PLANNING AROUND RAPID TRANSIT STATIONS

PARTS CENTRAL PLAN

Kitchener 2016
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The Region of Waterloo, in association with a consortium, GrandLine, is designing and constructing the ION light rail and adapted bus rapid transit line and ION stops through Kitchener, Waterloo and Cambridge. Currently, there are twelve (12) ION stops identified in Kitchener (one future light rail ION stop is shared with Cambridge). The intent is to commence the ION light rail transit (LRT) service in Kitchener and Waterloo in 2017 and have adapted bus rapid transit (gBRT) operate between Fairview Park Mall and Cambridge until such time as ION is extended to the City of Cambridge.

The ION has the potential to be a major factor in the long-term growth and continued economic prosperity of our area. With it comes the potential for continued change in areas close to the ION stops. In order to help ensure and confirm there is a proper framework to guide growth and stability in these locations, the City of Kitchener is embarking on the detailed planning for the future of land and infrastructure within a ten (10) minute walk of each ION stop. The intent is to build on the efforts of the Region’s Central Transit Corridor Community Building Strategy and to complete as much detailed planning as possible in time for the opening of the ION Rapid Transit System.

In Kitchener, the detailed planning initiative with respect to station area planning and the ION system is referred to as Planning Around Rapid Transit Stations (PARTS). The scope of the PARTS project does not include discussion on the merits of rapid transit, the location and design of the actual rapid transit line or ION stops, municipal or other agency infrastructure requirements or relocations within the rapid transit alignment and several other matters. The primary purpose of the PARTS project is to provide direction for future development and stability within rapid transit station areas along with recommendations for capital projects to ensure that these areas are developed in a way that is transit-supportive and adds value to our community.

The PARTS Central Plan is the first station area plan to be completed under the overall PARTS Project. It commenced in Fall 2014 and involved an extensive and collaborative community consultation exercise involving various stakeholders, including property owners, residents, business owners, and development interests over approximately eighteen (18) months. The result is the PARTS Central Plan, detailed in the pages to follow, which will guide development and change in the station area, as well as provide the guidance and framework for the PARTS Central Area to be an attractive, vibrant, identifiable ‘Great Place’ to live, work, study, and play in the City of Kitchener.
"There is a desire to see new developments and changes support, rather than undermine, these important relationships and the unique character of the neighbourhood. The studies, plans for developments, and future initiatives must be undertaken as change within the neighbourhood, rather than change to the neighbourhood" - Schneider Creek Plan

photo: October 6th 2015 Neighbourhood Walk
1.0 Study Area, Process & Consultation

The development of the PARTS Central Plan commenced in September 2014 and utilized an integrated Environmental Assessment and Planning Act process, occurring over 4 phases, with active and collaborative community consultation. Any technical or financial matters related to the construction of the ION rapid transit system are not within the scope of this project. This section provides an overview of the process that was undertaken to develop the PARTS Central Plan.

The PARTS Central Plan built upon and implemented of the work that was done in Phases 1 and 2 of the project 'Planning Around Rapid Transit Stations (PARTS).'

Phase 1 of PARTS occurred in 2013 and included the following key components:

- Confirmation of recommended station study areas (a station study area includes one or more ION stops and contains a focus area and a surrounding influence area).
  - Central Stations Study Area
  - Midtown Station Study Area
  - Rockway Stations Study Area
  - Fairway Station Study Area
  - Block Line Station Study Area

- Preparation of an overall vision and goals to guide planning within the station study areas.
- Compilation and evaluation of existing conditions data for each of the six (6) station study areas.
- Identification of the likely extent of work for future phases and key deliverables for each Station Study Area Plan.
- Development of an overall work program for Phase 2 and the subsequent preferred order and timing to complete planning for each of the station study areas in time for the operation of the rapid transit system in 2017.

Through Phase 1 of PARTS, it was determined that some of the key work required to complete the station area plans is best prepared for all of the station study areas at once. As a result, Phase 2 recommended five (5) corridor-wide initiatives be undertaken and completed in advance of the first station area plan. The five (5) corridor-wide initiatives completed in 2014 were:

- Interim Direction - Policies to guide development/redevelopment in station areas
- Communications Approach
- Urban Design Guidelines
- Sanitary Sewer Capacity Analysis
- Transportation Demand Management

(above) PARTS project phasing.
(above) A diagram illustrating the ION stops within the five (5) station study areas.
At the November 2014 and May 2015 Community Engagement Sessions, a 'trace your route' map was completed by session attendees outlining their walk, cycle and bus routes, but also locations where they live, work, shop and play.

"The Iron Horse Trail should be a key means of accessing the transit hub/transit stops and the linkages should be made clear and obvious so that people can easily access and use this important connection."
- May 26, 2015 Feedback Report

"With planned closure of Charles Street Terminal, Gaukel Street serves little purpose for cars. Would like to see it closed and used as a walking gateway to Victoria Park."
- May 26, 2015 Feedback Report

"Make the transit stops a community amenity by including public areas for seating, way-finding signage, key map of things to do nearby, good lighting, weather protection, library drop-boxes, etc. Provide pick-up/drop-boxes for library materials at each station stop throughout the LRT system."
- May 26, 2015 Feedback Report
1.0 Study Area, Process & Consultation

PARTS Central Study Area

Through Phase 1 of PARTS, a station study area was identified for Central using the boundary of a Major Transit Station Area, defined in the Region’s Official Plan and City's new Official Plan, as the area formed by an 800 metre radius or a 10 minute as ‘the crow flies’ walking distance from an ION stop as well as a review of those areas the focus for intensification. The Central Area was identified to be the highest priority station study area because it was anticipated to require the least amount of work to have the planning framework and infrastructure system ready for ION. It is also the most ‘ready’ to respond to the changes that the rapid transit system will bring to the city’s infrastructure and planning, and its importance in directing growth to one of the most appropriate locations within the City.

The Central Study Area encloses six (6) ION stops and several major transit destinations including downtown and the future Multi-Modal Hub. It has the highest current Grand River Transit (GRT) ridership of all the station study areas which is to be expected because it is also the largest station study area. The Central Study Area also has the highest anticipated LRT ridership as it is not expected that a major paradigm shift to support and encourage rapid transit ridership, will be required because of the current GRT ridership.

Issues & Opportunities

In the Fall of 2014, the City of Kitchener Planning Division developed the Project Plan to facilitate the completion of the PARTS Central Plan and on November 19th, 2014 the first community engagement session was held in accordance with both the Planning Act and the Environmental Assessment Act. This initiated the public consultation process on a plan that would outline the most appropriate land uses, streetscapes and infrastructure requirements within about a 10 minute walk of each of the six (6) ION stops in the central area of Kitchener.

The purpose of the first community engagement session was to engage the public on the following:
- to ask participants to map their route to or from an ION stop;
- to learn about what members of the public value about their neighbourhoods and the Central Area;
- to learn about what new opportunities – amenities and land uses member of the public would like to see along the route to the ION stop, at the ION stops and in the PARTS Central Area and;
- to learn about challenges, concerns and questions members of the public would like to see considered as part of the development of the plan.

At the first community engagement session, information was provided about the project and participants were asked some specific questions to help understand residents’ perspectives and what factors could influence their decisions to use the transit system.

The public was asked:
- Do you live, work or attend school within a 10 minute walk of an ION stop?
- Do you see yourself using the ION and if not, what would encourage you to do so?
- How long would you travel to or from an ION stop and would you be able to walk, bike or drive it?
- Would you want to grab a coffee, pick up groceries or stop at a park on the way to or from the ION stop or what other amenities would like to see around the stops?

Phase 1 also involved holding stakeholder interviews in December of 2014. The feedback received from Phase 1 of the project was used to generate some possible scenarios/alternatives for the community consideration in Phase 2 of the development of the plan.

Identification of Scenarios/Alternatives

Just before the second community engagement session, Planning Staff attended the Downtown Neighbourhood Alliance Annual General Meeting on May 23, 2015 to engage the Neighbourhood Associations and introduce and explain the PARTS Central Process. The neighbourhood associations in the PARTS Central area are key stakeholders in the process and it was important to inform and encourage their participation in future meetings.

Following the Neighbourhood Association meeting, a second community engagement session was held on May 26th, 2015 to present the problem statement and opportunities, the proposed scenarios/alternatives for consideration and the evaluation criteria. The purpose of the second community engagement session was to obtain information on the following:
- to ask participants to again map their route to or from an ION stop;
- to ask for feedback and comments about the proposed transportation changes and existing community amenities and facilities;
- to ask for feedback and comments about future land use scenarios/alternatives, possible station area boundaries and proposed land uses and mix of land uses; and
- to ask for feedback and comments about the proposed evaluation criteria.

In developing the scenarios/alternatives for Phase 2, one of the goals was to achieve a 160 persons and jobs per hectare density, based on best practice research. In order to support the ION rapid transit system, the proposed density of the Urban Growth Centre (UGC) (Downtown) is 225 persons/jobs per hectare which was put in place in the City’s new Official Plan, approved November 19, 2014, currently under appeal.

(top left) A photo from the December 9th, 2015 PARTS Central community engagement session, (below, left to right) The cover pages of PARTS Central Plan Community and Stakeholder Feedback Report, PARTS Phase 1, Community Building Strategy and Schneider Creek Neighbourhood Plan documents.
Identification of Preferred Scenario/Alternative

On December 9th, 2015, a third community engagement session was held. The purpose of this session was to ask participants for their comments and feedback on the preferred scenario/alternative that was being presented: the transportation and noise analysis; the public realm (parks and public space) vision/concept; the proposed streetscapes for the preparation of streetscape plans; and their comments and feedback on cultural heritage resources and cultural heritage landscapes in the PARTS Central Area.

Comments and feedback received at the first two (2) community engagement sessions confirmed that it was important to include parks in the natural heritage areas. The environmental assessment for the lands identified as the Urban Growth Centre (UCC) (Downtown) clearly identified the high density of land areas that would be designated as a Light Rail Transit (LRT) station. Whether the low-intensity uses are included or not in the station area plan, the density of the lands within an 800 metre radius of an LRT station, which can support redevelopment and intensification, remains the same.

The foundation of land use for the boundary of the Preferred Scenario/Alternative utilized the Scenario/Alternative 2 – Extended Boundary and further increased the boundary of the plan to include parks, such as Victoria Park and Kennedy Park, some lands identified as being Natural Heritage (i.e. flood plain), and a small additional part of a stable established neighbourhood to include both sides of Lancaster Street in the plan boundary. In addition, the lands were reclassified based on their distance and connectivity to the LRT stations. The preferred boundary encompasses the entire Urban Growth Centre (Downtown).

Some of the land use designations were also reviewed to ensure a sufficient density to support LRT and to ensure that there would be a proper transition between different land use categories and high and lower densities of land uses (i.e. King Street, East; Victoria Street, South, Weber Street, and Queen Street).
1.0 Study Area, Process & Consultation

Identification of Preferred Scenario/Alternative

The overall potential density of the preferred scenario/alternative, at 50% zoning capacity, is 205 persons/jobs per hectare. At first glance, the Preferred Scenario/Alternative appears to have a lower density than Scenario 2 (Extended Boundary). This can be easily explained as the preferred scenario/alternative has also included parks and natural heritage lands, thus creating a density similar to the 2nd Scenario/Alternative. However, with the exclusion of the stable established neighbourhoods, parks and natural heritage lands, the overall potential density of the preferred scenario/alternative, at 50% zoning capacity, is 286 persons/jobs per hectare, which more than achieves the targeted densities required to support transit and to meet the targets as established in the Places to Grow Act, the Regional Official Plan as well as the new Kitchener Official Plan.

Irrespective of the overall density of the station area plan, these low-intensity uses contribute to the station area and some of these uses also contribute to the ridership of the ION. Accordingly, it is important to include them to ensure the development of a comprehensive station area plan. The inclusion of these lands in the PARTS Central Plan also gives very clear direction as to the future use and intent of these lands and affords them with a level of protection, including neighbourhood character and stability and cultural heritage protection, while recognizing their contribution and importance to the station area plan and reaffirming that these are not the primary focus for redevelopment and intensification.

The Schneider Creek Neighbourhood is one such stable established neighbourhood in the Central Area that acknowledged that the ION is coming to their neighbourhood and wanted to be included in the development of the PARTS Central Plan. The neighbourhood recognized that given its proximity to the ION stops, this neighbourhood could be a potential host for intensification, renewal and a high level of change.

It was important for their neighbourhood to be included in the process and the development of the PARTS Central Plan. This is an opportunity to put policy framework in place to ensure that any growth and/or change is positive and contributes to great neighbourhoods. This is also an opportunity to comprehensively confirm that these neighbourhoods and all the uses within the station area are well-connected and that the station area environment is inviting and supportive of ION ridership.

“New development and infrastructure must contribute to the qualities that make up a good neighbourhood; appropriate height, density and scale, walkable streetscapes with a mix of nearby uses including employment and amenities, tree canopy, buildings that face the street, careful planning for circulation and connection that is appropriate.” (Schneider Creek Neighbourhood)

Implementation Measures/Recommendations:

The PARTS Central Plan will provide direction for the future growth and development in the Central Area and will be implemented in a variety of ways. The implementation tools will include an Official Plan Amendment, a Secondary Plan, a Zoning By-Law Amendment, an update to the City’s Urban Design Manual, and recommendations for identifying and prioritizing future capital projects, such as streetscape improvements, servicing upgrades, and public space creation. The recommended implementation of the PARTS Central Plan will be discussed in more detail in the section entitled ‘Getting There’.
Focusing and directing growth within station areas reinforces and optimizes public infrastructure investments, builds compact, sustainable and complete communities and encourages transit use.
2.0 Existing Conditions

The PARTS Central Area encompasses the highest existing and target densities, as well as the greatest number of ION stops of any PARTS study area.

Introduction

The PARTS Central Area is located in the heart of Kitchener, comprises 322 hectares, has six (6) ION stops, and is the first and largest station area plan in the City of Kitchener.

This section of the plan provides data and baseline conditions that capture what exists currently within the PARTS Central Area.

PARTS Central includes many of Kitchener’s most prominent urban spaces, landmark buildings and marquee new and recent development. It is home to many of Kitchener’s biggest events and includes the entirety of the city’s Urban Growth Centre.

The PARTS Central Area contains many of the large office, high rise residential and dense mixed use buildings expected of the downtown of a mid-sized city. However, the study area also includes a significant amount of low-rise residential (22% of all properties) within stable neighbourhoods. Likewise, while the Central Area is the home to many recent, new and future developments, there are many sites with cultural heritage significance and two Heritage Conservation Districts. Overall, the built form of PARTS Central is a highly varied mixture of typologies, forms and eras, presenting many design challenges and opportunities moving forward.

(right) A view of the City of Kitchener showing the ION route and Station Study Areas.
Existing Land-Use in the Preferred Boundary

*Urban Growth Centre
*City Centre District
*Civic District
*Innovation District
*Market District
Low Rise Residential
Mixed Use Corridor
General Industrial
Major Institutional
Low Rise Conservation
Low Rise Conservation A
Low Rise Conservation B
Low Rise Residential Preservation
Low Rise Multiple Residential
Low Density Multiple Residential
Medium Density Multiple Residential
High Density Multiple Residential
Office/Res Conversion

Convenience Commercial
Low Density Commercial/Res
Medium Density Commercial/Res
High Density Commercial/Res
Neighbourhood Institutional
Community Institutional
Neighbourhood Park
Open Space
Two-Zone Policy Area (Floodplain)
Iron Horse Trail

*As indicated in the new Official Plan

1ha

for reference
do not scale
**Demographics**

As seen in the chart above, more than half of the 14,019 people currently living in the PARTS Central Area reside in multiple dwelling units. This percentage is climbing due to the new/recent construction of high rise condominium projects (1 Victoria and City Centre) and as part of a larger trend toward downtown living, driven partially by the LRT itself. However, there is also a significant presence of low rise residential within the study area, with demand for centrally located single-detached housing also increasing. It will be important to ensure higher density development is compatible with the context of the surrounding low-rise stable neighbourhoods.

Of the 12,980 jobs in the PARTS Central Area, three-quarters are categorized as commercial (office, retail), along with small percentages of industrial and institutional employment.

**Land Use**

Approximately 30% of the PARTS Central Area has a Downtown land use designation in the current Official Plan. Additionally, there are a variety of permitted land uses throughout the station area including low to high rise residential, neighbourhood community and major institutional, general industrial, office, mixed use and open space. The policy framework currently in the place allows for continued mixing of uses in the future.

Approximately 11% of lands in the PARTS Central Area are park land, 2.5% of the lands in the station area are open space, and 0.5% of lands are used for recreational purposes.

Overall there are currently 108 existing persons and jobs per hectare in the entire PARTS Central Area. The new land use designations that are recommended as part of the PARTS Central Plan will allow the station area to achieve a minimum density of 150 persons/jobs per hectare, which is what is required to support rapid transit.

