



PLANNING ANALYSIS

CITY OF CHARLOTTETOWN

MARCH 2023

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EXECUTIVE SUMMARY

The City of Charlottetown is experiencing growth and change like never before. Understanding what this change means and looks like over time helps planners, stakeholders, decision-makers, and residents alike to best understand how to address planning for the future.

Key Takeaways from the Planning Analysis

- There is substantial overlap between many of the emerging themes, and a comprehensive approach to addressing challenges and opportunities is required.
- Charlottetown has successfully accommodated record growth since the beginning of the pandemic. Planning must now seek to provide a framework for the city to continue growing in a sustainable manner.
- As the city continues to experience record growth, it is imperative that attention be paid to ensuring access to parks, open space, and affordable housing is maintained.
- At the same time, care and consideration must be made for addressing the impacts and risks of a changing climate on Charlottetown, such as from coastal flooding.
- Strategic opportunities to improve connectivity between parks, open spaces, trails, and pathways can improve access and enjoyment of Charlottetown's already great parks and recreation network.
- Charlottetown's historic and cultural resources must continue to be leveraged as a strategic economic development pillar while ensuring growth within the city is able to accommodate this expanding sector in a sustainable manner.



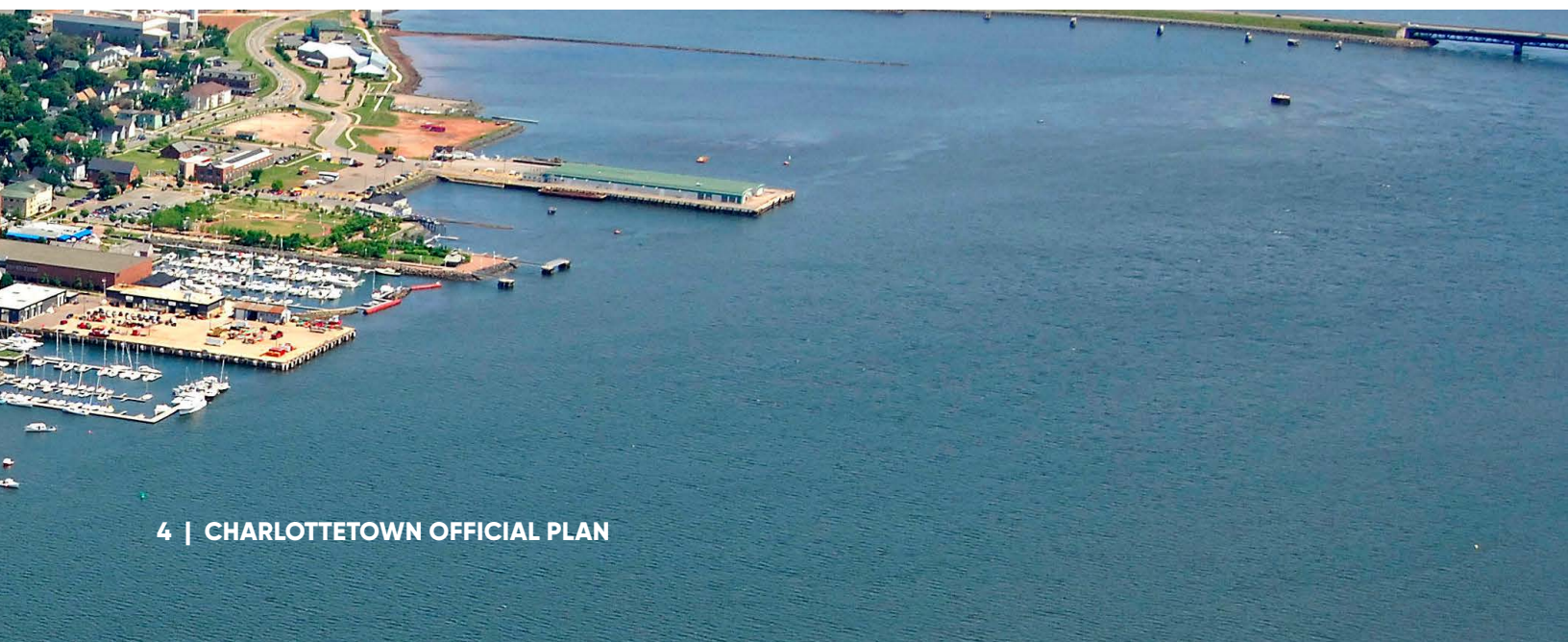
PLANNING ANALYSIS

This Planning Analysis takes a wide perspective on the various trends, datasets, and facts about Charlottetown that can and will influence how the city grows over the coming years. Ranging from building statistics to population growth to transportation, infrastructure, and parks and open space, the analysis seeks to understand how the city is spatially distributed.

Throughout the analysis different datasets are presented geographically through maps, accompanied with a brief analysis of what the data tells us and how this information was considered in the preparation of the Official Plan. When viewed holistically, the analysis paints a picture of Charlottetown's existing strengths, but also some strategic opportunities for the city to continue growing and improving the overall quality of life it affords to residents.

Topics included as part of this planning analysis include:

- Land Use
- Development Statistics
- Property Assessment
- Population Density
- Parks & Open Space
- Ecology
- Tourism
- Recreation
- Transportation
- Servicing
- Coastal Flooding



Current Land Uses

The City of Charlottetown exhibits a great diversity of land uses within its planning area. For this analysis, land uses in Charlottetown are broken down into eight categories and are depicted on the Current Land Use Map (Figure 1).

Residential and Mixed Use land uses make up a significant portion of the developed land in Charlottetown. From Charlottetown's predominantly Mixed Use downtown core, Residential land uses prevail as the primary land use in the city. Much of the land bound by University Avenue, Brighton Road, and Belvedere Road, as well as the former municipalities of Sherwood and Hillsborough Park are characterized mostly by their Residential land use. Beyond the Trans Canada Highway, Residential land uses are present, but are less contiguous than in the southern portion of the city, with the Airport and Industrial land uses making up a large portion of the developed areas.

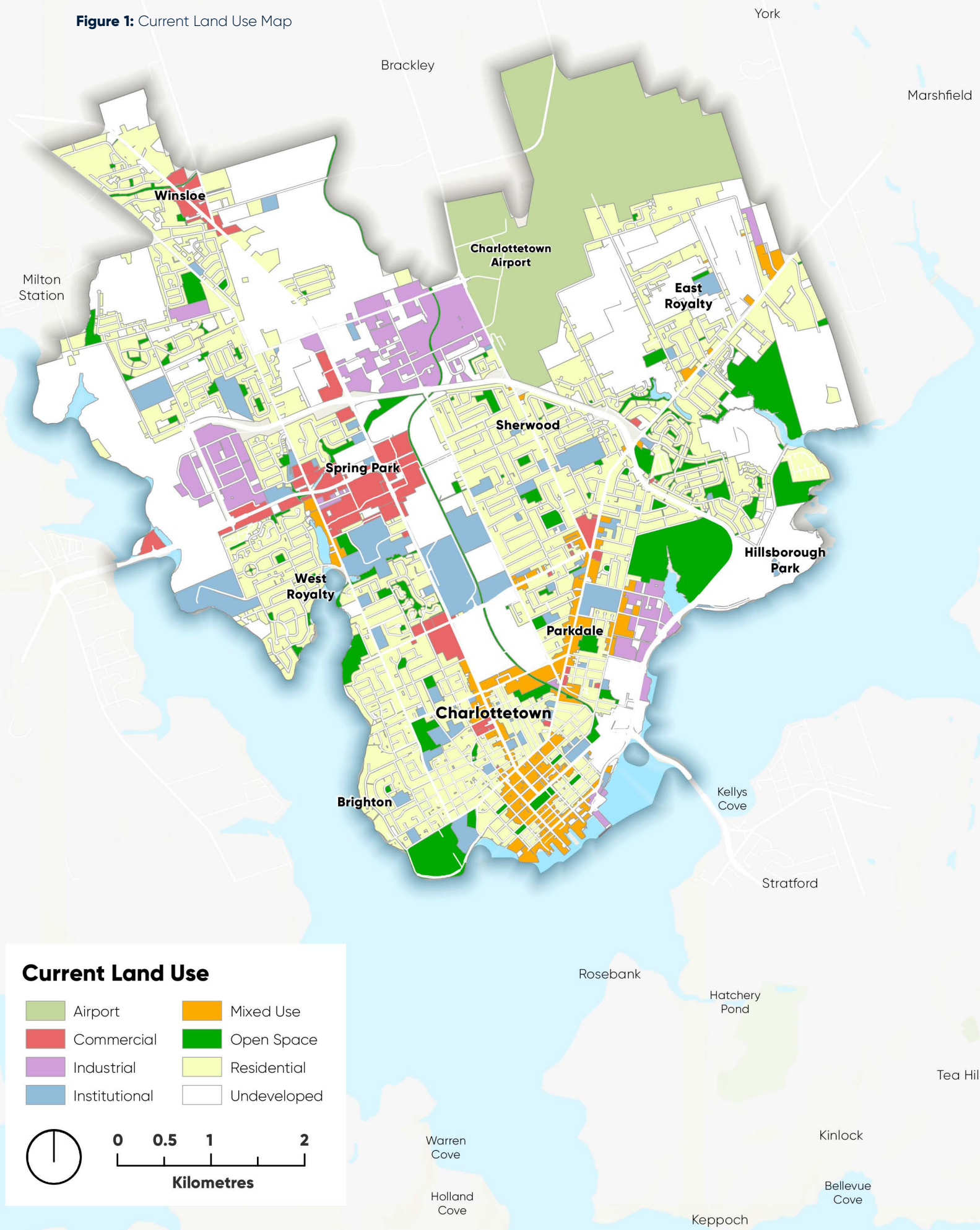
There are also substantial areas of land within Charlottetown used for Industrial and Commercial purposes. Industrial land uses are concentrated along Highway 1, while there is also a portion of the waterfront used for Industrial purposes. Commercial uses are mostly located along Highway 1/Capital Drive, with secondary Commercial uses located along University Avenue and St Peters Road. The style of commercial and industrial development in these areas—predominantly single-use big-box and warehouse-style. With their concentration in key areas of the city this results in the creation of physical barriers that fragment sections of Charlottetown from each other—especially the northwestern quadrant of Charlottetown from downtown.

What Does This Mean for the Official Plan?

With the observed land use patterns in Charlottetown, and with a large number of undeveloped parcels of land, there is opportunity to promote infill development and potentially connect areas of the city that are currently spatially fragmented. There is also an opportunity to strengthen the significance of key routes within Charlottetown through mixed use corridors by connecting key areas of the city. Charlottetown's older single-use shopping malls present opportunities for residential infill and the creation of new mixed-use urban nodes along the city's key transportation corridors.

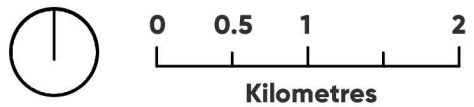


Figure 1: Current Land Use Map



Current Land Use

- Airport
- Commercial
- Industrial
- Institutional
- Mixed Use
- Open Space
- Residential
- Undeveloped



Development: Historic Growth 1935-2022

Historic growth patterns (Figure 3) in Charlottetown have generally followed an outward trajectory from the downtown core, spreading into the outlying areas of the city over approximately 90 years. The majority of buildings existing in 1935 were located in the 500 Lot Area, the traditional downtown core of Charlottetown. Between 1935 and 1974, much of the building stock south of the Trans Canada Highways that exists today was constructed. The growth patterns observed during this period would suggest new development was largely contiguous with existing development—that is, the city's footprint generally expanded outward in a uniform fashion.

