Central Transit Corridor (CTC) Monitoring Program

Kitchener-Cambridge-Waterloo

# MONITORING CHANGE IN THE CTC 2018 REPORT

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# 1. Background

## 1.1 Summary

The Region of Waterloo has recognized the importance of monitoring change in the Central Transit Corridor (CTC) over time in order to understand the changing nature of the social, economic and environmental characteristics of the corridor. The CTC monitoring program is a multi-year project to monitor the corridor from the baseline year of 2011 until at least 2021, after ION is constructed, opened for service, and is functioning within the community. There are 16 baseline indicators, as well as themed indicators, each one selected for their capacity to describe key aspects of the corridor. The indicators provide a lens for monitoring change in the corridor, including changes in the protection of the community's important assets, such as heritage resources and affordable housing. Further, through a partnership with the University of Waterloo, the influence of rapid transit on urban growth and land use change has been explored.

## 1.2 About ION

ION, the Region of Waterloo's rapid transit service, which was 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 a 17 km route extension to Cambridge. As of June, 2019, the Region of Waterloo Council endorsed a Preferred Route for the Stage 2 ION project.

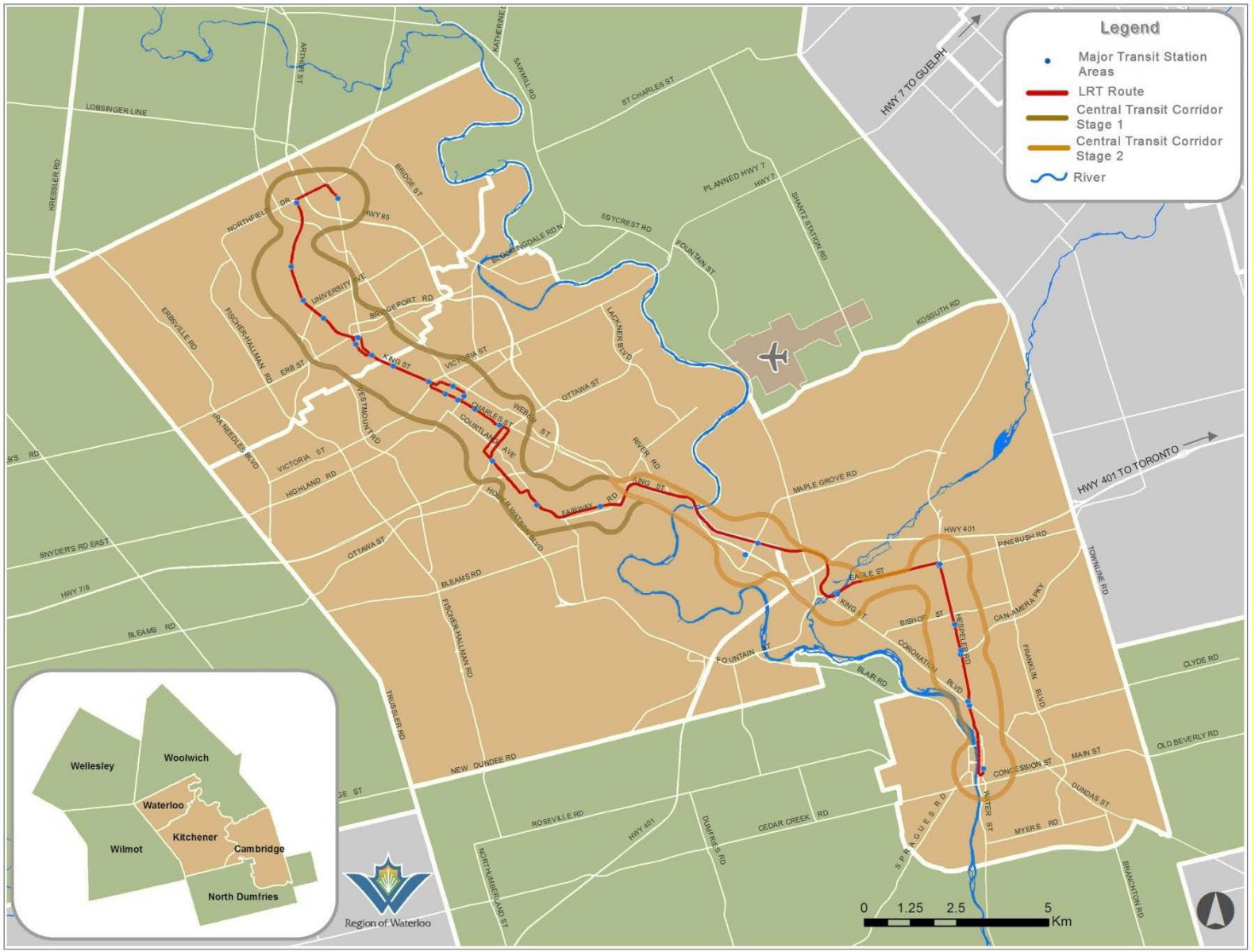
More information about ION can be found in the Region of Waterloo's ION Story report:
http://rapidtransit.regionofwaterloo.ca/en/resourcesGeneral/ION-Story-Fall-2016-access.pdf;
and at the project website:
http://rapidtransit.regionofwaterloo.ca/en/index.asp.

### 1.3 The ION Central Transit Corridor

The Central Transit Corridor (CTC) is the area within approximately 800 metres of ION Light Rail Transit (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 23 rapid transit station areas. The geography of the CTC includes areas within the corridor that are expected to re-urbanize over time by incorporating the station area planning work that the Area Municipalities are undertaking, including secondary plans, and follows pre-established boundaries such as roads, rivers, property boundaries, and statistical boundaries already being used for monitoring.

The CTC will be adjusted when Stage 2 of the route is finalized though Cambridge. Until that time, the corridor includes the area around the preliminary Stage 2 LRT stations in Cambridge as defined in 2011.

## 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 has also informed the development of the monitoring program, and continues to guide planning initiatives directed towards achieving the community-building goals of ION.

### 2.2 Monitoring ION's Goals

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

### 2.3 Baseline and Annual Indicators

For each dimension, one or more indicators have been chosen. These indicators are collected and reported on annually. In total, sixteen indicators have been developed through the CTC Monitoring Program. Some of the baseline indicators cannot be measured each year due to constraints in data availability. Thirteen of the 16 baseline indicators have been updated for the 2018 reporting year.

**Table 1. Goals, Dimensions and Indicators**

| Goal | Dimension | Indicator | Metric |
|---|---|---|---|
| **Moving People** | Mobility | Transit Ridership | Number of trips made using Grand River Transit (million) |
| | | Daily Transit Activity | Per cent of daily average transit activity which occurred in the CTC |
| | Sustainable Modes of Transportation | Transit Mode Share | Per cent of mode of travel share which was on transit across the CTC |
| | | Active Transportation | Per cent of mode of travel share which was pedestrian and cyclist in the CTC |
| | | Walkability | Per cent of population living in "high" or “very high” walkable areas in the CTC |
| **Building Community** | Vibrant Communities | Land Use Mix | Per cent of all regional land uses which were found in the CTC |
| | | Population | Per cent of Region’s residents who live in the CTC |
| | Art 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 (million) |
| | | Assessment Value | Assessed value of properties in the CTC (billion) |
| | Environment | Emissions | Tonnes of net air emissions per capita in Cambridge, Kitchener and Waterloo |
| | Crime and Safety | Perception of Safety | Per cent of people in Cambridge, Kitchener and Waterloo who perceive that their downtowns are safe at night |
| | | Calls for Service | Per cent of police calls for service which were related to potential public perception in the CTC |
| | Inclusive Community | Affordability of Home Ownership Transactions | Per cent of housing transactions which were affordable to low and moderate income households in the CTC |

### 2.4 Themed Indicators

Each year, the CTC monitoring program focuses on an area of interest and explores that area through the development of themed indicators. This year, the chosen theme is “Urban Vibrancy”. The proposed schedule for past and future themes is presented in Table 2. The 2020 reporting year will focus on the theme of Mobility, which could incorporate the following potential indicators: Way-finding, Vehicular Miles, Efficiency, Mode Share, Active Mobility, Connectivity, and Walkability. The schedule accounts for the time when data will be available for the indicators. In 2021, a ten-year review of the indicators is proposed.

**Table 2. Publication Year of Themes**

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

## 3. Monitoring Results and Analysis

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

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

Subsequent reports, published annually, provide updates on key indicators and also take a deeper dive into the themes. Results from the annual monitoring are summarized in Table 3, and results from each of the themes are summarized in Table 4 to 7.

It is recognized that there are many factors that influence each of these indicators. 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.

The CTC monitoring program will continue to measure and report on indicators until at least 2021. This provides an opportunity for a comprehensive review of the change happening in the corridor along the LRT route before, during, and after the construction and operation of ION. These metrics are important in helping to tell the story about the different ways ION is moving people and shaping the future of our communities.

**Table 3. Annual Indicators for the CTC Monitoring Program**

| Goal | Dimension | Indicator | Metric | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Moving People | Mobility | Transit Ridership | Number of trips made using Grand River Transit (million) | 19.7 | 21.3 | 22.0 | 21.6 | 20.3 | 19.7 | 19.7 | 21.1 |
| | | Daily Transit Activity | Per cent of daily average transit activity in the CTC | 67% | 65% | 67% | 64% | 63% | 63% | 61% | 60% |
| | 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% | - | - | - | - | 8.6% | - | - |
| | | Walkability | Per cent of population living in "high" or “very high” walkable areas in the CTC | 55% | 56% | 56% | 56% | 56% | 56% | 57% | 57% |
| Building Community | Vibrant Communities | Land Use Mix | See indicators below (Table 7) | | | | | | | | |
| | | Population | See indicators below (Table 7) | | | | | | | | |
| | Art and Culture | Cultural Vibrancy | Number of arts and culture establishments in the CTC | 241 | - | - | - | - | 318 | - | 336 |
| | | Restaurants | Per cent of the Region’s restaurants in the CTC | 50% | 51% | 52% | 52% | 52% | 52% | 54% | 54% |
| | Heritage | Heritage Resource Retention | Number of demolition permits on pre-1920 and designated built heritage resources in the CTC | 13 | 36 | 11 | 9 | 12 | 17 | 16 | 7 |
| | Investment | Building Activity | Dollar value of building permits in the CTC for new construction (million, adjusted) | $491 | $262 | $227 | $548 | $259 | $308 | $222 | $190 |
| | | Assessment Value | Assessed value of properties in the CTC (billion) | $10.0 | - | - | $12.0 | $12.8 | $13.6 | $14.7 | $15.3 |
| | Environment | Emissions | Tonnes of net air emissions per capita in Cambridge, Kitchener and Waterloo | 2.52 | - | - | - | - | - | 2.66 | - |
| | Crime and Safety | Perception of Safety | Per cent of people in the Tri-Cities who perceive that their downtowns are safe at night | 65% | - | - | - | - | | 62% | 58% |
| | | Calls for Service | Per cent of police calls for service related to potential public perception in the CTC | 40% | 41% | 43% | 43% | 42% | 43% | 45% | - |

**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 transaction values in the CTC (million, adjusted) | $619 | $764 | $821 | $916 | $898 | $1,030 |
| | Building Improvements | Dollar value of building permits for property improvements in the CTC (million, adjusted) | $74 | $80 | $93 | $80 | $96 | $166 |

**Table 6. Inclusive Community (2018)**

| Dimension | Indicator | Metric | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|
| Inclusive Community | Affordability of Home Ownership Transactions | Per cent of housing transactions which were affordable to low and moderate income households in the CTC | 55% | 56% | 53% | 54% | 57% | 57% | 33% | 38% |
| | Renter Affordability | Per cent of renters spending less than 30% of their household income on shelter related costs in the CTC | 64% | - | - | - | - | 61% | - | - |
| | Supply of Community Housing | Number of community housing units in the CTC | 2,687 | 2,610 | 2,631 | 2,631 | 2,633 | 2,645 | 2,645 | 2,701 |
| | Location of Households Receiving Rent Assistance | Per cent of Housing Allowances with Supports (HAWS) in the CTC | - | - | - | - | 50% | 60% | 56% | 57% |

**Table 7. Urban Vibrancy (2019)**

| Dimension | Indicator | Metric | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|
| Vibrant Communities | Land Use Mix | Per cent of all regional land uses found in the CTC | 69% | 69% | 69% | 69% | 69% | 70% | 70% | 71% |
| | Population | Per cent of Region's residents who live in the CTC | 17.5% | 17.4% | 17.8% | 18.1% | 18.4% | 18.8% | 19.4% | 19.8% |
| | Surface Parking | Area of land dedicated to surface parking in the CTC | - | 543 Ha | - | - | - | - | - | 533 Ha |
| | Vacant Lands | Area of land assessed as vacant land in the CTC | 293 Ha | 285 Ha | 276 Ha | 274 Ha | 280 Ha | 272 Ha | 268 Ha | 268 Ha |
| | Grocery Stores | Number of Grocery Stores in the CTC | - | - | - | - | - | - | - | 28 |
| | Demographic Shifts | Number of Families with Children | 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

Together with public sector investments in the active transportation network and planned improvements to service levels and the regional transit network, the ION rapid transit system has the opportunity to greatly enhance mobility within and between Cambridge, Kitchener and Waterloo.

2018 was a year of increased train testing, as the construction of Stage 1 was complete. After several years of closures and detours, the completion of the construction of Stage 1 allowed busses to return to regular routing; thereby, allowing users to become more familiarized with a stable system. Monitoring of the mobility indicators will be used to track shifts in travel behaviour in the CTC since ION was announced.

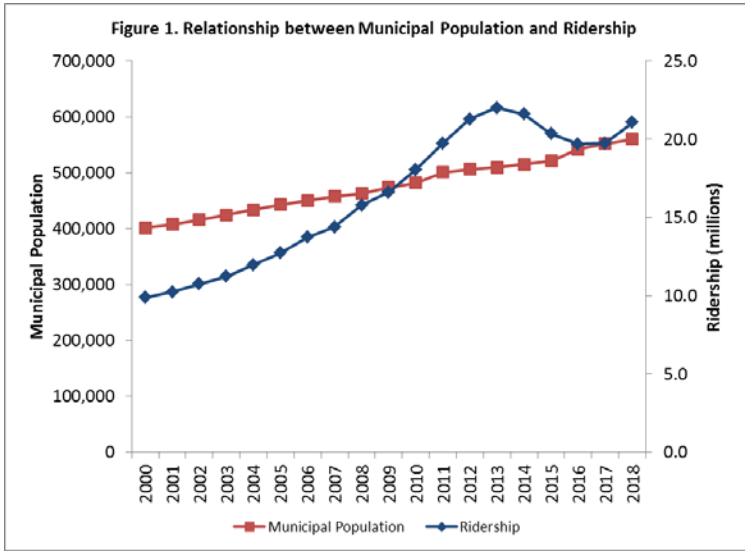
### 3.1.1 Mobility: Total Transit Ridership

**21,066,847 trips were made across Waterloo Region using Grand River Transit in 2018**

Total transit ridership within the Region increased by 1.3 million trips between 2011 and 2018 to over 21 million trips (Table 1). Transit ridership rebounded in 2018 after decreases since 2013. In the CTC, the rebound was partially due to regular routing after many routes were detoured for ION and other road construction. This allowed residents to return to previous travel patterns. Outside the CTC, growth came from a couple of factors in particular. There was significant growth in Conestoga College enrollment, which increased transit ridership to the college. Additional transit service to new growth areas such as south-west Kitchener resulted in further ridership growth.