Currently, 14,019 people live and 12,980 people work within the PARTS Central Area.
2.0 Existing Conditions

Existing Assets & Features

Historically, Downtown Kitchener developed primarily on the strength of the industrial and retail sectors before becoming a centre for finance and insurance. More recently, it has found success as an innovation cluster, with increased desirability for high rise residential uses helping to create a mixture of uses and unit-types. Many events also take place in the downtown, particularly along King Street, at Carl Zeilh Square and in Victoria Park, including Kitchener Blues Festival, Cruisin’ on King Street, Rib Fest, Koi Fest, Christkindl Market, NightShift among many others.

The PARTS Central Area contains a significant proportion of the city’s built heritage with many listed and designated properties as well as two (2) Heritage Conservation Districts and several cultural heritage landscapes within, or overlapping with, the PARTS Central Area. The Innovation (formerly Warehouse) District contains several prominent heritage buildings as part of a legacy left behind by the area’s historic garment industry. Here, there are many good examples of adaptive reuse, including Kaufman Lofts, The Lang Tannery, The Breithaupt Block, and many sites along Victoria Street.

The PARTS Central Area contains a wide variety of urban design and buildings representing many different architectural styles and eras. The Urban Growth Centre is divided into four design districts—Innovation, City Centre, Market, Civic—and each contains unique characteristics. Currently the City has engaged in streetscape redevelopment in the downtown to encourage an active pedestrian environment, which should continue in areas identified as priorities streets for streetscape plans.

PARTS Central is home to Victoria Park, a major city-wide focal point where many events frequently occur throughout the year. Other parks in the preferred boundary are shown on the Parks & Public Realm map on page 40. There are many public art and industrial artifact installations within this boundary as well, the locations of which are also identified on the Parks & Public Realm map.

PARTS Central is home to a large percentage of the city’s bike parking locations, cycling infrastructure including cycling route designations, sharrows and bicycle fixing stations. The existing transportation and cycling network consists of small blocks and a grid-like system that will accommodate increased vehicular and cyclist traffic. The existing Iron Horse Trail is located along the southern boundary of the PARTS Central Area and provides a trail connection to the PARTS Central Area.

The existing sanitary infrastructure was built at a time when pipes were required to be large to handle the capacity of wastewater from factories. It has been determined that the existing sanitary infrastructure will adequately service new development proposed within the timeframe of this plan.

(right, top) Building Height Map showing low (pink) mid rise (yellow) and tall (blue) buildings. Numbered circles correspond to photo examples on the following page.
(right, bottom) Walking Distance Map showing 250m (purple) and 500m (pink) walking distances along public paths, measured from each ION Stop.
2.0 Existing Conditions

The PARTS Central Area encompasses a wide range of building types, heights, sizes and architectural styles representing many eras of building construction.

![Lang Tannery building at Victoria and Charles.](image)

**Built Form & Development Pattern**

The majority of the buildings in the station area are three (3) storeys or fewer. However, there are over 20 buildings within the four (4) to eight (8) storey range. Examples of mid-rise built form include the Region of Waterloo Administration Headquarters, the Residences on David Street, Kaufman Lofts and Google Canada at the Breithaupt Block. There are a similar number of buildings (over 20) that are nine (9) storeys or greater. Examples include Kitchener City Hall, the new consolidated Provincial Courthouse on Frederick Street, Duke Tower, the TD Bank Building on King Street, the Sun Life Financial Building on Frederick Street, and the Alexandria, a high-rise residential building on Water Street.

Recently demand has increased for high-rise condominium towers in the downtown, the most recent of which are the City Centre Condominiums and 1 Victoria Condominiums. Demand for new high-tech office space has mostly been met by low and mid-rise adaptive reuse projects, including the Tannery, 72 Victoria Street South and 127 Victoria Street South, and is continuing with currently in progress projects at 5 Michael Street, 195 Joseph Street and 8 Queen Street North.

Buildings along King Street between Victoria Street and Cedar Street are more compact and situated close to the street.

(right) Examples of built-form in the PARTS Central Area showing different heights, architectural styles, construction eras and forms.
3.0 ION Stops

The Preferred Area & ION Stops

The PARTS Central Area contains six (6) ION stops and all lands within the boundary of the proposed PARTS Central Plan are within an 800 metre radius of the six (6) ION stops. The one exception is a small area of Victoria Park and a small portion of a parcel with frontage on Victoria Street South adjacent to the Iron Horse Trail.

The locations of the ION stops were determined through an Environmental Assessment process initiated by Region of Waterloo, and which was completed in 2011. The ION stops were also named by the Region of Waterloo in the spring of 2015.

The six (6) ION stops within the PARTS Central Plan are:

- Central Station/Innovation District
  This ION stop will be the location of the Region’s proposed Multi-Modal Hub. It will be a two-way ION stop with service to the north to Waterloo and service to the south to the Fairview Park Mall.

- Kitchener City Hall
  This ION stop is located on the northeasterly side of Duke Street, just south of Young Street and Kitchener City Hall, and is a one-way ION stop with service to the City of Waterloo.

- Victoria Park
  This ION stop is located on the southwesterly side of Charles Street West, just north of Gaukel Street, and is a one-way ION stop with service to the Fairview Park Mall.

- Queen
  This ION stop is located on the southwesterly side of Charles Street West, just south of Queen Street South and north of Benton Street, and is a one-way ION stop with service to the Fairview Park Mall.

- Frederick
  This ION stop is located in the middle of the Frederick Street right-of-way, just east of King Street West, across from Goudie’s Lane, and is a one-way ION stop with service to the City of Waterloo.

- Kitchener Market
  This ION stop is located on the northeasterly side of Charles Street West, just south of Cedar Street South and northerly of Madison Avenue South, and is a two-way ION stop with service to the north to Waterloo and service to the south to the Fairview Park Mall.

(above) Images of each ION stop (courtesy of the Region of Waterloo).
"I would like to see the inclusion of pocket parks in the urban core."
May 26th 2015 Feedback Report
4.0 Vision & Objectives

The Vision

"Together we will design, build and support a well-connected, innovative, vibrant, inviting, and inclusive PARTS Central Area in which to live, work, shop, study, and play."

The PARTS Central Plan will support the use of ION by ensuring an appropriate mix of land uses and densities in appropriate locations.

The PARTS Central Plan will provide direction to promote and ensure compatibility of design and development in order to contribute to making the PARTS Central Area an identifiable ‘Great Place’ in the City of Kitchener.

Objectives

Manage Growth & Change

- Promote appropriately located and scaled intensification to achieve transit-supportive and policy-directed densities;
- Identify and conserve established stable residential areas surrounding the Urban Growth Centre (Downtown);
- Ensure new development/redevelopment supports the conservation of Cultural Heritage Resources, including Heritage Conservation Districts;
- Plan for adaptation (places that can transition over time to achieve the overall vision for the station study area);
- Promote redevelopment opportunities on underutilized lots;
- Support compact and sustainable development patterns to make efficient use of Centre’s land and resources; and
- Identify the need for public investments (including servicing, infrastructure and community amenities).

Ensure a Mix of Appropriate Land Uses

- Plan for a mix of land uses to support rapid transit and foster a vibrant and complete community in the PARTS Central Area;
- Support a range of services that appeal to a broad range of users to encourage a vibrant and safe environment;
- Encourage and support new residential uses;
- Encourage and support the creation of affordable housing in new development projects;
- Encourage and support the location of unique and niche retail and commercial uses those uses which support residential development with the Urban Growth Centre and within adjacent neighbourhoods;
- Support the function of being the Region’s centre for government, administration, office and commercial activity;
- Support and facilitate the PARTS Central Area as a centre of arts, cultural and entertainment and a gathering place for events and experiences; and
- Protect, and conserve existing natural, built, and cultural heritage resources while creating new opportunities to live, work, study, and play.

Enhance Transportation Choice & Connectivity

- Support active transportation by improving connectivity, convenience, access and mobility to and from ION stops, destinations and amenities;
- To give pedestrian, cycling and rapid and public transit modes of transportation the priority over vehicular circulation;
- Create and maintain a cycling and pedestrian-friendly and walkable PARTS Central Area;
- Design streets for all users by implementing pedestrian-scaled development principles and plan for all modes of transportation; and
- Require a barrier-free environment for enhanced accessibility.
4.0 Vision & Objectives

Enhance Placemaking, Safety & Community Design
- Inspire and promote creative, high quality design through the encouragement and support of architectural excellence;
- Support the creation of healthy, inclusive, comfortable, safe, meaningful, and attractive places;
- Enhance the area’s sense of place by creating recognizable streetscapes;
- Support the design of new buildings to create a pedestrian-friendly environment;
- Preserve existing public spaces and create new public spaces;
- Incorporate new green spaces and connections where possible; and
- Foster safety by increasing the vitality of the Urban Growth Centre (Downtown), especially after work hours, through the support of uses to increase the liveliness of the Downtown and the use of Crime Prevention Through Environmental Design (CPTED) practices.

Guide Public & Private Investment
- Identify, guide, plan, and prioritize public sector initiatives, including infrastructure investment;
- Plan for new and improved public spaces, services, and amenities;
- Guide private sector investments to shape the nature and form of new development and its contribution to the streetscape;
- Support the growth of high-tech and start-up companies, educational institutions, and arts, cultural, and entertainment uses; and
- Support the attraction of vibrant and unique businesses and retail stores.

(right) Visualizations illustrating potential development around each ION stop.
5.0 Preferred Plan

Best Practices for Density for LRT | 160 Residents/Jobs

The Province of Ontario’s Transit Supportive Guidelines indicates that for LRT/BRT to be successful, a minimum density of 160 residents and jobs/ha is required. These guidelines base their recommended density on revenue/cost recovery ratio that it believes is necessary for LRT/BRT to be economically viable in Ontario. The goal in preparing the Station Area Plan for Central was to ensure that the residents and jobs density in the PARTS Central Area could at a minimum meet a minimum target of 160 residents and jobs per hectare.

The City’s new Official Plan set a density target of 225 residents and jobs per hectare for the Urban Growth Centre (Downtown). Five (5) of the six (6) ION stops in the PARTS Central Area are located in the UGC (Downtown) and one (1) ION stop is located just on the fringe of the UGC (Downtown). All the ION stops will be well-served by an area that exceeds the minimum best practice density target for LRT of 160 residents and jobs per hectare. The overall planned density of the PARTS Central Area is 175 residents and jobs per hectare at 50% of the zoned capacity of the lands. If the areas which are not intended for intensification are excluded, for example, low rise residential areas, parks, natural heritage lands, then the overall density increases to 250 residents and jobs per hectare at 50% of the zoned capacity of the lands. Again, this overall density well exceeds the minimum required to support LRT/BRT in Ontario and in Kitchener.

Through the development of the station area plan there was some concern that the inclusion of low-intensity uses in the plan would decrease the overall density of the station area plan. While the low-intensity uses do have the effect of decreasing the overall density of the station area plan, the proposed density of the lands proposed for intensification remains the same. Whether the low-intensity uses are included or not in the station area plan, the density of the lands within an 800 metre radius of an ION stop, which can support redevelopment and intensification, remains the same.

Accordingly, the proposed land uses in the Preferred Scenario will support the Region’s ION rapid transit system.

The Places To Grow Growth Plan for the Greater Golden Horsehoe requires municipalities to plan to achieve by the year 2031 a minimum gross density target for their Urban Growth Centre (Downtown). For the City of Kitchener, that minimum density target is 200 residents and jobs per hectare. In the review of the City’s new Official Plan, and in implementing the policies in the Places To Grow Growth Plan, the City proposed a minimum density target of 225 residents and jobs per hectare as it was determined that a proposed maximum Floor Space Ratio (FSR) of 3.0 could yield 230 residents and jobs per hectare at 50% of the zoned capacity of the UGC lands.

The City proposed a higher number than what was contained in the Provincial document because the city was already close to meeting the target of 200 residents and jobs per hectare and existing zoning alone could yield 230 residents and jobs. Also, given that LRT was on the immediate horizon the City anticipated that there would be increased interest and “take up” on a number of redevelopment opportunities in the central area to easily increase the density beyond 200 residents and jobs per hectare over the next 20 years.

Some stakeholders through the PARTS Central Plan process asked the City to consider increases in the maximum permitted FSR in the Urban Growth Centre (UGC) and the mixed use areas in the PARTS Central Area. The lands in the UGC were reviewed as part of the City’s new Official Plan to ensure that the density target set out in Places To Grow and the Region’s Official Plan could be met. As the proposed maximum permitted FSRs in the UGC and Mixed Use areas will facilitate the city achieving the minimum density targets for an UGC and for a major transit station area, at this time, the PARTS Central Plan is not recommending any further district-wide increases beyond the new Official Plan. The new Official Plan provides the direction for further consideration for an increase in the maximum permitted FSR (density) through the use of bonusing provisions in the zoning by-law.
5.0 Preferred Plan

Land Use Map

Urban Growth Centre
City Centre District
Civic District
Innovation District
Market District
Innovation Employment
Institutional
Mixed Use
High Density
Medium Density
Low Density
Residential
High Rise
Medium Rise
Low Rise
Park
Natural Heritage
Two-Zone Policy Area (Floodplain)
Iron Horse Trail
Site-Specific Policy Area

1ha

For reference: do not scale
5.0 Preferred Plan

Legend Description

- **Urban Growth Centre**
  - City Centre District – Minimum FSR of 1.0 – Maximum FSR of 3.0
  - Civic District – Maximum FSR of 3.0
  - Innovation District – Maximum FSR of 3.0
  - Market District – Maximum FSR of 3.0 except those properties having frontage on Market Lane or Duke Street where the maximum FSR will be 1.0

- **Innovation Employment**
  - Maximum Building Height 14.0 metres

- **Institutional**
  - Mixed Use
    - High Density Mixed Use
    - FSR 1.0 to 4.0
    - Maximum Building Height 24 metres
  - Medium Density Mixed Use
    - FSR 0.6 to 1.0
    - Maximum Building Height 14.0 metres

- **Residential**
  - High Rise Residential
    - FSR 1.0 to 4.0
    - Maximum Building Height 8 storeys
  - Medium Rise Residential
    - FSR 0.6 to 2.0
    - Maximum Building Height 3 storeys
  - Low Rise Residential
    - FSR 0.6
    - Maximum Building Height 14.0 metres

Proposed Built Form Specifications

- **Floor Space Ratio (FSR)** – the amount of building floor area that may be developed on a property and which is dependent on the lot area. The value is calculated by dividing the building floor area by the lot area.

- **Conservation of Stable Established Neighbourhoods**

  One of the considerations in developing the PARTS Central Plan was ensuring the conservation of stable established neighbourhoods. There were two ways to do this.

  One of the scenarios/alternatives that was developed through the process was to exclude the stable established neighbourhoods and focus the boundary to only those lands which had redevelopment or intensification opportunities. By their exclusion, it was clear that the stable established neighbourhoods were not the focus for intensification and this did provide some level of conservation of the existing fabric and built form. However, with their exclusion from the station area plan there was still some ambiguity as to the future use and intent of these lands.

  To remove the ambiguity, another scenario/alternative that was put forward in the process included the stable established neighbourhoods. It was felt that these neighbourhoods and other low-intensity uses contribute to the station area and some of these users also contribute to the ridership of the ION. Accordingly, it was important to include them to ensure the development of a comprehensive station area plan.

  It was also felt that the inclusion of these lands in the PARTS Central Plan gives very clear direction as to the future use and intent of these lands and affords them with an even better level of conservation than if they were excluded. Their inclusion and designation in the PARTS Central Plan recognizes their contribution and importance to the station area plan and provides a clear message that these lands are not the focus for redevelopment and intensification.

- **Conservation of Cultural Heritage Resources**

  Another consideration through the development of the PARTS Central Plan was the conservation of cultural heritage resources, such as designated and listed built heritage resources and cultural heritage landscapes. New development or redevelopment within the PARTS Central Area will need to comply with provincial, regional and/or municipal heritage policy and regulation, including the Ontario Heritage Act and the Provincial Policy Statement (2014) under the Planning Act. The conservation of cultural heritage resources also supports efforts to protect the existing character of stable established neighbourhoods. Stakeholder consultation and study will be undertaken through the Secondary Plan process to determine and extend appropriate conservation measures to specific cultural heritage landscapes.

- **Proposed Land Uses in the PARTS Central Plan**

  Historically, Downtown Kitchener has been the focal point of the region. It has been a centre for trade, politics, arts and culture and entertainment. Today, the vision is to establish Downtown Kitchener as one of the best downtowns in North America that offers a complete sense of community while providing unique, vibrant and eclectic experiences. To our community, this means offering a unique urban feel, creative work environments, bustling pedestrian-focused sidewalks, unique stores and restaurants, attractive buildings and storefronts, a vibrant arts and culture scene, innovative housing options and a strong sense of community.

  The land uses proposed in the PARTS Central Plan are transit-supportive and will help contribute to a complete and healthy community.
5.0 Preferred Plan

**Urban Growth Centre (UGC)**

**City Centre District**

The City Centre District is the heart of the Urban Growth Centre (Downtown) and focuses around the original commercial area of King Street. The commercial area of King Street has historically developed as a pedestrian-oriented environment characterized by ground floor commercial uses in narrow store fronts, providing frequent entrances for pedestrians. The intent is to maintain the pedestrian appeal while evolving into a compact, contemporary urban setting, with taller buildings, lively street activity and a stylish mix of shops, restaurants, bars, cultural and entertainment uses.

