



United Way  
Centraide  
Windsor-Essex County

# THE COST OF POVERTY IN WINDSOR-ESSEX COUNTY



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## PUBLICATION INFORMATION

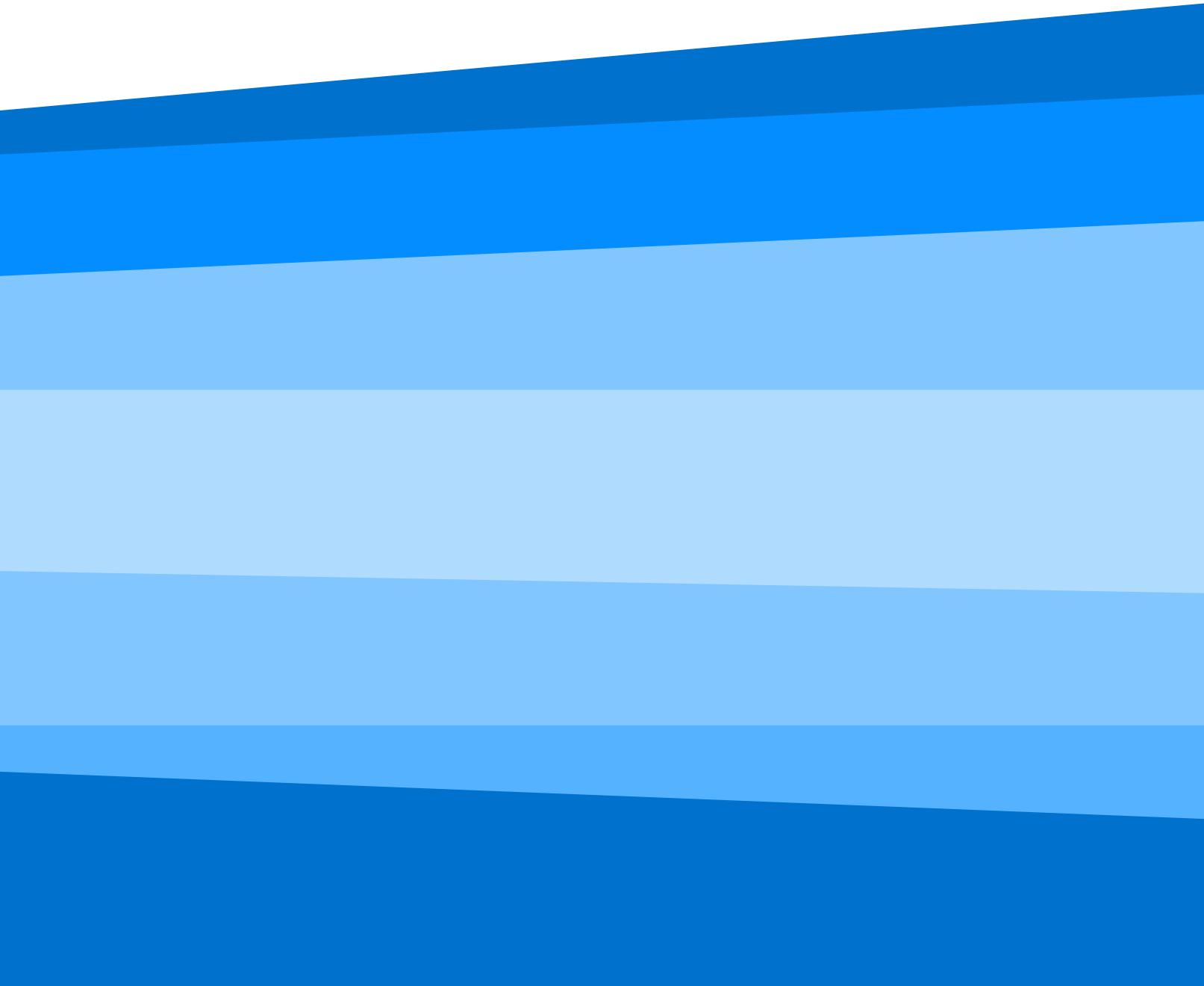
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## INTRODUCTION

Since 2007, poverty has increasingly been on the national agenda. This is a result of significant advocacy work, which has led to the creation of several provincial poverty reduction strategies. Advocacy has evolved from describing poverty reduction as a human rights issue, to including the economic impact of poverty on our society.

