



What Municipal Employment Surveys Tell Us About Recent Employment Growth in the Greater Toronto Area

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EXECUTIVE SUMMARY

The purpose of this paper is to determine how useful the employment surveys conducted by the municipalities in the Greater Toronto Area (GTA) are in portraying accurate employment and businesses trends for the entire GTA and its individual municipalities. The paper first examines employment estimates from the municipal surveys conducted between 2011-2015 then compares these estimates with those from other sources including Statistics Canada's Labour Force Survey (LFS) and 2011 National Household Survey (NHS), and Hemson Consulting employment estimates for the Greater Golden Horseshoe (Hemson). The paper then examines business counts from the municipal surveys conducted from 2011-2015 and compares them with the business counts from Statistics Canada's Canadian Business Patterns (CBP). A synopsis of the each of the municipal surveys is provided in the Appendices.

Conclusions

The review of the municipal surveys conducted between 2011 and 2015 revealed that the available data does not provide an accurate portrayal of total employment, total businesses and annual changes in employment/businesses for the entire GTA. The analysis of the employment and business data raised doubts about the reliability of the annual results published by some of the municipalities. The problems found with the data from the municipal survey were:

- Annual analysis for the region was unreliable due to its incomplete geographic and temporal coverage of the GTA;
- Volatile and irregular year-to-year variations in the data questions the reliability of the individual municipal survey results; and
- Irregularities of the businesses counts from the municipal surveys data from Statistics Canada raise doubts about the accuracy of the municipal data.

Changes to the municipal surveys are needed in order to provide annual data that accurately represents employment and business trends by individual municipality as well as for the entire GTA.

Options for the Collection of More Reliable and Complete Employment and Business Establishment Data for the GTA

Four options for data collection have been evaluated against three criteria:

- Establishment of a provincial or a single GTA body to oversee and conduct the employment surveys using a single methodology;

- Formulation of a standardized methodology which is then applied when the City of Toronto and the four 905 Regions conduct their own surveys;
- Reliance on Statistics Canada to provide employment and business establishment data based on its Canadian Business Patterns (CBP) database expanded to incorporate employment counts of individual businesses; and
- Reliance on employment and business establishment data now collected and distributed by a third party source such as Info Canada.

Recommendations

The option having the potential to be the most cost effective and providing the most accurate employment and business establishment information for individual municipalities and for the GTA as a whole is the option is having Statistics Canada provide the information based on its current CBP database expanded to include exact employment counts for businesses rather than ranges of employment as at present.

In the event it is not possible to reach agreement with Statistics Canada for an expansion to its CBP database information, a single body, whether in the provincial government or supported by the GTA municipalities, should be mandated and funded to conduct an annual employment survey covering all municipalities in the GTA.

1.0 INTRODUCTION¹

The purpose of this report is to determine how useful the employment surveys conducted by the municipalities in the Greater Toronto Area (GTA) are for pinpointing employment and trends in the number of employers (also called businesses, establishments, or business establishments) in the entire GTA as well as in individual regions or municipalities. The time period investigated encompasses five years from 2011-2016.

Municipal land-use planners, economic development personnel, economists, and other interested parties rely largely on the quinquennial Census of Canada for obtaining data on employment by location and industry at the municipal and sub-municipal levels. Limitations of the census data include that they are available only every five years. While Statistics Canada prepares annual post-censal population estimates for regional and single-tier municipalities within the GTA, there are no comparable employment estimates available.

To fill this important data gap many municipalities in the GTA, and elsewhere in the Greater Golden Horseshoe, now conduct annual surveys of employers (businesses) to collect employment and ancillary types of information. Many of these surveys are of recent origin though the City of Toronto's municipal survey started in 1983.

The employment information collected in the municipal surveys is comprised mainly of employees of businesses with a “fixed place of work” – the largest segment of employees in the municipalities of the GTA. Largely excluded, however, are employees with “no fixed place of work” (e.g., taxi drivers, truck drivers, landscaping personnel) and employees of “home-based” businesses.

This paper compares data provided by business establishments in the employment surveys. One challenge in making these comparisons are the differing terminologies used to define the various types of businesses. “Employment in business establishments” is a comparable term used in the municipal surveys to what Statistics Canada calls employment by “usual place of work” in its national census. Employees in home-based businesses and those with no fixed place of work from the municipal survey are excluded from this analysis.

The employee and business counts from the municipal surveys are compared to estimates from other sources including Statistics Canada's Labour Force Survey (LFS) and Canadian Business Patterns (CBP) database, and estimates made by Hemson Consulting in its forecasts for the Greater Golden Horseshoe (Hemson).

¹ This report was authored by Justin Shin, BURPI, Researcher, CUR, under the supervision of Dr. Frank Clayton, Senior Research Fellow, CUR. A draft of the report was peer reviewed by Professor Steven Webber. The views expressed are those of the author only and do not represent opinions and views of CUR, Ryerson University or the peer reviewer.

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The paper first presents the employee count analyses followed by the business count analyses. Conclusions and recommendations are presented in the final section. A synopsis of each of the municipal surveys is provided in the appendices.

2.0 MUNICIPAL EMPLOYMENT SURVEYS, 2011-2015

2.1 Overview of Municipal Surveys

Figure 1 provides a comparative description of the surveys examined for this paper. There is at least partial employment information for all municipalities within the GTA during the period from 2011 to 2015 with the exception of the Town of Caledon which is initiating a survey in 2016.

Figure 1:
Summary Employment Surveys Comparison, GTA

Municipality	Start Year	Comparable Years	Collection Period	Surveyed Categories
Halton Region	2010	2011-2014	Annually	<ul style="list-style-type: none"> • Business establishments • Agricultural businesses (from 2013) • Home-based businesses
Durham Region	2012	2013-2015	Annually	<ul style="list-style-type: none"> • Business establishments • Agricultural businesses (from 2013)
City of Mississauga	2001 - current methodology	2001-2015	Annually	<ul style="list-style-type: none"> • Business establishments • Agricultural businesses • Home-based businesses
City of Brampton	2001 - current methodology	2001–2015	Biennially – every odd year	<ul style="list-style-type: none"> • Business establishments • Agricultural businesses
York Region	1998	2007-2015	Annually	<ul style="list-style-type: none"> • Business establishments • Agricultural businesses (from 2014)
City of Toronto	1983	1983-2015	Annually	<ul style="list-style-type: none"> • Business establishments

Source: Appendices A-F

Three of the four 905 regions in the GTA and the City of Toronto undertake comprehensive employment surveys to gather business and employment data. The exception is Peel Region where surveys are conducted by two of its three local municipalities. The majority of municipalities, with the exception of Peel Region, use a similar methodology to collect employment data:

- The municipalities mostly use student interviewers to conduct face-to-face interviews with businesses;
- If interviews are not possible, a copy of the survey form is dropped off at the business location to be completed and returned; and
- Respondents also have the option of completing the survey via telephone interview, email or online.

The surveys have a high participation rate with only 2-10 per cent of firms contacted declining to provide information.

Interviews with municipal staff in Durham Region revealed that the municipal survey started in 2012 when an initial database was created, however, there were errors with the original information which may cause irregularities when comparing the 2012 data with that of subsequent years.

The lower-tier municipalities in Peel Region use a slightly different methodology in collecting their employment and business data. Although the City of Mississauga deploys a team of interviewers to businesses, they only collect information on the business name, contact information and location. After this data is collected, a third party is used to conduct telephone interviews to collect employment and businesses data. These interviews are conducted for only half of the city on an annual basis with the other half being contacted the following year. The City also mails out surveys to businesses located in residential districts to collect more detailed information. The City of Brampton uses the same methodology as the rest of the GTA; however, the City is the only municipality in the region that conducts their employment survey every two years. Although the data is collected every other year, the City sends interviewers throughout Brampton to gather information from businesses that are new or have changed locations on an annual basis.

The municipalities within the GTA all use their internal building permit database and/or third party data sources to identify new businesses to survey. In instances where employment data was not obtained, all the municipalities used the data from the previous year if an entry for the previous year existed. In cases where there was no data for the previous year, most municipalities left the entry blank while York Region and the City of Mississauga use an adjustment factor to estimate the number of jobs for the business.

Collecting data from agricultural or farmed-based businesses has proved to be a challenge within the GTA. In Halton and Durham Regions, interviewers are sent out to rural areas to identify farms by their OFA (Ontario Federation of Agriculture) or CFA (Canadian Federation of Agriculture) signs which are located at the entrance of their properties and collects data through face-to-face interviews. York Region uses two methods to collect data from agricultural businesses. Prior to 2014, the Region used data from the Census of Agriculture to provide

information on farm-based businesses in the region. Then, in 2014, the region began to gather data directly from farms through its first agricultural survey; however, the participation rates were low as only 9 per cent of firms that were contacted participated in the survey.

