Central Transit Corridor (CTC) Monitoring Program

Kitchener-Cambridge-Waterloo

MONITORING CHANGE IN THE CTC 2020 REPORT

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1 Background

1.1 Summary

The Region of Waterloo recognizes the importance of monitoring the Central Transit Corridor (CTC) – the area around the Region's light rail system, ION – in order to understand the changing nature of the social, economic, and environmental characteristics of the corridor. The CTC Monitoring Program is a multi-year project to monitor change from the baseline year of 2011 until at least 2021, after ION has been constructed, opened for service, and is functioning within the community.

There are 18 indicators, which have been selected for their capacity to describe key aspects of the corridor. Each year, a theme such as The Environment, Housing Affordability, or Urban Vitality is explored in detail. Due to the ongoing COVID-19 pandemic, the theme of Mobility, which was originally scheduled for last year's report, has again been deferred this year.

It is recognized that there are many factors that influence change in the CTC. The economy, policies, programs, and political decisions at many levels of government are large influences on change in the Region, both inside the CTC and more broadly.

1.2 About ION

ION, the Region of Waterloo's rapid transit service approved by Council in June 2011, is shaping our community for the future by bringing Light Rail Transit (LRT) to Waterloo Region in two stages. In its entirety, ION will connect the core areas of Cambridge, Kitchener, and Waterloo. Stage 1 is 19 km in length and connects Kitchener and Waterloo. Construction of Stage 1 ION LRT was completed in 2017 and train testing began late that year. ION Stage 1 LRT service launched on June 21, 2019. Stage 2 of ION LRT service will be an 18 km route extension to Cambridge; Waterloo Regional Council endorsed a preferred Stage 2 route alignment in June 2019.

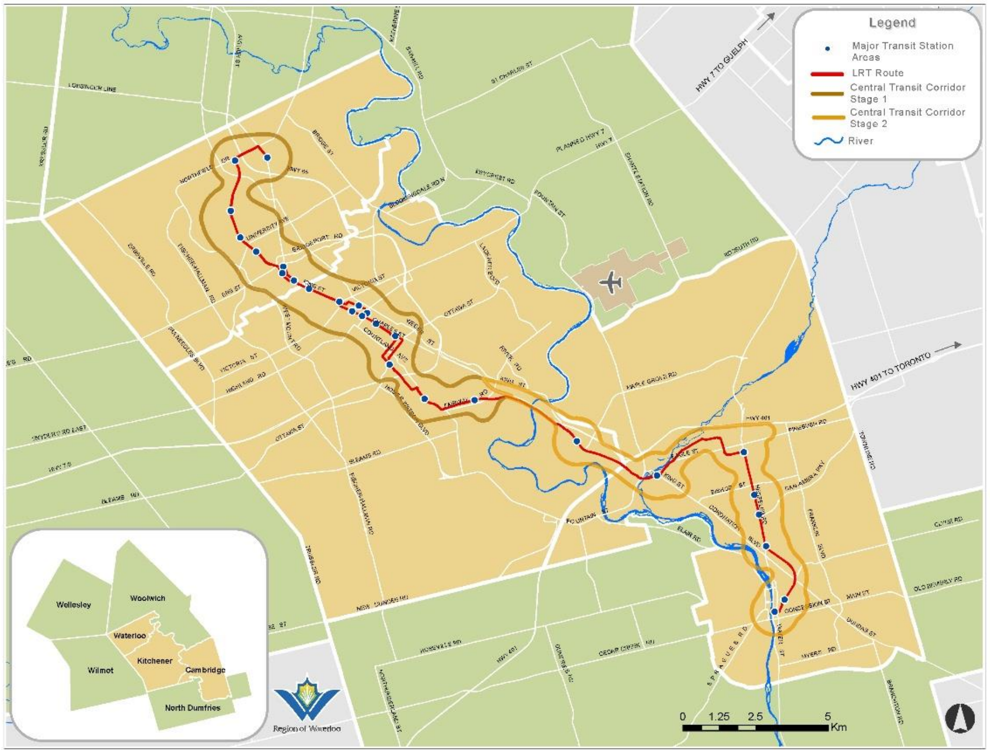
More information about ION can be found in the Region of Waterloo's ION Story report: http://rapidtransit.regionofwaterloo.ca/en/resourcesGeneral/ION-Story-Fall-2016-access.pdf;
and at the Stage 2 ION project website:
https://www.engagewr.ca/Stage2ION.

1.3 The ION Central Transit Corridor

The Central Transit Corridor is the area within approximately 800 metres of ION LRT stations, and the lands connecting these, to form a continuous corridor. The 800-metre distance is generally accepted as the distance people will walk (roughly ten minutes) to access rapid transit. The CTC connects the three Urban Growth Centres (UGCs) of downtown Cambridge, downtown Kitchener, and uptown Waterloo, as well as 26 rapid transit station areas. The CTC includes areas within the corridor that are expected to re-urbanize over time by incorporating the station area planning work and follows pre-established boundaries such as roads, rivers, property boundaries, and statistical boundaries already being used for monitoring.

The CTC is divided into Stages 1 and 2, reflecting the implementation stages of the full ION system. The alignment of the CTC around Stage 2 ION was preliminary until June 2019, when Regional Council endorsed a new preferred route through Cambridge. Subsequently, the mapping of the CTC was adjusted to accommodate the new alignment as well as to incorporate new work that was undertaken through the Regional Official Plan Review to delineate Major Transit Station Areas as required by the Provincial Growth Plan. Map 1 illustrates the current CTC, while the previous alignment is shown in Appendix A.

Map 1. Central Transit Corridor



2 The Central Transit Corridor Monitoring Program

2.1 Purpose of the Monitoring Program

Since Council's commitment to implement Light Rail Transit (LRT) in 2011, the Region of Waterloo has recognized the importance of monitoring change in the Central Transit Corridor (CTC) over time. The new rapid transit system will do more than just increase transit access throughout the Region. It also creates an opportunity to build healthy and vibrant communities along the route. The Central Transit Corridor Community Building Strategy (CBS) published on December 3, 2013, made recommendations on how the community should grow around rapid transit stations. It also included a recommendation to establish and implement baseline metrics pertaining to transit investment in the Central Transit Corridor and to report to Council with periodic updates. The CBS informed the development of the monitoring program, and continues to guide planning initiatives directed towards achieving the community-building goals of ION.

2.2 Monitoring ION's Goals

To monitor ION's two goals of moving people and building community, the monitoring program for the CTC explores the changing social, economic, and environmental state of the Region's rapid transit corridor, by using data to look at the various ways the CTC will be transformed by ION. Nine dimensions are explored, as shown in Table 1.

Table 1. Goals, Dimensions and Indicators

Goal	Dimension	Indicator	Metric
Moving People	Mobility	Transit Ridership	Number of trips made using Grand River Transit (millions)
		Daily Transit Activity	Per cent of daily average transit activity which occurred in the CTC
	Sustainable Modes of Transportation	Transit Mode Share *	Per cent of mode of travel share which was on transit across the CTC
		Active Transportation *	Per cent of mode of travel share which was pedestrian and cyclist in the CTC
		Walkability	Per cent of population living in ‘high’ or ‘very high’ walkable areas in the CTC
Building Community	Vibrant Communities	Land Use Mix	Per cent of all regional land uses which were found in the CTC
		Population	Per cent of Region’s residents who live in the CTC
	Arts and Culture	Cultural Vibrancy *	Number of arts and culture establishments in the CTC
		Restaurants *	Per cent of the Region’s restaurants in the CTC
	Heritage	Heritage Resource Retention	Number of demolition permits on pre-1920 and designated built heritage resources in the CTC
	Investment	Building Activity	Dollar value of building permits in the CTC for new construction (millions)
		Assessment Value	Assessed value of properties in the CTC (billions)
	Environment	Emissions *	Tonnes of net air emissions per capita in Cambridge, Kitchener and Waterloo
	Crime and Safety	Perception of Safety *	Per cent of people in Cambridge, Kitchener and Waterloo who perceive that their downtowns are safe at night
		Calls for Service	Per cent of police calls for service which were related to potential public perception in the CTC
	Inclusive Community	Affordability of Home Ownership Transactions	Per cent of housing transactions which were affordable to low and moderate income households in the CTC
		Supply of Community Housing	Number of Community Housing units located within the CTC
		Location of Households Receiving Rent Assistance	Per cent of Housing Allowances with Supports (HAWS) in the CTC

** These indicators have not been completed for 2020, due to limitations of data or resources.*

2.3 Baseline and Annual Indicators

For each dimension, one or more indicators have been chosen. In total, 16 indicators were developed, collected and reported as a baseline. In 2018, two additional annual indicators were added: Supply of Community Housing and Location of Households Receiving Rent Assistance. Some of the baseline indicators cannot be measured every year due to constraints in data availability. Twelve of the 18 baseline indicators have been updated for the 2020 reporting year.

2.4 Themed Indicators

In each monitoring year, the CTC Monitoring Program has focused on a topic area of interest and explored that area through the development of themed indicators (Table 2). The schedule accounts for the time when data and resources will be available for the indicators. Due the COVID-19 pandemic, the scheduled theme of Mobility has been postponed indefinitely, but may be explored in 2022. In 2022, a ten-year review of the indicators is also proposed.

Table 2. Publication Year of Themes

Report Year	Theme
2015	Baseline
2016	The Environment
2017	Investment
2018	Housing Affordability
2019	Urban Vibrancy
2020	Postponed
2021	Postponed
2022	Mobility Ten-Year Review

2.5 Updating Indicators for the Stage 2 CTC Route Alignment Changes

Prior to 2020, monitoring reports were based on the preliminary CTC Stage 2 route. Beginning with the 2020 reporting year, the CTC boundary was changed to reflect the preferred Stage 2 alignment that was endorsed by Council in June 2019. The 'revised' boundary has again been used for this 2020 report. Three indicators (Population, Building Activity and Calls for Service) have been re-calculated to provide a seamless time series from 2011 to 2020. The remaining indicators were not rebased; rather, they were calculated using both the old alignment (for 2011-2019) as well as the new alignment (for 2019-2020) to show the differences. For these indicators, the statements of change over time include the effects of new activity as well as changing geography, and each is clearly stated. In addition, a table with both 2019 values according to their respective boundaries is shown in Appendix B.

3 Monitoring Results and Analysis

The CTC Monitoring Program measures change through the various stages of implementation of ION, from Council endorsement (2011-2014), through construction and testing (2015-2018), to service start (2019), and early operation (2019-2021). These stages are not discrete – for example, although ION was announced in 2011, there was anticipation of its approval by Council in the years leading up to the final decision. However, the stages are generally useful to consider in understanding the changes occurring in the corridor over time and through the progress of the project.

The first report from the monitoring program was the Monitoring Change in the Central Transit Corridor – Baseline Report, dated November 17, 2015, which described key aspects of the corridor in the post-announcement period from 2011 to 2014. Since construction of ION had not yet begun, the results did not reflect the direct effects of ION infrastructure, but did show indications of change in the CTC in anticipation of ION.

Subsequent reports, published annually, provide updates on key indicators and take a deeper dive into annual themes. Results from the annual monitoring are summarized in Table 3, and results from each of the themes are summarized in Tables 4 through 7. The CTC Monitoring Program will continue to measure and report on indicators until at least 2021. These metrics are important in helping to tell the story about the different ways ION is moving people and shaping the future of our communities.