Researchers in Calgary, Alberta developed a model to identify the external costs of poverty (Shiell and Zhang, 2004). Because many costs cannot be fully measured using currently available data, cost of poverty reports tend to utilize conservative estimates. The conservative estimates also compensate for assumptions that are made in developing the analysis.

Subsequent reports have built on the model developed by Shiell and Zhang (2004) for the province of Ontario (Laurie, 2008) and the province of British Columbia (Ivanova, 2011). This report will apply the model utilized in the Ontario cost of poverty report (Laurie, 2008) to Windsor-Essex County. Readers are encouraged to view the Laurie report for more detailed information about the model.

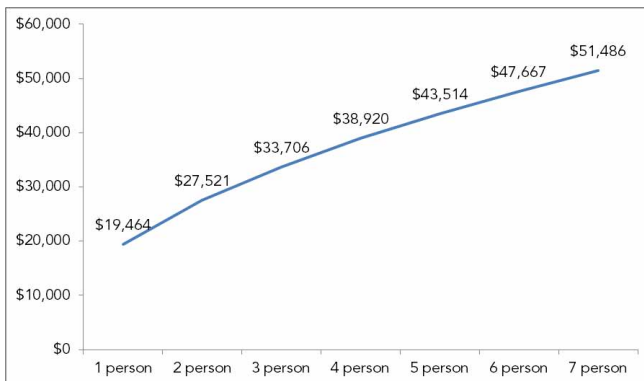
While there are multiple ways to measure poverty in Canada, this report uses the After Tax Low-Income Measure (LIM-AT). This measure represents 50 per cent of median adjusted-after tax income of

households observed at the individual level. The measure is adjusted to indicate that a household's needs are accounted for. The LIM-AT for a one person household in Canada was \$19,460 in 2010.

Poverty has an impact on many life outcomes. Canadians living in poverty often experience negative outcomes such as poor health, lower expected lifetime earnings and lower educational outcomes (Shiell and Zhang, 2004; Valletta, 2004; Finnie, 2000; Raphael, 2000). This report considers the impact of poverty in four areas: health care, crime, intergenerational poverty and lost productivity. The best available data in these areas is applied to attempt to understand the economic consequences of poverty in Windsor-Essex County.

**SPECIAL POINTS OF INTEREST**

- 18.3% of people in Windsor CMA live in poverty
- Children are more likely to live in poverty, at 24.2% in Windsor CMA
- A conservative estimate of the annual cost of poverty in Windsor-Essex County is \$450 million



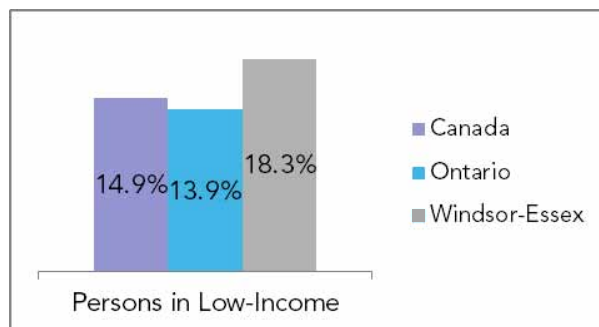
Source: Low-income measures thresholds for households of Canada, 2010

Figure 1: After Tax Low-Income Measure, Canada, by household size

## POVERTY IN WINDSOR-ESSEX COUNTY

Windsor-Essex is particularly struck by the effects of poverty. As shown in Figure 2, the proportion of the population of Windsor CMA living in poverty (18.3%) is much higher than the provincial or national averages (13.9% and 14.9%, respectively). Because of this, it is even more important to address the issue in our community.

Figure 2: Proportion of Population in Low-Income, by LIM-AT, 2010



Source: National Household Survey Focus on Geography Series, 2013

**GEOGRAPHY CONSIDERATIONS**

Windsor Census Metropolitan Area includes the municipalities in Windsor, excluding Leamington and Kingsville. In the Introduction section, Windsor CMA poverty rates are described. For the calculations, however, Leamington Census Agglomeration (CA) (Leamington and Kingsville) were included.

