

Critique of 2016 Employment Surveys and Economic Nuggets: GTA Municipalities

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EXECUTIVE SUMMARY

The need for consistent employment data in the large urban region anchored by Toronto goes back to at least the year 2000. A report released by The Regional Planning Commissioners of Ontario (RPCO) in 2000 observed there was a need to elevate the profile of employment data within individual municipalities as well as at the broader regional level and that the data collection and maintenance requires data consistency and standards. At the time, only two municipalities conducted annual employment surveys: the City of Toronto (Metro Toronto) had conducted a survey since 1983 and the Region of York since 1983.

According to recent correspondence from a working group that reports to the RPCO [the Regional Information Systems Working Group (RISWG)], the Province of Ontario was approached to partner (provide funding) with the municipalities to conduct employment surveys using standard questions and methodology but never committed. As a result, Greater Toronto Area (GTA) municipalities decided to conduct their own surveys based upon their local data requirements and within the available resources.

This report reviews municipal employment surveys for the year 2016 with 2015 comparisons to gain an understanding of: (a) how much employment growth there was in the GTA in 2016 (b) where this growth occurred and (c) what sectors contributed to the growth. While the individual employment surveys as currently designed are unable to provide reliable estimates of GTA employment in a given year or to monitor employment growth over time, they do provide some interesting insights into differences in economic structures and growth dynamics between municipalities in the year 2016.

Key 2016 employment findings from our review of the survey publications

- More than half of GTA jobs are outside the City of Toronto according to the surveys. According to the employment surveys, the GTA had 3,085,386 jobs in 2016 with 1,461,020 in the Toronto (47 percent of the total) and 1,624,366 in the four 905 regions (53 percent of the total). Peel region (611,237 jobs) and York region (595,200 jobs) were next in importance to Toronto in terms of total employment.
- Number of GTA jobs climbed by 76,639 in 2016 according to the surveys.
 - A job growth of 76,639 for the GTA is calculated from the available 2016 employment survey results this estimate excludes Brampton and Caledon where data for the two years are not available. The survey publications show a growth of 38,740 jobs in Toronto followed by Durham region (16,067) and York region (15,100). It is striking that the combined employment growth in Durham and York regions alone is close to Toronto's growth.



How representative are these published employment estimates of actual employment and employment growth in 2016?

The conclusion we reach after reviewing the published results of the municipal employment surveys is that the published employment estimates should be treated with extreme caution, especially the estimates of employment growth in 2016. Reasons for caution are twofold:

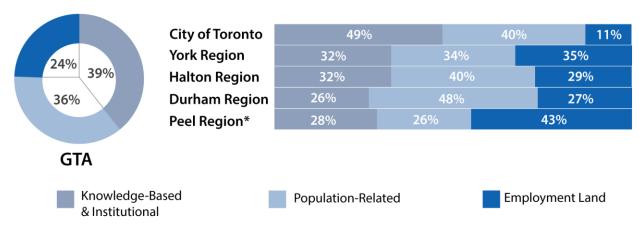
- The surveys are conducted at the municipal level rather than by a centralized agency or body. The production of comprehensive and consistent employment, business and related data throughout the GTA requires that the surveys be conducted by or are directly supervised by a centralized agency or body. It is not sufficient that the individual surveys be modelled in a general way on what, say, the City of Toronto does, as this leaves discretion for municipalities to make ad hoc changes in coverage, methodology, and estimating methods which act to reduce the comparability of the estimates between municipalities and over time.
- There is little effort being made to ensure the individual surveys are consistent over time so that recorded changes accurately portray what has happened.
 - The real value in collecting annual employment and related economic data by municipality is not to just to establish the structure of the local economy at a point in time. It is to document shifts in the structure over time. For this to happen, it is essential that expertise in statistical surveys and estimating techniques be an integrated part of the oversight for all the surveys.
 - The collection, production, and analysis of annual employment and related economic data can be an important tool for municipal land-use planners, economic development personnel, and economists active in the GTA, but only if done in a way to produce meaningful and consistent results.
- Not all reported employment growth in the surveys in 2016 is actual growth. For instance, Durham's reported growth includes 7,028 jobs in existing businesses who reported for the first time in 2016 and Toronto's reported growth included 25,000 part time employees of the Toronto District School Board counted for the first time in 2016. GTA employment growth in 2016 after these Toronto and Durham adjustments is 44,610 jobs, not the reported 76,639 jobs.

Economic Nuggets from the 2016 Surveys

• GTA overall: Jobs in Toronto are tilted to knowledge-based, institutional sectors (office) and population-related sectors (commercial retail) with minimal employment lands employment (industrial). Population-related employment is disproportionately high in Halton and Durham regions, as is employment lands employment in Peel region. York region has the most balanced economic structure with employment distributed almost equally across the three categories.



Total Employment by Category, GTA, 2016



*City of Brampton is 2015.

Source: CUR based on 2016 municipal employment surveys.

- **City of Toronto**: Office employment actually declined in 2016 contrary to the published growth of 20,050 jobs, and job growth was centered in "rest of the city" which outpaced downtown job growth by a wide margin.
- York Region: Almost half of the region's employment growth was in Vaughan and over half of the region's growth was on employment lands just 3,500 net new jobs occurred in the "centres and corridors."
- **Halton Region:** Burlington has the largest employment growth in 2016 and about a quarter of the region's growth was in "emerging sectors" (advanced manufacturing, financial services and information technology).
- **Durham Region:** 7 percent of businesses were identified for the first time in the survey, Oshawa followed by Whitby are the largest employment centres, and 43 percent of all employment is in larger businesses (100 employees or more).
- Peel Region: Relatively few Brampton jobs are in the Downtown and Queen Street Corridor; large businesses (100 employees or more) accounting for 52 percent of all jobs. In Mississauga, the largest share of jobs is in employment areas with relatively few in the downtown.