This City Centre District is also characterized by several large office developments and by lot sizes and assemblies of lot sizes conducive to future large scale developments. On the edge of this District are small areas with buildings that were originally constructed as single detached dwellings but over the years have been converted to mixed use commercial or multiple residential uses. These locations outside of King Street have excellent access to a primary road network and public transportation, they are suitable for redeveloping opportunities to help contribute to achieving the intensification target for the Urban Growth Centre (Downtown).

**Innovation District**

The Innovation District is situated at the most northwesterly end of the downtown, which is centered around the intersection of King Street and Victoria Street. This district is characterized by many large, old industrial buildings which have already been converted or have the potential for conversion to loft style office, residential and other viable uses. This area is different from the rest of the downtown as Victoria Street carries through traffic not necessarily destined for the City Centre. It is anticipated that this district will evolve with the development of a regional Multi-Modal Transportation Hub within the lifetime of this Plan.

The Innovation District will continue to transform into a dense contemporary urban setting. The presence of high-tech and science related office uses, as well as new post-secondary and research related institutional uses. The policies in this section will support and encourage this trend to continue.

**The City Centre District land use designation, as identified in the new Official Plan, will have a minimum Floor Space Ratio (FSR) of 1.0 and a maximum Floor Space Ratio (FSR) of 3.0. Building heights on King Street will be regulated to maintain the current pedestrian experience.**

**Mixed Use**

Mixed Use areas are intended to permit a broad range and compatible mix of commercial, retail, institutional and residential uses, either on the same site or within the same building. Permitted uses could include, but are not limited to retail, office uses, a day care facility, health office/clinic, personal services, religious institutions, commercial entertainment, restaurants, studio and artisan-related uses. Permitted residential uses may include those medium and high rise residential uses permitted in the Medium Rise Residential and High Rise Residential land use designations, including special needs housing.

Development and redevelopment of properties will be encouraged to achieve a high standard of urban design, be compatible with surrounding areas, be transit-supportive and cyclist and pedestrian-friendly. Further, the permitted commercial and retail uses within Mixed Use areas are designed to Mixed Use areas play a significant role in achieving and maintaining the planned function and ensuring the vibrancy of the major transit station area. Accordingly, although residential development is permitted and encouraged within lands designated Mixed Use, it is not the intent of lands designated Mixed Use to lose the planned retail and commercial function to service surrounding neighbourhoods.

Mixed Use areas in the preferred land use plan are proposed to be classified according to intensity of the mixed use. The preferred land use plan proposes a low, medium and high density mixed use land use designations as part of a new Secondary Plan to achieve a low, medium and high intensity of use. By having different intensities of mixed use, it will aid in facilitating the transition between high and low intensity uses, particularly where mixed use abuts a low rise residential neighbourhood.

To further assist in the transitioning between high and low, it is proposed that the maximum Floor Space Ratio (FSR) in a medium density mixed use land use designation be limited to 2.0 and the maximum Floor Space Ratio in the low density mixed use land designation be limited to 1.0. This will provide a clearer distinction of the intensity of use between medium and high density mixed uses and support the transition between low and high intensity of uses.

**Low Density Mixed Use**

The Low Density Mixed Use land use designation should have a minimum Floor Space Ratio (FSR) of 0.6 and a maximum Floor Space Ratio (FSR) of 1.0. Also, the maximum building height should be 14 metres.

**Medium Density Mixed Use**

The Medium Density Mixed Use land use designation should have a minimum Floor Space Ratio (FSR) of 1.0 and a maximum Floor Space Ratio (FSR) of 2.0. Also, the maximum building height should be 24 metres.

**High Density Mixed Use**

The High Density Mixed Use land use designation should have a minimum Floor Space Ratio (FSR) of 2.0 and a maximum Floor Space Ratio (FSR) of 4.0. No maximum building height limitation is being proposed for lands within this designation.

**Civic District**

The Civic District was planned in 1965 as a contemporary urban square with architecturally bold buildings situated in a park-like setting. It is the only area of the downtown located north of Webster Street and is linked to the City Centre District by Queen and Frederick Streets. This District has evolved into a civic and cultural focal point for Kitchener and the region. It is comprised of publicly-owned lands developed primarily as administrative, government, cultural uses and open space. The vision is for the District to evolve into more of a mixed use area.

**The Civic District land use designation, as identified in the new Official Plan, will have a maximum Floor Space Ratio (FSR) of 3.0.**

**Market District**

The Market District is located at the eastern entrance to the downtown and functions as a unique village-like setting anchored by market uses. Many of the properties which were originally developed as single detached residential dwellings have been converted to commercial uses given their proximity to the City Centre District. The collection of buildings on Market Lane and others on Eby Street have converted or redeveloped with a similar design theme creating a unique and attractive environment.

**The Market District land use designation, as identified in the new Official Plan, will have a maximum Floor Space Ratio (FSR) of 3.0.**

**Boniising for Increased Height & Density in Exchange for Community Benefits**

Bonising is a strategy that is permitted by the Planning Act and may be used by the City to add to the development or redevelopment of key areas in the city. It involves increasing the height and/or density of a development or redevelopment in exchange for community benefits.

The City’s new Official Plan strongly encourages the use of bonising within the Urban Growth Centre (Downtown) and Major Transit Station Areas.

In all of the downtown land use designations in the Urban Growth Centre, the new Official Plan already provides a policy framework to permit the maximum Floor Space Ratio to be increased through the use of bonising provisions in the Zoning By-Law in order to promote residential development or redevelopment and the provision of community benefits.

For those lands designated for High Rise Residential and High Density Mixed Use, the new Secondary Plan should give consideration to extending the use of bonising provisions to those High Rise and High Density Mixed Use lands within the City’s new Official Plan, with an emphasis on the provision of community benefits, particularly the provision of affordable housing.
5.0 Preferred Plan

Institutional

The primary use of lands within these areas is intended for institutional uses that are of a neighbourhood, community or regional nature. The uses in this land use designation could include secondary and post-secondary educational facilities, long-term care facilities, social, cultural and administrative facilities, small-scale institutional uses compatible with surrounding uses such as public and private elementary schools, libraries, day care centres, and places of worship. Some of these small-scale institutional uses may also be permitted in other land use designations, for example, Mixed Use.

The intent of the Institutional land use designation is to protect these lands for institutional purposes. In recent years there have been several examples in the City of elementary schools leaving established neighbourhoods and these lands being redeveloped with residential uses. Once an institutional use within the neighbourhood is gone, it is very difficult to reestablish such a use. Typically there is no getting them back and neighbourhoods have lost a valued service/amenity and the ‘completeness’ of the community is compromised. It is important to protect school sites in the central area, especially as this area grows and evolves, to help with walkability and to ensure opportunities for other community infrastructure such as religious institutions.

Residential

High quality residential areas provide varied housing options for residents in different life circumstances in locations which are supported by community infrastructure such as parks and schools and an integrated transportation system, as well as commercial uses, employment uses and other services which are essential to day-to-day life.

Residential areas in the preferred land use plan are proposed to be classified according to the intensity of the residential use.

Low Rise Residential

Lands indicated as Low Rise Residential comprise the stable established neighbourhoods, the centres of Heritage Conservation Districts and for the most part, are within a cultural heritage landscape. It is intended that through the development of the Secondary Plan and implementing zoning by-law, further and more detailed policy direction will be provided for these areas, with respect to dwelling types, built form, building regulations and setbacks, in order to conserve the development pattern, character, and cultural heritage significance of these areas.

These areas are proposed to accommodate low density housing types, including single detached dwellings, duplex dwellings, semi-detached dwellings, and where appropriate and compatible, other low density housing types such as street townhouse dwellings and small-scale multiple dwellings.

This category should have at least two land use designations whereby certain areas are limited in terms of the dwelling types and other locations may have a wider range of dwelling types permitted.

Medium Rise Residential

This area is proposed to accommodate a range of medium density housing types including townhouse dwellings in a cluster development, multiple dwellings and special needs housing.

The maximum permitted Floor Space Ratio (FSR) for Low Rise Residential should be 0.6. Also, the maximum building height in the Low Rise Residential land use designation should be 3 storeys or 4 storeys if the lands front onto a Regional Road or City Arterial Street.

The minimum Floor Space Ratio (FSR) should be 0.6 and the maximum Floor Space Ratio (FSR) should be 2.0. Also, the maximum building height should be 8 storeys in the Medium Rise Residential land use designation.

High Rise Residential

This area is proposed to accommodate primarily high density multiple dwellings and special needs housing to achieve a high intensity of residential use.

The minimum Floor Space Ratio (FSR) should be 1.0 and the maximum Floor Space Ratio (FSR) should be 4.0. Also, there should be no maximum building height in the High Rise Residential land use designation.

Park

Parks and open spaces are valuable resources to the community and contribute to the quality of life in Kitchener. The primary intent of these areas are to provide for a comprehensive and connected open space system of parks and trails, a buffer between land uses, and increase the opportunities for recreation and general enjoyment, in an active or passive manner, of an area while having regard for the City's natural areas that are designated as part of the Natural Heritage System.

Natural Heritage Conservation

These areas are intended to protect and/or conserve natural heritage features and their ecological functions. Natural heritage features can include provincially or locally significant wetlands, valleys, woodlands, threatened or endangered species habitat, and lands subject to natural hazards or flooding. Permitted uses could include conservation activities, forest, fish and wildlife management, and small scale passive recreation activities, for example, trails. No new development/redevelopment is permitted within these areas.

Ecological Restoration Area

These areas on the preferred land use plan are lands and waters that have the potential to be enhanced, improved or restored to a more natural state, contributing to the overall diversity and connectivity of the Natural Heritage System. Ecological Restoration Areas are identified by the City in order to enhance the diversity and connectivity of the Natural Heritage System and to provide habitat supportive of the overall sustainability of the system. Lands that are identified as Ecological Restoration Area are intended to be treated as an overlay layer to the applicable land use designation.

In Ecological Restoration Areas an Environmental Impact Study or other appropriate study will be needed to evaluate the area’s ecological functions in its optimal ecological state and demonstrate that there will be no adverse environmental impacts on the restored feature or the ecological functions of the feature in its optimal ecological state.

The City is currently undertaking an integrated stormwater management master plan which follows the municipal environmental assessment process. The master plan will update the 2001 City of Kitchener Master Stormwater Management Policy, in order to bring it into compliance with updated legislation, regulations and policies and to reflect that the city has a stormwater utility. This master plan will provide guidance on how the city should manage stormwater over the next 15 years. The City is expected to be completed in the Spring of 2016 and is recommending various alternatives be explored including enhancing uptake of lot-level stormwater management on private property and "low impact" development.

A new Secondary Plan is an opportunity to further implement more detailed Ecological Restoration Area policies and recommendations from the updated Master SWM Policy to restore and enhance these identified areas to a more 'green' state, thereby reducing flooding, improving water quality and reducing the impacts of climate change.

Floodplain

Kitchener’s long term prosperity, human and environmental health and social well-being depend on reducing the potential for public cost or the risk to Kitchener’s residents from natural and human-made hazards. Development will be directed away from areas of natural or human-made hazards where there is an unacceptable risk to public health or safety or property damage and not create new or aggravate existing hazards.

Where a ‘One Zone Policy Area’ has been applied to lands, the entire floodplain will be considered the floodway. No new development or site alteration will be permitted in the floodway. Development is limited to land uses that, by their nature, must locate within the floodway, including flood and/or erosion control works, structures necessary for conservation, water supply, wastewater management, or minor additions or passive non-structural uses which do not affect flood flows. For lands within a ‘One Zone Policy Area’, these lands are intended to be designated Natural Heritage Conservation.

For lands where the ‘Two Zone Policy Area’ is applied, development, redevelopment or site alteration may be permitted in the flood fringe, subject to appropriate floodproofing standards to the flooding hazard elevation or another flooding hazard standard approved by the Minister of Natural Resources.

A ‘Two Zone Policy Area’ may only be applied to lands where significant urban uses currently exist with the floodplain, and where there is significant potential for further infilling and redevelopment with no adverse effects on flood flow. For lands within a ‘Two Zone Policy Area’, these lands will have a land use designation with an Ecological Restoration Area overlay layer on top of the land use designation. (Cont’d on next page)
5.0 Preferred Plan

Floodplain - for watercourses and small inland lake systems, means the area usually comprising of low lands adjoining a watercourse, which has been or may be subject to flooding hazards.

Floodway - for watercourses and small inland lake systems, means the portion of the floodplain where development and site alteration would cause a danger to public health and safety or property damage.

Where the ‘One Zone concept’ is applied, the floodway is the entire contiguous floodplain.

Where the ‘Two Zone Concept’ is applied, the floodway is the contiguous inner portion of the floodplain, representing an area required for the safe passage of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage.

Where the ‘two zone concept’ applies, the outer portion of the floodplain is called the flood fringe. In all cases, the floodway will include areas of inundation that contain high points of land not subject to flooding.

Innovation Employment

Industrial employment has always been an important component of Kitchener’s economy and has played a vital role in the city. Industrial employment is integral to the development, growth and vitality of the local economy which is closely linked to the quality of life of the residents of the city.

The preferred land use plan is proposing a new category of land use, not currently found in our current and new Official Plan. It is proposed to be named ‘Innovation Employment’ to recognize a growing trend for employment lands for ‘start-ups’ and ‘makers’, while recognizing the unique location of these employment lands in close proximity to the ION stops, the existing built form and opportunities for the redevelopment of these lands. The new land use designation would be applied to lands on north side of Breithaupt Street between King Street and Weber Street and to lands located on Whitney Place.

The intent of the land use designation would be to accommodate the following types of uses:

- creative production industries which may use both traditional and cutting-edge production and fabrication methods requiring expensive equipment and appropriate production spaces. (Creative production industries are those employment uses which may use such modern tools and high-tech equipment such as laser cutters, waterjet cutters, CNC routers, 3-D printers to produce close to anything a ‘maker’ can dream up;)
- creative production can also include an artisans’ establishment, studio (art and music), craftsman shop, live/work space, shared facilities, galleries, studios and office space for creative professionals;
- retail sales associated with the production of goods and materials;
- office uses, including scientific, technological and/or communications establishments such as computer, electronic, data processing, research and development and consulting uses those engaging in research and development;
- some light industrial uses such as small repair operations and contractor or service trades uses;
- complementary service commercial uses such as restaurants, print shops, personal services, fitness centres, recreational facilities, daycare facilities, health office and clinics and veterinary services; and
- in order to provide for a transition between the Low Rise Residential land use designation and Mixed Use and Innovation District land use designations, residential uses may be permitted on some lands, where it can be demonstrated that the residential use is compatible with Innovation Employment uses on the subject lands and adjacent lands.

It is recommended that the creation of a new Innovation Employment land use designation as suggested above, be implemented through the preparation of a new Secondary Plan for the PARTS Central Plan.

Also, with respect to built form, the maximum building height in this land use designation should be 14 metres.

Site-Specific Policy Areas

The preferred land use plan indicates those lands which may require more detailed site-specific policies and/or regulations through the preparation of a new Secondary Plan. This is the case in order to deal with transition and compatibility between low and high intensity of uses or to recognize existing site-specific policies and/or uses/regulations which would not be in conformity with the proposed parent land use designation.
**Existing & Potential Persons & Jobs**

It is anticipated that the number of persons living in the PARTS Central Area could grow to 23,323 and the number of potential jobs could grow to 27,421. This can be expected if every property within the PARTS Central Area, develops at a minimum of 50% build out of the potential of the zone category in which the lands are situated. The population and jobs numbers could be higher if properties develop to a capacity greater than 50% of the potential of the zone category.

Overall, in the PARTS Central Area, there are currently 108 existing persons/jobs per hectare which is anticipated to grow to 205 persons/jobs per hectare over the long term.

If we exclude those lands in the PARTS Central Area that are designated for Low Rise Residential, Parks and Natural Heritage uses, the existing density is 136 persons/jobs per hectare, while the proposed density, excluding these areas, could be 286 persons/jobs per hectare.

Accordingly, the land use designations that are recommended as part of the PARTS Central Plan will allow the station area to achieve a minimum density of 160 persons/jobs per hectare, which is what is required to support rapid transit.

