

Central Transit Corridor (CTC) Monitoring Program

Kitchener-Cambridge-Waterloo

# MONITORING CHANGE IN THE CTC 2024 REPORT

December 2024

## **Growth Management and Data Analytics**

### **Planning, Development and Legislative Services**

Regional Municipality of Waterloo  
150 Frederick Street, 8th Floor  
Kitchener, ON N2G 4J3

Tel: (519) 575-4400

Fax: (519) 575-4449

Email: [planninginfo@regionofwaterloo.ca](mailto:planninginfo@regionofwaterloo.ca)

Website: [www.regionofwaterloo.ca](http://www.regionofwaterloo.ca)

Document Number: 4705181

4705181



Region of Waterloo

## **Acknowledgements**

### **Lead Authors**

Ryan Pogrzeba – Manager, Growth Management and Analytic Services

Bobby Soosaar – Planning Information Specialist, Growth Management and Analytic Services

Bator Toth – Student Planner, Growth Management and Analytic Services

### **Contributors/Advisors**

#### **Growth, Development and Sustainability Services**

Rod Regier – Commissioner, Planning, Development and Legislative Services

Danielle De Fields – Director, Growth, Development and Sustainability Services

#### **GIS Services**

Vali Vakhshoori - Planning Data Analyst, Growth Management and Analytic Services

#### **Transit Services**

Blair Allen – Manager, Transit Development

Chantelle Thompson – Supervisor, Transit Development

Jeremy Turner – Transit Analyst

#### **Sustainability Services**

Stephanie Shifflett - Coord, CCPM & Reporting, Planning, Development and Legislative Services

#### **Cultural Services**

Roxy Nazarowicz – Senior Planner (Cultural Heritage)

#### **Financial Services**

Julie Bradey – Financial Assistant (Tax Policy, FFM, Legal, POA)

#### **Waterloo Regional Police Service**

Amanda Franceschini – Strategic Planner, Waterloo Regional Police Service

#### **Housing Services**

Jeffrey Schumacher – Manager, Affordable Housing Development

Judy Maan Miedema – Principal Planner (Housing & Development)

Tristan Wilkin – Supervisor, Affordable Housing Development (Housing & Development)

**Table of Contents**

**1 Background .....1**

1.1 Summary..... 1

1.2 About ION..... 1

1.3 The ION Central Transit Corridor..... 1

**2 The Central Transit Corridor Monitoring Program .....3**

2.1 Purpose of the Monitoring Program ..... 3

2.2 Monitoring ION’s Goals ..... 3

2.3 Baseline and Annual Indicators ..... 4

2.4 Updating Indicators for the Stage 2 CTC Route Alignment Changes..... 4

2.5 Monitoring the Impacts of Progressive Policy..... 5

    2.5.1 *Monitoring the Impacts of Progressive Policy: Regional Growth Management Strategy* ..... 5

    2.5.2 *Monitoring the Impacts of Progressive Policy: Adaptations within Area Municipalities*..... 5

    2.5.3 *Monitoring the Impacts of Progressive Policy: Development Incentives* ..... 6

    2.5.4 *Monitoring the Impacts of Progressive Policy: Conclusion* ..... 7

**3 Monitoring Results and Analysis.....8**

3.1 Goal: Moving People ..... 12

    3.1.1 *Mobility: Transit Ridership* ..... 13

    3.1.2 *Mobility: Daily Transit Activity* ..... 15

    3.1.3 *Sustainable Modes of Transportation: Emissions* ..... 17

    3.1.4 *Sustainable Modes of Transportation: Walkability*..... 19

3.2 Goal: Building Community..... 21

    3.2.1 *Vibrant Communities: Land Use Mix*..... 22

3.2.2	<i>Vibrant Communities: Population</i>	23
3.2.3	<i>Vibrant Communities: Major Transit Station Area (MTSA) Densities</i>	24
3.2.4	<i>Arts and Culture: Restaurants</i>	28
3.2.5	<i>Heritage: Heritage Resource Retention</i>	29
3.2.6	<i>Investment: Building Activity</i>	31
3.2.7	<i>Investment: Assessment Value</i>	37
3.2.8	<i>Crime and Safety: Calls for Service</i>	39
3.2.9	<i>Inclusive Community: Affordability of Home Ownership Transactions</i>	42
3.2.10	<i>Inclusive Community: Supply of Community Housing</i>	45
3.2.11	<i>Inclusive Community: Location of Households Receiving Rent Assistance</i>	47
<b>4</b>	<b>Updates to Indicators</b>	<b>48</b>
4.1	CTC Stage 2 Realignment	48
4.2	Adjustments and Corrections in Data and Definitions	48
<b>5</b>	<b>Data Sources</b>	<b>49</b>
	<b>Appendix A: Map of CTC Stage 2 Alignment</b>	<b>52</b>
	<b>Appendix B: Land Use Parcel Codes</b>	<b>53</b>
	<b>Appendix C: Building Activity</b>	<b>67</b>
	<b>Appendix D: WRPS Call Type Codes</b>	<b>71</b>

# 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 demographic, 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. Given the sustained investment, development, and infrastructure improvements seen along Stage 1, there is an interest in continuing to monitor change along the CTC as stage 2 is constructed.

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.

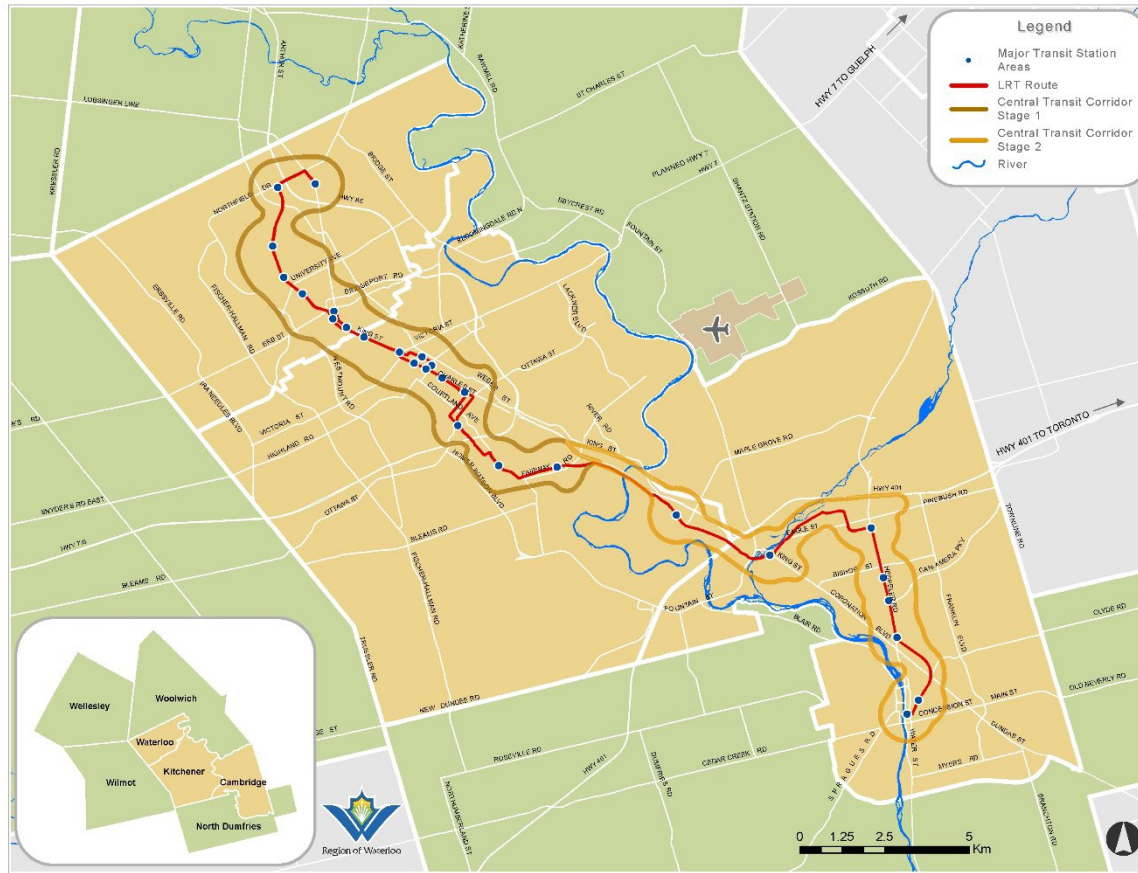
More information about ION can be found in the Region of Waterloo’s ION Story report: <https://www.grt.ca/en/ion-light-rail.aspx?mid=18023>; and at the Stage 2 ION project website: <https://www.engagewr.ca/Stage2ION>.

## 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 lines, 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 included 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. Eight 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
		GHG Emissions	Tonnes of net air emissions per capita in Cambridge, Kitchener and Waterloo
		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
		MTSA Density	Density achieved at each of the Region’s MTSAs
	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)
	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

\* These indicators have not been completed for 2023, 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. 2023 was the first year Major Transit Station Area (MTSA) residential and employment density was monitored in addition to overall population. Some of the baseline indicators cannot be measured every year due to constraints in data availability. 14 of the 18 indicators have been updated for the 2023 reporting year.

**2.4 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 (2019 monitoring report), the CTC boundary was changed to reflect the preferred Stage 2 alignment that was endorsed by Council in June 2019. The ‘revised’ boundary has been used since the

2019 report and will continue to be used for future monitoring years. In response to the boundary change, three indicators (Population, Building Activity and Calls for Service) have been re-calculated to provide a seamless time series from 2011 to 2023. The remaining indicators were not recalculated; rather, they were calculated using both the old alignment (for 2011-2019) as well as the new alignment (for 2019-2023) 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.

## **2.5 Monitoring the Impacts of Progressive Policy**

The ION LRT was officially approved in 2011 with the goal of enhancing urban mobility by providing a reliable, efficient, an eco-friendly transportation alternative. While it has successfully delivered results on these objectives since opening in 2019, the Region has been progressing towards this long before its construction began. Preventing urban sprawl through densification, inspiring new residential and business investments, as well as bolstering community vibrancy have all been indirect results of this major public transit initiative. The influence of ION can be found throughout the various indicators of this report, which demonstrate variation in statistics within the CTC compared to outside of it. However, ION's infrastructure itself was just one factor among many that have encouraged smart growth and prosperity throughout the years. Studies have shown that even high-quality rapid transportation infrastructure has minimal effects on transit-oriented development without policy interventions and a strong land market value to back it up (Hook et al., 2013)<sup>1</sup>. As such, many of the milestones seen within the CTC can be attributed to the complementary and strategic reforms underwent beyond that of the ION operation itself.

### **2.5.1 Monitoring the Impacts of Progressive Policy: Regional Growth Management Strategy**

Progressive zoning reforms, policy incentives and even the construction of ION can be traced back to the Regional Growth Management Strategy of 2003. This strategy established the goals and direction of the Region as it realized the level of growth pressures it was facing, which would only accumulate over time. Since its introduction, the Regional Growth Management Strategy has served as a guide for directing this growth by regulating its distribution, timing, and technique. One of the strategy's primary objectives was ensuring the prevention of urban sprawl and instead establishing the Region's unique path to achieving "smart growth" through densification, transit expansion, and countryside preservation. These values were adopted by the Region's Official Plans and have created an environment where transit could be successful. The Regional Growth Management Strategy can therefore be seen as a catalyst to capturing the Region's potential for growth and investing it into existing infrastructure, thereby maximizing its use and securing the longevity of the Region's natural and financial resources. To learn more about the Regional Growth Management Strategy, visit [RegionalGrowthManagementStrategy.pdf \(regionofwaterloo.ca\)](#).

### **2.5.2 Monitoring the Impacts of Progressive Policy: Adaptations within Area Municipalities**

Through implementation of the Regional Official Plan, the City of Kitchener developed the Planning Around Rapid Transit Stations (PARTS) project, which developed a mapped out the needs of each station area and set the stage for the internationally recognized plan known as Growing Together. This two-stage

---

<sup>1</sup> Hook, W., Lotshaw, S., & Weinstock, A. (2013). *More development for your transit dollar: An analysis of 21 North American transit corridors*. Institute for Transportation and Development Policy. <https://crcog.org/wp-content/uploads/2016/07/MoreDevelforTransitDollar.pdf>

plan is implementing progressive zoning changes around what are known as MTSAs to optimize the use of high-value land through the removal of vehicular parking requirements, special mixed land use permissions, and modified height restrictions. To learn more about the Growing Together plan, visit <https://www.kitchener.ca/en/strategic-plans-and-projects/growing-together.aspx>.

The City of Cambridge is currently developing a similar transit-oriented plan, which seeks to transform one of its major thoroughfares into a complete and vibrant community while retaining its commercial relevance. The Hespeler Road Corridor Secondary Plan intends to broaden the land uses of this corridor by allowing a variety of residential developments with higher densities, as well as institutional, recreational, and employment uses that foster liveability. With the additional extension of street networks and connections, Hespeler Road is expected to evolve from a vehicle-centric thoroughfare to a transit-oriented corridor full of opportunities. To learn more about the Hespeler Road Corridor Secondary Plan, visit <https://www.cambridge.ca/en/learn-about/resources/Growth-and-Intensification-Study/Hespeler-Road-Corridor-Secondary-Plan--Dec-5-2022.pdf>.

In addition, in February 2023, the City of Cambridge approved a comprehensive plan to promote transit-oriented development along the CTC in preparation for the expansion of the Stage 2 ION light rail transit (LRT) system. The Transit Oriented Development Community Improvement Plan (TOD CIP) and the Transit Oriented Development Grant (TODG) program, aim to increase transit ridership, improve pedestrian accessibility, and support alternative modes of transportation. By encouraging denser, more walkable communities within the CTC, the City of Cambridge is taking a proactive approach to sustainable urban development, creating a more livable and connected community for its residents.

The City of Waterloo has undertaken several initiatives to support intensification and transit-oriented development along the CTC and other transit corridors. In June 2017, Waterloo City Council approved Station Area Plans for five MTSAs outside Uptown Waterloo, extending from the Laurier-Waterloo Park station to the end of the CTC at Conestoga Mall. The plans aim to enable and encourage higher densities, mixed use and transit supportive development along the CTC over the next several decades. They also provide a vision for the areas around the MTSAs and provide policy and design direction to guide development and public realm improvements, creating vibrant, attractive places to live, work, play and study.

The Station Area Plans were used to inform amendments to the City's Official Plan and zoning regulations, and urban design guidelines. Proposed updates to the Official Plan in 2024 will continue to facilitate growth and intensification to these station areas.