## NEIGHBOURHOOD POVERTY

Not only does Windsor have a higher than average proportion of the population living in poverty, but also, at 33.3%, has the highest proportion of the low-income population living in very low-income neighbourhoods in Canada (see map to the right for the top five). Again, this highlights the need for action around poverty in our community.

The proportion of low-income families in Windsor-Essex County living in very low-income neighbourhoods is the highest in Canada.

Figure 4: Low-income rate by family type, 2010

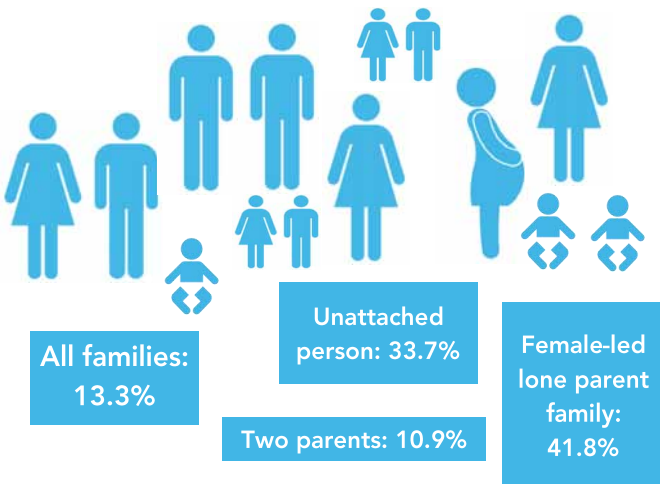


Figure 3: Proportion of low-income population living in very low-income neighbourhoods, 2010



## POVERTY AND FAMILIES

The impacts of poverty are particularly acute for some family types over others in Windsor CMA. As shown in Figure 4, nearly 42% of female-led lone parent families in Windsor CMA live in poverty, more than three times general population. Unattached individuals and lone-parent families are also particularly susceptible to low-income. Windsor CMA has slightly more lone-parent families than Ontario (19% vs. 17%).

A single mom is almost four times as likely as a two-parent family to live in poverty in Windsor-Essex County.

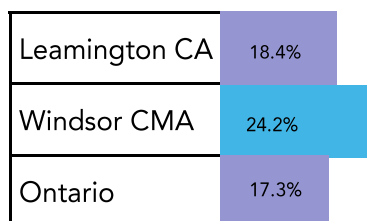
## POVERTY IN CHILDHOOD

Children in Windsor-Essex County are more likely to live in low-income families than the provincial average. In Windsor, 24.2% of children live in low-income families. In Leamington, the proportion of children living in low-income families is less (18.4%), but still higher than the provincial rate (17.3%).

There is a strong correlation between socio-economic status and children's academic performance. For example, a Statistics Canada study published in November 2006 analyzed five-year-old children's readiness to learn on the basis of gender, level of household income, and the child's home environment. The study concluded that children from lower income families were less

ready to learn than children from more affluent households.

Children from low-income families routinely have lower achievement scores in school than children from higher income families (Steinbrickner and Steinbrickner, 2003; Acemoglu and Pischke, 2001; Duncan et al., 1998).



Living in low-income can result in lower educational outcomes for children.

Figure 5: Percentage of children living in low-income, by location, 2010

Source: National Household Survey Focus on Geography Series, 2013

## CALCULATING THE COSTS—HEALTHCARE

People living in poverty require more health care than those not living in poverty, and report lower perceived overall health. In a recent study in Hamilton, Ontario, researchers found that people living in the poorest neighbourhoods in Hamilton had a life expectancy more than twenty years less than those living in the richest neighbourhoods (65.5 years to 86 years) (see [www.thespec-codred.com](http://www.thespec-codred.com)).

The Canadian Institute for Health Information (CIHI) releases an estimate of health care spending. While it is a national figure, like the reports by Laurie (2008) and Ivanova (2011), the figure is divided by the proportion of people living in Windsor-Essex County (1.07% of the Canadian population) to develop an estimate of the annual amount spent on health care locally.

Mustard et al (1998) conducted a study in Manitoba to determine the health system usage of the population by income. Table 1 applies the share of total public health expenditures by quintiles to the share of health care expenditures estimated for Windsor-Essex County. This makes the assumption that health care expenditures by income are consistent across the country, which is consistent with previous Cost of Poverty reports.