**Implementation Measures/Recommendations:**

- That the preferred land use plan be implemented through a new Secondary Plan/Official Plan Amendment and Zoning By-law Amendment.
- That the boundary of the preferred plan, which provides further conservation of stable established neighbourhoods, be the boundary of a new Secondary Plan for lands outside of the Urban Growth Centre (UGC), (refer to Land Use Transition Map, p.34).
- That the Mixed Use land use designation be implemented in a hierarchical and transitional form in the Secondary Plan for the PARTS Central Area, for example, High, Medium and Low. Also that the FSRs of the various mixed use designations follow a minimum of 1.0 and maximum of 4.0 for high, a minimum of 1.0 and maximum of 2.0 for medium and a minimum of 0.6 and a maximum of 1.0 for low.
- That the new Secondary Plan for the PARTS Central Plan create a new Innovation Employment land use district for the lands on north side of Breithaupt Street between King Street and Weber Street and to lands located on Whitney Place.
- That the Secondary Plan implement more detailed policies to those lands identified as a 'Site-specific Policy Area', to facilitate the transition and compatibility between low and high intensity of use or to recognize existing site-specific policies.
- That the use of bonuses in the UGC be expanded in the new Zoning By-law in accordance with the City’s new Official Plan.
- That bonusing be considered for High Rise Residential and High Density Mixed Use lands, within 450 metres of an Ion stop, to potentially allow for site-specific increases in the Floor Space Ratio requirement (increases in density) for the provision of community benefits (particularly for affordable housing).
PARTS Central includes a diverse mixture of uses, built form, architectural typologies and styles, construction eras, materials and relationships to the public realm.
6.0 Market Conditions & Opportunities

PARTS Central Market Analysis

The City of Kitchener is ideally situated within one hour of the Greater Toronto Area (GTA) and central to the Golden Horseshoe. The city continues to be a centre for innovation and technology and the local market has been a testimony to this change in the city’s core. With the attraction of global scaled businesses such as the Communitech Hub, the city has become a hotspot for new innovation and this will demand that housing, employment and other services continue to be located in the core, which is a significant component of the PARTS Central Plan.

Kitchener is a successful community that will continue to grow. It is the largest city in Waterloo Region, an area that has one of the most robust economies in Canada. Kitchener has been a leader in managing growth in the past and it is now necessary to be even more strategic about it.

(Below) Various events held in the downtown.

Between 2005 and 2007 the Government of Ontario enacted a series of land use planning reforms that changed the way that cities are expected to plan and to grow. Amendments to the Ontario Planning Act updates to the Provincial Policy Statement (2005) and the release of Places to Grow: Growth Plan for the Greater Golden Horseshoe 2006 outline new objectives and set out new future growth targets for Kitchener and other urban centres. Places to Grow also mandates compact urban development by requiring municipalities to comply with intensification and density targets that go beyond levels contemplated in any of Kitchener’s planning documents.

Vitality within the Urban Growth Centre is a key Official Plan objective and this aligns with the need to continue to encourage residential and employment intensification in PARTS Central. A vibrant downtown will be a catalyst for change. This vibrancy will support service uses along the LRT corridor which are integral to intensification. Over the last few years, Kitchener has experienced a new momentum with respect to development intensification within the core and this will have to continue in order to realize the employment intensification needed to support transit.

A sense of vitality can also be achieved through the programming of public spaces within the core. This vitality is important to the City of Kitchener, with many successful programmed events that continue to bring people downtown such as the Kitchener Blues Festival, the Multicultural Festival, Oktoberfest and the Christkindl Market, among others.

Residential Growth Patterns in Waterloo Region

The table below indicates the current and projected residential growth patterns in the Region.

<table>
<thead>
<tr>
<th>Year</th>
<th>Student Rental</th>
<th>Rental</th>
<th>First-Time Buyer</th>
<th>Transition</th>
<th>Active Retirement</th>
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<td>Age: 24-28</td>
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<td>38,985</td>
<td>40,195</td>
<td>40,960</td>
<td>45,800</td>
<td>98,290</td>
<td>38,185</td>
</tr>
<tr>
<td>5 year change</td>
<td>+1,660</td>
<td>+600</td>
<td>-3,195</td>
<td>+605</td>
<td>+11,695</td>
<td>+9,550</td>
</tr>
</tbody>
</table>

Source: Province of Ontario Land Use Forecasts, 2015

Based on the above regional projections, the following assumptions can be made:

- Demand for apartment style housing geared at students and young adults is at a relative peak, and should decrease over the next 5-10 years.
- Demand for housing geared at first-time home buyers and mature young adults should increase over the next 5 years before plateauing and decreasing towards 2031.
- Demand for housing geared at young adults is expected to increase over the next 5 years and then decline.
- Demand for housing geared at empty nesters and seniors will increase significantly over the next 15 years. (cont.)
6.0 Market Conditions & Opportunities

(icont from previous) Between 2006 and 2013, there was a shift to higher density development formats across the region, influenced by the strong performance of the condominium sector, particularly Downtown, and due to several other factors. There was a corresponding shift in the mix of the existing housing stock between 2006 and 2011. Although in Waterloo Region the majority of the existing housing stock are single detached dwellings, since 2011, both in the City of Kitchener and Waterloo Region, construction of new multi-unit dwellings has outpaced the construction of single detached dwellings.

The Millennial Generation/Baby Boom Echo will drive demand for multiple dwelling units in the PARTS Central Area for the foreseeable future. Collectively, the growth in these age groups could create demand, region-wide, for as many as 1,400 - 2,000 new multi-unit dwelling units over the next 5 years. Millennials and Baby Boomers have demonstrated a willingness to live in smaller unit sizes, as well as a willingness to live without a vehicle. As the Millennial generation matures and begins purchasing larger dwelling units, demand for existing homes in the central neighbourhoods and infill townhouse-style dwelling unit development will increase.

The aging Baby Boom Generation will also drive demand for housing growth in the PARTS Central Area as many begin to downsize. It is unclear as to what form/tenure of dwelling will be in demand by this age cohort. Indicators in the market suggest a shift to rental versus ownership, and a tendency toward split occupancy, which could include renting out of their primary residence while purchasing a vacation property/home. The size and style of home is also unclear, and will be dependent on lifestyle choices and other family considerations, including income and health.

Common among Millennials and Baby Boomers alike is the desire to live in urban areas in an effort to pursue an active lifestyle. Collectively, these suggest that there may be an increased demand for other urban amenities such as vibrant streets, bike infrastructure, dog parks, etc.

Employment Growth Patterns in Waterloo Region

The following graph depicts the employment growth patterns by industry type within the Region of Waterloo.

Between 2001 and 2015, the region grew by 56,400 jobs (25.2%) with 73,600 additional new jobs needed to meet the Places to Grow target of 130,000 total new jobs by 2031.

Looking forward:
- Most of the employment growth will be in the office, technological, institutional and service sectors which include consumer goods, accommodation, etc. These industries thrive with nearby access to multiple modes of transportation, such as those available (or planned for) within the PARTS Central Area (for example: LRT, Regional buses, Greyhound and GO buses, GO and VIA trains, cycling and pedestrian routes and vehicular access).
- As a general trend, service industry jobs will follow office/institutional job growth and residential intensification. It is reasonable to conclude that intensification of office and residential development within PARTS Central should lead to increased service-based uses, which supports the need for mixed use development.

Despite these growth opportunities, the economic viability of new, high density office construction (with structured parking) remains the most significant challenge for the PARTS Central Area. As concluded through the Downtown Financial Incentive Review (2013), it is not currently economically feasible to build new office on speculation, though it is possible to foresee new office spaces that are purpose built for a single user. Therefore, reducing the need for parking through better walkability and ION connectivity will play a critical role in enabling employment based intensification within the PARTS Central Area.

(below) A conceptual rendering of potential urban intensification in Downtown Kitchener. This is a speculative rendering and should not be considered a formal presentation of current or future plans.
(right) A diagram showing many of the prominent large office and multiple residential projects in the PARTS Central Area.
7.0 Cultural Heritage Resources

What makes older cities interesting is their ability to creatively integrate new development with the old, in a way that preserves the historical integrity and early development pattern of the city for future generations to experience and appreciate.

The City of Kitchener has a responsibility to conserve its significant cultural heritage resources. Both the light rail transit initiative (ION) and Provincial growth targets have the potential to impact Kitchener’s cultural heritage resources. Therefore, it is important to establish how cultural heritage resources located within the PARTS Central Area will be addressed in the context of anticipated development.

Existing Conditions

Kitchener has a diverse range of cultural heritage resources that provide an important means of defining local identity, enhancing the quality of life of the community, and supporting and promoting economic prosperity. These include built heritage resources, cultural heritage landscapes and archaeological resources. In comparing the five rapid transit station areas in Kitchener (Central, Midtown, Rockway, Fairway, and Block Line), the PARTS Central Area contains the greatest number of cultural heritage resources than any other station area.

Built Heritage Resources

Built heritage resources include buildings and structures located on property that has design or physical value, historic or associative value, or contextual value. The City protects these properties under the Ontario Heritage Act through their designation and listing on the Municipal Heritage Register.

Heritage designation affords protection against demolition and inappropriate changes to heritage attributes. Property may be individually designated (Part IV designation), or designated as part of a heritage conservation district (Part V designation). Properties that are listed on the Municipal Heritage Register are also recognized as being of heritage value, but do not have the same level of protection as designated property. Within the PARTS Central Area, there are 35 Part IV designated properties, 519 Part V designated properties, and 133 properties listed on the Municipal Heritage Register.

A cultural heritage landscape (CHL) is defined as: “a geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Aboriginal community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association”. Examples of CHLs include distinct neighbourhoods, parks, cemeteries, and industrial areas to name a few.

In April 2015, the City of Kitchener formally approved the Kitchener Cultural Heritage Landscape Study which identified 55 significant cultural heritage landscapes (CHLs) in the City. Thirteen significant CHLs are completely or partly located within the PARTS Central Area. These CHLs include distinctive districts and areas that provide an historical context as to how the city was formed. Included are the Downtown, the Warehouse District, the Catholic Block, and Civic District; a number of transportation corridors such as the Canadian National Railway line, the Iron Horse Trail and Jubilee Drive; Victoria Park; and several residential neighbourhoods, some of which are also heritage conservation districts.

The value of these CHLs and an overview of the features that make them significant are outlined in the CHL Study. The map to the right identifies the location of the 13 CHLs which are completely or partly situated within the PARTS Central Area.

Over 27% of the land parcels within the PARTS Central Area are designated under the Ontario Heritage Act or listed on the City’s Municipal Heritage Register.
7.0 Cultural Heritage Resources

(a) Archaeological Resources (cont.n from previous)

The Region of Waterloo maintains an Archaeological Potential Model as a tool to assist land use planners and policy makers in identifying areas having archaeological potential. The model partitions land parcels into zones having low, medium or high archaeological potential, and is used in determining if an archaeological assessment will be required as part of the land use planning process. In running the Regional Archaeological Potential Model against the lands contained within the PARTS Central Area, it is determined that 24.8% of the land has low archaeological potential, 52.6% has medium archaeological potential, and 22.6% has high archaeological potential.

(b) Conserving Cultural Heritage Resources

Conservation is a balance between preserving the special character, quality, and significance of the historic place and facilitating change in a way that sustains it into the future.

Heritage conservation tools and approaches available to municipalities in Ontario are primarily guided by the policies, rules and regulations set by the Province through legislation, such as the Ontario Heritage Act and the Planning Act.

The Ontario Heritage Act enables municipalities to protect cultural heritage resources through formal heritage designation and listing. Designated property owners are required to obtain municipal approval through the heritage permit process for alterations, new construction and demolition. Properties listed on the City’s Municipal Heritage Register are not subject to the heritage permit process, but are afforded interim protection from demolition for a period of 60 days.

The Breithaupt Block development within the Warehouse District CHL successfully maintains the integrity of the City’s industrial past while adding a modern expression that brings the property into the 21st century.

Historic facades, original openings and heritage attributes have been preserved.

Additions linking buildings and spaces provide a transition that is distinguishable from, yet complementary to, the historic in scale and design.

New windows located on character defining elevations are of an appropriate style and design, in keeping with the age and style of the buildings.

Significant new development is appropriately scaled and does not attempt to replicate the historic architecture or style. The skillful use of glazing adds mass that is transparent, modern, and does not compete with or overwhelm the historic.

Ontario’s Planning Act provides municipalities with the policies, procedures and tools they require to make decisions about land use and development. The Provincial Policy Statement (PPS 2014) issued under the Planning Act identifies policies to which municipal Official Plans and land use planning decisions must conform. Under the PPS, municipalities are required in their decision making to conserve significant built heritage resources and significant cultural heritage landscapes, and to protect archaeological resources. Municipalities are further enabled under the PPS to use Heritage Impact Assessments and Conservation Plans to evaluate and mitigate the impacts of development and site alteration on significant built heritage resources (including designated and listed properties), significant cultural heritage landscapes and archaeological resources.

Guiding Development & Conservation

Conserving cultural heritage resources involves being sensitive to and respecting the values and attributes that contribute to making the cultural heritage resource significant. For built heritage resources, these values and attributes are typically identified in a Statement of Significance (SoS).

All development should preserve and integrate existing built heritage resources on designated and listed property. Where development includes a proposal to alter an existing built heritage resource by adding or removing usable space, such work should not obscure, radically change, or destroy character defining heritage attributes. If an addition is proposed, it should be physically and visually compatible with but subordinate to and distinguishable from the built heritage elements, so that a false historical appearance is not created.

For development involving new building activity on or adjacent to heritage property, the built form including scale, height, massing, architectural character and materials, should be compatible with the surrounding historic context. It is not expected that development replicate historical styles and decoration.

However, new buildings must be able to demonstrate complementary proportions and massing in order to continue the rhythm of traditional façade or street patterns and provide for an appropriate transition where significantly higher densities are proposed.

The inclusion of stable established neighbourhoods within the boundary of the PARTS Central Plan, and the adjustments made to the land use plan to address compatibility and a proper transition between land use categories and densities, supports efforts to conserve cultural heritage resources within the PARTS Central Plan boundary, and in particular cultural heritage landscapes (CHLs). Six of the thirteen CHLs located completely or partly within the PARTS Central Plan boundary are identified as stable established neighbourhoods. The desire to limit redevelopment and intensification in these primarily residential areas is aligned with the conservation objective of maintaining and protecting the existing character and integrity of these cultural heritage landscapes.

Implementation

Where development is proposed on or adjacent property which is listed on the City Municipal Heritage Register, designated under the OHA or identified as having archaeological potential, the City will use the enabling tools under the Ontario Heritage Act and Planning Act to achieve an appropriate level of conservation consistent with the City’s heritage goals, objectives and policies.

This will include requiring heritage permit applications for development on property designated under the Ontario Heritage Act (Part IV or Part V designation); and the ability to require a Heritage Impact Assessment and/or a Conservation Plan for applications made under the Planning Act for property listed on the Municipal Heritage Register or designated under the Ontario Heritage Act, as well as for development applications on property adjacent to a designated property.

The City of Kitchener and Region of Waterloo may require that an archaeological assessment be conducted for development applications made on property identified by the Region as having archaeological potential.
7.0 Cultural Heritage Resources

Sometimes it is the homogeneity or unity of architecture that is important within a CHL. It is also often the combination of historic layers and parts that contributes to significance. Inevitably, it is the local distinctiveness of a CHL that deserves to be acknowledged and conserved.

Conservation Within Cultural Heritage Landscapes (CHLs)

The Region of Waterloo Official Plan enables and requires area municipalities to identify CHLs in their official plans and establish associated policies to conserve these areas. With the completion of the Kitchener CHL Study, the City is now positioned to identify the strategies that will best conserve the unique characteristics of each of these areas.

While the conservation of 2 of the 13 CHLs located within the PARTS Central Area have been addressed through heritage district designation (for example, Victoria Park Neighbourhood Area HCD, and Civic Centre Neighbourhood HCD), other CHL areas will require further examination and consideration of new or additional conservation tools. To be effective, such mechanisms must be a reflection of the combined level of change management desired by the City, the public and property owners.

The City recognizes that there is a need to provide guidance and establish well-understood standards to assess proposals for new development within the City’s significant CHLs. To this end, the City will be engaging with property owners in an effort to address and achieve the ‘three Cs’, namely:

- certainty in identifying regulations and what constitutes appropriate development within CHLs;
- consistency in the development application review and decision making process; and,
- consultation between property owners, the development sector and decision makers on achieving successful outcomes.

These discussions should consider various conservation tools and approaches available under the Ontario Heritage Act and Planning Act, with the objective of maintaining CHL character by protecting existing built heritage resources and ensuring development activity contributes to and enriches rather than diminishes the cultural environment. The implementation of the PARTS Central Plan and the preparation of a Secondary Plan for areas outside the Urban Growth Centre which includes several CHLs, is one other way this objective is expected to be addressed. The Secondary Plan will provide more detailed policy direction in guiding appropriate and compatible development. This, together with implementation of the preferred land use plan, consideration of new zoning provisions, and the introduction of design guidelines, is expected to support efforts to conserve CHLs.

‘CHL Character’ means the combination of qualities, features or patterns that distinguishes a CHL from other areas of the City. The objective is to ensure that proposals for change including new development maintains and protects the heritage character of the CHL.

In the context of a CHL that is a stable residential neighbourhood, this may include having particular regard to lot patterns and street edges; the scale, design, placement and orientation of new buildings; as well as vegetation, topography and other common elements. For other distinctive CHLs like the Innovation District, the character may be a reflection of the general qualities found in landmark industrial buildings and structures, or in recognizing and maintaining significant views or vistas.

Implementation Measures/Recommendations:

- Continue to use the Ontario Heritage Act and Planning Act in conserving built heritage resources through:
  - listing and designating property on the Municipal Heritage Register;
  - processing Heritage Permit Applications for alterations, additions and development on designated property;
  - requiring Heritage Impact Assessments and/or a Conservation Plan for Planning applications made for listed and designated property;

- Preparation of a Secondary Plan and related policies providing direction on appropriate and compatible development within specific CHLs including the implementation of the PARTS Central plan, as well as the introduction of zoning regulations and urban design guidelines directed toward conserving CHL character.

