



Report: PDL-CPL-19-14

Region of Waterloo
Planning, Development and Legislative Services
Community Planning

To: Chair Tom Galloway and Members of the Planning and Works Committee

Date: March 19, 2019

File Code: D15-60 (A)

Subject: Year-End 2018 Population and Household Estimates for Waterloo Region

Recommendation:

For Information.

Summary:

This report highlights key aspects of Waterloo Region's population and household growth and how recent growth compares to long term trends. The total year-end population and household estimates are used by many Regional and Area Municipal departments, agencies, boards and community groups to plan for growth, support infrastructure and service programs, develop municipal benchmarks and performance indicators, calculate service costs per resident, assess housing need and track population-related trends.

The total population of Waterloo Region is estimated at 601,220 as of year-end 2018, including university and college students temporarily residing in the Region. Between 2017 and 2018, the population grew by 7,130 residents, a growth rate of 1.2 per cent. The estimated number of households was 216,230, representing a one-year growth rate of 1.4 per cent, or 3,000 more households than in 2017. The year end 2018 figure is higher than previously forecasted, due largely to significant increases in student enrollment in Conestoga College.

Further details on the population and household growth in the Region and Area Municipalities are contained in the following report and summarized in Attachment 1: Planning Information Bulletin. The Planning Information Bulletin will be distributed to

Area Municipalities and other parties, as well as being posted on the Region's website for broader community access.

Report:

Population and Household Estimates

The total population of Waterloo Region is estimated at 601,220 as of year-end 2018 including university and college students temporarily residing in the Region. This number represents an increase of 7,130 people (1.2 per cent) over 2017, lower than the 15 year average of 1.29 per cent. Of the Area Municipalities, Kitchener experienced the highest population growth at 2,560 people.

The estimated number of households in Waterloo Region in 2018 was 216,230. Growth in households from the previous year was 3,000 (1.4 per cent).

The overall persons per unit (PPU) tapered from 2.75 people per unit in 2006, to 2.72 in 2011, 2.70 in 2016 and is currently estimated at 2.69 in 2018. The declining PPU is attributed largely to the aging of population, smaller average family size, as well as the increase in apartment/condo units being built which generally house less people per unit than a traditional single-detached house.

Further detail on year-end 2018 population and household estimates for all Area Municipalities, along with 2017 comparators are shown in Table 1. A detailed description of the methodology used to create the year-end population and household estimates is contained in Attachment 2 to this report.

Table 1 - Year-end 2018 Population and Household Estimates for Waterloo Region

	Region of Waterloo*	Cambridge	Kitchener	North Dumfries	Waterloo	Wellesley	Wilmot	Woolwich
Total Population Year-end 2018*	601,220	136,810	255,070	10,610	139,490	11,540	21,570	26,150
Population in Regular Households	582,000	134,480	250,890	10,500	127,830	11,530	21,270	25,540
Population in Collective Dwellings***	19,220	2,330	4,180	120	11,660	10	300	620
Total Population Year-end 2017*	594,100	135,060	252,520	10,380	137,420	11,530	21,220	25,960
Additional Population	7,130	1,740	2,560	240	2,070	10	350	190
Population Change 2017-2018 (%)	1.20%	1.3%	1.0%	2.2%	1.5%	0.1%	1.6%	0.7%
Households Year-end 2018*	216,230	49,920	97,830	3,640	44,710	3,400	7,780	8,950
Households Year-end 2017*	213,220	49,160	96,720	3,550	43,890	3,390	7,650	8,870
Additional Households	3,000	760	1,120	100	820	10	130	80
Household Change 2017-2018 (%)	1.41%	1.5%	1.1%	2.5%	1.9%	0.3%	1.7%	0.9%
Persons per Unit+	2.69	2.69	2.56	2.88	2.86	3.39	2.73	2.85

* Based on available data from the 2016 Census, includes adjustments for recent residential development, students and other foreign/temporary residents, net Census undercount, and vacancy rates. Due various corrections and adjustments, direct comparison to previous years estimates are not valid.