Beyond 1974, however, new growth in Charlottetown largely transitioned from contiguous growth to a clustering form of development. Especially north of the Trans Canada Highway, new development clusters into subdivision-style growth and manifests as development along curvilinear, often closed-ended, streets. Much of the new growth beyond 1974, particularly residential growth, abandons the traditional grid-like development structure seen elsewhere in Charlottetown.

The rate of growth in Charlottetown compared to other communities in Atlantic Canada is nearer the higher-end, with Charlottetown leading the rate of growth in PEI and growing at roughly the same pace as Halifax, Moncton, and Fredericton (Figure 2).

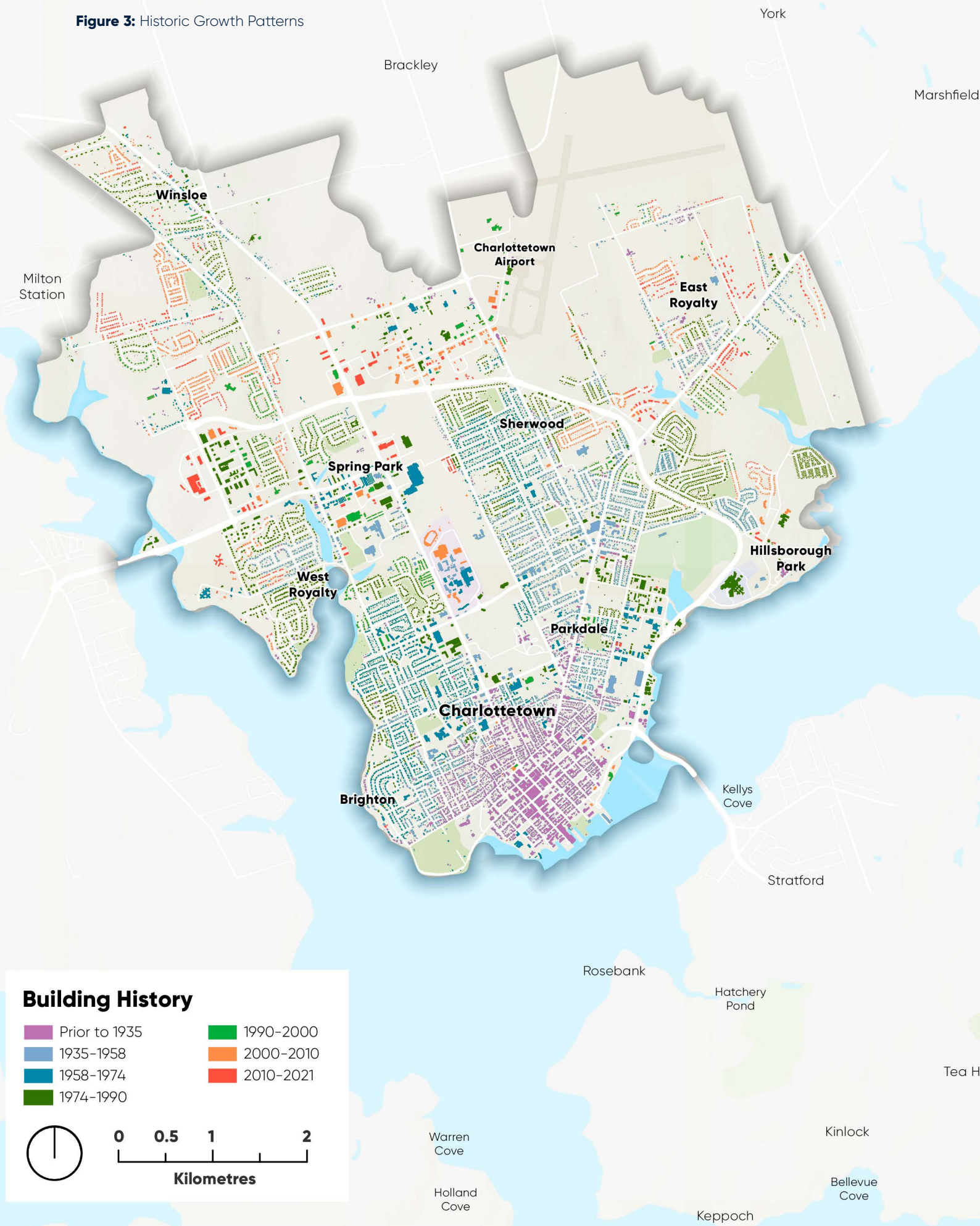
What Does This Mean for the Official Plan?

As Charlottetown faces continued pressure for development—especially residential development—the Official Plan seeks to re-balance how and where new development happens to ensure the City has an appropriate supply of developable land over the life of the plan. Promoting greater development density in certain areas of the city can help make more efficient use of the City's dense street network.

	2011	2016	2021	TOTAL CHANGE (2011-2021)
Halifax	304,979 (+7.8%)	317,334 (+4.1%)	348,634 (+9.9%)	+14.3%
Moncton	69,074 (+7.7%)	71,889 (+4.1%)	79,470 (+10.5%)	+15.4%
Saint John	70,063 (+3.0%)	67,575 (-3.6%)	69,895	-0.5%
St. John's	106,172 (+5.5%)	108,860 (+2.5%)	110,525 (+1.5%)	+4.1%
Fredericton	56,224 (+11.3%)	58,721 (+4.4%)	63,116 (+7.5%)	+12.3%
Sydney	31,587 (-2.8%)	30,170 (-4.5%)	30,960 (+2.6%)	-2.0%
Charlottetown	34,562 (+7.4%)	36,094 (+4.4%)	38,809 (+7.5%)	+12.3%

Figure 2: Charlottetown's growth rate over the last 10 years compared to other Atlantic Canadian cities.

Figure 3: Historic Growth Patterns



Development: Residential Building Permits 2015–2022

Permitting and building start data emphasize how residential development patterns have been changing over the last two decades in Charlottetown. The types and locations of new housing have changed, indicating a shift in the needs and demands for housing in the city.

Based on data obtained from the Canadian Housing and Mortgage Corporation (CMHC), between 1998 and 2008, single-unit dwellings were the predominant housing type being developed, but since 2009, multi-unit housing has outpaced single, semi, and row-house construction each year (Figure 4). The city has also experienced year-on-year growth in the number of housing starts since 2014, except for 2021 when housing starts decreased—likely influenced by the COVID-19 pandemic. In 2020, Charlottetown set a record of 554 housing starts, the highest since 1998 when records became available. Of these 554 starts, 406 of which were apartment building units (73% of all housing starts).

City residential permitting data, which shows the location of all residential permits issued (including renovations and other non-building start data), highlights how the location of building permits for residential dwellings has changed (Figure 5). Between 2015 and 2022, the majority of residential development permits issued for multi-unit dwellings (7+ residential dwelling units) were issued south of the Trans Canada Highway, with many close to the downtown or near key employment and institutional centres. The growing number of multi-unit residential building permits issued close to the downtown and key employment and institutional centres would suggest that there is increasing demand for residential uses that are in dense, walkable neighbourhoods with convenient access to services and amenities. This growth also likely reflects the growing need for more affordable housing options as multi-unit dwellings are often more affordable than traditional single-unit, semi, or row dwellings.

What Does This Mean for the Official Plan?

The new Official Plan promotes and enables a greater diversity of housing options in the city to meet a growing demand for housing, including affordable housing, in Charlottetown.

In 2020,
Charlottetown
saw a record
554 housing starts

73%
of those starts were
apartments.

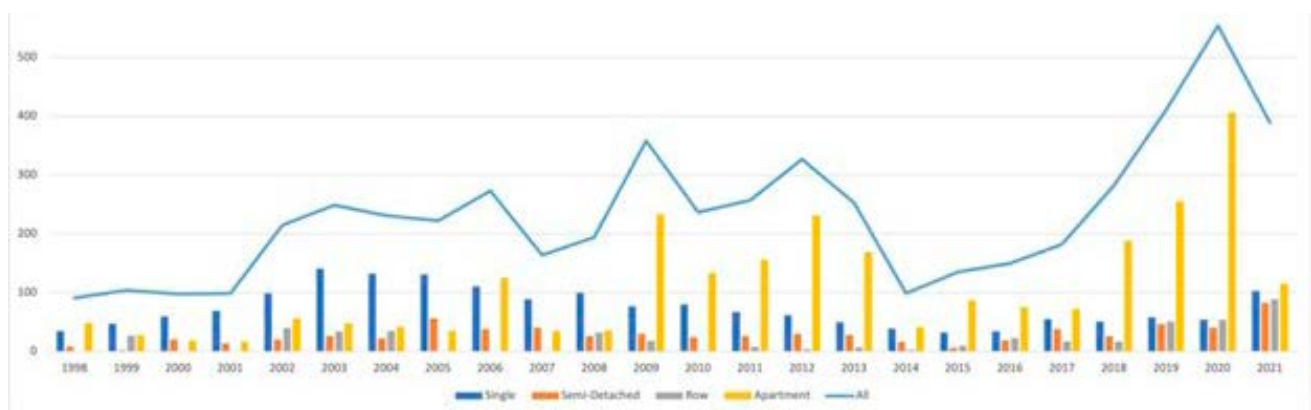
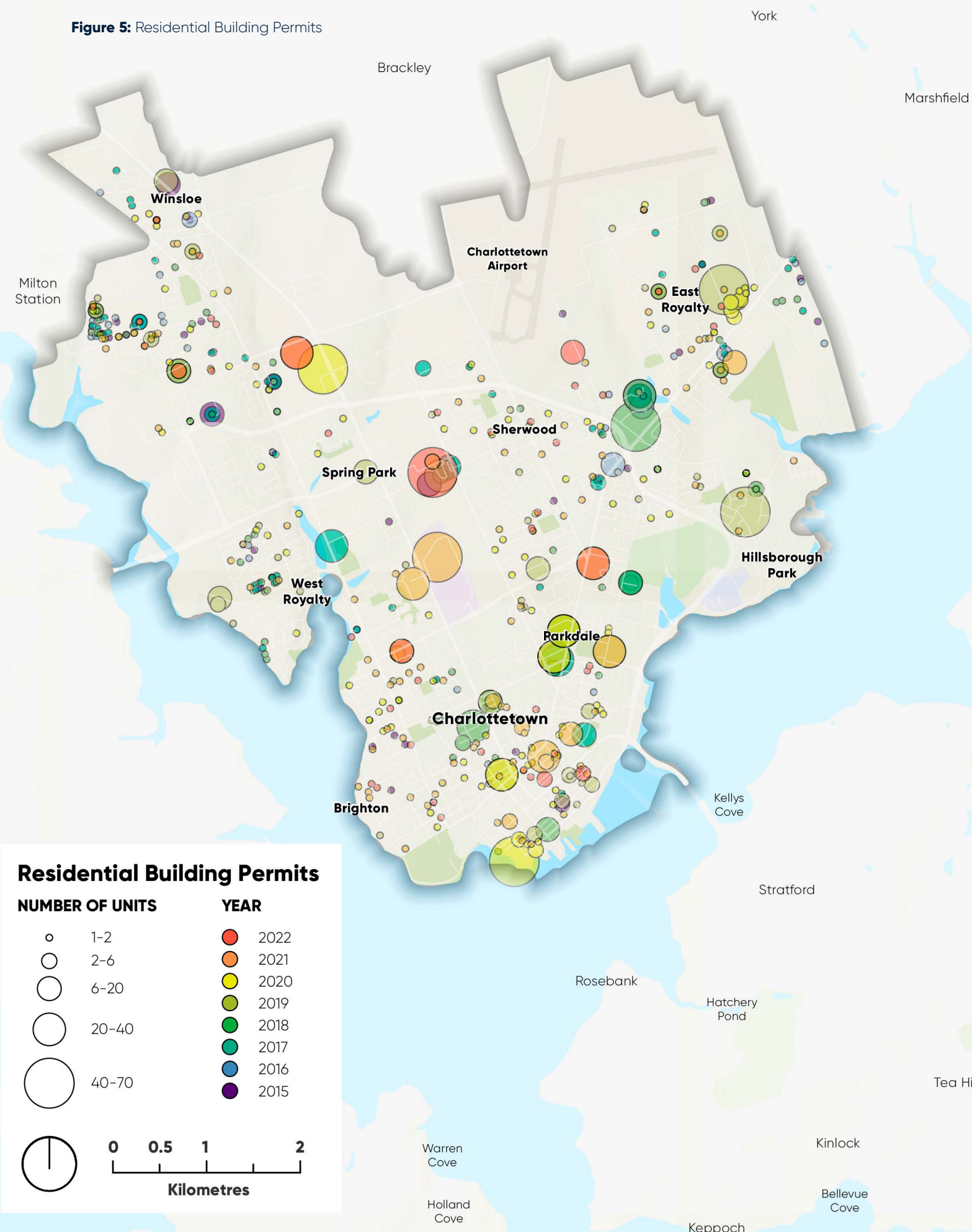


Figure 4: Charlottetown Housing Starts by Type and Year

Figure 5: Residential Building Permits



Development: Land Utilization

From a binary perspective (developed vs. undeveloped), the majority of land within Charlottetown is developed—that is, it contains a building (Figure 6). Over 92% of lots within the city contain a building, representing 95% of the total lot area in the city. Generally, undeveloped lots increase in frequency as a function of distance from the downtown, with most of the undeveloped lots being located in the northern half of the city, beyond the Trans Canada Highway. There are, however, several undeveloped lots interspersed throughout the city, including in the centre of the city along the Confederation Trail.