Additionally, the City of Waterloo recently completed a Built Form Review study as part of its Official Plan review. This study assessed mid-rise and high-rise development trends, policies, regulations, and guidelines to identify areas for improvement. The study helped identify existing policies, regulations, or guidelines that may be hindering development along the CTC corridor. By understanding these barriers, the City can take steps to remove or modify them to attract developers, encourage denser developments, and achieve higher quality design outcomes.

The City of Waterloo has also launched a Community Planning Permit System (CPPS) pilot program to expedite housing development. This initiative aims to streamline the approval process for zoning, minor variance, and site plan control by combining these three applications into a single submission. By reducing review time, the CPPS aims to accelerate development within the Uptown Urban Growth Centre and Erb Street Corridor, particularly along the ION LRT Central Transit Corridor.

The City has also made significant investments in new pedestrian and cycling infrastructure to connect MTSAs to surrounding neighborhoods and amenities. It has also completed several public realm improvements, including new public parks, plazas, and greenways, to enhance the livability and attractiveness with the CTC and MTSAs.

All these initiatives have helped to create a more vibrant, sustainable, and transit-friendly environment along the ION LRT corridor, promoting economic growth, reducing traffic congestion, and improving the quality of life for residents.

### **2.5.3 Monitoring the Impacts of Progressive Policy: Development Incentives**

Development charges ensure that the cost of growth related infrastructure is recovered by the individual developments. Reducing or limiting these charges provides a financial incentive to develop within a certain area. As more developers invest in an area due to reduced DCs, the region and municipality will ultimately reap the benefits through the property taxes of new residents, increased economic activity, and overall urban vibrancy. These incentives can therefore be seen as investments in the community that boost land values, which can be further capitalized on through small-scale zoning reforms.

Development along the CTC was accelerated through the implementation of temporary financial incentives. DC exemptions, both Regional and Municipal, for residential developments within Kitchener's downtowns was provided from 2011 until 2019. Similarly, the City of Waterloo promoted development by eliminating development charges for transit and waste management services for all new developments within its uptown core, expiring in 2011.

On a regional scale, there have been initiatives to incentivize infill development on brownfield sites through the reimbursement of Regional Development Charges for the purpose of remediating contaminated sites. For more information on regional and municipal development incentives, visit <https://www.regionofwaterloo.ca/en/doing-business/development-incentives.aspx>.

These incentives have served their purpose of building momentum within the Region's communities catalyzing residential development and revitalization within the respective downtowns. Development continues to occur at a substantial pace throughout the respective downtowns as the markets demand for housing in these areas is strong enough where financial incentives are no longer necessary to spur growth.

### **2.5.4 Monitoring the Impacts of Progressive Policy: Conclusion**

When comparing the CTC today to the approval stage of the ION in 2011, the effects of growth can be seen both in the statistics of this report as well as the urban fabric on the streets. While the visible changes are most often attributed to the ION system, the intangible changes made through progressive policy, calculated strategies and financial incentives cannot be overlooked. Furthermore, these changes would not have been possible without the foresight into the Region's growth derived from the Regional Growth Management Strategy in 2003, which has made "smart growth" initiatives such as the ION possible. As Hook et al. (2013) have determined, the changes induced by rapid transit systems such as the ION occur over the course of many years, and given its relatively recent beginnings, many of this report's metrics will likely see further advancements in future monitoring years.

### **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 (2019-2023). 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. As 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. 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<sup>2</sup>**

Goal	Dimension	Indicator	Metric	2011	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Moving People	Mobility	Transit Ridership	Number of trips made using Grand River Transit (millions)	19.7	20.3	19.7	19.7	21.1	22.0	11.4	9.7	17.8	26.4	
		Daily Transit Activity	Per cent of daily average transit activity in the CTC	67%	63%	62%	60%	60%	59%	63%	58%	68%	52%	
	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%	-	-	-	-	-	-	-	-
		Transportation GHG Emissions	Tonnes per person of GHG emissions from local transportation in the Tri-Cities	2.88	2.55	-	2.69	-	2.20	1.84	1.76	1.93	-	
		Walkability	Per cent of population living in 'high' or 'very high' walkable areas in the CTC	55%	56%	57%	57%	57%	57%	57%	58%	58%	59%	

<sup>2</sup> Results for 2012 to 2014 have been removed from this table to improve legibility; to view results for these years, refer to the 2020 Monitoring Report (DOCS # 3868173, or [https://www.regionofwaterloo.ca/en/regional-government/resources/LandUse\\_BuildingActivity/3978310-PDL-CPL-22-07\\_Appendix\\_A\\_2021\\_Building\\_Permit\\_Activity\\_and\\_Growth\\_Monitoring.ACCESS.pdf](https://www.regionofwaterloo.ca/en/regional-government/resources/LandUse_BuildingActivity/3978310-PDL-CPL-22-07_Appendix_A_2021_Building_Permit_Activity_and_Growth_Monitoring.ACCESS.pdf)).

Goal	Dimension	Indicator	Metric	2011	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Building Community	Vibrant Communities	Land Use Mix	Per cent of all Regional land uses found in the CTC	69%	69%	70%	70%	70%	70%	69%	70%	70%	72%	
		Population	Per cent of the Region's residents who live in the CTC	18%	19%	19%	19%	19%	20%	19%	20%	20%	21%	
		MTSA Densities	Per cent of Provincial density targets achieved at each of the Region's MTSA's	See section 3.2.3.										
	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%	52%	52%	53%	53%	54%	-	51%	50%	50%	
	Heritage	Heritage Resource Retention	Number of demolition permits on pre-1920 and designated built heritage resources in the CTC	13	12	17	16	7	21	11	25	14	14	
	Investment	Building Activity	Dollar value of building permits in the CTC for new construction (millions, adjusted to 2011)	\$489	\$257	\$303	\$215	\$211	\$682	\$619	\$416	\$237	\$429	
		Assessment Value	Assessed value of properties in the CTC (billions)	\$10.0	\$12.8	\$13.6	\$14.7	\$15.3	\$17.0	\$18.3	\$18.5	\$19.3	\$20.0	
	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%	44%	45%	46%	47%	47%	43%	44%	45%	-	
	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%	57%	57%	33%	38%	30%	24%	16%	8%	6%	
		Supply of Community Housing	Number of community housing units in the CTC	2,687	2,633	2,645	2,645	2,701	2,758	2,758	2,766	2,848	3,007	

**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.

The COVID-19 pandemic hindered progress toward this goal, with widespread interruption to regular commuting and travel patterns and a shift to remote work and e-commerce for many employees and businesses, respectively. Despite this setback, 2021 and 2022 saw the beginning of a gradual return to pre-pandemic activity. In 2023, several indicators have surpassed the pre-pandemic indicators of 2019.

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**

*26,380,921 trips were made across Waterloo Region using Grand River Transit in 2023.*

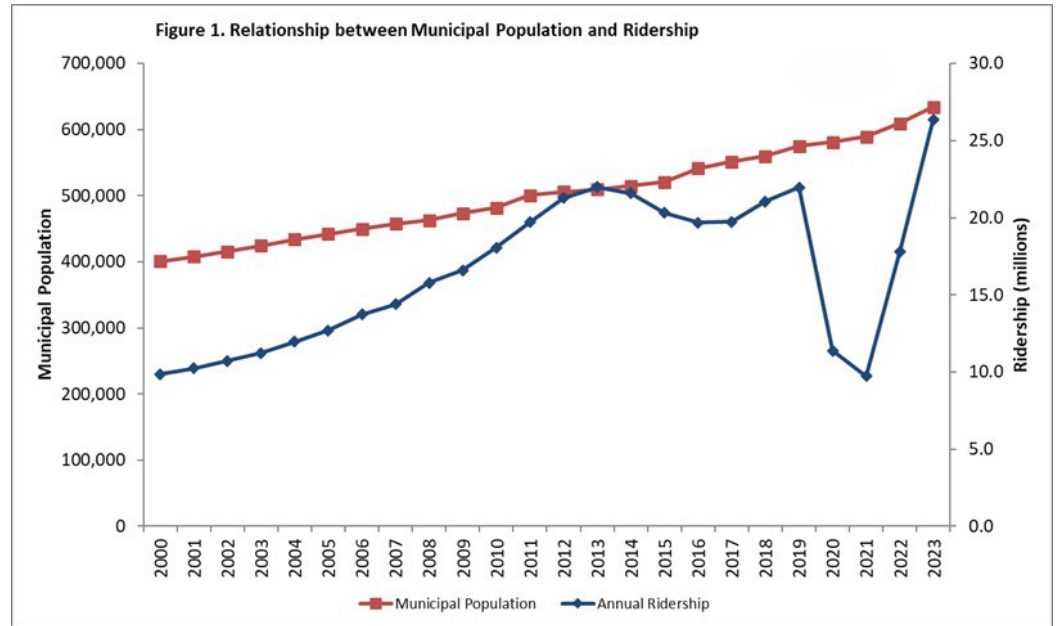
Ridership continued to grow significantly in 2023, and surpassed pre-COVID levels (see Table 1). Record ridership levels were recorded across both bus and light rail routes and as such growth was noted inside and outside of the CTC. The annual ridership growth rate outpaced that of the transit service area population, resulting in an increase of total transit ridership per capita. This trend suggests a robust recovery and heightened demand for public transportation due to a successful adaptation and expansion of transit services that meet the needs of the Region's population.

**Table 1. Total Transit Ridership per capita within the Transit Service Area, 2011-2023**

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	45.3
2020	11,383,805	580,839	486,926	23.4
2021	9,741,109	589,273	493,728	19.7
2022	17,783,913	609,139	511,066	34.8
2023	26,380,521	634,395	522,921	50.4
Change 2011-2023	6,658,555	133,695	90,655	4.8
Change 2022-2023	8,596,608	25,256	11,855	15.7
% Change 2011-2023	33.8%	26.7%	21.0%	10.6%
% Change 2022-2023	48.3%	4.1%	2.3%	45.0%
Average Annual % Change	2.5%	2.0%	1.6%	0.8%

\* For Settlements with Bus Service

**Figure 1. Relationship Between Municipal Population and Ridership, 2000-2023**



### **3.1.2 Mobility: Daily Transit Activity**

*52 per cent of the daily average transit activity in the Region occurred within the CTC in 2023.*

Compared to pre-pandemic, ridership growth within the CTC continues to be significant, increasing over 34 per cent compared to 2019 and 192% when looking back to 2021 (Table 1). The most significant increase was seen outside the CTC in part due to high post-secondary enrollment at Conestoga College. As a result, GRT logged very high transit usage to and from all College campuses, particularly the Doon Campus located in southwest Kitchener outside of the CTC. Additionally, a revised network in Cambridge was launched providing more direct service to major destinations and expanded service hours, largely outside the CTC.

**Table 1. Total Daily Transit Activity, 2011-2023**

Year	CTC		Outside CTC		Region Total
	Daily Boardings and Alightings	% Within CTC	Daily Boardings and Alightings	% Outside CTC	Daily Boardings and Alightings
<b>2011</b>	108,291	<b>66.8%</b>	53,839	33.2%	162,130
<b>2012</b>	114,917	<b>65.2%</b>	61,243	34.8%	176,160
<b>2013</b>	122,199	<b>67.4%</b>	59,133	32.6%	181,332
<b>2014</b>	119,248	<b>63.6%</b>	68,371	36.4%	187,619
<b>2015</b>	115,678	<b>62.8%</b>	68,654	37.2%	184,331
<b>2016</b>	119,654	<b>62.3%</b>	72,333	37.7%	191,987
<b>2017</b>	127,571	<b>60.5%</b>	83,416	39.5%	210,986
<b>2018</b>	133,607	<b>60.0%</b>	88,928	40.0%	222,535
<b>YOY Growth</b>	+4,318		+6,710		+11,029
<b>2019 (Original Stage 2)</b>	137,925	<b>59.1%</b>	95,638	40.9%	233,563
<b>CTC Stage 2 Realignment</b>	+420		-420		0
<b>2019 (Revised Stage 2)</b>	138,345	<b>59.2%</b>	95,218	40.8%	233,563
<b>2020</b>	50,481	<b>63.1%</b>	29,535	36.9%	80,016
<b>2021</b>	63,663	<b>57.5%</b>	47,015	42.5%	110,678
<b>2022</b>	177,562	<b>68.4%</b>	82,021	31.6%	259,583
<b>2023</b>	185,747	<b>51.5%</b>	175,164	48.5%	360,911
<b>Change 2011-2023</b>	<b>77,456</b>		<b>121,325</b>		<b>198,781</b>
<b>Change 2022-2023</b>	<b>8,185</b>		<b>93,143</b>		<b>101,328</b>
<b>% Change 2011-2023</b>	<b>71.5%</b>		<b>225.3%</b>		<b>122.6%</b>
<b>% Change 2022-2023</b>	<b>4.6%</b>		<b>113.6%</b>		<b>39.0%</b>
<b>Average Annual % Change</b>	<b>4.6%</b>		<b>10.3%</b>		<b>6.9%</b>

*Due to improvements implemented in 2015 to the method of calculating boarding and alightings by station, data is not comparable between the 2011-2014 data points and the 2015-2023 data.*

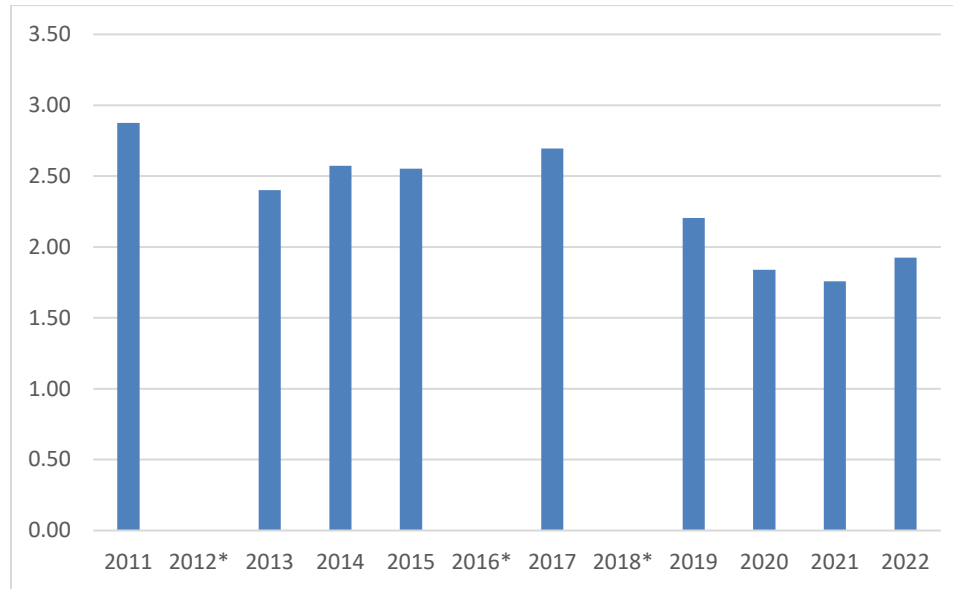
*The above change calculations utilize the original Stage 2 boundary for 2011 and the revised boundary for 2019 to 2023.*

### 3.1.3 Sustainable Modes of Transportation: Emissions

1.93 tonnes per person of greenhouse gas emissions were seen from local passenger transportation in Cambridge, Kitchener, and Waterloo in 2022.