Municipalities encounter difficulties in collecting data from businesses whose employees have no fixed place of work, and from home-based businesses. Halton Region asks businesses during its survey collection if they have any off-site employees. York and Durham Regions have an online survey where businesses can provide this information. Both of these methods only manage to capture data from a small portion of businesses whose employees have no fixed place of work or are home-based business employment. In order to account for home-based businesses in their total business counts, the City of Mississauga publishes the number of businesses obtained from the survey and the estimated number of home-based businesses using data from the Canadian Business Patterns (CBP) database.

After collecting the employment and business data each municipality publishes an employment survey report. The information published in all the reports includes: the number of jobs and businesses, and number of jobs by employment type at the regional and local level. When reporting the number of jobs counted from the survey, the majority of municipalities in the GTA included the total number of full-time, part-time and contract/seasonal jobs as a part of these figures. However in Mississauga, the City assumes that two part-time jobs are equivalent to one full-time job when reporting on the employment totals.

The appendices provide further information on each of the municipal surveys.

2.2 GTA Employment and Employment Growth, 2011-2015

Figure 2 shows the levels of employment and changes in employment by year within the GTA, according to the municipal employment surveys.

Figure 2:
Municipal Survey Employment in the GTA, 2011-2015

	Total Employment (Jobs)				
	2011	2012	2013	2014	2015
City of Toronto	1,317,300	1,331,600	1,363,550	1,384,390	1,422,280
Durham Region	N/A	125,274	155,894	170,148	177,563
York Region	459,060	472,400	494,320	511,600	524,700
Halton Region	176,043	189,042	209,979	218,257	220,026
Peel Region:					
Mississauga	386,125	383,670	387,355	393,020	398,170
Brampton	152,577	N/A	154,122	N/A	150,584
Subtotal - Peel*	538,702	N/A	541,477	N/A	548,754
Total: GTA - excluding Brampton, Caledon and Durham	2,338,528	2,376,712	2,455,204	2,507,267	2,565,176
Total: GTA - excluding Brampton and Caledon	N/A	2,501,986	2,611,098	2,677,415	2,742,739
Total: GTA - excluding Caledon	N/A	N/A	2,765,220	N/A	2,893,323
	Annual Change in Employment (Jobs)				
	2012	2013	2014	2015	Average Annual Change
City of Toronto	14,300	31,950	20,840	37,890	26,245**
Durham Region	N/A	30,620	14,254	7,415	17,430***
York Region	13,340	21,920	17,280	13,100	16,410**
Halton Region	12,999	20,937	8,278	1,769	10,996**
Peel Region:					
Mississauga	(2,455)	3,685	5,665	5,150	3,011**
Brampton	N/A	N/A	N/A	N/A	(498)**
Subtotal - Peel*	N/A	N/A	N/A	N/A	2,513**
Total: GTA - excluding Brampton, Caledon and Durham	38,184	78,492	52,063	57,909	56,662**
Total: GTA - excluding Brampton and Caledon	N/A	109,112	66,317	65,324	80,251***
Total: GTA - excluding Caledon	N/A	N/A	N/A	N/A	64,052****

*Excluding Caledon

**2012-2015

***2013-2015

****2014-2015

Source: Appendices A-F

2.3 Employment Growth in the GTA

Because of missing data it is not possible to tabulate estimates of total employment or annual employment growth for the entire GTA:

- In terms of total employment, estimates of GTA employment, with the exception of the Town of Caledon, are available for just two years – 2013 and 2015;
- In terms of annual growth, estimates for the GTA, excluding Brampton and Caledon in Peel Region, and all of Durham Region, are available for all four years examined; and
- In terms of annual growth, estimates for the GTA, excluding Brampton and Caledon, are available for the three years 2013-2015.

Regardless of the differing geographies, it is evident that the GTA experienced significant employment growth in the years since 2011:

- During the years 2014 to 2015, combined employment in the GTA, excluding Caledon, showed average annual employment growth averaging of 64,052 jobs per year with employment totaling 2.89 million jobs in 2015;
- During the years 2013-2015 employment in the GTA excluding Caledon and Brampton employment growth averaged 80,291 jobs per year; and
- During the years 2012-2015 employment in the GTA excluding Caledon, Brampton and Durham Region averaged 56,662 jobs per year.

The aggregated data also suggests extremely strong employment growth occurred in 2013 with 2014 and 2015 also exhibiting strong growth. The year 2012 had the slowest growth in the GTA.

2.4 Employment Growth in Durham Region

According to the surveys, Durham Region recorded strong employment growth in 2013 which decelerated sharply over the subsequent two years:

- Durham's employment growth in 2013 (30,620 jobs) was extraordinary, almost equaling that of the City of Toronto and exceeding job growth in neighbouring York Region; but
- Employment growth fell by half to 14,254 jobs in 2014, and again by half to just 7,415 jobs in 2015.

The employment growth in 2013 was abnormal due to the 2012 data containing errors which caused a perceived high increase in jobs. Employment in business establishments totaled 177,563 in 2015, according to the survey. The quantum of growth in 2013 is an outlier and appears to be a statistical quirk.

2.5 Employment Growth in York Region

The York Region survey indicates that the Region has recorded robust employment growth since 2011. Aside from 2013 when Durham recorded extraordinary job growth, York Region's growth has been second only to the City of Toronto within the GTA:

- Job growth averaged 16,410 per year over the four years following 2011 with 2013 seeing the largest annual growth (21,920 jobs).

Total employment in 2015 was 524,700 in York Region.

2.6 Employment Growth in Peel Region

As noted, the local municipalities of Mississauga and Brampton conduct employment surveys instead of Peel Region as a whole. The smallest municipality in the Region, the Town of Caledon, is conducting its first employment survey in 2016. According to the surveys:

- Combined, the cities of Brampton and Mississauga recorded minimal employment growth over the past four years – just 2,513 jobs per year on average; and
- Brampton is shown to have a marginal decline in employment during the years 2012-2015, while Mississauga experienced a small average increase (3,011 jobs per year).

This modest change in employment since 2011 is oddly lower than expected. Total employment in the two cities amounted to 548,754 jobs in 2015 according to the surveys, ahead of York Region but well behind the City of Toronto.

2.7 Employment Growth in Halton Region

The employment surveys point to extremely robust employment growth in Halton Region in 2013, like Durham, which dissipated to essentially nil growth in 2015. The survey shows total employment at 220,026 jobs in 2015.

Like Durham Region, the 2013 employment growth number is suspect because it is so high compared to other years covered by the survey.

2.8 Employment Growth in the City of Toronto

Employment growth in the City of Toronto has been robust but volatile over the past four years. Employment growth in the city reached 31,950 in 2013, significantly higher than in 2012. Employment growth was significant again in 2015 with a net additional 37,890 jobs recorded, exceeding 2013 growth, unlike the other GTA municipalities.

In 2015, Toronto had 1.422 million jobs in its business establishments.

2.9 Employment Surveys' Findings

The compilation of the municipal employment survey results point to strong employment growth in the GTA since 2011. The impressive performance in the City of Toronto is supported by the large supply of new office space occupied in the central area in recent years. There are some employment patterns that appear suspicious and warrant further investigation including:

- The marked acceleration in employment growth in Durham and Halton Regions from 2012 to 2013 followed by sharp declines in 2014 and 2015;
- The minimal amount of employment growth in the Cities of Brampton and Mississauga since 2011; and
- The strong employment growth in York Region from 2012-2015.

2.10 Comparison with Other Sources of Employment Data

2.10.1 Labour Force Survey (LFS) Estimates – Statistics Canada

The LFS is a sample household survey conducted by Statistics Canada on a monthly basis to collect employment estimates for a variety of geographic areas including census metropolitan areas (CMAs). Due to the small sample size there is the potential for volatile sampling errors in the employment data. Furthermore, data are generally not available for individual regions or municipalities within the GTA.²

The LFS provides employment estimates based on where the respondent lives (place of residence) which is different from where the respondent works (place of work). In order to properly understand employment trends within the GTA, the important employment concept is “place of work”, not “place of residence.” Data from the LFS was compiled for the Toronto and Oshawa CMAs as an approximation of the GTA as shown in Figure 3.

² The City of Toronto is an exception. Its Economic Development Division obtains and makes available monthly data, including employment, from Statistics Canada's Labour Force Survey for the city and for the 905 portions of the Toronto CMA.