From a lot utilization perspective, there is significant capacity for the city to absorb additional growth on lands that are already developed (Figure 7). Only 1.5% of parcels have a lot coverage of 50% or greater—representing 0.01% of the land area in the city. Comparatively, 69% of parcels within the city have lot coverages less than 15% (including lots with no buildings on them), which represents 97% of the total land area in Charlottetown.

What Does This Mean for the Official Plan?

With increasing development pressure in the city, the Official Plan helps support potential infill development on underdeveloped and undeveloped lands, especially in areas close to services and amenities.



Figure 6: Building footprints across Charlottetown

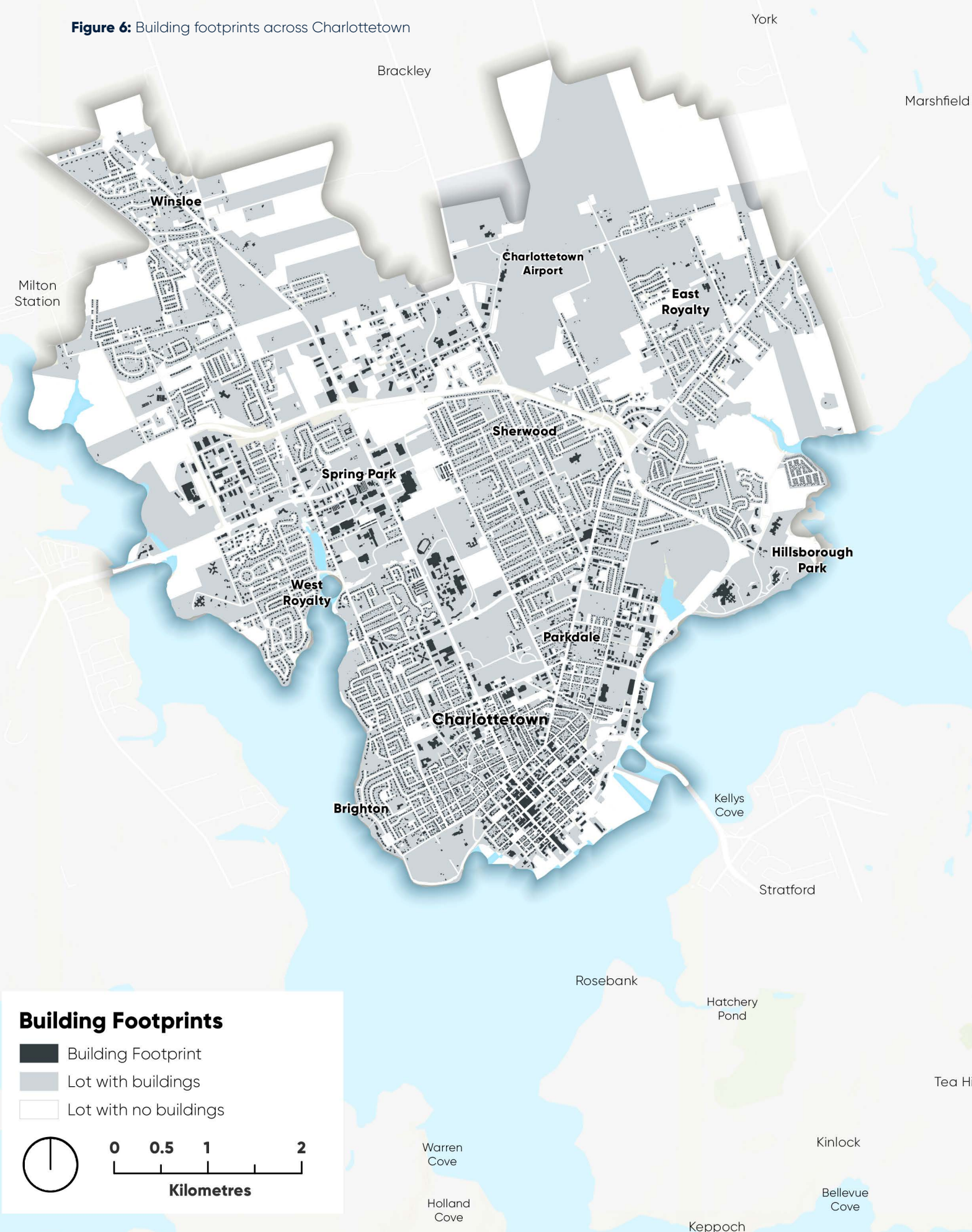
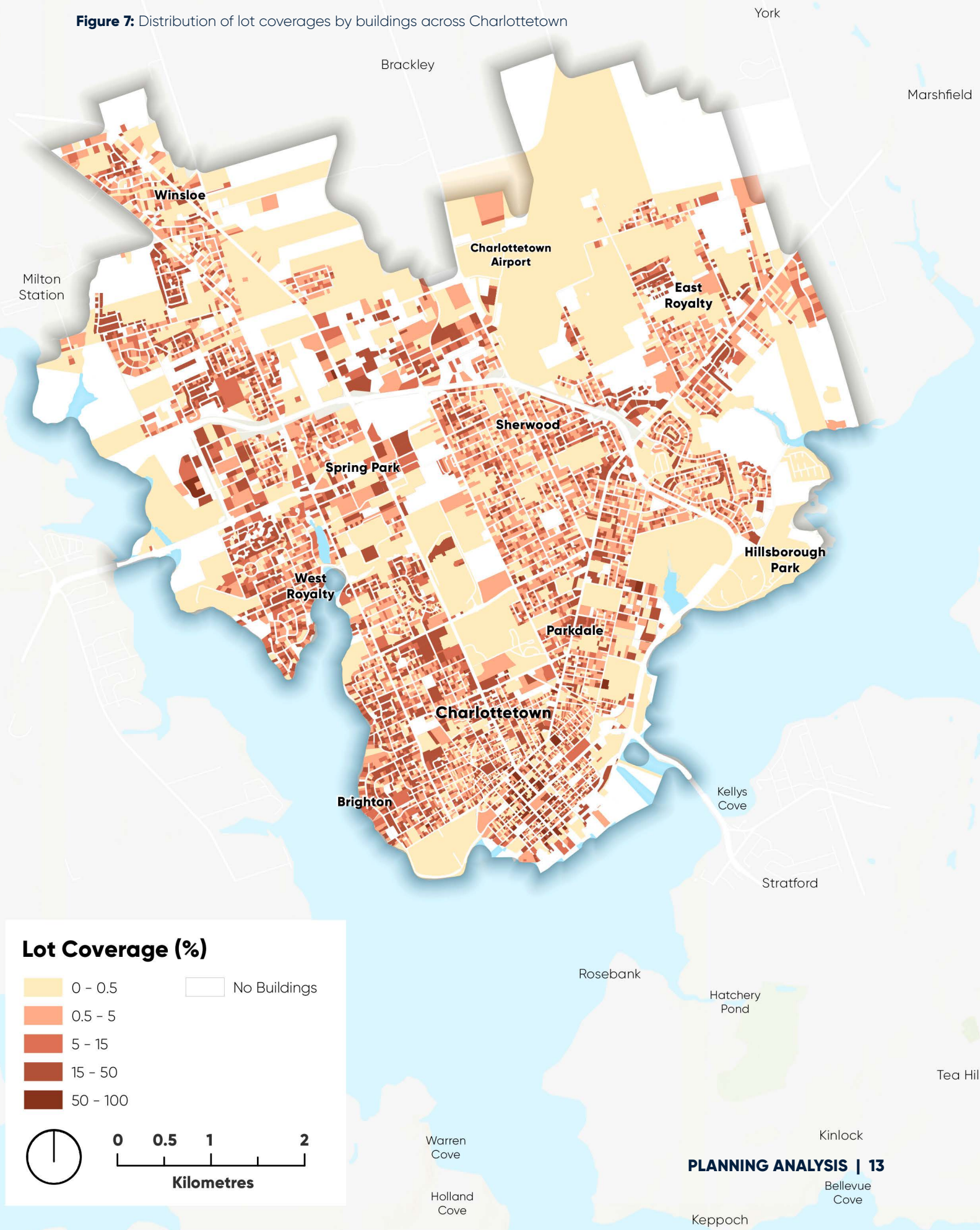


Figure 7: Distribution of lot coverages by buildings across Charlottetown



Development: Maximum Permitted Building Heights

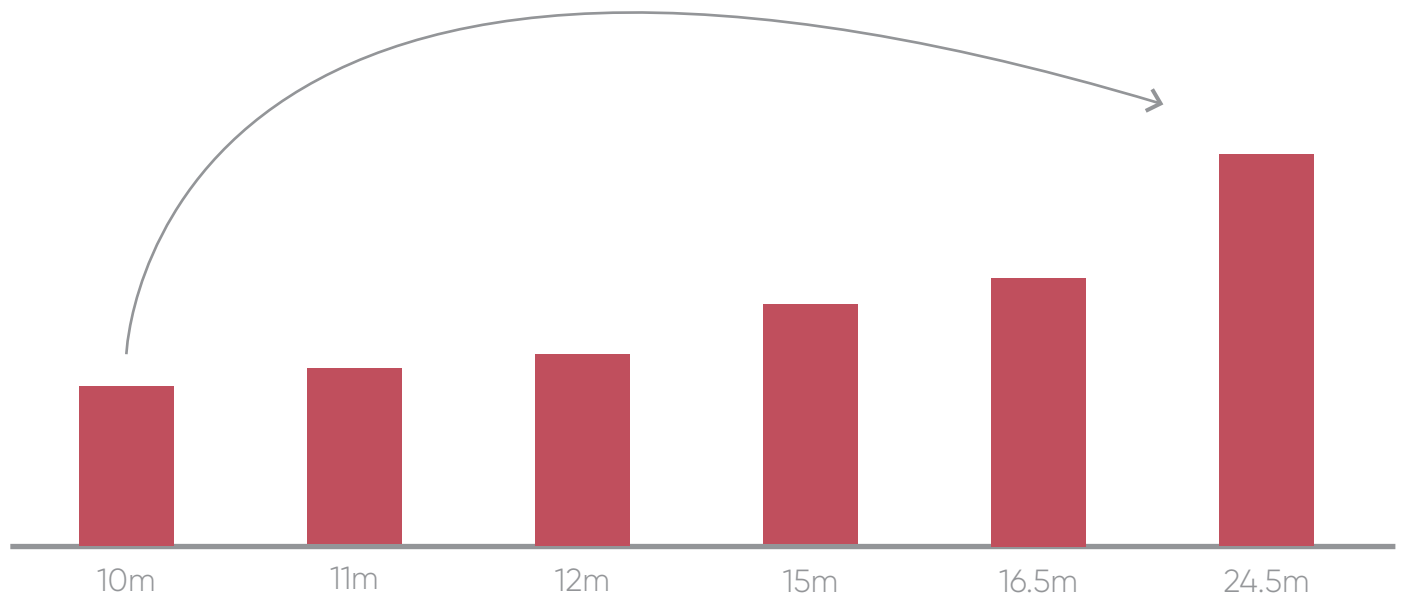
The maximum permitted heights within the Zoning and Development Bylaw (Figure 8) provide a quasi-accurate depiction of development potential in Charlottetown (i.e., areas with higher permitted maximum heights generally have a higher development potential), but are also a representation of where the City has prioritized higher-density forms of development. Generally, the City has prioritized lower-density forms of development but enabled taller buildings in selected areas of Charlottetown.