Table 3. Annual Indicators for the CTC Monitoring Program

Goal	Dimension	Indicator	Metric	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Moving People	Mobility	Transit Ridership	Number of trips made using Grand River Transit (millions)	19.7	21.3	22.0	21.6	20.3	19.7	19.7	21.1	22.0	11.4
		Daily Transit Activity	Per cent of daily average transit activity in the CTC	67%	65%	67%	64%	63%	62%	60%	60%	59%	63%
	Sustainable Modes of Transportation	Transit Mode Share	Per cent of mode of travel share on transit across the CTC	-	-	-	-	5%	-	-	-	-	-
		Active Transportation	Per cent of mode of travel share which was pedestrian and cyclist in the CTC	5%	-	-	-	-	9%	-	-	-	-
		Walkability	Per cent of population living in 'high' or 'very high' walkable areas in the CTC	55%	56%	56%	56%	56%	57%	57%	57%	57%	57%
Building Community	Vibrant Communities	Land Use Mix	Per cent of all Regional land uses found in the CTC	69%	69%	69%	69%	69%	70%	70%	70%	70%	69%
		Population	Per cent of the Region's residents who live in the CTC	18%	18%	18%	19%	19%	19%	19%	19%	20%	19%
	Arts and Culture	Cultural Vibrancy	Number of arts and culture establishments in the CTC	241	-	-	-	-	318	-	336	-	-
		Restaurants	Per cent of the Region's restaurants in the CTC	50%	51%	52%	52%	52%	52%	53%	53%	54%	-

Goal	Dimension	Indicator	Metric	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Building Community (cont.)	Heritage	Heritage Resource Retention	Number of demolition permits on pre-1920 and designated built heritage resources in the CTC	13	36	11	9	12	17	16	7	21	11
	Investment	Building Activity	Dollar value of building permits in the CTC for new construction (millions, adjusted to 2011)	$489	$263	$228	$563	$257	$303	$215	$211	$682	$619
		Assessment Value	Assessed value of properties in the CTC (billions)	$10.0	-	-	$12.0	$12.8	$13.6	$14.7	$15.3	$17.0	$18.3
	Environment	Emissions	Tonnes of net air emissions per capita in Cambridge, Kitchener and Waterloo	2.52	-	-	-	-	-	2.66	-	-	-
	Crime and Safety	Perception of Safety	Per cent of people in the Tri-Cities who perceive that their downtowns are safe at night	65%	-	-	-	-	-	62%	58%	-	-
		Calls for Service	Per cent of police calls for service related to potential public perception in the CTC	41%	42%	44%	44%	44%	45%	46%	47%	47%	-
	Inclusive Community	Affordability of Home Ownership Transactions	Per cent of housing transactions which were affordable to low and moderate income households in the CTC	55%	56%	53%	54%	57%	57%	33%	38%	30%	24%
		Supply of Community Housing	Number of community housing units in the CTC	2,687	2,610	2,631	2,631	2,633	2,645	2,645	2,701	2,758	2,758
		Location of Households Receiving Rent Assistance	Per cent of Housing Allowances with Supports (HAWS) in the CTC	-	-	-	-	50%	60%	56%	57%	56%	60%

Table 4. The Environment (2016)

Dimension	Indicator	Metric	Indicator Value
Environment	Trails and Pathways	Length of trails and pathways in the CTC	78 kilometres
	Public Greenspaces	Area of public greenspaces in the CTC	398 hectares

Table 5. Investment (2017)

Dimension	Indicator	Metric	2011	2012	2013	2014	2015	2016
Investment	Transaction Values	Dollar value of transactions in the CTC (millions, adjusted to 2011)	$619	$764	$821	$916	$898	$1,030
	Building Improvements	Dollar value of building permits for property improvements in the CTC (millions, adjusted to 2011)	$74	$80	$93	$80	$96	$166

Table 6. Inclusive Community (2018)

Dimension	Indicator	Metric	2011	2012	2013	2014	2015	2016	2017
Inclusive Community	Renter Affordability	Per cent of renters spending less than 30 per cent of their household income on shelter-related costs in the CTC	64%	-	-	-	-	61%	-

Table 7. Urban Vibrancy (2019)

Dimension	Indicator	Metric	2011	2012	2013	2014	2015	2016	2017	2018
Vibrant Communities	Surface Parking	Area of land dedicated to surface parking in the CTC (hectares)	-	543	-	-	-	-	-	533
	Vacant Land	Area of land assessed as vacant land in the CTC (hectares)	293	285	276	274	280	272	268	268
	Grocery Stores	Number of grocery stores in the CTC	-	-	-	-	-	-	-	28
	Demographic Shifts	Number of families with children in the CTC	9,384	-	-	-	-	9,539	-	-
	Festivals/Events	Event attendance in the CTC (thousands)	609	624	675	730	818	803	781	810

3.1 Goal: Moving People

ION officially launched on June 21, 2019 and, together with public sector investments in the active transportation network and improvements to service levels and the regional transit network, the ION rapid transit system has greatly enhanced mobility within and between Cambridge, Kitchener, and Waterloo.

However, the onset of the COVID-19 pandemic in March 2020 saw widespread interruption to regular commuting and travel patterns, with government-mandated stay-at-home orders and a resulting shift to remote work and e-commerce for many employees and businesses, respectively.

Monitoring of the mobility indicators will track any shifts in travel behaviour in the CTC since ION was announced and opened for service, as well as changes related to COVID-19.

3.1.1 Mobility: Transit Ridership

11,383,805 trips were made across Waterloo Region using Grand River Transit in 2020

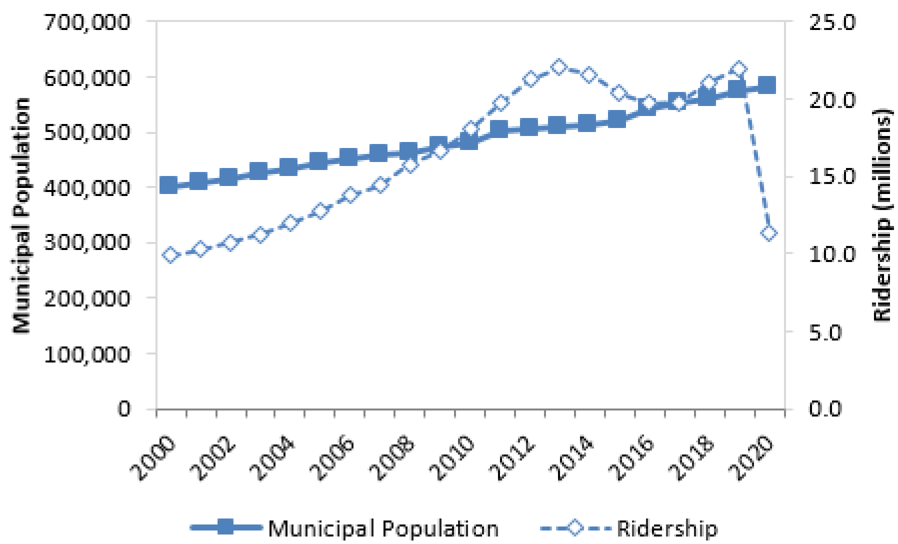
The COVID-19 pandemic had a major impact on transit ridership beginning in March 2020 due to stay-at-home orders and closures of schools, businesses, and non-essential activities. Ridership to essential services such as health facilities and employment areas was relatively stable. A two-week interruption of bus service due to the transit workers' strike in January also affected ridership. Accordingly, total transit ridership fell 48 per cent from 2019, as just 11,383,805 trips were made across Waterloo Region using Grand River Transit in 2020 – a level of ridership last seen in 2003 (Table 1; Figure 1).

Table 1. Total Transit Ridership per capita within the Transit Service Area, 2011-2020

Year	Total Transit Ridership	Municipal Population *	Transit Service Area Population	Total Transit Ridership per capita in Service Area
2011	19,721,966	500,700	432,266	45.6
2012	21,274,042	505,920	438,563	48.5
2013	22,000,737	509,445	435,780	50.5
2014	21,596,989	514,611	434,437	49.7
2015	20,327,109	520,670	434,988	46.7
2016	19,691,267	541,395	452,684	43.5
2017	19,742,606	551,598	460,104	42.9
2018	21,066,847	559,695	488,257	43.1
2019	21,964,989	575,413	483,811	45.4
2020	11,383,805	580,839	486,926	23.4
Change 2011-2020	-8,338,161	80,139	54,660	-22.2
Change 2019-2020	-10,581,184	5,426	3,115	-22.0
% Change 2011-2020	-42.3%	16.0%	12.6%	-48.8%
% Change 2019-2020	-48.2%	0.9%	0.6%	-48.5%
Average Annual % Change	-4.1%	1.7%	1.4%	-5.3%

** For settlements with bus service*

Figure 1. Relationship Between Municipal Population and Ridership, 2000-2020



3.1.2 Mobility: Daily Transit Activity

63 per cent of the daily average transit activity in the Region occurred within the CTC in 2020

Daily transit activity in 2020 was significantly impacted by two events: some activity was impacted by the Grand River Transit workers' strike in January, which caused a two-week closure of bus service but not LRT service, while the local onset of the COVID-19 pandemic in March 2020 saw drastically reduced ridership due to government-mandated stay-at-home orders and a resulting shift to remote work for many employees.

Table 1. Total Daily Transit Activity, 2011-2020

Year	CTC		Outside CTC		Region Total
	Daily Boardings and Alightings	% Within CTC	Daily Boardings and Alightings	% Outside CTC	Daily Boardings and Alightings
2011	108,291	66.8%	53,839	33.2%	162,130
2012	114,917	65.2%	61,243	34.8%	176,160
2013	122,199	67.4%	59,133	32.6%	181,332
2014	119,248	63.6%	68,371	36.4%	187,619
2015	115,678	62.8%	68,654	37.2%	184,331
2016	119,654	62.3%	72,333	37.7%	191,987
2017	127,571	60.5%	83,416	39.5%	210,986
2018	133,607	60.0%	88,928	40.0%	222,535
YOY Growth	+4,318		+6,710		+11,029
2019 (Original Stage 2)	137,925	59.1%	95,638	40.9%	233,563
CTC Stage 2 Realignment	+420		-420		0
2019 (Revised Stage 2)	138,345	59.2%	95,218	40.8%	233,563
2020	50,481	63.1%	29,535	36.9%	80,016
Change 2011-2020	-57,810		-24,304		-82,114
Change 2019-2020	-87,864		-65,683		-153,547
% Change 2011-2020	-53.4%		-45.1%		-50.6%
% Change 2019-2020	-63.5%		-69.0%		-65.7%
Average Annual % Change	-4.2%		-0.9%		-3.1%

Due to improvements implemented in 2015 to the method of calculating boardings and alightings by station, data is not comparable between the 2011-2014 data points and the 2015-2020 data.
The above change calculations utilize the original Stage 2 boundary for 2011-2018 and the revised boundary for 2019 and 2020.

With a significant decrease in ridership based on essential trips only, the interpretation of the impact of the CTC should be taken with caution. Ridership for most of the year did not travel to traditional major generators such as secondary and post-secondary institutions. Thus, one of the major draws outside the CTC

(Conestoga College) had essentially no ridership, which shows in the comparison of activity inside and outside the CTC (Table 1). Trips were largely confined to essential services, so employment areas (mostly outside the CTC), health facilities (major ones inside the CTC), and grocery stores (scattered inside and outside the CTC) became the major generators and saw the least amount of decrease in ridership. The amount of service was also reduced based on where remaining essential service was required. At the same time, the decrease in service was not as significant as the ridership decrease – some level of service was still required throughout the community to assist with essential trips, and the vehicles had a lower capacity imposed to allow minimum physical distancing to be maintained.

