

Community and Health Services Department Office of the Commissioner

Memorandum

To: Members of Committee of the Whole

From: Katherine Chislett

Commissioner of Community and Health Services

Date: April 6, 2017

Re: Low Income Dynamics in York Region, 2004 to 2013

Attached is the Low Income Dynamics in York Region, 2004 to 2013 research paper. This research paper is the latest study in a series about low income trends prepared by the Community and Health Services Department to better understand income trends in York Region. Previous reports include topics on low income trends (Low Income Trends in York Region, 2000 to 2012; Low Income Trends in York Region, Update 2013); inequality and polarization (Income Inequality Trends in York Region, 1997 to 2012; Income Group Trends in York Region, 1995 to 2011), and the "working poor" (Working Poor in York Region).

The analysis in this research paper is focused on low income dynamics in York Region and how it compares to the Toronto Census Metropolitan Area (CMA) and Ontario. It explores how many York Region adult residents entered and exited low income each year and how long they stayed in low income. This research uses Statistics Canada data which is based on individuals' income tracked over two year and eight year periods between 2004 and 2013. Low income status in this analysis is defined using Statistics Canada's Low Income Measure – After Tax (LIM-AT) for York Region. For example, in 2013 the LIM-AT for a single adult was \$17,371 and for a couple with two children under 16 years of age it was \$34,742. The period 2004 – 2013 was used because it was consistent with a Statistics Canada study which allowed comparison between York Region, Toronto CMA and Ontario.

Some of the report's key findings include:

- Most of York Region residents didn't experience low income during the study period
- About ten percent of York Region residents experienced low income for only a short period of time

- Approximately seven percent of York Region residents lived with low income for over six years
- The proportion of York Region residents who entered low income in the study period have remained fairly steady since 2004 and below the provincial and Toronto CMA levels
- During the same period, fewer people in York Region were able to leave their low income situation, which is consistent with the provincial and Toronto CMA trend

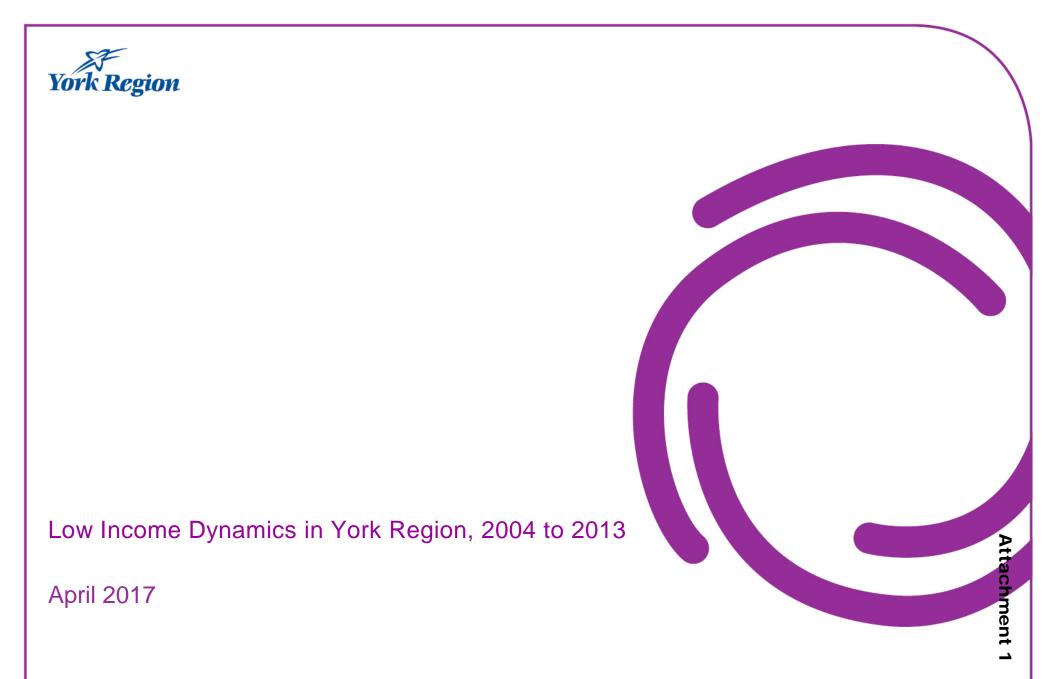
Understanding low income dynamics is important to inform departmental and corporatewide strategic and service planning. York Region residents who experience low income, for different periods of time, may require different types of regional services and supports. Types of required services and supports available to assist low income York Region residents include:

- Child care fee assistance and recreation subsidies
- Ontario Works and employment supports
- Social Housing and programs related to housing stability
- Public health services for families, youth and children
- Transit subsidy programs

Katherine Chislett
Commissioner of Community and Health Services

KC/tf

Attachment (1)



Community and Health Services

Strategies and Partnerships



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Contents

ln	troduction	3
	Understanding the data	3
Н	ow many residents enter and exit low income?	∠
	Low income entry rates	4
	Low income exit rates	5
Н	ow long do residents stay in low income?	6
	Most York Region residents did not experience low income	6
	Most residents who live with low income experience it for only one or two years	7
	A smaller group of residents experience low income for three to five years	
	Longer-term low income is a reality for some residents	8
	Comparing panels draws attention to persistent low income	8
Ρ	olicy Implications	9
	Regional government has an important supplementary role in responding to low income dynamics through a mix of strategies	s.9
	A vibrant regional job market is important in sustaining income mobility out of low income	
	Prevention is also important to help residents deal with short-term challenges	.10
	Residents who face re-occurring periods of low income benefit from labour market supports, workforce development and social inclusion	al

Persistent low income requires targeted wraparou helps with life stabilization and longer-term transiti	
employment	10
Conclusion	11
Appendix	12
List of Sources	13



Introduction

This report is a latest study in a series prepared by the Community and Health Services Department to better understand income trends in York Region. Previous reports have included topics on low income trends (<u>Low Income Trends in York Region, 2000 to 2012</u>; <u>Low Income Trends in York Region, Update 2013</u>); inequality and polarization (<u>Income Inequality Trends in York Region, 1997 to 2012</u>; <u>Income Group Trends in York Region, 1995 to 2011</u>), and the "working poor" (<u>Working Poor in York Region</u>).

This report focuses on low income dynamics – individuals entering low income and staying in it over a period of time.

This approach is important to Regional service planning. Residents who are low income for only a short period likely have different needs than residents who are persistently living in low income and struggling with the effects of having inadequate income – for example, poorer health, food insecurity and fewer resources to pay for their children's activities.

While most income-related policies are provincial and federal responsibilities, Regional government has an important supplementary role. Understanding low income dynamics will help assess if Regional government has the right mix of strategies to meet varying needs among York Region's residents living with low income where it has the responsibility or interest to act.

Understanding the data

The data used to analyze low income dynamics is longitudinal¹, which means that it tracks the low income status of the same individuals over a specific time period. The Community and Health Services Department ordered a custom tabulation of longitudinal data for York Region to undertake two levels of analysis:

- How many York Region residents enter and exit low income each year?
- How long do residents stay in low income over time?

Longitudinal data is different than "cross-sectional data" used in previous reports on low income, which tell us how many York Region residents are living in low income in any given year. While important in showing year-to-year pressures on Community and Health Services programs that are incomerelated, cross-sectional data does not tell us the "dynamic" part of the story.

The source of data used in this report is Statistics Canada's Longitudinal Administrative Databank (LAD). LAD is derived from income tax filer data and organizes the tax filers' records into groups that are tracked over a period of time. These groups, or "panels", can include individuals based on a given criteria and track their income for a set period of time. The data in this report covers the period between 2004 and 2013, and



¹ Longitudinal data is a standard term used to describe repeated observations of the same variables over periods of time.

includes residents who are 18 years and older, and uses twoyear and eight-year panels.

Since the data is based on income tax filer data, the data used in this report does not include detailed information on the socioeconomic or demographic characteristics of residents.