The majority of land within Charlottetown has a maximum permitted building height between 10 metres and 12 metres (between approximately 3 and 3.5 storeys), which are generally the low-density residential areas of Charlottetown, whereas the highest permitted heights in the city are found in the downtown. Both St. Peters Road and University Avenue have higher permitted building heights than surrounding low-density residential areas, while there are also sites within low-density residential areas that permit higher building heights.

What Does This Mean for the Official Plan?

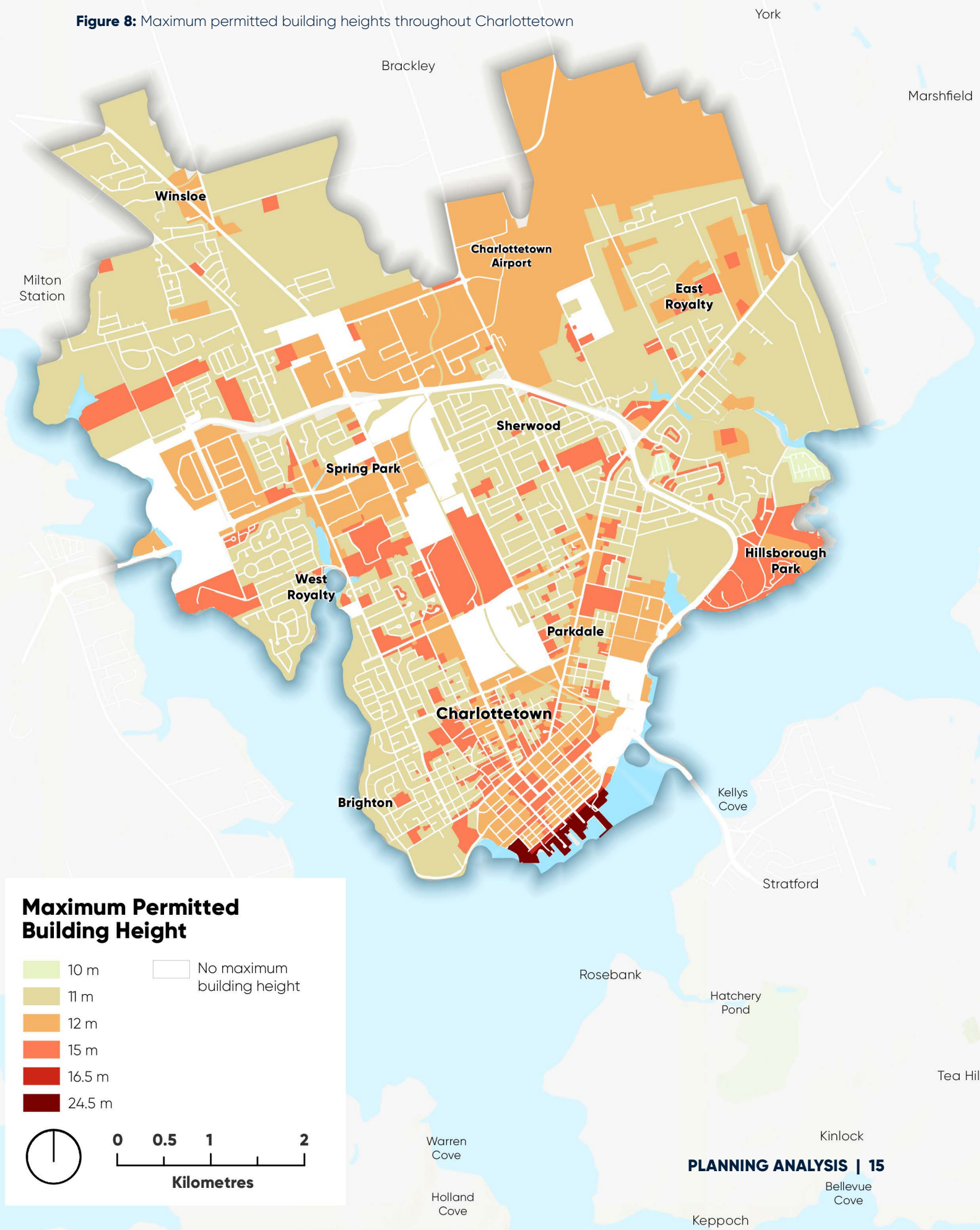
As the City develops a new blueprint for growth, there is an opportunity to re-examine how, where, and what types of new development will be permitted in the city. The Official Plan strengthens key corridors with higher-density forms of residential and commercial development to help promote a mix of uses and pedestrian-friendly environments. The Official Plan also requires appropriate transitions to surrounding areas in order to mitigate impact on neighbouring lower density uses.

The tallest permitted height is **2.5 times** the standard low density maximum.



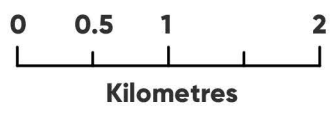
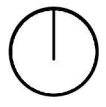
Charlottetown's Land Use Bylaw permits a range of building heights, with the tallest permitted buildings roughly 7-8 storeys tall. This graphic demonstrates these heights proportionately.

Figure 8: Maximum permitted building heights throughout Charlottetown



Maximum Permitted Building Height

- 10 m
- 11 m
- 12 m
- 15 m
- 16.5 m
- 24.5 m
- No maximum building height



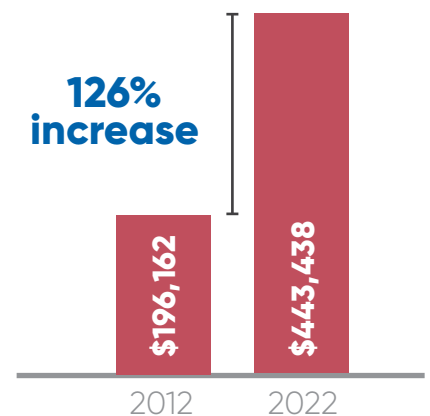
Property Assessment

Property assessment (Figure 9) provides a high-level overview and estimate of the assessed value per square metre of land area for each property in Charlottetown. This assessment does not, however, take the quality, type, or age of real estate, or other influencing factors into account. Rather, the property assessment map is meant to show how the real estate values range across the city. The map displays property assessment values in percentiles, which rank properties according to their relative value within the city. For example, a site in the 80–90th percentile has a higher assessed value than the bottom 80% of properties but a lower value than the top 10%.

The lands with the highest assessed values, according to the property assessment map, are concentrated in the downtown core, along University Avenue and St. Peters Road, and the Brighton/Spring Park areas. There is a moderate level of correlation between the property assessment map and the lot coverage map (Figure 7), suggesting that the assessed value of a property could be partially explained by the extent property is utilized. The property assessment map also indicates the types of development that are of the highest value in Charlottetown—those that are generally located in dense, walkable areas.

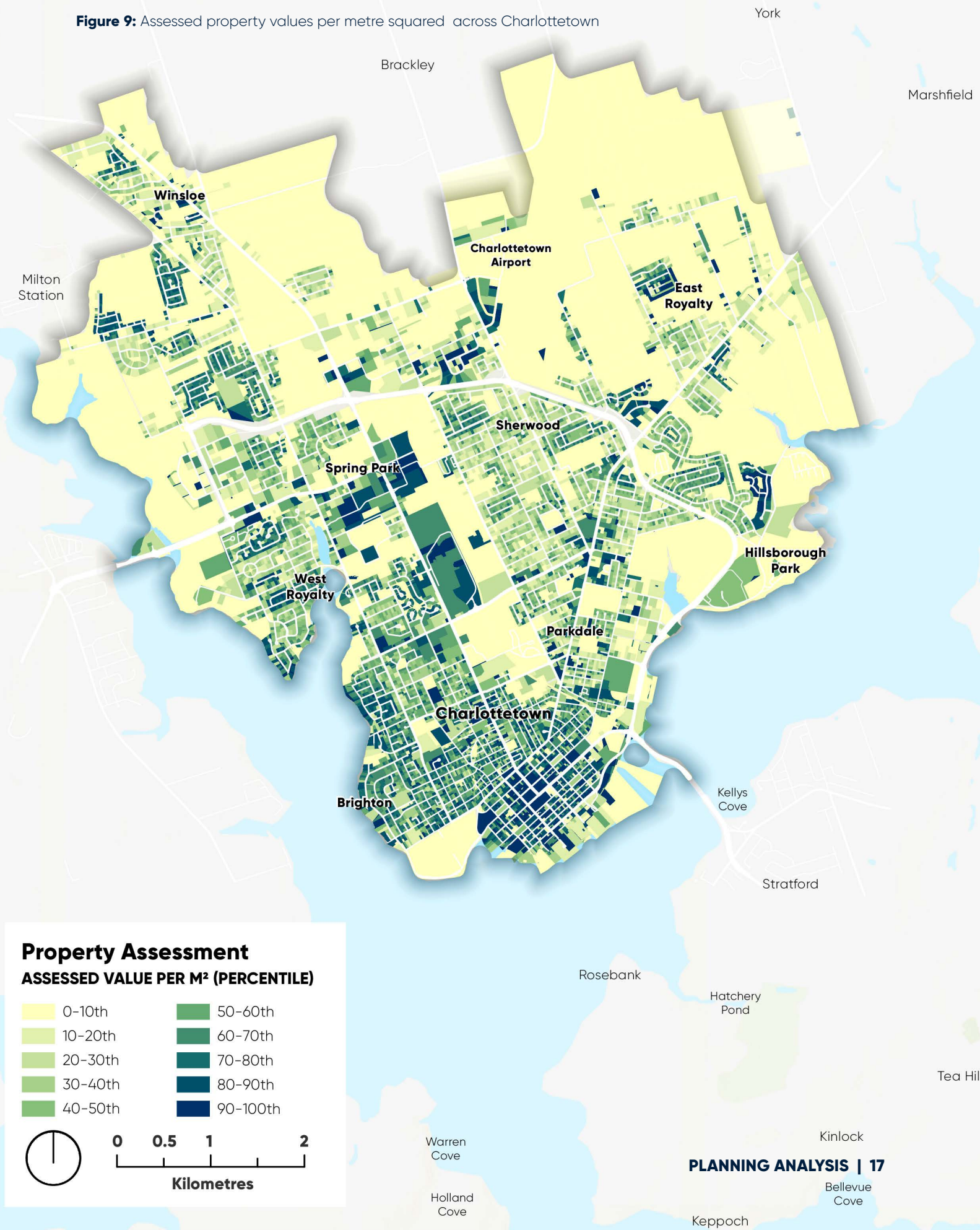
What Does This Mean for the Official Plan?