If the share of health expenditures were reduced from the lowest income quintile spending to the second quintile spending in Windsor-Essex County, it is estimated that it would result in a reduction of \$140 million dollars annually in health care expenditures. That reflects 6.7% of the total annual health care spending.

People living in low-income neighbourhoods may have a lower life expectancy than those living in high-income neighbourhoods.

**Table 1: Impact on Public Health Expenditures of a Reduction in Poverty - Canada and Windsor-Essex County, 2011**

Income quintiles (each quintile contains 20% of all individuals)	(1) Share of total public health expenditures by quintiles	Total public health expenditures distributed as per percentage shares in column (1)	
		(2) Estimated distribution of \$200,100 million for all of Canada in 2011	(3) Estimated distribution of \$2,141 million for Windsor-Essex County in 2011
1 (poorest 20%)	30.9%	\$61,800	\$660
2	24.2%	\$48,400	\$520
3 (middle 20%)	16.2%	\$32,400	\$350
4	14.1%	\$28,200	\$300
5 (richest 20%)	14.6%	\$29,200	\$310
<b>Estimated reduction in total public health expenditures depending on the degree of reduction in poverty</b>			
If first quintile spending were reduced to second quintile spending		\$13,400 million (from \$61,800 million to \$48,400 million)  6.7% of total Canadian health care spending	\$140 million (from \$660 million to \$520 million)  6.7% of total health care spending in Windsor-Essex

Source: Author's estimates based on Laurie, 2008, Ivanova, 2010 and CIHI, 2011

## CALCULATING THE COSTS—CRIME

Living in poverty is also indicated to increase the incidence of criminal activity. Literacy is a strong indicator of criminal involvement. Incarcerated individuals tend to have lower literacy levels than the general population. Because people who live in poverty tend to fare poorer in school, which leads to lower literacy levels, the link between literacy and crime can be assumed.

While a causal relationship is very difficult to prove, Laurie (2008) developed a model that considers income, literacy and crime.

Table 2 below shows the link between income and literacy in Canada, based on the International Adult Literacy survey (2003). Laurie (2008) used this data to estimate the cost savings of raising those in the lowest income quintile to the literacy levels of those in the second income quintile. It is estimated that this would result in a four per cent decrease in the total cost of crime.

This figure is then applied to the total cost of crime in Windsor-Essex County. The data for the cost of crime is identified in a 2011 report by Zhang, utilizing 2008 crime data, the most recent report of its type available. In order to determine the cost of crime in Windsor-Essex County, the proportion of crimes in Windsor-Essex County in 2008 (0.8 per cent) was applied to the full cost of crime in Canada. Four per cent of that cost, as described by Laurie (2008) can be reasonably attributed to poverty.

In Windsor-Essex County, the cost of crime attributable to poverty is \$5.57 million in costs to government, and an additional \$26.27 million in costs to society at large. Therefore, raising the income of people in the lowest quintile to those in the second quintile could result in a cost savings of \$31.87 million annually.

**Table 2: Joint Distribution of Literacy and Income in Canada**

Literacy quintile	Income quintile				
	1 (poorest 20%)	2	3 (middle 20%)	4	5 (richest 20%)
1 (least literate 20%)	8.3	5.8	3.4	1.6	0.8
2	4.4	5.3	4.4	3.4	2.4
3 (middle 20%)	2.5	3.9	4.8	4.9	4.0
4	1.9	3.2	4.4	5.2	5.4
5 (most literate 20%)	1.3	2.4	4.2	4.9	7.4

Source: Laurie (2008)

People with low literacy levels tend to be more likely to be involved in criminal activity. The link between income and literacy is well-established.

**Table 3: Total Costs of Crime and Share of Costs Attributable to Poverty, 2008**

	Cost of crime in Canada (millions)	Cost of crime in Windsor (millions)	Cost of crime attributable to poverty in Windsor (millions)
Costs to government (policing, criminal justice system, health care for victims, victim services)	\$17,450	\$139.60	\$5.58
Costs to society at large (stolen and damaged property, lost productivity, pain and suffering, loss of life)	\$82,150	\$657.20	\$26.29
<b>Total costs</b>	<b>\$99,600</b>	<b>\$796.80</b>	<b>\$31.87</b>

Source: Zhang (2011) and author’s calculations based on Ivanova (2010)

## CALCULATING THE COST—INTERGENERATIONAL

One of the long-term effects of poverty is intergenerational poverty, also referred to as the cycle of poverty. The outcomes related to education, health and lower lifetime earnings can contribute to lifelong and intergenerational poverty (Dahl and DeLeire, 2008). Children are particularly susceptible to these impacts and poverty in early childhood can continue to affect a child throughout her life (Duncan et al., 1998, Juel, 1988). Worse educational outcomes can reduce earning potential throughout a person's life.