Low income status in this analysis is defined by the Low Income Measure – After Tax (LIM-AT). Statistics Canada calculates a LIM-AT in each year of the LAD.

For example, after-tax LIM for 2013 was as follows:

- Single adult \$17,371
- Couple family with no children \$24,319
- Couple family with two children under 16 years of age -\$34,742
- Lone parent with two children under 16 years of age -\$29,531
- Couple family with four children one over 16 years of age and three under 16 years of age - \$46,902

Calculated from: Statistics Canada, Annual Income Estimates for Census Families and Individuals (T1 Family File) Family Data

More details on LAD, LAD panels, LIM-AT and important considerations in interpreting LAD data are included in Appendix A.

How many residents enter and exit low income?

These rates are important because they tell us about income mobility in York Region – in other words, is it getting harder or easier to move in and out of low income over time? This

information provides a high-level view of the extent to which York Region residents have been able to use their skills and education, find and keep jobs or access important supports to improve their income status.

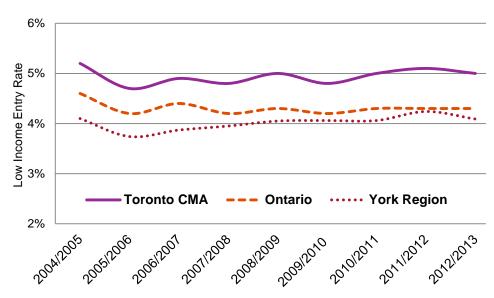
Low income entry rates

The low income entry rate is the number of individuals who enter low income in a given year as a percentage of residents who were not in low income the year before. It is calculated using a two year panel – a person is counted as entering low income if they were not in low income in the first year of the panel and entered low income in the second year of the panel.

As Chart 1 shows, of York Region residents who were not in low income in 2012, 4.1 percent moved into low income in 2013. The percent of residents entering low income has been fairly steady between 2004 and 2013, decreasing to 3.7 percent during 2005/2006 and peaking at 4.2 percent during 2011/2012.



Chart 1
Percent Entering Low Income, 2004/05 to 2012/13



Source: Statistics Canada, Longitudinal Administrative Databank, 2004 to 2013

As Chart 1 also shows, low income entry rates have tended to be lower in York Region compared to the overall rates in Ontario and the Toronto Census Metropolitan Area (CMA).² These

trends likely reflect York Region's relative affluence within the Toronto CMA.

Low income exit rates

The low income exit rate is the number of low income individuals that exit low income in a given year. It is expressed as a percentage of the population living in low income. Similar to low income entry rates, the exit rate is calculated using a two year panel of residents — a person is counted as exiting low income if they were in low income during the first year of the panel and left low income the second year of the panel. Since the exit rate reflects a share of the low-income population, it is higher than the entry rate.

As Chart 2 shows, York Region's low income exit rate generally declined over time, meaning that fewer people were able to leave their low income situation. In 2004/2005, the low income exit rate was 27.1 percent in York Region. By 2012/2013, this had declined to 24.7 percent.

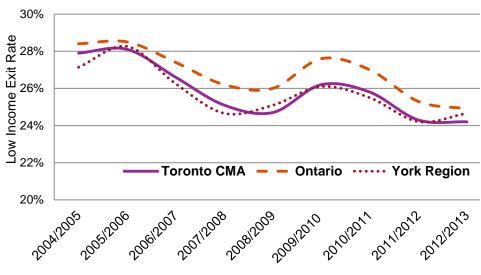
The 2008 recession likely had an impact, with fewer residents able to exit low income during 2007/2008 and 2008/2009. ³ This improved with the recovery but declined again during 2010/2011 and following years.



² York Region is part of the Toronto CMA. As a result, the trends in low income dynamics for both York Region and the Toronto CMA reflect the **relative** differences and similarities between York Region residents and residents living in the adjoining areas of the Toronto CMA – the City of Toronto, Peel Region and parts of Halton Region, Durham Region, Dufferin County and Simcoe County.