There was a 33 per cent decrease in greenhouse gas (GHG) emissions per capita for passenger transportation between 2011 and 2022. This equates to an average of 1.93 tonnes per person in the three cities in 2022 compared to an average of 2.88 tonnes per person in 2011 (see Figure 1). Despite an urban population growth rate of 22% over the same period, total GHG emissions from local transportation have decreased from 1.4 million tonnes in 2011 to 1.1 million tonnes in 2022, an 18.7 per cent decline over those 11 years.

**Figure 1. Estimated GHG Emissions (Tonnes) Per Person for Passenger Travel, 2011-2022**



\* Certain years were not included in the analysis due to insufficient data on transportation emissions.

The decrease in transportation emissions can be attributed to restrictions brought on by COVID-19, which reduced demand for localized travel through measures such as working from home, which remains popular long after restrictions have been lifted. The decrease in emissions beginning in 2019 can also be attributed to the introduction of the ION, which has replaced trips otherwise taken by private motorized vehicles with public transport while encouraging the development of denser and more walkable areas. Due to the overlap between COVID-19 restrictions and the ION's introduction, it is difficult to distinguish how much of the reduction was due to the impacts ION has had on the community compared with the impacts COVID-19 has had on travel patterns. It is worth noting however, that since operation, the ION's contributions to annual GHG emissions have been scarce, with only 91 tonnes emitted in 2022 (see Table 1). As such, the emissions generated per passenger are negligible compared to the emissions generated for the same trip by private automobile.

**Table 1. ION Annual GHG Emissions (Tonnes)**

Year	ION Emissions (Tonnes)
2019	57
2020	77
2021	83
2022	91

This indicator estimates emissions from passenger transportation (i.e. excluding freight) originating within the cities of Cambridge, Kitchener, and Waterloo. Emissions included in this indicator are exclusively GHG emissions such as Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), and Nitrous Oxide (N<sub>2</sub>O). Emission calculations were based off the number of registered vehicles (passenger cars, SUVs, motorcycles, and Grand River Transit buses), their respective fuel types and efficiencies, and average kilometers travelled.

### 3.1.4 Sustainable Modes of Transportation: Walkability

59 per cent of the population living in the CTC lived in ‘very high’ or ‘high’ walkable areas in 2023.

Approximately 141,000 people lived in the Central Transit Corridor in 2023, of which 82,683 were in ‘very high’ or ‘high’ walkable areas (Table 1). More than half (59 per cent) of the population within the CTC lived in ‘very high’ or ‘high’ walkable areas while 39,580 (28 per cent) lived in ‘moderate’ walkable areas, and 18,999 (13 per cent) were in ‘low’ or ‘very low’ walkable areas.

**Table 1. Estimated Population in Walkability Ratings within the CTC, 2011-2023**

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
2019	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
2021	29,821	43,003	72,823	37,949	8,425	6,788	15,213	125,985
2022	31,362	44,538	75,900	38,039	8,659	8,430	17,089	131,028
2023	35,369	47,314	82,683	39,580	9,758	9,241	18,999	141,263
<b>Change 2011-2023</b>	<b>12,693</b>	<b>16,414</b>	<b>29,107</b>	<b>6,429</b>	<b>5,341</b>	<b>3,678</b>	<b>9,019</b>	<b>44,556</b>
<b>Change 2022-2023</b>	<b>4,007</b>	<b>2,776</b>	<b>6,783</b>	<b>1,541</b>	<b>1,099</b>	<b>811</b>	<b>1,910</b>	<b>10,235</b>
<b>% Change 2011-2023</b>	<b>56.0%</b>	<b>53.1%</b>	<b>54.3%</b>	<b>19.4%</b>	<b>120.9%</b>	<b>66.1%</b>	<b>90.4%</b>	<b>46.1%</b>
<b>% Change 2022-2023</b>	<b>12.8%</b>	<b>6.2%</b>	<b>8.9%</b>	<b>4.1%</b>	<b>12.7%</b>	<b>9.6%</b>	<b>11.2%</b>	<b>7.8%</b>
<b>Average Annual % Change</b>	<b>3.8%</b>	<b>3.6%</b>	<b>3.7%</b>	<b>1.5%</b>	<b>6.8%</b>	<b>4.3%</b>	<b>5.5%</b>	<b>3.2%</b>
<b>% of CTC Population (2011)</b>	23.4%	32.0%	55.4%	34.3%	4.6%	5.8%	10.3%	100.0%
<b>% of CTC Population (2023)</b>	25.0%	33.5%	58.5%	28.0%	6.9%	6.5%	13.4%	100.0%

*The above change calculations utilize the original Stage 2 boundary for 2011-2018 and the revised boundary for 2019-2023.*

Since 2011, the proportion of the CTC population living in 'high' or 'very high' walkable areas has increased from 55 per cent to 59 per cent; this shift resulted from population growth of 29,107 people in more walkable areas, compared to 6,429 people in 'moderate' and 9,019 in less walkable areas of the CTC.

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.

### **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.

### 3.2.1 Vibrant Communities: Land Use Mix

72 per cent of Waterloo Region's land uses were found within the CTC in 2023.

There were 200 unique property codes within Waterloo Region in the year 2023, of which 143 were found within the CTC. In other words, of all the different types of land uses in the Region, 72 per cent can be found within the CTC. Property codes are categorized into series, which entail various residential, commercial, and industrial land uses, among others (see Appendix B for specific property codes). The number of land uses throughout the corridor has been stable since the monitoring program began in 2011, with a net increase of 12 from 131 in 2011 to 143 in 2023 and an increase of 3 property codes between 2022 and 2023 (Table 1). The most prevalent land uses in the CTC were found to be single family detached homes followed by duplexes in Stage 1 and semi-detached homes in Stage 2, indicating higher tenancy rates within Stage 1.

**Table 1. Land Use Mix in the CTC and Waterloo Region, 2011-2023**

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%
2019	140	199	70.4%
2020	139	201	69.2%
2021	140	199	70.4%
2022	140	199	70.4%
2023	143	200	71.5%
<b>Change 2011-2023</b>	<b>12</b>	<b>9</b>	<b>--</b>
<b>Change 2022-2023</b>	<b>3</b>	<b>1</b>	<b>--</b>

*The above change calculations utilize the original Stage 2 boundary for 2011-2018 and the revised boundary for 2019-2023.*

### 3.2.2 Vibrant Communities: Population

21 per cent of the Region's residents were living in the CTC in 2023.

2023 was a year of significant growth for the Region, as it set new records for increases in residents both within the CTC and outside of it. Between 2022 and 2023, the CTC grew by over 10,000 residents, the majority of whom settled within Stage 1 (Table 1). Approximately 141,000 people lived in the CTC in 2023, representing over one-fifth of Waterloo Region's population. Between 2011 and 2023, the population within the CTC increased at a faster rate (2.9 per cent annually, on average) than the population outside the CTC (1.4 per cent annually) and within the region (1.7 per cent annually). A significant share of students attending the Region's post-secondary institutions lived within the CTC, and since COVID-19 restrictions have been lifted, many of these students have returned. This sharp increase in population throughout the Region can therefore largely be attributed to increases in student enrolment.

**Table 1. Population Living Within the CTC, Including Students, 2011-2023**

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%
2021	94,714	31,271	125,985	506,245	632,230	19.9%
2022	99,706	31,321	131,028	516,512	647,540	20.2%
2023	107,508	33,755	141,263	532,647	673,910	21.0%
<b>Change 2011-2023</b>	<b>36,489</b>	<b>5,095</b>	<b>41,584</b>	<b>80,726</b>	<b>122,310</b>	--
<b>Change 2022-2023</b>	<b>7,801</b>	<b>2,434</b>	<b>10,235</b>	<b>16,135</b>	<b>26,370</b>	--
<b>% Change 2011-2023</b>	<b>51.4%</b>	<b>17.8%</b>	<b>41.7%</b>	<b>17.9%</b>	<b>22.2%</b>	--
<b>% Change 2022-2023</b>	<b>7.8%</b>	<b>7.8%</b>	<b>7.8%</b>	<b>3.1%</b>	<b>4.1%</b>	--
<b>Average Annual % Change</b>	<b>3.5%</b>	<b>1.4%</b>	<b>2.9%</b>	<b>1.4%</b>	<b>1.7%</b>	--

### 3.2.3 Vibrant Communities: Major Transit Station Area (MTSA) Densities

Major Transit Station Areas (MTSAs) are incorporated into the Regional Official Plan with the intent to accommodate higher density, mixed land uses, and access to opportunities via public transportation. They are generally defined as areas within 500 to 800 metres around a rapid transit stop, which represent a 10-minute walk. MTSA density targets are mandated by the province as being 160 people and jobs per hectare, however certain areas have had their targets amended to better align with their unique circumstances. All MTSAs are located within the CTC.

3 out of 24 MTSAs have achieved their targets as of 2023. These include the combined stations of Victoria Park and Kitchener City Hall as well as Queen and Frederick in Kitchener. University of Waterloo was the only station area to reach its target in Waterloo, whereas Cambridge had no stations at or above the target threshold. University of Waterloo’s station area also saw the most growth between 2022 to 2023 in Waterloo at a rate of almost 10 people and jobs per hectare, followed by the Waterloo Public Square and Willis Way station area at a rate of almost 5 people and jobs per hectare (Table 2).

In Kitchener, Victoria Park and Kitchener City Hall station area grew the most between 2022 and 2023 at a rate of 25 people and jobs per hectare, followed by Central Station at a rate of almost 13 people and jobs per hectare (Table 3). Station areas in northern Kitchener saw higher growth rates overall compared to station areas in the southern half of the city (Table 4). Cambridge saw the least growth out of the three municipalities, with Pinebush station area densifying the most at a rate of just over 4 people and jobs per hectare (Table 5). It should be noted, that construction of ION through Cambridge has not yet started, the station areas within stage 2 do not have the same infrastructure in place to support the densities achieved throughout stage 1.

**Table 2. Population Density Within Each MTSA in Waterloo, 2012-2023\***

Year	Conestoga		Northfield		Research and Technology		University of Waterloo		Laurier-Waterloo Park		Waterloo Public Square + Willis Way		Allen Street	
	Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 95 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare	
	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved
2012	45.18	<b>28%</b>	32.71	<b>20%</b>	36.75	<b>23%</b>	80.69	<b>50%</b>	67.24	<b>71%</b>	83.49	<b>52%</b>	113.98	<b>71%</b>
2013	45.58	<b>28%</b>	32.98	<b>21%</b>	37.04	<b>23%</b>	86.35	<b>54%</b>	68.42	<b>72%</b>	86.62	<b>54%</b>	116.43	<b>73%</b>
2014	45.63	<b>29%</b>	35.48	<b>22%</b>	37.33	<b>23%</b>	91.59	<b>57%</b>	69.64	<b>73%</b>	90.53	<b>57%</b>	116.50	<b>73%</b>
2015	45.66	<b>29%</b>	36.27	<b>23%</b>	37.86	<b>24%</b>	100.04	<b>63%</b>	70.91	<b>75%</b>	90.71	<b>57%</b>	119.93	<b>75%</b>
2016	47.19	<b>29%</b>	38.02	<b>24%</b>	40.16	<b>25%</b>	105.01	<b>66%</b>	72.55	<b>76%</b>	92.33	<b>58%</b>	121.07	<b>76%</b>
2017	47.47	<b>30%</b>	39.05	<b>24%</b>	41.48	<b>26%</b>	119.07	<b>74%</b>	72.27	<b>76%</b>	99.93	<b>62%</b>	123.63	<b>77%</b>
2018	47.44	<b>30%</b>	38.57	<b>24%</b>	46.26	<b>29%</b>	124.11	<b>78%</b>	72.00	<b>76%</b>	102.36	<b>64%</b>	131.10	<b>82%</b>
2019	46.47	<b>29%</b>	38.37	<b>24%</b>	47.79	<b>30%</b>	153.24	<b>96%</b>	87.57	<b>92%</b>	103.52	<b>65%</b>	128.12	<b>80%</b>
2020	46.84	<b>29%</b>	38.15	<b>24%</b>	48.10	<b>30%</b>	158.92	<b>99%</b>	88.96	<b>94%</b>	106.56	<b>67%</b>	127.93	<b>80%</b>
2021	47.09	<b>29%</b>	38.52	<b>24%</b>	48.08	<b>30%</b>	157.83	<b>99%</b>	84.18	<b>89%</b>	108.68	<b>68%</b>	129.24	<b>81%</b>

2022	45.90	<b>29%</b>	38.25	<b>24%</b>	48.27	<b>30%</b>	163.04	<b>102%</b>	91.65	<b>96%</b>	108.59	<b>68%</b>	129.11	<b>81%</b>
2023	45.74	<b>29%</b>	37.98	<b>24%</b>	48.71	<b>30%</b>	172.89	<b>108%</b>	94.40	<b>99%</b>	113.32	<b>71%</b>	131.76	<b>82%</b>

\*2011 was omitted due to insufficient data.

**Table 3. Population Density Within Each MTSA in northern Kitchener, 2012-2023\***

Year	Grand River Hospital		Central Station		Victoria Park + Kitchener City Hall		Queen + Frederick		Kitchener Market	
	Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare	
	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved
2012	75.99	<b>47%</b>	52.13	<b>33%</b>	164.16	<b>103%</b>	128.58	<b>80%</b>	58.09	<b>36%</b>
2013	75.79	<b>47%</b>	51.50	<b>32%</b>	164.00	<b>102%</b>	141.97	<b>89%</b>	57.99	<b>36%</b>
2014	75.76	<b>47%</b>	51.27	<b>32%</b>	164.55	<b>103%</b>	142.63	<b>89%</b>	58.22	<b>36%</b>
2015	75.48	<b>47%</b>	51.41	<b>32%</b>	164.38	<b>103%</b>	143.24	<b>90%</b>	57.74	<b>36%</b>
2016	75.77	<b>47%</b>	57.64	<b>36%</b>	170.81	<b>107%</b>	145.56	<b>91%</b>	59.20	<b>37%</b>
2017	76.32	<b>48%</b>	62.42	<b>39%</b>	177.27	<b>111%</b>	145.14	<b>91%</b>	60.75	<b>38%</b>
2018	76.33	<b>48%</b>	65.64	<b>41%</b>	177.85	<b>111%</b>	143.97	<b>90%</b>	60.48	<b>38%</b>
2019	79.07	<b>49%</b>	65.53	<b>41%</b>	182.00	<b>114%</b>	144.96	<b>91%</b>	61.08	<b>38%</b>
2020	78.20	<b>49%</b>	81.18	<b>51%</b>	184.75	<b>115%</b>	148.15	<b>93%</b>	61.01	<b>38%</b>
2021	79.04	<b>49%</b>	81.41	<b>51%</b>	195.57	<b>122%</b>	157.73	<b>99%</b>	61.69	<b>39%</b>
2022	79.23	<b>50%</b>	86.56	<b>54%</b>	196.48	<b>123%</b>	168.46	<b>105%</b>	64.09	<b>40%</b>
2023	89.00	<b>56%</b>	99.33	<b>62%</b>	221.47	<b>138%</b>	176.04	<b>110%</b>	66.70	<b>42%</b>

\*2011 was omitted due to insufficient data.