1. BACKGROUND

1.1 History of Municipal Employment Surveys in the GTA

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. Limitation of the Census data are that they are only available every five years and with a considerable time lag. While Statistics Canada prepares annual postcensal population estimates for regional and single-tier municipalities within the Greater Toronto Area (GTA), there are no comparable employment estimates available.

The need for consistent employment data in the large urban region anchored by Toronto goes back to at least the year 2000. A report released by The Regional Planning Commissioners of Ontario (RPCO) in 2000 observed there was a need to elevate the profile of employment data within individual municipalities as well as at the broader regional level and that the data collection and maintenance requires data consistency and standards. At the time, only two municipalities conducted annual employment surveys: the City of Toronto (Metro Toronto) had conducted a survey since 1983 and the Region of York since 1983.

According to recent correspondence from a working group that reports to the RPCO [the Regional Information Systems Working Group (RISWG)] the Province of Ontario was approached to partner (provide funding) with the municipalities to conduct employment surveys using standard questions and methodology but never committed. As a result, municipalities decided to conduct their own surveys based upon their local data requirements and within the available resources.²

By the year 2016, all municipalities in the GTA collected employment data. The City of Toronto and the Regions of York, Halton, Durham and the City of Mississauga collect employment data annually whereas the City of Brampton and the Town of Caledon collected the data every second year.

1.2 Feedback from RISWG

We reached out to RISWG as its municipal representatives are knowledgeable and are involved with the handling of the various municipal surveys conducted within the GTA:

 RISWG responded to a request to review a draft of this report for completeness and accuracy; and

² See Appendix C, attachment to a letter from Stephanie Jones, RISWG 2017 Chair to Frank Clayton, September 12, 2017,p. 1.



4

¹ The Regional Planning Commissioners of Ontario, *Planning Data Standards Recommended Guidelines: Employment Data, September 2000, p. v.*

• We were invited to attend a RISWG meeting to discuss comments and reactions to the draft report. RISWG provided its responses in writing after the meeting (see Appendix C).

It is fair to state that there are substantial differences between RISWG and the authors of this report especially with the combining of individual survey data to generate GTA-wide employment insights in each survey year and over time and the desirability of adjusting the data for non-response or incomplete information from respondents.

It is hoped that the release of this report along with RISWG's comments and concerns will encourage discussion about the collection, analysis and release of employment data in the future and produce changes both at the municipal level and for the GTA as a whole to enable more insightful analysis of both the municipal and regional economies.

1.3 Purpose of this report

We have been cautioned by RISWG that the individual employment surveys were not designed with the intent to combine to provide a GTA-wide profile. However, we could not resist calculating and assessing the combined results given the existence of the surveys.

This report reviews municipal employment surveys for the year 2016 with 2015 comparisons to gain an understanding of: (a) how much employment growth there was in the GTA in 2016 (b) where this growth occurred and (c) what sectors contributed to the growth. It also identifies areas where the employment surveys can be improved to enable municipal and regional comparisons.

Useful insights (called nuggets) into the growth dynamics of the local and GTA economies in 2016 have been gathered too.

It should be noted the Centre for Urban Research and Land Development (CUR) published a report last year that examined the veracity of the employment surveys conducted by municipalities in portraying employment and business trends for the entire GTA and its individual municipalities between 2011 and 2015.³

1.4 Scope and structure of the report

The research results presented are in two parts: (a) employment growth patterns 2016 over 2015 and (b) useful insights ("nuggets") into local economies. Unless noted, all the data referenced are taken from the published municipal employment surveys for 2016. Since employment surveys are typically conducted in the summer months, the results apply to approximately mid-year of 2016.

³ Shin, Justin, *What Municipal Employment Surveys Tell Us About Recent Employment Growth in the Greater Toronto Area*, Centre for Urban Research and Land Development (CUR), Ryerson University, October 3, 2016. This study concluded: "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." (p. 4)



The Regions of Durham, York, Halton and the City of Toronto undertake annual employment surveys and publish the results. In Peel region, the City of Mississauga conducts an annual survey, but the City of Brampton only conducts a survey every second year with 2015 being the latest published. Peel Region conducted employment surveys on behalf of the Town of Caledon in 2014 and 2016 and Peel Region staff provided us with unpublished Caledon employment counts for these years.

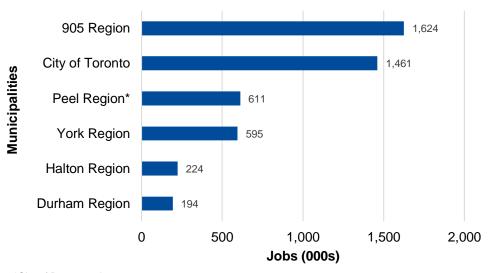
Three appendices are included:

- Appendix A lists all the employment survey reports and documents used in the preparation of this report;
- Appendix B is a table summarizing total employment data for the local municipalities in the GTA as of 2016 (2015 in the case of Brampton); and
- Appendix C contains copies of RISWG's letter dated September 12, 2017, discussion notes prepared by Frank Clayton for a September 22, 2017 meeting and RISWG's follow-up written response after the meeting.

2. TOTAL EMPLOYMENT IN THE YEAR 2016

2.1 More than half of GTA jobs are outside Toronto according to the surveys

Figure 1: Total Employment in the GTA, 2016



*City of Brampton is 2015. Source: CUR based on municipal employment surveys.