In 2020, an average of 50,481 people per day boarded or alighted a Grand River Transit (GRT) vehicle within the CTC, including conventional bus, express bus, and ION light rail train service – a decrease of 64 per cent from 2019. Of the 50,481 boardings and alightings in the CTC, 17,003 (34 per cent) were on ION. Daily activity outside the CTC saw a larger year-over-year decrease, with 69 per cent fewer trips that the previous year. Accordingly, in 2020, 63 per cent of the total daily activity in the Region occurred within the CTC, indicating that more than six out of ten riders travelling on transit in the Region had gotten on or off a GRT vehicle within the CTC. This compares to 59 per cent in 2019.

3.1.3 Sustainable Modes of Transportation: Walkability

57 per cent of the population living in the CTC lived in 'very high' or 'high' walkable areas in 2020

Approximately 116,000 people lived in the Central Transit Corridor in 2020, of which 66,179 were in 'very high' or 'high' walkable areas (Table 1). Over half (57 per cent) of the population within the CTC lived in 'very high' or 'high' walkable areas while 36,928 (32 per cent) lived in 'moderate' walkable areas, and 12,697 (11 per cent) were in 'very low' or 'low' walkable areas. Between 2011 and 2020 there was an increase in the proportion of the CTC population living in 'high' or 'very high' walkable areas from 55 to 57 per cent; this shift resulted from population growth of 12,603 people in more walkable areas, compared to 3,777 people in 'moderate' and 2,717 in less walkable areas of the CTC.

As a result of the COVID-19 pandemic, the CTC saw a year-over-year population decrease of 6,100 residents; public health restrictions and a shift to online learning meant that a sizeable proportion of the usual student population did not return to the Region. Despite this decrease, the proportion of CTC population living in 'high' and 'very high' walkable areas remained stable at 57 per cent between 2019 and 2020.

Walkable areas are characterized by residential land use near a variety of destinations (retail, schools, etc.) and small block sizes that are conducive to walking. Studies show that residents living in more walkable neighborhoods tend to walk, cycle, and use transit more and own fewer cars than those living in less walkable areas of Waterloo Region. Population growth in highly walkable areas is helpful in creating safer, more vibrant communities.

Table 1. Estimated Population in Walkability Ratings Within the CTC, 2011-2020

Year	Very High	High	High and Very High	Moderate	Low	Very Low	Low and Very Low	Total
2011	22,676	30,900	53,576	33,151	4,417	5,563	9,980	96,707
2012	22,543	30,971	53,514	33,023	4,026	5,402	9,427	95,964
2013	22,752	31,980	54,731	33,914	4,107	5,576	9,683	98,329
2014	23,348	32,446	55,794	34,294	3,993	5,693	9,686	99,774
2015	23,463	33,550	57,013	34,242	4,392	5,756	10,149	101,404
2016	24,265	36,109	60,374	34,680	5,124	6,313	11,437	106,491
2017	25,327	38,997	64,324	35,363	6,197	6,366	12,563	112,250
2018	26,377	39,344	65,722	36,084	6,567	6,364	12,931	114,737
YOY Growth	+521	+2,434	+2,954	+179	+197	+37	+233	+3,366
2019 (Original Stage 2)	26,898	41,778	68,676	36,263	6,764	6,401	13,165	118,103
CTC Stage 2 Realignment	0	+777	+777	+1,300	+1,572	+142	+1,715	+3,792
2019 (Revised Stage 2)	26,898	42,555	69,453	37,563	8,336	6,543	14,879	121,895
2020	27,141	39,038	66,179	36,928	7,877	4,819	12,697	115,804
Change 2011-2020	4,465	8,138	12,603	3,777	3,460	-744	2,717	19,097
Change 2019-2020	243	-3,517	-3,274	-635	-459	-1,723	-2,182	-6,092
% Change 2011-2020	19.7%	26.3%	23.5%	11.4%	78.3%	-13.4%	27.2%	19.7%
% Change 2019-2020	0.9%	-8.3%	-4.7%	-1.7%	-5.5%	-26.3%	-14.7%	-5.0%
Average Annual % Change	2.0%	2.8%	2.4%	1.2%	7.3%	-1.1%	3.1%	2.1%
% of CTC Population (2011)	23.4%	32.0%	55.4%	34.3%	4.6%	5.8%	10.3%	100.0%
% of CTC Population (2020)	23.4%	33.7%	57.1%	31.9%	6.8%	4.2%	11.0%	100.0%

The above change calculations utilize the original Stage 2 boundary for 2011-2018 and the revised boundary for 2019 and 2020.

3.2 Goal: Building Community

ION is a catalyst for building community in the CTC. Indicators that monitor the 'building community' goal of ION strive to tell a story about how the ION LRT system may influence social, economic, and environmental aspects in the CTC and contribute to change in the community. Measuring these dimensions provides snapshots of the ways people and the market may be adapting to a new higher-order transit service over the pre-and-post implementation phases of ION.

Some of the indicators in this section have been impacted by the COVID-19 pandemic; however, most have not seen the same level of impacts as the mobility indicators associated with the 'moving people' goal.

3.2.1 *Vibrant Communities: Land Use Mix*

69 per cent of Waterloo Region's land uses were found within the CTC in 2020

There were 201 unique land uses within Waterloo Region in 2020, of which 139 were found in the CTC. In other words, of all the types of land uses in Waterloo Region, 69 per cent of them can be found within the CTC. The number of land uses within the corridor has been relatively stable since 2011, with a net increase of eight from 131 in 2011 to 139 in 2020 (Table 1). Despite the year-over-year decrease in unique property codes from 2019 to 2020 shown in Table 1, there have not been any material changes in land use types within the CTC. One unique code was lost, as the former Schneider's meat processing plant on Courtland Avenue East in Kitchener – which closed in 2015 – has been re-coded by MPAC as vacant condominium development land. This land use was already existent in the CTC, however.

Table 1. Land Use Mix in the CTC and Waterloo Region, 2011-2020

Year	Number of Unique Property Codes		
	CTC	Region	% Within CTC
2011	131	191	68.6%
2012	132	192	68.8%
2013	131	190	68.9%
2014	132	190	69.5%
2015	135	196	68.9%
2016	136	194	70.1%
2017	135	193	69.9%
2018	137	196	69.9%
YOY Growth	+1	+3	--
2019 (Original Stage 2)	138	199	69.3%
CTC Stage 2 Realignment	+2	0	--
2019 (Revised Stage 2)	140	199	70.4%
2020	139	201	69.2%
Change 2011-2020	8	10	--
Change 2019-2020	-1	2	--

The above change calculations utilize the original Stage 2 boundary for 2011-2018 and the revised boundary for 2019 and 2020.

3.2.2 Vibrant Communities: Population

19 per cent of the Region's residents were living in the CTC in 2020

Approximately 115,800 people lived in the CTC in 2020, representing almost one-fifth of Waterloo Region's population (Table 1). Between 2011 and 2019, the population within the CTC increased at a faster rate (2.6 per cent annually, on average) than the population outside the CTC (1.2 per cent). A significant share of students attending the Region's post-secondary institutions live within the CTC. With public health-related restrictions and a shift to online learning in response to the COVID-19 pandemic, many of the students who would typically live within the CTC were not present in 2020. As a result, the number of people living within the CTC decreased by five per cent or 6,100 people from 2019 to 2020.

Table 1. Population Living Within the CTC, Including Students, 2011-2020

Year	CTC			Outside CTC	Region Total	% Within CTC
	Stage 1	Stage 2	Total			
2011	71,018	28,660	99,678	451,922	551,600	**18.1%**
2012	72,287	28,730	101,016	455,884	556,900	**18.1%**
2013	74,932	28,904	103,836	459,164	563,000	**18.4%**
2014	77,160	28,914	106,074	462,926	569,000	**18.6%**
2015	79,006	29,026	108,032	466,668	574,700	**18.8%**
2016	82,465	29,379	111,844	474,056	585,900	**19.1%**
2017	86,313	29,743	116,056	484,644	600,700	**19.3%**
2018	88,730	29,817	118,546	491,354	609,900	**19.4%**
2019	91,856	30,042	121,898	495,902	617,800	**19.7%**
2020	85,437	30,367	115,804	496,166	611,970	**18.9%**
Change 2011-2020	**14,418**	**1,707**	**16,125**	**44,245**	**60,370**	--
Change 2019-2020	**-6,420**	**325**	**-6,094**	**264**	**-5,830**	--
% Change 2011-2020	**20.3%**	**6.0%**	**16.2%**	**9.8%**	**10.9%**	--
% Change 2019-2020	**-7.0%**	**1.1%**	**-5.0%**	**0.1%**	**-0.9%**	--
Average Annual % Change	**2.4%**	**0.7%**	**1.9%**	**1.2%**	**1.3%**	--

3.2.3 *Heritage: Heritage Resource Retention*

Eleven demolition permits were issued for built heritage structures in the Central Transit Corridor in 2020

In 2020, 11 demolition permits were issued for heritage structures in the CTC, defined as formally recognized or pre-1920 structures (Table 1). These 11 demolition permits represent about 38 per cent of the total permits issued for heritage structures across the Region and 32 per cent of the total demolitions that took place within the CTC in 2020. This denotes a decrease in the number of demolitions of heritage structures in the CTC over 2019 and is also below the 10-year average number of demolition permits in the CTC (15 per year).

Table 1. Number of Formally Recognized and Pre-1920 Heritage Buildings Demolished, 2011-2020

Year	Stage 1	Stage 2	CTC Total	Formally Recognized (Registered/Designated)
2011	13	0	13	5
2012	34	2	36	2
2013	11	0	11	0
2014	9	0	9	1
2015	11	1	12	3
2016	17	0	17	1
2017	14	2	16	2
2018	3	4	7	2
2019 *	19	2	21	2
2020	7	4	11	1
Average 2011-2020	14	2	15	2
Total 2011-2020	138	15	153	19

** 2019 results for this indicator were not affected by the CTC Stage 2 realignment.*

Of the 11 permits issued:

- One permit was for a formally recognized structure (i.e., listed on the Municipal Heritage Register or designated under the Ontario Heritage Act). This number is in-line with the average number of formally recognized structures lost in the CTC since 2011 (two per year).
- Seven permits were for heritage structures located in the Stage 1 section of the ION LRT project, and four were found within the Stage 2 section of the project (within the City of Cambridge). This trend reflects the greater trend experienced across the whole CTC and is related to the differing stages of and approvals of the Stage 1 and Stage 2 ION LRT project.

- Three permits were issued where the planned or constructed replacement structure did not significantly increase the density of the site. This trend is observed in heritage demolitions outside the CTC as well; it occurs when a heritage house is demolished and replaced with a single detached house, or two single detached houses. An additional three permits were issued in 2020 for structures where a development application has yet to be filed (as of September 2021). These trends are seen as a negative finding. As increasing density in the CTC and conserving built heritage are often competing interests, a positive outcome for demolishing heritage resources in the CTC would therefore be a resultant significant increase in density.