** Municipal totals may not add due to independent rounding.

*** Collective dwellings include student residences, nursing homes, group homes, hospitals, larger lodging houses, etc.

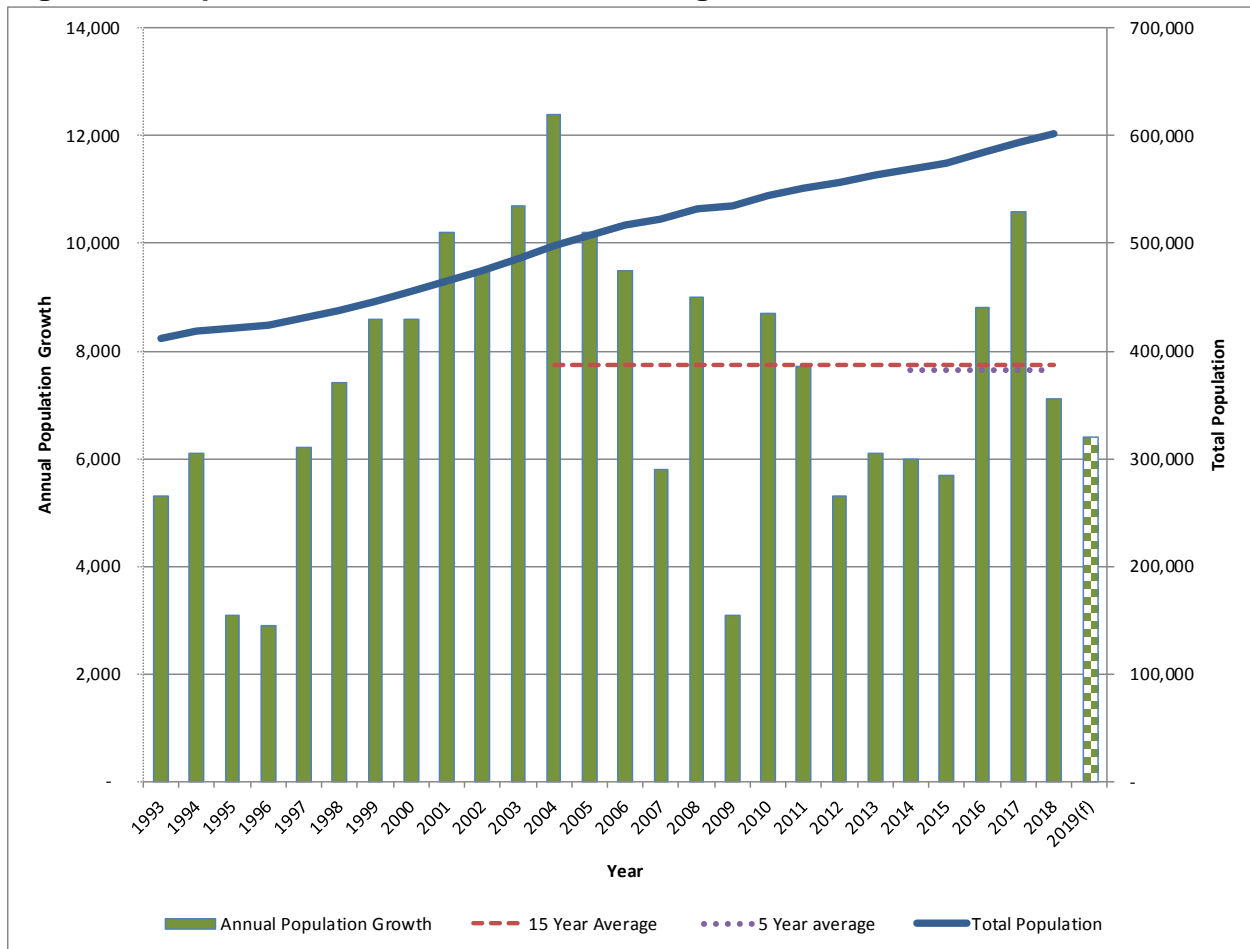
+ 'Persons per Unit' (PPU) calculation is based on the 'Population in Regular Households', not on 'Total Population'.

Population and Household Trends

After two years of strong population growth, in 2018 growth returned to similar levels as the previous four years as shown in Figure 1. The 15-year period from 2003 to 2018 approximates one typical cycle in the housing market, during which the Region’s population grew by an average of 7,735 per year, or 1.49 per cent. The most recent five year period, from 2013 to 2018, has been characterized by more moderate growth, with annual average of 7,645 people (1.3 per cent) and 3,080 households per year (1.44 per cent) in Waterloo Region.

A forecast of growth for 2019 anticipates the Region’s population to rise to over 607,720 people based on recent building permit activity, with a more moderate population growth rate of 1 per cent.

Figure 1 - Population Growth for Waterloo Region, 1993 to 2019



Estimates of Post-Secondary Students

The temporary student population contributes substantially to the total population of Waterloo Region. Estimates of the post-secondary student population and housing is based on recent data acquired from the University of Waterloo, Wilfrid Laurier University

and Conestoga College.

As of November 2017, there were 69,160 post-secondary students enrolled in full-time programs of Conestoga College, the University of Waterloo, and Wilfrid Laurier University, on the campuses that are located in Waterloo Region (Table 2). The student population has increased significantly this year due largely to increases in enrollment in Conestoga College. The increase was due to the completed renovations and expansions to the City of Waterloo campus, as well as increased enrollment of international students at the Doon Campus. The students at smaller schools such as business and technical training colleges, as well as thousands of students with part-time enrolments at our local schools are not included in these figures. Typically, these students already live in the Region or commute in for these programs, and therefore, are not considered to be adding to the local population.