- According to the employment surveys, the GTA had a total of 3,085,386 jobs in 2016 with 1,461,020 in the City of Toronto (47 percent of the total) and 1,624,366 in the four 905 regions (53 percent of the total).
- Peel region (611,237 jobs) and York region (595,200 jobs) were next in importance to Toronto in terms of total employment.

2.2 Surveys vary in their coverage of employment

Figure 2: Coverage of Municipal Employment Surveys, 2016

	Business Establishments	Home-Based Businesses	Farm-Based Businesses	Estimates for Non- Response	National Household Survey Coverage
City of Toronto	Yes	Limited	Not applicable	Yes	No
York Region	Yes	Yes	Yes	Yes	No
Halton Region	Yes	Limited	Yes	No	No
Durham Region	Yes	Limited	Yes	No	No
Peel Region:					
City of Mississauga	a Yes	Yes	Not specified	No	Yes
City of Brampton*	Yes	No	Not specified	No	No
Town of Caledon	Yes	Yes	Yes	No	Yes

^{*}City of Brampton is 2015.

Source: CUR based on municipal employment surveys.

While all seven employment surveys provide employment estimates, the surveys do not all cover the same employment base:

- Four municipalities City of Toronto, Region of Halton, Region of Durham, and City of Brampton collect limited or no information on home-based businesses.
- Three municipalities Region of York, City of Mississauga, and Town of Caledon
 (adjusted by Region of Peel) derived home-based employment estimates based on data
 in Statistics Canada's Canadian Business Count tabulations or the 2011 National
 Household Survey.
- Four municipalities Regions of York, Halton and Durham and the Town of Caledon
 (adjusted by Region of Peel) specified the collection of information on farm-based
 businesses or estimates of this sector are made using data from the 2011 Census of
 Agriculture as a starting point.
- Except for Region of York and City of Toronto, the municipalities did not estimate employment in businesses not responding to the survey who had responded previously.
- City of Mississauga adjusted its total employment counts to be consistent with the
 employment coverage of the Census of Canada based on information from the 2011
 National Household Survey. Region of Peel similarly adjusted Caledon's total
 employment numbers using the 2011 National Household Survey as a starting point.

3. EMPLOYMENT GROWTH IN THE YEAR 2016

3.1 Number of GTA jobs climb by 76,639 in 2016 according to the surveys

Figure 3: Growth in Total Employment, GTA, 2016

	Total Employment		Year-to-Year Growth	
			%	
	Job	s	Distribution	
City of Toronto	1,461,020	38,740	49	
Durham Region	193,630	16,067	20	
York Region	595,200	15,100	22	
Halton Region	224,299	4,273	5	
Peel Region:	611,237	N/A	N/A	
City of Mississauga	428,309	2,459	3	
City of Brampton*	150,584	N/A	N/A	
Town of Caledon	32,344	N/A	N/A	
Total GTA	3,085,386	N/A	N/A	
Total GTA excluding Brampton and Caled	lon 2,902,458	76,639	100	
*City of Brampton is 2015. Source: CUR based on municipal employment surv	veys.			

- A job growth of 76,639 for the GTA is calculated from the available 2016 employment surveys this estimate excludes Brampton and Caledon where data for the two years are not available.
- To provide a perspective on the amount of recent growth in Brampton and Caledon, the latest survey data available shows an average loss of 1,769 jobs per year in Brampton between 2013 and 2015 and an average annual gain of 2,731 jobs in Caledon between 2014 and 2016.
- The compilation of employment estimates from the surveys points to a year of robust employment growth in the GTA in 2016. This is supported by the 2016 growth in the number of employed persons in Statistics Canada's Labour Force Survey (LFS). The LFS showed growth of 55,900-60,500 persons in 2016 over 2015 in the combined Toronto and Oshawa Census Metropolitan Areas (a proxy for the GTA).

The Labour Force Survey estimates that the average annual employment growth in 2016 is 55,900 persons and 60,500 persons for mid-year 2015 to mid-year 2016.



⁴ The municipal employment surveys and Statistic Canada's Labour Force Survey are not directly comparable because the former measures employment by place of work and the latter by place of residence.

3.2 Largest employment growth in Toronto followed by Durham and York regions according to the surveys

- The survey publications show a growth of 38,740 jobs in Toronto followed by Durham region (16,067) and York region (15,100). It is striking that the combined employment in Durham and York regions alone is close to Toronto's growth (see Figure 3).
- Halton region and Peel region lagged in employment growth, but it should be noted that growth in Peel region consists of Mississauga only.

4. APPRAISING HOW WELL REPORTED 2016 EMPLOYMENT GROWTH ACTUALLY MIRRORS GROWTH

4.1 Not all reported employment growth in the surveys is actual growth

- The changes in employment in 2016 from 2015 (Figure 3) are taken directly from the published surveys, except for City of Mississauga. The changes represent actual employment growth only to the extent that the individual municipal surveys for both years were conducted in exactly the same way with the same coverage and response rates. This was not the case, at least for Region of Durham and City of Toronto.
- Region of Durham's calculated employment growth of 16,067 jobs seemed very large in relation to growth in the other regions. In response to our request, Region of Durham explained that 7,029 jobs came from existing businesses who responded to the survey for the first time in 2016 while the remaining 9,038 came from new businesses or businesses that expanded. To calculate actual employment growth in 2016, the 7,029 jobs should be excluded leaving 9,038 as actual employment growth.
- According to the City of Toronto's employment survey, jobs in Toronto grew 2.7% and for a growth of 38,740 jobs in 2016. However, the survey also states "... a significant component of this growth in 2016 is due to the new inclusion of 25,000 part-time Toronto District School Board employees" (p.9). Although previous surveys did not capture the 25,000 jobs and count them towards employment, they are not new jobs in the city. By removing the 25,000 Toronto District School Board jobs from the calculated change, 13,740 jobs becomes the actual employment growth for the city in 2016.
- In contrast with the employment estimates released monthly by Statistics Canada, none of
 the municipal surveys provide quality indicators. For instance, Statistics Canada
 calculates and provides users with an indication of the representativeness of the
 employment estimates in both its Labour Force Survey and the Survey of Employment,
 Payroll and Hours based on the size of their coefficient of variation.