³ For more on effects of the 2008 recession on low income entry and exit rates, see Fang, T. and M. Gunderson (2016). "Poverty Dynamics among Vulnerable Groups in Canada" in *Income Inequality: The Canadian Story*. Edited by D. Green, W. Craig Riddell and F. St-Hilaire. The Institute for Research on Public Policy: 183-191.

Chart 2
Percent Exiting Low Income, 2004/05 to 2012/13



Source: Statistics Canada, Longitudinal Administrative Databank, 2004 to 2013

Similar to York Region, the low income exit rate declined in Ontario and the Toronto CMA between 2004 and 2013. The fact that York Region closely follows the Toronto CMA trend likely reflects broader socio-economic patterns in the Greater Toronto Area (GTA). For example, analysis of low income dynamics in Canada has shown that newcomers, lone parents, single older adults and people with disabilities are less likely to exit low income compared to other groups. ⁴ These groups make up a

growing share of the population across the Toronto CMA as well as in York Region, and could help explain the relative income challenges individuals within these groups face in exiting low income.

How long do residents stay in low income?

This section examines how long people stay in low income by tracking a panel of York Region residents over an eight year period (2006 to 2013) and counting how many years they are living in low income. This analysis allows us to understand the extent to which York Region residents are experiencing short-term vs. longer-term low income.

Most York Region residents did not experience low income

As Table 1 shows, about 76 percent of York Region residents did not experience any years in low income. This is consistent with Ontario and Toronto CMA, although York Region rates are relatively higher (73.3 percent Ontario and 69.7 percent Toronto CMA).

empirical evidence for Canada", Canadian Journal of Economics/Revue canadienne d'Economique, V. 36, No. 2: 309-311.



⁴ Fang and Gunderson, "Poverty Dynamics among Vulnerable Groups in Canada": 187-195; Finnie, R. and A. Sweetman (2003). "Poverty dynamics:

Table 1

York Region Residents by Number of Years Spent in Low Income, 2006 to 2013*

	Number of Residents	Percent of Residents
No years in low income	353,095	76.3%
1-2 years (transitory)	47,090	10.2%
3 - 5 years (re-occurring)	30,685	6.7%
6 years or longer (persistent)	32,120	6.9%

Source: Statistics Canada, Longitudinal Administrative Databank, 2006 to 2013 *Note: numbers and percents are based on 8-year panels, as described in the introduction.

Most residents who live with low income experience it for only one or two years

Table 1 shows that about 10 percent of York Region residents experienced low income for only one or two years between 2006 and 2013. This could be called **transitory low income** and is typical for residents who may be entering the labour market for their first jobs but quickly move up the earnings ladder, such as young adults leaving post-secondary education or higher-skilled newcomers who are able to find relevant work soon after arriving.

Residents in transitory low income could also be experiencing short-term job disruptions or changes, such as caring for a new

child or short-term lay-offs. In addition, it could also reflect people who move from being single to a couple, which usually reduces low income risk by adding another earner to the family.⁵

A smaller group of residents experience low income for three to five years

Between 2006 and 2013 (Table 1), 6.7 percent of all York Region residents experienced **re-occurring low income** (three to five years of low income).⁶

Although the data does not provide detailed information on the socio-economic or demographic characteristics of residents, we know factors that have an impact on experiencing re-occurring low income include:

- Labour markets that result in either fluctuations in earnings (e.g. the time between contracts or assignments) or residents who are finding it difficult to advance in the labour market
- Students in post-secondary education or training, where incomes are typically low if they are living on their own



⁵ Fang and Gunderson, "Poverty Dynamics among Vulnerable Groups in Canada": 186-187; Finnie and Sweetman, "Poverty dynamics: empirical evidence for Canada": 301-307; Feng, Y., S. Dubey and B. Brooks (2007). *Persistence of Low Income Among Non-elderly Unattached Individuals*. Statistics Canada, Income Research paper Series Catalogue no. 75F002MIE – No. 005: 13-14; Ren. Z. and K. Xu (2011). *Low Income Dynamics and Determinants under Different Thresholds: New Findings for Canada in 2000 and Beyond*. Statistics Canada, Income Research Paper Series. Catalogue no. 75F0002M - No. 003: 20-29.