Figure 3
Labour Force Survey Employment, GTA, 2011-2015

	Employed Persons				
	2011	2012	2013	2014	2015
Oshawa CMA	189,000	190,000	194,500	201,400	196,400
Toronto CMA	2,923,400	2,960,600	3,092,100	3,087,400	3,176,700
GTA	3,112,400	3,150,600	3,286,600	3,288,800	3,373,100

	Annual Change				Average Annual Change
	2012	2013	2014	2015	2012-2015
Oshawa CMA	1,000	4,500	6,900	-5,000	1,850
Toronto CMA	37,200	131,500	-4,700	89,300	63,325
GTA	38,200	136,000	2,200	84,300	65,175

Source: Statistics Canada, Table 282-0131 - Labour force survey estimates (LFS), employment by census metropolitan area (CMA).

Highlights of the LFS data are:

- The combined Toronto and Oshawa CMAs contained a total of 3.29 million employed persons in 2015 – this number includes employment by usual place of work, no fixed place of work and in home businesses;
- Employment climbed by an average of 65,175 jobs per year in the four years since 2011, some 8,500 more jobs than the combined totals of the municipal employment surveys for the GTA, excluding the City of Brampton, Town of Caledon and Durham Region; and
- Annual employment growth fluctuated widely by year with a low of 2,200 jobs in 2014 to a high of 136,000 jobs in 2013.

The pattern of growth over the four years differs widely from the municipal employment survey results. In the municipal survey, employment growth was lowest in 2012 and largest in 2013 for the GTA, excluding Brampton, Caledon and Durham, while in the LFS, job growth was equal to the municipal survey results in 2012 and recorded job growth much greater than the municipal survey results in 2013. Whereas the employment surveys indicate robust growth in both 2014 and 2015, the LFS, in contrast, pointed to very strong growth in 2015 and minimal growth in 2014.

2.10.2 2011 National Household Survey – Usual Place of Work Employment

Employment data from the 2011 National Household Survey (NHS) was also examined to assess the number of jobs in the GTA in mid-2011. The reliability of this data is suspect given that the

NHS was a voluntary survey, replacing the mandatory long form federal census.³ The NHS collected employment data by place of work and included the following employment status categories:

- Usual place of work: employees who report to usual place of work;
- Work at home: employees who work at their place of residence;
- No fixed workplace address: employees who do not work at fixed location (ex. Truck drivers, landscapers); and
- Work outside Canada (Excluded from this analysis and comparison with other data sources)

The usual place of work employment data approximates the total employment data collected in the municipal employment surveys.

Figure 4 shows the employment data for each employment category.

Figure 4:
NHS Employment by Place of Work, GTA, 2011

	Usual Place of Work	Worked at home	No fixed workplace address	Total
Employed Persons				
City of Toronto	1,287,520	87,795	140,480	1,515,795
Durham Region	167,465	19,085	33,560	220,110
York Region	384,420	40,035	58,750	483,205
Halton Region	185,970	20,650	23,660	230,280
Peel Region				
<i>Mississauga</i>	380,130	20,060	37,290	437,480
<i>Brampton</i>	142,900	9,625	29,615	182,140
<i>Caledon</i>	16,130	2,705	4,090	22,925
Subtotal - Peel	539,160	32,390	70,995	642,545
Total: GTA - excluding Brampton, Caledon and Durham	2,238,040	168,540	260,180	2,666,760
Total: GTA - excluding Brampton and Caledon	2,405,505	187,625	293,740	2,886,870
Total: GTA - excluding Caledon	2,548,405	197,250	323,355	3,069,010
Total: GTA	2,564,535	199,955	327,445	3,091,935

Source: Statistics Canada, 2011 National Household Survey, Statistics Canada Catalogue no. 99-012-X2011032.

³ In 2011 the mandatory long-form census questionnaire was replaced with a voluntary NHS by the previous federal government. The results from the 2011 NHS are less reliable due to the unknown extent that households in Canada completed the NHS compared to previous years where the long-form survey was distributed to every fifth household.

Highlights of the NHS employment data include:

- Total employment with a usual place of work totaled 2.56 million jobs in 2011 in the GTA overall and 2.24 million jobs in the GTA excluding Brampton, Caledon and Durham;
- The employment estimates from the NHS for usual place of work and the municipal employment surveys (excluding Brampton, Caledon and Durham) in 2011 were close at 2.24 million and 2.39 million jobs, respectively; and
- The NHS and municipal survey estimates were close for all municipalities surveyed in 2011, excluding York Region where the municipal survey estimate was higher by 74,640 jobs or 19.4 per cent.

2.10.3 Hemson Consulting – All Categories of Employment in 2011⁴

The Hemson reports also provided total employment estimates by place of work for the regions making up the GTA for 2011 as shown in Figure 5. The estimates use the Census of Canada definition of employment by place of work statuses which divides this employment into the same categories as the NHS. Hemson estimates excluded employees who work outside of Canada.

To account for employees with no fixed place of work, Hemson allocated these jobs to each municipality in the GTA based on the distribution of jobs with a usual place of work for each economic sector. The Hemson estimates were made prior to the availability of the NHS results. Figure 5 shows Hemson's 2011 employment estimates for the regions within the GTA and the City of Toronto. According to estimates by Hemson the regions within the GTA had the following number of jobs (all place of work status categories)

⁴ *Greater Golden Horseshoe Growth Forecasts to 2041, Technical Report Addendum* (Toronto: Hemson Consulting Ltd., June 2013). Hemson Consulting released the GGH growth Forecast to 2041 report in 2012 and release an addendum in 2013 that made revisions to the population and employment forecasts. The figures below use the revised figures from the 2013 report.

Figure 5:
Hemson Employment Estimates for the
Greater Toronto Area, 2011

	2011 Employment	% Distribution
City of Toronto	1,515,530	47
Durham Region	239,950	7
York Region	538,540	17
Peel Region	681,750	21
Halton Region	254,330	8
Total: GTA	3,230,100	100

Source: Hemson Consulting, Greater Golden Horseshoe Forecasts to 2041.

Highlights of the Hemson data include:

- The Hemson employment estimate of 3.23 million was larger than the 2011 LFS estimate of 3.11 million jobs:
 - The two employment estimates differ in part because the LFS estimates employment by place of residence while Hemson's employment estimates were by place of work;
- Hemson's total GTA employment estimate of 3.23 million was also larger than the NHS estimate of 3.09 million (including all place of work categories):
 - The estimates by Hemson were larger than NHS employment figures for all municipalities with the exception of the City of Toronto;
 - The largest difference at the municipal level between these two estimates was in York Region where Hemson reported an additional 55,335 jobs; and
- The Hemson employment estimate of 2.3 million for the GTA (excluding Peel and Durham Regions) was larger than the municipal survey estimate of 1.9 million which is due to the survey only including employment with a usual place of work.

Hemson, in its reports, prepared estimates of net commuters into the Greater Golden Horseshoe (GGH) for 2011, as well as earlier years and forecasts to 2041. The GGH consists of the GTA plus Hamilton (GTAH) and the "Outer Ring" which is made up of the municipalities located outside the Greenbelt. The net-in commuting figures estimate the net number of workers entering the municipality for work after subtracting the number of workers leaving the municipality for work. The 2011 net-in commuting estimates showed that there was a net-outflow of 84,850 workers leaving the Outer Ring to commute to their jobs in the GTAH, while in the GTAH there

was net-inflow of 88,120 workers commuting to their jobs in the GTAH. The remaining net-inflow of 3,270 workers was commuters living outside the GGH.

Figure 6:
Hemson Net In-Commuting Patterns within the
Greater Golden Horseshoe (GGH), 2011*

	2011 Net-In Commuting
Outer Ring West	(4,720)
Outer Ring South	(20,390)
Outer Ring East	(17,860)
Outer Ring North	<hr/> (41,880)
Outer Ring Total	(84,850)
GTAH Total**	88,120
Total GGH	3,270

*Negative values indicate net out-commuting while positive values indicated net in-commuting.

**GTAH=Greater Toronto Area and Hamilton

Source: Hemson Consulting, Greater Golden Horseshoe Forecasts to 2041 (2013).

2.10.4 Summary

The compilation of various employment data sources showed a variation of estimated employment in the GTA in 2011:

- The LFS estimated a total of 3.11 million employed persons in the GTA by place of residence;
- The NHS estimated a total of 2.56 million workers in the GTA by usual place of work and 3.10 million workers in total;
- Hemson estimated that there were total 3.23 million workers in the GTA by place of work;
- The municipal survey employment estimates were similar to employment estimates from the NHS but smaller than the Hemson employment estimates:
 - The employment estimates by usual place of work from the NHS and the municipal employment surveys in 2011 were close at 2.24 million and 2.39 million, respectively, for the GTA, excluding the City of Brampton, Town of Caledon and Durham Region; and
 - The Hemson employment estimate of 2.3 million for the GTA (excluding Peel and Durham Regions) was larger than the municipal survey estimates of 1.9 million

which is due in a major way to the surveys only including employees with a usual place of work and excluding employees who work from their place of residence or who have no fixed place of work.