**Table 4. Population Density Within Each MTSA in southern Kitchener, 2012-2023\***

Year	Borden		Mill		Block Line		Fairway		Sportsworld	
	Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 80 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare	
	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved
2012	36.70	<b>23%</b>	30.14	<b>19%</b>	38.26	<b>48%</b>	79.78	<b>50%</b>	28.87	<b>18%</b>
2013	37.70	<b>24%</b>	31.61	<b>20%</b>	43.29	<b>54%</b>	80.10	<b>50%</b>	34.09	<b>21%</b>
2014	39.14	<b>24%</b>	31.57	<b>20%</b>	45.51	<b>57%</b>	81.98	<b>51%</b>	34.20	<b>21%</b>
2015	38.94	<b>24%</b>	30.30	<b>19%</b>	45.59	<b>57%</b>	82.48	<b>52%</b>	34.25	<b>21%</b>
2016	40.81	<b>26%</b>	30.86	<b>19%</b>	47.57	<b>59%</b>	90.02	<b>56%</b>	37.91	<b>24%</b>
2017	40.57	<b>25%</b>	32.31	<b>20%</b>	47.26	<b>59%</b>	89.33	<b>56%</b>	39.24	<b>25%</b>
2018	40.24	<b>25%</b>	32.41	<b>20%</b>	47.20	<b>59%</b>	89.18	<b>56%</b>	39.22	<b>25%</b>
2019	41.28	<b>26%</b>	32.90	<b>21%</b>	51.37	<b>64%</b>	91.57	<b>57%</b>	39.21	<b>25%</b>
2020	41.07	<b>26%</b>	33.11	<b>21%</b>	51.06	<b>64%</b>	90.27	<b>56%</b>	39.19	<b>24%</b>
2021	40.80	<b>25%</b>	33.23	<b>21%</b>	51.43	<b>64%</b>	91.68	<b>57%</b>	39.11	<b>24%</b>
2022	40.93	<b>26%</b>	33.62	<b>21%</b>	51.50	<b>64%</b>	91.72	<b>57%</b>	38.01	<b>24%</b>
2023	42.07	<b>26%</b>	33.52	<b>21%</b>	54.26	<b>68%</b>	99.07	<b>62%</b>	38.07	<b>24%</b>

\*2011 was omitted due to insufficient data.

**Table 5. Population Density Within Each MTSA in Cambridge, 2012-2023\***

Year	Preston		Pinebush		Cambridge Centre Mall		Can-Amera		Delta		Main		Downtown Cambridge	
	Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 120 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare		Minimum Density Target: 160 people and jobs/gross hectare	
	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved	Density	Target % Achieved
2012	52.83	<b>33%</b>	27.94	<b>17%</b>	50.81	<b>32%</b>	42.37	<b>26%</b>	33.71	<b>28%</b>	57.86	<b>36%</b>	56.46	<b>35%</b>
2013	52.47	<b>33%</b>	27.95	<b>17%</b>	54.42	<b>34%</b>	45.48	<b>28%</b>	33.40	<b>28%</b>	57.67	<b>36%</b>	56.14	<b>35%</b>
2014	52.48	<b>33%</b>	29.32	<b>18%</b>	54.64	<b>34%</b>	45.51	<b>28%</b>	33.53	<b>28%</b>	57.79	<b>36%</b>	55.87	<b>35%</b>
2015	52.39	<b>33%</b>	29.42	<b>18%</b>	54.90	<b>34%</b>	45.43	<b>28%</b>	33.26	<b>28%</b>	57.81	<b>36%</b>	56.49	<b>35%</b>
2016	53.50	<b>33%</b>	29.57	<b>18%</b>	55.08	<b>34%</b>	46.25	<b>29%</b>	33.68	<b>28%</b>	62.14	<b>39%</b>	59.52	<b>37%</b>
2017	54.88	<b>34%</b>	29.80	<b>19%</b>	57.59	<b>36%</b>	46.73	<b>29%</b>	33.42	<b>28%</b>	62.28	<b>39%</b>	59.28	<b>37%</b>
2018	54.77	<b>34%</b>	29.74	<b>19%</b>	57.38	<b>36%</b>	46.75	<b>29%</b>	33.38	<b>28%</b>	62.22	<b>39%</b>	61.90	<b>39%</b>
2019	54.91	<b>34%</b>	30.20	<b>19%</b>	58.57	<b>37%</b>	48.27	<b>30%</b>	33.18	<b>28%</b>	63.17	<b>39%</b>	65.49	<b>41%</b>
2020	55.07	<b>34%</b>	30.21	<b>19%</b>	58.42	<b>37%</b>	46.36	<b>29%</b>	33.31	<b>28%</b>	63.03	<b>39%</b>	70.19	<b>44%</b>
2021	55.07	<b>34%</b>	30.21	<b>19%</b>	58.46	<b>37%</b>	46.59	<b>29%</b>	33.32	<b>28%</b>	63.28	<b>40%</b>	80.35	<b>50%</b>
2022	55.01	<b>34%</b>	34.81	<b>22%</b>	58.49	<b>37%</b>	58.56	<b>37%</b>	33.36	<b>28%</b>	62.76	<b>39%</b>	80.38	<b>50%</b>
2023	55.63	<b>35%</b>	39.06	<b>24%</b>	60.12	<b>38%</b>	61.67	<b>39%</b>	33.57	<b>28%</b>	65.23	<b>41%</b>	83.38	<b>52%</b>

\*2011 was omitted due to insufficient data.

### 3.2.4 Arts and Culture: Restaurants

50 per cent of restaurants in the Region were located within the CTC in 2023.

In 2023, there were 931 restaurants located within the CTC, 687 were within Stage 1 and 244 were within Stage 2 (Table 1). This upward trend in regional restaurants demonstrates continuous post-pandemic resiliency in 2023. When compared to 2022, there was a 6.5 per cent increase in the number of restaurants in the CTC in 2023, and nearly a 6 per cent increase in the Region as a whole. Overall, each area of the Region saw a much larger growth rate in the number of restaurants present between 2022 and 2023, with Stage 2 experiencing the largest increase of approximately 11 per cent.

**Table 1. Geographic Distribution of Restaurants, 2011-2023**

Year	CTC						Outside CTC		Region Total
	Stage 1		Stage 2		Total		Number of Restaurants	% Outside CTC	Number of Restaurants
	Number of Restaurants	% Within Stage 1	Number of Restaurants	% Within Stage 2	Number of Restaurants	% Within CTC			
2011	525	36.2%	206	14.2%	731	50.4%	720	49.6%	1,451
2012	547	36.0%	234	15.4%	781	51.4%	737	48.6%	1,518
2013	587	37.0%	236	14.9%	823	51.9%	762	48.1%	1,585
2014	611	37.6%	237	14.6%	848	52.2%	777	47.8%	1,625
2015	645	37.9%	244	14.4%	889	52.3%	811	47.7%	1,700
2016	643	37.5%	242	14.1%	885	51.6%	831	48.4%	1,716
2017	648	39.3%	229	13.9%	877	53.2%	771	46.8%	1,648
2018	664	39.2%	229	13.5%	893	52.8%	799	47.2%	1,692
2019	691	39.8%	253	14.6%	944	54.3%	793	45.7%	1,737
2021	635	38.0%	223	13.3%	858	51.3%	815	48.7%	1,673
2022	654	37.1%	220	12.5%	874	49.5%	891	50.5%	1,765
2023	687	36.8%	244	13.1%	931	49.9%	936	50.1%	1,867
<b>Change 2011-2023</b>	<b>162</b>		<b>38</b>		<b>200</b>		<b>216</b>		<b>416</b>
<b>Change 2022-2023</b>	<b>33</b>		<b>24</b>		<b>57</b>		<b>45</b>		<b>102</b>
<b>% Change 2011-2023</b>	<b>30.9%</b>		<b>18.4%</b>		<b>27.4%</b>		<b>30.0%</b>		<b>28.7%</b>
<b>% Change 2022-2023</b>	<b>5.0%</b>		<b>10.9%</b>		<b>6.5%</b>		<b>5.1%</b>		<b>5.8%</b>

Average Annual % Change	2.3%	1.4%	2.0%	2.2%	2.1%
-------------------------	------	------	------	------	------

### 3.2.5 Heritage: Heritage Resource Retention

14 demolition permits were issued for built heritage structures in the Central Transit Corridor in 2023.

In 2023, 14 demolition permits were issued for heritage structures in the CTC. These 14 demolition permits represent 47% of the total permits issued for heritage structures across the Region and denotes no change in the total demolition permits issued in 2022 for heritage structures in CTC. This number of demolitions remains below the 12-year average number of annual demolition permits issued for heritage structures in the CTC at 16 per year.

**Table 1. Number of Formally Recognized and Pre-1920 Heritage Buildings Demolished, 2011-2023**

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
2021	23	2	25	1
2022	9	5	14	5
2023	11	3	14	2
Average 2011-2023	14	2	16	2
Total 2011-2023	181	25	206	27

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

Of the 14 permits issued:

- 2 permits were for a formally recognized structure (i.e., listed on the Municipal Heritage Register or designated under the Ontario Heritage Act) (Table 1).

- 11 permits were for heritage structures located in the Stage 1 section of the ION LRT project, and 3 were found within the Stage 2 section of the project. There has been a decrease in heritage demolitions for this year's data for Stage Two, however an increase can be seen in Stage One data.
- Another emerging trend of concern is the number of heritage demolitions that are also located in municipally identified, but yet to be designated, Cultural Heritage Resources. There are 3 non-residential properties, one of which is a Potential Resource of Interest and two that are located within Potential Heritage Areas of Interest being the Central Frederick area and the Victoria Park area. There are also 16 residential properties that are considered Potential Resources of Interest due to their architectural style, age or other various Cultural Heritage aspects. These properties are located within Heritage areas such as the Cedar Hill Neighbourhood, Westmount East and West Neighbourhood, Mt Hope/Breithaupt Gildner & Gruhn Neighbourhood and Central Frederick Neighbourhood.

In addition to the above data captures, there is concern with demolitions occurring in Recognized Heritage Resource Areas that are Ontario Heritage Act designated as well. In 2023 there is one residential property within the Blair Heritage Conservation District (OHA Designated Part V), and two non-residential properties within the Victoria Park Heritage Conservation District (OHA Designated Part V) and the New Hamburg Heritage Conservation District (OHA Designated Part V). It is recommended that this trend be monitored moving forward.

### 3.2.6 Investment: Building Activity

\$429 million in new building permits were issued within the CTC in 2023.

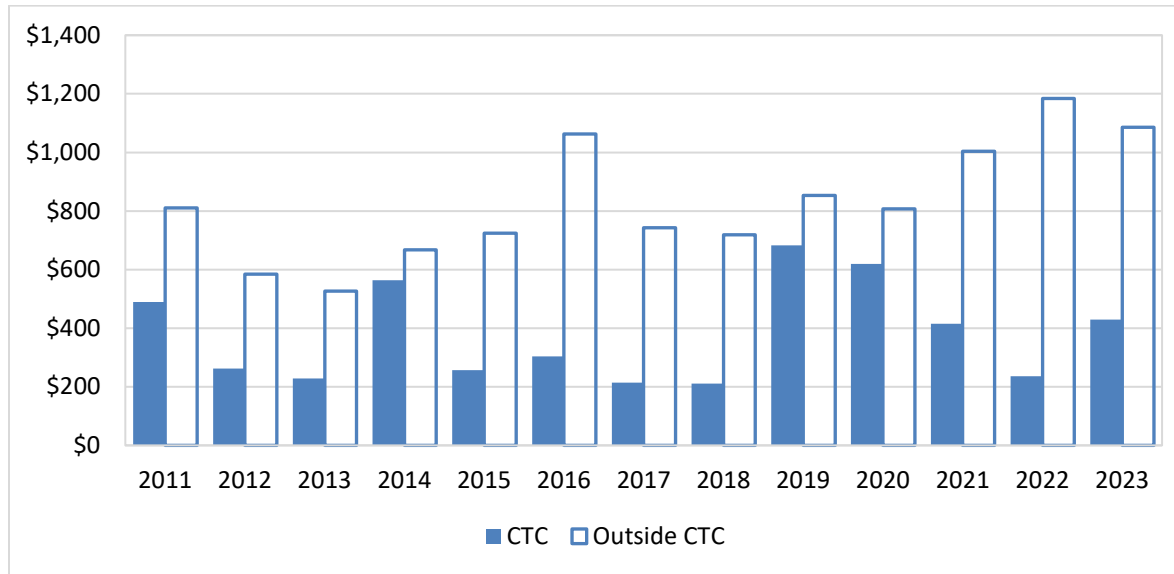
In 2023, building permit activity for new residential and employment uses within the CTC was estimated at \$429 million – approximately 28 per cent of the total new construction in Waterloo Region. Compared to 2022, this represents an additional \$193 million and an increase of almost 12 per cent of total permit value that was invested within the CTC (Table 1; Figure 1). Construction value in 2023 within the CTC is 6% lower than the long-term average (2011-2023) of 34.7% of the total value. Of the building activity<sup>3</sup> in the CTC, \$358 million in construction value was for 2,212 new residential units, representing 36 per cent of the total 6,158 residential units built across the Region (Table 2; Appendix C). In the non-residential sector, \$71 million was invested in industrial, commercial, and institutional (ICI) projects in the corridor, creating 206,612 square feet of new floor space. This represented 8 per cent of the total 2,436,674 of non-residential square footage added across the Region (Table 4; Appendix C). The total cumulative building permit value in the CTC for both residential and ICI uses from 2011 to 2023 was just under \$5 billion (Table 1).