⁶ The data in this report does not provide information on whether the years in low income are consecutive or not. We therefore use the term "re-occurring" to mean that the years could be either consecutive or in multiple periods.

Re-occurring low income can also be a result of significant life events, such as:

- An injury or sickness that leads to more chronic conditions that limit work over a period of time
- Older workers facing job loss can find it difficult to get new jobs, particularly if their education or training is outdated and they are single
- Family breakdowns or a death of a spouse often reduces the resources available to make ends meet

The underlying concern is that regardless of the trigger point into low income, people who are experiencing re-occurring low income are also at risk of staying in low income more persistently. In fact, the experience of having been in low income for multiple and recent time periods can be a predictor of being in low income in the future.

Longer-term low income is a reality for some residents

For the analysis in this report, a resident is considered living in **persistent low income** if they experienced low income for six or more years. As Table 1 shows, about 7 percent of residents experienced persistent low income between 2006 and 2013.

Research using Canada-wide data suggests that socioeconomic and demographic groups most likely to experience persistent low income include single older adults, lone parents and people with disabilities. Newcomers and indigenous peoples are also at risk, but not to the same extent as these other groups. Other risk factors related to living in persistent low income include having less education, poorer health and greater life stress. Residents at the highest risk are those who have multiple barriers. These barriers are often compounded by broader systemic and labour market issues, such as discrimination, credential recognition, dependence on social assistance, lack of access to critical social supports or uneven enforcement of basic employment standards. ⁸

Comparing panels draws attention to persistent low income

Longitudinal data also allows over-time comparisons of the transitory, re-occurring and persistent groups within the low income population of York Region. The comparison of three consecutive eight-year panels (2004-2011, 2005-2012 and 2006-2013)⁹ demonstrated that the relative proportion of the persistent low income group slightly increases over time (chart 3). This is a trend that needs to be monitored and studied in the future.

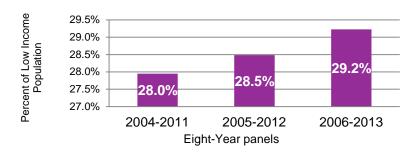


⁷ Finnie and Sweetman, "Poverty dynamics: empirical evidence for Canada": 312-317.

⁸For more on persistent low income and the factors impacting on it, see: Murphy, B., X. Zhang and C. Dionne (2012). *Low Income in Canada: a Multi-line and Multi-index Perspective*. Statistics Canada, Income Research Paper Series Catalogue no. 75F0002M – No. 001: 68-86; Fang and Gunderson, "Poverty Dynamics among Vulnerable Groups in Canada": 186-193, 195-197; Feng, Dubey and Brooks, "Persistence of Low Income Among Non-elderly Unattached Individuals": 22-23; and Ren and Xu (2011). *Low Income Dynamics and Determinants under Different Thresholds: New Findings for Canada in 2000 and Beyond*: 26-27.

⁹ An eight-year panel includes all residents who were at least 18 years old in the first year and stayed in York Region for the entire duration. To account for new taxfilers in York Region, tracking of a new panel is started each year. Therefore, many taxfilers are tracked in multiple panels.

Chart 3
Proportion of Persistent Low Income (6 years or more) to
Low Income Population in York Region



Source: Statistics Canada, LAD, 2004-2011, 2005-2012, 2006-2013 panels.

Policy Implications

Regional government has an important supplementary role in responding to low income dynamics through a mix of strategies

York Region has generally experienced similar trends in low income dynamics since 2004 as the broader GTA and Ontario, although relatively fewer York Region residents live in persistent low income and fewer enter low income each year. ¹⁰ This likely

¹⁰The percent of residents in the Toronto CMA and Ontario that experienced persistent low income between 2006 and 2013 was 9.8% and 7.8% respectively, compared to 6.9% in York Region. Overall, York Region had lower percentages in all low income categories and a higher percentage of residents who never experienced low income compared to the Toronto CMA and Ontario.

reflects York Region's relative affluence, economic vibrancy and the ability of many York Region residents to find good employment throughout the GTA labour market.