**Table 1. Total Transit Ridership per capita within the Transit Service Area from 2011 To 2018**

| Year | Total Transit Ridership | Municipal Population (for settlements with bus service) | Transit Service Area Population | Total Transit Ridership per capita (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** |
| Growth (%) 2017-2018 | **7%** | **1%** | **6%** | **0%** |



### 3.1.2 Mobility: Total Daily Transit Activity

**60 per cent of the daily average transit activity in the Region occurred within the CTC in 2018**

In 2018, there were 133,607 people per day who boarded or alighted a Grand River Transit (GRT) bus within the CTC, an increase of over 6,000 per day between 2017 and 2018 (Table 1). The CTC is continuing to capture more than half of the transit activity occurring within the Region (Table 2). In 2018, 60 per cent of the total daily activity in the Region occurred within the CTC, indicating that six out of ten riders on transit travelling in the Region had gotten on or off a GRT bus stop within the CTC.

**Table 1. Total Daily Activity from 2011 to 2018**

| Year | CTC | Outside CTC | Region |
|---|---|---|---|
| 2011 | **108,291** | 53,839 | 162,130 |
| 2012 | **114,917** | 61,243 | 176,160 |
| 2013 | **122,199** | 59,133 | 181,332 |
| 2014 | **119,248** | 68,371 | 187,619 |
| Method Change | | | |
| 2015 | **115,678** | 68,654 | 184,331 |
| 2016 | **119,654** | 72,333 | 191,987 |
| 2017 | **127,571** | 83,416 | 210,986 |
| 2018 | **133,607** | 88,928 | 222,535 |
| Growth (%) 2017-2018 | **5%** | **7%** | **5%** |

**Table 2. Distribution of Total Daily Activity within Region**

| Year | CTC | Outside CTC | Region |
|---|---|---|---|
| 2011 | **67%** | 33% | 100% |
| 2012 | **65%** | 35% | 100% |
| 2013 | **67%** | 33% | 100% |
| 2014 | **64%** | 36% | 100% |
| 2015 | **63%** | 37% | 100% |
| 2016 | **62%** | 38% | 100% |
| 2017 | **60%** | 40% | 100% |
| 2018 | **60%** | 40% | 100% |

*Due to improvements implemented in 2015 in the method of calculating the boardings and alightings by station, data is not comparable between the 2011-2014 data points and the 2015-2018 data. The change in methodology does not affect Table 2.

### 3.1.3 Sustainable Modes of Transportation: Walkability

**57 per cent of the population living in the CTC lived in "very high" or "high" walkable areas in 2018**

Approximately 109,400 people live in the Central Transit Corridor, of which 62,300 live in very high or high walkable areas in 2018. Over half (57 per cent) of the population within the CTC live in very high or high walkable areas while 35,231 (32 per cent) live in moderate walkable areas, and 11,833 (11 per cent) live in very low and low walkable areas in 2018 (Table 1). In the period between 2011 and 2018, there has been a shift in the proportion of the population living in high or very high walkable areas of the CTC from 55 per cent to 57 per cent. This shift resulted from population growth of 8,756 people in more walkable areas, compared to growth of 2,080 in moderate and 1,853 in low walkable areas of the CTC (Table 1).

**Table 1. Estimated Population in Walkability Ratings within the CTC**

| 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** |
| Percent of Population (2011) | 23% | 32% | **55%** | 34% | 5% | 6% | **10%** | **100%** |
| 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 | 23,946 | 34,239 | **58,185** | 34,648 | 4,879 | 5,817 | **10,697** | **103,529** |
| 2017 | 25,220 | 35,599 | **60,819** | 34,645 | 5,820 | 5,760 | **11,580** | **107,045** |
| 2018 | 26,254 | 36,078 | **62,332** | 35,231 | 6,088 | 5,745 | **11,833** | **109,395** |
| Percent of Population (2018) | 24% | 33% | **57%** | 32% | 6% | 5% | **11%** | **100%** |
| Change from 2011-2018 | 3,578 | 5,178 | 8,756 | 2,080 | 1,671 | 182 | 1,853 | 12,688 |

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. Residents living in more walkable neighborhoods have shown to walk, cycle and use transit more and own fewer cars than those living in less walkable areas in Waterloo Region. Population growth in very high or high walkable areas is helpful in creating safer, more vibrant communities. Research has shown that increasing numbers of people walking and cycling in neighbourhoods decreases the incidence rates of collisions with motor vehicles.

## 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

**71 per cent of Waterloo Region's land uses were found within the CTC in 2018**

There were 194 unique land uses within Waterloo Region in 2018, of which 137 were found within the CTC. In other words, of all the types of land uses in Waterloo Region, 71 per cent of them can be found within the CTC. The number of land uses within the corridor has been relatively stable since 2011, with a net increase of six land uses from 131 in 2011 to 137 in 2018 (Table 1). New land uses that have been introduced into the CTC in 2018 include transportation-related uses such as the ION drivers facility at Conestoga Mall.

**Table 1. Percent of unique land use codes existing in the CTC**

| Year | CTC | Region | Percent in 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 | 194 | **70.6%** |

### 3.2.2 Vibrant Communities: Population

**20 per cent of the Region's residents were living in the CTC in 2018**

Approximately 109,400 people lived in the CTC in 2018, representing 19.8 per cent of Waterloo Region's population. From 2011 to 2018, population within the CTC has been increasing at a faster rate (1.8 per cent annually) than the population outside the CTC (1.1 per cent annually) and across the Region as a whole (1.2 per cent annually) (Table 1).

From 2011 to 2018, the population of the CTC grew by 12,688 residents, representing a quarter (26 percent) of Waterloo Region's growth. Most of this growth occurred in Stage 1, with almost 12,000 new residents. In year over year growth from 2017 to 2018, there were an estimated 2,350 new residents in the CTC, a growth rate of 2.2 percent. These population figures include students who are living in Waterloo Region while they study at the local college and universities.

**Table 1. Population living within the CTC from 2011 to 2018 including students**

| Year | Stage 1 | Stage 2 | **Total CTC** | Outside CTC | Region | **Percent in CTC** |
|---|---|---|---|---|---|---|
| 2011 | 71,698 | 25,009 | **96,707** | 454,929 | 551,636 | **17.5%** |
| 2012 | 70,649 | 25,315 | **95,964** | 460,936 | 556,900 | **17.4%** |
| 2013 | 72,929 | 25,400 | **98,329** | 464,671 | 563,000 | **17.8%** |
| 2014 | 74,377 | 25,397 | **99,774** | 469,226 | 569,000 | **18.1%** |
| 2015 | 75,965 | 25,439 | **101,404** | 473,296 | 574,700 | **18.4%** |
| 2016 | 77,711 | 25,818 | **103,529** | 479,971 | 583,500 | **18.8%** |
| 2017 | 81,317 | 25,728 | **107,045** | 487,056 | 594,100 | **19.4%** |
| 2018 | 83,662 | 25,734 | **109,395** | 491,825 | 601,220 | **19.8%** |
| Average Annual Percent Change | 2% | 0.4% | **1.8%** | 1.1% | 1.2% | |
| Population Growth 2011-2018 | 11,964 | 725 | **12,688** | 36,896 | 49,584 | |

### 3.2.3 Art and Culture: Cultural Vibrancy

**336 arts and culture related establishments in the Region were located within the CTC in 2018**

In 2018, there were an estimated 716 arts and culture establishments within the Region, 336 of which were within the CTC. The proportion of cultural establishments that are located within the CTC has increased from 43 per cent (241 out of 565 establishments) in 2011 to 47 per cent in 2018.

| Category | Type | 2011 | 2016 | 2018 | % change from 2011 |
|---|---|---|---|---|---|
| Bakeries, breweries, wineries, jewellery, textiles, printing, clothing, wood product | Manufacturing | **21** | **39** | **43** | **105%** |
| Art dealers, picture frame, jewellery, video game, music, book, CD/record, craft, gift, and novelty stores | Retail | **35** | **43** | **45** | **29%** |
| Publishers, software[1], motion picture, broadcasting, libraries, archives | Information | **27** | **36** | **38** | **41%** |
| Architecture, design, programming, advertising, photography | Professionals | **61** | **76** | **86** | **41%** |
| Travel agencies, tour operators | Admin & Support | **24** | **25** | **24** | **0%** |
| Fine arts schools | Education | **19** | **31** | **29** | **53%** |
| Performing arts, promotions, agents, independent artists, heritage | Arts, Entertainment, Recreation | **21** | **31** | **36** | **71%** |
| Accommodation services | Accommodation | **12** | **12** | **11** | **-8%** |
| Photo finishing labs, social organizations, grant and giving services | Other Services | **11** | **16** | **15** | **36%** |
| Federal, provincial, and municipal administration | Public Administration | **4** | **5** | **5** | **25%** |
| Craft furnishings, craft jewellery, book and newspaper | Wholesale Trade | **1** | **2** | **2** | **100%** |
| Video rental | Real Estate, Rental and Leasing | **5** | **2** | **2** | **-60%** |
| **Total Cultural Establishments in the CTC** | | **241** | **318** | **336** | **38%** |
| **Total Cultural Establishments in the Region** | | **565** | **649** | **716** | **27%** |
| **Percentage of total Regional Cultural Establishments located in the CTC** | | **43%** | **49%** | **47%** | **4%** |

[1] Software includes only software publishers of video games

Since 2011, the number of cultural establishments has increased in almost every category (Table 1). Manufacturing establishments, which includes breweries, bakeries and more, have increased by 105 percent from 21 to 43 establishments. The Professionals category, which accounts for the highest proportion of cultural businesses, grew by 41 percent between 2011 and 2018. These significant increases have impacted the mix of cultural establishments in the CTC. Details of the types of establishments included within the cultural sector can be found in Appendix A.

The Accommodation category showed a net loss of one from 2011, most notably with the closing of the local landmark, the Satellite Motel, on Hespeler Road. The closure of the small family run motel will result in the redevelopment of the property into a mixed-use development with affordable housing units. Although we see a small loss of in the number of accommodation establishments, the opening of the Delta in Waterloo resulted in a net increase in the number of hotel rooms. The Delta, for example, brought in an additional 193 hotel rooms.

### 3.2.4 Art and Culture: Restaurants

**54 per cent of restaurants in the Region were located within the CTC in 2018.**

In 2018, there were 554 restaurants located within the CTC, an increase of 47 restaurants (or 9 per cent) since 2011. Approximately 413 restaurants were within Stage 1, and 141 restaurants within Stage 2 (Table 1). The proportion of restaurants has continued to increase in the CTC between 2011 and 2018, with over half of the region's restaurants located in the CTC (Table 2). Specifically, Stage 1 experienced an increase of 65 restaurants (or 19 per cent) during the time between 2011 and 2018.

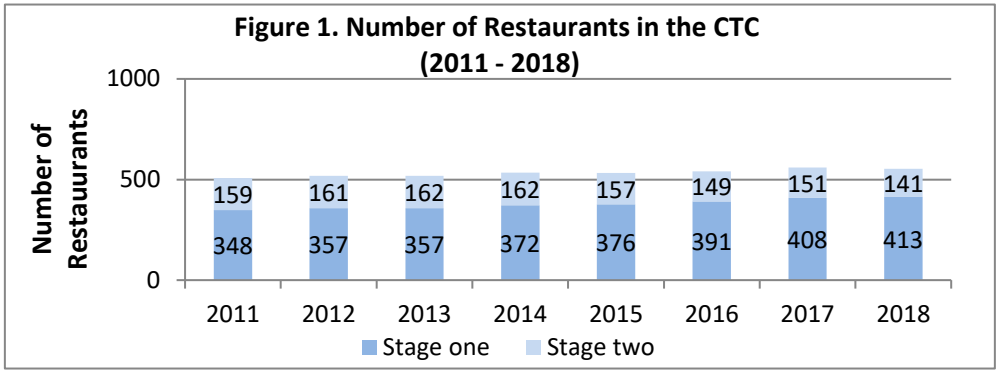
Table 1. Number of Restaurants (2011-2018)

| Year | Stage 1 | Stage 2 | CTC | Outside CTC | Region |
|---|---|---|---|---|---|
| 2011 | 348 | 159 | **507** | 499 | 1006 |
| 2012 | 357 | 161 | **518** | 496 | 1014 |
| 2013 | 357 | 162 | **519** | 486 | 1005 |
| 2014 | 372 | 162 | **534** | 499 | 1033 |
| 2015 | 376 | 157 | **533** | 500 | 1033 |
| 2016 | 391 | 149 | **540** | 498 | 1038 |
| 2017 | 408 | 151 | **559** | 477 | 1036 |
| 2018 | 413 | 141 | **554** | 480 | 1034 |
| Average Annual Percent Change | 2% | -2% | 1% | -1% | 0% |

Table 2. Distribution of Restaurants (2011-2018)

| Year | Stage 1 | Stage 2 | CTC | Outside CTC | Region |
|---|---|---|---|---|---|
| 2011 | 35% | 16% | **50%** | 50% | 100% |
| 2012 | 35% | 16% | **51%** | 49% | 100% |
| 2013 | 36% | 16% | **52%** | 48% | 100% |
| 2014 | 36% | 16% | **52%** | 48% | 100% |
| 2015 | 36% | 15% | **52%** | 48% | 100% |
| 2016 | 38% | 14% | **52%** | 48% | 100% |
| 2017 | 39% | 15% | **54%** | 46% | 100% |
| 2018 | 40% | 14% | **54%** | 46% | 100% |

The vibrancy of the CTC is reflected in the density of restaurants. The 2011 to 2018 data shows that number of restaurants reported to be operating within stage one has generally increased, despite the ongoing construction within the corridor (Figure 1).



### 3.2.4 Heritage: Heritage Resource Retention

**Seven built heritage structures were demolished in the CTC in 2018**

In 2018, seven demolitions took place in the CTC for structures built before 1920, two of which were for formally recognized structures (i.e., listed on the Municipal Heritage Register or designated under the Ontario Heritage Act) (Table 1). These two formally recognized structures were houses adjacent to the Schneider House museum, with the land to be used for programming for that National Historic Site.

Not included in the total number of demolitions were an additional five demolition permits that were issued for heritage structures that continued to remain standing at the time of monitoring in July 2019. Of these, four are located on Victoria St. N, and are part of a larger development located on Margaret Avenue.

A further eight demolition permits were issued for work internal to the structure and did not alter the outward appearance of the heritage structure. All together, permits issued for heritage structures for both the seven permits that resulted in complete demolition (Table 1), and the 13 permits that did not result complete demolition, represent 31 percent of all demolition permits issued for structures of all ages in the CTC.

Table 1. Number of Formally Recognized and Pre-1920 Heritage Buildings Demolished in 2018

| Year | Stage One | Stage Two | CTC | 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 |
| Total 2011-2018 | 112 | 9 | **121** | 16 |
| Total 1995-2011 | 66 | 15 | **81** | 23 |

Three demolitions of heritage structures occurred in Stage 1, and four were found within Stage 2. One of the demolitions in Stage 2 was to facilitate the relocation of an existing heritage structure to be incorporated into a townhouse development. Two commercial structures were demolished for the expansion of an existing business.

### 3.2.5 Investment: Building Activity

**$190 million in new building permits were issued within the CTC in 2018**

In 2018, building permit activity for new employment and residential uses within the CTC was estimated at $190.3 million, representing just over 20 percent of the new construction in Waterloo Region. Of the building activity[2] in the CTC, approximately $150 million in construction value was for 948 new residential units, which represented a third of the total 2923 residential units across the Region (Table 1). In the non-residential sector, $41 million was invested in industrial, commercial and institutional projects in the corridor creating nearly 160,000 square feet of new floor space, 9 per cent of the total new non-residential square feet across the Region. The total cumulative building permit value for both residential and non-residential uses from 2011 to 2018 is $2.5 billion (Figure 1).

Specifically in 2018, there were seven properties that had a building permit worth more than $10 million in the CTC. These new residential developments are a marker of continued intensified forms of housing within the CTC. This includes:

- $42.5 million permit for Circa 1877, a 19 storey condominium in Uptown Waterloo,
- $35 million permit for One Hundred Victoria, a 23 storey residential tower in Downtown Kitchener,
- $24 million permit for Barra on Queen, a six storey apartment building in Downtown Kitchener,
- over $40 million worth of permits to constuct four different student apartment buildings ranging from 6 storeys to 12 storeys in Waterloo's Northdale neighbourhood.