With 18-24% of children in Windsor-Essex County living in low-income households, this problem is particularly relevant. The likelihood of all of those children moving out of poverty is low. US studies indicate that children have a 40-60 per cent chance of moving out of the cycle of poverty. This report uses a more conservative estimate of 20 to 25 per cent, which is consistent with other Canadian studies.

In order to determine the intergenerational cost of poverty, we consider the assumption that 20 to 25 per cent of children growing up in poverty will continue to live in poverty as adults. 18,970 children under eighteen live in poverty in Windsor-Essex County. 20% of that is 3,794 and 25% is 4,743. Table 4 details

the average Canadian before- and after-tax income for households age 16-64 in 2010. The table shows the estimated impact of 20-25 per cent of the children currently living in poverty remaining poor as adults.

Based on data from 2010, the cost to society for intergenerational poverty is between \$45.5 million and \$56.9 million. The cost to government, through lost income taxes, is between \$6.1 million and \$7.6 million. This results in a total cost of between \$51.6 million and \$64.5 million.

**Approximately 4,000 children who live in poverty today will not escape the cycle of poverty as adults.**

**Table 4: Cost of Intergenerational Poverty, 2010**

	Average household income before income taxes	Average household income after income taxes	Average household taxes paid
<b>Average incomes for households aged 16-64 in Canada, 2010</b>			
1 (poorest 20%)	\$16,900	\$16,000	\$900
2	\$30,500	\$28,000	\$2,500
3 (middle 20%)	\$44,900	\$38,500	\$6,400
4	\$63,400	\$50,600	\$12,800
5 (richest 20%)	\$122,300	\$85,500	\$36,800
<b>Estimated costs of children growing up in poverty remaining poor as adults (millions)</b>			
3,794 children	\$51.6	\$45.5	\$6.1
4,743 children	\$64.5	\$56.9	\$7.6

Source: Based on Statistics Canada Income in Canada, 2008 and Laurie (2008)

## CALCULATING THE COSTS—PRODUCTIVITY

The opportunity cost of lost productivity is a result of lower annual earnings. It is related to lower education levels and lower earning potential as a result of living in poverty.

In Windsor-Essex County, a higher proportion of people have high school education as their highest education level than the provincial average. This means that fewer people go on to post-secondary education, particularly university. Lower education levels can result in lower income potential over time.

This element uses the income quintile data to determine the lost productivity associated with poverty. The lost productivity is calculated considering the cost to society related to lower annual wages, and the cost to government related to lost tax revenue.

The table below presents two scenarios: if the households living in low-income had income increased to the second quintile level, and if the lowest quintile incomes were increased to the second quintile incomes. The total number of households in low-income was calculated using the total number of households divided by the percentage of low-income in Windsor-Essex County.

As Table 5 shows, lost productivity results in \$208.1 million to \$346.6 million in costs to society (lower annual wages), and \$27.7 million to \$46.2 million in costs to government (lost annual tax revenue). In total, this reflects a cost between \$235.8 million and \$392.8 million.

**Table 5: Opportunity Costs of Poverty**

	Average household income before income taxes	Average household income after income taxes	Average household taxes paid
<b>Households classified as being in low income (poverty) based on Canada 2010</b>			
Low-Income Measure	\$22,160	\$19,460	\$2,700
<b>Average incomes for households aged 16-64 based on Canada 2010</b>			
1 (poorest 20%)	\$16,900	\$16,000	\$900
2	\$30,500	\$28,000	\$2,500
3 (middle 20%)	\$44,900	\$38,500	\$6,400
4	\$63,400	\$50,600	\$12,800
5 (richest 20%)	\$122,300	\$85,500	\$36,800
<b>If low-income households were raised to second quintile levels (millions)</b>			
Total increase	\$235.8	\$208.1	\$27.7
<b>If bottom quintile increased to second quintile levels (millions)</b>			
Total increase	\$392.8	\$346.6	\$46.2

Source: Based on Statistics Canada Income in Canada, 2008 and Laurie (2008)



## SUMMARY

This report estimates the economic cost of poverty in Windsor-Essex County. As poverty, particularly child poverty, continues to increase in our community, it is imperative that steps be taken to raise people out of poverty. Table six shows the total cost of poverty, based on health care costs, crime, intergenerational poverty and lost productivity.