2.11 GTA Total Business Establishments and Average Employees per Establishment

One method for checking the reliability of the employment estimates produced from the various municipal employment surveys is to explore patterns in the annual business establishment counts and the average number of employees per establishment. Volatility in either of these two variables would suggest that employment survey collection methods have differed during the study period.

2.11.1 Growth in Business Establishments

Figure 7 shows the business counts derived from the municipal employment surveys.

Figure 7:
Municipal Employment Survey Business Establishments, 2011-2015

Number of Business Establishments, GTA, 2011-2015					
	2011	2012	2013	2014	2015
City of Toronto	75,100	74,600	74,800	75,180	75,710
Durham Region	N/A	10,137	9,999	11,271	12,069
York Region	29,515	30,110	31,229	31,123	32,017
Halton Region	10,022	12,211	12,701	13,193	13,259
Peel Region:					
Mississauga	21,010	20,995	20,623	20,298	20,585
Brampton	8,075	N/A	8,595	N/A	8,775
Subtotal - Peel*	29,085	N/A	29,218	N/A	29,360
Total: GTA - excluding Brampton, Caledon and Durham	135,647	137,916	139,353	139,794	141,571
Total: GTA - excluding Brampton and Caledon	N/A	148,053	149,352	151,065	153,640
Total: GTA - excluding Caledon	N/A	N/A	157,947	N/A	162,415
Annual Change in Businesses					Average Annual Change
	2012	2013	2014	2015	
City of Toronto	(500)	200	380	530	153**
Durham Region	N/A	(138)	1,272	798	644***
York Region	595	1,119	(106)	894	626**
Halton Region	2,189	490	492	66	809**
Peel Region:					
Mississauga	(15)	(372)	(325)	287	(106)**
Brampton	N/A	N/A	N/A	N/A	175**
Subtotal - Peel*	N/A	N/A	N/A	N/A	69**
Total: GTA - excluding Brampton, Caledon and Durham	2,269	1,437	441	1,777	1481**
Total: GTA - excluding Brampton and Caledon	N/A	1,299	1,713	2,575	1862***
Total: GTA - excluding Caledon	N/A	N/A	N/A	N/A	2234****

*Excludes Caledon

**2012-2015

***2013-2015

****2014-2015

Source: Appendices A-F

Highlights include:

- For the GTA, excluding Brampton, Caledon, and Durham, the number of business establishments increased each year since 2011 but with wide fluctuations – growth varied from a high of 2,269 additional businesses in 2012 to a low of 441 additional businesses in 2014 – with an average annual growth rate of 1,481 businesses;
- According to the surveys, Halton Region recorded the largest annual business growth between 2012-2015 (829 per year) followed by Durham (644 per year) and York (626 per year);
- In contrast, average annual business growth was minimal in Toronto (153 per year), and Brampton (175 per year) during the study period, while Mississauga experienced a decrease in its number of businesses (-106 per year); and
- Unusually large changes in the number of businesses occurred in York Region in 2013 (1,119), Durham Region in 2014 (1,272), and Halton Region in 2012 (2,189).

2.11.2 Changes in Average Employees per Business

Figure 8 presents the average number of employees per business establishment calculated from employment survey data.

Figure 8:
Municipal Employment Survey Employees per Business, 2011-2015

	Employees per Business				
	2011	2012	2013	2014	2015
City of Toronto	17.5	17.8	18.2	18.4	18.8
Durham Region	N/A	12.4	15.6	15.1	14.7
York Region	15.6	15.7	15.8	16.4	16.4
Halton Region	17.6	15.5	16.5	16.5	16.6
Peel Region:					
Mississauga	18.4	18.3	18.8	19.4	19.3
Brampton	18.9	N/A	17.9	N/A	17.2
Subtotal - Peel	18.5	N/A	18.5	N/A	18.7
Total: GTA - excluding Brampton, Caledon and Durham	17.2	17.2	17.6	17.9	18.1
Total: GTA - excluding Brampton and Caledon	N/A	16.9	17.5	17.7	17.9
Total: GTA - excluding Caledon	N/A	N/A	17.5	N/A	17.8

Source: Appendices A-F

The figure reveal that in Mississauga the employment/business ratio has increased while in Brampton the ratio has decreased which reflects the employment and businesses trends discussed

above. Durham and Halton were the only regions where the employment/business ratio fluctuated by up to two percentage points.

Highlights include:

- The average establishment in the GTA, excluding Durham Region, the City of Brampton and the Town of Caledon, had 18.1 employees in 2015 and increased gradually between 2011 and 2015;
- Average sizes by municipality in 2015 ranged between 19.3 employees in Mississauga and 14.7 employees in Durham Region – not a big difference;
- The City of Toronto, York Region, and the City of Mississauga recorded gradual increases in the numbers of businesses between 2011 and 2015;
- In contrast, the City of Brampton and Halton Region recorded declines in average employees per business over this period; and
- Irregularities in the growth patterns between 2011 and 2015 occurred in Durham Region (a rise from 12.4 employees in 2012 to 15.4 employees in 2013), a decline in Halton Region from 17.6 employees in 2011 to 15.5 employees per business in 2012 followed by an increase to 16.5 in 2013, and the consistent decline in Brampton.

2.11.3 Summary

The review of the business count and average employee data from the municipal employment surveys shows a growth in the number of businesses in the GTA since 2011. Since 2011, the total number of businesses grew for each municipality with the exception of the City of Mississauga which experienced a decline in its number of businesses. The business patterns data shows irregularities that warrant further examination including:

- The rapid growth in business establishments in Halton Region from 2011 to 2012 followed by a steep drop in the subsequent years;
- A large increase in York Region businesses in 2013 followed by a loss of establishments in 2014; and
- Wide fluctuation in the number of firms in Durham Region which recorded a loss of 138 businesses in 2013, a large increase of 1,272 businesses in 2014, and a smaller increase of 798 businesses in 2015.

The employee to business ratio also revealed unusual trends including:

- Durham and Halton Regions representing the only two regions where the employment/business ratio fluctuates by over two percentage points; and
- The City of Brampton being the only municipality to record a decline in the employment/business ratio from 2011-2015.

3.0 COMPARISON OF ESTABLISHMENT COUNTS FROM THE MUNICIPAL SURVEYS TO CANADIAN BUSINESS PATTERNS' COUNTS, 2011-2014

The Canadian Business Patterns (CBP) database from Statistics Canada collects employment and business data through a mandatory survey that must be completed annually by active firms that have a corporate income tax account, are an employer, or have a GST account. The database contains information on the total number of businesses, number of businesses with employees, and businesses without employees by industry classification.⁵ Currently the CBP data does not contain the actual number of employees at the business and only collects employment size ranges. The CBP database contains information on businesses that is updated twice a year and should be reasonably accurate.

The number of businesses with employees from the CBP database was used in order to make a comparison with the business establishment data from the employment survey. The CBP data for businesses whose owner was their lone employee was excluded as these establishments were assumed to be comprised mostly of home-based businesses.

3.1 Comparison of Figures

Figure 9 shows the number of business establishments according to the employment surveys along with the number of businesses with employees, according to the CBP database, for the years 2011-2014.

⁵ This database includes employees with no fixed work location.

Figure 9:
Number of Establishments, Municipal Employment Surveys and Canadian Business Patterns, GTA, 2011-2014

Employment Surveys - Business Establishment				
	2011	2012	2013	2014
City of Toronto	75,100	74,600	74,800	75,180
Durham Region	N/A	10,137	9,999	11,271
York Region	29,515	30,110	31,229	31,123
Halton Region	10,022	12,211	12,701	13,193
Peel Region*	39,537*	N/A	43,930*	N/A

CBP - Businesses with Employees				
	2011	2012	2013	2014
City of Toronto	85,502	86,585	93,142	101,445
Durham Region	12,610	12,923	13,720	14,329
York Region	41,434	42,424	46,110	49,653
Halton Region	16,299	16,700	18,037	19,411
Peel Region**	38,320	39,939	45,545	48,970

CBP-Survey Difference (CBP Minus Employment Survey)				
	2011	2012	2013	2014
City of Toronto	10,402	11,985	18,342	26,265
Durham Region	N/A	2,786	3,721	3,058
York Region	11,919	12,314	14,881	18,530
Halton Region	6,277	4,489	5,336	6,218
Peel Region	(1,217)	N/A	1,615	N/A

*Excludes Caledon

**Includes Caledon

Source: See appendices and Canadian Business Patterns database, 2011-2014

Highlights include:

- With the exception of Peel Region in 2011, the CBP establishment counts are higher than those from the employment surveys (Peel is understated in the employment surveys due to the exclusion of Caledon);
- The marked widening of the gaps between the CBP database and the employment surveys for the City of Toronto and York Region in 2013 and again in 2014;
- The decline in the businesses counted in Durham's 2013 survey is at odds with the CBP recorded increase; and

- The difference in business counts in Halton Region appears excessively large in 2011 and 2014.