In 2018, the City of Kitchener's development charge exemption was still in effect, which provided an exemption from paying development charges in the core area of the city. The development charge exemption expired in February 2019. Due to the timing of this report, the increase in development activity seen in Downtown Kitchener in advance of the expiry date is not reflected in the 2018 numbers. However, the 2019 building activity numbers (to be published in next year's report) are expected to be substantially higher than previous years as it will include building permits received through the development charge exempt projects. The forcast for building activity in 2019 show over $700 million worth of permits issued in the CTC.

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

**Table 1. Residential Building Units from 2011 to 2018 in the CTC with Total Valued in Millions (Adjusted to 2011 dollars)**

| Residential | | | | | | |
|---|---|---|---|---|---|---|
| | Singles | Semi Detached | Townhouses | Apartments | **Annual Total Residential** | |
| Year | Units | Units | Units | Units | **Units** | **Value ($MM)** |
| **2011** | 13 | 1 | 44 | 1,147 | **1,205** | **$209** |
| **2012** | 12 | 7 | 179 | 623 | **821** | **$127** |
| **2013** | 11 | 6 | 48 | 624 | **689** | **$139** |
| **2014** | 10 | 6 | 92 | 1,623 | **1,731** | **$320** |
| **2015** | 5 | 2 | 50 | 1,096 | **1,153** | **$116** |
| **2016** | 6 | 5 | 55 | 1,793 | **1,859** | **$252** |
| **2017** | 13 | 3 | 26 | 1,076 | **1,118** | **$93** |
| **2018** | 16 | 16 | 69 | 847 | **948** | **$149** |
| **TOTAL** | **86** | **46** | **563** | **8,829** | **9,524** | **$1,405** |

**Table 2. Non-Residential Building Square Feet from 2011 to 2018 in the CTC with Total Valued in Millions (Adjusted to 2011 dollars)**

| Non- Residential | | | | | |
|---|---|---|---|---|---|
| | Commercial | Industrial | Institutional | **Annual Total Non Residential** | |
| Year | sq f | sq f | sq f | **sq f** | **Value ($MM)** |
| **2011** | 318,002 | 3,600 | 122,095 | **443,697** | **$282** |
| **2012** | 392,408 | 20,909 | 269,053 | **682,370** | **$135** |
| **2013** | 77,723 | 28,757 | 236,186 | **342,666** | **$88** |
| **2014** | 176,871 | 8,818 | 321,084 | **506,773** | **$228** |
| **2015** | 519,751 | 115,696 | 155,164 | **790,611** | **$143** |
| **2016** | 133,250 | 53,565 | 16,824 | **203,639** | **$57** |
| **2017** | 294,402 | 68,376 | 228,047 | **590,825** | **$129** |
| **2018** | 93,903 | 59,183 | 6,519 | **159,605** | **$41** |
| **TOTAL** | **2,006,310** | **358,904** | **1,354,972** | **3,720,186** | **$1,103** |

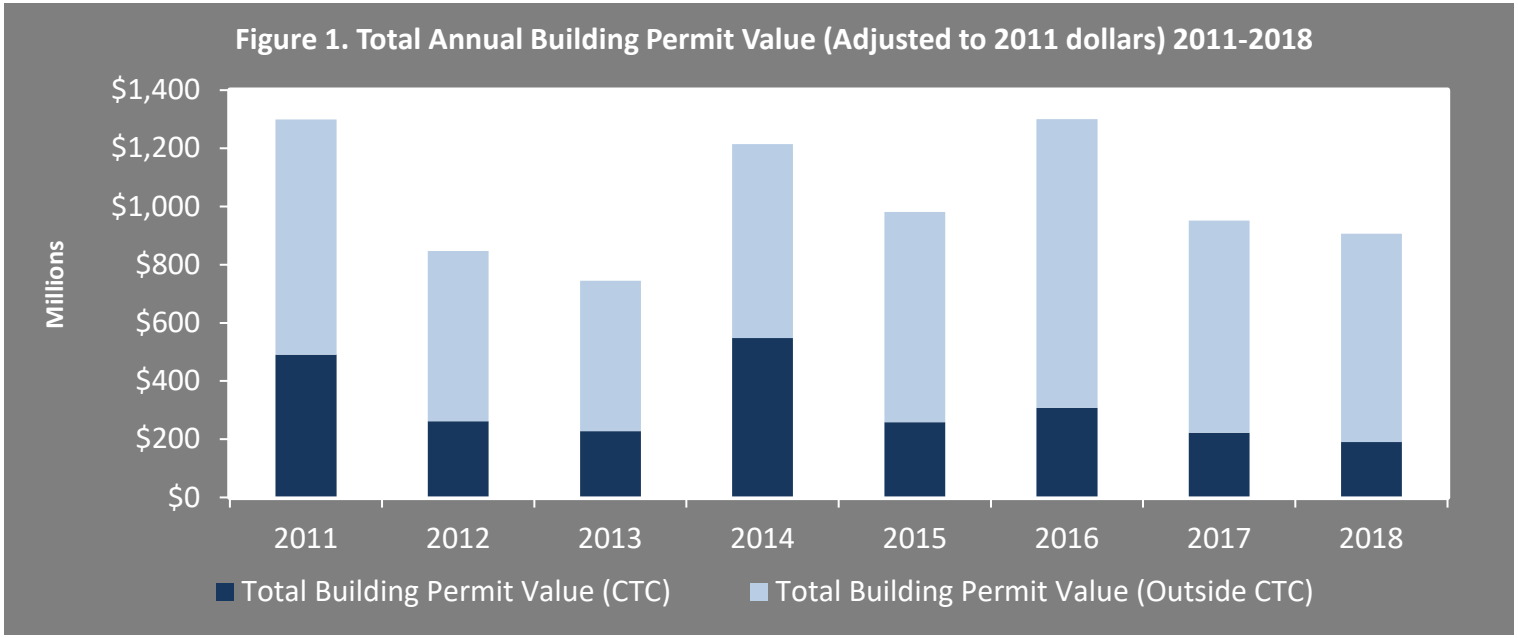



**Table 3.**

| Total Residential and Non-Residential Building Permit Activity ($ Millions) | | | | |
|---|---|---|---|---|
| Year | Stage 1 | Stage 2 | CTC | Region |
| **2011** | $428 | $63 | $491 | $1,300 |
| **2012** | $228 | $34 | $262 | $847 |
| **2013** | $211 | $16 | $227 | $745 |
| **2014** | $353 | $195 | $548 | $1,214 |
| **2015** | $231 | $28 | $259 | $981 |
| **2016** | $285 | $24 | $308 | $1,300 |
| **2017** | $178 | $44 | $222 | $951 |
| **2018** | $174 | $16 | $190 | $906 |
| **Total** | **$2,088** | **$421** | **$2,508** | **$8,245** |

### 3.2.6 Investment: Assessment Value

**$15.3 billion worth of assessed property value in the CTC in 2018**

Assessment values have been on the rise since 2011 in the CTC (Table 1). An increase in property assessment values in the CTC may indicate a relationship between the investment in ION and economic growth within the corridor. There have been a number of new high value and high quality developments as well as renovations of existing buildings, which is evident in the growth in assessment value from $10 billion in 2011 to $15.3 billion in 2018. This is an average annual increase of $755 million (6.4 per cent) 2011 to 2018 (Table 2). Growth in Stage 1 was strong; however, Stage 2 saw a slight decline in assessment value between 2017 and 2018. In part, this is due to resolution of multiple appeals, which resulted in a lower assessment evaluation in 2018 including some large commercial properties.

**Table 1. Assessment and Tax Revenue from 2011 to 2018 ($ millions)**

| Year | Stage One | | Stage Two | | CTC | | Outside CTC | | Region | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Assessment Value | Taxes Generated | Assessment Value | Taxes Generated | Assessment Value | Taxes Generated | Assessment Value | Taxes Generated | Assessment Value | Taxes Generated |
| 2011 | $6,901 | $89 | $3,082 | $45 | **$9,983** | **$134** | $44,331 | $489 | $54,314 | $623 |
| 2014 | $8,486 | $95 | $3,559 | $45 | **$12,045** | **$139** | $53,602 | $548 | $65,646 | $687 |
| 2015 | $9,030 | $105 | $3,720 | $51 | **$12,750** | **$155** | $56,351 | $582 | $69,102 | $737 |
| 2016 | $9,805 | $112 | $3,816 | $52 | **$13,621** | **$164** | $58,969 | $603 | $72,589 | $767 |
| 2017 | $10,710 | $122 | $3,991 | $54 | **$14,701** | **$176** | $61,829 | $627 | $76,530 | $803 |
| 2018 | $11,466 | $130 | $3,803 | $51 | **$15,269** | **$181** | $65,875 | $659 | $81,144 | $841 |

Municipal taxes (regional and area municipal) generated on properties within the CTC were estimated at $181 million in 2018. These taxes were 35.7 percent higher than in 2011, resulting in a yearly average rate of change of 4.5 per cent (Table 2). Stage 1 saw the highest growth in taxes generated between 2011 and 2018, increasing by 46 percent. This rate of increase significantly outpaces the 34.8 percent increase outside the CTC between 2011 and 2018.

| Table 2. Assessment and Tax Revenue Change from 2011 to 2018 | | | | | |
|---|---|---|---|---|---|
| **Scale** | | **Change from 2011 to 2018 ($ MM)** | **Per Cent Change** | **Average Annual Change** | **Average Annual Per Cent Change** |
| **Stage One** | **Assessment Value** | $4,565 | 66.1% | $652 | 7.7% |
| | **Taxes Generated** | $41 | 46.0% | $6 | 5.6% |
| **Stage Two** | **Assessment Value** | $721 | 23.4% | $103 | 3.2% |
| | **Taxes Generated** | $7 | 15.1% | $1 | 2.2% |
| **CTC** | **Assessment Value** | **$5,286** | **53.0%** | **$755** | **6.4%** |
| | **Taxes Generated** | **$48** | **35.7%** | **$7** | **4.5%** |
| **Outside CTC** | **Assessment Value** | $21,544 | 48.6% | $3,078 | 6.0% |
| | **Taxes Generated** | $170 | 34.8% | $24 | 4.4% |
| **Region** | **Assessment Value** | $26,831 | 49.4% | $3,833 | 6.1% |
| | **Taxes Generated** | $218 | 35.0% | $31 | 4.4% |

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/improved buildings (such as hospitals or municipal buildings) will not generate taxes due to their tax-exempt status. Of the $15.3 billion total assessment value in the CTC in 2018, $2.0 billion was on tax-exempt properties. Resultantly, this affects the taxes generated in the CTC as 13 percent of the assessed value comes from tax-exempt properties.

### 3.2.8 Crime and Safety: Perception of Safety

**58 per cent of people in Cambridge, Kitchener and Waterloo perceived that their downtown area was safe at night in 2018**

In 2018, 58 per cent of surveyed residents reported feeling safe in their downtown area when walking alone after dark (Table 1). Interestingly, the more often people visit the downtowns, the safer they feel. For example, of those who are downtown regularly, 82 per cent feel safe, even when walking alone after dark.

Comparing the results from 2018 with those from previous years is not recommended because of the differences in how the data were collected.[3] For example, the 2018 survey used different wording for the questions, adding the words 'walking alone' and 'crime,' and changing 'at night' to 'after dark'. Also, one of the answer options - what was previously labelled as "Somewhat Safe" was replaced with "Reasonably Safe". Interestingly, this category (level of perceived safety) reflected the biggest change across the years, which could mean that a part of the change in reported safety perceptions may be due to the difference in wording/methodology.

**Table 1. Perceptions of Safety in People's Downtowns**

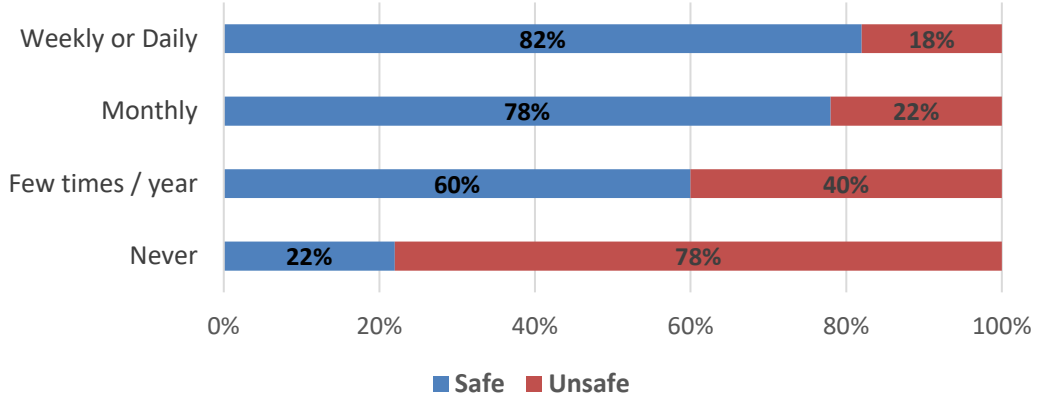
| Year | Very safe | Somewhat safe | Somewhat unsafe | Very unsafe | Source |
|---|---|---|---|---|---|
| **In thinking about your feelings of safety in your downtown area at night, how do you feel?** | | | | | |
| **2011** | 19.2% | 45.8% | 25.0% | 10.1% | WRAS |
| **2017** | 15.0% | 47.4% | 28.0% | 9.6% | WRAS |
| **How safe do you feel from crime walking alone after dark in your downtown area?** | | | | | |
| **2018** | 19.5% | 38.9% | 26.7% | 14.9% | CIW |

Note: WRAS = Waterloo Region Area Survey ; CIW = Canadian Index of Wellbeing

The 2018 findings show a statistically significant relationship between perceptions of safety and the frequency of visiting the downtown area at night (the same relationship was also identified in 2017). Overall, individuals who reported visiting the downtown at night more frequently tended to report feeling safer than individuals who reported visiting the downtown at night less frequently (Figure 1). Eighty-two per cent of the individuals who said they visited their downtown after dark either weekly or daily reported feeling (very or reasonably) safe being there after dark. Conversely, 78 per cent of the individuals who said they never visited their downtown after dark perceived that being there after dark was (very or somewhat) unsafe.

[3] further differences in data collection are outlined on page 53

**Figure 1. Perceptions of Safety in the Downtown at Night based on Frequency of Visits to Downtown at Night**




The exact nature of the above relationship and what is driving it is not necessarily clear. It could be that the behaviour of visiting the downtown at night is shaping people's perceptions of safety or vice versa (or both scenarios could be occurring). For example, if someone perceives their downtown to be unsafe at night, they may choose to never go there at night as a result. At the same time, perceptions of safety among the individuals who never visit their downtown at night may be less realistic in nature as these individuals may not be fully aware of the present conditions in the downtown or any changes that have taken place.

Individuals who visit their downtown more frequently at night may be more familiar with the downtown environment and, consequently, feel more comfortable in terms of their perceived safety. These individuals may also be more aware of the changes that have taken place in their downtown and this awareness may be positively influencing their perceptions of safety. This line of reasoning would suggest that the more people are attracted to visit their downtown at night the more their perceptions of safety may be increased. Overall, the link between frequency of visiting the downtown at night and perceptions of safety appears to be noteworthy and it may be a worthwhile consideration for the recently mandated community safety and wellbeing planning work being done at the municipal level.

### 3.2.9 Crime and Safety: Police Calls for Service

**45 per cent of police calls for service related to potential public perception of safety occurred within the CTC in 2017**[4]

More than 49,111 calls for police service occurred within Waterloo Region that were identified as being related to public perception of safety. Of those calls, 22,146 occurred within the CTC, which represents 45 percent of the Regional total (Table 1). The proportion of calls within the CTC has climbed from 40 percent to 45 percent between 2011 and 2017. Examples of calls for service that are related to public perception of safety are graffiti, intoxicated person, or break and enter. Appendix D contains the full subset of police calls for service that are included for this analysis.