This previously uncaptured portion of TDSB employment includes existing jobs that do not have a spatial location, such as substitute teachers or other travelling staff.



⁵ The employment growth for Mississauga was calculated using the City of Mississauga employment profiles for 2015 and 2016.

⁶ Regional Municipality of Durham, Planning and Economic Development, email message to Frank Clayton, dated July 6, 2017.

⁷ City of Toronto, *Toronto Employment Survey 2016*, p. 9.

4.2 2016 GTA employment growth after Toronto and Durham adjustments is 44,610 jobs, not 76,639

Figure 4: Adjusted Growth in Total Employment, GTA, 2016

Tota	l Employment	Gr	owth %	
	Jo	bs	Distribution	
City of Toronto	1,461,020	13,740	31	
Durham Region	193,630	9,038	20	
York Region	595,200	15,100	34	
Halton Region	224,299	4,273	10	
Peel Region:	611,237	N/A	N/A	
City of Mississauga	428,309	2,459	6	
City of Brampton*	150,584	N/A	N/A	
Town of Caledon	32,344	N/A	N/A	
Total GTA	3,085,386	N/A	N/A	
Total GTA excluding Brampton and Caledon	2,902,458	44,610	100	
*City of Brampton is 2015. Source: CUR based on municipal employment surveys.				

- After adjustments, Durham region is now third instead of second in the GTA when it comes to job growth in 2016. As noted, 7,029 of the reported 16,067 job growth in Durham region in Figure 3 is due to existing businesses responding for the first time to the employment survey, leaving 9,038 as the job growth due to new businesses or
- In addition, Toronto is no longer top in terms of job growth. As noted, 25,000 of the 38,740 job growth in Toronto is due to the inclusion of Toronto District School Board part-time employees for the first-time, leaving 13,740 jobs as the actual job growth due in Toronto for 2016.
- York region is now the leader in job growth in the GTA with 15,100 net additional jobs reported compared to Toronto's amended 13,740 jobs.
- The employment data in Figure 4 assumes that the published employment growth in portions of the GTA excluding Durham and Toronto accurately portray employment growth in 2016. It is not known at this time whether this assumption is a reasonable one.

expansion of existing businesses.

5. ECONOMIC NUGGETS FROM THE 2016 EMPLOYMENT SURVEYS

While the individual employment surveys as currently designed are unable to provide reliable estimates of GTA employment in a given year or to monitor employment growth over time, they do still provide some interesting insights into differences in economic structures and growth dynamics between municipalities.

This section begins with an examination of differences between economic structures of municipalities in the GTA. This followed by five infographics, one for each municipality, highlighting facets of the local economies.

5.1 Economic structure by Municipality, GTA, 2016

- A disaggregation of the employment structure within a municipality provides valuable information on the type of jobs created in the local economy. All GTA municipalities have included in their surveys a breakdown of employment by the 2012 North American Industrial Classification System (NAICS).
- In order to distinguish employment types, Halton Region used the NAICS sectors ("economic sectors") and combined them to create three broader categories more related to land uses: knowledge-based and institutional; population-related; and employment lands. According to the Region, the knowledge-based and institutional category consists of mostly office employees, the population-related consists largely of commercial retail employees, and the employment lands consists mostly of industrial employees.
- This particular categorization differs from what has become widely-accepted throughout the GTA based on research conducted by Hemson Consulting, especially its employment analyses and forecasts for the Greater Golden Horseshoe. Hemson disaggregates employment into three categories: major office (employees working in office buildings sized 20,000 sq. ft. or more), population-related (which encompasses more than Halton's Region's category of the same name), and employment lands (employees working in low-rise industrial type buildings).8
- A key limitation to Halton Region's categorization based on NAICS sectors is that individual economic sectors can create jobs in more than one land use category.⁹ It is not evident why Halton Region did not adopt Hemson's methodology. It would be a useful exercise to compare the pros and cons of the two approaches and reach agreement on the typology that best demonstrates economic structures and provides insight into employment by categories of land (e.g. retail, business parks).

⁹ Hemson Consulting Ltd., email message to Frank Clayton and Jodee Ng from Russell Mathew, dated July 24, 2017.



⁸ For example, Halton Region's knowledge-based and institutional category includes Hospital employees which could be added to the population-related category and Professional, Scientific & Technical Services employees could be added into the employment land category.

- The authors of this report have applied Halton Region's methodology using the NAICS information from the other single-tier and upper-tier municipal employment surveys to compare the relative importance of the three employment categories in Toronto and the four regions. ¹⁰ Key findings are:
 - Employment in Toronto is tilted to knowledge-based and institutional and population-related (49 percent and 40 percent).
 - Halton and Durham regions have a high concentration of population-related employment (40 percent and 48 percent).
 - York region's employment is split evenly between the three categories (32 to 35 percent).
 - Peel region has a high concentration of employment land jobs compared to the other two categories (43 percent).

¹⁰ For our calculations, hospital employees were combined with Health Care and Social Assistance economic sector as per the NAICS in the population-related category.