Evidence shows there are still concerns. Income mobility out of low income may be decreasing. In addition, residents experiencing multiple or longer-term periods of income falling under the low income threshold are likely also facing social exclusion, poorer health and housing affordability and labour market challenges.

Like many income related issues, most of the policy tools to address low income dynamics rest at the provincial and federal level. However, Regional government has an important supplementary role that has already and will continue to help residents move out of low income and better manage when they are experiencing low income for longer periods of time. This is accomplished through developing a mix of approaches that respond to varying levels or intensity of support.

A vibrant regional job market is important in sustaining income mobility out of low income

Strategies that foster a robust regional economy and jobs that offer income growth are essential in continuing to keep residents from experiencing low income in the first place. A strong economy also helps keep low income as a "transitory" experience for most by providing opportunities to quickly progress in the labour market and exit low income.



Prevention is also important to help residents deal with short-term challenges

Current programs that help prevent people from falling into financial distress when they face short-term challenges, like when sick or losing a job, are important to deal with transitory low income. These programs include short-term rent or housing cost assistance. Given that transitory low income is the most common experience for residents who are living in low income, investing in these programs is a cost-effective approach to reducing the need for longer-term supports.

Residents who face re-occurring periods of low income benefit from labour market supports, workforce development and social inclusion

Residents who face re-occurring low income require support in helping manage the ups and downs that are likely impacting on their low income status, such as more uncertain work arrangements, contract work or self-employment. While the Regional government's role in work supplements is limited, York Region's child care fee assistance is critical in helping parents sustain themselves in the labour market or participate in training that helps them get better jobs. In addition, the proposed low income transit pass pilot will help lower the costs of transit for many who are "working poor" and rely on York Region Transit/Viva to get to work and community activities.

It is also important to reduce the risk of low income becoming more persistent, particularly for residents who are facing early challenges in entering and advancing in the labour market, such as youth or newcomers. Creating new pathways to help residents find better job opportunities through Community Benefits Agreements, newcomer integration strategies or targeted workforce development initiatives are options. York Region has taken strategic action through its community and municipal partnerships to explore these options through pilots or policy. These include:

- · York Region's Diversity and Inclusion Initiative
- York Region's Local Immigration Partnership Economic Integration Working Group
- York Region's Human Services Planning Board's Progressive Employment Action Plan

Persistent low income requires targeted wraparound support that helps with life stabilization and longer-term transitions to employment

Residents living in persistent low income are likely facing multiple barriers to work or have experienced a significant change in their work or capacity to work that has limited their earnings potential. For seniors who experienced these limitations, this has likely led to some level of persistent low income. The policy issue is how to either increase their income or reduce their everyday living costs. Since income security for seniors is mostly a federal and provincial responsibility, Regional policy is limited to considering factors like an ability to pay for various services or tax obligations, as highlighted in York Region's Seniors Strategy.

The bigger issue is likely persistent low income for working-age adults. Arguably many income-related Regional programs are directed to this group, such as longer-term housing assistance,



Ontario Works, housing stability programs and recreation subsidies and public health services for families, youth and children. Many of these programs include providing wraparound support, so the services are responsive to a resident's individual or family needs and help people make longer-term changes to improve their well-being and find and keep work.

The Community and Health Services Department is also exploring even more ways to improve the delivery of wraparound support to respond to the complex needs of residents living in persistent low income. This includes the new emergency housing and transitional facilities for at-risk or homeless women and youth, which link the need for immediate housing with building resiliency and life skills. The department is also working to re-focus the Ontario Works delivery model to enable case workers to spend less time on benefits administration and more time on helping clients build their skills and overcome barriers to employment. The goal is to improve client outcomes and income potential over time – whether this is through improved labour market participation or transitioning to more appropriate income programs, such as ODSP for persons with long-term disabilities.

