstrate the scope of the region's increasing housing crises, where in the fiscal year ending 1996, emergencies (which include homelessness or those at risk of homelessness) comprised roughly 64% of the total number of clients associated with the agency. By the fiscal year ending 2001, that figure had climbed to 67%, after having peaked in 1997/1998 at 71%.

# Summary of Key Findings:

- The numbers of households that rent their primary dwelling increased consistently throughout the region in 1996 over 1991 but declined in the year 2001.
- The number of people who owned their primary residence increased consistently in the region, a trend which continued into 2001.
- Rental Fees have climbed between three and four per cent in the region between Census years while the Province saw a significant increase in 2001 over 1991
- Housing costs have seen substantial increases in the region, more so in the City of Belleville than elsewhere in the region.
- The number of tenants with high shelter costs increased substantially in 1996 over 1991.
- The number of home owners with high shelter costs was slightly lower than the Provincial average in all sub-sets except the City of Belleville which was exceedingly high in comparison to all other communities in the study area.
- Regional average rents plus housing costs exceed the averaged monthly gross income in the region by roughly \$380.00 each month. This translates to a gross deficit of roughly \$3,404 each year
- Housing and utility costs are the most frequently subsidized costs provided through Belleville Community Trust.
- Roughly 67% of the total number of individuals served by the Hastings Housing Resource Centre in 2001 was dealing with emergency housing issues. Emergency housing includes homelessness or those at risk of becoming homeless.

### Local Conditions

Health

Far too often, physical health and well being is directly impacted by economics.<sup>xiii</sup> For example, in communities where economics are low, necessities of life, including housing as indicated above, are compromised. This is a trend which has been well documented in Canadian society.<sup>xiv</sup> Locally, this trend is echoed in study after study. In "*Assessing the State of Food Security in Belleville, Ontario*<sup>xv</sup>", a 2002 follow up study to the Community Development Council of Quinte's 1992 *Task Force on Hunger Report: Hunger in Belleville*, it was determined that one in every ten individuals in the City of Belleville is at risk of experiencing hunger or food insecurity<sup>xvi</sup> at any given time and that those most at risk are young people. Both income insecurity and low income have been identified repeatedly as a contributing factor to food insecurity. That said, physical health is also compromised. And yet, as the following charts demonstrate, ill-health significantly affects the well-being of community. High Doctor– Patient ratios for example, affect community well-being by reducing access to preventative measures.

#### Figure 26: Doctor – Patient Ratios (Family Medicine – General Practioners)



Source: Ontario Physician Human Resource Data Centre, Active Physicians Registry

A community is considered to be "under-serviced" when the Doctor – Patient Ratio exceeds 1136 residents per 1 full-time general practioner. As the chart above indicates, Hastings County failed to meet that benchmark in 1996 (1341:1), 1997 (1355:1), and in 2001 (1441:1). That said, a Physician Crisis is looming. Specifically, the average age of physicians in Ontario is presently 50 years of age, physicians are retiring faster than new ones are entering the system, and it has been determined that patients in their 60's and 70's use five times more medical services per capita annually than patients in their 30's and 40's.<sup>xvii</sup> With more than 20,000 area residents over age 65, a large number of people will require increased medical services over the next decade. Active physicians in the region are also aging, as the following chart indicates.

#### Figure 27: Active Physicians By Age in Hastings County



A recent study conducted for the College of Physicians and Surgeons of Canada, conducted by Decima Research<sup>xviii</sup>, revealed that 15% of Canadians do not have access to physician services. In 2000, Ontario suffered a net loss of 110 physicians, many in specialties.<sup>xix</sup> In this region, doctor shortages have been well documented.

If these figures aren't startling enough, ill-health is also on the rise. As the following chart indicates, the number of new cancer cases in Hastings & Prince Edward Counties has increased between 1990 and 1998 (the last year for which statistics are available). Even more dramatic is the volatility surrounding Hastings County and Prince Edward County in comparison to Ontario as a rate per 1000 people.

### Figure 28: New Cancer Cases



### Figure 29: New Cancer Cased as a Rate Per 1000



The health of the region is often measured by examining cause of death. Mortality Statistics provide a snapshot of the most serious diseases causing death, but do not provide an accurate picture surrounding illness that does not cause death. At the same time, where fatalities affect few individuals within a region suppression occurs so as to protect confidentiality. Given the relatively small geography studied, this information is not available with any degree of accuracy by age breakdown locally at this time. The Hastings & Prince Edward Counties Health Unit is presently filtering information so as to guarantee its accuracy. Receipt of this information is pending at this time.