Police calls for service do not necessarily represent actual criminal activity; 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.

**Table 1. Percentage of Police Calls for Service Related to Potential Public Perception**

| | CTC | | Outside CTC | | Region |
|---|---|---|---|---|---|
| **Year** | Number of Calls | % in CTC | Number of Calls | % Outside CTC | Number of Calls |
| **2011** | 17,024 | 40% | 25,400 | 60% | 42,423 |
| **2012** | 17,549 | 41% | 25,299 | 59% | 42,847 |
| **2013** | 17,601 | 43% | 23,738 | 57% | 41,339 |
| **2014** | 17,447 | 43% | 23,562 | 57% | 41,009 |
| **2015** | 19,097 | 42% | 25,908 | 58% | 45,004 |
| **2016** | 20,724 | 43% | 27,049 | 57% | 47,773 |
| **2017** | 22,146 | 45% | 26,965 | 55% | 49,111 |
| **Average Annual Change %** | **4.6%** | | **1.1%** | | **2.6%** |

The number of selected calls for service made within the CTC has been relatively consistent, experiencing an increase since 2011 of 4.6 per cent annually; however, it remains consistently less than half of all the calls made within the Region. Of the five fastest growing citizen generated call types (by number of calls), four are included in the subset of call types monitored in this indicator. The increases in the selected calls for service within the CTC may be due to a variety of factors: population growth, changes in police procedures, and increases in citizen engagement and

[4] 2017 was the most recent year for which data was available at the time of the writing of this report

reporting. On a per capita basis, there were 20.7 calls per 100 people living in the CTC in 2017 (Table 2). This has been relatively consistent, increasing by about 2.8 per cent per year since 2011.

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

| | CTC | | | Outside CTC | | | Region | | |
|---|---|---|---|---|---|---|---|---|---|
| **Year** | Number of Calls | Calls per 100 people | Population | Number of Calls | Calls per 100 people | Population | Number of Calls | Calls per 100 people | Population |
| **2011** | 17,024 | 17.6 | 96,707 | 25,400 | 5.6 | 454,929 | 42,423 | 7.7 | 551,636 |
| **2012** | 17,549 | 18.3 | 95,964 | 25,299 | 5.5 | 460,936 | 42,847 | 7.7 | 556,900 |
| **2013** | 17,601 | 17.9 | 98,329 | 23,738 | 5.1 | 464,671 | 41,339 | 7.3 | 563,000 |
| **2014** | 17,447 | 17.5 | 99,774 | 23,562 | 5.0 | 469,226 | 41,009 | 7.2 | 569,000 |
| **2015** | 19,097 | 18.8 | 101,404 | 25,908 | 5.5 | 473,296 | 45,004 | 7.8 | 574,700 |
| **2016** | 20,724 | 20.0 | 103,529 | 27,049 | 5.6 | 479,971 | 47,773 | 8.2 | 583,500 |
| **2017** | 22,146 | 20.7 | 107,045 | 26,965 | 5.5 | 487,056 | 49,111 | 8.3 | 594,100 |
| **Average Annual Change %** | **4.6%** | **2.8%** | **1.7%** | **1.1%** | **0.0%** | **1.1%** | **2.6%** | **1.3%** | **1.2%** |

For 2017, 'calls for service' data were further examined for each occurrence type. An occurrence type is the recorded incidence for each call that is made and remains as an attribute associated with the call. The number of calls for each type has been identified for each reported year (2011-2017) to display trends of call types in Stage 1 and Stage 2 of the CTC as well as outside the CTC. One particular call type identified as trending upward is Unwanted Person. Within Stage 1, there were 1,475 calls in 2011 and 3,911 in 2017 (165 per cent increase) and in Stage 2, an increase from 492 in 2011 to 1,852 in 2017 (276 per cent increase). Unwanted Person calls outside the CTC experienced a similar increase, from 1,689 in 2011 to 3,478 in 2017 (105 per cent increase).

It should be noted that a single call might encompass several incidents. Communicators do categorize the most appropriate initial call type for each dispatch based on the information made available. Officers who are involved in a call are responsible for closing the call with the most appropriate occurrence type. The relevant and critical information about the involved persons and the situation goes into the report so it is captured, however this is usually under one occurrence and one occurrence type. Due to how the occurrence is captured, there may be some variation in the types being reported.

## 4.0 Inclusive Community: Affordability

The theme explored in the 2017 CTC Monitoring Report was 'Housing Affordability'. Several indicators were developed to illustrate housing affordability within the corridor and broad perspectives of gentrification and displacement were discussed. One of the conclusions presented to Regional Council was the need for continuing monitoring of affordability in the CTC given the importance and interest in the subject. This was further supported by regional initiatives that were forthcoming including: the 10-year Housing and Homelessness Plan Update; the new Affordable Housing Strategy for 2020; and the work of Wellbeing Waterloo Region which identified affordable housing as a priority area for the Region. Accordingly, the indicators measured as part of the 2017 theme have been updated for 2018 and are presented in this section along with the annual housing affordability indicator of Home Ownership Affordability.

### 4.1 Inclusive Communities: Home Ownership Affordability Indicator

**38 per cent of the housing transactions were affordable to low and moderate-income households within the CTC in 2018.**

In 2018, there were 1,012 residential resale transactions within the CTC, with 38 percent (389 transactions) at a price below the affordability cut-off[5] while 62 percent (623 transactions) exceeded the cut-off of $350,200 (Table 1). The number of transactions below the threshold had remained relatively stable in the CTC from 2011 to 2015, however, by 2017, upward pressure in the housing market decreased the number of affordable transactions both inside the corridor and across the region. The 2018 analysis shows improvements to affordability when compared to 2017, but compared to the historical trend, it is still significantly less affordable than previous years.

**Table 1. Residential Units Under the Affordability Cut-off (resale transactions over $10,000)**

| Year | Affordability Cut-off | Number of Affordable Transactions | | | | Number of Transactions | | | | % of Transactions Below Cut-off | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Stage 1 | Stage 2 | **CTC** | Region | Stage 1 | Stage 2 | **CTC** | Region | CTC | Region |
| 2011 | $263,349 | 202 | 156 | **358** | 2,364 | 373 | 282 | **655** | 6,209 | 55% | 38% |
| 2012 | $270,967 | 240 | 139 | **379** | 2,322 | 442 | 233 | **675** | 6,296 | 56% | 37% |
| 2013 | $281,678 | 195 | 141 | **336** | 2,416 | 384 | 256 | **640** | 6,421 | 53% | 38% |
| 2014 | $290,778 | 202 | 154 | **356** | 2,289 | 397 | 268 | **665** | 6,354 | 54% | 36% |
| 2015 | $300,857 | 216 | 176 | **392** | 2,384 | 409 | 284 | **693** | 6,883 | 57% | 35% |
| 2016 | $337,035 | 247 | 205 | **452** | 2,727 | 481 | 319 | **800** | 7,532 | 57% | 36% |
| 2017 | $349,500 | 128 | 131 | **259** | 1,218 | 478 | 318 | **796** | 7,890 | 33% | 15% |
| 2018 | $350,200 | 228 | 161 | **389** | 1,525 | 615 | 397 | **1,012** | 7,379 | 38% | 21% |

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

Although transactions have become increasingly unaffordable over the past two years, the data shows that, in general, housing is still more affordable in the CTC when compared to outside the CTC as shown in Figure 2, with 38 percent of transactions within the CTC being deemed affordable for low to moderate-income earners, and only 21 percent of transactions being affordable outside the CTC.

The relative stability of the number of affordable transactions in the CTC until 2016 suggests that low and moderate-income households have been able to obtain affordable home ownership within the CTC. The increase though in the number of transactions in the CTC that are 'unaffordable' especially between 2016 and 2018 may represent that it is becoming increasingly difficult for low-to-moderate income households to secure affordable housing and that 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.

**Figure 2. Affordable home ownership transactions for low- to moderate- income earners**

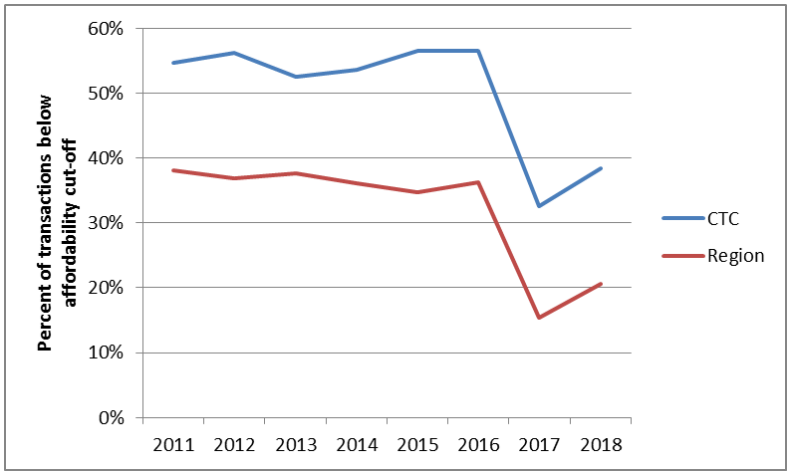



Table 2. Median Resale Transaction ($) Values from 2011 to 2018

| Year | Median Transaction Value ($) | | | | |
|---|---|---|---|---|---|
| | Stage 1 | Stage 2 | CTC | Outside CTC | Region |
| 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 |

There were more transactions in general in Stage 1 (615) than in Stage 2 (397) which is not surprising given the amount of residential investment occurring in Stage 1 compared to Stage 2, however a greater percentage of transactions were affordable in Stage 2 (41 per cent) than in Stage 1 (38 per cent). In 2018, the median residential unit transaction value of $385,000 within stage one was over the affordability cut-off by $34,800(Table 2). In Stage 2, the median transaction value of $370,000 was $19,800 more than the affordability cut-off. A median transaction value of $459,900 was found outside the CTC, which is $109,700 (31 per cent) higher than the affordability cut-off.

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

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 892 condo units sold in the Region in 2018, forty per cent (340 units) were located in the CTC, and of the singles sold in the Region, only 11 per cent were in the CTC. This housing mix explains, in part, the greater affordability in the CTC compared to the Region as a whole. However, when looking at single detached homes specifically, of all singles sold within the CTC, 20 percent were considered affordable. This is compared to only 6 percent of singles being considered affordable across the region as a whole. This tells us that the CTC remains more affordable when compared with the region as a whole.

### 4.2 Inclusive Community: Supply of Community Housing

**2,701 Community Housing units were located within the CTC in 2018.**

In 2018, there were 2,701 Community Housing units located within the CTC and this supply has remained relatively stable since 2011. Since the LRT announcement in 2011, to the end of 2018, there has been a net gain of 257 units of Community Housing in Waterloo Region and 75 of them (30 per cent) have been in the CTC.

**Table 1. Number of Community Housing Units**

| Year | Total in the CTC | Per cent in the CTC | Total not in the CTC | Per not in the CTC |
|---|---|---|---|---|
| Pre-2011 | **2,626** | **29.8%** | 6,189 | 70.2% |
| 2011 | **2,687** | **30.0%** | 6,258 | 70.0% |
| 2012 | **2,610** | **29.4%** | 6,260 | 70.6% |
| 2013 | **2,631** | **29.6%** | 6,265 | 70.4% |
| 2014 | **2,631** | **29.4%** | 6,305 | 70.6% |
| 2015 | **2,633** | **29.5%** | 6,305 | 70.5% |
| 2016 | **2,645** | **29.7%** | 6,259 | 70.3% |
| 2017 | **2,645** | **29.5%** | 6,306 | 70.5% |
| 2018 | **2,701** | **29.8%** | 6,371 | 70.2% |

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

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

### 4.3 Inclusive Community: Households receiving rent assistance and living in the CTC

**57 per cent of households receiving rent assistance found housing in the CTC in 2018.**

The Region provides flexible rent assistance for up to 100 households through the Housing Assistance With Supports (HAWS) program. The focus for this rent assistance program is to house those who are, or are at risk of becoming chronically homeless. Participants, with the help of their support workers, are required to find housing in the private rental market for which they will receive a monthly allowance. Rental units are only eligible if they are below a certain threshold.

**Table 1. Number of HAWS households in September 2018**

| | HAWS households | Per cent of HAWS households |
|---|---|---|
| **Stage one** | 37 | 39% |
| **Stage two** | 18 | 19% |
| **Total in CTC** | 55 | 57% |
| **Total Outside CTC** | 41 | 43% |
| **Total in Region** | 96 | 100% |

**Table 2. Location of HAWS Households since the program began in 2015**

| | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| **Stage one** | 44% | 54% | 40% | 39% |
| **Stage two** | 6% | 6% | 16% | 19% |
| **Total in CTC** | 50% | 60% | 56% | 57% |
| **Total Outside CTC** | 50% | 40% | 44% | 43% |
| **Total in Region** | 100% | 100% | 100% | 100% |

Since the program began, in 2015, there has been a 7% increase in the percent of people able to find housing within the CTC. This has remained relatively consistent over the program's duration, indicating that households can continue to find housing in the CTC that is affordable under the terms of this program.

Currently, participants were able to find rental accommodation below the threshold within the CTC 55 out of 96 times. With increasing costs for rental housing across the Region in 2018, it will be interesting to continue to track this over time to see if program participants continue to be able to find rental units within the CTC – as participants change over time and if a potential expansion to the program occurs. Although this is currently just a sample of 96, it represents the most vulnerable population when it comes to housing stability.

## 5. Monitoring Urban Vibrancy in the Central Transit Corridor

Each year, the CTC monitoring program focuses on an area of interest and explores that area through the development of additional indicators. This year, the theme is *Urban Vibrancy*. The term urban vibrancy is an overarching theme and has a broad scope for interpretation. For the purposes of this report, the analysis is based on the following definitions of urban vibrancy that have been derived from academic literature, each with a different perspective on the term:

- "The capacity of an urban built environment to increase lively social activities as measured by different dimensions including the built environment, human activities, and human–environment interaction" (Montgomery, 1998, 3, 93–116.).
- "The degree to which the form of a settlement supports the vital functions, biological requirements, and capabilities of human beings" (Lynch, 1984 p. 514).
- "The continuous presence of people in streets and public spaces, their activities and opportunities, and the environment within which these activities occur" (Maas, 1984).

Each definition is supplemented with a related framing question which was then used to derive specific indicators. The framing questions and their respective indicators are listed below:

| **Framing Question:** | **Indicators** |
|---|---|
| Are changes to the built environment within the CTC contributing to more opportunities for human-environment interaction? | Surface Parking Area<br>Vacant Land Area |
| Have social activities and opportunities for human interaction increased in the CTC thereby increasing urban vitality? | Event Attendance |
| Are there services, functions and housing opportunities available for a diversity of household formations within the CTC? | Number of Food Stores<br>Number of families |

Since the announcement of ION in 2011, population growth and building investment in the corridor have outpaced the Region as a whole. As a result, more people and jobs are moving into the core. With these changes in population and investment, our streetscapes are evolving. New buildings are going up, which are changing the landscape. Previous surface parking and vacant lots are transforming into vibrant new places for

people to live and work. These shifts, however, raise the questions about how demographics in the corridor may be changing. The predominant form of housing currently being built in the corridor is viewed as being oriented to young singles and empty nesters. Resultantly, there are questions about available accommodations that can support a family. Families are an important indication of vibrancy, as the services desired by families (daycares, parks, schools) add to the life and culture of urban areas.

Vibrant urban centres often have events, activities, or festivals that offer entertainment for people who live in the region. Tracking event attendance in the CTC can help us understand whether the CTC is a vibrant place in terms of entertainment and street activity.

Lastly, people's access to grocery stores is an important part of a complete and vibrant community. Food is an essential aspect of human life. Without access to food establishments, a city becomes less livable and less attractive. With more people moving into areas that have historically been places of employment, it is important to track the number of food stores as an indication of a vibrant urban community.