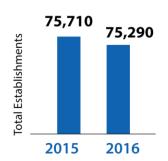


5.2 City of Toronto, 2016

Toronto gained **3,670** new establishments



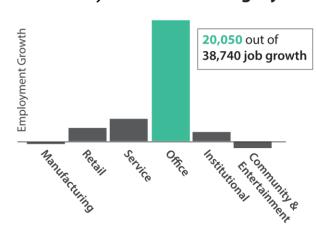
But still had a net loss of **420** establishments



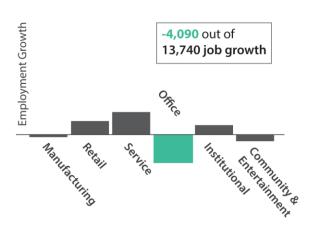
Exits and entries of businesses made up 5% of all establishments



The **published** employment growth is mostly in the **office category**



But the **actual office employment** declined



The **published** employment growth is higher in the centres than downtown

Total	38,740
Rest of the City	34,740
Employment Areas	-9,070
Downtown	2,560
Centres	10,510

When in **actuality**, employment growth declined in the centres

Total	13,740
Rest of the City	22,240
Employment Areas	-9,070
Downtown	2,560
Centres	-1,990

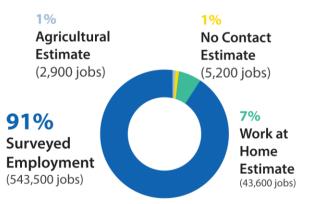
Source: CUR based on City of Toronto, *Toronto 2016 Employment Survey*, 2016; City of Toronto, *Toronto 2015 Employment Survey*, 2015; and City of Toronto, SIPA City Planning Division, email message to Jodee Ng which refers to Toronto District School Board jobs, dated July 27, 2017.

5.3 York Region, 2016

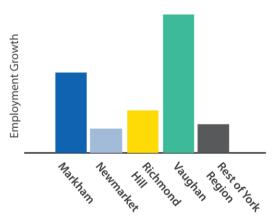
York Region has the **third** largest job base in GTA



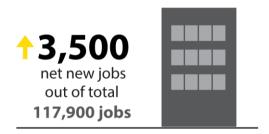
Most of the job data are collected through the employment survey



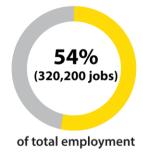
Almost half (44%) of the employment growth occurred in Vaughan



Employment in the centres and corridors grew by almost 3%



Employment lands are a strong contributor to the **job economy**

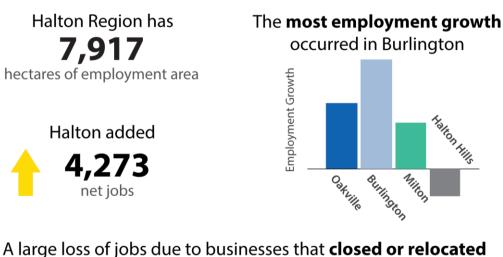


Jobs on the employment lands are predominately service-producing



Source: CUR based on the Regional Municipality of York, 2016 Employment and Industry Report, 2017 and the Regionality Municipality of York, 2016 employment survey results for lower-tier municipalities, 2017.

5.4 Halton Region, 2016



A large loss of jobs due to businesses that closed or relocated

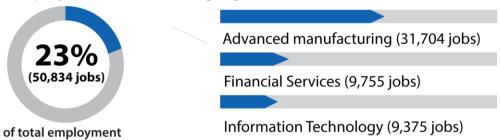


Businesses that **exported** goods and services

Businesses involved in research & development Offsite employment



Total employment in the emerging sectors:



Source: CUR based on the Regional Municipality of Halton, 2016 Employment Survey Results, 2017.

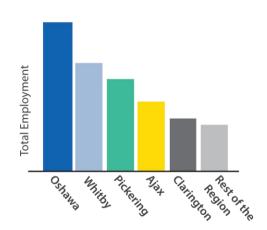


5.5 Durham Region, 2016

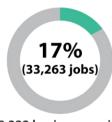
Total employment in Durham Region was

193,630

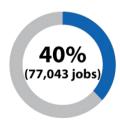
91% of Durham's employment occurs in **5 municipalities**



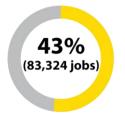
Durham's employment is mainly in medium and large businesses



8,332 businesses with 1-10 employees



2,716 businesses with 11-100 employees



295 businesses with 100+ employees

7% of businesses responded to the survey for the first time

7,029 jobs were identified from businesses responding for the first time

3% of businesses exported goods/services



3% exported

406 businesses



6% imported

736 businesses

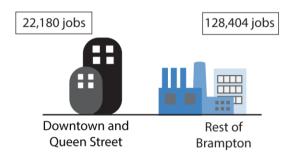
Source: CUR based on the Regional Municipality of Durham, 2016 Business Count Highlights, 2016 and the Regional Municipality of Durham, Planning and Economic Development, email message from Brian Bridgeman to Frank Clayton, dated July 6, 2017.

5.6 **Peel Region, 2016**

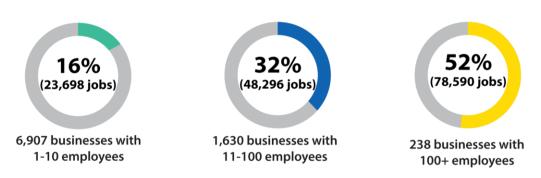
The east side of Brampton has a **higher proportion** of employment



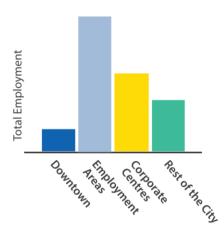
85% of employment in Brampton is located **outside** the downtown and Queen Street corridor



Most of Brampton's employment is in large businesses



Mississauga's **employment areas** have the most jobs in the city



The **most job growth** occurred in Mississauga's corporate centres



While **job growth declined the most** in the employment areas



Source: CUR based on City of Mississauga, 2017 Employment Profile; City of Mississauga, 2017 employment profile statistics, 2017 and City of Brampton, 2015 Employer Survey, 2016.