For that reason, Leading Cause of Death in Canada by age breakdown is highlighted first, as a means with which to better understand general trends.

1997								
Leading Cause of	1-14	15-19	20-24	25-34	35-44	45-54	55-64	65+
Death: Canada								
Injuries	41.2	71.8	70.6	53.4	30.3	13.3	4.7	2.4
Unintentional Injury	32.9	45.8	43.2	28.7	14.9	6.4	2.7	2.1
Suicide	4.4	22.6	22.6	19.8	13.0	5.9	1.7	.3
Homicide	3.5	2.6	3.7	3.2	1.0	.5	.1	.01
Other Injury	.5	.8	1.0	1.7	1.4	.5	.2	.02
Cancer	13.6	7.4	7.3	12.8	27	40.4	45.6	24.9
Congenital Anomalies	8.3	2.2	1.6					
Circulatory Disease	5.0	2.9	2.6	6.3	15	23.6	28.4	41.5
Other	18.4	6.2	8.1	13.1	15.0	14.3	15	24.6
Source: Canadian Injury Data 1997, Statistics Canada								

#### Table 30: Leading Cause of Death: Canada



#### Figure 29: Percentage of All Births in Hastings County By Age of Mother

While the number of women that give birth between the ages of 20-29 is on the decline, the number of women having babies between the ages of 30-39, and over 40 is on the incline. The number of birth mothers under 20 years of age has also seen an increase. Teen pregnancies as a jurisdiction of live birth is described in greater detail in the chart that follows. The information is, however, dated, in large part as a result of the filtering that must take place to guarantee data integrity. Updated figures are due in September 2003.

Figure 30: Live Births To Females Under 18 Years of Age



Source: Ministry of Health and Long-Term Care Provincial Health Planning Database

A baby is considered to have low birth weight if born weighing less than 5.5 pounds or 2500 grams. Low birth weight is often attributed to physical and social environment factors, lifestyles, and access to health services. Age of mother can also be a factor. While low birth weights are, generally, on the decline in the region, there is still some concern as to the how low birth weights are tracked in the Province, especially since, in this region, neonatal crises are handled by transferring patients to tertiary hospitals. In this region, for the most part, mothers would be transferred to Kingston, Ontario for perinatal and neonatal care while mothers from North Hastings are often transferred to Peterborough, Ontario. That said, low birth weight is, traditionally, a primary factor in measuring infant mortality and morbidity. Since mothers are transferred to larger urban centres for care, infant morbidity is more often recorded as having occurred in that community as opposed to place of residence of mother. The Quinte Health Care Corporation reports in its population health study that 40 low birth weight babies were born at the local hospital in the fiscal year ending 2002. That figure represents 2.9% of all live births at the Quinte Health Care Corporation during that time.<sup>xvii</sup>

#### Figure 31: Low Birth Weights



While health statistics are in general somewhat dated, Community Health Surveys help us to understand the living and working conditions of area residents. Statistics Canada uses Community Health Surveys to compare "peer groups", that is, communities of similar geographic and socio-economic conditions and reports on its findings. Participation is strictly voluntary. There is however, some question as to the integrity of the data being reported. This is partly attributed to the question of "double counts" and questions pertaining to methodology. Further, there is some question as to the accuracy of the math being used locally to reflect present situations.

Smoking:

- In 2000/2001, 27.39% or 36,330 out of 132,650 residents report that they smoke daily or occasionally.
- 7.1% of 87,597 survey respondents aged 12 and over reported they first started smoking between the ages of 5-11; another 31% between the ages of 12-14; and 46 % between the ages of 15-19.xxiii

Diabetes:

 3.9% of 132,650 survey respondents report that they have been diagnosed with Diabetes.

Asthma:

• 10.4% report that they have been diagnosed with Asthma.