As the property assessment suggests, the land with the highest value, and, therefore, the land that produces the highest tax revenues for the City, are the properties closest to the downtown core and those that include a mix of residential and commercial services. Strategically promoting new, appropriate development near the downtown and pedestrian-friendly, mixed development in the new Official Plan will help the City generate additional revenue to expand the services and amenities it can offer.



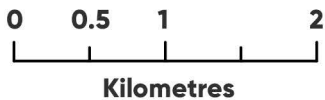
Average single family house price in Charlottetown.

Figure 9: Assessed property values per metre squared across Charlottetown



Property Assessment
ASSESSED VALUE PER M² (PERCENTILE)

 0-10th	 50-60th
 10-20th	 60-70th
 20-30th	 70-80th
 30-40th	 80-90th
 40-50th	 90-100th



Population Density

The City of Charlottetown has an overall population density, determined by the 2021 Census, of 876.6 people per square kilometre and is the densest urban centre on Prince Edward Island and is a little more than 1.5 times more densely populated than second most populous city on the island, Summerside.

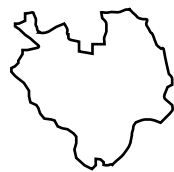
Figure 10 on the following page illustrates Charlottetown’s population density by dissemination block. Looking at this distribution, three major patterns of density emerge:

- The downtown has the highest amount of people per square kilometre.
- Middle Charlottetown, has a u-shaped pattern of density around the University of PEI.
- West Royalty, Hillsborough Park and the area around the Trans Canada Highway also provide concentrations of density (it is notable that West Royalty is a recent development subject to a 2015 Master Plan).

Outside of these population concentrations, Charlottetown development is relatively low density. It is important to note that high density development in Charlottetown is in the form of three to four storey multi-residential buildings.

What Does This Mean for the Official Plan?

The Official Plan outlines a generalized density distribution through its land use typologies that supports efficient transportation, servicing and commercial development. Additionally, the Official Plan outlines the preferred form this density should take and considers slightly taller buildings in nodes, where appropriate and contextually justified.



CHARLOTTETOWN



PEI



CANADA

POPULATION (2021)

38,809

154,331

36,991,981

**POPULATION DENSITY
(PEOPLE/KM²)**

876.6

27.2

4.2

Figure 10: 2021 Charlottetown population density by dissemination block

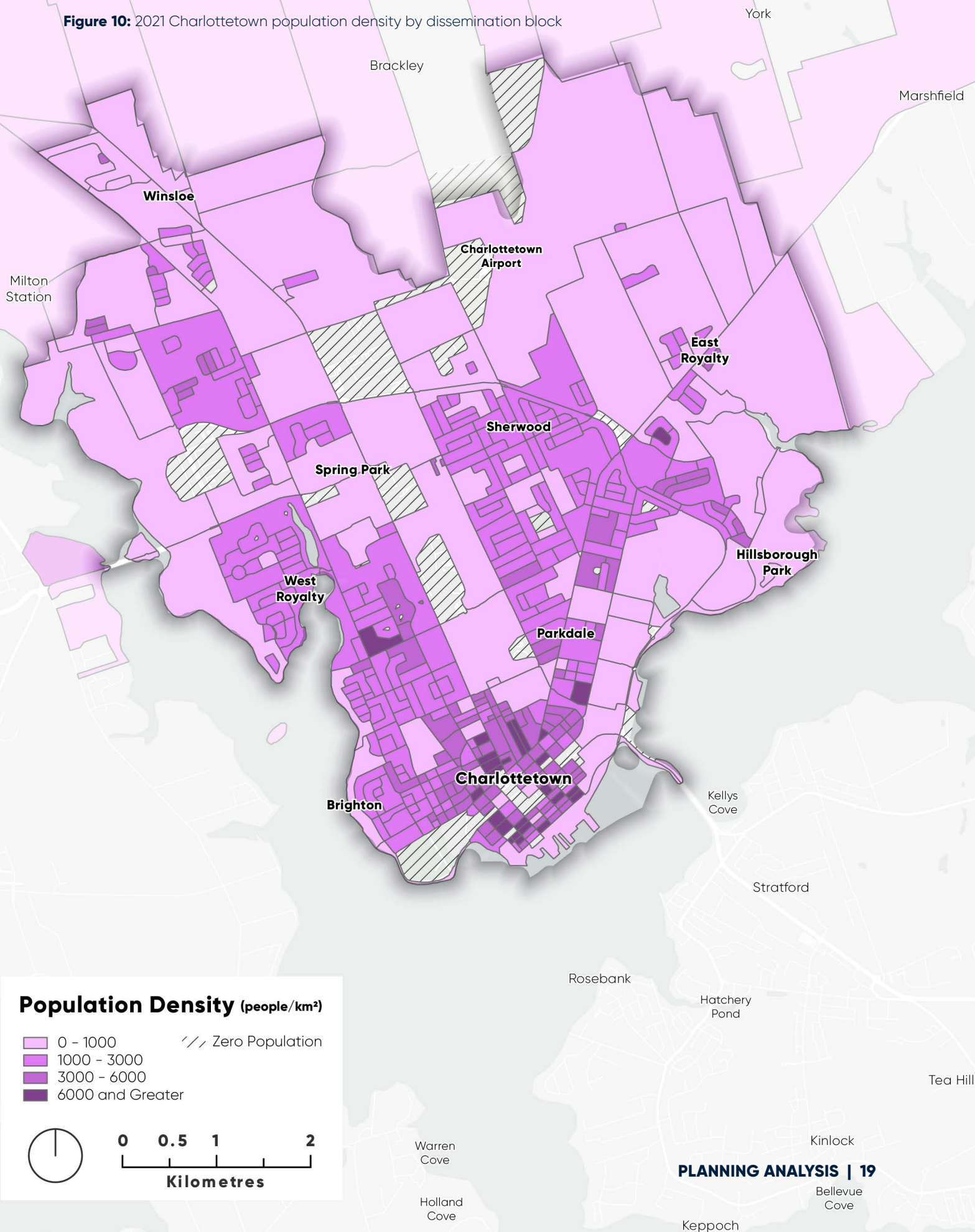


Figure 11: Relative density of residents aged 0-14 across Charlottetown and school locations.

York

Marshfield

Residents Aged 0-14 & School Locations

The location of schools within Charlottetown largely coincides with the areas of the city with the highest density of youth aged 0-14 (Figure 11). There are seven schools, including four elementary, two intermediate, and one high school, clustered near Charlottetown's downtown—the area of the city with the highest density of youth. The density of schools decreases as the distance from the downtown increases, which broadly corresponds to a decrease in youth density.

Milton Station

Charlottetown Airport

East Royalty

Spring Park

Sherwood

Hillsborough Park

West Royalty



Parkdale

Brighton

Charlottetown

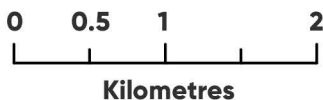
Kellys Cove

Youth Density & School Locations

-  All grades
-  Highschool
-  Elementary
-  Intermediate

INDIVIDUALS AGED 0-14 PER M² (2021 census)

-  0-100
-  200-400
-  100-200
-  400-900



What Does This Mean for the Official Plan?

Although the Province of Prince Edward Island largely dictates the location of elementary, junior high, and high schools in the province, the City can, through its Official Plan, influence the utilization of existing schools and the location of future schools by dictating how and where new growth and development will take place.

Rosebank

Warren Cove

Holland Cove

Tea Hill

Keppoch

Parks & Open Space: Overview and Popularity

Charlottetown's parks are a mix of active parkland and natural areas (Figure 12). Notable parks and open spaces include:

- Victoria Park (constructed in 1873) is one of the oldest parks.
- The downtown is served by the four historic squares of Rochford Square, Connaught Square, Hillsborough Square, and Kings Square along with Confederation Park.
- The Confederation Trail bisects the city travelling from the eastern edge of downtown through the university to the northwest linking into the east/west trail that travels across the province.

Cell phone data was used to determine which parks had the highest visitation from residents and the highest visitation from non-residents (Figure 13).

- Popular with residents: Victoria Park, Confederation Trail through the university, Belvedere Golf Club, and the Simmons Sports Centre and Field
- Popular with non-residents: Victoria Park, Confederation Trail through the university, Belvedere Golf Club, and Confederation Landing
- Victoria Park is the most visited park in the city for both residents and non-residents alike

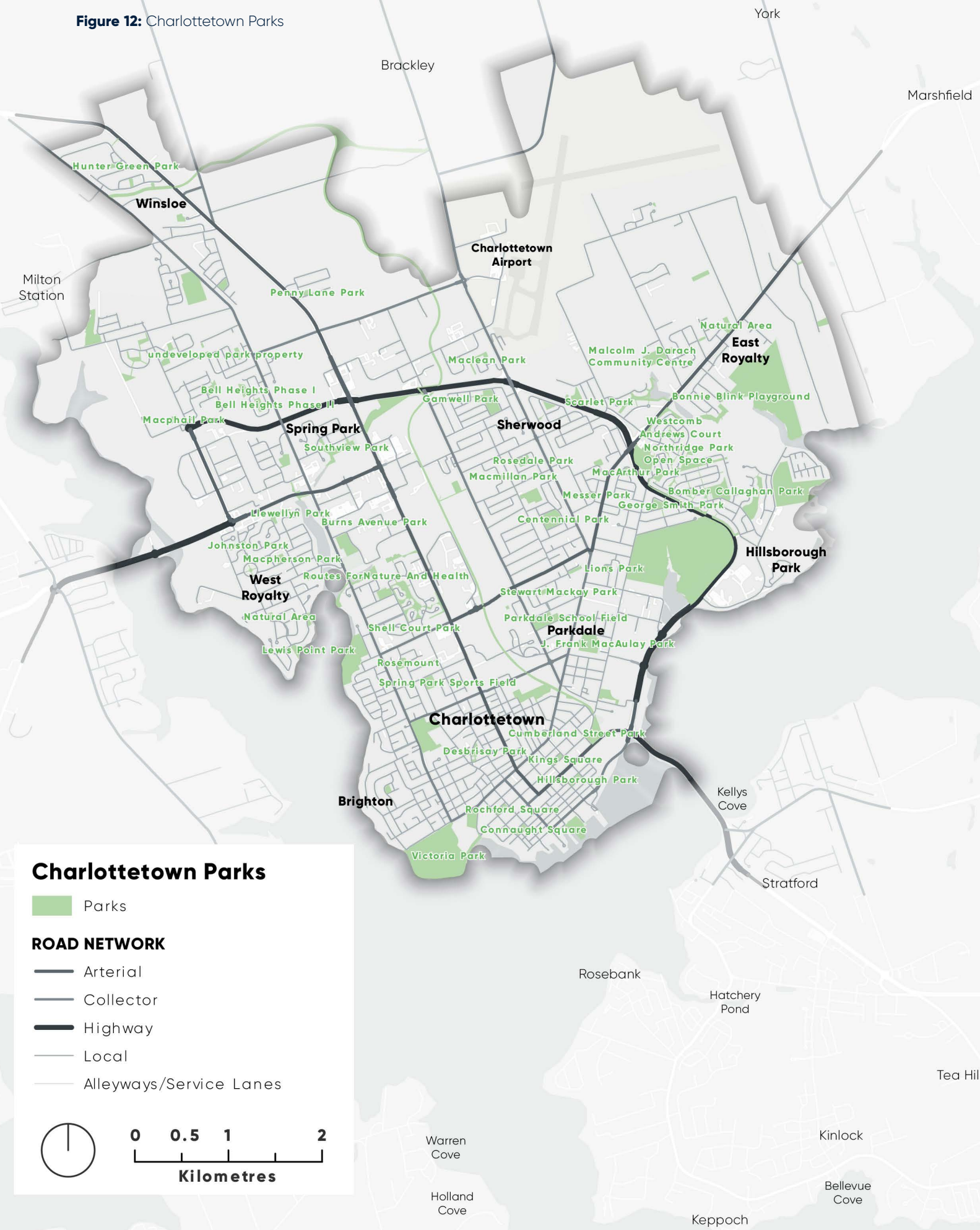
In addition to parks within Charlottetown, the popular Prince Edward Island National Park is easily accessible about 20 kilometres north of the city along the ocean.