It is important to note that the themed indicators were developed using an iterative process in which each indicator was chosen on its ability to meet a specific criteria. The criteria includes the relevance to the ION, reliable data sources, scalability, and relevance to the public.

**Measuring Urban Vibrancy: Changes in Surface Parking Lots**

Surface parking in urban areas have a number of negative impacts on cultural vibrancy and the pedestrian realm. Pedestrian activity in downtown centres decreases as the number of open parking spaces increase (Ewing, 1999). This is due to the creation of 'dead space' and the lack of enclosure that parking lots generate (Ewing & Handy, 2009). Dead space refers to the lack of interest and inactivity in an urban streetscape that is caused when there are breaks in the continuity of active frontages (Ewing & Handy, 2009). Parking lots take away the space to have consumer destinations. This means that surface parking lots represent an untapped potential for a downtown to become more economically and culturally vibrant through the provision of more businesses and destinations (Ahmed, 2017). More dense urban areas with limited amounts of surface parking encourage more people to walk or take transit, which, in turn, creates a more compact, vibrant, and lively urban setting (Betanzo, 2007).

Primarily consisting of asphalt, urban surface parking lots contribute to the urban heat island effect (Mohajerani, Bakaric, & Bailey, 2017). Dark asphalt with limited tree canopy cover absorbs solar radiation and can increase the local temperature significantly, which can deter pedestrian traffic on hot summer days. Further, parking lots contribute to the absence of urban street trees, which are known to have multiple benefits for the pedestrian experience in urban areas. These benefits include improved air quality, reduced urban heat island effects, and can contribute to the sense of scale and sense of place (Galenieks, 2017).

Enclosure is an important concept when it relates to increasing pedestrian activity in urban centres (Ewing &Handy, 2009). Specifically, enclosure refers to the perceptions of the human eye and the height to width ratio of a space. An average height to width ratio that is attractive to pedestrians is 1:3; however, closer to 1:1 is better (Ewing & Handy, 2009). In a general sense, this means that building façades should create a

continuous frontage punctuated by store entrances and windows to create a visually defined space (Ewing & Handy, 2009). Surface parking lots can create height to width ratios that do the contrary, which leaves pedestrians without a sense of position and a reduced sense of safety (Ewing & Handy, 2009). In summary, parking lots reduce the sense of enclosure experienced by pedestrians, which creates an unfavourable and unattractive environment for people. Parking lots can also increase the urban heat island effect, making urban areas more hostile to pedestrians. Removing surface parking in exchange for development is a positive sign in creating a more culturally vibrant community. This has taken place across many sites in the region including 345 King St. W in downtown Kitchener, which was previously a parking lot, and is now going to be a six-storey office building. Other sites include 85 Duke St. W (Kitchener), and 85 Willis Way (Waterloo), both of which replaced a surface parking lot with intensified uses.

**Measuring Urban Vibrancy: Vacant Land**

Vacant urban land can have many impacts for people that can affect the vibrancy of urban areas. Vacant land is known to attract criminal activity, which can deter people from visiting certain areas with high amounts of vacancy (Garvin et. al., 2013). Emotions of stress and anxiety can also be felt when people live near or travel nearby vacant land, which overshadow other positive aspects of the community (Garvin et al., 2013). Further, the negative appearance of vacant land in an urban setting can create a perception of economic deterioration, which, in turn, can escalate the perceived risk for developers and reduce building investment (Balsas, 2004). A vibrant urban centre will contain an assortment of different uses and activities that are intended to attract people (Balsas, 2004). In the CTC, these uses include employment, residential and retail. Vacancy in any one of these uses can impact the vibrancy of an urban core.

**Measuring Urban Vibrancy: Event Attendance**

A closely related topic and indication of urban vibrancy is urban vitality. Montgomery (1998) refers to urban vitality as the "…number of people in and around the street across different times of the day and night, the uptake of facilities, the number of cultural events and celebrations over the year, the presence of an active street life, and generally the extent to which a place feels alive or lively (p. 97 Montgomery, 1998)." This report does not touch on all of the aforementioned criteria; however, it does track the number of events in the CTC.

Our cultural traditions and celebrations are often presented as public events where there are opportunities for social gathering, commercial exchange and street life activity (McClinchey, 2008). Public events help to draw people together and are an important aspect of the social fabric and vibrancy of urban life. A goal of urban planning policy to attract people to visit core areas at all hours of the day (Montgomery, 1995). The economic and social vitality of cities can be enhanced when there is more activity in urban areas at all hours of the day, specifically during nighttime hours (Montgomery, 1995). Events are a means to attract people to urban areas at times when they are most empty. They give people a reason to visit the core and spend time and money when they originally would not have (Montgomery, 1995).

Rapid transit provides an opportunity for a mass of people to travel to, and attend events taking place within the CTC. More people at these events can help stimulate the local economy and provide a lively urban setting. Therefore, with the implementation of ION, it is important to see whether transit can be used as a tool to bring more people to urban events by tracking the attendance events in the CTC.

**Measuring Urban Vibrancy: Number of Food Stores**

Downtown grocery stores are seen as a means to attract people to live downtown (Balsas, 2014). As food is a necessary part of survival, having a grocery store that is convenient to access is highly desirable when considering a place to reside. The literature suggests residential population is the most important consideration for a grocery store to justify opening a store (Berg & Murdoch, 2008). Historically, the primary function of the core area of a city was for employment. Now, especially in Kitchener and Waterloo, we are seeing a rise in population in the core. Presumably, with an influx of people moving into an area that was previously predominantly employment, we may see the number and concentration of grocery stores change across the CTC. However, currently, there are certain areas within the CTC that are not conveniently served by a grocery store, including downtown Kitchener. The lack of urban grocery stores impacts marginalized populations the most, as they are forced to purchase food at small scale variety stores, where healthy selection is limited and prices are high (Nayga & Weinberg, 1999). Therefore, grocery stores are a key aspect of an inclusive and complete community. Grocery stores also provide investment, wellbeing, and increase neighbourhood quality (Berg & Murdoch, 2008).

Larson and Gilliand conducted a geographic analysis of urban food stores in London, Ontario between 1961 and 2005. The study shows a dramatic shift in grocery stores moving away from the core of the city (in 1961) towards the urban periphery (in 2005) (Larson & Gilliand, 2008). The study shows that people who lived in the core of London in 1961 were better served by grocery stores than in 2005 (Larson & Gilliand, 2008). London and Kitchener both face the challenge of attracting a downtown grocery retailer. The reality is that the population density has to increase before grocery retailers will justify setting up an operation in the urban core of a mid-sized city (Larson & Gilliand, 2008).

**Measuring Urban Vibrancy: Number of Families**

*"Children are a kind of indicator species. If we can build a successful city for children, we will have a successful city for all people." — Enrique Peñalosa, Mayor of Bogotá*

Children, which represent a significant proportion of urban dwellers, are an important aspect in making urban areas diverse and vibrant (Torres, 2009). The needs for children differ from the needs of adults, resulting in more diverse businesses and services that cater to the younger population. Schools, parks, daycares, sports facilities, community centres, are all important services that play a role in shaping the lives of children. Without these services, urban centres become more homogeneous and serve the needs of a narrow demographic, reducing the draw for people to live downtown. More children will result in increased investment into public schools, parks, and other public facilities that families desire (Egan,

2005). A reduced child population in urban centres could create an unsustainable situation by failing to replace an aging population. This can weaken the long-term social and economic sustainability of urban centres (Eagan, 2005).

Further, children are products of the environment in which they grow up (Torres, 2009). As children grow up within their community, they will build connections and memories with the people and places that surround them (Torres, 2009). Therefore, children growing up within the CTC today will likely be more inclined to walk or take transit in their adult years as people around them begin to shift their mode of transportation. "…the mobility of young people is above all influenced by their parents" (Torres, 2009 p.8).

In today's context, we are aware of the important role that children and families play in the development of our cities; however, the decisions we make rarely consider the child's perspective. Toronto is currently facing this reality as the downtown condominium boom has largely resulted in small one and two bedroom condos unsuitable for raising a family (Willcocks, 2011). Toronto has realized the impacts of excluding the family population from new developments in the downtown, which has encouraged the city to amend their official plan policies in order to attract larger – family friendly condo units (Willcocks, 2011). Although Waterloo Region is not experiencing the volume of condominium development that Toronto has seen, there is still concern that the types of housing units being constructed in the CTC are not conducive to raising a family.

**5.1 Change in the area of vacant land in the CTC**

**Indicator: 26 hectares of vacant land has been repurposed in the CTC between 2011 and 2018**

**Importance:**
Vacant land in an urban setting can impact the vibrancy of the surrounding area. From the lost opportunity to generate a destination, to the missed economic benefits, to crime and safety, vacant land can negatively affect urban vitality from many perspectives. From a streetscape and pedestrian experience perspective, vacant land can obstruct streetscape continuity and can be a target for criminal activity. As vacant parcels develop into buildings, it can help to activate street frontages, attract people and jobs, and make the CTC a more vibrant and desirable place to live and visit.

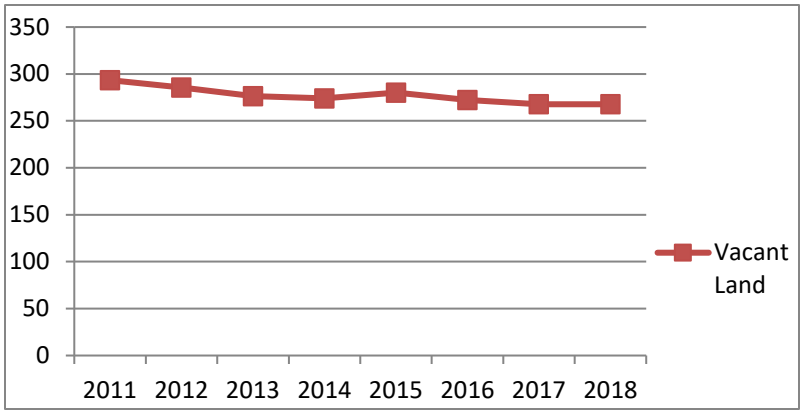
**Results:**
Between 2011 and 2018, the CTC has seen a net decrease of 63 acres of vacant properties. To put that number into perspective, 63 acres is approximately the area of 50 football fields. The change in vacant land represents properties that were previously free of any use or structure, to properties that have a structure, or have been converted into useable land, such as a park or parking lot. Through the development process, a number of parcels that were once occupied are now considered vacant, as they wait for the re-development to be approved. For example, single detached homes in Northdale were purchased, demolished, and remained vacant for a period to make way for student-oriented apartments.

**Analysis:**
Since 2011, the CTC has seen a trend of reducing vacant land, as shown in Figure 1. Large properties that were previously vacant in 2011 but have since been redeveloped include the Waterloo Region Court House (85 Frederick St. Kitchener), the School of Pharmacy (King and Victoria) in Kitchener, and the CIGI campus (Erb and Caroline streets) in Waterloo. In Cambridge, a large parcel at Hespeler Road and the Can-Amera Parkway was vacant in 2011 and has since been redeveloped into a retirement home.

Table 1. Vacant parcels and land area in the CTC

| Year | Number of Vacant Parcels | Acres | Ha |
|---|---|---|---|
| 2011 | 684 | 725 | 293 |
| 2012 | 761 | 705 | 285 |
| 2013 | 711 | 683 | 276 |
| 2014 | 701 | 677 | 274 |
| 2015 | 649 | 692 | 280 |
| 2016 | 622 | 673 | 272 |
| 2017 | 638 | 662 | 268 |
| 2018 | 638 | 662 | 268 |
| % change 2011-2018 | -7% | -9% | -9% |
| Total Change | -46 | -63 | -26 |

Figure 1. Vacant land in the CTC (Ha)



**Methodology:**
This report used data provided by MPAC (Municipal Property Assessment Corporation), which assesses over 5 million properties in Ontario. MPAC assesses individual properties and assigns a code according to the use of the property. In total, MPAC has seven different codes for vacant land, each varying slightly in the definition of vacant. For the vacant land analysis, properties that were coded with any of the seven “vacant” property codes were then selected and analyzed using GIS.

### 5.2 Changes in the amount of surface parking in the CTC

**Indicator: Surface parking declined by 10 hectares between 2012 and 2018**

**Importance:**
Surface parking in urban areas have a number of impacts on urban vibrancy and the pedestrian realm. Pedestrian activity in downtown centres decreases as the land dedicated to parking increases. This is due to the creation of 'dead space' and the lack of enclosure that parking lots generate. Although the function of parking is an important aspect of bringing people into the corridor, too much surface parking can take away from the vibrancy and attractiveness of an urban centre.

Surface parking lots contribute to the urban heat island effect, a phenomenon known to inflate temperatures in urban areas due to high amounts of asphalt. Increased temperatures in urban areas can deter pedestrian activity. Further, parking lots contribute to the absence of urban street trees, which are known to have multiple benefits for the pedestrian experience in urban areas. These benefits include improved air quality, reduced urban heat island effects, and can contribute to an increased sense of scale and sense of place (Galenieks, 2017). It is important to recognize that with increased investment in transportation, including ION and active transportation projects, the need for car access to the CTC is anticipated to decrease.

**Results:**
Between 2012 and 2018, the CTC has seen decrease of 10 hectares of surface parking lots. In 2012, the CTC had 543 Ha of surface parking lots, that number has declined to 533 in 2018. Intensification and an evolving economy are the main explanations for the decline in the number and size of surface parking lots in the CTC. In general, more parking lots are being converted to other uses in downtown Kitchener and Uptown Waterloo. However, the industrial lands south of downtown Kitchener have also seen significant changes in surface parking.

**Table 1. Total land area dedicated to surface parking in the CTC (Hectares)**

| Year | Stage 1 | Stage 2 | CTC |
|---|---|---|---|
| **2012** | 330 | 213 | **543** |
| **2018** | 323 | 210 | **533** |
| **Change from 2012** | **-7** | **-3** | **-10** |
| **Percent Change** | **-2%** | **-1%** | **-2%** |

Other areas, however, have seen an increase in parking lots. These areas include parts around the Northfield Station and Research and Technology Park, where office development has increased the surface parking capacity. That said, overall the CTC has lost the equivalent of 20 football fields of surface parking.

**Table 2. Change in surface parking in Urban Growth Centres (Ha)**

| Year | Stage 1 UGC's | Stage 2 UGC |
|---|---|---|
| **2012** | 35.5 | 7.7 |
| **2018** | 32.4 | 7.8 |
| **Change from 2012** | **-3.1** | **0.1** |
| **Percent Change** | **-9%** | **1%** |

Table 2 shows the change in surface parking lots specifically in the downtown cores of Waterloo, Kitchener, and Cambridge as delineated by the Urban Growth Centre boundaries developed for the Places to Grow Act. Downtown Kitchener has seen the sharpest decrease of surface parking, down 2.3 Ha from 2012. Waterloo has dropped by 0.8 Ha, while Cambridge has remained stable over the same period.

**Analysis:**

Surface parking lots captured in this indicator include both publicly owned and private lots, as well as lots used for commercial purposes such as car dealers and auto wreckers. It should be noted that although we have seen a decrease in surface parking spots, there are many instances where the amount of total parking spaces have increased due to new underground or structure parking. For example, the City Centre Condos in Downtown Kitchener removed a surface parking lot to facilitate the development of a condo tower with multiple levels of underground parking. Other examples where surface parking has been removed and sub-surface parking added include the Arrow Lofts site and Willis Way in Waterloo. These developments have contributed to vibrancy in the CTC as they have provided more space for people to live and work, and have increased the active retail frontage in the core. The Kitchener Library parking lot is another example where surface parking was removed and converted to underground parking with a result of enhancing vibrancy. The lot was reduced to half its size in 2012, the other half was turned into a grass field as an extension of the Civic Centre Park, which is now used for recreation.