3.2.4 *Investment: Building Activity*

$619 million in new building permits were issued within the CTC in 2020

In 2020, building permit activity for new residential and employment uses within the CTC was estimated at $619 million – approximately 43 per cent of the new construction in Waterloo Region (Table 1; Figure 1). Of the building activity[1] in the CTC, $436 million in construction value was for 2,350 new residential units, representing 45 per cent of the total 5,197 residential units built across the Region (Table 2). In the non-residential sector, $183 million was invested in industrial, commercial, and institutional projects in the corridor, creating 520,000 square feet of new floor space – almost half of the total non-residential square footage added across the Region (Table 3). The total cumulative building permit value in the CTC for both residential and non-residential uses from 2011 to 2020 was $3.8 billion (Table 1).

Table 1. Total Building Permit Value, 2011-2020, in Millions (Adjusted to 2011 Dollars)

Year	CTC			Outside CTC	Region Total	% in CTC
	Stage 1	Stage 2	Total			
2011	$428	$61	**$489**	$810	$1,299	37.6%
2012	$228	$34	**$263**	$585	$848	31.0%
2013	$211	$17	**$228**	$526	$754	30.2%
2014	$370	$194	**$563**	$667	$1,231	45.8%
2015	$231	$26	**$257**	$724	$981	26.2%
2016	$284	$19	**$303**	$1,063	$1,366	22.2%
2017	$178	$37	**$215**	$742	$957	22.4%
2018	$196	$14	**$211**	$719	$929	22.7%
2019	$543	$140	**$682**	$853	$1,536	44.4%
2020	$580	$39	**$619**	$808	$1,428	43.4%
Total 2011-2020	**$3,249**	**$582**	**$3,831**	**$7,498**	**$11,329**	**33.8%**

[1] Only building permits that are for new residential units or employment space are monitored in this indicator. Other building activity such as renovation of existing space, façade improvements, or accessory buildings is in addition to these figures.

Figure 1. Total Building Permit Value, 2011-2020, in Millions (Adjusted to 2011 Dollars)

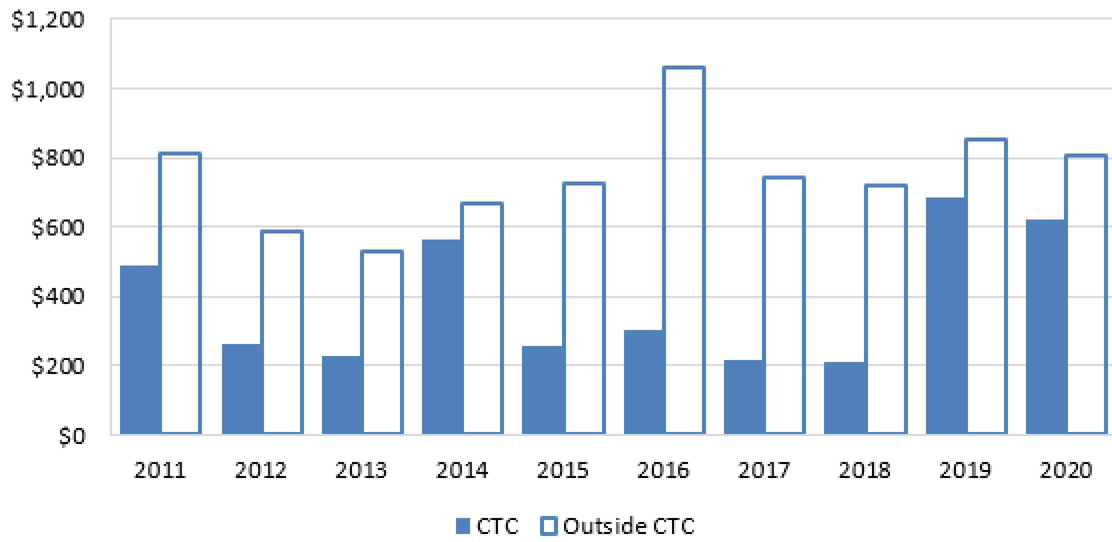


Table 2. Residential Building Activity in the CTC, 2011-2020 (Adjusted to 2011 Dollars)

Year	Units Built					Total Value ($M)
	Single-detached	Semi-detached	Townhouses	Apartments	Total	
2011	13	1	44	1,146	1,204	$209
2012	13	7	179	624	823	$127
2013	12	6	48	624	690	$140
2014	11	6	92	1,831	1,940	$337
2015	7	2	50	1,096	1,155	$116
2016	8	5	55	1,793	1,861	$252
2017	14	3	26	1,076	1,119	$93
2018	18	16	69	847	950	$151
2019	11	13	109	3,274	3,407	$587
2020	6	72	20	2,252	2,350	$436
Total 2011-2020	**113**	**131**	**692**	**14,563**	**15,499**	**$2,448**

Table 3. Non-Residential Building Activity in the CTC, 2011-2020 (Adjusted to 2011 Dollars)

Year	Square Footage Added				Total Value ($M)
	Industrial	Commercial	Institutional	Total	
2011	3,600	311,980	122,095	437,675	$280
2012	20,909	392,408	269,053	682,370	$135
2013	28,757	77,723	236,186	342,666	$88
2014	8,818	173,994	317,777	500,589	$227
2015	115,696	528,584	155,164	799,444	$141
2016	3,335	133,250	16,824	153,409	$52
2017	8,534	292,260	228,047	528,841	$121
2018	9,616	273,358	6,519	289,493	$60
2019	2,045	576,674	17,684	596,403	$95
2020	11,562	447,253	61,505	520,320	$183
Total 2011-2020	**212,872**	**3,207,484**	**1,430,854**	**4,851,210**	**$1,383**

Waterloo Region has continued to see strong residential growth during the COVID-19 pandemic, as rapidly rising house prices in the Greater Toronto Area and a widespread shift toward working remotely have allowed many workers to move further afield to more affordable mid-size cities and rural areas. ION's successful opening in 2019, in conjunction with the housing market's continued strength and low interest rates, ensured that the CTC saw a large share of this growth – 2020 saw the second-highest residential construction value and number of new units in the CTC since monitoring began in 2011.

In 2020, there were nine residential building permits in the CTC worth at least $10 million. The associated projects are a marker of continued intensified forms of housing within the CTC. While 2019 saw a concentration of large residential projects in Downtown Kitchener, this year there were four located on the fringes of Downtown:

- $128 million for Station Park, with two residential towers (20 and 29 storeys, 583 units) on a shared podium and three levels of underground parking at 641 King Street West.
- $91 million for Drewlo Downtown, with two residential towers (14 and 18 storeys, 488 units) on a five-storey mixed-use podium (including three levels of aboveground parking) and one level of underground parking at 475 King Street East.
- $45 million for Civic 66, an 11-storey, 170-unit apartment building with ground floor commercial and one level of underground parking at 66 Weber Street East.
- $18 million for 242 Queen, an 11-storey, 120-unit apartment building with one level of underground parking at 242 Queen Street South.

In addition, there were four large projects located near Waterloo's universities:

- $41 million for District Condos, a 22-storey, 186-unit apartment building with ground floor commercial and two levels of underground parking at 155 King Street North.
- $36 million for RezOne Phillip Square (Elora House), a 20-storey, 107-unit student residence building with ground floor commercial and underground parking at 250 Phillip Street.
- $32 million for a 25-storey, 179-unit residential tower with a four-storey podium including commercial/office space on the first two floors at 203 Albert Street.
- $28 million for Accommod8u (239 Albert Street), a 12-storey, 193-unit student apartment building with two towers and ground floor commercial.

Finally, one residential permit over $10 million was located in Stage 2 of the CTC: $18 million for an eight-storey, 73-unit apartment building at 195 Hespeler Road, Cambridge.

On the non-residential side, 2020 was an above-average year for industrial, commercial, and institutional construction value and square footage in the CTC, thanks to a flagship office development in Downtown Kitchener and an addition to Uptown Waterloo's primary recreation centre:

- $150 million for Breithaupt Block Phase III, a new 11-storey, 355,000 square foot office building at 20 Breithaupt Street with one level of underground parking and a bridge connecting to Google's existing offices at 25 Breithaupt Street.
- $20 million for a new two-storey, 30,000 square foot community pavilion and a 16,000 square foot addition to the Waterloo Memorial Recreation Complex at 101 Father David Bauer Drive.

Over the past decade, there has been rapid growth in accessory dwelling units[2] in Waterloo Region (Table 4). In 2011, 26 new accessory units were added throughout the Region, of which two (eight per cent) were in the CTC. By 2020, the number built Region-wide reached 399, with 43 (11 per cent) located in the CTC. Accessory apartments comprised eight per cent of the new housing stock built in the Region in 2020, compared to just two per cent in the CTC, as there is more opportunity to build such units within the larger homes that are more typical outside the CTC. With housing prices continuing to reach record highs and the ION corridor seeing greater development pressure each year, these units are certain to gain increased momentum as a useful – and perhaps a more affordable – addition to the Regional housing stock, both within and outside the CTC.

[2] Accessory dwelling units, or accessory apartments, are new units added within existing dwelling units, such as basement suites or duplex conversions. These do not include accessory detached units built in addition to, but separate from, an existing primary dwelling structure (e.g., tiny homes or garden suites).

Table 4. New Accessory Dwelling Units, 2011-2020

Year	CTC			Outside CTC			Region Total			% of Accessory Units in CTC
	Accessory Units	Total Units	% of Total Units	Accessory Units	Total Units	% of Total Units	Accessory Units	Total Units	% of Total Units	
2011	2	1,204	0.2%	24	2,395	1.0%	26	3,599	0.7%	**7.7%**
2012	9	823	1.1%	58	1,589	3.7%	67	2,412	2.8%	**13.4%**
2013	12	690	1.7%	76	1,956	3.9%	88	2,646	3.3%	**13.6%**
2014	18	1,940	0.9%	56	2,073	2.7%	74	4,013	1.8%	**24.3%**
2015	19	1,155	1.6%	89	2,450	3.6%	108	3,605	3.0%	**17.6%**
2016	14	1,861	0.8%	72	3,859	1.9%	86	5,720	1.5%	**16.3%**
2017	19	1,119	1.7%	79	2,121	3.7%	98	3,240	3.0%	**19.4%**
2018	25	950	2.6%	132	1,983	6.7%	157	2,933	5.4%	**15.9%**
2019	30	3,407	0.9%	205	2,902	7.1%	235	6,309	3.7%	**12.8%**
2020	43	2,350	1.8%	356	2,847	12.5%	399	5,197	7.7%	**10.8%**
Total 2011-2020	**191**	**15,499**	**1.2%**	**1,147**	**24,175**	**4.7%**	**1,338**	**39,674**	**3.4%**	**14.3%**

3.2.5 Investment: Assessment Value

$18.3 billion worth of assessed property value in the CTC in 2020

Assessment values have been on the rise in the CTC since 2011 (Table 1). An increase in property assessment values in the CTC may indicate a relationship between the investment in ION and economic growth within the corridor. There have been a number of new high-value and high-quality developments as well as renovations of existing buildings, which is evident in the growth in assessment value from $10 billion in 2011 to $18.3 billion in 2020. This is an average annual increase of $991 million (7.2 per cent) from 2011 to 2020.