What Does This Mean for the Official Plan?

The Official Plan includes a 'green network' type map and highlights strategic direction to create an interconnected and accessible parks system. Recommendations to connect the parks through active transportation, greenery and other modes support existing and future use of these space, particularly Victoria Park.



Figure 12: Charlottetown Parks



Charlottetown Parks

 Parks

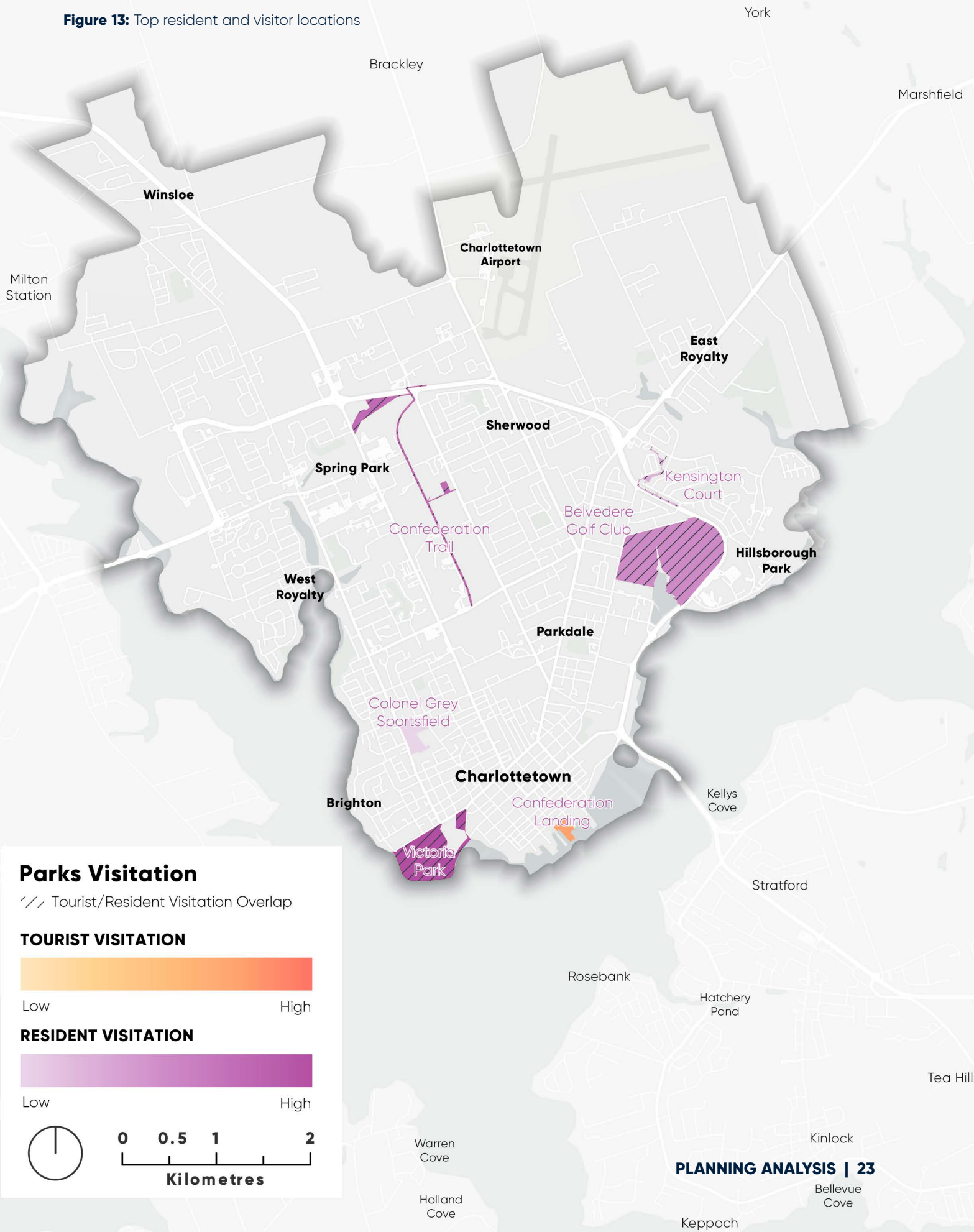
ROAD NETWORK

-  Arterial
-  Collector
-  Highway
-  Local
-  Alleyways/Service Lanes



0 0.5 1 2
Kilometres

Figure 13: Top resident and visitor locations



Parks Visitation

/// Tourist/Resident Visitation Overlap

TOURIST VISITATION

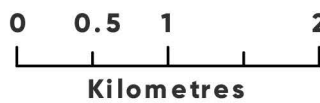


Low High

RESIDENT VISITATION



Low High



Parks & Open Space: Provision

As Charlottetown grows, the parks and open space provision will need to increase to support a high quality of life for residents. Figure 14 illustrates the square metres of parkland within a 500m walking distance for the different dissemination blocks. The following areas have a relatively low provision of parkland, less than 25 square metres per person:

- The downtown area
- Most of the area west of University Avenue
- Most of the area south of Capital Drive

Charlottetown has the least amount of people per km trail (1727 people/km of trail) when compared to Fredericton (489 people/km of trail), Moncton (546 people/km of trail) and Saint Johns (1,251 people/km of trail). However, it is important to keep in mind that Charlottetown's land area is much smaller at 44.5 square kilometres compared to Fredericton (133 square kilometres), Moncton (141 square kilometres) and Saint John (326 square kilometres). This in turn requires more strategic trail planning. It is important to note that as Charlottetown's population grows, the parkland per person will decrease if no additional parkland is created.

What Does This Mean for the Official Plan?

Downtowns have higher concentrations of people within a limited space and a lower provision of parks. The Official Plan supports the addition of contextually appropriate, downtown open spaces that can offer the recreational, social, and leisure opportunities.

City-wide, The Official Plan identifies high-level service targets and improvements to connectivity between parkland to increase parkland accessibility.

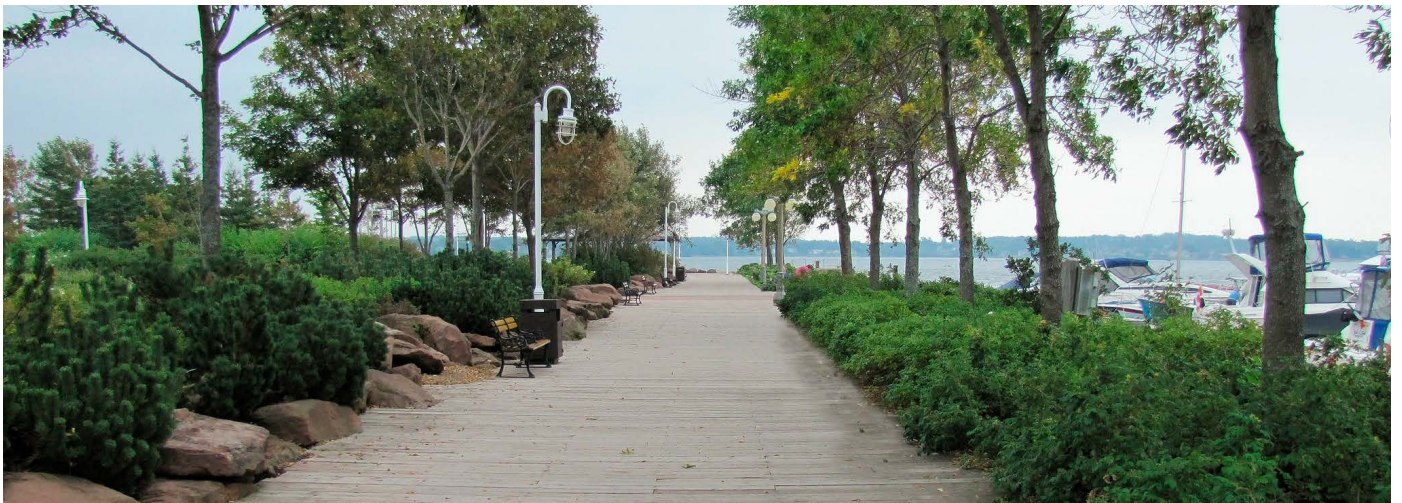
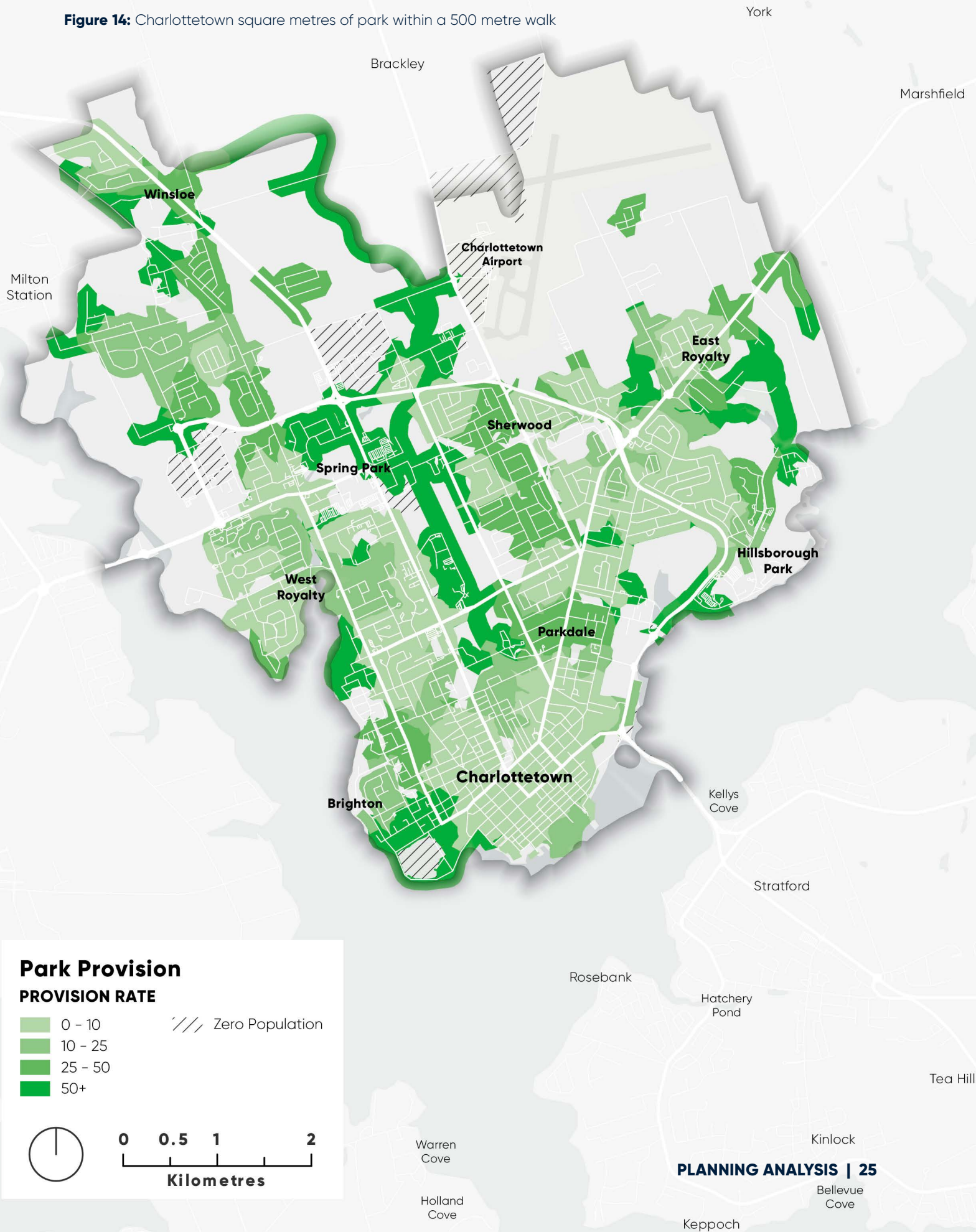