**Methodology:**

The surface parking analysis for this report was completed using a variety of data sources. Municipally owned lots (obtained through local municipal open data portals) were used in conjunction with commercial parking lot property codes obtained from the Municipal Property Assessment Corporation (MPAC). Manual digitization using 2012 and 2018 aerial imagery was completed to add parking on private property such as shopping centres, private businesses, residences (apartment buildings), and auto related businesses. Prior to 2014, Regional aerial imagery was captured on a two-year interval; therefore, 2012 was used as the baseline year for this indicator as there was no imagery captured for 2011.

### 5.3 Access to Food Stores

**Indicator: 28 food stores were located in the CTC in 2019**

**Importance:**
Grocery stores are a key aspect of an inclusive and complete community. Grocery stores also provide investment, wellbeing, and increase neighbourhood quality. Historically, the primary function of the core area of a city was for employment. Now, especially in Kitchener and Waterloo, there is a rising population in the core areas. Presumably, with an influx of people moving into an area that was previously employment, the number and concentration of grocery stores may change across the CTC. However, currently, there are certain areas within the CTC that are not conveniently served by a grocery store, including downtown Kitchener, the University of Waterloo Station area, and Preston. The lack of urban grocery stores impacts marginalized populations the most, as they are forced to purchase food at small scale variety stores, where healthy selection is limited and prices are high. As food is a necessary part of survival, having a grocery store that is convenient to access is an important aspect of having a complete and vibrant community.

**Results:**
In 2019, the CTC had a total of 28 grocery and specialty stores, 19 of which were located in Stage 1, and nine located in Stage 2. All food stores in the CTC (including grocery/specialty food stores, variety stores and farmers market vendors) total 286, which accounts for approximately 40 percent of the Region's food retailers.

**Table 1. Number of food stores in the CTC in 2019**

| Store Type | Stage One | Stage Two | CTC |
|---|---|---|---|
| **Grocery Stores** | 19 | 9 | **28** |
| **Small Format Food Retailers** | 78 | 38 | **116** |
| **Farmers Market Vendors** | 79 | 31 | **110** |
| **Total** | **175** | **78** | **254** |

**Analysis:**
With more people moving into the CTC every year, there will likely be more grocery stores opening within the CTC. For example, in early 2019, T&T Supermarket and Zero Waste Bulk opened in Waterloo. In 2019, in the CTC there was approximately one grocery/specialty store per 4,400 residents, compared to the region, which had approximately one grocery/specialty store per 6,700 residents. This suggests that the CTC has a higher proportion of grocery/specialty food stores relative to population than the region as a whole. Although from a density standpoint the CTC has more stores per capita, there are still areas that are not served by grocery stores, which can influence where people choose to live.

**Methodology:**

The food store data was obtained through the Region's Public Health Department food safety inspections facilities list. The data is categorized by type of food establishment. Establishments categorized as "supermarkets", "convenience/variety", and "Farmers Markets" were used as an indication of food stores within the CTC. For the purpose of this report, the "supermarket" selection was renamed "Grocery Stores". These include stores such as Sobeys, Zehrs, Valumart, Vincenzo's, Farmboy and more. Similarly, "convenience and variety" was renamed "small format food retailers". This category tracks a range of food stores including convenience, health food, and specialty food retailers. Retailers such as gas stations and candy stores were taken out as they do not provide a sufficient range of food options. A list of the grocery stores and small format food retailers included in the Analysis is provided in Appendix E. Farmers Market Vendors include vendors selling food products at the Kitchener Farmers Market (Stage 1) and the Cambridge Farmers Market (Stage 2). Due to data constraints, the data provided in this indicator represents food stores that were open in July 2019.

**5.4 Event Attendance**

**Indicator: 809,775 people attended events within the CTC in 2018**

**Importance:**
Events are not only a means to bring people together, they also attract people to venues at different times of the day than they are normally frequented. Events inside the CTC can deliver an influx of people who make the streets livelier and boost the local economy. With the implementation of ION, more people can access cultural events by way of rapid transit. Therefore, tracking festival attendance in the CTC over the years can help indicate whether the CTC is becoming a more vibrant urban corridor.

**Results:**
In 2018, there were 201,000 more people attending events in the CTC than in 2011. Attendance increased in both Stage 1 and Stage 2 by about 33 percent since 2011. The rise in people attending events outpaced population growth in both stages.

Table 1. Event attendance in the CTC

| Estimated Attendance | | | | | | |
|---|---|---|---|---|---|---|
| | Stage 1 | | Stage 2 | | **CTC** | |
| Year | Attendance | Population | Attendance | Population | Attendance | Population |
| 2011 | 531,276 | 71,698 | 77,400 | 25,009 | **608,676** | **96,707** |
| 2012 | 546,825 | 70,649 | 77,400 | 25,315 | **624,225** | **95,964** |
| 2013 | 598,378 | 72,929 | 76,400 | 25,400 | **674,778** | **98,329** |
| 2014 | 629,780 | 74,377 | 100,400 | 25,397 | **730,180** | **99,774** |
| 2015 | 713,076 | 75,965 | 105,400 | 25,439 | **818,476** | **101,404** |
| 2016 | 679,435 | 77,711 | 123,400 | 25,818 | **802,835** | **103,529** |
| 2017 | 660,442 | 81,317 | 120,900 | 25,728 | **781,342** | **107,045** |
| 2018 | 705,375 | 83,662 | 104,400 | 25,734 | **809,775** | **109,395** |
| Total Change in Attendance 2011-2018 | 174,099 | 11,964 | 27,000 | 725 | **201,099** | **12,688** |
| % Change | 33% | 17% | 35% | 3% | 33% | 13% |

**Analysis:**
Urban cultural event attendance can indicate the vibrancy and vitality of an urban area. The steady increase of people attending cultural events within the CTC indicates the overall success of creating a more vibrant urban experience. With increased attendance comes more economic success for vendors and store owners located at or near these events. In the CTC, event attendance increased by 33 percent between 2011 and 2018, which is almost twice the rate of population growth over the same time frame (Table 1). The increased attendance numbers do not necessarily reflect an increasing residential population in the CTC; however, it does reflect the shifting desire to for people to spend more time within the core urban area. Event attendance peaked in 2015 (818,500), which is likely attributed to increased construction in the core areas in 2016 and 2017. Attendance rebounded to about 810,000 in 2018, when construction was completed.

**Methodology:**
Festival attendance data is independently tracked by each respective municipality (Kitchener, Waterloo, and Cambridge). For the purposes of this report, data was received from each municipality. Once received, the data was reviewed and screened to only include events that occur within the CTC. Data from Waterloo includes events that the City was involved in either directly or indirectly including partnerships and Public Square rentals. Data provided by the City of Cambridge includes events that occurred on city property including streets and sidewalks. Some examples of the events being tracked include Kitchener Blues Fest, Craft Beer and Ribs Festival, Multicultural Festival, Christmas in Cambridge, and the Christkindl Market. The indicator does not include events such as parades, Octoberfest, and other private events.

**5.5 Number of households with children in the CTC**

**Indicator: 156 more families with children live in the CTC in 2016 than in 2011**

**Importance:**
Building a city for children creates a successful city for everyone. Families with children have different needs and preferences for services, recreation, and mobility than other population groups, which attracts a diverse range of services, activities, and businesses. Inside the CTC, there has been an increase in residential development, dominated primarily by condo towers consisting of smaller one and two bedroom units. This has resulted in concern that the new forms of housing being built in the CTC are not conducive to family living. By tracking the number of families living in the CTC over time, we can see if families are choosing to continue to live in the CTC.

**Results:**
The CTC gained 156 "family households with children" between 2011 and 2016, which represents a two percent increase (Table 1). Although there was an increase of families with children, the relative magnitude and rate of change was far out paced by households without children. Families without kids in the CTC grew by 837 or 11 percent since 2011. Non-family households are growing even faster, with one person and two or more people households growing at 12 percent.

**Table 1. Family Breakdown in the CTC**

| | Family Households | | | Non-family Households |
|---|---|---|---|---|
| **Year** | **Families with Kids (couple families and lone parent)** | **Families with no kids** | **Other[14] Families** | **One person / Two or more people** |
| **2006** | 9,663 | 7,696 | 1,523 | 14,912 |
| **2011** | 9,384 | 7,830 | 1,654 | 15,884 |
| **2016** | 9,539 | 8,667 | 1,696 | 17,848 |
| Total Change between 2011 and 2016 | 156 | 837 | 42 | 1,964 |
| Percent Change between 2011 and 2016 | 2% | 11% | 3% | 12% |

[14] One-census-family households with additional person and multiple-census-family households

**Analysis:**
The results show that the number of family households with children has grown in the CTC, albeit, at a slow rate. Despite the concern that the one and two bedroom condo development occurring within the CTC is not conducive to raising children, there are more families with children in the CTC in 2016, than there were in 2011. This result may not reflect a shift in housing choice for families, but rather a more cyclical trend in home turnovers. The CTC contains stable single detached neighbourhoods. As the owners of these homes age and downsize housing opportunities arise for new young families.

In addition to household types, different age groups within the CTC were analyzed to better understand what is occurring with regard to the child population within the CTC. The number of children ages 0 to 4 years old has remained stable between 2011 and 2016 while 5 to 9 year olds have increased by 14.1 percent in the same time period (Table 2). Small decreases have occurred in both older children between the ages of 10 to 14 and 15 to 19 years old.

**Table 2. Population by Age Groups within the CTC**

| Age Groups | 2006 | 2011 | 2016 | Absolute Change (2011-2016) | Percent Change (2011-2016) | Cohort Change (2011 – 2016) | Cohort Percent Change (2011-2016) |
|---|---|---|---|---|---|---|---|
| 0 to 4 years | 3,942 | 3,870 | 3,868 | -2 | -0.1% | | |
| 5 to 9 years | 3,756 | 3,128 | 3,569 | 441 | 14.1% | -301 | -7.8% |
| 10 to 14 years | 4,056 | 3,174 | 3,100 | -74 | -2.3% | -28 | -0.9% |
| 15 to 19 years | 4,385 | 4,196 | 4,142 | -54 | -1.3% | 968 | 30.5% |
| 20 to 24 years | 6,363 | 7,375 | 8,350 | 975 | 13.2% | 4,153 | 99.0% |
| 25 to 29 years | 6,204 | 7,380 | 8,211 | 831 | 11.3% | 836 | 11.3% |
| 30 to 34 years | 5,730 | 5,808 | 6,455 | 647 | 11.1% | -925 | -12.5% |
| 35 to 39 years | 5,506 | 4,996 | 5,184 | 188 | 3.8% | -625 | -10.8% |
| 40 to 44 years | 5,854 | 5,015 | 4,634 | -381 | -7.6% | -361 | -7.2% |
| 45 to 49 years | 5,432 | 5,407 | 4,938 | -469 | -8.7% | -77 | -1.5% |
| 50 to 54 years | 4,808 | 5,255 | 5,411 | 155 | 3.0% | 3 | 0.1% |
| 55 to 59 years | 4,290 | 4,615 | 5,236 | 620 | 13.4% | -20 | -0.4% |
| 60 to 64 years | 3,142 | 3,845 | 4,606 | 761 | 19.8% | -9 | -0.2% |
| 65 to 69 years | 2,627 | 2,981 | 3,881 | 899 | 30.2% | 36 | 0.9% |
| 70 to 74 years | 2,285 | 2,518 | 3,019 | 501 | 19.9% | 38 | 1.3% |
| 75 to 79 years | 2,161 | 2,241 | 2,411 | 170 | 7.6% | -107 | -4.3% |
| 80 to 85 years | 1,721 | 2,030 | 1,955 | -75 | -3.7% | -286 | -12.8% |
| 85+ | 1,537 | 2,112 | 2,045 | -67 | -3.2% | 15 | 0.8% |

In order to better understand the changes in age groups between census periods, it is important to understand the size of each cohort (or group) in the previous census. This is referred to as cohort change in Table 2. Increases or decreases in a cohort over time, particularly for the youngest age group, represent families moving into or out of the CTC. Children aged 0 to 4 in 2006 are 5 to 9 years old in 2011; this cohort decreased by almost 21 percent over this time (from 3,942 in 2006 to 3,128 in 2011). Subsequently, the number of children 0 to 4 years old in 2011 who were 5 to 9 in 2016 decreased by only 8 percent. While families with young children have moved out of the CTC, the rate at which this is happening has decreased significantly since 2006.

The increase in families with children seen above and the relative stability of 0 to 4 year olds in each Census period may suggest that couples already residing in the CTC are having their first child and that housing turnover may be occurring where new families are occupying housing previously occupied by now empty nesters. The cohort analysis suggests that as families grow and children age, some families may be leaving the CTC in search of different forms of housing and space that is not readily available within the CTC. However, the rate at which families leave has decreased since 2006.

**Methodology:**
Data on household types from the Census were used for the Families indicator. The data was downloaded from Statistics Canada for 2006, 2011 and 2016 at the dissemination area level of geography. Dissemination areas are small areas composed of one or more neighbouring dissemination blocks. They are the smallest geography for which all Census data is made available. Weights were applied for dissemination areas that intersected the boundary of the CTC, based on a Regional dataset that shows the population residing inside and outside the CTC boundary. To provide further context of this indicator different age groups were also analysed by the same geography and time periods.

### 6.1 Adjustments and Corrections in Data and Definitions

Two indicators have updated previous figures that reflect changes in either the source data or adjustments and corrections in the definitions used to query the indicator values. Comparisons between the data shown in the 2017 and 2016 update reports and the original baseline monitoring report may not be valid for the following indicators; however, the previous reports' data has been updated in this report.

**Daily Transit Activity**

The daily transit activity indicator is an output of a database updated annually by GRT that records the average daily boarding's and alighting's for every stop in the transit network. Initially this was done using only data from the month of November because of the slow nature of querying and processing data for the entire network. This methodology was used in the baseline report.

In 2014, improvements were made to the output process that allow for all records from the full fall signup period (September to mid-December) to be included in the average, which GRT now uses instead for the database. This updated methodology was used since the 2015 update report. Increasing the sample size from November only to all of fall provides a truer average. Additionally, adapting the time range of the indicator to match that of the GRT database promotes consistency amongst different regional departments and simplifies the update process. An analysis was conducted to ensure that this change to the time window of samples did not have a significant effect on the trends or quantities reported.

In 2018, further improvements were made to the process of calculating daily transit activity. The calculation relies on taking the average activity of every trip that serves every bus stop, and then summing those averages for a daily total. A flaw in the previous methodology was that the formula taking the sum of these averages could not distinguish between two discrete trips for a route that shared a start time, for example if two separate trips for Route 7 depart at 8:00:00 AM exactly. Since trips that were separate were being averaged together rather than summed, this meant artificially lower daily totals than what was actually occurring in the system. The new methodology was used for the 2017 update, meaning that values before and after that year are not directly comparable.

In 2019, additional improvements were made to the process of inputting the daily transit activity into a GIS layer and determining stop location in relation to the Central Transit Corridor. Previously, the daily transit activity data was joined into a GIS layer (that contained GRT stops) based on EasyGO number. Following this, a spatial query was used to determine if the daily transit activity occurred inside or outside of the Central Transit Corridor. However, the GIS layer used in the join contained stops with duplicate EasyGO numbers as some active stops share an EasyGO number with inactive stops. The join attached the daily transit activity to both the active and inactive stops, and thus the total daily stop activity was inflated due to this duplication. The new methodology filters out the inactive stops in the GRT stops layer before joining the daily transit activity;

this removes the previous duplication error. This methodology was applied to correct the data from 2015-2017, and was also applied for the 2018 update.

**Cultural Establishments**

To improve the quality of the cultural establishments data, a more rigorous statistical validation was developed in this year's report. Statistics Canada provides a framework of industry classification codes (NAICS) that represent cultural establishments. This updated methodology required manual filtering of businesses to ensure that only those which represent cultural establishments were included. For example, the framework categorizes businesses as being 'software publishers', however, this category is further refined to only include software publishers of video games. Overall, there were more categories that were deemed to be 'cultural' in this year's report, but a more detailed analysis was used to capture only businesses that fall under the cultural definition.