APPENDIX A:

Below is the list of municipal employment surveys and documents referenced:

- City of Brampton, Brampton Employer Survey Results, 2016.
- City of Mississauga, 2017 Employment Profile, 2017.
- City of Mississauga, 2017 employment profile statistics. Accessed July, 2017 http://www5.mississauga.ca/research_catalogue/N_42_2017_EmploymentProfileStatistic s CSV.zip
- City of Toronto, Toronto Employment Survey 2016, 2017.
- City of Toronto, Toronto Employment Survey 2015, 2015.
- City of Toronto, SIPA City Planning Division, email message to Jodee Ng which refers to Toronto District School Board jobs, dated July 27, 2017.
- Hemson Consulting Ltd, email message to Frank Clayton and Jodee Ng from Russell Mathew, dated July 24, 2017.
- The Regional Municipality of Durham, 2016 Business Count Highlights, 2016.
- The Regional Municipality of Durham, Planning and Economic Development, email message from Brian Bridgeman to Frank Clayton, dated July 6, 2017.
- The Regional Municipality of Halton, 2016 Employment Survey Results, 2017.
- The Regional Municipality of Peel, Information Management Division, email message to Jodee Ng which refers to Caledon 2016 employment survey data, dated July 19, 2017.
- The Regional Municipality of York, 2016 employment survey results for lower-tier municipalities. Accessed July, 2017, http://shrinkslessorsquare.ca/documents/category/9-york-region?download=185:york-region-municipalities-emplyment-profiles-2016
- The Regional Municipality of York, Long Range Planning, Comments on what municipal employment surveys tell us about recent employment growth in the Greater Toronto Area, email message to Frank Clayton from Paul Bottomley, dated April 21, 2017.
- The Regional Municipality of York, *York Region Employment and Industry Report 2016*, 2017.
- The Regional Planning Commissioners of Ontario, *Planning Data Standards Recommended Guidelines: Employment Data*, September 2000,
- Shin, Justin. What Municipal Employment Surveys Tell Us About Recent Employment Growth in the Greater Toronto Area. Centre for Urban Research and Land Development, Ryerson University, October 3, 2016.

APPENDIX B:

Total Employment in all GTA Municipalities, 2016

Total Employment

	Jobs	% Distribution across GTA	Local Municipalities as a % of Regional Municipality
City of Toronto	1,461,020	47	-
Halton Region	224,299	7	100
Oakville	86,000	-	38
Burlington	85,508	-	38
Milton	32,091	-	14
Halton Hills	20,700	-	9
Peel Region	611,237	20	100
Mississauga	428,309	-	70
Brampton*	150,584	-	25
Caledon	32,344	-	5
York Region**	595,200	19	100
Aurora	24,121	-	4
East Gwillimbury	7,727	-	1
Georgina	7,554	-	1
King	6,925	-	1
Markham	167,045	-	28
Newmarket	40,798	-	7
Richmond Hill	67,866	-	11
Vaughan	208,827	-	35
Whitchurch-Stouffville	12,633	-	2
Durham Region	193,630	6	100
Oshawa	55,041	-	28
Whitby	40,435	-	21
Pickering	34,446	-	18
Ajax	26,205	-	14
Clarington	20,252	-	10
Scugog	7,049	-	4
Uxbridge	6,621	-	3
Brock	3,581		2
Total GTA	3,085,386	100	N/A

^{*}City of Brampton is 2015.



^{**}Low er-tier municipality employment numbers published in York Region municipal profiles do not add up to total employment.

Source: CUR based on municipal employment surveys and York Region 2016 employment survey results for low er-tier municipalities.

APPENDIX C: Interaction with the Regional Information Systems Working Group (RISWG)

- Letter from Stephanie Jones, RISWG 2017 Chair, to Frank Clayton dated September 12, 2017.
- Discussion notes prepared by Frank Clayton for RISWG meeting held on September 22, 2017.
- RISWG follow-up response to September meeting dated October 23, 2017.

REGIONAL
INFORMATION
SYSTEMS
WORKING
GROUP



September 12, 2017

Frank Clayton
Senior Research Fellow
Centre for Urban Policy and Land Development (CUR)
Ryerson University
Third Floor, 111 Gerrard Street East
Toronto, Ontario
M5B 2K3

Dear Mr. Clayton:

RE: DRAFT - Employment Growth within the Greater Toronto Area in 2016: A Review of Municipal Employment Surveys

Thank you for the opportunity to provide feedback on your draft report regarding GTA – Municipal Employment Surveys.

Attached is a submission expressing the views and recommendations of the GTA RISWG members regarding the draft report. Your positive consideration of the suggested enhancements is greatly appreciated.

If you have any questions, feel free to contact me.

Yours truly,

Stephanie Jones RISWG 2017 Chair

cc: Amjad Gauhar, Durham Region Gena Ali, Halton Region Anthony Campese, Halton Region Ron Jaros, Peel Region Michael Wright, City of Toronto Mark Kitzelmann, York Region Angela Monaco, City of Hamilton Margaret Parkin, Region of Waterloo

Attach.