Of the full-time students studying on local campuses, it is estimated that over 56,200 reside in Waterloo Region, while almost 12,960 students live outside the Region but commute to the local colleges and universities. These estimates are based on historical student commuting patterns

Table 2 - University and College Enrolment by Institution (Fall 2018)

	Conestoga		Waterloo		Laurier		Total	
	2017	2018	2017	2018	2017	2018	2017	2018
Full-time Local Enrolment	13,510	17,820	36,430	37,280	13,930	14,060	63,870	69,160
Commuters, co-op work term, etc.	4,030	5,270	6,650	7,080	610	610	11,290	12,960
Resident in Region	9,480	12,550	29,780	30,200	13,320	13,450	52,580	56,200

Since the Census counts post-secondary students at their primary place of residence, usually at the home of their parents, there are flows of students both into and out of the Region. The net number of post-secondary students in Waterloo Region is estimated to be 24,500. Further estimates of the student population by area municipality is provided in Table 3.

Table 3 – Temporary Student Population Estimates for Waterloo Region

	Region of Waterloo*	Cambridge	Kitchener	North Dumfries	Waterloo	Wellesley	Wilmot	Woolwich
Temporary Student Population (included above)	23,510	(1,060)	(820)	(110)	25,930	(50)	(200)	(170)
Students Arriving	31,560	800	3,030	40	27,480	40	60	100
Living in Student Residences	10,430	-	530	-	9,900	-	-	-
Living in Other Accommodations	21,120	800	2,500	40	17,580	40	60	100
Students Leaving++	(8,050)	(1,870)	(3,850)	(150)	(1,550)	(90)	(260)	(270)

++ These are students who leave home to attend school. They represent the reverse flow of the temporary students arriving in the Region from elsewhere.

Area Municipal Consultation/Coordination

This report has been circulated to all Area Municipalities.

Corporate Strategic Plan:

Many of the objectives and actions contained in the Corporate Strategic Plan rely on estimates of population and households, including Strategic Objectives 2.2 “Develop, optimize and maintain infrastructure to meet current and projected needs”, and 5.3 “Ensure Regional programs and services are efficient and effective and demonstrate accountability to the public”.

Financial Implications:

Nil.

Other Department Consultations/Concurrence:

Nil.

Attachments:

Attachment 1 - Year-end 2018 Population and Housing Estimates Bulletin

Attachment 2 - Methodology for Estimation of Regional Year-end Population

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Approved By: **Rod Regier**, Commissioner, Planning, Development and Legislative Services

Attachment 1**Year-end 2018 Population and Housing Estimates Bulletin**

Planning, Housing and Community Services produces year-end estimates of population and households (equivalent to occupied dwelling units) for the Region of Waterloo and its constituent municipalities. The base for these estimates is the 2016 Census of Canada. Building Permit activity as reported by the municipalities was used to update this base. Vacancy rates (extrapolated from CMHC data), demolitions, university/college student enrollment, and assumptions about the average number of persons per dwelling unit (PPU) also influence the numbers. Although based on the best information available, population and household numbers should always be regarded as estimates, not statements of fact.

Year-End 2018 Population and Household Estimates for the Region of Waterloo

	Region of Waterloo*	Cambridge	Kitchener	North Dumfries	Waterloo	Wellesley	Wilmot	Woolwich
Total Population Year-end 2018*	601,220	136,810	255,070	10,610	139,490	11,540	21,570	26,150
Population in Regular Households	582,000	134,480	250,890	10,500	127,830	11,530	21,270	25,540
Population in Collective Dwellings***	19,220	2,330	4,180	120	11,660	10	300	620
Total Population Year-end 2017*	594,100	135,060	252,520	10,380	137,420	11,530	21,220	25,960
Additional Population	7,130	1,740	2,560	240	2,070	10	350	190
Population Change 2017-2018 (%)	1.20%	1.3%	1.0%	2.2%	1.5%	0.1%	1.6%	0.7%
Households Year-end 2018*	216,230	49,920	97,830	3,640	44,710	3,400	7,780	8,950
Households Year-end 2017*	213,220	49,160	96,720	3,550	43,890	3,390	7,650	8,870
Additional Households	3,000	760	1,120	100	820	10	130	80
Household Change 2017-2018 (%)	1.41%	1.5%	1.1%	2.5%	1.9%	0.3%	1.7%	0.9%
Persons per Unit+	2.69	2.69	2.56	2.88	2.86	3.39	2.73	2.85
Temporary Student Population (included above)	24,500	(920)	(350)	(100)	26,260	(50)	(190)	(150)
Students Arriving	32,270	900	3,320	40	27,800	40	60	100
Living in Student Residences	10,430	-	530	-	9,900	-	-	-
Living in Other Accommodations	21,840	900	2,780	40	17,900	40	60	100
Students Leaving++	(7,770)	(1,830)	(3,670)	(150)	(1,540)	(90)	(250)	(250)

* Based on available data from the 2016 Census, includes adjustments for recent residential development, students and other foreign/temporary residents, net Census undercount, and vacancy rates. Due various corrections and adjustments, direct comparison to previous years estimates are not valid.