Figure 14: Charlottetown square metres of park within a 500 metre walk



Ecology: Watersheds

A watershed is defined as an area of land that drains surface and ground water into the river or stream from the river's mouth to its source. Within the City of Charlottetown boundaries there are six watershed areas as illustrated in Figure 15. These include:

- The Charlottetown watershed
- The Riverside watershed
- Wrights Creek watershed
- Hornes Creek 2 watershed
- Winter River watershed
- North River watershed

Urban watersheds are particularly vulnerable to impacts caused by development which can result in siltation, restricted flow, and reduced water quality. Local watershed associations lead watershed restoration and enhancement activities in coordination with the City. Healthy watersheds contribute to wildlife and freshwater habitat and biodiversity, carbon sequestration, stormwater resilience and groundwater recharge.

The provincial Ellen's Creek – Brighton Shore Wildlife Management Area regulations restrict hunting and disturbances to wildlife in this area. Most of the ecological areas within Charlottetown are concentrated along the edge of the city and along waterbodies. The wetland and wildlife management areas within the City are illustrated on the same map.

What Does This Mean for the Official Plan?

It is important to protect and enhance natural areas to help with Charlottetown's climate and resilience strategy. These areas will provide opportunities for flood mitigation, ground water recharge and filtration, as well wildlife corridors. The Official Plan incorporate policies that will identify the balance of natural area protection and enhancement with economic goals and objectives.

61 wetlands



6 watersheds

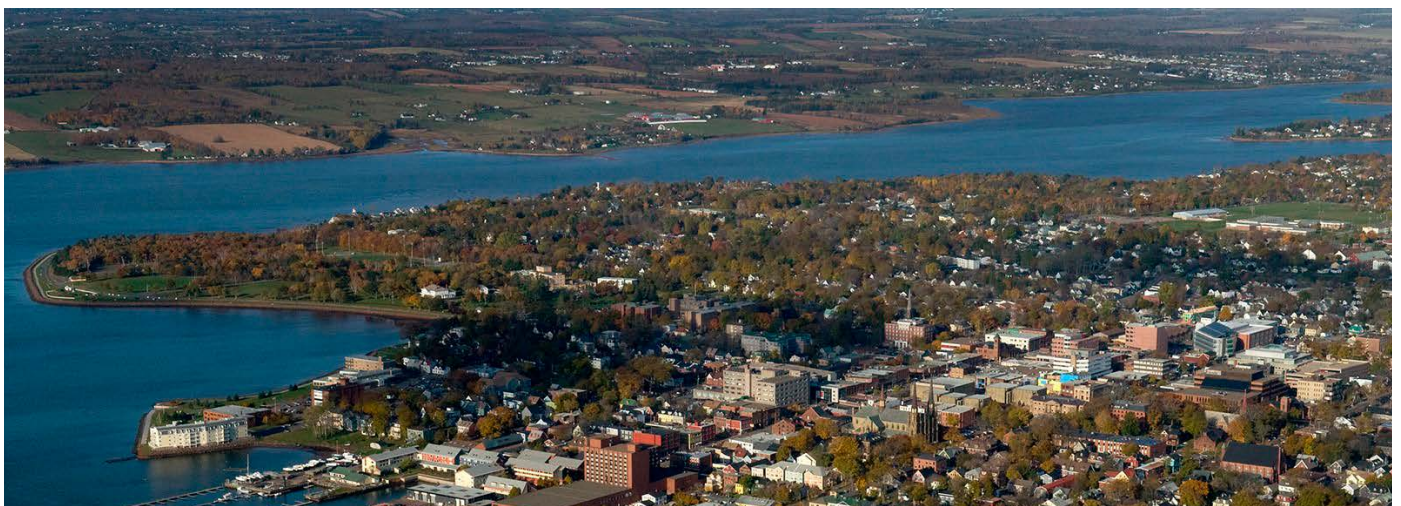
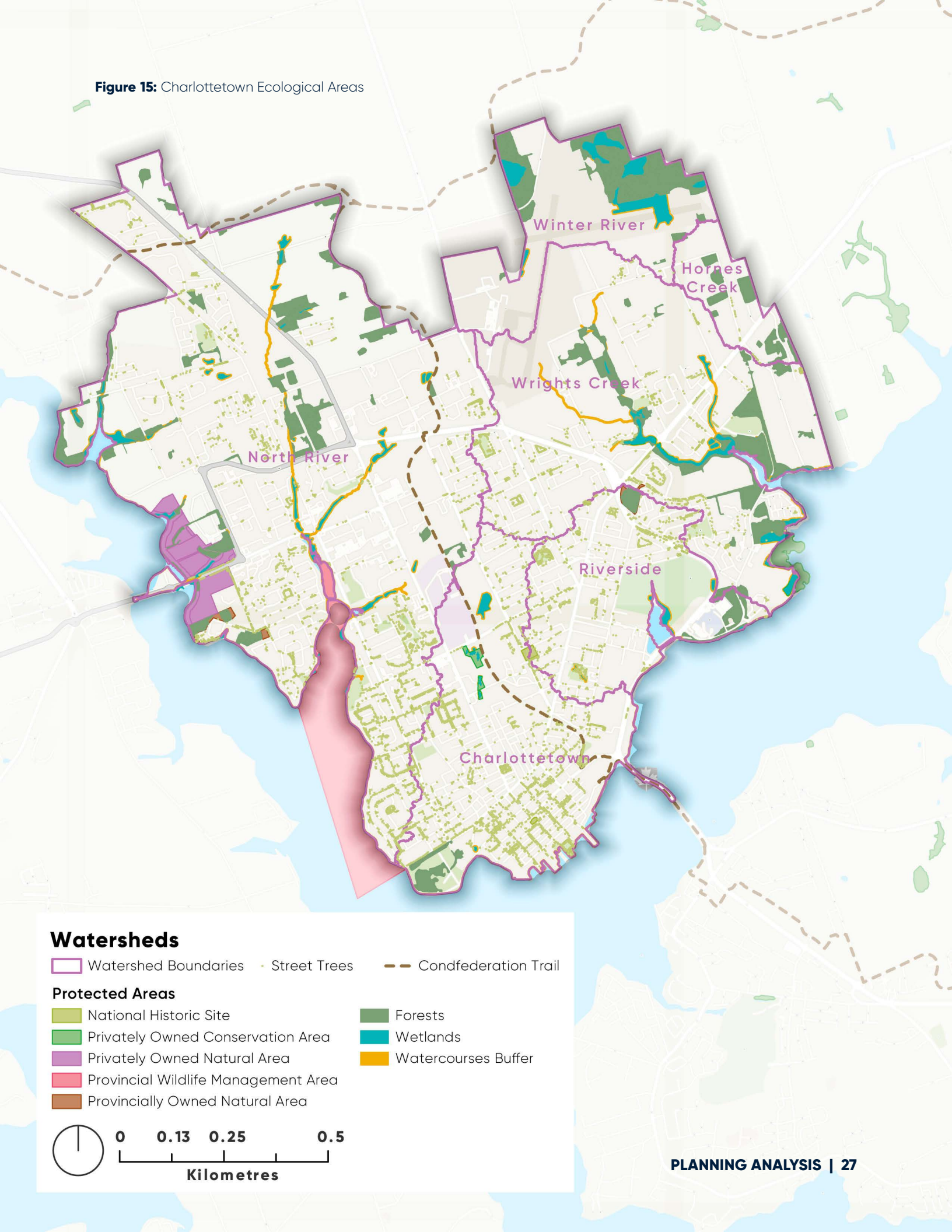


Figure 15: Charlottetown Ecological Areas

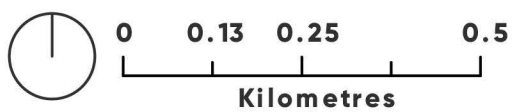


Watersheds

- Watershed Boundaries
- Street Trees
- Confederation Trail

Protected Areas

- National Historic Site
- Privately Owned Conservation Area
- Privately Owned Natural Area
- Provincial Wildlife Management Area
- Provincially Owned Natural Area
- Forests
- Wetlands
- Watercourses Buffer



Ecology: Urban Forests

Urban forests include all trees and shrubs within the City, including trees in yards, along streets, in urban and linear parks, and protected forested spaces. Urban forests provide habitat and preserve biodiversity within the urban ecosystem; improve air quality, water filtration, storage of water, reduce stormwater runoff, and contribute to carbon sequestration. Trees in public spaces also contribute to improved mental health and active living for residents, and neighbourhoods with mature trees benefit from increased property values.

Unfortunately, Charlottetown's urban forest has been significantly impacted by severe storm events in recent years. Mature trees that are characteristic of the City's urban streetscapes have been lost, and forested areas have been damaged. The urban forest requires active protection from development and enhancement to protect what remains and replace what has been lost.

Urban heat islands occur when cities replace natural land cover with dense concentrations of pavement, buildings, and other surfaces that absorb and retain heat. Because of this, it comes as no surprise that the most developed parts of Charlottetown exhibit some of the highest urban heat island effects (Figure 16). The urban heat island effect can dramatically influence local weather, increasing the local temperature considerably. As summers get warmer it is likely that urban heat island effects will intensify across Canada, leading to increased energy costs for cooling and greater impacts on local wildlife, residents, and vegetation.

One way to combat the urban heat island effect is through the enhancement and protection of the urban tree canopy. Tree canopies help to protect underlying areas from the most intense effects of heating, and provide a cooling effect when larger, contiguous canopies are preserved.

The maps on the following page come from the HealthyPlan.City project. You can explore Charlottetown's tree canopy and urban heat island more on their website www.healthyplan.city/en.

What Does This Mean for the Official Plan?

Taking an intentional approach to addressing urban heat island effects and their impacts on residents, tourists, and the local economy is an important consideration for the next 20 years of Charlottetown's growth. By working to mitigate heat island impacts through expanding the tree canopy cover as well as access to shaded parks and open space, the Official Plan seeks to improve the overall quality of life for residents and create a safer, healthier community for all.