3.2 Surveys' Findings

Both data sources show there was been strong growth in the number of businesses for all of the GTA municipalities since 2011. Comparing the actual number of businesses between the two sources revealed large differences, including:

- The marked increase in the differences between the CBP and municipal survey business counts for York Region and the City of Toronto in 2014 and 2015 where the CBP business counts grew more rapidly than those recorded in the municipal surveys; and
- In Peel Region the survey showed a larger number of businesses compared to the CBP data in 2011, while in 2013 the pattern reversed.

4.0 CONCLUSIONS, OPTIONS AND RECOMMENDATIONS

4.1 Conclusions

The review of the municipal surveys revealed that the available data does not provide an accurate portrayal of total employment, total businesses and annual changes in employment/businesses for the entire GTA. The analysis of the employment and business data raised doubts about the reliability of the annual results published by some of the municipalities. The problems found with the data from the municipal survey were:

- Annual analysis for the region was unreliable due to its incomplete geographic and temporal coverage of the GTA:
 - Brampton conducted their survey every other year;
 - Caledon has no recorded data as their municipal survey is starting in 2016;
 - Year-to-year employment and business analysis for Peel Region was unfeasible due to the absence of data from the City of Brampton and the Town of Caledon;
- Volatile and irregular year-to-year variations in the data questions the reliability of the individual municipal survey results:
 - Durham Region had high job growth in 2013 which fell by half in 2014 and half again in 2015:
 - Although the job growth in 2013 was greater than the growth in York Region and almost equal to that in the City of Toronto, there was a decline in the number of businesses;
 - Durham Region had large fluctuations in businesses including a loss in 2013, a large increase in 2014, and a small increase in 2015;
 - Halton Region had high employment growth in 2013 which nearly equaled that in York Region, however, the job growth fell rapidly in subsequent years to almost nil in 2015;
 - Halton Region had a high growth in firms in 2012 followed by a steep drop in business growth in subsequent years;
 - Durham and Halton Regions were the only municipalities where the employment/business ratio changed by over 2 percentage;
 - York Region had the second highest employment growth in the GTA in 2014 while there was decrease in the number of businesses;
 - The City of Mississauga had the second lowest average annual job growth in the GTA between 2011-2015 and the number of businesses declined during this time period which was unexpected;
 - City of Brampton had a loss of jobs while the number of firms increased between 2011-2015;

- Brampton was the only municipality where the employment/business ratio consistently declined from 2011-2015;
- Irregularities of the businesses counts from the municipal survey with CBP data raises doubts about the accuracy of the municipal data:
 - CBP business counts were greater than the business estimates from the municipal survey with the exception of Peel Region in 2011;
 - York Region and the City of Toronto had a sharp increase in the difference between the number of firms reported by the municipal survey and CBP in 2014 and 2015, a noticeable irregularity;
 - Durham Region had a decrease in the number of businesses in 2013 from the municipal survey which was at odds with the increase from the CBP; and
 - Comparisons between the two data sources may not be completely accurate as businesses with employees from the CBP were used as an approximation for businesses with a usual place of work to allow for analysis.

The analysis of the employment and business data revealed irregularities in the data from the municipal surveys and comparisons with other sources were limited to 2011 due to the lack of annual data from the other sources. In order to obtain data that accurately represents employment and business trends for the entire GTA, changes to the municipal survey are needed.

4.2 Options for Rectifying Employment Survey Deficiencies

A review of the employment surveys revealed a need for a standardized methodology that is applied consistently throughout the GTA. This would allow for an accurate comparison of the employment and business trends between municipalities in the GTA and would produce an aggregate GTA count. The following changes for the survey are recommended to standardize the data collection process:

- Surveys should cover the entire upper-tier or single tier municipality;
- Surveys should be conducted annually; and
- Surveys should be conducted through site visits with face-to-face interviews with the option of participants to complete the survey and return them through mail, telephone interviews, online or email.

In order to standardize the employment data collection process across the region the following options are recommended:

- Collection by a Central Body:
 - Municipalities agree to set up a provincial or a single GTA body to oversee, conduct and fund the employment surveys for the entire region using a single methodology.

- Standardize Municipal Methodology:
 - Municipalities conduct their own surveys using the same standardized methodology that they agree upon;
 - Municipalities could establish standardized core questions to ask businesses across the GTA with specific localized questions which would allow for inter-regional comparisons and a GTA level aggregate collection of data while accounting for inter-municipal differences.
- Expand Statistics Canada's CBP Database :
 - Municipalities obtain their data from Statistics Canada's CBP dataset after modifications to the methodology to collect actual employment numbers and business addresses assuming Statistics Canada agrees;
 - CBP currently collects their data from a mandatory survey that businesses must fill out quarterly;
 - CBP database currently contains information on the number of businesses by industry and employment size ranges at the census sub-division level;
 - Statistics Canada is currently offering an experimental quarterly estimate of the number of businesses and with the associated employment for the first quarter of 2016.⁶
- Purchasing Data from a Third Party:
 - Municipalities obtain their data from a third party source such as InfoCanada which collects similar employment and business data as the municipal surveys; and
 - InfoCanada currently builds their database from businesses with publicly listed information and updates their database monthly and is verified by telephone interviews three times a year.

The CBP and Third Party data is available on a quarterly basis while the Central Body or Standardize Municipal Methodology should collect their data annually. The figure below evaluates the four options based on a set of three criteria:

⁶ Experimental quarterly estimates for the first quarter of the number of firm entries and exits in the business sector, with associated employment, broken down by North American Industrial Classification System industry, are now available upon request. <http://www.statcan.gc.ca/daily-quotidien/160629/dq160629g-eng.htm#wb-cont>

Figure 10:**Comparison of Options for Collecting Consistent and Reliable Employment and Business Data in the GTA**

Options	Application of Methodology	Comprehensiveness	Cost
Central Body	<ul style="list-style-type: none"> Methodology is same in each municipality Province or municipalities would have to agree to set up central body 	<ul style="list-style-type: none"> Ensures the most accurate data for comparison Regional survey cannot be customized to collect specific data that local municipalities are interested in 	<ul style="list-style-type: none"> Cost roughly cheaper/equal to current municipal surveys
Standardize Municipal Methodology	<ul style="list-style-type: none"> Methodology is same in each municipality Municipalities would have to agree upon a standardize core questions Could be faster to implement than central body Need to determine who will be responsible for annual monitoring to ensure the municipalities are consistent 	<ul style="list-style-type: none"> Data will be more accurate than what is presently being collected by the municipalities Municipalities can agree on the data that will be collected and they customize each of their surveys to collect localized data unique to their interests 	<ul style="list-style-type: none"> Cost roughly equal to current municipal surveys
CBP	<ul style="list-style-type: none"> Methodology is same in each municipality Statistics Canada would have to agree to change in the survey methodology to collect actual number of employees Survey cannot be customized to collect specific data that local municipalities are interested 	<ul style="list-style-type: none"> Ensures the most comprehensive and accurate data for comparison Allows for comparison with other urban regions in Canada Greater proportion of home-based businesses captured than survey Database may not have the depth of information individual municipalities are interested in 	<ul style="list-style-type: none"> Most cost effective as CBP get their data from a mandatory survey
Third Party	<ul style="list-style-type: none"> Methodology is same in each municipality Easiest approach to adopt as municipality would purchase data from InfoCanada 	<ul style="list-style-type: none"> Greater proportion of home-based businesses captured than survey Only has data for businesses with publicly listed contact information Businesses coverage could be smaller than survey Could be less reliable due to survey coverage Database may not have the depth of information individual municipalities are interested in 	<ul style="list-style-type: none"> Could be more cost effective depending on the rate that is negotiated between the municipalities and InfoCanada

4.3 Recommendations

The option having the potential to be the most cost effective and providing the most accurate employment and business establishment information for individual municipalities and for the GTA as a whole is the option is having Statistics Canada provide the information based on its current CBP database expanded to include exact employment counts for businesses rather than ranges of employment as at present.

In the event it is not possible to reach agreement with Statistics Canada for an expansion to its CBP database information, a single body, whether in the provincial government or supported by the GTA municipalities, should be mandated and funded to conduct an annual employment survey covering all municipalities in the GTA.