### Summary of Key Findings:

- One in ten individuals is at risk of experiencing food insecurity and hunger in the region. Economics is the primary cause
  of food insecurity.
- Hastings County has failed to meet the standardized Doctor-Patient ratio three times between 1997 and 2001.
- The number of physicians over age 55 is continuing to grow in the region. This has the potential to seriously impact the way in which services are delivered in the region in the near future as the population in general requires increased medical services due to aging.
- Ill-health is on the rise.
- The number of new cancer cases as a percentage of the population continues to exceed that of the Province.
- Injuries account for a full 41.2% of deaths in children 14 years of age and young, and 71.8% of deaths in teens aged 15-19. By aged 55, Cancer is the leading cause of death.
- Larger numbers of women are choosing to give birth in their 30's, a shift from previous years. Teen pregnancies exceed that of women older than 40 years of age.
- Young people under the age of 19 are the fastest growing population of new smokers.
- Asthma diagnoses exceed Diabetes in the region.

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## End Notes

<sup>ii</sup> Ontario Healthy Communities Coalition, "From the Ground Up: An Organizing Handbook for Healthy Communities", undated, pg. 1

<sup>iii</sup> Trocmé & Walsh, Ontario Association of Children's Aid Societies, "*<u>Highlights from the Ontario Incidence Studies of Reported Child Abuse</u>" OACAS Journal, September 2002.* 

iv Ibid

v Median family income has been used, as it is a fairer measure than average incomes as averages can be skewed by significantly high or low incomes.

<sup>vi</sup> The Institute for Clinical Evaluative Sciences tracked hospitalization rates for coronary illness from 1991 to 1997 and found that hospitalization rates for patients from the lowest income neighbourhoods were from 69% to 121% higher than for patients from higher income neighbourhoods. York University has also undertaken significant research as it relates to income and social conditions through its School of Health Policy and Management. Its research has confirmed that economic security (achieved through income) affects both the physical and emotional well-being of communities and their residents.

vii Quinte Destinations For Youth, *Needs Assessment: Report on Findings*, September 2000.

viii Ontario Ministry of Energy, Science & Technology reports "typical house" uses 12,000 k Wh of electricity annually. To determine a monthly bill, 12,000 k Wh were divided by number of months. First 250 k Wh billed at 9.37 cents, balance at 7.17 cents.

<sup>ix</sup> Belleville Utilities Commission estimate (2001) an average family of four uses 75,000 gallons of water annually. To calculate bill, 75,000 was divided by number of months. That figure was divided by 1000 in order to reflect billing per 1000 gallons. Average consumption cost was determined by averaging the Winter billing at \$2.77 per 1000 gallons with the Summer billing of \$2.96 per 1000 gallons in order to establish a blended average fee.

\* Calculated using Rent & Income Limit Calculator, Novgradac & Company, LLP, Affordable Housing Resource Centre

xi Source: Ontario Non-Profit Housing Association; http://www.onpha.on.ca/municipalities

xii Source: Hastings & Prince Edward Housing Authority, 2000; Hastings Housing, Community Well Being Index, 2001

xiii Raphael, D, Canadian Journal of Public Health, Nov/Dec 1998, 89, p. 380-381.

xiv The Canadian Institute of Children's Health's Report, "<u>Health of Canada's Children</u>", (1994), clearly demonstrates the disparity that exists between children living in families that are economically poor and non-poor.

<sup>xv</sup> Wallace, Jonathan, School of Urban & Regional Planning, Queen's University, "Assessing the State of Food Security in Belleville, Ontario" A Report to the Community Development Council of Quinte, 2002

x<sup>vi</sup> According the 1996 World Food Summit, "food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (Agriculture & Agri-Food Canada: AAFC 1998).

<sup>&</sup>lt;sup>i</sup> Quality of Life is defined as: the product of the interplay among the social, health, economic, and environmental conditions which affect human and social development. Definition copy-write: Ontario Social Development Council, Social Planning Network of Ontario, "*Quality of Life In Ontario*," fall 1999.

xvii Ontario Medical Association, March 19, 2001, www.oma.org/pcomm/cha/hcreform.htm.

 $^{\mathrm{xviii}}$  Stafford, L, College of Family Physicians of Canada, 2003-01-01

xix Ontario Physician Human Resource Data Centre, Active Physicians Registry

<sup>xx</sup> The Ontario Cancer Registry provides information to the Ontario Ministry of Health, Public Health Branch and is deemed to have an accuracy rate by residency of 98%.

<sup>xxi</sup> The Ontario Cancer Registry provides information to the Ontario Ministry of Health, Public Health Branch and is deemed to have an accuracy rate by residency of 98%.

xii Valentyne, D, "*Quinte Health Care, Our History and the Population We Serve: Hastings & Prince Edward*", Population Health Report, November 2002.

xxiii Statistics Canada, Canadian Community Health Survey, 2000/01