Regional Information System Working Group (RISWG) September 12, 2017

Employment Growth within the Greater Toronto Area in 2016: A Review of Municipal Employment Surveys (Draft Report) - Response

1. Standardized GTA Wide Data

A key message in the report is about the inconsistency between employment surveys. To understand why the employment surveys are not consistent, it is important for the report provide a history of Employment Surveys in the GTA. Over 10 years ago, the province set out employment targets the municipalities were required to monitor and achieve through The Places to Grow Act. At the time, only York and Toronto had appropriate employment data available via their employment surveys to monitor employment. No other data sources existed. RISWG created a proposal using standard questions and methodology and approached the province to partner with the Region's to conduct employment surveys. Unfortunately the province did not commit. As a result municipalities decided to conduct their own surveys within their available resources.

Each municipality's survey was created based on the original RISWG proposal. The data collected and the survey cycles were decided by the municipality's individual requirements and resources. For example farms are not of interest to Toronto, however, in farms are an important part of the employment picture in Durham. Peel only has funding to survey Caledon once every two years. It is important to note that the surveys are not intended to be compiled together across the GTA.

2. Centralized Data Collection

The draft report states the "only way to the only way to produce a comprehensive and consistent employment data set is to have surveys conducted by or supervised by a centralized agency". The municipalities all recognize the need to have a set of standardized data across the GGH that can be compared over time. However, as stated above the Province would not commit to partnering with the municipalities in this endeayour.

It is important to note municipalities, through RISWG, do make efforts to understand each other's methodologies and discuss best practices in data collection and reporting. RISWG has a long history of discussing best practices for the municipal employment surveys, surveys that have informed local, regional and provincial planning. The report could recognize this long history and suggest that Municipalities, through RISWG, can administer, structure, and assess the data in a similar fashion without having it centralized. The challenge here is that municipalities conduct these surveys for different reasons and therefore the surveys are structured and administered differently as is necessary to meet their respective planning and operational needs. As part of the proposal for a GGH



wide employment survey standard, the municipalities identified common features necessary for the comparability of core data. This report could recognize the past and ongoing efforts by municipalities to work together despite limited resources and competing priorities. An example of this is the introduction and use of NAICS coding in a number of the surveys.

3. Accuracy of Data

The draft report states "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 business and annual changes in employment/businesses for the entire GTA." This needs to be better explained. The reasons behind this are not discussed in the report and are vital in explaining why that statement is true/false. For example, the survey is optional in nature and businesses can refuse to provide employment information. Reading the draft report without this information makes it seem like the surveys are flawed. Most surveys explain the survey collection and data limitations. The surveys are also not intended to be compiled for a GTA wide picture.

4. Contradiction within the Report

The draft report seems to read as two separate reports. The first half performs a critique on the survey methods, and then the second half uses the data from the surveys to illustrate employment growth.

5. Tone of the Report

The draft report has a negative connotation throughout. Given the constraints municipalities face and the considerable effort it takes to conduct the employment surveys, the negative tone is disappointing and discouraging.

6. More Specific Feedback

- a) Pg. 2 "Economic nuggets from 2016 surveys": This section does not explain what the benchmarks indicators are or how they were determined. Stating that one municipality's results are "skewed" towards a type of employment is not clearly justified (Skewed compared to what? What is an "appropriate" breakdown of employment types?).
- b) Pg. 2 "The surveys are conducted at the municipal level rather than by a centralized agency or body." This statement and the succeeding paragraph do not explain why this is the only recommended solution. The municipalities have designed their respective survey programmes and invested considerable effort in their execution to meet their business needs. The municipalities are not making "ad hoc changes" but considered changes to their respective survey processes to address their information requirements. For example, the Toronto Employment Survey incorporated NAICS coding in 2011 for the City's varied internal analyses and so as to increase the potential for comparability with other data sources. The report could note that the 2016 Toronto Employment Survey bulletin contains an assessment of its NAICS coding over the past five years, compares the establishment counts



- with other available data sources, and identifies challenges and opportunities for further process improvements.
- c) Pg. 2 "There is little effort being made to ensure the individual surveys are consistent over time so that changes accurately portray what has happened." This statement is puzzling. The observation in the succeeding paragraph regarding the significance of time-series data collection and analysis might take note of the use of the LUAC standard for thirty-five years by the City of Toronto. RISWG developed the Land Use Activity Code (LUAC) standard as a means of relating employment to land use. This is a unique feature of some municipal employment surveys, enabling an analysis of employment change with respect to land management. Through a consistent use of this coding standard over time, with minor modifications to accommodate structural industrial change, this has enabled municipalities using this standard to create longitudinal data collection for time-series analysis. The report could also note that each year, the City of Toronto produces an annual Toronto Employment Survey bulletin that analyzes change year-over-year, over five years, and over ten years. The report could also take note of the commentary in the 2013 Toronto Employment Survey Bulletin which contains a thirty-five-year retrospective on employment change in the municipality. This same bulletin also contains a comparison of the 2011 Toronto Employment Survey results against the 2011 National Household Survey and the Labour Force Survey of Statistics Canada.
- d) Pg. 2 Economic Nuggets, Bullet 3: York Region half of the region's growth was on employment lands just 3,500 net new jobs occurred in the "centres and corridors". As per York Region's 2016 E&I Report, employment in centres and corridors grew by over 3,500 jobs.
- e) Pg 2, p. 9 and page 13 regarding the City of Toronto employment in 2016 and the inclusion of TDSB employees. The 2016 Toronto Employment Survey Bulletin discusses this issue in full and the challenge of capturing footloose employment in an establishment-based survey. A subsequent Staff Report expanded on this issue and is publicly available. The report might take note that municipal employment surveys are voluntary instruments. It is through each municipality's effort to build goodwill with its respective employers that has enabled the capture of employment not previously reported to the municipality, and over time, the degree to which these surveys can capture more of the total employment occurring in their respective municipalities, The results need to be interpreted in the context of the entirety of municipal reporting on these issues. For example, the report notes in the importance of the quality indicators in Statistics Canada's instruments; it might also take note of the 2013 comparison between the employment captured by the 2011 Toronto Employment Survey and the 2011 National Household Survey and the Labour Force Survey, which demonstrated the significant undercounting of employment by the NHS. The report might also note the importance of the municipal employment surveys addressing issues of local concern in assessing employment,
- f) Pg. 7 bullet 3: Halton Region also surveys farms