- Investigate possible stakeholder interest in and support for other appropriate and acceptable tools and strategies to conserve CHL character, such as heritage district designation.
New places, spaces and neighbourhoods will emerge and be shaped in areas around the rapid transit stations. To ensure that each of these is successful and vibrant, the design of station study areas must carefully integrate matters of built form, architecture, public realm, streetscape, place-making, safety and universal design. Creating healthy, sustainable communities that reflect our natural heritage and cultural richness will require inspired and high quality design that is functional, diverse and inclusive.
8.0 Urban Design

To create a livable community that balances directing growth to intensification areas with conserving and enhancing residential neighbourhoods.

The urban design direction for the PARTS Central Area was developed by building on work from the Region's Community Building Strategy, the design brief prepared for the transit corridor prepared in 2011 as a Phase 2 initiative, feedback from the community and stakeholders and transit oriented development best practices. Detailed design guidelines for the PARTS Central Area are a future implementation item that will result in a recommendation from this plan.

Development in Urban Growth Centre & Mixed Use Areas

Focusing and directing growth within station areas reinforces and optimizes public infrastructure investments, builds compact, sustainable and complete communities and encourages transit use.

Land Use & Development Pattern

The type and mixture of land uses within the PARTS Central Area will help create a sense of place and encourage a shift towards more sustainable modes of transportation and movement. The transition to an appropriate mix of land uses with the PARTS Central Area and adjacent to the ION stops will help generate transit ridership, reduce personal vehicle trips and contribute to a complete and healthy community.

In order to achieve the desired land use development pattern within PARTS Central a mix of residential, employment and retail uses are encouraged near the ION stop rather than dispersed, segregated uses. Similarly, auto dependent uses such as drive-through retail and car wash facilities should not be permitted within major transit station areas.

Built Form

Achieving the desired built form within the station area can have an impact on the overall function and feel to the station area. Built form is vital to the objective of placemaking and achieving the desired densities that support transit. The following recommended actions will ensure that the desired built form is achieved within PARTS Central Area:

- Concentrate new development and highest densities close to the ION stops.
- Transition from higher intensity development in high density land uses to less intense development patterns in low density areas.
- Establish minimum lot lines with maximum setbacks to achieve a built form that addresses the street.
- Require at least one principal entrance be located within the front of the building and a minimum percentage of building frontage to be built to the lot line.

Parking

Making transit ridership a priority in the PARTS Central Area requires less dependence on the automobile for trips within the station area and increased pedestrian connectivity. To achieve these objectives, the following shall be encouraged:

- Reduced parking rates, maximum parking rates and shared parking should be investigated for the PARTS Central Area to discourage surface parking.
- Require surface parking to be landscaped/buffered from pedestrian/sidewalks.
- Establish surface parking design standards, minimum provision for permeable surface, pedestrian promenade internal to the lot, landscaping and buffing throughout.

Driveways/Site Access

Mowing the buildings closer to the street and providing for fewer potholes of conflict between the pedestrian and vehicles is an objective that puts the pedestrian first. This can be achieved through the following design considerations:

- Require service and parking access on side or rear of buildings.
- Reduce curb cuts for single use driveways onto transit streets.
- Encourage new laneways or the extension of existing laneways on larger sites.
- Allow for shared access lanes to parking (commercial to residential).
8.0 Urban Design

Established residential neighbourhoods in the PARTS Central Area should be reinforced by development that is contextually sensitive to the existing built form.

Compatibility in Established Neighbourhoods

New low density development in Kitchener’s established residential neighbourhoods should be sensitive in scale to existing development, maintain the traditional character and pedestrian-friendly design of the streetscape, and ensure privacy and sunlight penetration on adjacent properties.

New buildings and significant redevelopment should respect and fit within the existing development pattern, scale and height of adjacent properties. This may include the rehabilitation of existing single detached dwellings or the construction of new single detached or multiple unit residential dwellings.

To be compatible means the development or redevelopment of uses which may not necessarily be the same as, or similar to, the existing development, but can coexist with the surrounding area without unacceptable adverse impact.

Built Form

Design will play an important role for reurbanization in established residential neighbourhoods.

To maintain the residential character of existing low density neighbourhoods, new buildings in the interior of those neighbourhoods should generally be no greater than three residential stories in height and adopt similar setback and massing characteristics to the existing residential development along the street.

Achieving compatibility is not about replicating the existing form or reproducing architectural styles or details of nearby buildings. Rather, the focus is to direct how new development can be designed to maintain and conserve neighbourhood character and scale.

Where a development represents a transition between different land use designations or housing forms, a gradation in building height should be used to achieve a transition in height from adjacent development.

The conservation and integration of heritage buildings, structures and uses within a Heritage Conservation District should be achieved through appropriately scaled development that is sensitive to the built cultural heritage. It is anticipated that urban design guidelines for PARTS Central will address the City’s objective to conserve natural heritage landscapes and will provide advice and guidance to ensure that development within and adjacent to identified Cultural Heritage Landscapes will be sensitive to and compatible with the heritage character of the CHLs.

Transitioning

Where the Medium Density Mixed Use land use designation abuts low rise residential uses, the bulk of the massing in the Mixed Use designation should step back from the street thereby providing a maximum separation between the adjacent low density uses.

Stepping back building mass should be used to ensure an appropriate built form transition between the higher density mixed use and the low rise residential. Low density mixed use does not require a transition to low rise residential, as the scale of built form is similar.

The map above details the locations where appropriate built form transition is critical. These areas will be further detailed with special policies, zoning provisions and design guidelines to ensure appropriate transition occurs between higher density uses and low density residential areas.

Land Use & Development Pattern

Development should maintain and strengthen access and connections to amenities including neighbourhood commercial facilities, community facilities including schools, parks and community centres, and LRT/LUN stops.

Implementation Measures/Recommendations:

• Develop Secondary Plan policies and Zoning regulations that achieve the objectives of good urban design principles in station areas, including the desired built form within intensification areas and specific requirements for established neighbourhoods and transitioning.
• Use the design directions in this plan as the basis for updating guidelines within the Urban Design Manual (PARTS Urban Design Brief).
9.0 Streetscapes

The development of streetscape plans in the PARTS Central Area is an opportunity for placemaking and a tool for the creation and enhancement of spaces for people.

A targeted series of streetscape improvements should be implemented over time in the PARTS Central Area. This section of the plan provides a high-level vision for streetscapes that have been identified by the public, staff and stakeholders as corridors that provide a high level of connectivity to the ION stops and other important landmarks. As an implementation tool of the PARTS Central Plan, streetscape plans should be developed in a priority sequence, to provide guidance on the preferred built form and pedestrian interface along the street, as well as both public and privately funded streetscape improvements.

Privately funded improvements could include, but are not limited to, such elements as paving materials, landscape materials, coordinated street furniture, transit stops, public art, patio delineation and cycling facilities.

Publicly funded streetscape improvements will occur either through major road reconstruction projects or ongoing enhancements carried out from time to time by the City or Business Improvement Association (for example, additional street furnishings, wayfinding, transit stops, public art, street crossing treatments etc.). These streetscape plans will provide guidance for future reconstruction projects, appreciating that decisions on elements such as curb alignments, paving materials, crosswalks, etc., will be determined during the detailed design of each street. The City's Urban Design Guidelines will provide direction on elements such as coordinated street furnishings, wayfinding, pole selection, lighting, etc. It is important that materials and plantings have a relatively high infiltration rate to reduce the impact on the stormwater system.

When the planning and design of streetscapes in PARTS Central is being undertaken, consideration should be given to the integration of both traditional (for example, oil/grit separators, proprietary stormwater treatment devices) and Low Impact Development ("LID") water management techniques consistent with the direction of the City's Integrated Stormwater Management Master Plan. Incorporating such techniques into road reconstruction and resurfacing projects can result in significant reductions in pollutant loading (water quality) and runoff volumes (water quantity) from currently uncontrolled urban catchments. Materials and plantings used in LID water management can enhance infiltration on both private (for example, at the front of lots) and public (for example, within boulevards and road rights-of-way) properties in these established neighbourhoods.

In acknowledgment of what is expected to be a greater future emphasis on competing urban public spaces and related amenities, including a greater quality and quantity of downtown streetscapes that function beyond functional transportation thoroughfares, the City will be examining further options and methods for downtown streetscape development and long-term sustainability in the future.
9.0 Streetscapes

Breithaupt Street (see previous page for image)

Breithaupt Street will continue to evolve into a new employment hub within the Innovation District. Spurred on by the redevelopment of the Breithaupt Block, this street could experience significant redevelopment and adaptive reuse over the next 20 years. With increased office workers in the area, the stable adjoining Mt. Hope neighbourhood to the north, and a potential global spotlight on this street, it is critical to explore opportunities for a comprehensive streetscape improvement. As a first initiative, the segment of the Breithaupt Street between Moore Avenue and Waterloo Street, and Moore Avenue between King Street West and Wellington Street West should explore upgrades to the pedestrian realm, such as lighting, street furniture materials and design and the consideration of part of the street for a temporary or permanent woonerf.

Victoria Street North & South (see previous page for image)

Victoria Street north and south (Regional Road) is a well-travelled pedestrian and vehicular transit route, which provides a direct connection to the Multi-Modal Hub and Zentral Station/Innovation Distriction stop. As the central spine of the Innovation District, it has been a focus for urban redevelopment in recent years. As most of the sidewalks and lighting have recently been upgraded, streetscape enhancements would focus primarily on private sector contributions to the public realm. This could include the public-private interface, street tree plantings, street furnishings, etc.

Young Street

Young Street provides a connection from the Civic Centre Neighbourhood Heritage Conservation District to the Kitchener City Hall/ION stop and Downtown Kitchener. The transportation analysis recommends exploring an opportunity for a counter-flow bike lane on the one-way portion of the street, north of Weber. The streetscape plans should focus primarily on the block between Weber and Charles, as well as 1 Young Street, where long-term redevelopment could occur.

Queen Street North & South

The Queen Street corridor provides a promenade that links Civic District to the central transit corridor. Queen Street, between Charles and Duke, will be upgraded in the near future through a capital reconstruction project. Importance should be placed on coordinating the pedestrian experience with the Queen ION stop. While there is limited potential for publicly or privately funded improvements on the balance of Queen Street, the incorporation of pedestrian friendly elements such as seating, landscaping and wayfinding should be considered.

Frederick Street

Frederick Street (Regional Road) links the Civic District and the Central Frederick neighbourhood to the Frederick ION stop. Frederick Street is a major corridor in the Civic District and could benefit from an improved pedestrian realm (including wider sidewalks, pedestrian scaled lighting, public spaces and landscaping) from Duke Street to Lancaster Street. Opportunities should be explored at both a Regional and local level for the incorporation of these streetscape elements. Due to the largely public nature of the properties along this corridor, the initiatives, if any would likely be public initiatives.

Benton Street

Benton Street (Regional Road) provides an important connection between Cedar Hill, the Schneider Creek and Victoria Park neighbourhoods and the Frederick ION stop. Currently the street profile is very wide and unfriendly to pedestrians as it is designed to carry large volumes of traffic. As part of the streetscape plan, Benton Street (between Courtland and Charles) could benefit from a road diet analysis that might include recommendations for an improved cycling and pedestrian experience.
9.0 Streetscapes

Cedar Street

Identified as a place-specific opportunity in the Region’s Community Building Strategy, the Kitchener’s Market ION stop is located a block away from the Kitchener Market in the downtown’s Market District. While Cedar Street has been recently reconstructed, opportunity exists to explore creative improvements that would strengthen the pedestrian experience between the ION stop and the market. This area is also a gateway to our downtown core and this would be an appropriate location for additional improvements.

Charles Street East & West

There are a multitude of redevelopment opportunities and therefore opportunity for private investment in streetscape upgrades along Charles Street East and West (Regional Roads). The currently well-traveled corridor provides a very important pedestrian realm in the downtown and will connect users directly to the Kitchener Market, Queen and Victoria Park ION stops. The streetscape plan would provide direction to ensure a coordinated form (such as a consistent podium edge) throughout the entire corridor. The plan would also identify potential private sector contributions to enhance the pedestrian experience (such as enhanced overall lighting, landscaping, pedestrian amenities, and public space).

Courtland Avenue East

Courtland Avenue East (Regional Road) is a planned mixed use corridor that connects two adjacent residential neighbourhoods to the north and south. Streetscape plans should look at encouraging a built form that addresses the street with a pedestrian focus. Buildings, lighting and height within the mixed use corridor should be appropriate in form and scale and oriented towards Courtland Avenue East to provide an adequate transition between the low-rise residential neighbourhoods, but also provide a pedestrian friendly environment along Courtland Avenue East.

Lancaster Street

Lancaster Street is an important connecting street between the Central Frederick neighbourhood to the north and the Market ION stop south on Cedar Street. Although no capital improvements are currently being considered, Lancaster Street has two important community institutional uses and could benefit from further analysis on how to improve pedestrian comfort and safety, landscaping and opportunities to calm traffic. The transportation analysis recommended considering options for reducing traffic and improving the pedestrian and cycling environment and safety on Lancaster Street from Frederick to Krug Streets.

“The King Street corridor is lacking in greenery. It will be important to address streetscape and create a better environment for pedestrians along King Street. The addition of more trees and planters would be a good start to address the heat island effect instead of having so much concrete which is too stuffy/hot in the summer and windy and cold in the winter.” -May 26th 2015 Feedback Report
9.0 Streetscapes

**Eby Street**

Eby Street connects the Cedar Hill neighbourhood to the the Kitchener Market and the ION stops on Charles Street East. Although not currently a candidate for reconstruction, creative solutions to improve the public realm between Charles and King should be explored. The grades in this area may make certain elements challenging for the pedestrian and should be considered for an future improvements.

**Halls Lane**

Halls Lane is a back-of-house focused laneway that runs parallel to King Street and provides a connection through Downtown Kitchener. As the laneway was very recently reconstructed, future streetscape enhancements should focus on privately owned buildings and lands abutting the laneway. This could include such elements as commercial amenity space (for example, restaurant patios), enhanced lighting, etc. Realizing the functionality of the laneway for basic services, such as loading and garbage, the streetscape plan might identify strategic opportunities where limited conflict would exist.

**Gaukel Street**

Gaukel Street is a ceremonial connection between Victoria Park and City Hall. It was recently reconstructed to advance the notion of a pedestrian promenade. However, the traffic friction generated by the Charles Street Bus Terminal has prevented Gaukel Street from achieving this purpose. Should the Terminal be decommissioned, the streetscape should be evaluated for opportunities to further enhance the pedestrian nature of this promenade. This could include new traffic calming, pavement markings, or exploring more unique treatments such as converting it to a "woonerf" (shared street).

**King Street East**

King Street, south of Madison, is a major southern vehicular entry point to the Downtown. As the area intensifies with more residential development, it should also become an important pedestrian route to the downtown and ION stops. Urban Design Guidelines exist for this corridor, and streetscape enhancements were undertaken approximately 10 years ago. Opportunity exists to identify privately funded streetscape enhancements that could be implemented through the site plan process, as new developments come in. This could include implementing the guidelines via street furnishings, landscape enhancements, etc.

**Implementation Measures/Recommendations:**

- This section of the plan provides a high-level vision for streetscapes that have been identified by the public, staff and stakeholders as corridors that provide a high-level of connectivity to the ION stops and other important landmarks. As an implementation tool of PARTS Central Plan, detailed Streetscape Master Plan should be developed in a priority sequence, to provide guidance on the preferred built form and pedestrian interface along the street, as well as both public and privately funded streetscape improvements. The streetscape plans should act as a blueprint to coordinate future development requirements and future public works.
- As a first initiative, the segment of the Breithaupt Street between Moore Avenue and Waterloo Street and Moore Avenue between King Street West and Wellington Street West should explore upgrades to the pedestrian realm, such as additional lighting and street furniture, and a pedestrian-first (shared) pedestrian-only.
- A prioritization process should occur for the development of Streetscape Master Plans, and proposed enhancements identified as future top priorities should be included in the City’s Capital Forecast.
10.0 Parks & Public Realm

The following opportunities identify priority investments for improving the public spaces and pedestrian environment in the PARTS Central Area. These recommendations explore opportunities for streetscaping, enhanced open-space connections and community gathering places.

Public realm includes the spaces between buildings that can be freely accessed by the public, and includes roads, parks, squares, as well as pedestrian and cycling routes. Outdoor space should stimulate the senses, yet remain human in scale. The condition and quality of these spaces have a major impact on our quality of life.

The vision for the public realm within the PARTS Central Plan is one of an extensive open space system that builds upon the existing, adds new urban parks and plazas and connects the downtown and the ION system to adjacent greenways, natural systems and neighbourhoods. The ideal open space system is interconnected by a network of tree-lined pedestrian and bicycle-friendly streets as well as corridors and trails. The key principles of pedestrian linkage and movement are fundamental to this vision.