**Heritage Resource Retention**

In 2017, changes were made to the types of heritage demolition permits that were being tracked. Prior to 2017, the report tracked heritage demolition permits that resulted in the complete demolition of a structure in the reporting year. The 2017 report tracked all heritage permits, including permits that did not result in a complete demolition (interior alterations, partial demolition permits, and structures that received a permit but were not demolished) in that reporting year. In 2018, the methodology was reverted back to the original in order to track only the heritage demolition permits that resulted in a complete demolition in the reporting year. The 2018 report updated the figures for 2017 to reflect the original methodology of tracking heritage demolitions.

**Perceptions of Safety**

The differences in methodology between 2017 and 2018 include the following:
Data in 2017 were collected as part of the Waterloo Region Area Survey, an annual omnibus survey administered by the University of Waterloo Survey Research Centre. Survey respondents were contacted/recruited through the random-digit dialed (RDD) strategy (using both landline and cell phone telephone numbers). Responses were collected either via telephone or online. In total, 404 responses were collected, approximately half through a telephone survey and half through an online survey.

Data in 2018 were collected through the Waterloo Region Community Wellbeing Survey administered by the Canadian Index of Wellbeing (CIW). Here, perceptions of safety were included as a set of indicators falling within CIW's framework on community wellbeing. The survey was promoted through various means including a variety of traditional and social media channels, personalised invitation letter to 40,000 randomly selected

households across Waterloo Region, as well as targeted outreach to specific populations. In total, 5,029 responses were collected - the majority (86%) were collected online and 14 per cent were collected using a paper version of the survey.

In 2018, wording of the question was changed in order to align it with the wording of a related question (examining perceptions of safety in the neighbourhood). Here are the two versions:

**2017**: In thinking about your feelings of safety in your downtown area at night, do you feel very safe, somewhat safe, somewhat unsafe or very unsafe?

**2018**: How safe do you feel from crime walking alone after dark in your downtown area? (the same question was asked referring to the respondent's neighbourhood)

In 2018, there was an extra answer option included in the survey. In addition to the four options depicting levels of safety (i.e. very safe, reasonably safe, somewhat unsafe, and very unsafe), respondents had the option of selecting the answer "I never walk alone there after dark".

## 7. 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: Cultural Vibrancy**
**Scale:** CTC
**Measurement Interval:** 2011, 2016, 2018
**Data Source:** The arts and culture establishments were counted from the 2016 Workplace Count, a survey of places of employment in the Region.

**Indicator: Restaurants**
**Scale:** CTC
**Measurement Interval:** Annual
**Data Source:** The list of restaurants is derived from the Region of Waterloo Public Health food inspection data.

**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 data supplied by the Area Municipalities.

**Indicator: Assessment Value**
**Scale:** CTC
**Measurement Interval:** 2011, 2014, 2015, 2016, 2017
**Data Source:** The most updated parcels for the fourth quarter of 2016 were sourced from MPAC (Municipal Property Assessment Corporation) under license, and used to determine the total assessment of parcels within the CTC.

**Indicator: Perception of Safety**
**Scale:** CTC
**Measurement Interval:** 2011, 2017, 2018
**Data Source:** The perception of safety data is obtained from the Waterloo Region Area Survey by the Crime Prevention Council of Waterloo Region.

**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 Waterloo Regional Police Service website.

**Indicator: Home Ownership Affordability**
**Scale:** CTC
**Measurement Interval:** Annual
**Data Source:** Average re-sale residential prices are obtained through the MLS® System provided by the Kitchener-Waterloo Association of REALTORS® and Cambridge Association of REALTORS®.

**Indicator: Transaction Values**
**Scale:** CTC

**Measurement Interval:** 2011 to 2018
**Data Source:** Transaction data is obtained under license from Teranet.

**Indicator: Change in Area of Vacant Land**
**Scale:** CTC
**Measurement Interval:** 2011 to 2018
**Data Source:** MPAC

**Indicator: Change in Area of Surface Parking**
**Scale:** CTC
**Measurement Interval:** 2012, 2018
**Data Source:** MPAC, Waterloo Open Data, Kitchener Open Data, Cambridge Open Data, manual digitizing

**Indicator: Access to Food Stores**
**Scale:** CTC
**Measurement Interval:** 2019
**Data Source:** Public Health Inspection Faculties

**Indicator: Event Attendance**
**Scale:** CTC
**Measurement Interval:** 2011 to 2018
**Data Source:** City of Waterloo, City of Kitchener, City of Cambridge

**Indicator: Number of Households with Children in the CTC**
**Scale:** CTC
**Measurement Interval:** 2006, 2011, 2016
**Data Source:** Census

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

Appendix A

**Cultural Establishments by NAICS Code in the CTC**

| Type | 2011 | % of Total | 2016 | % of Total | 2018 | % of Total |
|---|---|---|---|---|---|---|
| **Manufacturing** | | | | | | |
| 311811 – Retail bakeries | 7 | 3% | 18 | 6% | 20 | 6% |
| 312120 – Brewery | 4 | 2% | 7 | 2% | 9 | 3% |
| 312130 – Winery | 1 | 0% | 1 | 0% | 1 | 0% |
| 313 - Textile mills* | 0 | 0% | 1 | 0% | 1 | 0% |
| 314 - Textile product mills * | 0 | 0% | 0 | 0% | 0 | 0% |
| 315 - Clothing * | 0 | 0% | 1 | 0% | 1 | 0% |
| 316 - Leather and allied product * | 0 | 0% | 0 | 0% | 0 | 0% |
| 321 - Wood product* | 0 | 0% | 1 | 0% | 1 | 0% |
| 323113 - Commercial screen printing* | 5 | 2% | 6 | 2% | 6 | 2% |
| 323119 -Printing* | 0 | 0% | 0 | 0% | 0 | 0% |
| 32312 - Support activities for printing* | 0 | 0% | 0 | 0% | 0 | 0% |
| 327 - Non-metalic mineral product* | 3 | 1% | 2 | 1% | 2 | 1% |
| 332 - Fabricated metal * | 1 | 0% | 1 | 0% | 1 | 0% |
| 33461 - Magnetic and optical media | 0 | 0% | 0 | 0% | 0 | 0% |
| 337 - Furniture * | 0 | 0% | 0 | 0% | 0 | 0% |
| 339 - Miscellaneous * | 0 | 0% | 1 | 0% | 1 | 0% |
| **Total Manufacturing** | **21** | **9%** | **39** | **12%** | **43** | **13%** |
| **Retail** | | | | | | |
| 442292 - Print and picture frame stores | 6 | 2% | 8 | 3% | 6 | 2% |
| 4483 - Jewellery, luggage and leather * | 0 | 0% | 1 | 0% | 1 | 0% |
| 45112 - Video game | 2 | 1% | 4 | 1% | 3 | 1% |
| 45114 - Music stores selling sheet music* | 4 | 2% | 5 | 2% | 5 | 1% |
| 45121 - Book stores | 9 | 4% | 9 | 3% | 8 | 2% |
| 45122 - Tape, cd and record stores | 0 | 0% | 1 | 0% | 1 | 0% |
| 45322 - Craft gift, novelty, souvenier store* | 6 | 2% | 10 | 3% | 12 | 4% |
| 45392 – Art dealers | 8 | 3% | 5 | 2% | 9 | 3% |
| **Total Retail** | **35** | **15%** | **43** | **14%** | **45** | **13%** |
| **Information** | | | | | | |
| 5111 – Publishers* | 4 | 2% | 3 | 1% | 5 | 1% |
| 5112 – Software* | 0 | 0% | 1 | 0% | 4 | 1% |
| 512 – Motion picture/music sound | 9 | 4% | 16 | 5% | 15 | 4% |
| 515 – Broadcasting (radio/television/cable) | 6 | 2% | 8 | 3% | 7 | 2% |

| | | | | | | |
|---|---|---|---|---|---|---|
| 517112 - Cable and program distribution | 0 | 0% | 0 | 0% | 0 | 0% |
| 51912 – Library & archives | 6 | 2% | 7 | 2% | 7 | 2% |
| 51913 - Internet publishing, broadcasting and web search portals | 2 | 1% | 1 | 0% | 0 | 0% |
| 51919 - Stock photo agency * | 0 | 0% | 0 | 0% | 0 | 0% |
| **Total Information** | **27** | **11%** | **36** | **11%** | **38** | **11%** |
| **Professionals** | | | | | | |
| 54131 – Architecture | 11 | 5% | 15 | 5% | 18 | 5% |
| 54132 – Landscape arch | 7 | 3% | 5 | 2% | 5 | 1% |
| 54134 - Drafting services | 1 | 0% | 0 | 0% | 0 | 0% |
| 5414 – Design (interior/industrial/graphic) | 16 | 7% | 23 | 7% | 29 | 9% |
| 54151 - Website design | 8 | 3% | 2 | 1% | 3 | 1% |
| 5418 – Advertising and media* | 12 | 5% | 14 | 4% | 17 | 5% |
| 54192 – Photography | 6 | 2% | 17 | 5% | 14 | 4% |
| 54193 - Translation services | 0 | 0% | 0 | 0% | 0 | 0% |
| **Total Professionals** | **61** | **25%** | **76** | **24%** | **86** | **26%** |
| **Administration & Support** | | | | | | |
| 56151 – Travel agencies | 23 | 10% | 24 | 8% | 22 | 7% |
| 56152 – Tour operators | 1 | 0% | 1 | 0% | 2 | 1% |
| 56192 - Craft shows and trade fairs | 0 | 0% | 0 | 0% | | 0% |
| **Total Admin & Support** | **24** | **10%** | **25** | **8%** | **24** | **7%** |
| **Education** | | | | | | |
| 61111 - Elementary school that provide culture programs * | 0 | 0% | 0 | 0% | 0 | 0% |
| 61121 - Community college: culture programs * | 0 | 0% | 0 | 0% | 0 | 0% |
| 61131 - Universities: culture programs* | 0 | 0% | 0 | 0% | 0 | 0% |
| 61151 - Trade schools: culture programs* | 0 | 0% | 0 | 0% | 0 | 0% |
| 61161 – Fine arts schools | 19 | 8% | 31 | 10% | 29 | 9% |
| **Total Education** | **19** | **8%** | **31** | **10%** | **29** | **9%** |
| **Arts, Entertainment, Recreation** | | | | | | |
| 7111 – Performing arts | 6 | 2% | 7 | 2% | 7 | 2% |
| 7113 – Promotions (not sports)* | 7 | 3% | 8 | 3% | 7 | 2% |
| 7114 – Agent & managers (not sports)* | 0 | 0% | 0 | 0% | 0 | 0% |
| 7115 – Ind. artists | 3 | 1% | 7 | 2% | 12 | 4% |
| 712 – Heritage | 5 | 2% | 9 | 3% | 10 | 3% |
| **Total Arts, Entertainment, Recreation** | **21** | **9%** | **31** | **10%** | **36** | **11%** |
| **Accommodation** | | | | | | |

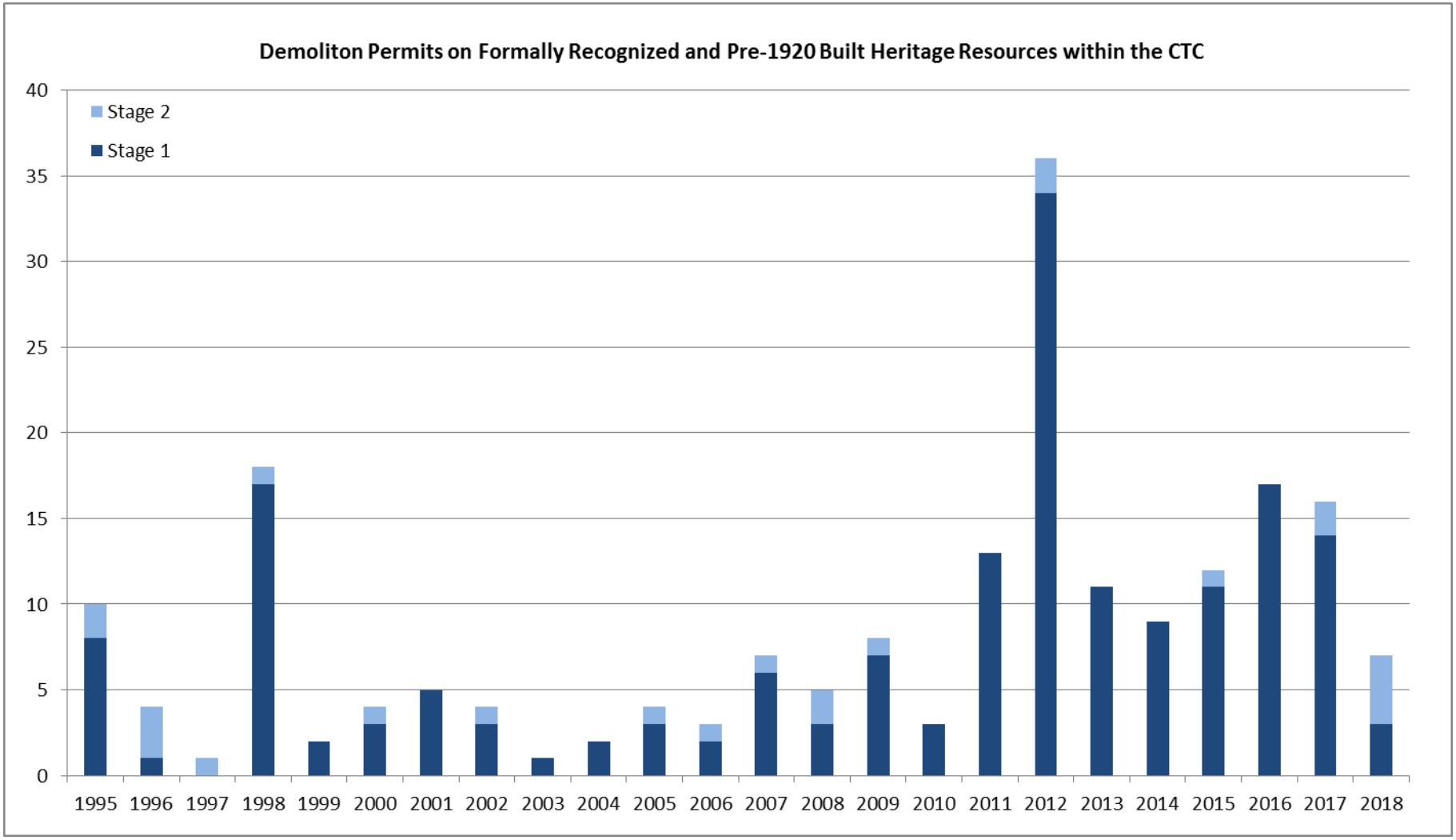
| | | | | | | |
|---|---|---|---|---|---|---|
| 721 – Accommodation services | 12 | 5% | 12 | 4% | 11 | 3% |
| **Total Accommodation services** | **12** | **5%** | **12** | **4%** | **11** | **3%** |
| **Other Services** | | | | | | |
| 812921 - Photo finishing labs | 1 | 0% | 0 | 0% | 0 | 0% |
| 812922 - One hour photo finishing | 0 | 0% | 0 | 0% | 0 | 0% |
| 81321 - Grant and giving services* | 1 | 0% | 3 | 1% | 2 | 1% |
| 81331 - Social advocacy organizations* | 1 | 0% | 2 | 1% | 4 | 1% |
| 81341 - Civic and social organizations * | 5 | 2% | 4 | 1% | 4 | 1% |
| 81391 - Business associations * | 0 | 0% | 2 | 1% | 2 | 1% |
| 81392 - Professional organization * | 0 | 0% | 2 | 1% | 0 | 0% |
| 81393 - Labour organizations * | 0 | 0% | 0 | 0% | 0 | 0% |
| 81399 - Other organizations * | 3 | 1% | 3 | 1% | 3 | 1% |
| **Total Other Services** | **11** | **5%** | **16** | **5%** | **15** | **4%** |
| **Public Administration** | | | | | | |
| 91124 - Federal regulatory services* | 0 | 0% | 0 | 0% | 0 | 0% |
| 91191 - Other federal public admin* | 0 | 0% | 0 | 0% | 0 | 0% |
| 91291 - Other provincial public admin * | 2 | 1% | 2 | 1% | 2 | 1% |
| 91391 - Municipal public admin * | 2 | 1% | 3 | 1% | 3 | 1% |
| **Total Public Administration** | **4** | **2%** | **5** | **2%** | **5** | **1%** |
| **Wholesale Trade** | | | | | | |
| 4143 - Craft home furnishings * | 0 | 0% | 1 | 0% | 1 | 0% |
| 41441- Craft jewellery and watch* | 0 | 0% | 0 | 0% | 0 | 0% |
| 41442 - Book and newspaper | 1 | 0% | 1 | 0% | 1 | 0% |
| 41444 - Sound recording | 0 | 0% | 0 | 0% | 0 | 0% |
| 41445 - Video cassette | 0 | 0% | 0 | 0% | 0 | 0% |
| 41912- Books and newspaper* | 0 | 0% | 0 | 0% | 0 | 0% |
| **Total Wholesale Trade** | **1** | **0%** | **2** | **1%** | **2** | **1%** |
| **Real Estate, Rental and Leasing** | | | | | | |
| 53223 - Video tape and disc rental | 5 | 2% | 2 | 1% | 2 | 1% |
| 53311 - Non-financial intangible assets (cultural tradamarks)* | 0 | 0% | 0 | 0% | 0 | 0% |
| **TotaReal Estate, Rental and Leasing** | **5** | **2%** | **2** | **1%** | **2** | **1%** |
| **Finance and Insurance** | | | | | | |
| 526989 - Cultural foundations and funds* | 0 | 0% | 0 | 0% | 0 | 0% |
| **Total Finance and Insurance** | **0** | **0%** | **0** | **0%** | **0** | **0%** |
| **Total Cultural Establishments** | **241** | **100%** | **318** | **100%** | **336** | **100%** |