** Municipal totals may not add due to independent rounding.

*** Collective dwellings include student residences, nursing homes, group homes, hospitals, larger lodging houses, etc.

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Long-term Trends in Population and Households: Waterloo Region

Year-end	Population			Households		
	Total Population	Annual Growth	Change %	total Households	Annual Growth	Change %
1993	411,900	5,300	1.30%	143,090	2,830	2.02%
1994	418,000	6,100	1.48%	146,280	3,190	2.23%
1995	421,100	3,100	0.74%	148,080	1,800	1.23%
1996	424,000	2,900	0.69%	149,640	1,560	1.05%
1997	430,200	6,200	1.46%	152,010	2,370	1.58%
1998	437,600	7,400	1.72%	154,950	2,940	1.93%
1999	446,200	8,600	1.97%	158,270	3,320	2.14%
2000	454,800	8,600	1.93%	161,590	3,320	2.10%
2001	465,000	10,200	2.24%	164,600	3,010	1.86%
2002	474,500	9,500	2.04%	167,530	2,930	1.78%
2003	485,200	10,700	2.26%	170,820	3,290	1.96%
2004	497,600	12,400	2.56%	175,080	4,260	2.49%
2005	507,800	10,200	2.05%	178,780	3,700	2.11%
2006	517,300	9,500	1.87%	182,200	3,420	1.91%
2007	523,100	5,800	1.12%	185,130	2,930	1.61%
2008	532,100	9,000	1.72%	188,800	3,670	1.98%
2009	535,200	3,100	0.58%	189,820	1,020	0.54%
2010	543,900	8,700	1.63%	193,230	3,410	1.80%
2011	551,600	7,700	1.42%	196,490	3,260	1.69%
2012	556,900	5,300	0.96%	198,480	1,990	1.01%
2013	563,000	6,100	1.10%	200,830	2,350	1.18%
2014	569,000	6,000	1.07%	203,660	2,830	1.41%
2015	574,700	5,700	1.00%	205,990	2,330	1.14%
2016	583,500	8,800	1.53%	209,240	3,250	1.58%
2017	594,100	10,600	1.82%	213,220	3,980	1.90%
2018	601,220	7,120	1.20%	216,220	3,000	1.41%
2019(f)	607,620	6,400	1.06%	219,400	3,180	1.47%
5-year average		7,644	1.32%		3,078	1.44%
15-year average		7,735	1.49%		3,027	1.62%

f - Forecast

Attachment 2

Methodology for Estimation of Regional Year-end Population

An estimate of the current population and households in the Region is prepared by Planning, Development and Legislative Services staff each year. The estimate is primarily based on the most recent Census of Canada, which was May 2016, and provided a count of 535,154 people and 203,832 occupied dwellings. Given the high degree of uncertainty around the specific estimate of net undercoverage, together with the disruptive effect of making historical changes, the current practice is to use a 4 per cent addition to Census values to estimate the actual population. Retaining the 4 per cent undercoverage rate also maintains consistency with the assumptions used in the Places to Grow forecasts.

The Region's population and household estimates are anchored to 2016 Census estimates, and in the subsequent years they are extrapolated from building activity. Building permits are received from the Area Municipalities, and an estimated occupancy date is assigned to each permit. The estimated lag between building permit issuance and occupancy varies by dwelling type. These sources are supplemented by data from the Municipal Property Assessment Corporation (MPAC), correlated with a visual inspection of recent aerial photography, and data such as vacancy rates published by Canada Mortgage and Housing Corporation (CMHC). As a result, the growth in households cannot be directly compared to building activity in each year.

Although the Census population and household counts provide the foundational data, the estimate of population contained in this report differs from the population reported by the Census in several important ways. To best reflect the total number of people consuming services at year-end within the Region, adjustments are made to include:

- the Census net undercoverage (people who were missed or double counted by the Census);
- temporary residents in the Region, most notably students who study at our post-secondary institutions, as well as those who leave to study elsewhere;
- growth during the time period from mid-May to year-end; and
- adjustments for long-term trends in 'Persons Per Unit' by type of dwelling, as reflected in changing household sizes.

Similarly, the household estimates contained in this report are based on the 2016 Census, updated with building permit data, and with the following adjustments:

- vacancy rates in rental accommodations, which have dropped slightly from 2.4 to 2.2 per cent as reported by Canada Mortgage and Housing Corporation;
- student households; and
- growth during the time period from mid-May to year-end.