Table 1. Assessment Value and Taxes Generated, 2011-2020, in Millions

Year	CTC						Outside CTC		Region Total	
	Stage 1		Stage 2		Total					
	Assessment Value	Taxes Generated	Assessment Value	Taxes Generated	**Assessment Value**	Taxes Generated	Assessment Value	Taxes Generated	Assessment Value	Taxes Generated
2011	$6,901	$89	$3,082	$45	**$9,983**	$134	$44,331	$489	$54,314	$623
2014	$8,486	$95	$3,559	$45	**$12,045**	$139	$53,602	$548	$65,646	$687
2015	$9,030	$105	$3,720	$51	**$12,750**	$155	$56,351	$582	$69,102	$737
2016	$9,805	$112	$3,816	$52	**$13,621**	$164	$58,969	$603	$72,589	$767
2017	$10,710	$122	$3,991	$54	**$14,701**	$176	$61,829	$627	$76,530	$803
2018	$11,466	$130	$3,803	$51	**$15,269**	$181	$65,875	$659	$81,144	$841
YOY Growth	+$957	+$9	+$187	+$2	**+$1,143**	+$11	+$3,540	+$27	+$4,683	+$38
2019 (Original Stage 2)	$12,423	$139	$3,990	$53	**$16,413**	$192	$69,415	$687	$85,828	$879
CTC Stage 2 Realignment	N/A	N/A	+$606	+$7	**+$606**	+$7	-$606	-$7	$0	$0
2019 (Revised Stage 2)	$12,423	$139	$4,595	$61	**$17,018**	$200	$68,809	$679	$85,828	$879
2020	$13,380	$149	$4,915	$64	**$18,295**	$213	$71,974	$709	$90,269	$922
Change 2011-2020	$3,937	$44	$1,036	$16	**$4,974**	$61	$15,208	$131	$20,181	$192
Change 2019-2020	$957	$10	$320	$3	**$1,277**	$13	$3,165	$29	$4,442	$43
% Change 2011-2020	93.9%	67.8%	59.5%	43.3%	**83.3%**	59.6%	62.4%	44.9%	66.2%	48.1%
% Change 2019-2020	7.7%	7.3%	7.0%	5.4%	**7.5%**	6.7%	4.6%	4.3%	5.2%	4.9%
Average Annual Change	$775	$8	$216	$3	**$991**	$11	$3,066	$26	$4,057	$37
Average Annual % Change	7.9%	7.1%	5.7%	5.5%	**7.2%**	6.5%	5.3%	4.3%	5.7%	4.8%

The above change calculations utilize the original Stage 2 boundary for 2011-2018 and the revised boundary for 2019 and 2020.

Municipal taxes (regional and area municipal) generated on properties within the CTC were estimated at $213 million in 2020. These taxes were 59.6 per cent higher than in 2011, resulting in a yearly average rate of change of 6.5 per cent. This rate of increase significantly outpaces the 44.9 per cent increase outside the CTC for this period. Stage 1 saw the highest growth in taxes generated between 2011 and 2020, increasing by 67.8 per cent. While Stage 2 saw the lowest growth in taxes generated between 2011 and 2020 (43.3 per cent), the 2019-2020 change of 5.4 per cent is greater than the 4.3 per cent increase outside the CTC for the same period.

While assessment value is a good indicator of the change in value of properties, not all changes in assessment result in an increase in taxes generated. Reassessments and the resulting assessment phase-ins are included in the year-to-year assessment change; however, reassessments do not generate additional property taxes. Additionally, several of these new or improved buildings (such as hospitals or municipal buildings) will not generate taxes due to their tax-exempt status. Of the $18.3 billion total assessment value in the CTC in 2020, $1.8 billion was on tax-exempt properties. This affects the taxes generated in the CTC as 9.9 per cent of the assessed value comes from tax-exempt properties.

3.2.6 *Crime and Safety: Calls for Service*

47 per cent of police calls for service related to potential public perception of safety occurred within the CTC in 2019[3]

More than 52,000 calls for police service occurred within Waterloo Region in 2019 that were identified as being related to public perception of safety (Table 1). Of those calls, approximately 24,500 occurred within the CTC, comprising 47 per cent of the Regional total; this has increased from 41 per cent in 2011. The majority of calls for service that police respond to are not criminal in nature. However, the selected calls for service are tracked in this report as they may affect public perceptions of safety. Examples of calls related to public perception of safety are graffiti, intoxicated person, or break and enter. Appendix D lists the types of police calls that are included in this analysis.

Table 1. Police Calls for Service Related to Potential Public Perception, 2011-2019

Year	CTC		Outside CTC		Region Total
	Number of Calls	% Within CTC	Number of Calls	% Outside CTC	Number of Calls
2011	18,568	41.3%	26,345	58.7%	44,912
2012	19,160	42.2%	26,238	57.8%	45,398
2013	19,002	43.6%	24,581	56.4%	43,583
2014	18,880	43.7%	24,341	56.3%	43,220
2015	20,768	43.7%	26,772	56.3%	47,540
2016	22,504	44.5%	28,025	55.5%	50,528
2017	24,167	46.2%	28,146	53.8%	52,313
2018	26,548	46.8%	30,152	53.2%	56,699
2019	24,457	46.6%	28,074	53.4%	52,531
Change 2011-2019	5,890		1,730		7,619
Change 2018-2019	-2,091		-2,078		-4,168
% Change 2011-2019	31.7%		6.6%		17.0%
% Change 2018-2019	-7.9%		-6.9%		-7.4%
Average Annual % Change	3.7%		1.0%		2.1%

The number of calls for service made within the CTC has been increasing by an average of 3.7 per cent per year since 2011 – almost four times the growth in calls outside the CTC. The growth in calls for service within the CTC may be due to factors such as population growth and increases in citizen engagement and reporting. An increase is to be expected with more activity and people living in the corridor. An increase in homelessness and substance abuse would also have

[3] 2019 is the most recent year for which data were available at the time of writing this report.

been likely contributing factors. On a per capita basis, there were 20.1 calls per 100 people living in the CTC in 2019, an increase of about one per cent per year since 2011 (Table 2).

Table 2. Police Calls for Service Related to Potential Public Perception per 100 People, 2011-2019

Year	CTC			Outside CTC			Region Total		
	Number of Calls	Calls per 100 people	Population	Number of Calls	Calls per 100 people	Population	Number of Calls	Calls per 100 people	Population
2011	18,568	18.6	99,678	26,345	5.8	451,922	44,912	8.1	551,600
2012	19,160	19.0	101,016	26,238	5.8	455,884	45,398	8.2	556,900
2013	19,002	18.3	103,836	24,581	5.4	459,164	43,583	7.7	563,000
2014	18,880	17.8	106,074	24,341	5.3	462,926	43,220	7.6	569,000
2015	20,768	19.2	108,032	26,772	5.7	466,668	47,540	8.3	574,700
2016	22,504	20.1	111,844	28,025	5.9	474,056	50,528	8.6	585,900
2017	24,167	20.8	116,056	28,146	5.8	484,644	52,313	8.7	600,700
2018	26,548	22.4	118,546	30,152	6.1	491,354	56,699	9.3	609,900
2019	24,457	20.1	121,898	28,074	5.7	495,902	52,531	8.5	617,800
Change 2011-2019	5,890	1.4	22,220	1,730	-0.2	43,980	7,619	0.4	66,200
Change 2018-2019	-2,091	-2.3	3,351	-2,078	-0.5	4,549	-4,168	-0.8	7,900
% Change 2011-2019	31.7%	7.7%	22.3%	6.6%	-2.9%	9.7%	17.0%	4.4%	12.0%
% Change 2018-2019	-7.9%	-10.4%	2.8%	-6.9%	-7.7%	0.9%	-7.4%	-8.5%	1.3%
Average Annual % Change	3.7%	1.1%	2.6%	1.0%	-0.2%	1.2%	2.1%	0.7%	1.4%

For 2019, calls for service data were further examined by occurrence type. An occurrence type is the recorded incident for each call. The number of calls of each type has been identified for each reported year (2011-2019) to identify trends. One particular call type identified as trending upward is unwanted person. Within Stage 1, there were 1,345 unwanted person calls in 2011 and 4,265 in 2019 (a 217 per cent increase, or 27 per cent per year on average). In Stage 2, these calls increased from 463 in 2011 to 1,891 in 2019 (308 per cent increase, or 39 per cent per year on average). Unwanted person calls outside the CTC increased as well, from 1,848 in 2011 to 3,722 in 2019 (101 per cent increase, or 13 per cent per year on average). Significant increases are also evident for calls related to suspicious and mentally ill persons.

Although the long-term trend shows a large increase in unwanted person calls across all geographies, this call type saw a decrease of nine per cent both within and outside the CTC from 2018 to 2019. Calls related to unwanted persons were one the largest contributors to the year-over-year decrease in calls, alongside significant decreases for theft under $5000 and drugs.

3.2.7 *Inclusive Community: Affordability of Home Ownership Transactions*

24 per cent of resale housing transactions were affordable to low- and moderate-income households within the CTC in 2020

In 2020, there were 1,141 residential resale transactions within the CTC, with 24 per cent (273 transactions) at a price below the affordability cut-off[4] while 76 per cent (868 transactions) exceeded the cut-off of $368,000 (Table 1). The number of transactions below the threshold had remained relatively stable in the CTC from 2011 to 2016; however, by 2017, upward pressure in the housing market decreased the number of affordable transactions both inside the corridor and across the Region. The 2020 analysis shows a decrease in affordability both within and outside the CTC compared to 2019.

Table 1. Residential Units Under the Affordability Cut-off (Resale Transactions over $10,000), 2011-2020

Year	Affordability Cut-off	Number of Affordable Transactions				Number of Transactions				% of Transactions Below Cut-off			
		Stage 1	Stage 2	CTC Total	Region Total	Stage 1	Stage 2	CTC Total	Region Total	Stage 1	Stage 2	CTC	Region
2011	$261,565	202	156	358	2,364	373	282	655	6,209	54.2%	55.3%	**54.7%**	38.1%
2012	$268,715	240	139	379	2,322	442	233	675	6,296	54.3%	59.7%	**56.1%**	36.9%
2013	$280,159	195	141	336	2,416	384	256	640	6,421	50.8%	55.1%	**52.5%**	37.6%
2014	$288,899	202	154	356	2,289	397	268	665	6,354	50.9%	57.5%	**53.5%**	36.0%
2015	$299,574	216	176	392	2,384	409	284	693	6,883	52.8%	62.0%	**56.6%**	34.6%
2016	$336,517	247	205	452	2,727	481	319	800	7,532	51.4%	64.3%	**56.5%**	36.2%
2017	$349,500	128	131	259	1,218	478	318	796	7,890	26.8%	41.2%	**32.5%**	15.4%
2018	$350,200	228	161	389	1,525	615	397	1,012	7,379	37.1%	40.6%	**38.4%**	20.7%
YOY Growth	--	-24	-68	-92	-339	+31	-48	-17	+412	--	--	--	--
2019 (Original Stage 2)	$357,200	204	93	297	1,186	646	349	995	7,791	31.6%	26.6%	**29.8%**	15.2%
CTC Stage 2 Realignment	--	N/A	+16	+16	0	N/A	+46	+46	0	N/A	--	--	--
2019 (Revised Stage 2)	$357,200	204	109	313	1,186	646	395	1,041	7,791	31.6%	27.6%	**30.1%**	15.2%
2020	$368,000	188	85	273	844	675	466	1,141	8,196	27.9%	18.2%	**23.9%**	10.3%

Although transactions have become increasingly unaffordable over the past four years, the data show that, in general, housing is still more affordable in the CTC compared to the Region as a whole (Figure 1). In 2020, 24 per cent of transactions within the CTC were deemed affordable for low- to moderate-income earners, and only 10 per cent of transactions were affordable across the Region.