APPENDICES: MUNICIPAL EMPLOYMENT SURVEYS

APPENDIX A: HALTON REGION EMPLOYMENT SURVEYS

Rationale for Collecting Employment Data

Halton Region collects employment and business data to monitor the region's economic health, support policy making and forecast infrastructure and service needs for the residents and businesses in Halton.

Years Available

- Collected annually
- Data available from 2010-2014

Compatibility of Data over Time

- 2011-2014

Employment Sector Coverage

- Business establishments
- Agricultural businesses data not collected until 2013
- Home-based businesses or establishments with no fix place of work are only captured through surveys where operators are asked if they have any off-site employment

Information Presented

- Total number of employment and businesses for region and lower-tier municipalities
- Number of jobs and businesses by sector at two digit NAIC level for region and lower-tier municipalities
- Number of jobs by employment type (full-time, part-time, seasonal) for region and lower-tier municipalities
- Number of jobs and businesses by employee size in the Region and in lower-tier municipalities
- Number of businesses by building type for region and lower-tier municipalities
- Number of businesses by floor area for region

Methodology

Data for the survey was primarily collected annually through face-to-face interview where interviewers were sent to business locations to conduct the interviews. When contact with a business could not be made, a copy of the survey questionnaire was dropped off to at the location and was contacted on a later date. In instances where businesses were unable to provide data, information from the previous year was used if data for the business already existed or was left blank if there was no entry for the business.

The municipality did not have a consistent method in identifying new businesses and the survey did not cover the entire region for the initial survey that was conducted in 2010. In the subsequent years the coverage area was expanded and in 2014 the municipality used internal building permit data and a third party data source to standardize the method in identifying new businesses.

The survey began collecting data from agriculture businesses in 2013 where coverage was limited; however in 2014 the collection area was widespread. Interviewers were sent to rural areas and identified farms through OFA (Ontario Federation of Agriculture) or CFA (Canadian Federation of Agriculture) signs to conduct face-to-face interviews to collect data.

Comments

The methodology used to collect the data presents some limitations in making comparisons between the annual data sets and with other municipalities in the Greater Toronto Area. Prior to 2014 the municipality did not have a consistent method in identifying new businesses thus jobs and businesses that were recorded as new may have already existed in previous years as the Interviewers were not able to find and survey the establishment.

The survey also had difficulties in collecting data from home-based businesses or establishments with no fixed place of work. Although survey participants were asked if they had any off-site employees this method would only capture a small portion of businesses in this category.

Halton's employer survey reports the total number of jobs in the city which includes full-time, part-time and seasonal jobs.

Employment and Business Data

Table A-1:
Number of Jobs in Halton Region, 2011-2014

	Jobs			
	2011	2012	2013	2014
Burlington	68,523	74,216	79,419	82,751
Halton Hills	16,508	15,887	19,013	19,753
Milton	23,552	24,975	28,293	30,212
Oakville	<u>67,460</u>	<u>73,964</u>	<u>83,254</u>	<u>85,541</u>
Total	176,043	189,042	209,979	218,257

	Annual Change			Average Annual Change
	2012	2013	2014	2012-2014
Burlington	5,693	5,203	3,332	4,743
Halton Hills	-621	3,126	740	1,082
Milton	1,423	3,318	1,919	2,220
Oakville	<u>6,504</u>	<u>9,290</u>	<u>2,287</u>	<u>6,027</u>
Total	12,999	20,937	8,278	14,071

Source: Halton Employment Survey, 2011-2014

Table A-2:
Number of Businesses in Halton Region, 2011-2014

	Businesses			
	2011	2012	2013	2014
Burlington	3,816	4,638	4,827	5,012
Halton Hills	1,045	1,220	1,356	1,407
Milton	1,418	1,760	1,836	1,927
Oakville	<u>3,743</u>	<u>4,593</u>	<u>4,682</u>	<u>4,847</u>
Total	10,022	12,211	12,701	13,193

	Annual Change			Average Annual Change
	2012	2013	2014	2012-2014
Burlington	822	189	185	399
Halton Hills	175	136	51	121
Milton	342	76	91	170
Oakville	<u>850</u>	<u>89</u>	<u>165</u>	<u>368</u>
Total	2,189	490	492	1,057

Source: Halton Employment Survey, 2011-2014

Table A-3:
Number of Jobs per Business in Halton Region, 2011-2014

	Jobs per Business			
	2011	2012	2013	2014
Burlington	18	16	16	17
Halton Hills	16	13	14	14
Milton	17	14	15	16
Oakville	<u>18</u>	<u>16</u>	<u>18</u>	<u>18</u>
Total	18	15	17	17

Source: Halton Employment Survey, 2011-2014

APPENDIX B: DURHAM REGION EMPLOYMENT SURVEYS

Rationale for Collecting Employment Data

Durham Region collects employment and business data to better understand the regional economy, monitor economic development and planning activities, and update Durham's online business directory.

Years Available

- Collected annually
- Data available from 2012-2015

Compatibility of Data over Time

- 2013-2015

Employment Sector Coverage

- Business establishments
- Agricultural businesses data not collected until 2013
- Home-based businesses or establishments with no fixed place of work were collected from 2013 through an online survey

Information Presented

- Total number of jobs and businesses visited (2012-2013) and businesses (2013-2015) for region and lower-tier municipalities
- Percentage of jobs (2012-2013) and number of jobs (204-2015) by employment type (full-time, part-time, seasonal) in the Region (2012-2013) and in lower-tier municipalities (2014-2015)
- Percentage of businesses (2012-2013) and number of businesses (2014-2015) by employee size in the Region and lower-tier municipalities
- Total square footage of businesses for region and lower-tier municipalities
- Businesses vacancy rate (2013-2015) for region and lower-tier municipalities

Methodology

The Business Count Team visited business establishments annually to collect data through face-to-face interviews. Where interviews were not possible businesses had the option of returning the survey through mail, fax or completing the survey online. In instances where businesses were unable to provide data, information from the previous year was used if data for the business already existed or was left blank if there was no entry for the business. The municipality uses their building permit database to identify new businesses

Data from agriculture businesses was collected in 2013 when interviewers were sent to rural areas and identified farms through OFA or CFA signs to conduct interviews. In 2013, farms and home-based businesses were encouraged to complete the survey online.

Comments

Interviews with municipal staff revealed that the survey started in 2012 in order to create an initial database; however, there were errors with the data meaning that the 2012 results were not comparable with survey results in subsequent years. Staff indicated that comparing data on the number of businesses from 2013-2015 by industry sector was unreliable. Prior to 2015, a third party was used to verify the North American Industry Classification System (NAICS) codes that were assigned to each business by the interviewers; however staff found errors in verification. In 2015, municipal staff again verified the NAICS codes and this time were confident in their verification process.

Data collection from home-based businesses proved difficult as they were asked to fill out the survey online which would have captured only a small portion of businesses in this category.

Durham's Business Count reports the total number of jobs in the city which includes full-time, part-time and seasonal jobs.

Employment and Business Data

Table B-1:
Number of Jobs in Durham Region, 2013-2015

	Jobs				Annual Change			Average Annual Change
	2012	2013	2014	2015	2013	2014	2015	2013-2015
Ajax	19,573	22,336	24,377	25,517	2,763	2,041	1,140	1,981
Brock	1,874	2,518	2,987	3,128	644	469	141	418
Clarington	9,750	14,741	17,086	18,948	4,991	2,345	1,862	3,066
Oshawa	28,727	42,768	46,287	48,102	14,041	3,519	1,815	6,458
Pickering	29,009	30,474	32,521	32,702	1,465	2,047	181	1,231
Scugog	3,019	5,381	5,444	6,741	2,362	63	1,297	1,241
Uxbridge	5,177	6,142	6,183	6,120	965	41	-63	314
Whitby	28,145	31,534	35,263	36,305	3,389	3,729	1,042	2,720
Total	125,274	155,894	170,148	177,563	30,620	14,254	7,415	17,430

Source: Durham Business Count, 2013-2015

Table B-2:
Number of Businesses in Durham Region, 2013-2015

	Businesses				Annual Change			Average Annual Change
	2012	2013	2014	2015	2013	2014	2015	2013-2015
Ajax	1646	1,514	1,582	1,598	-132	68	16	(16)
Brock	369	329	355	511	-40	26	156	47
Clarington	999	1,096	1,347	1,449	97	251	102	150
Oshawa	2451	2,432	2,726	2,869	-19	294	143	139
Pickering	1990	1,785	1,925	1,957	-205	140	32	(11)
Scugog	499	559	687	835	60	128	148	112
Uxbridge	500	524	601	700	24	77	99	67
Whitby	1683	1,760	2,048	2,150	77	288	102	156
Total	10,137	9,999	11,271	12,069	-138	1,272	798	644

Note: 2013 data includes number of businesses which was obtained from 2014 Business Count.