**Table 1. Total Building Permit Value, 2011-2023, in Millions (Adjusted to 2011 Dollars)**

Year	CTC			Outside CTC	Region Total	% in CTC
	Stage 1	Stage 2	Total			
2011	\$428	\$61	<b>\$489</b>	\$810	\$1,299	37.6%
2012	\$228	\$34	<b>\$263</b>	\$585	\$848	31.0%
2013	\$211	\$17	<b>\$228</b>	\$526	\$754	30.2%
2014	\$370	\$194	<b>\$563</b>	\$667	\$1,231	45.8%
2015	\$231	\$26	<b>\$257</b>	\$724	\$981	26.2%
2016	\$284	\$19	<b>\$303</b>	\$1,063	\$1,366	22.2%
2017	\$178	\$37	<b>\$214</b>	\$742	\$957	22.4%
2018	\$196	\$14	<b>\$211</b>	\$719	\$929	22.7%
2019	\$543	\$140	<b>\$682</b>	\$853	\$1,535	44.4%
2020	\$580	\$39	<b>\$619</b>	\$807	\$1,427	43.4%
2021	\$276	\$140	<b>\$416</b>	\$1,004	\$1,420	29.3%
2022	\$217	\$20	<b>\$236</b>	\$1,184	\$1,420	16.7%
2023	\$310	\$119	<b>\$429</b>	\$1,086	\$1,515	28.3%
<b>Total 2011-2023</b>	<b>\$4,051</b>	<b>\$860</b>	<b>\$4,912</b>	<b>\$10,772</b>	<b>\$14,168</b>	<b>34.7%</b>

<sup>3</sup> 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 ancillary buildings/structures is in addition to these figures.

**Figure 1. Total Building Permit Value, 2011-2023, in Millions (Adjusted to 2011 Dollars)**



**Table 2. Residential Building Activity in the CTC, 2011-2023 (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
2021	14	10	532	1,813	2,369	\$348
2022	8	6	73	1,005	1,092	\$194
2023	4	3	42	2,163	2,212	\$358
<b>Total 2011-2023</b>	<b>139</b>	<b>150</b>	<b>1,339</b>	<b>19,544</b>	<b>21,172</b>	<b>\$3,349</b>

**Table 3. Non-Residential Building Activity in the CTC, 2011-2023 (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	138,152	16,824	158,311	\$52
2017	8,534	292,239	228,047	528,820	\$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
2021	1,640	398,526	5,833	405,999	\$68
2022	0	65,461	13,620	79,081	\$42
2023	5,522	193,314	7,776	206,612	\$71
<b>Total 2011-2023</b>	<b>220,034</b>	<b>3,869,666</b>	<b>1,458,083</b>	<b>5,547,783</b>	<b>\$1,563</b>

Waterloo Region continued to see strong residential growth, as house prices in the Greater Toronto Area continued to rise and remote working continued to be popular with employers, allowing many workers to move further afield to more affordable mid-size cities and rural areas. After a modest decrease in building permits issued and building permit value in 2022, the CTC rebounded to significant growth rates – 2023 saw the third-highest residential construction value and fourth-largest number of new units in the CTC since monitoring began in 2011.

In 2023, there were 8 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. In contrast to 2022, which saw these permits completely concentrated in the City of Waterloo, only two were located there in 2023, with the remaining six within the City of Kitchener.

The six permits valued at more than \$10 million in the City of Kitchener include:

- \$108.5 million for a 45-storey, 549 unit mixed-use building with two levels of underground parking located at 30 Francis Street South, near the Kitchener GO Station.
- \$99.5 million for Station Park’s Tower C, a 36-storey, 452 unit apartment building located at 25 Wellington Street South, also near the Kitchener GO Station.

- \$71 million for a 24-storey, 304 unit apartment building with two levels of underground parking and a 2-storey open-air parking garage, located at 3241 King Street East.
- \$70 million for an 18-storey, 155 unit apartment building with two levels of underground parking located at 25 Sportsworld Crossing Road, near the border of Kitchener and Cambridge.
- \$46.5 million for a 24-storey, 231 unit mixed-use building with two levels of underground parking located at 900 King Street West, across from Grand River Hospital.
- \$12.5 million for a conversion of office space to 128 apartment units within floors 3-10 at 30 Duke Street West.

Additionally, there were two residential permits valued at more than \$10 million in the City of Waterloo:

- \$23 million for a 6-storey, 188 unit apartment building with an underground parking garage at 88 Hickory Street West.
- \$12.5 million for a 6-storey, 100 unit student-oriented apartment building located at 316 Batavia Place.

While 2023 was still below-average for ICI construction value and square footage in the CTC, it saw a slight increase from the prior year. There were three permits valued at more than \$10 million in the CTC; two of which were located in downtown Kitchener:

- \$36.5 million for the shoring of a 3-storey underground parking garage at 25 Wellington Street South.
- \$16 million for the 3-storey underground parking garage itself, including site servicing for Station Park's Tower C at 25 Wellington Street South.

There was also one permit greater than \$10 million in the City of Waterloo:

- \$15 million for the new addition of Earth Sciences and Chemistry Building No. 6 at the University of Waterloo, 200 University Avenue West.

Over the past decade, there has been rapid growth in accessory dwelling units<sup>4</sup> in Waterloo Region (Table 4). In 2011, 26 new accessory units were added throughout the Region, of which 2 (8 per cent) were in the CTC. In 2023, the number built Region-wide reached 1,115, with 84 (7.5 per cent) located in the CTC. This marked the lowest proportion of accessory units built within the CTC compared to the Region total, with this type of residential unit comprising 18 per cent of the new housing stock built in the Region in 2023, compared to just 4 per cent in the CTC. This may be due to the prevalence of larger homes outside the CTC compared to within, which provide more opportunity to build such units. 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.

---

<sup>4</sup> Accessory dwelling units, or accessory apartments, are new units added within existing dwelling units, such as basement suites or duplex conversions. These include detached secondary dwelling 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, 2011-2023**

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	
<b>2011</b>	2	1,204	0.2%	24	2,395	1.0%	26	3,599	0.7%	<b>7.7%</b>
<b>2012</b>	9	823	1.1%	58	1,589	3.7%	67	2,412	2.8%	<b>13.4%</b>
<b>2013</b>	12	690	1.7%	76	1,956	3.9%	88	2,646	3.3%	<b>13.6%</b>
<b>2014</b>	18	1,940	0.9%	56	2,073	2.7%	74	4,013	1.8%	<b>24.3%</b>
<b>2015</b>	19	1,155	1.6%	88	2,448	3.6%	107	3,603	3.0%	<b>17.8%</b>
<b>2016</b>	14	1,861	0.8%	72	3,859	1.9%	86	5,720	1.5%	<b>16.3%</b>
<b>2017</b>	19	1,119	1.7%	79	2,121	3.7%	98	3,240	3.0%	<b>19.4%</b>
<b>2018</b>	25	950	2.6%	132	1,983	6.7%	157	2,933	5.4%	<b>15.9%</b>
<b>2019</b>	30	3,407	0.9%	204	2,900	7.0%	234	6,307	3.7%	<b>12.8%</b>
<b>2020</b>	43	2,350	1.8%	351	2,841	12.4%	394	5,191	7.6%	<b>10.9%</b>
<b>2021</b>	54	2,369	2.3%	489	3,633	13.5%	543	6,002	9.0%	<b>9.9%</b>
<b>2022</b>	71	1,092	6.5%	716	3,693	19.4%	787	4,785	16.4%	<b>9.0%</b>
<b>2023</b>	119	2,212	5.4%	996	3,946	25.2%	1,115	6,158	18.1%	<b>10.7%</b>
<b>Total 2011-2023</b>	<b>435</b>	<b>21,172</b>	<b>2.1%</b>	<b>3,341</b>	<b>35,437</b>	<b>9.4%</b>	<b>3,776</b>	<b>56,609</b>	<b>6.7%</b>	<b>11.5%</b>

### **3.2.7 Investment: Assessment Value**

*\$19.95 billion worth of assessed property value in the CTC in 2023.*

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 many new high-value and high-quality developments as well as renovations of existing buildings, which is reflected in the growth in assessment value from \$10 billion in 2011 to \$19.95 billion in 2022. This is an average annual increase of \$831 million (5.9 per cent) from 2011 to 2023, although annual growth has been decreasing. Between 2022 and 2023, the increase rate was below the annual average, at 3.4 per cent.

Municipal taxes (regional and area municipal) generated on properties within the CTC were estimated at \$258 million in 2023. These taxes were 93.4 per cent higher than in 2011, resulting in a yearly average rate of change of 5.6 per cent. This rate of increase far outpaces the 72.4 per cent increase outside the CTC for this period (4.6 per cent annually). Stage 1 saw the highest growth in taxes generated between 2011 and 2023, increasing by 105 per cent. Conversely, Stage 2 saw the lowest growth in taxes generated between 2011 and 2023 (70.3 per cent).

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 \$19.95 billion total assessment value in the CTC in 2023, almost \$2 billion was on tax-exempt properties. This affects the taxes generated in the CTC as 9.8 per cent of the assessed value comes from tax-exempt properties.

**Table 1. Assessment Value and Taxes Generated, 2011-2023, 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				
<b>2011</b>	\$6,901	\$89	\$3,082	\$45	<b>\$9,983</b>	\$134	\$44,331	\$489	\$54,314	\$623
<b>2014</b>	\$8,486	\$95	\$3,559	\$45	<b>\$12,045</b>	\$139	\$53,602	\$548	\$65,646	\$687
<b>2015</b>	\$9,030	\$105	\$3,720	\$51	<b>\$12,750</b>	\$155	\$56,351	\$582	\$69,102	\$737
<b>2016</b>	\$9,805	\$112	\$3,816	\$52	<b>\$13,621</b>	\$164	\$58,969	\$603	\$72,589	\$767
<b>2017</b>	\$10,710	\$122	\$3,991	\$54	<b>\$14,701</b>	\$176	\$61,829	\$627	\$76,530	\$803
<b>2018</b>	\$11,466	\$130	\$3,803	\$51	<b>\$15,269</b>	\$181	\$65,875	\$659	\$81,144	\$841
<b>YOY Growth</b>	+\$957	+\$9	+\$187	+\$2	<b>+\$1,143</b>	+\$11	+\$3,540	+\$27	+\$4,683	+\$38
<b>2019 (Original Stage 2)</b>	\$12,423	\$139	\$3,990	\$53	<b>\$16,413</b>	\$192	\$69,415	\$687	\$85,828	\$879
<b>CTC Stage 2 Realignment</b>	N/A	N/A	+\$606	+\$7	<b>+\$606</b>	+\$7	-\$606	-\$7	\$0	\$0
<b>2019 (Revised Stage 2)</b>	\$12,423	\$139	\$4,595	\$61	<b>\$17,018</b>	\$200	\$68,809	\$679	\$85,828	\$879
<b>2020</b>	\$13,380	\$149	\$4,915	\$64	<b>\$18,295</b>	\$213	\$71,974	\$709	\$90,269	\$922
<b>2021</b>	\$13,552	\$153	\$4,923	\$64	<b>\$18,475</b>	\$217	\$73,213	\$728	\$91,687	\$946
<b>2022</b>	\$14,144	\$164	\$5,141	\$70	<b>\$19,285</b>	\$234	\$74,284	\$771	\$93,569	\$1,005
<b>2023</b>	\$14,671	\$182	\$5,279	\$76	<b>\$19,950</b>	\$258	\$75,818	\$843	\$95,768	\$1,102
<b>Change 2011-2023</b>	\$7,770	\$93	\$2,197	\$31	<b>\$9,967</b>	\$125	\$31,487	\$354	\$41,454	\$479
<b>Change 2022-2023</b>	\$527	\$18	\$138	\$6	<b>\$665</b>	\$24	\$1,534	\$73	\$2,199	\$97
<b>% Change 2011-2023</b>	112.6%	105.0%	71.3%	70.3%	<b>99.8%</b>	93.4%	71.0%	72.4%	76.3%	76.9%
<b>% Change 2022-2023</b>	3.7%	10.9%	2.7%	9.2%	<b>3.4%</b>	10.4%	2.1%	9.4%	2.3%	9.7%
<b>Average Annual Change</b>	\$647	\$8	\$183	\$3	<b>\$831</b>	\$10	\$2,624	\$30	\$3,455	\$40
<b>Average Annual % Change</b>	6.5%	6.2%	4.6%	4.5%	<b>5.9%</b>	5.6%	4.6%	4.6%	4.8%	4.9%

*The above change calculations utilize the original Stage 2 boundary for 2011-2018 and the revised boundary for 2019-2023.*

### 3.2.8 Crime and Safety: Calls for Service

45 per cent of police calls for service related to potential public perception of safety occurred within the CTC in 2022<sup>5</sup>

Over 49,000 calls for police service occurred within Waterloo Region in 2022 that were identified as being related to public perception of safety (Table 1). Of those calls, 22,163 occurred within the CTC, comprising 45 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, 2011-2022**

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
2020	21,908	43.2%	28,810	56.8%	50,717
2021	21,570	44.2%	27,270	55.8%	48,840
2022	22,163	45.1%	27,007	54.9%	49,169
<b>Change 2011-2022</b>	<b>3,595</b>		<b>662</b>		<b>4,257</b>
<b>Change 2021-2022</b>	<b>593</b>		<b>-264</b>		<b>329</b>
<b>% Change 2011-2022</b>	<b>19.4%</b>		<b>2.5%</b>		<b>9.5%</b>
<b>% Change 2021-2022</b>	<b>2.7%</b>		<b>-1.0%</b>		<b>0.7%</b>
<b>Average Annual % Change</b>	<b>1.6%</b>		<b>0.8%</b>		<b>0.8%</b>

<sup>5</sup> Due to the release timing of the occurrence data, there is usually a one-year lag between the data for this indicator and the year of monitoring. For example, the 2021 CTC Monitoring Report would typically utilize 2020 occurrence data.

The number of calls for service made within the CTC has been increasing by an average of 1.6 per cent per year since 2011 – double the growth rate experienced outside the CTC. The growth in calls for service in 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; however, on a per capita basis, there were 16.9 calls per 100 people living in the CTC in 2022, representing a decrease over recent years (Table 2).