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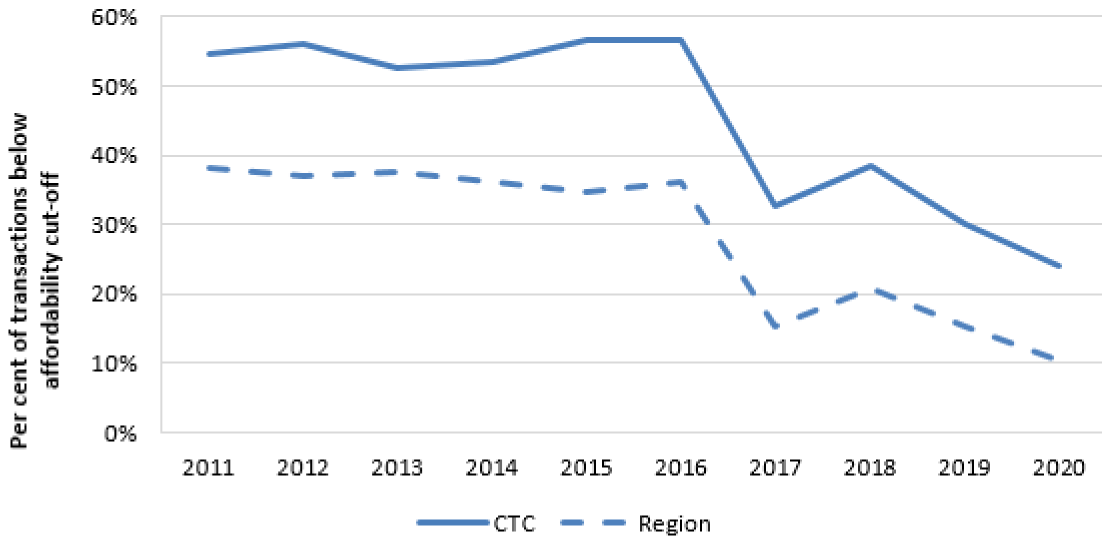
[4] The affordability cut-off is defined as housing for which the purchase price results in annual accommodation costs that do not exceed 30 per cent of gross annual household income for low- and moderate-income households.

Figure 1. Affordable Home Ownership Transactions for Low- to Moderate-Income Earners, 2011-2020



The relative stability of the number of affordable transactions in the CTC until 2016 suggests that low- and moderate-income households had been able to obtain affordable home ownership within the CTC. However, the increase in the number of transactions in the CTC that are 'unaffordable' – especially between 2016 and 2020 – shows that it has become increasingly difficult for low- to moderate-income households to secure affordable housing; and for some households the reality is that either they must spend, or they choose to spend, more than 30 per cent of their income on housing.

There were more transactions in 2020 in Stage 1 (675) than in Stage 2 (466), which is not surprising given the continued amount of residential investment occurring in Stage 1 compared to Stage 2. There was also a greater percentage of affordable transactions in Stage 1 (28 per cent) than in Stage 2 (18 per cent). This is a reversal from 2011-2018, when a greater percentage of affordable transactions occurred in Stage 2.

In 2020, the median residential transaction value[5] of $475,000 within Stage 1 was over the affordability cut-off by $107,000 (Table 2). In Stage 2, the median transaction value of $480,000 was $112,000 more than the affordability cut-off. A median transaction value of $580,000 was found outside the CTC, which is $212,000 higher than the affordability cut-off.

The median value of housing transactions is influenced by the mix of housing types sold. A housing mix that includes a greater proportion of large single detached houses will have a higher median value than a mix with more apartment units. Of the 1,476 condominium units sold in the Region in 2020, 27 per cent

[5] The median is the value at which half of the transactions were higher and half were at a lower value.

(401 units) were located in the CTC, and of the singles sold in the Region, only 11 per cent were in the CTC. This housing mix explains, in part, the greater affordability in the CTC compared to the Region as a whole. However, when looking at single detached homes specifically, of all singles sold within the CTC, seven per cent were considered affordable. This is compared to just two per cent of singles being considered affordable across the Region as a whole. This tells us that the CTC remains more affordable when compared with the Region as a whole.

Table 2. Median Resale Transaction Values, 2011-2020

Year	CTC			Outside CTC	Region Total
	Stage 1	Stage 2	CTC		
2011	$257,300	$235,500	$248,000	$288,500	$284,000
2012	$263,500	$245,000	$256,000	$299,900	$294,950
2013	$280,500	$257,750	$274,625	$205,000	$304,900
2014	$290,000	$267,500	$283,000	$322,500	$318,250
2015	$299,000	$275,000	$288,000	$335,625	$330,000
2016	$331,200	$300,000	$322,950	$375,000	$370,000
2017	$400,000	$363,750	$385,000	$460,000	$450,300
2018	$385,000	$370,000	$378,750	$459,900	$449,900
YOY Growth	+$30,000	+$48,000	+$36,250	+$35,100	+$35,100
2019 (Original Stage 2)	$415,000	$418,000	$415,000	$495,000	$485,000
CTC Stage 2 Realignment	N/A	+$2,000	$0	+$1,000	$0
2019 (Revised Stage 2)	$415,000	$420,000	$415,000	$496,000	$485,000
2020	$475,000	$480,000	$477,500	$580,000	$566,000

3.2.8 *Inclusive Community: Supply of Community Housing*

2,758 Community Housing units were located within the CTC in 2020

In 2020, there were 2,758 Community Housing units located within the CTC (Table 1) – the same number as 2019. The Region saw 52 new Community Housing units in 2020; however, all of them were located outside the CTC. From the LRT announcement in 2011 to the end of 2020, there has been a net gain of 186 Community Housing units in Waterloo Region, of which 71 (38 per cent) have been in the CTC. The inclusion of two additional properties outside the CTC means that the proportion of Community Housing units located within the CTC remains at 30 per cent.

Table 1. Number of Community Housing Units, 2011-2020

Year	CTC		Outside CTC		Region Total
	Number of Units	% Within CTC	Number of Units	% Outside CTC	Number of Units
2011	2,687	30.0%	6,258	70.0%	8,945
2012	2,610	29.4%	6,260	70.6%	8,870
2013	2,631	29.6%	6,265	70.4%	8,896
2014	2,631	29.4%	6,305	70.6%	8,936
2015	2,633	29.5%	6,305	70.5%	8,938
2016	2,645	29.7%	6,259	70.3%	8,904
2017	2,645	29.5%	6,306	70.5%	8,951
2018	2,701	29.8%	6,371	70.2%	9,072
YOY Growth	0		+7		+7
2019 (Original Stage 2)	2,701	29.7%	6,378	70.3%	9,079
CTC Stage 2 Realignment	+57		-57		0
2019 (Revised Stage 2)	2,758	30.4%	6,321	69.6%	9,079
2020	2,758	30.2%	6,373	69.8%	9,131
Change 2011-2020	71		115		186
Change 2019-2020	0		52		52
% Change 2011-2020	2.6%		1.8%		2.1%
% Change 2019-2020	0.0%		0.8%		0.6%
Average Annual % Change	0.3%		0.2%		0.2%

The above change calculations utilize the original Stage 2 boundary for 2011-2018 and the revised boundary for 2019 and 2020.

Community Housing, defined as housing in which rents are supported by government funding, became the responsibility of the Region in 2001 when the province transferred to municipalities a number of funding responsibilities including social housing. The inherited properties of that time, many of which still exist today, pre-date the LRT. Since ION was approved in 2011, Region-issued requests for proposals for new Community Housing projects have placed a greater weighting on projects that are proposed to be located in the CTC or along major transit routes, thereby recognizing the value of having affordable units in proximity to public transportation.

The stock of Community Housing can increase as private and non-profit developers build new units. The stock of Community Housing can decrease as non-profit housing providers with federal housing agreements reach the end of their agreements. Once they reach the end of their agreement, they are no longer obligated to provide their housing at affordable rents, although most continue to do so as providing affordable housing is part of their non-profit mandate. Some housing providers choose to sell their properties at this time if they are no longer interested or able to provide affordable housing.

3.2.9 Inclusive Community: Location of Households Receiving Rent Assistance

60 per cent of households receiving rent assistance found housing in the CTC in 2020

In 2020, the percentage of households receiving rent assistance with supports who were living within the CTC increased slightly to 60 per cent (Table 1). Of the 58 households receiving Housing Assistance with Supports (HAWS) and living within the CTC, 37 lived in Stage 1 while 21 households lived in Stage 2 (Table 2). The Region provides flexible rent assistance for up to 100 households through the HAWS program. The focus for this rent assistance program is to house those who are, or are at risk of becoming, chronically homeless. Participants, with the help of their support workers, are required to find housing in the private rental market for which they will receive a monthly allowance. Rental units are only eligible if they are below a certain threshold. With costs for rental housing continuing to increase across the Region in 2020, tracking this indicator as participants change is important in order to see if program participants continue to be able to find rental units within the CTC. Although this is currently a small sample of just 96, it represents the most vulnerable households when it comes to housing stability.

Table 1. Location of HAWS Households, 2015-2020

Year	CTC			Outside CTC	Region Total
	Stage 1	Stage 2	Total		
2015	44.0%	6.0%	**50.0%**	50.0%	100.0%
2016	54.0%	6.0%	**60.0%**	40.0%	100.0%
2017	40.0%	16.0%	**56.0%**	44.0%	100.0%
2018	38.5%	18.8%	**57.3%**	42.7%	100.0%
2019 *	39.1%	17.2%	**56.3%**	43.7%	100.0%
2020	38.5%	21.9%	**60.4%**	39.6%	100.0%

** 2019 results for this indicator were not affected by the CTC Stage 2 realignment.*

Table 2. Number of HAWS Households, 2020

Year	CTC			Outside CTC	Region Total
	Stage 1	Stage 2	Total		
2020	37	21	**58**	38	96

4 Updates to Indicators

4.1 CTC Stage 2 Realignment

Beginning with the 2019 monitoring report (published in 2020), the CTC boundary was adjusted to reflect the newly approved alignment of ION Stage 2, and to incorporate work on delineating the Major Transit Station Areas (MTSAs).

To calculate indicators using the revised CTC Stage 2 boundary, the following methodology was adopted:

- Three indicators (Population, Building Activity, and Calls for Service) were recalculated from 2011 to 2020 using the new CTC geography. Rebasing these indicators to 2011 provides a consistent series with which we can show total change back to the baseline year, as if the new boundary had always been in place, allowing seamless calculations of growth.
- For most indicators, change was measured using the original CTC boundary for 2011 to 2018 and the new CTC Stage 2 boundary for 2019 and 2020. This approach was used for indicators for which raw data were not available for all previous years. Therefore, change from the baseline of 2011 to 2019 includes both temporal and geographic change. Since it is important to ensure transparency between 'real' change versus change that is a result of the boundary change, each of those two components has been separated out for each indicator, and described both in the text and data tables.

Appendix B shows all indicators measured for 2011 to 2018 with the original CTC geography, and the values for 2019 with both the original CTC boundary as well as the revised boundary. Some indicators (e.g., heritage) did not change regardless of which Stage 2 boundary is used. Finally, 2020 results are shown for the revised boundary only.

4.2 Adjustments and Corrections in Data and Definitions

Over time, various refinements are made to data and calculations to incorporate corrections as detected. Aside from such refinements, none of the indicators in this year's report have had significant adjustments to methodology or definitions.

5 Data Sources

The data presented in this report is the best available at the time of publication. Data is typically acquired from external agencies, and occasionally changes over time. All such changes to indicators over the course of the monitoring program are fully documented.