The table separates the costs into 'costs to society' and 'costs to government'. Costs to society include the private costs that individuals and communities face. These include lower earnings and effects of criminal activity. The costs to government represent direct costs to fund additional

services (e.g. health care, crime) to people who live in poverty and lost tax revenue.

Based on these calculations, the total cost of poverty in Windsor-Essex County is between \$459 million and \$629 million annually. This is proportionally consistent with previous reports for other jurisdictions.

As you can see, in the long-term, maintaining the current poverty levels in Windsor-Essex County would be very expensive. The following section outlines some of the activities that are happening in Windsor-Essex County to reduce poverty.

**Table 6: The Costs to Society and Government of Poverty in Windsor-Essex County**

**With a conservative estimate, poverty costs a total of over \$450 million dollars per year in Windsor-Essex County.**

	Costs to Society (millions)	Costs to Government (millions)
Health Care		\$140
Crime	\$26.3	\$5.6
Intergenerational	\$45.5 - \$56.9	\$6.1 - \$7.6
Productivity	\$208.1 - \$346.6	\$27.7 - \$46.2
Total	\$279.9 - \$429.8	\$179.4 - \$199.4
<b>Total cost of poverty</b>	<b>\$459 million - \$629 million</b>	

## REDUCING POVERTY

Strategic, targeted investments by governments and charities are needed to reduce the external costs associated with poverty in Windsor-Essex County. There are many groups working on addressing the issue of poverty locally, provincially and nationally.

United Ways across the country are partnering with other community poverty reduction efforts to move people from poverty to possibility. Nationally, they invested over \$50 million dollars in this area alone in 2012-13.

In Windsor-Essex County, one United Way investment was a partnership with the City of Windsor in the Voluntary Trusteeship and Financial Education program. This program provides people with the support they need to manage their finances, set life goals and move toward financial independence. The Food Security Strategy is another example of partners working together to support people to meet their basic needs by increasing access to affordable, healthy food. The Food Security Strategy continues to evolve to better serve the people of Windsor-Essex County.

Locally, Pathway to Potential is the region's poverty reduction strategy. Funded by the City of Windsor and the County of Essex, and supported by United Way, P2P

brings together community members to work in the areas of: income; education and literacy; and employment and training. P2P also supports the work of other groups in the areas of housing, health, childcare and civic participation.

Other community groups, such as the Homeless Coalition of Windsor-Essex County and Food Matters Windsor-Essex County, also continue to work to reduce the impact of poverty in our community.

In Ontario, the Income Security Advocacy Centre uses law reform, public legal education and community development to address the systemic issues that create poverty in the first place. The first five years of the provincial poverty reduction strategy have seen more targeted investments to reduce the effects of poverty on Ontarians. Annual reports acknowledge the need for collective action to have a significant impact on this complex issue.

Initiatives that improve educational outcomes, such as Pathways to Education, have been proven to return \$24 for every \$1 invested. Pathways provides academic, financial and social supports to youth in low-income communities to help them stay in school and move onto post-secondary education.

Some changes, such as the City and County's 10 Year Housing and Homelessness Plan, are moving policy and government investments toward poverty reduction. This strategy was created to guide the community's investments in housing and homelessness, including the Ministry of Municipal Affairs and Housing Community Homelessness Prevention Initiative.

These types of policy shifts have the potential to reduce poverty, as well as the economic impact. High quality, cost-effective programs aimed at addressing local needs are required to reduce the economic impacts of poverty. Given those economic impacts, these programs may be supported at no net cost to government.

Increasing the income of the most vulnerable in our community would actually strengthen the economy by

reducing costs associated with poverty. We need to continue to call for collaboration between funders to strengthen the quality of investments, particularly in emerging and promising practices that are known to be effective at moving people out of poverty. As this report shows, ensuring that everyone in our community has enough to meet their basic needs will greatly benefit all of us.

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