The public realm is a critical component of the Parts Central Area’s urban fabric and identity. These public spaces are the platform for a range of community activities and social uses. They are the places for active play, quiet contemplation, public gatherings, festivals and markets. They are also places for utilitarian and recreational non-motorized trip making and they enhance the area’s natural habitat and provide a connection to Kitchener’s natural areas and trail systems. The PARTS Central Area currently lacks some key multi-use pathway linkages, could benefit from enhanced streetscape and public realm along other connections, and has parks that are currently underutilized and which have the potential to provide for a better contribution to the surrounding neighbourhoods.

With a goal of enhancing the city’s urban forest, the City of Kitchener has initiated the development of a Sustainable Urban Forest Program which will seek to create an urban forest strategic plan for the public and private urban forest and an asset management plan for the trees on City lands. The work includes determining the existing tree canopy cover across the city and setting of targets to maintain and/or increase the existing tree canopy. Tree planting and the protection of the existing resources are key elements to maintaining or increasing tree canopy cover.

In 2015, the City of Kitchener approved the Iron Horse Trail Improvement Strategy which was developed to explore potential improvements to the trail that exists within the city boundaries; and to establish a clear, strategic direction for planning, developing, promoting and managing this vital community asset. The Strategy will ultimately provide a framework, guiding vision, goals and an implementation approach to improve the existing conditions and support future decisions in strengthening Kitchener’s trail network. The Iron Horse Trail Improvement Strategy should be consulted when exploring improvements or redevelopment opportunities on lands adjacent to the trail or when evaluating new potential trail connections.
Parks & Public Realm Vision Plan Legend

Potential Enhanced Pedestrian Connection
A well-designed trail system is reliant on connectivity and the quality in which the trail provides links to the existing network of roads, transit, trails and open spaces. Gaps between major destinations, ION stops, and transportation corridors such as the Iron Horse Trail need to be improved to better serve the community.

Future Bridge
A future pedestrian/bicycle bridge, or crossing, is needed over the railway to establish a connection from Charles Street to Walnut Street, as well as another over King Street to provide a seamless connection from the Iron Horse Trail extension to the Transit Hub. These bridges, which could be designed to serve as focal points and community meeting places would serve important role in the visual makeup of the downtown and should integrate and complement the surrounding context.

Potential Privately Owned Public Space (POPS)
While ION construction will spur streetscape enhancement along the length of the transit corridor, strong emphasis should be focused around the station areas. These areas present specific opportunities for POPS to create engaging environments and enhance mobility where a significant increase in pedestrian and cycling activity will occur.

Future Public Realm Improvement (Publicly Owned Land)
Continuing from the King Street and Gaukel Street public realm improvements, these public realm improvements will enhance connections to and from major destinations, as well as places of work and living. By offering people attractive routes to walk, the street-level pedestrian experience will be enhanced.

Completed Public Realm Improvement

ing Street, the city’s principle east/west corridor, connects major downtown destinations and provides a community focal point for festivals and celebrations. Both Gaukel Street, between King Street and Victoria Park, and King Street, between Francis and Frederick Streets have undergone streetscape improvements in recent years.

Existing Parks in Preferred Boundary
Within the PARTS Central Station Area, the parks fall under various classifications of parkland. These include: Parkettes and Urban Greens; Conestoga Green, Francis Green, Hilbener Park, Knitting Mill Green, Lang Green, Madison Green, Market Green, Michel Green, Mike Wagner Green, Stabler Green, Stirling Green, Vogelsang Green, Wallenberg Park, and Willow Green; Neighbourhood Parks: Civic Centre Park and Sandhills Park; District Park: Kaufman Park; City Wide Park; Victoria Park; and Conscreevy: Schneider Conscreevy.

Potential Major Civic Park / Urban Space
The City of Kitchener Parks Strategic Plan identifies targets of one neighbourhood park or playground within 5 minute walking distance (400-500m) of every residence. The area near Victoria Street, indicated as medium grey on the map, was shown to be parkland deficient through a parkland provision gap analysis. Parks and open space can serve as an anchor for revitalizing neighborhoods and building healthy communities. Within this area there is the potential and need to include a civic park/urban space. It would incorporate a range of uses to meet the needs of the downtown users, the stable neighborhood to the northwest and future redevelopment within the adjacent area.
10.0 Parks & Public Realm

The following new opportunities describe a series of ideas for future investment in the public realm. While the eventual location and configuration of these spaces may be different than the images presented here, developers, City Departments and other stakeholders should strive to achieve the general intent and purpose of the opportunities illustrated. These conceptual opportunities will require a range of implementation measure – from allocation of municipal capital works budgets to private investment and parkland dedication and/or acquisition – to be determined on a site-by-site basis as investment occurs.

Recommendations & New Opportunities

The public realm within the PARTS Central Plan will comprise of urban squares, parks, multi-use pathways, pedestrian corridors, and streets. The PARTS Central Plan highlights the fundamental themes and describes key improvements which will serve to guide future development within the PARTS Central Plan. All public realm acquisitions and enhancement shown will be subject to review during the development approval process for individual applications and/or acquisition process, and detailed concept plans will be developed in conjunction with all stakeholders to identify programming, use, facilities, and detailed design.

Create New Parks & Green Connections

There is a need for a neighbourhood park within PARTS Central in the Innovation District area. This potential park site would contain a pedestrian rail crossing as this would provide an additional connection between Walter Street and Charles Street. Opportunities for the extension of Walter Street East to the park should be explored as a means of further enhancing these connections and opening the park to the stable residential neighbourhood to the west. The Walter Street extension, east of Agnes or Wellington streets, could serve as a green corridor, as it currently has generous sidewalks and opportunities for street tree planting.

Establish Opportunities for Multi-Use Pathway Linkages to ION Stops & Multi-Modal Transit Hub

The future Multi-Modal Transit Hub would benefit from a trail connection to the Iron Horse Trail, and a seamless elevated connection for pedestrian and bicycle traffic. The future Multi-Modal Hub will be a mixed use development that will present opportunity for parks and public realm space to be incorporated within the development. In addition, the current connection to from the Kitchener Market to the Market ION stop would benefit from public realm and streetscape improvements to provide an improved connection between the two destination points.

Creating a new multi-use pathway and open linear park along the east side of the rail corridor between the Iron Horse Trail and the Multi-Modal Transit Hub which includes an overhead pedestrian and bicycle connection to Hub over King Street would resolve this much needed link. Other opportunities to provide connection between the Iron Horse and Spurline Trails and the ION stops should be explored.

Close Streets to Traffic

Close Breithaupt Street to traffic from Waterloo to King Streets and Moore Avenue from Breithaupt Street to the laneway to create a linear plaza. This space will maintain pedestrian and bicycle circulation while also providing much needed amenity space for local residents and employees.

The opportunity of creating a ‘shared street’ should be explored on Gaukel to improve the connection between City Hall and Victoria Park.

Provide Mid-Block Connections

Encourage pedestrian connections to enhance the City’s open space network through future development close to ION stops. These could be achieved through Privately Owned Public Spaces (POPS). These improvements could be targeted at enhancing the pedestrian environment, improving safety, and supporting users through amenities such as enhanced lighting, seating, bike facilities, as well as garbage and recycling receptacles. The integration of POPS through building setbacks, plazas or forecourts can be an ideal way to optimize usable space at ION stops.

Gaukel Street is a ceremonial connection between Victoria Park and City Hall. It was recently reconstructed to advance the notion of a pedestrian promenade. However, the traffic friction generated by the Charles Street Bus Terminal has prevented Gaukel Street from achieving this purpose. Once the Terminal is decommissioned, the streetscape should be evaluated for opportunities to further enhance the pedestrian nature of this promenade. This could include new traffic calming, pavement markings, or exploring more unique treatments such as converting it to a ‘woonerf’.

(above) An event taking place along Halls Lane.
(below) Conceptual vision for Gaukel Street re-imagined as a ‘woonerf’, or shared street. Renderings are for illustrative purposes only and are not intended to represent real-world current or future conditions.
10.0 Parks & Public Realm

Animate Laneways

Animated laneways provide respite from busy streets, create exciting and unique destinations, provide new venues for special events and entertainment, make better use of existing spaces and ensure cleaner laneways and improved waste management.

The potential of laneways can vary from those that function as connectors between points to those that could serve as active destinations. Through revitalization and programming, there is an opportunity to improve both Goudies and Halls Lanes in Downtown Kitchener.

Revitalize Under-Utilized Public Spaces: The Cenotaph, Vogelsang Green, Francis Green, The Green at Duke & Ontario, Stabler Green, Mitchell Street Connection

The Cenotaph and Vogelsang Green on Duke Street have both been identified for revitalization. While relatively well used, the Cenotaph is in need of a refresh. This will provide an opportunity to complement the recently constructed courthouse located diagonally across the intersection. Vogelsang Green, with its substantial tree canopy and vegetation, is ideal for respite and relaxation, and could also potentially play an important role along what could be an enhanced Queen Street North corridor. Its location is also ideally situated in relation to the eating establishments across Duke Street. The landscaping has become overgrown and in some cases has reached maturity and intervention is required to incorporate CPTED strategies and to refresh hard and soft landscaping.

Though small in scale, these spaces represent a tremendous opportunity for both temporary and long-term public realm and open space initiatives that can help bring members of the community together to activate these spaces.

Francis Green is currently an underutilized public space with a prominent location fronting on King Street and within close proximity to the Central Station/Innovation District ION Stop and Transit Hub. Through revitalization and programming, there is opportunity to create a vibrant public space.

Small pocket parks and connections such as the Green at Duke and Ontario, the Stabler Green and the Mitchell Street connection, provide rest and relaxation areas within the city that could benefit from further enhancements to revitalize the public realm. The Mitchell Street connection provides an important pedestrian connection between the Schneider Creek Neighbourhood, Queen Street and Victoria Park.

In addition to the opportunities presented above, Kitchener’s Carl Zezre Square, located at Kitchener City Hall is currently undergoing a master planning process, where enhancements to the public realm are being evaluated.

Enhance Connections to Existing Neighbourhood Parks: Sandhills Park, Mike Wagner Green & Kaufman Park

Sandhills Park is currently an underutilized asset that is situated within a neighbourhood in close proximity to the Kitchener Market ION stop. In addition to enhancement of park amenities, pathways through the park should be updated to Oly standards. Improvements to each of the park’s entrances should seek to elevate the profile of the park and the path systems from the neighbourhood through special landscaping treatments, new wayfinding signage and expressions of public art.

Mike Wagner Green is a linear park space located near the centre of the Iron Horse Trail. This park provides a connection to the trail and connection between Peter and Benton Streets. The Iron Horse Trail Improvement Strategy has identified and recommended that Mike Wagner Green be included in the City of Kitchener Central Area Park Rehabilitation Program.

Kaufman Park currently has a walkway entrance from Madison Avenue South and Courtland Avenue East. Improvements to the park connections should be explored, including any opportunities to purchase land to increase the size and street presence of the park.

Consider New Park & Public Realm Opportunities Through Redevelopment

As new development occurs, bringing additional residents and patrons to support local businesses, projects will be required to improve the public realm, streetscape, and provide additional public amenity areas. As rapid transit improvements are implemented, the mix of the PARTS Central Area will evolve to become more pedestrian-focused while maintaining vehicular movement, including bicycles. Redevelopment of large-scale sites, including existing surface parking lots, should provide new gathering spaces and amenity areas, while contributing to a vibrant streetscape.

Think of streets and laneways as public spaces – not just as infrastructure for vehicles. With the introduction of the ION system, even more pedestrians will travel through the PARTS Central area. Attention needs to be paid to creating streets and laneways that in themselves can become destinations. Successful streets prioritize the pedestrian and allows them to travel between destinations, but also provide amenities to support a variety of activities for diverse user groups. They have a positive and distinct identity, and have edges that are activated with ground floor uses.
11.0 Public Art

Public Art can visually enhance a space and provide clues for placemaking. The addition of art to an area of interest will help make the space more livable. The City of Kitchener values public art as an important component of creating spaces for people. Part of the City’s vision for creating a vibrant community is the inclusion of public art in our public spaces, buildings, and parks. The vision encourages public art as a means to explore the City’s diversity, tell our stories, and provide artists with a canvas to make our landmarks unique and beautify our gathering places through creative and artistic means. In turn, the use of public art contributes to the City’s cultural diversity and identity and improves the overall quality of life in our community while telling our story.

Public Art Recommendations & Opportunities

Enhance Underutilized Building Facades Through Public Art

Opportunities should be explored to incorporate public art along blank walls or building facades. Instead of allowing large expanses of building facades that are not animated to continue to dominate our streetscapes, efforts should be made to incorporate public art like murals/mosaics or relief sculpture etc. to these blank canvases. This can give a space an identity and can be visually very stimulating. It can also be something that becomes a symbol of local pride and significance thus deterring other forms of defacement of these blank canvases.

Create A Sense of Place at ION Stops

Working together with other initiatives, public art as a component of place making will help people identify with a place and will provide the wayfinding clues to assist in determining a sense of space. Public art can take on many forms at an ION stop including but not limited to something attached to the building both internal or external, as part of another structure or feature such as a water feature or as an independent free standing object that is two or three dimensional. Public art can also be incorporated into a functional component of the ION stop such as seating or shelters. These types of opportunities should be explored through private, and public initiatives or combination thereof.

Public Art in Parks & Green Spaces

Public parks, green spaces, trails and corridors are also great opportunities for the provision of public art. For instance, in a park, larger independent and free standing public art features can be incorporated throughout the natural elements of the park. In addition, public art along a trail can not only be appealing and add interest to the trail, but it can also assist with the wayfinding along the route through the use of common elements, colours or patterns. Art can also be a means to re-activate some underutilized spaces in the absence of redevelopment or intensification. For instance, the placing of a piano in Weber Park can spark local interest and encourage people to use the space. Opportunities to incorporate these types of often community led initiatives such as the creation of community based expressions of seasonal or temporary public art exhibits should be explored like the CAFKA (Contemporary Art Forum Kitchener + Area) displays that occur biennially.

Continuation of the Use of Industrial Artifacts

The City of Kitchener has already made use of industrial artifacts in some of its public spaces including City Hall and the public green at Francis and King. This is intended to pay homage to the City’s industrial past and this initiative should be continued as it will ensure that our history is not lost and will connect the present with the past. This initiative would be well suited to the former Warehouse District now the Innovation District. Perhaps additional initiatives showing our modern innovation and how this has emerged from our industrious past could be incorporated in public space throughout this sector of the PARTS Central Area. This could be achieved through both private and public initiatives.

Other Opportunities

That the Olyt of Kitchener prepare a master plan showing opportunities for the incorporation of public art within the Urban Grown Centre and the PARTS Central Area and that this master planning process be interconnected with the City’s Public Art Process and the Planning Around Rapid Transit Station Area process in order to ensure implementation of this recommendation.

That the Olyt of Kitchener continue to explore opportunities for partnerships with private sector initiatives to incorporate art as part of a development, public space, park, streetscape or ION stop.

That bonusing be used as a tool to implement public art components via private sector initiatives.
Public spaces should be designed to support four season programming, including outdoor winter programming, recreation and everyday winter life.
12.0 Transportation Demand Management

Explanation of Purpose & Intent

To reduce traffic congestion, parking supply needs, and demand for parking spaces by encouraging various modes of travel including supporting the use of ION.

The Transportation Demand Management (TDM) component of this plan will seek to build upon the PARTS Station Area Transportation Demand Management (TDM) Strategy that was prepared in 2014 as a PARTS Phase 2 corridor-wide initiative. The sections below will detail further TDM related directives and recommended actions for the PARTS Central Plan for future implementation.

Cyclist & Pedestrian Oriented Development Amenities

Secondary plan policies, zoning regulations and urban design guidelines should encourage or require pedestrian and cyclist amenities. The bonusing framework should consider the provision of TDM infrastructure as a community benefit.

Street furniture and other pedestrian and cyclist amenities outside of the travelled portion of a sidewalk are essential to creating environments that are comfortable and interesting for pedestrians and cyclists. New developments within the PARTS Central Plan should be encouraged to provide unique pedestrian and cyclist environments to contribute to lively public spaces, and to minimize conflict between active transportation modes and motor vehicles. While pedestrian and cyclist amenities are addressed under the City of Kitchener’s Urban Design Manual, additional incentives such as parking reductions could be provided in exchange for the provision of amenities.

Wayfinding

The City should prepare a comprehensive signage and wayfinding strategy for cyclists and pedestrians to navigate to and within the PARTS Central Area.

Wayfinding, signage and maps can easily identify designated bicycle routes and pedestrian circulation routes. Wayfinding helps to guide cyclists and pedestrians as well as transit users through the bicycle and pedestrian network while also linking to transit systems. The City should develop a comprehensive signage and wayfinding strategy for cyclists and pedestrians to navigate to and within the station area to promote active transportation mode selection and support transit use. Further, the City, in collaboration with TravelWise, should explore a mobile app for active transportation users that provides routing information, trip tracking, community events schedule, and incentives.

[above, left] Dedicated cycling lane on East Avenue.
[above, centre] Cycling maintenance station along the Iron Horse Trail.
[right, top] Creative bicycle parking on Water Street.
[right, above] Benches outside the Waterloo Courthouse.
[right] Map of City owned bike rack locations.

Route Efficiency

Support and encourage the creation of pedestrian and cycling linkages within the PARTS Central Area.