Indicator: Transit Ridership

Scale: Regional

Measurement Interval: Annual

Data Source: GRT ridership indicator is calculated based on daily data obtained from the electronic fare boxes on buses, as well as the sales of various passes, and published on GRT's website at: http://www.grt.ca/en/about-grt/performance-measures.aspx.

Indicator: Daily Transit Activity

Scale: CTC

Measurement Interval: Annual

Data Source: The data for the ridership information comes from MOBILEstatistics, which allows Automatic Passenger Counter (APC) data queries to be made and downloaded by GRT.

Indicator: Walkability

Scale: CTC

Measurement Interval: Annual

Data Source: The five walkability categories were determined from the NEWPATH study that was performed in 2009, which assessed the walkability of Kitchener, Waterloo and Cambridge.

Indicator: Land Use Mix

Scale: CTC

Measurement Interval: Annual

Data Source: The Municipal Property Assessment Corporation (MPAC) provides data on each land parcel within the Region, including land use information.

Indicator: Population

Scale: CTC

Measurement Interval: Annual

Data Source: The total resident population of Waterloo Region is estimated annually, based on Census of Canada results, building activity, vacancy rates, and long-term changes in the average number persons per units for various dwelling types. The year-end estimates include usual residents in both private and collective dwellings, temporary postsecondary students not counted by the Census, other foreign and temporary residents, as well as an adjustment for the net undercount of the population.

Indicator: Heritage Resource Retention
Scale: CTC
Measurement Interval: Annual
Data Source: An inventory of formally recognized (listed and/or designated) and pre-1920 built heritage resources is compared to demolition permits acquired from Area Municipalities.

Indicator: Building Activity
Scale: CTC
Measurement Interval: Annual
Data Source: Figures on building activity in both the residential and non-residential sectors are compiled annually by Regional staff, based on building permit data supplied by the Area Municipalities.

Indicator: Assessment Value
Scale: CTC
Measurement Interval: 2011, 2014 to 2020
Data Source: The most updated parcels for the fourth quarter of 2019 were sourced from MPAC (Municipal Property Assessment Corporation) under license, and used to determine the total assessment of parcels within the CTC.

Indicator: Calls for Service
Scale: CTC
Measurement Interval: Annual
Data Source: The annual Waterloo Regional Police Service (WRPS) occurrence data is obtained through open source data from the WRPS website.

Indicator: Affordability of Home Ownership Transactions
Scale: CTC
Measurement Interval: Annual
Data Sources: Average re-sale residential prices are obtained through the MLS® System provided by the Kitchener-Waterloo Association of REALTORS® and Cambridge Association of REALTORS®. Transaction data is obtained under license from Teranet.

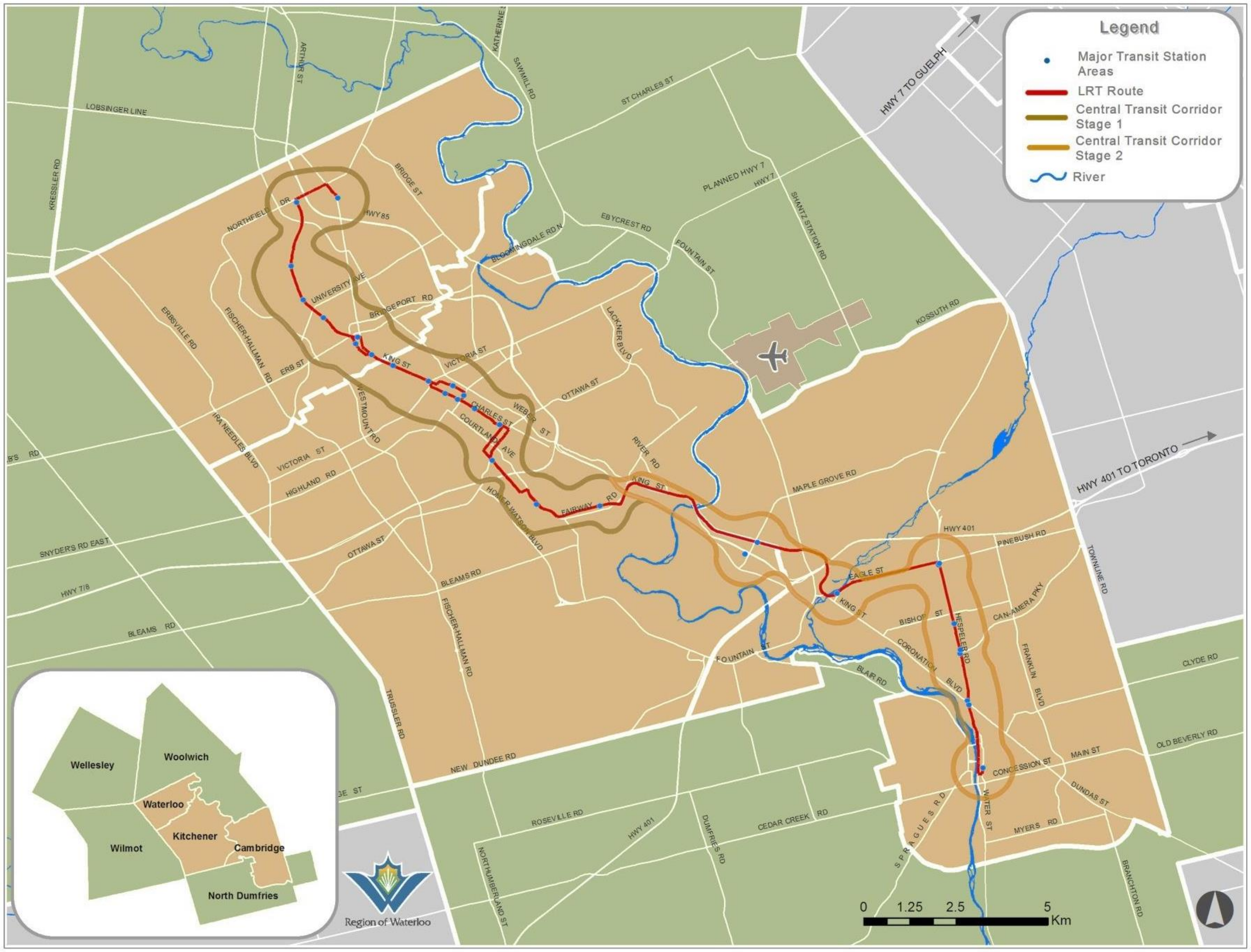
Indicator: Supply of Community Housing
Scale: CTC

Measurement Interval: Annual
Data Source: Region of Waterloo Community Housing

Indicator: Location of Households Receiving Rent Assistance
Scale: CTC
Measurement Interval: Annual since 2015
Data Source: Region of Waterloo Community Housing

For a more comprehensive explanation of the use of data and methodology for each indicator, please read the Baseline Monitoring report.

Appendix A: CTC Map with the Original Stage 2 Alignment[6]



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[6] This boundary was used for the CTC Monitoring Program from 2011 to 2018.

Appendix B: Annual Indicators for the CTC Monitoring Program, with Results for Original and Revised Stage 2 Boundaries

Dimension	Indicator	Metric	2011	2012	2013	2014	2015	2016	2017	2018	2019		2020
											Original Stage 2	*Revised Stage 2*	
Mobility	Transit Ridership	Number of trips made using Grand River Transit (millions)	19.7	21.3	22.0	21.6	20.3	19.7	19.7	21.1	22.0	22.0	11.4
	Daily Transit Activity	Per cent of daily average transit activity in the CTC	67%	65%	67%	64%	63%	62%	60%	60%	59%	59%	63%
Sustainable Modes of Transportation	Transit Mode Share	Per cent of mode of travel share on transit across the CTC	-	-	-	-	5%	-	-	-	-	-	-
	Active Transportation	Per cent of mode of travel share which was pedestrian and cyclist in the CTC	5%	-	-	-	-	9%	-	-	-	-	-
	Walkability	Per cent of population living in 'high' or 'very high' walkable areas in the CTC	55%	56%	56%	56%	56%	57%	57%	57%	58%	57%	57%
Vibrant Communities	Land Use Mix	Per cent of all regional land uses found in the CTC	69%	69%	69%	69%	69%	70%	70%	70%	69%	70%	69%
	Population	Per cent of the Region's residents who live in the CTC	18%	17%	17%	18%	18%	18%	19%	19%	19%	20%	19%
Arts and Culture	Cultural Vibrancy	Number of arts and culture establishments in the CTC	241	-	-	-	-	318	-	336	-	-	-
	Restaurants	Per cent of the Region's restaurants in the CTC	50%	51%	52%	52%	52%	52%	53%	53%	53%	54%	-
Heritage	Heritage Resource Retention	Number of demolition permits on pre-1920 and designated built heritage resources in the CTC	13	36	11	9	12	17	16	7	21	21	11
Investment	Building Activity	Dollar value of building permits in the CTC for new construction (millions, adjusted to 2011)	$491	$262	$227	$565	$259	$308	$222	$213	$697	$682	$619
	Assessment Value	Assessed value of properties in the CTC (billions)	$10.0	-	-	$12.0	$12.8	$13.6	$14.7	$15.3	$16.4	$17.0	$18.3
Environment	Emissions	Tonnes of net air emissions per capita in Cambridge, Kitchener and Waterloo	2.52	-	-	-	-	-	2.66	-	-	-	-

Dimension	Indicator	Metric	2011	2012	2013	2014	2015	2016	2017	2018	2019		2020
											Original Stage 2	*Revised Stage 2*	
Crime and Safety Crime and Safety	Perception of Safety	Per cent of people in the Tri-Cities who perceive that their downtowns are safe at night	65%	-	-	-	-	-	62%	58%	-	-	-
	Calls for Service	Per cent of police calls for service related to potential public perception in the CTC	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018** *Original Stage 2*	**2018** *Revised Stage 2*	**2019**	**2020**
			40%	41%	43%	43%	43%	44%	45%	46%	47%	47%	-
Dimension	**Indicator**	**Metric**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019** *Original Stage 2*	**2019** *Revised Stage 2*	**2020**
Inclusive Community	Affordability of Home Ownership Transactions	Per cent of housing transactions which were affordable to low and moderate income households in the CTC	55%	56%	53%	54%	57%	57%	33%	38%	30%	30%	24%
	Supply of Community Housing	Number of community housing units in the CTC	2,687	2,610	2,631	2,631	2,633	2,645	2,645	2,701	2,701	2,758	2,758
	Location of Households Receiving Rent Assistance	Per cent of Housing Allowances with Supports (HAWS) in the CTC	-	-	-	-	50%	60%	56%	57%	56%	56%	60%