Source: Durham Business Count, 2013-2015

Table B-3:
Number of Jobs per Business in Durham Region, 2013-2015

	Jobs per Business			
	2012	2013	2014	2015
Ajax	12	15	15	16
Brock	5	8	8	6
Clarington	10	13	13	13
Oshawa	12	18	17	17
Pickering	15	17	17	17
Scugog	6	10	8	8
Uxbridge	10	12	10	9
Whitby	17	18	17	17
Total	12	16	15	15

Source: Durham Business Count, 2013-2015

APPENDIX C: CITY OF MISSISSAUGA EMPLOYMENT SURVEYS

Rationale for Collecting Employment Data

The City of Mississauga collects employment and business data to ensure that the objectives listed in strategic and planning policies are being met, to forecast and plan for future needs and services, and to attract and retain businesses in the city.

Years Available

- Collected annually
- 2001-2015 using current methodology

Compatibility of Data over Time

- 2001-2015

Employment Sector Coverage

- Business establishments
- Agricultural businesses
- Home-based businesses through Canadian Business Patterns Database (CBP)

Information Presented

- Total number of jobs from survey and jobs from census adjustment
- Total number of businesses from survey and home-based businesses from CBP
- Percentage of jobs by employment type (full-time, part-time) for region
- Employment ratio
- Number of businesses by sector at two digit NAIC level for region and lower-tier municipalities
- Number of businesses by employee size
- Number of jobs and businesses by sector at two digit NAIC level
- Number of new businesses or businesses that moved by survey year
- Vacancy Rate

Methodology

The City of Mississauga annually sends interviewers throughout the city to collect business information including the business name, contact information and location. Additionally, the municipality uses their building permits database to identify new businesses within the City which is added to the database of existing businesses. Businesses are contacted by third party to conduct telephone interviews to collect employment data while businesses located in residential areas are

mailed a survey by the City requesting a telephone interview. Telephone interviews are conducted for half the city annually with the other half being contacted the following year. Employment figures from businesses will be collected when the data is older than two years or if the business is a new establishment.

In instances where businesses were unable to provide employment data, information from the previous year will be used if an entry has already existed. If there is no entry for the business the City will use an adjustment factor that is unique for each planning district that is calculated using the average number of employees for businesses within the district. If the adjustment factor for the district is five then an entry of five employees will be entered in for the business with no employment data.

Comments

The City of Mississauga's employment data provides information on the number of jobs reported from its survey and total employment which is calculated by adding a census adjustment. When reporting the employment data from the survey the City converts two part-time positions into one full-time job. The profile also provides the total employment in the city which is the number of jobs from the survey plus a census adjustment. The census adjustment excludes 40 per cent of part-time employment to account for individuals holding multiple part-time jobs and uses a ratio of around 30 jobs per 1,000 of the population to account for the number of jobs that home-based businesses provide.

The employment profile also provides data on the number of businesses reported from the survey and the total number of businesses. The City uses the Canadian Business Patterns database from Statistics Canada, which collects data on business when they are registered or pay taxes, to account for the number of home-based businesses. The municipality will use the number of businesses in the city from the CBP database and subtract the number of businesses reported from the survey to get the number of home-based businesses. In order to get the total of businesses in the city, the number of home-based businesses and businesses from the survey are added.

Employment and Business Data

Table C-1:
Number of Jobs in the City of Mississauga, 2011-2015

	Jobs				
	2011	2012	2013	2014	2015
Mississauga - Employment Survey Results	386,125	383,670	387,355	393,020	398,170
Mississauga - Total Employment	415,710	413,325	417,585	420,500	425,850
	Annual Change				Average Annual Change
	2012	2013	2014	2015	2012-2015
Mississauga - Employment Survey Results	(2,455)	3,685	5,665	5,150	3,011
Mississauga - Total Employment	(2,385)	4,260	2,915	5,350	2,535

Note: Total employment figures includes results from Employment Survey and Census Adjustment

Source: Mississauga Employment Profile, 2011-2015

Table C-2:
Number of Businesses in the City of Mississauga, 2011-2015

	Businesses				
	2011	2012	2013	2014	2015
Mississauga - Employment Survey Results	21,010	20,995	20,623	20,298	20,585
Mississauga - Total Businesses	54,056	53,757	59,160	62,300	86,170
Annual Change					Average Annual Change
	2012	2013	2014	2015	2012-2015
	(15)	(372)	(325)	287	(106)
Mississauga - Employment Survey Results					
Mississauga - Total Businesses	(299)	5,403	3,140	23,870	8,029

Note: Total business figures includes results from Employment Survey and home-based businesses from Canadian Business Patterns.

Source: Mississauga Employment Profile, 2011-2015

Table C-3:
Number of Businesses in the City of Mississauga, 2011-2015

	Jobs per Business				
	2011	2012	2013	2014	2015
Mississauga - Employment Survey Results	18	18	19	19	19
Mississauga - Total Jobs per Business	8	8	7	7	5

Note: Total jobs per business figures includes results from Employment Survey, Census Adjustment and home-based businesses from Canadian Business Patterns

Source: Mississauga Employment Profile, 2011-2015

APPENDIX D: CITY OF BRAMPTON EMPLOYMENT SURVEYS

Rationale for Collecting Employment Data

The City of Brampton collects employment and business data to provide detailed information on the structure of Brampton's economic base and to monitor business growth and expansion. The information from the survey assists the City in policy formulation and reviewing development applications.

Years Available

- Collected biannually – every odd year
- 2001 – 2015, with current methodology

Compatibility of Data over Time

- 2001 – 2013, every odd year with current methodology

Employment Sector Coverage

- Business establishments
- Agricultural businesses

Information Presented

- Total number of jobs and businesses
- Percentage of jobs by employment type (full-time, part-time, contract)
- Number of businesses by employee size
- Number businesses by sector at two digit NAIC level for top five sectors

Methodology

The City of Brampton conducts its employment survey every two years (every odd year). The City sends out interviewers to conduct interviews with businesses to gather data and when contact with a business is not possible interviewers will drop off the survey form and the City will contact that business via email, fax and telephone to collect data. Although the majority of the data is collected every two years, the City will send interviewers to gather information from businesses that are new or have changed locations annually. The municipality uses their building permit database and third party data sources to identify new businesses

Comments

Brampton's employer survey reports the total number of jobs in the city which includes full-time, part-time and contract-based jobs.

Employment and Business Data

Table D-1:
Number of Jobs in the City of Brampton, 2011-2015

Jobs					
	2011	2012	2013	2014	2015
Brampton	152,577	N/A	154,122	N/A	150,584
		Annual Change		Average Annual Change	
		2013	2015	2011-2015	
Brampton	1,545	(3,538)		(498)	

Note: Brampton Employment Survey is conducted every odd year, results from 2015 were unavailable at this time

Source: Brampton Employer Survey, 2011 & 2013

Table D-2:
Number of Businesses in the City of Brampton, 2011-2015

Businesses					
	2011	2012	2013	2014	2015
Brampton	8,075	N/A	8,595	N/A	8,775
		Annual Change		Average Annual Change	
		2013	2015	2011-2015	
Brampton	520	180		175	

Note: Brampton conducts the survey biannually on the odd year, it was assumed in the even year that the data stayed the same

Source: Brampton Employer Survey, 2011 & 2013

Figure D-3:
Number of Jobs per Business in the City of Brampton, 2011-2015

	Jobs/Business				
	2011	2012	2013	2014	2015
Brampton	18.9	N/A	17.9	N/A	17.2

Note: Brampton conducts the survey biannually on the odd year, it was assumed in the even year that the data stayed the same

Source: Brampton Employer Survey, 2011 & 2013

APPENDIX E: YORK REGION EMPLOYMENT SURVEYS

Rationale for Collecting Employment Data

York Region collects employment and business data to monitor local economic trends and provide data for land use planning, forecasting, infrastructure planning and economic development

Years Available

- Collected annually
- 1998-2015

Compatibility of Data over Time

- 2007-2015

Employment Sector Coverage

- Business establishments
- Agricultural businesses data was not collected until 2014 and the Region previously used census of agriculture data
- Home-based businesses or establishments with no fix place of work are captured through an online survey that began in 2012

Information Presented

- Number of employment from contacted firms, estimated from firms with no contact, agricultural based, home-based, and total for region and lower-tier municipalities
- Number of jobs by sector at two digit NAIC level for region and lower-tier municipalities (2011, 2014)
 - Number of jobs by sector by major industry group in the region (2012-2014) and lower-tier municipalities (2012, 2013)
 - Percentage of jobs by sector at two digit NAIC level in the region (2012-2014) and lower-tier municipalities (2012, 2013)
- Number of businesses by sector at two digit NAIC level in the region (2011)
- Number of businesses for region and number of businesses surveyed for lower-tier municipalities (2011-2013)
- Number of new businesses by sector at two digit NAIC level in the region (2011, 2012)
 - Number of new businesses by major industry group in the region (2013, 2014)
- Number of jobs by employment type (full-time, part-time, seasonal/contract) in the region (2011-2014) and lower-tier municipalities (2011-2013)

- Number of businesses by employee size in the region (2011-2014) and lower-tier municipalities (2011-2013)
- Number of jobs by employee size in the region (2013, 2014) and lower-tier municipalities (2013)

Methodology

In 2007 York Region completed its first comprehensive survey that collected employment and business data from all businesses in the region. Data was collected annually, primarily through face-to-face interviews. When in person interviews were not possible, businesses had the option of returning the survey through mail or fax, conducting a telephone interview or completing the survey online. In instance where businesses were unable to provide data, information from the previous was used if data for the business existed from the previous year or an employment estimate based on businesses activity was used if there was no prior entry.