The provision of direct and publicly accessible routes to destinations can reduce access time to ION stops. Reducing total travel time from multiple origins to multiple destinations works to promote active transportation and transit as a viable means of travel. On private developments, particularly large land parcels in close proximity to transit, efforts should be made to encourage the provision of publicly accessible routes through them to connect with public pathways and shorten travelling distances.

City Owned Bike Rack Locations

[Map showing locations of city-owned bike racks]
12.0 Transportation Demand Management

Discourage surface parking in the PARTS Central Area.

There are three major off-street parking facility types: surface parking, parking structures and underground parking. Surface parking is provided at ground level, consumes large quantities of land and therefore is not an efficient use of land. Further, surface parking lots leave gaps in the built form of an urban area, disengage pedestrians by removing opportunities for lively streets and the pedestrian realm, and do not fully utilize land value potential, especially in urban centres or along intensification corridors. Parking structures, on the other hand, are multiple storey buildings where parking is provided interior to the building envelope with ramp access. Parking structures can integrate good design elements including façade features and building materials to blend in with the urban form, and can provide active uses on the ground floor at street level. Parking structures can also be incorporated into larger developments, by wrapping lower levels and incorporating active uses at street level, and including parking on the first few storeys of a building that contains residential, office or a mix of uses above. Underground parking integrates well into an urban setting. Underground parking allows for necessary parking and loading areas that are integral to urban life, while preserving the streetscape for active uses that appeal to pedestrians, cyclists and transit riders.

Public Provision of Bicycle Parking

Support and encourage the public provision of bicycle parking on lands in close proximity to the ION stops

Bicycle storage is an important requirement to facilitate cycling as a mode of transportation. Providing suitable, convenient, well-designed, and secure parking facilities can lead to increased cycling in the community.

The provision of secure bicycle parking facilities can include secure public bike cages or lockable bike boxes in close proximity to ION stops within the Central Plan on public property. The City should work with the Region to provide secure bicycle parking facilities within the PARTS Central Plan. In addition, the City should consider options such as converting existing automobile parking spaces in highly visible locations to bicycle parking corrals, which can be installed temporarily based on demand, and occupy a standard parking space. The same is true of private developments. The conversion of existing parking spaces and incorporation of bicycle parking corrals into existing developments can have a high impact on cycling mode share.

TDM Checklist & Report

A TDM Report will be required as part of a complete development application for sites located in the PARTS Central Plan. The application types include Plans of Subdivision, Official Plan Amendments, Zoning By-law Amendments, Site Plans and Minor Variances that deal with parking or that seek additional floor space/units. All commercial, office, industrial, institutional and residential with the exception of residential developments composed of six dwelling units or less are required to complete a TDM checklist.

Implementation Measures/Recommendations:
- Secondary Plan policies, Zoning Regulations and Urban Design Guidelines should support TDM initiatives.
- Require pedestrian and cyclist amenities in public and private developments and to ensure the bonuses framework allows the provision of TDM infrastructure as a community benefit.
- That the City prepare a comprehensive signage and wayfinding strategy for cyclists and pedestrian to navigate to and within the PARTS Central Plan.
- Support and encourage the creation of pedestrian and cycling linkages within the PARTS Central Plan.
- Discourage surface parking areas in the PARTS Central Plan.
- Support and encourage the public and private provision of bicycle parking on lands in close proximity to the ION stops.
- Require the submission of a TDM Checklist and Report as part of a complete application.
13.0 Transportation Network

The Transportation Assessment Analysis investigated the broader road, cycling and pedestrian networks that relate to the preferred scenario and provided an analysis of transportation network issues and opportunities within the PARTS Central Area (for example, Woonerf streets, new cycling connections, pedestrian improvements). It also identified any network capacity issues and opportunities to mitigate any significant traffic issues to be able to facilitate the preferred scenario over the long term.

Existing & Planned Conditions

Existing Transit

The PARTS Central Area which includes Downtown Kitchener is naturally a focus area for transit in the municipality. As one of the primary concentrations of economic, institutional, and public facilities, it is well served by local and express transit routes. The current focus of transit in Downtown Kitchener is the Charles Street Terminal. Located on Charles Street West, between Gaukel Street and Ontario Street South, it is one of Grand River Transit's two (2) central terminals and serves as a major bus transfer point, with 16 different routes stopping there. In addition, it is the region's primary intercity bus station, serving Greyhound, Megabus, and GO Transit.

Although the majority of routes in Downtown Kitchener converge at the Charles Street Terminal, many streets within the study area are well served by buses.

Route 200 – Xpress and Route 7 – Mainline are among the most frequent and well-used bus routes in Downtown Kitchener. They both serve the King Street corridor, and are the precursors to the Ion LRT currently under construction.

Route 204 - Highland/Victoria Limited Stop Express was implemented in 2015 and connects the Ira Needles Commercial Centre with Kitchener and the Victoria Street employment and commercial areas east of downtown.

Planned Transit

Transit can move people more efficiently in the same road space and will play a major role in the future transportation network to accommodate the anticipated growth in Downtown Kitchener. Transit infrastructure and service is being implemented to support transit modal share (percentage of people taking transit) to 45% on King Street west of Victoria Street, 35% to the east of downtown and 25% to the north and south of the downtown area.

Major transit initiatives include:

- Light rail transit (ION) connecting Downtown Kitchener to Uptown Waterloo, University of Waterloo/Wilfrid Laurier University, North Waterloo and South Kitchener (2017)
- Future Rapid Transit and Bus Network in PARTS Central Area
- Increased frequency for local transit service connecting residential areas to the downtown
- A 4-Lane increases service to four trains per day in each direction expanding to two-way all day service in the future (cont)
A multi-modal transportation hub will be constructed at the King Street/Victoria Street intersection that will link ION, GO Rail, local buses, intercity buses and VIA Rail. Another key transit transfer location will be located at Frederick Street near King Street where local transit routes will connect with ION.

**Existing Roads**

The road network in the Downtown Kitchener area is dense and provides multiple opportunities to disperse traffic. Roads within the study area are under the jurisdiction of both the Region of Waterloo and the City of Kitchener. Under existing (pre-construction) conditions, the roads in Downtown Kitchener generally operate well and may experience some longer delays during the peak hour, as is characteristic of busy core areas.

**Planned Roads**

The Region of Waterloo’s Transportation Master Plan recognizes that there is limited opportunity to widen the major roadway infrastructure, particularly in the Kitchener downtown core. Due to the built-up nature of the study area, it is neither reasonably feasible nor desirable to significantly increase the roadway network’s capacity. As a result, no major road improvements, new road construction or widenings are proposed in the study area. There are several recommendations which can be implemented to improve local pinch points, but the road network that currently exists will mostly remain unchanged in the future.

**Existing Walking & Cycling**

The sidewalk infrastructure in Downtown Kitchener is well established and includes sidewalks on both sides of all roads. Many of the sidewalks are curb faced with some impediments including utility poles, signs etc. The construction of the ION along Charles Street and Duke Street will result in the reconstruction of the sidewalks.

King Street from Francis Street to Cedar Street has been reconstructed to provide a very attractive pedestrian realm. A wide pedestrian space, landscaping that provides filtration for storm drainage, pedestrian buffer, low-level lighting, street furniture and on-street parking that blends into the streetscape, all contribute to making this a welcoming place for people.

Currently, the Iron Horse and Spurline Trails provide the high-quality cycling routes to access the downtown. Within the PARTS Central Area, there are several streets that have sharrow, indicating that cyclists and motorists must share the road. Currently, on-street bike lanes exist on a section of Water Street.

Future Walking & Cycling

A comprehensive cycling and pedestrian network will be required to support transit and provide linkages for transit riders to get to their final destination in the downtown area. These pedestrian and cycling facilities will also be required to connect adjacent residential and commercial areas to the downtown and to ION. There are many methods of promoting a healthy pedestrian and cycling environment which include:

- Pedestrian/shared streets
- Widened sidewalks
- Improved streetscapes
- Additional pedestrian linkages

These opportunities for improving the walking and cycling network are outlined in the Implementation Measures/Recommendations Section.

**Transportation Assessment**

**Baseline Scenario vs. Preferred Scenario**

The transportation assessment consisted of a capacity analysis of the road network in the study area, comparing the level of development of the preferred scenario with the baseline condition (existing data as of 2011).

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Population</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Condition (2011)</td>
<td>13,038</td>
<td>19,747</td>
</tr>
<tr>
<td>Preferred Scenario (2031)</td>
<td>21,516</td>
<td>25,345</td>
</tr>
</tbody>
</table>

For infrastructure purposes, longer-term scenarios were considered based on population and employment assumptions modelled in the Region of Waterloo’s Transportation Master Plan and based on potential development of the preferred scenario of the PARTS Central Plan (using the variation of 50% of the land use density which equates to about an 18% increase beyond the 2031 assumptions).

The regional transportation model forecasts that a significant number of new trips associated with the increase in population and jobs in Downtown Kitchener will be made by non-auto modes. It is expected that the construction of the LRT, the improvement in local transit connections, and the improvement in the pedestrian and cycling infrastructure in Downtown Kitchener will contribute to a mode shift away from vehicles. It has been assumed that the preferred scenario would experience the same mode share as the baseline scenario, modeled in the Transportation Master Plan.

Growth within the study area is not expected to occur uniformly. While some areas will experience significant increases in traffic, other areas, particularly established residential neighborhoods, will experience moderate growth. Specifically, intensification and development is expected to be most concentrated in the western part of Downtown Kitchener, in the vicinity of the Goderich-Exeter Railway (GER) corridor. The traffic forecasts and analysis for the preferred scenario took this unequal distribution of development into account, assigning additional growth to intersections and road segments in this area.
13.0 Transportation Network

Assessment Conclusions

Over the next twenty years, population and employment in Downtown Kitchener is expected to increase significantly. In order for this to occur without compromising the livability and attractiveness of the area, this growth cannot be accommodated solely by vehicles on the existing road network. The Regional Transportation Master Plan expects the majority of additional trips to be accommodated through:

- ION LRT, along with increased express and local buses
- Upgrades pedestrian and cycling facilities
- Transportation Demand Management techniques
- Existing downtown road network and Weber Street widening

The preferred scenario represents a moderate increase in population and employment as compared to the baseline scenario. The additional traffic generated is generally expected to be accommodated by existing road capacity. The growth in trips will be highest on the west side of Downtown Kitchener, owing to the higher concentration of new development.

Although traffic forecasting and modelling show network performance to be satisfactory in future horizon years, the City of Kitchener and Region of Waterloo should monitor the performance of intersections within the study area. Should major operational issues be noted, corrective actions to mitigate delay and capacity issues may be taken. Potential measures include:

- Time-based turning restrictions
- Advance protected turning phases
- Traffic signal timing optimization
- Local traffic only signage, directing traffic to through routes (for example, Weber Street)

It should be noted that these measures alone, without capacity improvements, are unlikely to resolve all operational issues within the study area. A certain level of congestion is unavoidable in dense downtown areas, and is to be expected and tolerated in order to encourage alternative transportation choices (public transit, walking, cycling, etc.).

Depending on the extent of development that is to occur between Victoria Street South and the railway corridor, the eastbound approaches of Joseph Street and Bramm Street may require capacity improvements or geometric re-configurations. The addition of an auxiliary turning lane may be warranted, depending on the achieved level of development. Other significant individual developments should consider local effects on the street network and integrate any feasible solutions (turn lanes, one-way driveways, etc.) that eliminate excessive delays.

Implementation Measures/Recommendations:

The following are short-term and long-term opportunities to enhance the pedestrian and cycling environment, improve connectivity to the ION stops and improve traffic flow in the PARTS Central area. Additional public consultation may be conducted as the City of Kitchener implements these opportunities.

- Construct wider sidewalks and boulevard with streetscaping/landscaping on Young Street from Duke Street to Weber Street.
- Provide sharrow on Yonge Street from King Street to Weber Street.
- Construct a contra-flow cycling lane on Young Street from Weber Street to Mainard Street.
- Provide sharrow on Water Street from Weber Street to King Street to enhance the connection from the Spurline Trail to Downtown Kitchener.
- Construct wider sidewalks, cycling infrastructure and boulevard with streetscaping/landscaping on Duke Street from Breithaupt Street to Francis Street.
- Extend sharrow along King Street from Madison Avenue to Ottawa Street.
- Construct a contra-flow cycling lane on Duke Street from Cedar Street to Pandora Avenue.
- Construct a more direct pedestrian connection from Walter Street/Weston Street/Weston Street to King Street as the adjacent mixed use/commercial site redevelops.
- Consider opportunities to improve the streetscaping, widen sidewalks and increasing the separation from the travelled portion of the road for downtown streets in conjunction with redevelopment or reconstruction of the roadway.
- Continue with weekend and/or special event closures of King Street from Francis Street to Madison Avenue. The function of King Street can be re-envisioned as the residential/commercial development matures and pedestrian traffic increases during the day, evening and weekends.
- On Cedar Street from King Street to Charles Street, construct a flexible cross-section that can be closed on market days to accommodate pedestrians, potential street vendors and other activities but be open for vehicular traffic at other times of the week. The cross-section could be similar to that provided on King Street in the downtown area. This street is a primary connection from the ION stops to the Kitchener Market. Opportunities to improve the pedestrian environment should be considered with redevelopment of adjacent properties.

Intersections

Key intersections in the PARTS Central area were analyzed to determine their operational performance under the preferred scenario and using the longer-term scenarios. All intersections are generally expected to operate with acceptable delays and are expected to be within capacity. The following intersections are expected to be most impacted by the additional development in the preferred scenario:

- King Street West and Victoria Street
- Victoria Street West and Charles Street West
- King Street West and Wellington Street

Despite the slightly increased vehicular delays at the locations noted above, these intersections are expected to operate at level of service E or better (less than 80 seconds delay), which is considered acceptable in central urban settings. All other intersections analyzed are expected to operate with an average delay of under 35 seconds per vehicle. Intersections should be monitored as development proceeds in order to implement mitigation measures should they be required.

Road Segments

In addition to individual intersections, the road segments which connect them also have a finite capacity. A screening analysis was completed to determine if the streets connecting Downtown Kitchener to other parts of the city will have sufficient capacity to meet increased travel demands. This analysis considered the combined capacity of all streets crossing an imaginary boundary line. This approach is more representative of conditions that materialize in reality when compared to analyzing the projected ability of a particular road segment to process demand, because motorists using a dense road network such as that found in Downtown Kitchener will find alternate routes to reduce delays.

The screening volume-to-capacity (v/c) ratios are summarized as follows:

<table>
<thead>
<tr>
<th>Screenline</th>
<th>Inbound</th>
<th>Outbound</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>Baseline</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>Preferred</td>
<td>0.61</td>
</tr>
<tr>
<td>East</td>
<td>Baseline</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>Preferred</td>
<td>0.71</td>
</tr>
<tr>
<td>North</td>
<td>Baseline</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>Preferred</td>
<td>0.44</td>
</tr>
<tr>
<td>South</td>
<td>Baseline</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>Preferred</td>
<td>0.70</td>
</tr>
</tbody>
</table>

A volume-to-capacity ratio less than 1.0 indicates that there is sufficient capacity to process the expected traffic demand. The preferred scenario sees higher volume-to-capacity ratios than the baseline scenario, but the street network is expected to continue to have sufficient capacity. The South screenline (composed of Victoria Street and Queen Street) is expected to approach capacity in the outbound (southbound) direction during the PM peak hour, but the vehicular demand should continue to be processed without excessive delays.
13.0 Transportation Network

Implementation Measures/Recommendations (cont’d):

- Consider further pedestrian enhancements on Guelph Street upon decommissioning of the Charles Street Transit Terminal. This could include new traffic calming, pavement markings, or exploring more unique treatments such as converting the street to a ‘woonerf’. These streets create a space shared by all users and are considered to be complete streets where equal priority is given to pedestrians, cyclists and automobiles. No new accesses should be permitted to Guelph Street to preserve the future function of the street.

- Monitor and consider implementing if necessary, peak-hour only left-turn restrictions from southbound Victoria Street South to eastbound Charles Street West.

- Consider options for reducing traffic and improving the pedestrian and cycling environment and safety on Lancaster Street from Frederick Street to Krug Street.

- Investigate extending Charles Street or Joseph Street westerly across the railway tracks to connect with Wellington Street/Walter Street to improve network connectivity for all modes of transportation.

- Convert the Madison Avenue ramp that connects to Charles Street to a pedestrian only street upon consideration of access by emergency vehicles and other service vehicles.

- Request the Region of Waterloo to consider options for traffic signal control at the intersection of Young Street/Guelph Street and King Street including an all-pedestrian phase to complete this pedestrian corridor from Victoria Park to the Old Berlin Neighbourhood connecting City Hall and the ION stops.

- Request the Region of Waterloo to consider constructing wider sidewalks, bicycle lanes and boulevard with striping for cycling on the new Guelph Street, Courtland Avenue to Charles Street to connect the Mill/Courtland Neighbourhood with the Frederick and Queen ION stops and Downtown Kitchener. The ION line could also function as another cycling connection between the Iron Horse Trail and Downtown Kitchener.