**Table 2. Police Calls for Service Related to Potential Public Perception per 100 People, 2011-2022**

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
<b>2011</b>	18,568	18.6	99,678	26,345	5.8	451,922	44,912	8.1	551,600
<b>2012</b>	19,160	19.0	101,016	26,238	5.8	455,884	45,398	8.2	556,900
<b>2013</b>	19,002	18.3	103,836	24,581	5.4	459,164	43,583	7.7	563,000
<b>2014</b>	18,880	17.8	106,074	24,341	5.3	462,926	43,220	7.6	569,000
<b>2015</b>	20,768	19.2	108,032	26,772	5.7	466,668	47,540	8.3	574,700
<b>2016</b>	22,504	20.1	111,844	28,025	5.9	474,056	50,528	8.6	585,900
<b>2017</b>	24,167	20.8	116,056	28,146	5.8	484,644	52,313	8.7	600,700
<b>2018</b>	26,548	22.4	118,546	30,152	6.1	491,354	56,699	9.3	609,900
<b>2019</b>	24,457	20.1	121,898	28,074	5.7	495,902	52,531	8.5	617,800
<b>2020</b>	21,908	18.9	115,804	28,810	5.8	496,166	50,717	8.3	611,970
<b>2021</b>	21,570	17.1	125,985	27,270	5.4	506,245	48,840	7.7	632,230
<b>2022</b>	22,163	16.9	131,028	27,007	5.2	516,512	49,169	7.6	647,540
<b>Change 2011-2022</b>	<b>3,595</b>	<b>-1.7</b>	<b>31,349</b>	<b>662</b>	<b>-0.6</b>	<b>64,591</b>	<b>4,257</b>	<b>-0.5</b>	<b>95,940</b>
<b>Change 2021-2022</b>	<b>593</b>	<b>-0.2</b>	<b>5,043</b>	<b>-264</b>	<b>-0.2</b>	<b>10,267</b>	<b>329</b>	<b>-0.1</b>	<b>15,310</b>
<b>% Change 2011-2022</b>	<b>19.4%</b>	<b>-9.2%</b>	<b>31.5%</b>	<b>2.5%</b>	<b>-10.3%</b>	<b>14.3%</b>	<b>9.5%</b>	<b>-6.7%</b>	<b>17.4%</b>
<b>% Change 2021-2022</b>	<b>2.7%</b>	<b>-1.2%</b>	<b>4.0%</b>	<b>-1.0%</b>	<b>-2.9%</b>	<b>2.0%</b>	<b>0.7%</b>	<b>-1.7%</b>	<b>2.4%</b>
<b>Average Annual % Change</b>	<b>1.6%</b>	<b>-0.9%</b>	<b>2.5%</b>	<b>0.2%</b>	<b>-1.0%</b>	<b>1.2%</b>	<b>0.8%</b>	<b>-0.6%</b>	<b>1.5%</b>

For 2022, calls for service data were further examined by occurrence type. An occurrence type is the recorded incident for each call. One call type that has seen an upward trend is unwanted person calls. In Stage 1, there were 1,345 calls in 2011 and 2,976 in 2022 (a 121 per cent increase or 11 per cent per year on average). In Stage 2, there were 463 calls in 2011 and 1,395 in 2022 (a 201 per cent increase or 18 per cent per year on average). Unwanted person calls increased outside the CTC as well, with 1,848 calls in 2011 to 2,714 calls in 2022 (a 47 per cent increase or 4 per cent per year on average). Additionally, there were significant increases in mentally ill and suspicious person’s calls.

Although the long-term trend shows increases in unwanted person calls across all geographies, this call type actually saw a slight decrease of 1 per cent in the CTC and an 8 per cent decrease outside the CTC between 2021 and 2022. In previous years, calls for unwanted persons were among the call types that saw the biggest year over decrease. However, it was calls for drugs, liquor offence, and break and enter had the largest year-over-year decrease in calls between 2021 and 2022.

One call type that has seen a notable downward trend is calls related to drugs. In Stage 1, there were 637 calls in 2011 and 175 calls in 2022 (a 73 per cent decrease or 7 per cent per year on average). In Stage 2, there were 220 calls in 2011 and 129 calls in 2022 (a 41 per cent decrease or 4 per cent per year on average). Drug-related calls also decreased outside the CTC as well, with 1,270 calls in 2011 to 245 calls in 2022 (an 81 per cent decrease or 7 per cent per year on average). Further, this call type saw a 30 per cent decrease in the CTC and a 35 percent decrease outside the CTC between 2021 and 2022.

### 3.2.9 Inclusive Community: Affordability of Home Ownership Transactions

6 per cent of resale housing transactions were affordable to low- and moderate-income households within the CTC in 2023.

In 2023, there were 918 residential resale transactions within the CTC, with 6 per cent (58 transactions) at a price below the affordability cut-off<sup>6</sup> while 94 per cent (860 transactions) exceeded the cut-off of \$395,200 (Table 1). 2023 was the first year since monitoring began that the cut-off decreased compared to the previous year. Despite an upward adjustment in income based on inflation, the significant rise in mortgage rates has increased the monthly carrying costs of owning a home, thus reducing the threshold of what is deemed affordable. 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 2023 analysis shows a decrease in affordability both within and outside the CTC compared to 2022.

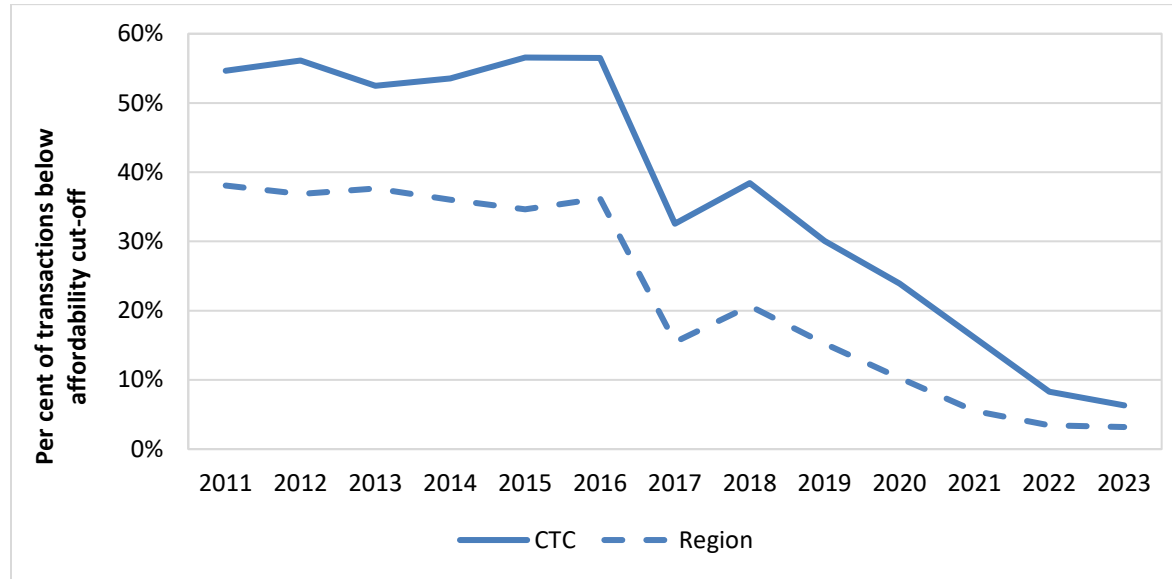
**Table 1. Residential Units under the Affordability Cut-off (Resale Transactions over \$10,000), 2011-2023**

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%	<b>54.7%</b>	38.1%
2012	\$268,715	240	139	379	2,322	442	233	675	6,296	54.3%	59.7%	<b>56.1%</b>	36.9%
2013	\$280,159	195	141	336	2,416	384	256	640	6,421	50.8%	55.1%	<b>52.5%</b>	37.6%
2014	\$288,899	202	154	356	2,289	397	268	665	6,354	50.9%	57.5%	<b>53.5%</b>	36.0%
2015	\$299,574	216	176	392	2,384	409	284	693	6,883	52.8%	62.0%	<b>56.6%</b>	34.6%
2016	\$336,517	247	205	452	2,727	481	319	800	7,532	51.4%	64.3%	<b>56.5%</b>	36.2%
2017	\$349,500	128	131	259	1,218	478	318	796	7,890	26.8%	41.2%	<b>32.5%</b>	15.4%
2018	\$350,200	228	161	389	1,525	615	397	1,012	7,379	37.1%	40.6%	<b>38.4%</b>	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%	<b>29.8%</b>	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%	<b>30.1%</b>	15.2%
2020	\$368,000	188	85	273	844	675	466	1,141	8,196	27.9%	18.2%	<b>23.9%</b>	10.3%
2021	\$385,500	210	47	257	552	984	611	1,595	10,020	21.3%	7.7%	<b>16.1%</b>	5.5%
2022	\$418,100	90	14	104	265	774	480	1,254	7,744	11.6%	2.9%	<b>8.3%</b>	3.4%
2023	\$395,200	50	8	58	187	577	341	918	5,863	8.7%	2.3%	<b>6.3%</b>	3.2%

<sup>6</sup> 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.

Although transactions have become increasingly unaffordable over the past six years, the data show that, in general, housing is still slightly more affordable in the CTC compared to the Region as a whole (Figure 1). In 2023, 6 per cent of transactions within the CTC were deemed affordable for low- to moderate-income earners while only 3 per cent of transactions were affordable across the Region.

**Figure 1. Affordable Home Ownership Transactions for Low- to Moderate-Income Earners, 2011-2023**



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 2023 – 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 2023 in Stage 1 (577) than in Stage 2 (341), which is not surprising given the continued amount of residential investment occurring in Stage 1 compared to Stage 2. There was also a much greater percentage of affordable transactions in Stage 1 (9 per cent) than in Stage 2 (2 per cent). This is a reversal from 2011-2018, when a greater percentage of affordable transactions occurred in Stage 2.

In 2023, the median residential transaction value<sup>7</sup> of \$612,000 within Stage 1 was over the affordability cut-off by \$216,800 (Table 2). In Stage 2, the median transaction value of \$650,000 was \$254,800 more than the affordability cut-off. A median transaction value of \$780,000 was found outside the CTC, which is \$384,800 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 1,196 condominium units sold in the Region in 2023, 30 per cent (358 units) were located in the CTC, and of the 4,667 singles sold in the Region, only 12 per cent (560 units) 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, 1.4 per cent were considered affordable compared to 1.2 per cent of singles being considered affordable across the Region as a whole. This indicates that owning a single detached home is becoming increasingly difficult for low- and moderate-income earners both within and outside the CTC.

**Table 2. Median Resale Transaction Values, 2011-2023**

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
<b>YOY Growth</b>	+\$30,000	+\$48,000	+\$36,250	+\$35,100	+\$35,100
<b>2019 (Original Stage 2)</b>	\$415,000	\$418,000	\$415,000	\$495,000	\$485,000
<b>CTC Stage 2 Realignment</b>	N/A	+\$2,000	\$0	+\$1,000	\$0
<b>2019 (Revised Stage 2)</b>	\$415,000	\$420,000	\$415,000	\$496,000	\$485,000
2020	\$475,000	\$480,000	\$477,500	\$580,000	\$566,000
2021	\$542,500	\$622,000	\$585,000	\$735,000	\$715,000
2022	\$645,000	\$712,900	\$670,000	\$850,000	\$820,000
2023	\$612,000	\$650,000	\$630,000	\$780,000	\$760,000

<sup>7</sup> The median is the value at which half of the transactions were higher and half were at a lower value.

**3.2.10 Inclusive Community: Supply of Community Housing**

3,007 Community housing units were located within the CTC in 2023.

In 2023, there were 3,007 Community Housing units located within the CTC (Table 1). The Region saw 271 new Community Housing units in the same period, with 159 new units within the CTC and 112 outside of it. This marks the largest increase of community housing since monitoring began, which can largely be attributed to the Region’s Building Better Futures program. This program aims to create 2,500 new affordable homes between the years 2021 to 2025, all of which are either complete or currently in development. Therefore, only occupied units are counted in this report, which means this upward trend is anticipated to continue in the upcoming years.

**Table 1. Number of Community Housing Units, 2011-2023**

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
<b>YOY Growth</b>	<b>0</b>		<b>+7</b>		<b>+7</b>
2019 (Original Stage 2)	2,701	29.7%	6,378	70.3%	9,079
<b>CTC Stage 2 Realignment</b>	<b>+57</b>		<b>-57</b>		<b>0</b>
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
2021	2,766	30.2%	6,402	69.8%	9,168
2022	2,848	31.0%	6,332	69.0%	9,180
2023	3,007	31.8%	6,444	68.2%	9,451
<b>Change 2011-2023</b>	<b>320</b>		<b>186</b>		<b>506</b>
<b>Change 2022-2023</b>	<b>159</b>		<b>112</b>		<b>271</b>
<b>% Change 2011-2023</b>	<b>11.9%</b>		<b>3.0%</b>		<b>5.7%</b>
<b>% Change 2022-2023</b>	<b>5.6%</b>		<b>1.8%</b>		<b>3.0%</b>
<b>Average Annual % Change</b>	<b>0.9%</b>		<b>0.2%</b>		<b>0.5%</b>

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 several funding responsibilities to municipalities, including social housing. The inherited properties of that time, many of which still exist today, pre-date the LRT. Since the ION's approval in 2011, Region-issued requests for proposals for new Community Housing projects have placed a greater weight on projects with proposed locations in the CTC or along major transit routes, thereby recognizing the value of having affordable units in proximity to public transportation.

In 2023, the two largest community housing projects were both within the CTC. 139 University Avenue West, which added 80 new units of community housing to the Region, was formerly a student rental building before it was purchased by the Region and converted into transitional housing. 195 Hespeler Road added 55 new community homes and was built by Satellite Community Homes funded in part by a capital grant from the Region.

The supply of Community Housing can increase as private and non-profit developers build new units. The Community Housing stock can decrease as non-profit housing providers with federal housing agreements reach the end of their contracts. 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.

### **3.2.11 Inclusive Community: Location of Households Receiving Rent Assistance**

Beginning this year the Portable Rent Assistance indicator is not being included. When this indicator was designed in 2017, there were 100 participants and a rent threshold for eligible units. As the rental market became more expensive, participants were no longer able to find units either in the CTC or outside that were at the rent threshold the program allowed (see section 3.2.9 for trends on housing affordability). Therefore, the threshold was changed and the amount of rental assistance was increased so that participants could find units to live in. The level of assistance required has increased dramatically in order to allow people to afford current rents - which are currently not considered affordable. It is therefore no longer accurate to assume that a unit is affordable if a program participant is renting it out.

## **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 2019 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 both the original and revised CTC Stage 2 boundaries for 2019. 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.