The Region used their building permit and vacant unit database to identify new businesses in the region. The Economic Development department at the regional and local level also provided data on new businesses to survey.

Data from agricultural and home-based businesses were collected over the past two years on a consistent basis. Prior to 2014 the region used data from the Census of Agriculture to provide information on farm-based businesses in the region. Beginning in 2014 the Region completed the first farm-based survey in collaboration with the York Region Agricultural Advisory Liaison group and the York Federation of Agriculture. In 2012, data from home-based businesses was collected through an online survey as part of the process of registering their establishment on the Region's online business directory. Prior to 2012, the region did not have a consistent method in gathering data from such businesses

Comments

The Region had difficulty in collecting data from agricultural and home-based businesses. In 2014, the first agricultural survey was distributed to over 700 agricultural businesses in the region which covered a majority of the businesses in this sector as the 2011 Census of Agriculture indicated that there were 828 such businesses. Despite the wide coverage of farms in the survey the Region had difficulty in gathering data as only nine per cent of businesses that were contacted participated in the survey. Although York Region tried to incentivize home-based businesses to fill out the survey as part of the process in registering their business on the region's business directory, York had difficulty in gathering data. Approximately 200 establishments completed the survey which was not an accurate representation of such businesses as the 2011 Census indicated that there were around 40,000 home-based jobs in the region.

York's employer survey reports the total number of jobs in the municipality which includes full-time, part-time and contract/seasonal jobs.

Employment and Business Data

Table E-1:
Number of Jobs from Survey in York Region, 2011-2014

	Jobs				Annual Change			Average Annual Change
	2011	2012	2013	2014	2012	2013	2014	
Aurora	19,560	21,260	22,490	23,896	1,700	1,230	1,406	1,445
East Gwillimbury	5,400	6,140	7,130	7,566	740	990	436	722
Georgina	6,410	6,670	7,410	7,356	260	740	(54)	315
King	6,230	6,280	6,370	6,816	50	90	446	195
Markham	141,470	145,340	149,580	155,455	3,870	4,240	5,875	4,662
Newmarket	39,620	39,600	40,030	38,914	(20)	430	(1,116)	(235)
Richmond Hill	60,030	61,150	64,040	65,058	1,120	2,890	1,018	1,676
Vaughan	170,140	175,500	186,020	194,852	5,360	10,520	8,832	8,237
Whitchurch-Stouffville	10,200	10,460	11,250	11,680	260	790	430	493
Total	459,060	472,400	494,320	511,593	13,340	21,920	17,273	17,511

Note: Employment figures only include results from Employment Survey

Source: York Region Employment and Industry Profile, 2011-2014

Table E-2:
Total Number of Jobs in York Region, 2011-2014

	Jobs				Annual Change			Average Annual Change
	2011	2012	2013	2014	2012	2013	2014	2012-2014
Aurora	22,700	24,500	25,440	27,009	1,800	940	1,569	1,436
East Gwillimbury	6,900	8,300	9,300	9,473	1,400	1,000	173	858
Georgina	8,100	8,600	8,750	8,827	500	150	77	242
King	8,200	9,100	8,500	8,908	900	(600)	408	236
Markham	158,200	161,200	164,300	169,984	3,000	3,100	5,684	3,928
Newmarket	43,100	43,400	43,750	42,683	300	350	(1,067)	(139)
Richmond Hill	69,200	70,700	74,290	75,217	1,500	3,590	927	2,006
Vaughan	186,800	189,200	199,470	208,117	2,400	10,270	8,647	7,106
Whitchurch-Stouffville	12,600	12,600	13,700	14,387	0	1,100	687	596
Total	515,800	527,600	547,500	564,605	11,800	19,900	17,105	16,268

Note: Employment figures include results from employment survey, estimates from firm who didn't respond to survey, agricultural jobs and work from home

Source: York Region Employment and Industry Profile, 2011-2014

Table E-3:
Total Number of Businesses in York Region, 2011-2013

	Businesses			Annual Change		Average Annual Change 2012-2013
	2011	2012	2013	2012	2013	
Aurora	1,120	1,165	1,233	45	68	57
East Gwillimbury	302	321	338	19	17	18
Georgina	652	689	698	37	9	23
King	388	394	401	6	7	7
Markham	8,321	8,490	9,015	169	525	347
Newmarket	2,364	2,382	2,388	18	6	12
Richmond Hill	4,037	4,063	4,222	26	159	93
Vaughan	9,629	9,913	10,231	284	318	301
Whitchurch-Stouffville	691	681	690	(10)	9	(1)
Total	27,504	28,098	29,216	594	1,118	856

Note: Business figures exclude home-based and agricultural businesses

Source: York Region Employment and Industry Profile, 2011-2014

Table E-4:
Number of Jobs per Business from Survey in
York Region, 2011-2013

	Jobs per Business		
	2011	2012	2013
Aurora	17	18	18
East Gwillimbury	18	19	21
Georgina	10	10	11
King	16	16	16
Markham	17	17	17
Newmarket	17	17	17
Richmond Hill	15	15	15
Vaughan	18	18	18
Whitchurch-Stouffville	15	15	16
Total	17	17	17

Note: Jobs per business figures only include results from employment survey and excludes home-based and agricultural businesses

Source: York Region Employment and Industry Profile, 2011-2014

APPENDIX F: CITY OF TORONTO EMPLOYMENT SURVEYS

Rationale for Collecting Employment Data

The City of Toronto collects employment and business data to monitor the local economy, provide information for policy and decision and decision-making and planning for the needs of municipal infrastructure and services.

Years Available

- Collected annually
- 1983-2015

Compatibility of Data over Time

- 1983-2015

Employment Sector Coverage

- Business establishments

Information Presented

- Total number of jobs and businesses
- Number of jobs by employment type (full-time, part-time)
- Number of jobs by land use activity (manufacturing, retail, service, office, institutional, other)
- Number of new businesses
- Percentage of businesses by land use activity (manufacturing, retail, service, office, institutional, other)
- Number of new businesses by land use activity (manufacturing, retail, service, office, institutional, other)
- Percentage of businesses by years at present location
- Number of jobs and businesses by sector at two digit NAIC level (2012 – 2014)
- Number of employees per business

Methodology

The City of Toronto sends out a team of interviewers out to commercial, industrial, institutional and mixed-used areas throughout the city to conduct face-to-face interviews with businesses to collect annual employment and business data. Businesses that are major multi-branch employers are mailed a copy of the survey to their primary contact at the head office for completion.

Comments

The survey does not collect data from agricultural businesses or home-based businesses.

Toronto's employer survey reports the total number of jobs in the city which includes full-time and part-time jobs.

Employment and Business Data

Table F-1:
Number of Jobs in the City of Toronto, 2011-2015

	Jobs				
	2011	2012	2013	2014	2015
Toronto	1,317,300	1,331,600	1,363,550	1,384,390	1,422,280
Annual Change					Average Annual Change
Toronto	14,300	31,950	20,840	37,890	2012-2015 26,245

Source: Toronto Employment Survey, 2011-2015

Table F-2:
Number of Businesses in the City of Toronto, 2011-2015

	Businesses				
	2011	2012	2013	2014	2015
Toronto	75,100	74,600	74,800	75,180	75,710
Annual Change					Average Annual Change
Toronto	2012 (500)	2013 200	2014 380	2015 530	2012-2015 153

Note: Business figures excludes home-based and agricultural businesses

Source: Toronto Employment Survey, 2011-2015

Table F-3:
Number of Businesses in the City of Toronto

	Jobs per Business				
	2011	2012	2013	2014	2015
Toronto	18	18	18	18	19

Note: Jobs per business figures excludes home-based and agricultural businesses

Source: Toronto Employment Survey, 2011-2015