Conclusion

In summary, it is important that Regional policy and service planning is sensitive to low income dynamics. Residents experience low income for different periods of time and have different needs. A mix of short-term support and more sustained interventions are needed to help residents facing low income to improve the income potential and make ends meet.

At the same time, broader strategies that work with key partners to create more and better jobs, support self-employment and foster entrepreneurs are also critically important so residents can avoid low income periods or face only transitory periods of low income, as they enter the labour market or make transitions to other jobs.

For all inquiries and questions regarding this information, its dissemination and use, please contact CHSDataandPolicy@york.ca. Accessible formats or communication supports are available upon request.



Appendix

Data Source:

The data used in this report is Longitudinal Administrative Databank (LAD). The LAD is a 20 percent representative sample of Canadian tax filers and is constructed by Statistics Canada from the annual release of the T1 Family File (T1FF) and other administrative sources. The T1FF is received from the Canada Revenue Agency (CRA) one year after the end of the income reference period.

The LAD has a very good coverage of the adult population since the rate of tax filing in Canada is very high and low income families have strong incentives to file taxes in order to receive various tax credits (e.g. FST, GST, OAS). As a 20 percent sample file from T1FF, the LAD file is larger than most survey files available in Canada.

Individuals are randomly selected into the LAD at a 20 percent rate and are then followed over time. Individuals can be linked year to year starting with 1982 data.

This report focuses on the low-income dynamics and low income persistence of individuals whose after-tax family income fell below specified low income threshold at least once during the sample period. The low income measure (LIM) is used to identify low income threshold, which is calculated annually as half of the median of the adjusted income of all tax filers and their family members.

After-tax LIM for 2013 was as follows:

- Single adult \$17,371
- Couple family with no children \$24,319
- Couple family with two children under 16 years of age -\$34,742
- Lone parent with two children under 16 years of age -\$29,531
- Couple family with four children one over 16 years of age and three under 16 years of age - \$46,902

Calculated from: Statistics Canada, Annual Income Estimates for Census Families and Individuals (T1 Family File) Family Data

Adjusted family income assumes that there are a certain economies of scale derived from living together in families. Census family is the only family unit available in the LAD.

Low Income Dynamics: Entry and Exit Rates

For the purpose of this report low income dynamics are analyzed as a flow of people in and out of low income during two successive years.

The low income entry rate is the proportion of individuals who entered low income in the second year as a percentage of all people who were not in low income the first year. The entry rate is calculated by counting the number of tax filers who have both an income above the low-income line in a first year and an income below the low income line the second year. This count is then divided by the number of tax filers who were not in low income in the first year.

The low income exit rate is based on the number of low income individuals in a given year that left low income the following



year. The exit rate is calculated by first counting the number of tax filers who have both an income below the low-income line in a first year and an income above the low-income line the second year. This count is then divided by the number of tax filers who were in low income in the first year.

Since it is expressed as a share of only low-income tax filers, the exit rate is higher than the entry rate.

Low Income Persistence

To measure the persistence of low income it is important to have data following the same people over time. The LAD sample used in this report followed the same individuals during three eight-year periods (2004-2011, 2005-2012 and 2006-2013).

Due to the longitudinal nature of this study, where an individual must stay in York Region during all eight years, the data coverage is lower than one observed in any single crosssectional year.

For the purpose of this report, the York Region sample was constructed to include individuals who were 18 years and over in the first year of an eight-year period. The sample was then reduced to those individuals who filed taxes in each of the years covered by this report (2004-2013), thus deleting those who left York Region or died during this period, reducing the file to 462,990 individuals. This is a representative sample of York Region's long-term residents that raises a number of interesting observations about the low income dynamics and transitions over the time span of eight years.

List of Sources

- Fang, T. and M. Gunderson (2016). "Poverty Dynamics among Vulnerable Groups in Canada" in *Income Inequality: The Canadian Story*. Edited by David Green, W. Craig Riddell and France St-Hilaire. The Institute for Research on Public Policy: 177-203.
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