Some indicators (e.g., heritage) did not change regardless of which Stage 2 boundary is used. Results for years beyond 2019 will be 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 2023

*Data Source:* The most updated parcels were sourced from MPAC (Municipal Property Assessment Corporation) under license and used along with year-end tax information 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**

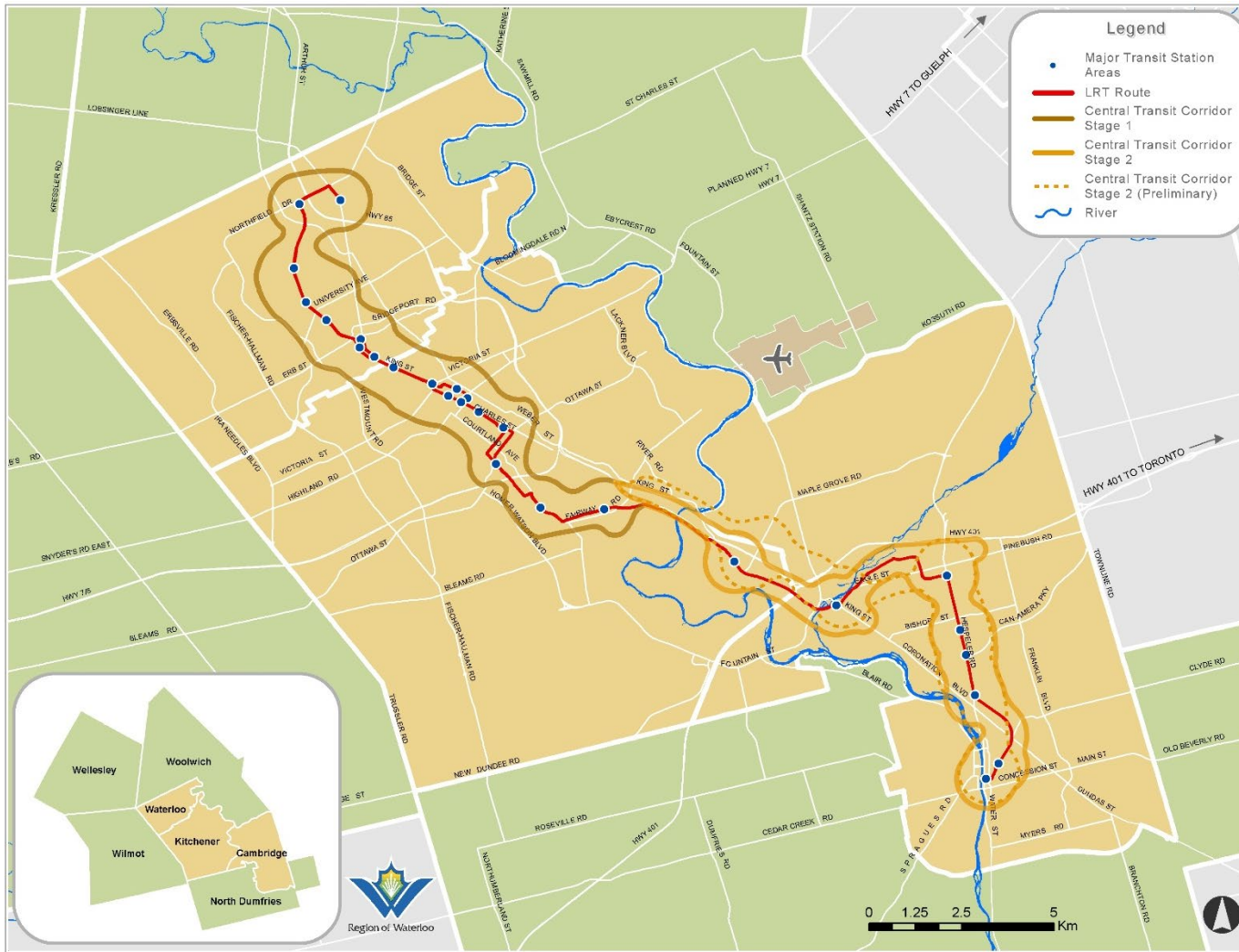
*Scale:* CTC

*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: Map of CTC Stage 2 Alignment<sup>8</sup>



<sup>8</sup> Prior to 2019, CTC monitoring utilized the preliminary CTC Stage 2 route. Beginning with the 2020 reporting year (2019 monitoring report), the CTC boundary was changed to reflect the preferred Stage 2 alignment that was endorsed by Council in June 2019.

## Appendix B: Land Use Parcel Codes

**Table 1. Vacant Property Codes, 2023**

Property Code	Description
100	Vacant residential land not on water
101	Second-tier vacant lot—refers to location not being directly on the water but one row back from the water
102	Conservation Authority land
103	Municipal park (excludes Provincial parks, Federal parks, campgrounds)
105	Vacant commercial land
106	Vacant industrial land
107	Provincial park
108	Federal park
110	Vacant residential/recreational land on water
111	Island under single ownership
112	Multi-residential vacant land
113	Condominium development land - residential (vacant lot)
114	Condominium development land—non-residential (vacant lot)
115	Lands in transition—value based on alternate use
120	Water lot (entirely under water)
125	Residential development land.
127	Townhouse block - freehold units
130	Non-buildable land (walkways, buffer/berm, storm water management pond,etc)
134	Land designated and zoned for open space
140	Common land
150	Mining lands - patented
151	Mining lands - unpatented
155	Land associated with power dam
169	Vacant land condominium (residential)-defined land that's described by a condominium plan

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

**Table 2. Farm Property Codes, 2023**

Property Code	Description
200	Farm property without any buildings/structures
201	Farm with residence - with or without secondary structures; no farm outbuildings
210	Farm without residence - with secondary structures; with farm outbuildings
211	Farm with residence - with or without secondary structures; with farm outbuildings
220	Farm without residence - with commercial/industrial operation
221	Farm with residence - with commercial/industrial operation
222	Farm with a winery
223	Grain/seed and feed operation
224	Tobacco farm
225	Ginseng farm
226	Exotic farms e.g. emu, ostrich, pheasant, bison, elk, deer
227	Nut orchard
228	Farm with gravel pit
229	Farm with campground/mobile home park
230	Intensive farm operation - without residence
231	Intensive farm operation - with residence
232	Large scale greenhouse operation
233	Large scale swine operation
234	Large scale poultry operation
235	Government—agriculture research facility, predominately farm property
236	Farm with oil/gas well(s)
240	Managed forest property, vacant land not on water
241	Managed forest property, vacant land on water
242	Managed forest property, seasonal residence not on water
243	Managed forest property, seasonal residence on water

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
244	Managed forest property, residence not on water
245	Managed forest property, residence on water
260	Vacant residential/commercial/ industrial land owned by a non-farmer with a portion being farmed
261	Land owned by a non-farmer improved with a non-farm residence with a portion being farmed
262	Land owned by a farmer improved with a non-farm residence with a portion being farmed

Property codes highlighted in blue were found within the CTC boundary in 2023.

**Table 3. Residential Property Codes, 2023**

Property Code	Description
301	Single family detached (not on water)
302	More than one structure used for residential purposes with at least one of the structures occupied permanently
303	Residence with a commercial unit
304	Residence with a commercial/ industrial use building
305	Link home – are homes linked together at the footing or foundation by a wall above or below grade.
306	Boathouse with residence above
307	Community lifestyle (not a mobile home park) – Typically, a gated community. The site is typically under single ownership. Typically, people own the structure.
309	Freehold Townhouse/Row house – more than two units in a row with separate ownership
311	Semi-detached residential – two residential homes sharing a common center wall with separate ownership.
313	Single family detached on water – year round residence
314	Clergy Residence
322	Semi-detached residence with both units under one ownership – two residential homes sharing a common center wall.
332	Typically a Duplex – residential structure with two self-contained units.
333	Residential property with three self-contained units
334	Residential property with four self-contained units
335	Residential property with five self-contained units

Property codes highlighted in blue were found within the CTC boundary in 2023.

Property Code	Description
336	Residential property with six self-contained units
340	Multi-residential, with 7 or more self-contained units (excludes row-housing)
341	Multi-residential, with 7 or more self-contained residential units, with small commercial unit(s)
350	Row housing, with three to six units under single ownership
352	Row housing, with seven or more units under single ownership
360	Rooming or boarding house – rental by room/bedroom , tenant(s) share a kitchen, bathroom and living quarters.
361	Bachelorette, typically a converted house with seven or more self-contained units
363	House-keeping cottages, no American plan—typically a mini resort where you rent a cabin. No package plan available. All activities, meals, etc. are extra.
364	House-keeping cottages, less than 50% American plan—typically a mini-resort where you rent a cabin and package plans are available. Activities, meals, etc. maybe included.
365	Group Home as defined in Claus 240(1) of the Municipal Act, 2001 – a residence licensed or funded under a federal or provincial statute for the accommodation of three to ten persons, exclusive of staff, living under supervision in a single housekeeping un
366	Student housing (off campus) – residential property licensed for rental by students.
367	Service or Amenity Unit (Condominium or Freehold title, owned by a condo corporation)
368	Residential Dockominium—owners receive a deed and title to the boat slip. Ownership is in fee simple title and includes submerged land and air rights associated with the slip. Similar to condominium properties, all common elements are detailed in the declaration.
369	Vacant land condominium (residential - improved) – condo plan registered against the land.
370	Residential Condominium Unit
371	Life Lease - No Redemption. Property where occupants have either no or limited redemption amounts. Typically Zero Balance or Declining Balance Life Lease Types.
372	Life Lease - Return on Invest. Property where occupants can receive either a guaranteed return or a market value based return on the investment. Typically, represented by Fixed Value, Indexed-Based, or Market Value Life Lease Types.
373	Cooperative housing – equity – Equity Co-op corporations are owned by shareholders. The owners of shares do not receive title to a unit in the building, but acquire the exclusive use of a unit and are able to participate in the building’s management.
374	Cooperative housing - non-equity – Non-equity Co-op corporations are not owned by individual shareholders, the shares are often owned by groups such as unions or non-profit organizations which provide housing to the people they serve. The members who occ
375	Co-ownership – percentage interest/share in the co-operative housing.
376	Condominium locker unit—separately deeded.
377	Condominium parking space/unit – separately deeded.

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
378	Residential leasehold condominium corporation—single ownership of the development where the units are leased.
379	Residential phased condominium corporation – condominium project is registered in phases.
380	Residential common elements condominium corporation – consists only of the common elements not units.
381	Mobile home – one or more mobile home on a parcel of land, which is not a mobile home park operation.
382	Mobile home park – more than one mobile home on a parcel of land, which is a mobile park operation.
383	Bed and breakfast establishment
385	Time-share, fee simple
386	Time share, right-to-use
391	Seasonal/recreational dwelling - first tier on water
392	Seasonal/recreational dwelling - second tier to water
395	Seasonal/recreational dwelling - not located on water

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

**Table 4. Commercial Property Codes, 2023**

Property Code	Description
400	Small Office building (generally single tenant or owner occupied under 7,500 s.f.)
401	Small Medical/dental building (generally single tenant or owner occupied under 7,500 s.f.)
402	Large office building (generally multi - tenanted, over 7,500 s.f.)
403	Large medical/dental building (generally multi - tenanted over 7,500 s.f.)
405	Office use converted from house
406	Retail use converted from house
407	Retail lumber yard
408	Freestanding Beer Store or LCBO - not associated with power or shopping centre
409	Retail - one storey, generally over 10,000 s.f.
410	Retail - one storey, generally under 10,000 s.f.

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
411	Restaurant – conventional
412	Restaurant - fast food
413	Restaurant - conventional, national chain
414	Restaurant - fast food, national chain
415	Cinema/movie house/drive-in
416	Concert hall/live theatre
417	Entertainment complex - with a large cinema as anchor tenant
419	Automotive service centre, highway—400-series highways
420	Automotive fuel station with or without service facilities
421	Specialty automotive shop/auto repair/ collision service/car or truck wash
422	Auto dealership
423	Auto dealership - independent dealer or used vehicles
425	Neighbourhood shopping centre - with more than two stores attached, under one ownership, with anchor - generally less than 150,000 s.f.
426	Small box shopping centre less than 100,000 s.f. minimum 3 box stores with one anchor (large grocery or discount store)
427	Big box shopping/power centre greater than 100,000 s.f. with 2 or more main anchors such as discount or grocery stores with a collection of box or strip stores and in a commercial concentration concept
428	Regional shopping centre
429	Community shopping centre
430	Neighbourhood shopping centre - with more than 2 stores attached, under one ownership, without anchor - generally less than 150,000 s.f.
431	Department store
432	Banks and similar financial institutions, including credit unions - typically single tenanted, generally less than 7,500 s.f.
433	Banks and similar financial institutions, including credit unions - typically multi tenanted, generally greater than 7,500 s.f.
434	Freestanding supermarket
435	Large retail building centre, generally greater than 30,000 s.f.
436	Freestanding large retail store, national chain - generally greater than 30,000 s.f.
438	Neighbourhood shopping centre with offices above

Property codes highlighted in blue were found within the CTC boundary in 2023.