g) Pg. 11 bullet 2 and 3: Does not state why Hemson's methodology is superior to Halton's. The intent of categorizing employment into these specific categories may be different. Halton's intent is to separate employment by land use, while Hemson's may be different, resulting in different categories (i.e. forecasting).

NOTES FOR A DISCUSSION RE DRAFT REPORT "EMPLOYMENT GROWTH WITHIN THE GREATER TORONTO AREA IN 2016: A REVIEW OF MUNICIPAL EMPLOYMENT SURVEYS"

Frank Clayton Sept. 22, 2017

We are all in agreement with the need for standardized data comparable over time for all GGH municipalities

- **CUR:** Reliable place of work employment data for the entire GGH by type/land use and location to complement Census of Canada data
- **RISWG:** "the municipalities all recognize the need to have a set of standardized data across the GGH that can be compared over time" (RISWG feedback)
- CURs latest report: not intended to be a critical document but a spark for change

RISWG's Feedback on Draft Report

- 1. Draft does not reflect history Province refused to partner for standardized survey *CUR Comment: Certainly can bring in this history*
- 2. Individual surveys not intended to be compiled together CUR Comment: Find this hard to believe given RISWG a regional working group
- 3. Accuracy/quality of data reasons not mentioned, e.g. survey is optional CUR Comment: Some mechanism needed to ensure statistical rigour and quality control including imputation of non-responses central collection or oversight two options. Time for RISWG to employ or retain services of statistician to vet and ensure consistency?
- 4. Municipalities have differing data needs

 CUR Comment: Not a reason for not have a core set of data collection common to all municipalities

5. Draft reads like two separate reports

CUR Comment: Don't agree. Key data: change in 2016 employment (Figures 3 & 4) published and adjusted employment growth (for Toronto & Durham – will add adjustments for other municipalities if brought to our attention)

- 6. Tone of report is negative throughout

 CUR Comment: Agree final report should be more positive not achieving standardized time-series data, let's resolve, here is how
- 7. More detail re Toronto survey as benchmark and credibility of results over time CUR Comment: Based on personal experience can vouch for Toronto data as being reasonably reliable (though adding education workers in 2016 an oddity and distorts annual change)
- 8. Halton vs. Hemson methodology for categorizing employment why Hemson superior? Current Comment: Hemson around for long-time and widely used/quoted – real question: why Halton did not follow Hemson approach?

Where do we go from here given desire for standardized time-series data?

- How to ensure consistent reliable employment data across GGH and over time? CUR Comment: Any suggestions from RISWG members welcomed
- Include Stephanie's September 12 letter as an appendix to final CUR report? CUR Comment: Happy to include if that is the desire

Regional Information System Working Group (RISWG) October 23, 2017

Employment Growth within the Greater Toronto Area in 2016: A Review of Municipal Employment Surveys (Draft Report) – Addendum to Letter of September 12, 2017

Dr. Frank Clayton met with RISWG on September 22, 2017 as part of the regular RISWG meeting to further discuss *Employment Growth within the Greater Toronto Area in 2016: A Review of Municipal Employment Surveys* (Draft Report).

dd: Standardized GTA Wide Data

The standardization of GTA wide data was discussed further during this meeting. The following additional points could be considered in the report.

Each municipality funds their employment survey program which must be justified annually at budget time. There are different funding models and data collection practices as determined by each municipality's business processes and priorities, such as; bi-annual data collection programs, rotating collection areas, limited and varying staff resources and limited timeframes allocated for data collection.

The report could note that there are different demands in each municipality to collect and use the resulting data in different ways, so the municipalities focus on collecting internally consistent data for these many purposes. These different business needs result in different survey objectives, data collection practices, and reporting. For example, many municipalities use employment survey data to populate business directories.

The report could also note that the core data elements being collected are consistent year over year within each individual municipality per their data collection and reporting processes. Each municipality also has a training program for its staff and data validation processes for its data. Inconsistencies may arise when attempting to combine data together across jurisdictions for purposes for which the various datasets were not originally intended.

ee: Accuracy of Data

The accuracy of the data was discussed further. The following additional points could be considered in the report.

As we have already established, each municipality conducts its employment survey in a slightly different manner as required by their respective municipal operational objectives on which the respective programs are justified and funded. This can complicate crossjurisdictional analysis; however, the report could be more supportive of municipal employment surveys in general in creating unique and valuable information sources used in municipal land use planning. By stating that the data collected in the survey is not useful for regional economic analysis, a purpose for which the surveys were not designed, and without acknowledging the varying municipal needs for which this information is required, the report will cause the municipalities to expend more effort as part of the



regular reporting to explain to readers the various products created from this information and appropriate use of this information. The report could propose that the researchers should approach Statistics Canada for employment information they require for regional economic analysis.

1. Additional comments

Since the report is coming from Ryerson University, it could note the collaboration between the municipalities and the post-secondary educational institutions over many years to train students, often providing their first opportunity for professional work and training in their careers as researchers.