Appendix C: Building Activity

Residential Building Activity in the CTC, 2011-2020

Year	Single Detached			Semi Detached			Townhouses			Apartments			Total Residential		
	Units	Value	Value (Adj) *	Units	Value	Value (Adj) *	Units	Value	Value (Adj) *	Units	Value	Value (Adj) *	Units	Value	Value (Adj) *
2011	13	$4,167,241	$4,167,241	1	$23,000	$23,000	44	$6,192,614	$6,192,614	1,146	$198,675,843	$198,675,843	1,204	$209,058,698	$209,058,698
2012	13	$3,755,184	$3,699,643	7	$900,000	$886,689	179	$27,243,704	$26,840,757	624	$97,507,250	$96,065,072	823	$129,406,138	$127,492,161
2013	12	$3,743,962	$3,655,546	6	$1,337,000	$1,305,426	48	$8,015,900	$7,826,599	624	$130,206,450	$127,131,542	690	$143,303,312	$139,919,113
2014	11	$3,807,000	$3,645,841	6	$1,389,000	$1,330,200	92	$15,353,000	$14,703,073	1,831	$331,034,537	$317,021,094	1,940	$351,583,537	$336,700,208
2015	7	$2,066,332	$1,956,976	2	$500,000	$473,539	50	$6,121,112	$5,797,167	1,096	$114,144,187	$108,103,381	1,155	$122,831,631	$116,331,063
2016	8	$2,389,122	$2,230,964	5	$1,222,000	$1,141,104	55	$5,719,000	$5,340,406	1,793	$260,239,837	$243,012,122	1,861	$269,569,959	$251,724,596
2017	14	$5,096,894	$4,686,485	3	$1,055,600	$970,602	26	$3,166,000	$2,911,069	1,076	$91,965,580	$84,560,376	1,119	$101,284,074	$93,128,531
2018	18	$6,960,910	$6,256,470	16	$4,981,460	$4,477,339	69	$9,523,800	$8,559,997	847	$146,199,461	$131,404,163	950	$167,665,631	$150,697,970
2019	11	$4,367,500	$3,850,465	13	$4,432,500	$3,907,770	109	$25,916,880	$22,848,779	3,274	$631,360,128	$556,618,230	3,407	$666,077,008	$587,225,245
2020	6	$2,511,640	$2,198,143	72	$13,038,320	$11,410,909	20	$6,100,000	$5,338,613	2,252	$476,506,100	$417,029,791	2,350	$498,156,060	$435,977,457
Total	**113**	**$38,865,785**	**$36,347,774**	**131**	**$28,878,880**	**$25,926,578**	**692**	**$113,352,010**	**$106,359,074**	**14,563**	**$2,477,839,373**	**$2,279,621,615**	**15,499**	**$2,658,936,048**	**$2,448,255,041**

* Value adjusted to 2011 dollars

Residential Building Activity in the Region, 2011-2020

Year	Single Detached			Semi Detached			Townhouses			Apartments			Total Residential		
	Units	Value	Value (Adj) *	Units	Value	Value (Adj) *	Units	Value	Value (Adj) *	Units	Value	Value (Adj) *	Units	Value	Value (Adj) *
2011	1,334	$381,768,896	$381,768,896	72	$10,406,129	$10,406,129	306	$43,663,458	$43,663,458	1,887	$297,517,043	$297,517,043	3,599	$733,355,526	$733,355,526
2012	928	$286,286,276	$282,051,968	54	$10,495,676	$10,340,440	476	$76,178,275	$75,051,563	954	$139,919,388	$137,849,915	2,412	$512,879,615	$505,293,885
2013	846	$265,001,286	$258,743,112	38	$8,436,800	$8,237,560	524	$83,890,009	$81,908,893	1,238	$195,435,150	$190,819,825	2,646	$552,763,245	$539,709,390
2014	947	$312,650,761	$299,415,545	70	$12,608,400	$12,074,658	675	$109,685,956	$105,042,701	2,321	$401,061,410	$384,083,571	4,013	$836,006,527	$800,616,474
2015	1,093	$384,336,598	$363,996,509	48	$9,874,000	$9,351,442	688	$119,321,866	$113,007,044	1,776	$207,333,858	$196,361,213	3,605	$720,866,322	$682,716,209
2016	1,698	$594,787,246	$555,412,701	106	$21,934,024	$20,482,005	955	$151,617,150	$141,580,189	2,961	$446,160,788	$416,625,222	5,720	$1,214,499,208	$1,134,100,117
2017	1,008	$391,136,208	$359,641,345	50	$14,579,585	$13,405,615	654	$118,036,545	$108,532,069	1,528	$150,186,382	$138,093,153	3,240	$673,938,720	$619,672,182
2018	918	$335,152,912	$301,235,638	66	$17,696,060	$15,905,229	572	$100,470,952	$90,303,352	1,377	$269,339,960	$242,082,918	2,933	$722,659,884	$649,527,137
2019	807	$300,524,475	$264,947,681	113	$33,338,600	$29,391,898	1,266	$247,342,882	$218,061,850	4,123	$742,510,870	$654,610,686	6,309	$1,323,716,827	$1,167,012,114
2020	971	$411,550,656	$360,181,924	186	$50,764,096	$44,427,848	729	$154,173,052	$134,929,554	3,311	$685,285,865	$599,750,184	5,197	$1,301,773,669	$1,139,289,510
Total	**10,550**	**$3,663,195,314**	**$3,427,395,320**	**803**	**$190,133,370**	**$174,022,824**	**6,845**	**$1,204,380,145**	**$1,112,080,672**	**21,476**	**$3,534,750,714**	**$3,257,793,729**	**39,674**	**$8,592,459,543**	**$7,971,292,545**

* Value adjusted to 2011 dollars

Non-Residential Building Activity in the CTC, 2011-2020

Year	Industrial			Commercial			Institutional			Total Non-Residential		
	Sq. ft	Value	Value (Adj) *	Sq. ft	Value	Value (Adj) *	Sq. ft	Value	Value (Adj) *	Sq. ft	Value	Value (Adj) *
2011	3,600	$8,500,000	$8,500,000	311,980	$44,212,500	$44,212,500	122,095	$227,234,856	$227,234,856	437,675	$279,947,356	$279,947,356
2012	20,909	$2,470,000	$2,433,468	392,408	$46,128,551	$45,446,288	269,053	$88,689,000	$87,377,248	682,370	$137,287,551	$135,257,004
2013	28,757	$3,755,000	$3,666,323	77,723	$21,991,500	$21,472,157	236,186	$64,339,248	$62,819,836	342,666	$90,085,748	$87,958,316
2014	8,818	$15,100,194	$14,460,969	173,994	$41,622,514	$39,860,539	317,777	$180,100,389	$172,476,331	500,589	$236,823,097	$226,797,838
2015	115,696	$8,769,316	$8,305,221	528,584	$83,980,713	$79,536,236	155,164	$56,060,000	$53,093,160	799,444	$148,810,029	$140,934,617
2016	3,335	$7,500,000	$7,003,505	133,250	$42,742,475	$39,912,950	16,824	$5,142,000	$4,801,603	153,409	$55,384,475	$51,718,057
2017	8,534	$11,772,000	$10,824,101	292,260	$57,911,920	$53,248,767	228,047	$62,322,869	$57,304,540	528,841	$132,006,789	$121,377,408
2018	9,616	$5,695,200	$5,118,849	273,358	$58,042,244	$52,168,404	6,519	$2,885,000	$2,593,040	289,493	$66,622,444	$59,880,293
2019	2,045	$300,000	$264,485	576,674	$101,348,153	$89,350,320	17,684	$6,319,920	$5,571,753	596,403	$107,968,073	$95,186,558
2020	11,562	$1,500,000	$1,312,774	447,253	$176,458,000	$154,432,950	61,505	$31,650,000	$27,699,526	520,320	$209,608,000	$183,445,250
Total	**212,872**	**$65,361,710**	**$61,889,695**	**3,207,484**	**$674,438,570**	**$619,641,111**	**1,430,854**	**$724,743,282**	**$700,971,891**	**4,851,210**	**$1,464,543,562**	**$1,382,502,696**

* Value adjusted to 2011 dollars

Non-Residential Building Activity in the Region, 2011-2020

Year	Industrial			Commercial			Institutional			Total Non-Residential		
	Sq. ft	Value	Value (Adj) *	Sq. ft	Value	Value (Adj) *	Sq. ft	Value	Value (Adj) *	Sq. ft	Value	Value (Adj) *
2011	435,198	$82,589,285	$82,589,285	689,686	$102,518,894	$102,518,894	552,995	$380,991,856	$380,991,856	1,677,879	$566,100,035	$566,100,035
2012	328,556	$43,003,250	$42,367,212	856,445	$112,437,349	$110,774,348	725,845	$192,080,261	$189,239,304	1,910,846	$347,520,860	$342,380,864
2013	394,662	$38,736,185	$37,821,405	383,040	$64,357,595	$62,837,750	534,528	$116,637,748	$113,883,273	1,312,230	$219,731,528	$214,542,428
2014	1,015,515	$91,691,662	$87,810,146	679,103	$110,988,989	$106,290,573	489,450	$246,487,230	$236,052,866	2,184,068	$449,167,881	$430,153,586
2015	534,583	$49,417,835	$46,802,515	778,228	$116,866,961	$110,682,059	467,636	$149,125,300	$141,233,203	1,780,447	$315,410,096	$298,717,777
2016	766,816	$88,934,500	$83,047,092	751,472	$96,245,966	$89,874,543	325,449	$63,220,740	$59,035,566	1,843,737	$248,401,206	$231,957,201
2017	978,749	$134,395,252	$123,573,548	655,287	$104,293,920	$95,896,020	573,082	$128,147,869	$117,829,214	2,207,118	$366,837,041	$337,298,782
2018	1,085,229	$147,003,760	$132,127,068	676,026	$112,862,881	$101,441,225	216,646	$51,420,000	$46,216,327	1,977,901	$311,286,641	$279,784,620
2019	1,169,419	$177,969,614	$156,901,152	957,919	$170,957,480	$150,719,131	155,869	$69,316,920	$61,111,020	2,283,207	$418,244,014	$368,731,304
2020	298,984	$41,913,307	$36,681,792	524,452	$194,551,133	$170,267,743	310,471	$92,851,000	$81,261,569	1,133,907	$329,315,440	$288,211,104
Total	**7,007,711**	**$895,654,650**	**$829,721,215**	**6,951,658**	**$1,186,081,168**	**$1,101,302,286**	**4,351,971**	**$1,490,278,924**	**$1,426,854,198**	**18,311,340**	**$3,572,014,742**	**$3,357,877,700**

* Value adjusted to 2011 dollars

Appendix D: WRPS Call Type Codes

A list of the WRPS call type codes used to count the total number of police calls for service in the CTC. This table is a subset consisting of the most relevant police calls for service. The call types were chosen to reflect the type of police activity that may affect a person's perception of safety within their downtown area. The selected call types are grouped under three categories: Public Order Maintenance, Police Reported Violent Occurrences Against a Person, and Police Reported Non Violent Occurrences. A sum of the selected call types within each category was taken to arrive at the total percentage of police calls for service that occurred within the CTC.

Public Order Maintenance		**Police Reported Violent Occurrences Against a Person**		**Police Reported Non-Violent Occurrences**	
9190	Prostitution	9000	Bomb Threat	9110	Break and Enter
9200	Gaming and Betting	9010	Homicide	9120	Theft over $5000
9210	Drugs	9040	Sex Offence	9130	Motor Vehicle Theft
9290	Unwanted Contact	9050	Indecent Act	9180	Property Damage
9350	Intoxicated Person	9060	Threatening	9790	Theft Under $5000
9360	Unwanted Person	9070	Assault	9920	Graffiti
9370	Mentally Ill	9080	Abduction		
9380	Public Mischief	9090	Robbery		
9470	Suspicious Person	9100	Extortion		
9480	Suspicious Vehicle	9170	Offensive Weapon		
9600	Abandoned Vehicle	9300	Disturbance		
9610	Liquor Offence	9310	Dispute		
9650	Youth Complaint	9460	Prowler		
		9850	Human Trafficking		
		9900	Criminal Harassment		