Property Code	Description
441	Tavern/public house/small hotel
444	Full service hotel
445	Limited service hotel
446	Apartment hotel
447	Condominium hotel Unit
448	Resort condominium
450	Motel
451	Seasonal motel
460	Resort hotel
461	Resort lodge
462	Country inns & small inns
463	Fishing/hunting lodges/resorts
465	Child and community oriented camp/resort
470	Multi-type complex—defined as a large multi-use complex consisting of retail/office and other uses (multi res/condominium/hotel)
471	Retail or office with residential unit(s) above or behind - less than 10,000 s.f. gross building area (GBA), street or onsite parking, with 6 or less apartments, older downtown core
472	Retail or office with residential unit(s) above or behind - greater than 10,000 s.f. GBA, street or onsite parking, with 7 or more apartments, older downtown core
473	Retail with more than one non-retail use
475	Commercial condominium
476	Commercial condominium (live/work)
477	Retail with office(s) - less than 10,000 s.f., GBA with offices above
478	Retail with office(s) - greater than 10,000 s.f., GBA with offices above
480	Surface parking lot - excludes parking facilities that are used in conjunction with another property
481	Parking garage - excludes parking facilities that are used in conjunction with another property
482	Surface parking lot - used in conjunction with another property
483	Parking garage—used in conjunction with another property

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
486	Campground
487	Billboard
489	Driving range/golf centre - stand alone, not part of a regulation golf course
490	Golf course
491	Ski resort
492	Marina—located on waterfront; defined as a commercial facility for the maintenance, storage, service and/or sale of watercraft
493	Marina—not located on waterfront; defined as a commercial facility for the maintenance, storage, service and/or sale of watercraft
495	Communication towers - with or without secondary communication structures
496	Communication buildings

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

**Table 5. Industrial Property Codes, 2023**

Property Code	Description
500	Mines—active
501	Mines—inactive, including properties where closure plans invoked
502	Mine tailings site associated with an active mine
503	Mine tailings site not associated with an active mine
504	Oil/gas wells
505	Sawmill/lumber mill
506	Forest products—including value-added plywood/veneer plants
510	Heavy manufacturing (non-automotive)
511	Pulp and paper mill
512	Cement/asphalt manufacturing plant
513	Steel mill
514	Automotive assembly plant

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
515	Shipyard/dry-dock
516	Automotive parts production plant
517	Specialty steel production (mini-mills)
518	Smelter/ore processing
519	Foundry
520	Standard industrial properties not specifically identified by other industrial Property Codes
521	Distillery/brewery
522	Grain elevators—Great Lakes waterway
523	Grain handling - Primary elevators (including feed mills)
525	Process elevators - flour mills, oilseed crushing, malt houses
527	Abattoir/slaughter house/rendering plants
528	Food processing plant
529	Freezer plant/cold storage
530	Warehousing
531	Mini-warehousing
532	Dry cleaning plant
535	Research and development facilities
540	Other industrial (all other types not specifically defined)
541	Printing plant
542	Compost Facility/Soil Farms
544	Truck terminal
545	Major distribution centre
550	Petro-chemical plant
551	Oil refinery
552	Tank farm
553	Bulk oil/fuel distribution terminal

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
555	O.P.G. hydraulic generating station
556	O.P.G. nuclear generating station
557	O.P.G. fossil generating station
558	Hydro One Transformer Station
559	MEU generating station
560	MEU Transformer Station
561	Hydro One Right-of-Way
562	Private Hydro right-of-way
563	Private Hydraulic generating station
564	Private nuclear generating station
565	Private Generating Station (Fossil Fuels and Cogen)
566	Private Transformer Station
567	Wind turbine
568	Solar/photo-voltaic electricity generating facility
575	Industrial condominium
576	Aerospace Manufacturing Plant
577	Pharmaceutical Manufacturing Plant
578	Data Centre
580	Industrial mall
581	Active Public Landfill/Waste Disposal Site
582	Active Private Landfill/Waste Disposal Site
583	Closed Landfill/Waste Disposal Site
584	Waste Transfer Station
585	Waste Incineration Site
586	Meter/Valve/Regulator Station
587	Natural Gas Gate Station

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
588	Pipelines—transmission, distribution, field & gathering and all other types including distribution connections
589	Compressor station—structures and turbines used in connection with transportation and distribution of gas
590	Water treatment/filtration/water towers/pumping station
591	Sewage treatment/waste pumping/waste disposal
593	Gravel pit, quarry, sand pit
594	Peat moss operation
595	Heat or steam plant
596	Recycling facility
597	Railway right-of-way
598	Railway buildings and lands described as assessable in the Assessment Act
599	GO transit station/rail yard

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

**Table 6. Institutional Property Codes, 2023**

Property Code	Description
601	Post secondary education - university, community college, etc
602	Multiple occupancy educational institutional residence located on or off campus
605	School (elementary or secondary, including private)
608	Day Care
610	Other educational institution (e.g. schools for the blind, deaf, special education, training)
611	Other institutional residence
621	Hospital, private or public
623	Continuum-of-care seniors facility
624	Retirement/nursing home (combined)

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
625	Nursing home
626	Old age/retirement home
627	Other health care facility
630	Federal penitentiary or correctional facility
631	Provincial correctional facility
632	Other correctional facility

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

**Table 7. Special and Exempt Property Codes, 2023**

Property Code	Description
700	Place of worship - with a clergy residence
701	Place of Worship - without a clergy residence
702	Cemetery
703	Cemetery with non-internment services
704	Crematorium
705	Funeral Home
710	Recreational sport club - non commercial (excludes golf clubs and ski resorts)
711	Bowling alley
713	Casino
715	Racetrack—auto
716	Racetrack—horse, with slot facility
717	Racetrack—horse, without slot facility
718	Exhibition grounds/fair grounds
720	Commercial sport complex
721	Non-commercial sports complex

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

Property Code	Description
722	Professional sports complex
725	Amusement park
726	Amusement park—large/regional
730	Museum and/or art gallery
731	Library and/or literary institutions
733	Convention, conference, congress centre
734	Banquet hall
735	Assembly hall, community hall
736	Clubs - private, fraternal
737	Federal airport
738	Provincial airport
739	Local government airport
740	Airport leasehold
741	Airport authority
742	Public transportation - easements and rights
743	International bridge/tunnel
744	Private airport/hangar
745	Recreational airport
746	Subway station
748	Transit garage
749	Public transportation - other
750	Scientific, pharmaceutical, medical research facility (structures predominantly other than office)
755	Lighthouses
760	Military base or camp (CFB)
761	Armoury
762	Military education facility

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

**Table 8. Government Property Codes**

Property Code	Description
805	Post office or depot
806	Postal mechanical sorting facility
810	Fire Hall
812	Ambulance Station
815	Police Station
822	Government—agricultural research facility; predominantly non farm property (office building, laboratories)
824	Government—wharves and harbours
826	Government— special educational facility
828	Government—canals and locks
830	Government—navigational facilities
832	Government—historic site or monument
840	Port authority—port activities
842	Port authority—other activities

*Property codes highlighted in blue were found within the CTC boundary in 2023.*

## Appendix C: Building Activity

**Table 1. Residential Building Activity in the CTC, 2011-2023**

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
2021	14	\$7,323,000	\$6,200,761	10	\$3,789,000	\$3,208,341	532	\$104,378,979	\$88,383,048	1813	\$295,224,301	\$249,981,594	2369	\$410,715,280	\$347,773,743
2022	8	\$5,800,324	\$4,599,596	6	\$3,975,000	\$3,152,133	73	\$26,778,649	\$21,235,185	1,005	\$208,477,181	\$165,320,198	1,092	\$245,031,154	\$194,307,112
2023	4	\$2,136,816	\$1,630,835	3	\$1,211,000	\$924,245	42	\$5,541,754	\$4,229,512	2,163	\$460,647,836	\$351,570,182	2,212	\$469,537,406	\$358,354,774
<b>Total</b>	<b>139</b>	<b>\$54,125,925</b>	<b>\$48,778,966</b>	<b>150</b>	<b>\$37,853,880</b>	<b>\$33,211,297</b>	<b>1,339</b>	<b>\$250,051,392</b>	<b>\$220,206,819</b>	<b>19,544</b>	<b>\$3,442,188,691</b>	<b>\$3,046,493,589</b>	<b>21,172</b>	<b>\$3,784,219,888</b>	<b>\$3,348,690,671</b>

\* Value adjusted to 2011 dollars.

**Table 2. Residential Building Activity in the Region, 2011-2023**

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	\$10,470,676	\$10,315,810	476	\$76,178,275	\$75,051,563	954	\$139,919,388	\$137,849,915	2,412	\$512,854,615	\$505,269,255
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	1,092	\$384,057,878	\$363,732,540	48	\$9,874,000	\$9,351,442	688	\$119,321,866	\$113,007,044	1,775	\$207,313,858	\$196,342,272	3,603	\$720,567,602	\$682,433,298
2016	1,698	\$594,904,341	\$555,522,044	106	\$21,934,024	\$20,482,005	955	\$151,617,150	\$141,580,189	2,961	\$446,160,788	\$416,625,222	5,720	\$1,214,616,303	\$1,134,209,461
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	\$155,686,382	\$143,150,285	3,240	\$679,438,720	\$624,729,314
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	806	\$300,094,425	\$264,568,541	113	\$33,338,600	\$29,391,898	1,266	\$247,342,882	\$218,061,850	4,122	\$750,503,870	\$661,657,456	6,307	\$1,331,279,777	\$1,173,679,745
2020	970	\$410,945,656	\$359,652,439	186	\$50,764,096	\$44,427,848	729	\$154,173,052	\$134,929,554	3,306	\$685,164,365	\$599,643,849	5,191	\$1,301,047,169	\$1,138,653,690
2021	1,099	\$525,716,317	\$445,151,034	66	\$23,788,524	\$20,142,966	1,432	\$289,817,732	\$245,403,574	3,405	\$534,143,023	\$452,286,359	6,002	\$1,373,465,596	\$1,162,983,933
2022	920	\$415,128,908	\$329,192,831	38	\$17,567,000	\$13,930,445	1,009	\$235,248,842	\$186,549,842	2,818	\$474,383,551	\$376,181,136	4,785	\$1,142,328,301	\$905,854,255
2023	603	\$352,674,023	\$269,163,688	102	\$31,125,378	\$23,755,142	1,016	\$277,851,106	\$212,058,228	4,437	\$919,904,893	\$702,078,909	6,158	\$1,581,555,400	\$1,207,055,967
<b>Total</b>	<b>13,169</b>	<b>\$4,955,517,887</b>	<b>\$4,469,839,621</b>	<b>1,009</b>	<b>\$262,589,272</b>	<b>\$231,826,748</b>	<b>10,302</b>	<b>\$2,007,297,825</b>	<b>\$1,756,092,316</b>	<b>32,129</b>	<b>\$5,476,533,681</b>	<b>\$4,800,318,759</b>	<b>56,609</b>	<b>\$12,701,938,665</b>	<b>\$11,258,077,444</b>

\* Value adjusted to 2011 dollars.

**Table 3. Non-Residential Building Activity in the CTC, 2011-2023**

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	<b>437,675</b>	<b>\$279,947,356</b>	<b>\$279,947,356</b>
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	<b>682,370</b>	<b>\$137,287,551</b>	<b>\$135,257,004</b>
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	<b>342,666</b>	<b>\$90,085,748</b>	<b>\$87,958,316</b>
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	<b>500,589</b>	<b>\$236,823,097</b>	<b>\$226,797,838</b>
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	<b>799,444</b>	<b>\$148,810,029</b>	<b>\$140,934,617</b>
2016	3,335	\$7,500,000	\$7,003,505	138,152	\$42,742,475	\$39,912,950	16,824	\$5,142,000	\$4,801,603	<b>158,311</b>	<b>\$55,384,475</b>	<b>\$51,718,057</b>
2017	8,534	\$11,772,000	\$10,824,101	292,239	\$57,901,920	\$53,239,572	228,047	\$62,322,869	\$57,304,540	<b>528,820</b>	<b>\$131,996,789</b>	<b>\$121,368,213</b>
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	<b>289,493</b>	<b>\$66,622,444</b>	<b>\$59,880,293</b>
2019	2,045	\$300,000	\$264,485	576,674	\$101,348,153	\$89,350,320	17,684	\$6,319,920	\$5,571,753	<b>596,403</b>	<b>\$107,968,073</b>	<b>\$95,186,558</b>
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	<b>520,320</b>	<b>\$209,608,000</b>	<b>\$183,445,250</b>
2021	1,640	\$395,000	\$334,467	398,526	\$38,336,769	\$32,461,713	5,833	\$41,376,400	\$35,035,525	<b>405,999</b>	<b>\$80,108,169</b>	<b>\$67,831,705</b>
2022	0	\$50,000	\$39,649	65,461	\$25,089,914	\$19,896,036	13,620	\$28,055,400	\$22,247,635	<b>79,081</b>	<b>\$53,195,314</b>	<b>\$42,183,321</b>
2023	5,522	\$3,500,000	\$2,671,229	193,314	\$70,336,337	\$53,681,265	7,776	\$18,684,000	\$14,259,781	<b>206,612</b>	<b>\$92,520,337</b>	<b>\$70,612,275</b>
<b>Total</b>	<b>220,034</b>	<b>\$69,306,710</b>	<b>\$64,935,039</b>	<b>3,869,666</b>	<b>\$808,191,590</b>	<b>\$725,670,931</b>	<b>1,458,083</b>	<b>\$812,859,082</b>	<b>\$772,514,833</b>	<b>5,547,783</b>	<b>\$1,690,357,382</b>	<b>\$1,563,120,803</b>

\* Value adjusted to 2011 dollars.

**Table 4. Non-Residential Building Activity in the Region, 2011-2023**

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	<b>1,677,879</b>	<b>\$566,100,035</b>	<b>\$566,100,035</b>
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	<b>1,910,846</b>	<b>\$347,520,860</b>	<b>\$342,380,864</b>
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	<b>1,312,230</b>	<b>\$219,731,528</b>	<b>\$214,542,428</b>
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	<b>2,184,068</b>	<b>\$449,167,881</b>	<b>\$430,153,586</b>
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	<b>1,780,447</b>	<b>\$315,410,096</b>	<b>\$298,717,777</b>
2016	766,816	\$88,934,500	\$83,047,092	756,374	\$96,245,966	\$89,874,543	325,449	\$63,220,740	\$59,035,566	<b>1,848,639</b>	<b>\$248,401,206</b>	<b>\$231,957,201</b>
2017	978,749	\$134,395,252	\$123,573,548	655,266	\$98,783,920	\$90,829,693	573,082	\$128,147,869	\$117,829,214	<b>2,207,097</b>	<b>\$361,327,041</b>	<b>\$332,232,456</b>
2018	1,085,229	\$147,003,760	\$132,127,068	676,026	\$112,982,881	\$101,549,081	216,646	\$51,420,000	\$46,216,327	<b>1,977,901</b>	<b>\$311,406,641</b>	<b>\$279,892,476</b>
2019	1,169,419	\$177,969,614	\$156,901,152	957,919	\$162,957,480	\$143,666,190	155,869	\$69,316,920	\$61,111,020	<b>2,283,207</b>	<b>\$410,244,014</b>	<b>\$361,678,362</b>
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	<b>1,133,907</b>	<b>\$329,315,440</b>	<b>\$288,211,104</b>
2021	916,500	\$140,228,348	\$118,738,552	649,597	\$104,579,560	\$88,552,890	70,604	\$58,380,000	\$49,433,347	<b>1,636,701</b>	<b>\$303,187,908</b>	<b>\$256,724,789</b>
2022	3,780,406	\$433,384,186	\$343,669,073	609,903	\$81,165,921	\$64,363,716	473,440	\$134,170,605	\$106,395,870	<b>4,863,749</b>	<b>\$648,720,712</b>	<b>\$514,428,660</b>
2023	1,778,156	\$176,978,175	\$135,071,185	445,034	\$129,924,068	\$99,159,107	213,484	\$96,945,068	\$73,989,266	<b>2,436,674</b>	<b>\$403,847,311</b>	<b>\$308,219,558</b>
<b>Total</b>	<b>13,482,773</b>	<b>\$1,646,245,359</b>	<b>\$1,427,200,026</b>	<b>8,661,073</b>	<b>\$1,488,360,717</b>	<b>\$1,341,366,588</b>	<b>5,109,499</b>	<b>\$1,779,774,597</b>	<b>\$1,656,672,682</b>	<b>27,253,345</b>	<b>\$4,914,380,673</b>	<b>\$4,425,239,295</b>

\* 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		