Appendix B

Per cent of Demolition Permits on Formally Recognized and Pre-1920 Heritage Buildings within the CTC

| Year | Total Formally | Total Demolition | Per cent Formally |
|---|---|---|---|
| 1995 | 10 | 29 | 34% |
| 1996 | 4 | 31 | 13% |
| 1997 | 1 | 9 | 11% |
| 1998 | 18 | 23 | 78% |
| 1999 | 2 | 39 | 5% |
| 2000 | 4 | 23 | 17% |
| 2001 | 5 | 30 | 17% |
| 2002 | 4 | 56 | 7% |
| 2003 | 1 | 41 | 2% |
| 2004 | 2 | 29 | 7% |
| 2005 | 4 | 34 | 12% |
| 2006 | 3 | 33 | 9% |
| 2007 | 7 | 36 | 19% |
| 2008 | 5 | 54 | 9% |
| 2009 | 8 | 37 | 22% |
| 2010 | 3 | 41 | 7% |
| 2011 | 13 | 75 | 17% |
| 2012 | 36 | 62 | 58% |
| 2013 | 11 | 76 | 14% |
| 2014 | 9 | 94 | 10% |
| 2015 | 12 | 72 | 17% |
| 2016 | 17 | 57 | 30% |
| 2017 | 20 | 71 | 28% |
| 2018 | 20 | 64 | 31% |
| **Total 1995-2018** | 219 | 1116 | 20% |
| **Total 2011-2018** | 138 | 571 | 24% |

Out of the total 554 demolition permits issued within the CTC between 2011 and 2018, there were 121 demolition permits issued for pre-1920 and recognized built heritage resources.




Between 1995 and 2018, thirty-nine of the demolished buildings were issued on formally recognized heritage resources, while the remainder were on built heritage resources constructed pre-1920. During the same time period, approximately 88 per cent of the 202 demolition permits for built heritage resources in the CTC were for buildings located in stage one.

Appendix C

**Residential Building Activity from 2011-2018 in the CTC (Unadjusted)**

| Residential | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Singles | | Semi Detached | | Townhouses | | Apartments | | **Annual Total Residential** | |
| year | Value | Units | Value | Units | Value | Units | Value | Units | **Value** | **Units** |
| **2011** | $ 4,167,241 | 13 | $ 23,000 | 1 | $ 6,192,614 | 44 | $ 198,685,843 | 1147 | **$ 209,068,698** | **1205** |
| **2012** | $ 3,443,500 | 12 | $ 900,000 | 7 | $ 27,243,704 | 179 | $ 97,497,250 | 623 | **$ 129,084,454** | **821** |
| **2013** | $ 3,171,962 | 11 | $ 1,337,000 | 6 | $ 8,015,900 | 48 | $ 130,206,450 | 624 | **$ 142,731,312** | **689** |
| **2014** | $ 3,432,000 | 10 | $ 1,389,000 | 6 | $ 15,353,000 | 92 | $ 314,034,537 | 1623 | **$ 334,208,537** | **1731** |
| **2015** | $ 1,621,150 | 5 | $ 500,000 | 2 | $ 6,121,112 | 50 | $ 114,144,187 | 1096 | **$ 122,386,449** | **1153** |
| **2016** | $ 594,555,283 | 1695 | $ 21,934,024 | 104 | $ 150,677,150 | 951 | $ 376,460,788 | 2617 | **$ 1,143,627,245** | **5367** |
| **2017** | $ 386,545,243 | 991 | $ 14,279,585 | 48 | $ 118,036,545 | 661 | $ 150,216,382 | 1529 | **$ 669,077,755** | **3229** |
| **2018** | $ 334,971,640 | 917 | $ 16,747,860 | 60 | $ 100,379,752 | 572 | $ 269,307,960 | 1374 | **$ 721,407,212** | **2923** |
| **TOTAL** | **$ 1,331,908,019** | **3654** | **$ 57,110,469** | **234** | **$ 432,019,777** | **2597** | **$ 1,650,553,397** | **10633** | **$ 3,471,591,662** | **17118** |

**Non-Residential Building Activity from 2011-2018 in the CTC (Unadjusted)**

| Non- Residential | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Commercial | | Industrial | | Institutional | | **Annual Total Non Residential** | |
| Year | Value | sq f | Value | sq f | Value | sq f | **Value** | **sq f** |
| **2011** | $ 46,112,500 | 318002 | $ 8,500,000 | 3600 | $ 227,234,856 | 122095 | **$281,847,356.0** | **443,697** |
| **2012** | $ 46,128,551 | 392408 | $ 2,470,000 | 20909 | $ 88,689,000 | 269053 | **$137,287,551.0** | **682,370** |
| **2013** | $ 21,991,500 | 77723 | $ 3,755,000 | 28757 | $ 64,339,248 | 236186 | **$90,085,748.0** | **342,666** |
| **2014** | $ 42,322,514 | 176871 | $ 15,100,194 | 8818 | $ 180,840,389 | 321084 | **$238,263,097.0** | **506,773** |
| **2015** | $ 85,930,713 | 519751 | $ 8,769,316 | 115696 | $ 56,060,000 | 155164 | **$150,760,029.0** | **790,611** |
| **2016** | $ 43,942,475 | 133250 | $ 11,500,000 | 53565 | $ 5,142,000 | 16824 | **$60,584,475.0** | **203,639** |
| **2017** | $ 58,091,920 | 294402 | $ 20,272,000 | 68376 | $ 62,322,869 | 228047 | **$140,686,789.0** | **590,825** |
| **2018** | $ 33,168,244 | 93903 | $ 9,595,200 | 59183 | $ 2,885,000 | 6519 | **$45,648,444.0** | **159,605** |
| **TOTAL** | **$377,688,417** | **$2,006,310** | **$79,961,710** | **$358,904** | **$687,513,362** | **$1,354,972** | **$1,145,163,489.0** | **$3,720,186.0** |

## Residential Building Activity from 2011-2018 in the Region (Adjusted)

| Residential | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Singles | | Semi Detached | | Townhouses | | Apartments | | **Annual Total Residential** | |
| year | Value | Units | Value | Units | Value | Units | Value | Units | **Value** | **Units** |
| **2011** | $ 381,978,896 | 1335 | $ 10,407,129 | 73 | $ 43,663,458 | 306 | $ 297,526,043 | 1887 | **$ 733,575,526** | **3601** |
| **2012** | $ 281,716,997 | 927 | $ 10,340,440 | 54 | $ 75,051,563 | 476 | $ 137,849,915 | 954 | **$ 504,958,914** | **2411** |
| **2013** | $ 258,743,112 | 846 | $ 8,237,560 | 38 | $ 81,908,893 | 524 | $ 181,837,089 | 1161 | **$ 530,726,654** | **2569** |
| **2014** | $ 299,032,478 | 946 | $ 12,074,658 | 70 | $ 105,042,701 | 675 | $ 367,803,219 | 2113 | **$ 783,953,056** | **3804** |
| **2015** | $ 364,024,922 | 1093 | $ 9,351,442 | 47 | $ 113,007,044 | 688 | $ 196,361,213 | 1776 | **$ 682,744,621** | **3604** |
| **2016** | $ 555,196,094 | 1695 | $ 20,482,005 | 104 | $ 140,702,417 | 951 | $ 351,539,318 | 2617 | **$ 1,067,919,834** | **5367** |
| **2017** | $ 355,420,051 | 991 | $ 13,129,772 | 48 | $ 108,532,069 | 661 | $ 138,120,738 | 1529 | **$ 615,202,629** | **3229** |
| **2018** | $ 301,139,504 | 917 | $ 15,056,326 | 60 | $ 90,241,397 | 572 | $ 242,107,856 | 1374 | **$ 648,545,084** | **2923** |
| **TOTAL** | **$ 2,797,252,054** | **8750** | **$ 99,079,332** | **494** | **$ 758,149,540** | **4853** | **$ 1,913,145,391** | **13411** | **$ 5,567,626,317** | **27508** |

## Non-Residential Building Activity from 2011-2018 in the Region (Adjusted)

| Non- Residential | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Commercial | | Industrial | | Institutional | | **Annual Total Non Residential** | |
| Year | Value | sq f | Value | sq f | Value | sq f | **Value** | **sq f** |
| **2011** | $ 102,518,894 | 689686 | $ 82,589,285 | 435198 | $ 380,991,856 | 552995 | **$566,100,035** | **1,677,879** |
| **2012** | $ 110,774,348 | 856445 | $ 42,367,212 | 328556 | $ 189,239,304 | 725845 | **$342,380,864** | **1,910,846** |
| **2013** | $ 62,837,750 | 383040 | $ 37,821,405 | 394662 | $ 113,883,273 | 534528 | **$214,542,428** | **1,312,230** |
| **2014** | $ 106,290,573 | 679103 | $ 87,810,146 | 1015515 | $ 236,052,866 | 489450 | **$430,153,586** | **2,184,068** |
| **2015** | $ 110,682,059 | 778228 | $ 46,802,515 | 534583 | $ 141,233,203 | 467636 | **$298,717,777** | **1,780,447** |
| **2016** | $ 89,874,543 | 751472 | $ 83,047,092 | 766816 | $ 59,035,566 | 325449 | **$231,957,201** | **1,843,737** |
| **2017** | $ 94,654,724 | 642222 | $ 123,573,548 | 978749 | $ 117,829,214 | 573082 | **$336,057,486** | **2,194,053** |
| **2018** | $ 79,025,589 | 496674 | $ 132,461,141 | 1085229 | $ 46,226,580 | 216646 | **$257,713,310** | **1,798,549** |
| **TOTAL** | **$756,658,479** | **$5,276,870** | **$636,472,344** | **$5,539,308** | **$1,284,491,863** | **$3,885,631** | **$2,677,622,687** | **14,701,809** |

## Appendix D

A list of the WRPS call type codes used to count the number of total 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 | 9060 | Threatening | 9790 | Theft Under $5000 |
| 9350 | Intoxicated Person | 9070 | Assault | 9180 | Property Damage |
| 9360 | Unwanted Person | 9080 | Abduction | 9920 | Graffiti |
| 9370 | Mentally Ill | 9090 | Robbery | | |
| 9380 | Public Mischief | 9100 | Extortion | | |
| 9470 | Suspicious Person | 9170 | Offensive Weapon | | |
| 9480 | Suspicious Vehicle | 9460 | Prowler | | |
| 9600 | Abandoned Vehicle | 9850 | Human Trafficking | | |
| 9610 | Liquor Offence | 9900 | Criminal Harassment | | |
| 9650 | Youth Complaint | 9050 | Indecent Act | | |
| | | 9310 | Dispute | | |

# Appendix E

## List of Grocery Stores

| Store Name | | |
|---|---|---|
| Caudle's Catch Seafood Ltd. | Freshco. | T&T Supermarket |
| Central Fresh Market | Goodness Me | Valu-Mart |
| Costco | Healthy Planet | Vincenzo's |
| Euromart & Deli Inc. | India Food And Grocery | Walmart (2) |
| Farah's Food Mart (2) | J & P Grocery | Waterloo Central Supermarket |
| Farm Boy | Kishki Halal Supermarket | Zehrs Market (2) |
| Food Basics (2) | New City Supermarket | Zero Waste Bulk |
| | Sobeys (2) | |

## List of Small Format Food Retailers

| Convenience / Variety Store | | | Specialty Food Store | | Health Food Store |
|---|---|---|---|---|---|
| 7 Days Mini Mart | International News (3) | Victoria Convenience | Bebora Store | Smk African Foods Inc. | Chelsea Market |
| 7 Star Convenience | King Variety | Water Convenience | Bulk Barn Foods (2) | T&J Seafood | Healthoholics |
| A Plus Variety | King's Mart | Gateway Newstands (2) | Discount Bakery Surplus | The Dollar Tree | Nature's Vibe |
| A&Z Convenience Store And Snack Bar | Laurel Street Variety | Uw - Asu Tuck Shop | Dollarama (6) | Your Dollar Store | S&H Health Foods |
| A.M. Variety | Little Short Stop (6) | Nyu Snack Hut | Eurocan Special Foods Inc. | Your Dollar Store With More | Sunrise Mills |
| Ahren's Convenience | Main Variety | Star Convenience | European Meat & Deli Store-Arcuense Store | Family Dollar And More | Full Circle Foods |
| A-Z Variety & Video | Mannie Mart | Students Smart Shop | Giant Tiger | Ming's Asian Food Mart | |
| Big Bear Food Mart | Metro Convenience | Total Convenience | K-W Korean Food Market | J And P Filipino Store | |
| Cambridge Mini Mart | Mia's Convenience Store | Union Mini Mart | Legacy Greens | Afri-Can Market | |
| Campus Convenience | Milk Convenience Fair | University Convenience | M & M Meat Shops (2) | | |
| Circle K | Mr. Convenience Too | | Onkar Foods & Spices | | |
| Convenience At Duke | My Convenience Store | | Palm Valley Indian Spices | | |
| Daisy Mart | Oscar's Convenience | | Rexall (2) | | |
| Duke Corner Store, The | Park Hill Variety | | Shoppers Drug Mart (6) | | |
| Eagle Mini Mart | Ribeiro's Market | | | | |
| Evergreen Mini Mart | Rincon Latino Mini Mart | | | | |
| Forsythe Variety | Smoke & Variety | | | | |
| Hasty Market | Southwood Mini Mart | | | | |
| Henos Convenience Store | | | | | |
| Hoffman Mini-Mart | | | | | |

## Number of Farmers Market Vendors

| Kitchener Farmers Market | Cambridge Farmers Market |
|---|---|
| 79 | 31 |

## Appendix F

Reference List for **Monitoring Urban Vibrancy in the Central Transit Corridor** (Author: Soosaar, B.)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