Noise Assessment

The Noise Impact Analysis assessed the feasibility of the preferred scenario and identified any necessary revisions or mitigation measures needed to achieve the preferred land use concept. The scope of work did not include an assessment of noise, vibration or mitigation measures from the Light Rail Transit line itself.

Existing

A continuous ambient noise monitoring program in Downtown Kitchener was undertaken in October 2015. Noise measurements were conducted in accordance with the Ontario Ministry of the Environment and Climate Change (MOECC) noise publication NPC-103. Five (5) Monitoring Locations (MLs) were identified within the study area as follows:

- **ML1** - Corner of Weber St. and Victoria St.
- **ML2** - 44 Walter St.
- **ML3** - Corner of Weber St. and Cedar St.
- **ML4** - 14 Madison Ave.
- **ML5** - 19 Courtland Ave.

The monitoring locations were selected based on areas most likely to be affected by significant developments or other changes through the implementation of the preferred land use scenario.

Units were set up to log hourly A-weighted sound level equivalent (Leq(A)) as well as other statistical values of measured levels such as peak values, max / min and various percentile values such as 90th percentile values (LA90). Generally, the gathered ambient noise data is reflective of an urban centre, with the dominant noise sources being road traffic. It must be noted that the observed noise levels measured are representative of modified traffic patterns, resulting from the diversion of some key routes due to ION construction in Downtown Kitchener.

Conclusions

The noise models show minor differences in ambient noise levels due to traffic volumes between the baseline and preferred scenarios at the selected receptor locations. Rail noise would be identical in both instances and there would be no relative difference in the results. The largest modeled increase in traffic noise between the baseline and preferred scenario is approximately 1 dba, a noise level so low that it is not perceptible to human hearing. As a result, it can be concluded that rail traffic associated with the additional population and employment growth occurring as part of the preferred scenario will not lead to a significant impact in noise pollution in Downtown Kitchener.

<table>
<thead>
<tr>
<th>Ambient Noise Monitoring Locations</th>
<th>Daytime (7am - 7pm)</th>
<th>Evening (7pm - 11pm)</th>
<th>Nighttime (11pm - 7am)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leq (A) - Avg</td>
<td>LA90 - Avg</td>
<td>Leq (A) - Avg</td>
<td>LA90 - Avg</td>
</tr>
<tr>
<td>ML1</td>
<td>65</td>
<td>59</td>
<td>61</td>
</tr>
<tr>
<td>ML2</td>
<td>60</td>
<td>50</td>
<td>54</td>
</tr>
<tr>
<td>ML3</td>
<td>73</td>
<td>68</td>
<td>71</td>
</tr>
<tr>
<td>ML4</td>
<td>57</td>
<td>51</td>
<td>59</td>
</tr>
<tr>
<td>ML5</td>
<td>65</td>
<td>52</td>
<td>57</td>
</tr>
</tbody>
</table>

The results of the CADNA/A model, showing noise levels from traffic in Downtown Kitchener with long term forecasted traffic volumes, under the preferred scenario:

Results of the CADNA/A model, showing noise levels from traffic in Downtown Kitchener with long term forecasted traffic volumes, under the preferred scenario:

- **Baseline**
- **Preferred**

Future

A predictive noise modelling exercise was undertaken to determine the potential noise impact that the preferred scenario would have on the nearby receptors. The modelling was set to simulate forecast traffic volumes in both scenarios, assuming that traffic would be the primary contributor to ambient noise levels. A georeferenced digital map was used as the basis for model construction. Data from the noise source measurements and site specific parameters, including building profiles and heights for the entire study area were incorporated in the model.

Traffic volume forecasts, for both the baseline and preferred scenarios, were inputted into the CADNA/A software to model the noise impact at the selected receptors, placed at locations of strategic importance where population and employment growth is expected to occur. Specific considerations such as the proportion of vehicles making turns at each intersection in the study area, have been incorporated into the model.

**Results of the CADNA/A model, showing noise levels from traffic in Downtown Kitchener with long term forecasted traffic volumes, under the preferred scenario:**

- **Baseline**
- **Preferred**

- **40**
- **50**
- **60**
- **70**

- **45**
- **55**
- **65**
- **75**
We need to build more new parks and plazas and be prepared when development makes a useful property potentially available for park use. Gaukel Street and the Charles Street bus terminal are great gateway opportunities for Victoria Park. - December 9th 2015 Feedback Report
14.0 Engineering Infrastructure

It is important to study the infrastructure (waste water) capacity early on to ensure that there will be adequate capacity in the system to support increased density and development in the future.

Adequate planning will allow for the appropriate delivery of infrastructure and a better understanding of longer-term operating implications. Decisions made now with respect to our engineering infrastructure will put the City in a better position to respond to and capitalize on the changes that rapid transit will bring to our community.

**Waste Water Capacity**

One of the initiatives within PARTS Phase 2 was to review the trunk sanitary sewer system within the central transit corridor (as well as downstream) using generalized density scenarios related to potential intensification. It was determined that there were no significant concerns related to the system being able to handle potential growth within the Central Study Area.

The next level of sanitary modelling analysis was completed for the trunk and local sanitary sewer system as part of the preparation and review of the preferred scenario/land use plan for PARTS Central. The intent was to confirm that the theoretical capacity exists to accommodate the proposed land use and densities of the PARTS Central Plan.

**Preferred Scenario**

As part of the sanitary sewer analysis the existing flows were reviewed. Given that decisions on this type of infrastructure are long term (30 years or more) and a preferred scenario was modelled using the highest variation whereby potential development assumptions were considered at 100% of the density provisions of each land use category for all lands. Using these numbers, equivalent sanitary flows were calculated for input into the City’s InfoSWMM® sanitary sewer modelling software. The flows were tracked downstream to the treatment plant to ensure no negative impacts. The residential flows were calculated using 305 litres/person/day and the non-residential flows were calculated using 1.50 litres/second/hectare which are consistent with City standards.

Modelling the highest possible variation of the preferred scenario yields a fairly large increase to the potential flows downstream up to approximately 358 litres/second. The increase in flow rate would not result in any surcharging sewers or downstream capacity issues. In addition, for infrastructure purposes, a longer-term scenario with higher density floor space ratios in the UGC, was assessed. That long term modelling indicated that even with a flow rate of up to approximately 497 litres/second, it should not result in any surcharging sewers or downstream capacity issues. These are high assumption scenarios. Typically, variations are not considered in excess of 20% of the density of the land use; thus it can be assumed that the likely flow rate will be much lower.

**Conclusion**

Based on the aforementioned analysis and the results from the InfoSWMM® sanitary sewer model, future development in the PARTS Central Area can be supported with existing sanitary infrastructure. As development proceeds in the future, the model will be updated with new flow information. If future development proposes to exceed the land uses shown in the PARTS Central Area, detailed modelling and possible flow monitoring will be required to determine if the sanitary infrastructure can support the development.

**Stormwater Management**

Stormwater is water from rain or melting snow that flows over hard surfaces (rooftops, driveways, etc.) before eventually flowing into ponds and creeks. At the time of preparing this plan, the City is in the process of updating the 2001 Master Stormwater Management Policy and creating an Integrated Stormwater Management Master Plan. The master plan will provide guidance on how the City should manage stormwater over the next 15 years, including the adoption of new innovative techniques. For the most part, other than typical storm sewer infrastructure, there are limited stormwater management retention areas within the Downtown and Central Area. One large series of facilities exists in Victoria Park (within the PARTS Central Plan) and work was recently completed to improve the stormwater management function. Additional improvements are now underway upstream and further improvements planned downstream. Following completion of the master plan, there may be additional directions or actions that could be considered within this study area beyond the recommendations within the PARTS Central Plan. This may include the consideration of Low Impact Development standards for future redevelopment.

**Storm Sewers & Water Supply**

Water supply and storm sewer infrastructure were not included as part of the analysis as neither are considered to be a potential limiting factor within the Downtown and Central Area. As such, the scope of this study is concerned...
“It’s about getting the ridership and convincing drivers to give up their cars and start using transit.”
- November 19th, 2014 Feedback Report

“The political will is needed to stop prioritizing cars and this Plan is an opportunity to prioritize transit and the active connections to ION.”
- November 19th, 2014 Feedback Report
15.0 Getting There

Using the Station Area Plan

The PARTS Central Plan is intended to be a strategic policy document that is used to guide development within the PARTS Central Area and to make recommendations for actions to implement the vision and the Plan. The Plan is a comprehensive stepping stone to the development of implementation policies, via a new Secondary Plan; zoning regulations; urban design guidelines, as well as specific action items to consider for future infrastructure and placemaking projects. Implementation of the policy direction of this plan will help realize the development and intensification of this area with uses and densities that support the higher order transit.

The development concepts illustrated in this plan, including the location of new parks and public realm spaces, represent possible development scenarios. Their purpose is to illustrate how the principles and objectives for new development as contained within this PARTS Central Plan, could be realized over time. They are not intended to be prescriptive for evaluating future development proposals, but are examples of how the visions, goals and objectives of this plan can be realized.

The PARTS Central Plan contains a range of visions, strategies and recommendations for assisting in realizing the strategic placemaking and economic development potential of this station area. Following approval of the Plan, City staff will be prioritizing and programming the recommendations described in this Plan and will be undertaking the following implementation tools.

Official Plan Policy Development

New policies, land use designations and bonuses for the Urban Growth Centre (Downtown) were prepared as part of the new Official Plan (Q2014). The PARTS Central Plan reflects the new direction and has confirmed that the land use and density provisions of the new Districts can accommodate growth to 2031 and more than achieve a transit-supportive UGC density target. As a result, there are no further proposed changes to implement this Plan (Implementation through zoning is required). The Major Transit Station Area policies and mapping will be reviewed and updated if needed through the Secondary Plan process.

New Secondary Plan/Revise Existing Secondary Plans

A Secondary Plan will be prepared for the lands within the PARTS Central Area that are outside of the Urban Growth Centre/Downtown through an Official Plan Amendment process. The new Secondary Plan will replace portions of several older, existing Secondary Plans that currently overlap with the PARTS Central Area. The geographic area would coincide with the boundary of the preferred scenario of this Plan.

The land use designations and policies of the Secondary Plan should reflect and further refine the PARTS Central preferred scenario/land use plan through further location specific study and public process. The designations and policies should provide an appropriate mix of residential, office, commercial and retail uses at transit-supportive densities and limit or restrict auto-dominated development. Detailed uses and policies for the Innovation Employment category will also be created. In addition, the Secondary Plan policies will provide further policy direction for the transition of built form and height between land uses in order to help ensure compatibility of new development with the surrounding established neighbourhoods and to conserve cultural heritage resources.

Zoning By-law

New zoning to implement the preferred land use plan for the PARTS Central Area will be created with the Secondary Plan and in consideration of the zoning being developed as part of the City’s Comprehensive Review of the Zoning By-law (CRo28By) project and any other relevant initiatives. New zones for the Urban Growth Centre (Downtown) are being developed as part of the CRo28By project to implement new Official Plan policies. The new zoning for the UGC should reflect the objectives and directions within this plan.

Zoning for the PARTS Central Area will not permit or will regulate certain uses to ensure the new development is transit supportive. In addition, in order to achieve the desired design and built-form, appropriate setbacks, step-backs, heights and densities will be regulated through the zoning. These zoning regulations will be supplemented with urban design guidelines specific to PARTS Central.

A vital step in ensuring transit ridership will be to regulate parking within the PARTS Central Area. This may include reductions in parking and establishing maximum parking rates. It may also prohibit surface parking in certain areas and may require that structured parking be required with active uses at the street. New parking regulations for the UGC and PARTS Central Area will be proposed through the CRo28By project and may be further refined to implement policies in the Secondary Plan and through the associated zoning preparation. Zoning regulations will also seek to implement Transportation Demand Management (TDM) measures.

Compatibility of new development with existing neighbourhoods is an important objective for the PARTS Central Area. In order to achieve the desired objective, appropriate transition guidelines in the Zoning By-law will be required to direct the scale, massing and orientation of new development.

Urban Design Guidelines

With the Secondary Plan policies and zoning, the existing PARTS Urban Design Brief will be amended that will provide design guidance for development in the station area. Urban design guidelines specific to the PARTS Central Area will be prepared to ensure that development is designed to support and sustain the rapid transit system, but be also compatible with the context of surrounding land uses and built form. Streetscape Plans will be a component of the guidelines.

Urban design of the lands and around the ION stops in PARTS Central will also necessitate that appropriate and detailed design guidelines be developed to ensure buildings are adequately sited around the ION stops with their principle entrance at the front of buildings to animate the public realm. Building scale, massing, architectural detail, landscaping and streetscape elements will also be addressed in the urban design guidelines.
15.0 Getting There

**Streetscape Master Plans**

Detailed Streetscape Master Plans are to be prepared for the streetscapes identified within the PARTS Central Area that provide connections to the ION stops. Each Streetscape Plan is to be incorporated into the appropriate section of the PARTS Urban Design Brief. Kitchener will prioritize and focus on city streets, with the highest priority of the PARTS Central Plan being Breithaupt Street. In addition, the City will explore opportunities with the Region of Waterloo to create partnerships for streetscape improvements along Regional Roads within the PARTS Central Area, including but not limited to Benton Street, Courtyard Avenue, Frederick Street and/or Victoria Street. This would help to improve connections between the neighbourhoods and ION stops.

**Cultural Heritage**

The conservation of cultural heritage resources located within the PARTS Central Area will be achieved through provisions under the Ontario Heritage Act and the Planning Act. This will include listing and designating property on the Municipal Heritage Register; processing Heritage Permit Applications for proposed alterations, additions and development on designated heritage property; and requiring Heritage Impact Assessments and/or Conservation Plans for Planning applications made for listed and designated property.

The conservation of identified cultural heritage landscapes (CHLS) will be achieved through the approval of this Plan and through the preparation of a Secondary Plan for those CHLS situated outside the Urban Growth Centre and within stable established neighbourhoods. The Secondary Plan will provide direction on appropriate and compatible development within specific CHLS through the implementation of the PARTS Central land use plan, as well as the introduction of zoning regulations and urban design guidelines directed toward conserving CHL character.

Additional strategies to conserve cultural heritage landscapes may be considered subject to additional engagement and interest from landowners and stakeholders.

**Improvements to Parks & the Public Realm**

As the PARTS Central Area continues to grow, redevelop and evolve, the City should focus on new placemaking opportunities. This includes improving existing parks and public realm areas and exploring opportunities for new urban squares and greens. Specifically, the highest priority is to create a new public space within the growing and nationally recognized Innovation District. Public/private partnerships or the creation of privately-owned publicly-accessible spaces is encouraged and should be explored.

Prioritization of the numerous opportunities outlined in this Plan will be necessary for work programming and budgeting purposes. Some of the main elements include:

- Continue with revitalizing Vogelsang and Cenotaph parks and other underutilized parks and public realm spaces, in order to refresh these well-used spaces and to incorporate CPTED elements.
- Revitalize Francis Green which is currently underutilized in order to make it more inviting; in addition, this space should be programmed with activities to increase its use as it is in close proximity to the Multi-Modal Hub.
- Increase access and improve visibility to Sandhills Park along with enhancing the landscaping and adding wayfinding elements.
- Upgrade Mike Wagner Green to improve the connection to the Iron Horse Trail as identified in the Iron Horse Trail Improvement Strategy through the City of Kitchener Central Area Park Rehabilitation Program.

In addition, a broad and coordinated wayfinding strategy would be extremely beneficial for mobility, sense of direction and an enhancement for the PARTS Central Area. The use of art within PARTS Central Area is encouraged as part of the development process (including potentially through bonusing or other private or public initiatives). The inclusion of additional “public art” in the PARTS Central Area may require an update to Public Art Master Plan.

**Improving the Transportation Network**

New opportunities should be explored to provide additional multi-modal pathway connections, specifically a connector to the Multi-Modal Hub. The creation of seasonal or temporary street closures and the development of “shared streets” should be considered and designed to enhance the pedestrian environment and to provide improved connections to parks and public spaces.

Opportunities to animate the City’s underutilized laneways such as Hall and Goudies Lanes in the Downtown should also be explored. The City shall consider constructing wider sidewalks and boulevards with landscaping to enhance the pedestrian and cyclist connectivity to ION stops. The addition of transportation signage for cycling trails, including sharrow, should be added along key cycling routes and where routes connect to the Iron Horse and Sparlane Trails.

Transportation Demand Management (TDM) is an important tool that will help the PARTS Central Area to achieve the desired transit ridership. The PARTS Central Plan includes appropriate directions and recommendations from the corridor-wide Phase 2 TDM Strategy. These actions will be further enshrined through the Implementation Tools of this Plan.

**Involving Partners**

The ION is a significant catalyst for shaping the built form and streetscapes of our community into the future. Additional strategic investments in the infrastructure and public realm in the areas beyond the immediate LRT line and ION stops can potentially provide further amenities and leverage an area’s marketability and livability. Meeting the long-term objectives of the PARTS Central Plan will require coordination with many partners.

![A panorama of the PARTS Central Area](opposite top)
![A photo from the February 24th 2015 PARTS Central site walk](bottom, opposite bottom)
![A graphic showing many of the layers of Information contained in this plan. Together, they build upon each other to create the preferred master plan for the PARTS Central Area.](opposite middle)