295 hectares

of forests



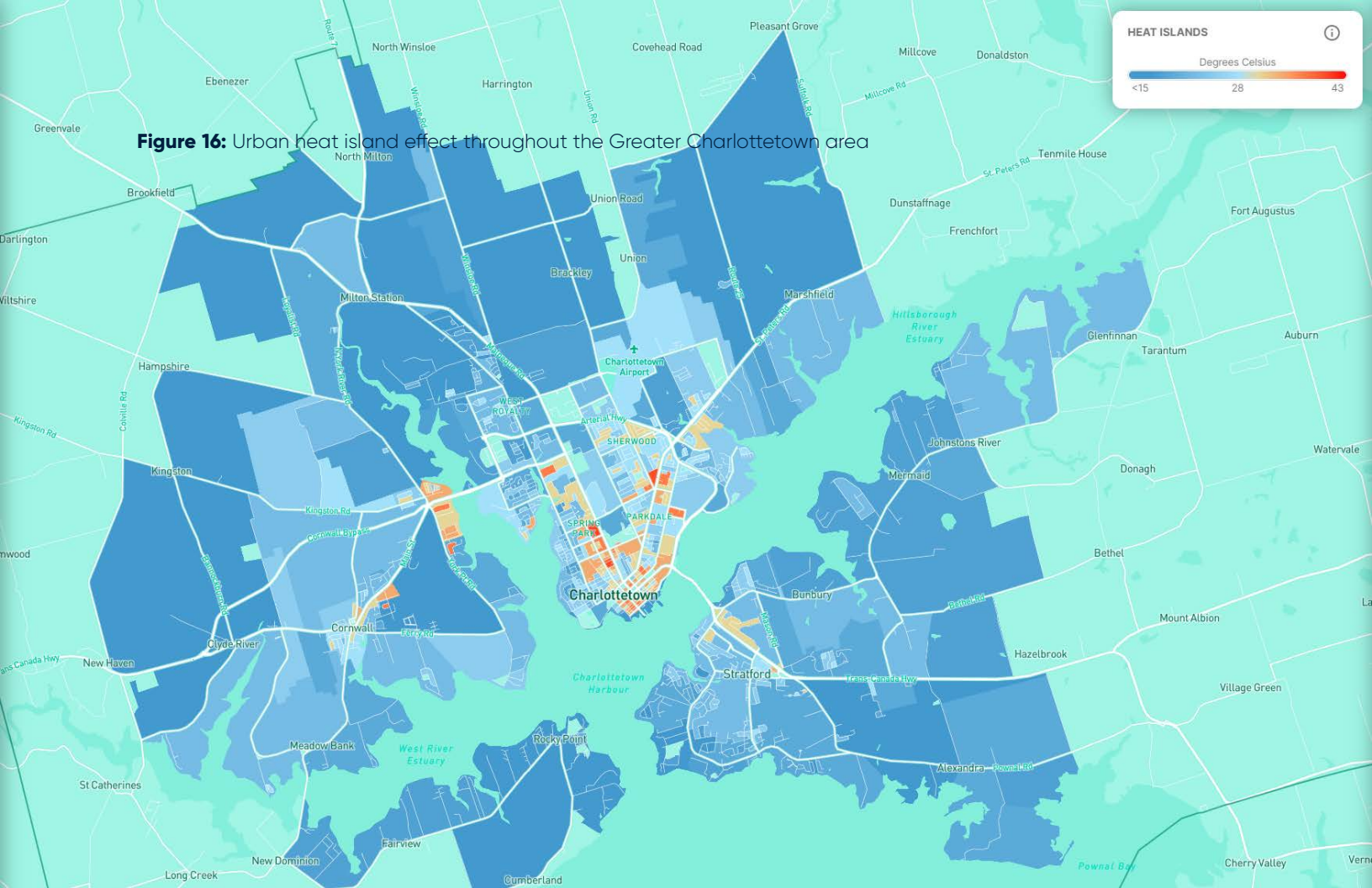


Figure 16: Urban heat island effect throughout the Greater Charlottetown area

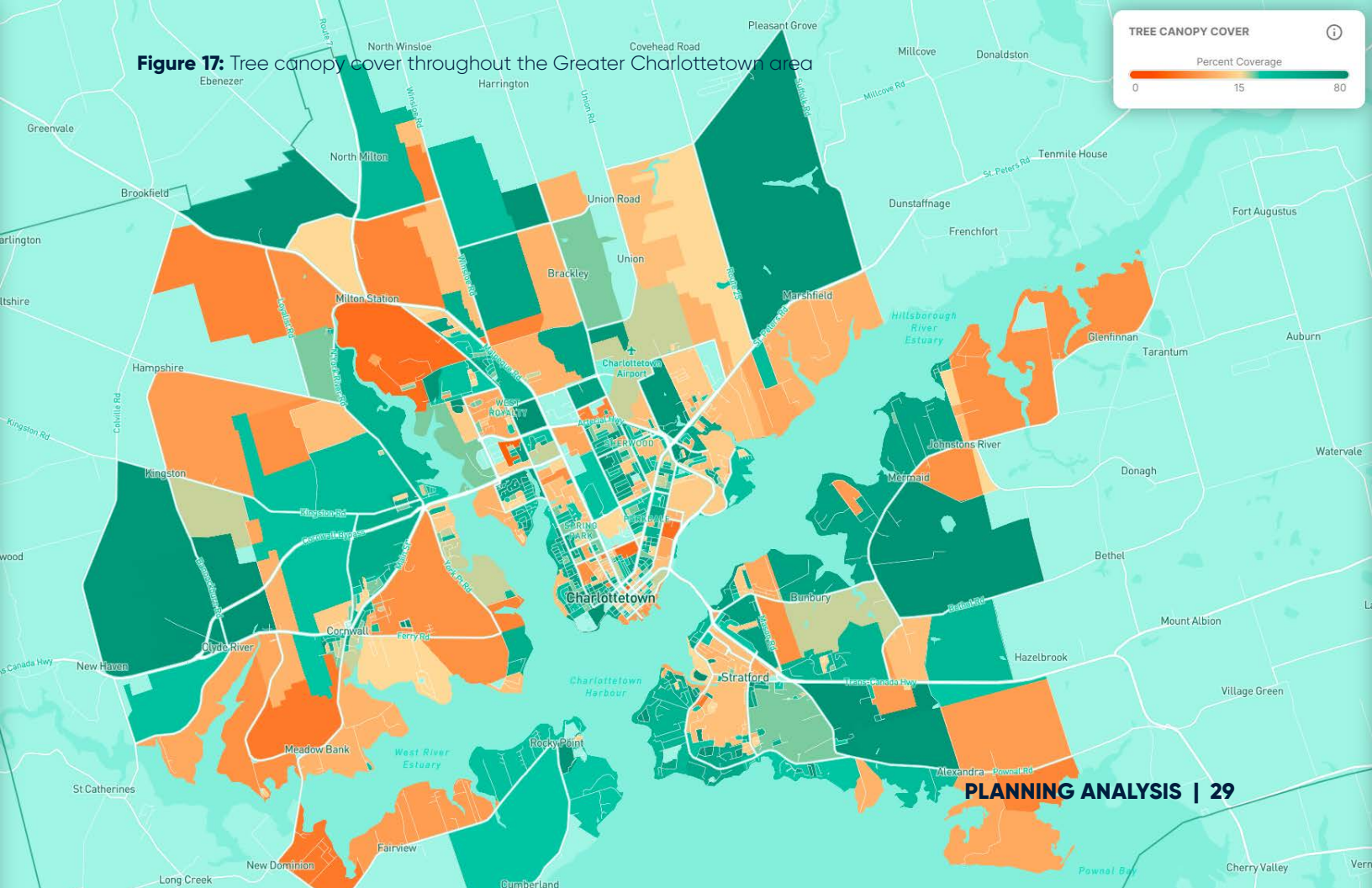


Figure 17: Tree canopy cover throughout the Greater Charlottetown area

Tourism: Draw and Profiles

There are many things to do and see in Charlottetown and the city's history is a major draw. The Strategic Initiatives Division of Tourism PEI indicates that prior to COVID, an estimated 1.5 million visitors travelled annually to the Greater Charlottetown Area by ground, air, and sea. This is roughly 39 times the City's population, comparable in scale to the number of tourists that visit Victoria, BC or Stratford, ON annually.

Over the five years prior to COVID, Charlottetown averaged approximately 347,000 paid overnight stays, while in 2021 there was approximately 218,000 paid overnight stays (Source: Tourism PEI, Integrated Tourism Services Database, 2022). Since 2020, due to COVID, annual visitors dropped to under 500,000, with the lack of cruise ships over the last two years being a major reason. It is anticipated that visitor numbers will rise significantly in 2022 due to easing COVID restrictions and travel returning to semi-normal.

The Canadian Tourism Commission has divided Canadian tourists into seven different Explorer Quotient (EQ) profiles that to help highlight different travel values, behaviours, and activities:

- Gentle Explorers: travelers with a reluctance to venture far beyond home and who are looking for comfortable environments
- Rejuvenators: family-oriented people who travel to escape stress, get pampered, and indulge themselves
- No-Hassle Travellers: cautious, dutiful, and reserved people who seek secure group travel
- Personal History Explorers: travellers with a desire to connect with their own cultural roots and travel in comfort, style, and security
- Authentic Experiences: people looking for authentic, tangible engagement with destinations to understand the places they visit
- Cultural Explorers: people who desire opportunities to embrace, discover and immerse themselves in culture, people and settings
- Free Spirits: highly social, open minded, experimental, and adventurous travellers who indulge in high-end experiences

On the following page each EQ profile is presented with a list of top activities that Charlottetown and PEI have to offer the different profiles. Items that don't apply to Charlottetown (e.g. glacier/mountain experiences) or are less place-specific (e.g. sunbathing) have been removed. Also, similar items have been grouped (wildlife viewing, visiting parks for wildlife viewing). It is important to note that some categories don't fit perfectly with the amenities Charlottetown has, like aquariums/zoos and amusement/theme parks; however, these have still been included in the list with the most relevant local examples.

What Does This Mean for the Official Plan?

The waterfront, natural areas, museums and local restaurants are important across the EQ profiles. The Official Plan contains policies that seek to reinforce the character of these places as well as provide direction to expand the tourist season and tourist offerings in support of this important local industry.

1.5M

estimated annual visitors to the Greater Charlottetown Area (pre-COVID)

	FREE SPIRIT	AUTHENTIC EXPERIENCERS	CULTURAL EXPLORERS	PERSONAL HISTORY EXPLORERS	NO HASSLE TRAVELLERS	REJUVENATORS	GENTLE EXPLORERS
Viewing marine life (seal watching, lobster trap haul tours, harbour cruise)	1	1	1	1	1	1	1
Viewing wildlife - land based animals and bird watching (wildlife management areas, beaches, Prince Edward Island National Park, provincial parks)	2	2	5	2	4	2	3
Dining at restaurants offering local ingredients (Kent Street, waterfront dining options)	3	7	3	6	3		2
Seeing beautiful coastline, beaches (red sandstone cliffs, Cavendish Cliffs)		4		3	2	4	4
Visiting interpretive centres and museums (Musée D'art, Beaconsfield Historic House, Armoury, Car Life Museum, Greenwich Interpretive Centre)	7	5	4	5	7	5	
Visiting aquariums/zoos (nearby farms, The Butterfly House)	4				6	3	5
Visiting well-known historic sites and buildings (walking tours, St. Dunstan's Basilica, Government House, and Province House, lighthouses)	6	6			5		
Attending Farmers' Markets (Downtown Charlottetown Farmers' Market, Charlottetown Farmers' Market)			2	7			
Visiting small towns and villages (Cavendish, Green Gables Heritage Place, nearby towns and villages)		3	7				
Taking a day cruise				4			7
Participating food-related tours (Taste the Town, winery, brewery and distillery tours, farm tours)			8				6
Visiting amusement/theme parks (race track and casino, Haunted House, Off the Wallz, mini-golf, go-karts)	5						
Viewing performances (Charlottetown Busker Festival, Street Feast, Confederation Centre of the Arts, The Guild, The Mack, Trailside Music Hall)			6				

Tourism: Heritage

One of Charlottetown's primary draws is its historic and heritage resources (Figure 18). Most historic properties concentrated in the 500-lot area. Some popular sites include the St. Dunstan's Basilica, Beaconsfield Historic House, Government House, and Province House. Though most of the historic sites are buildings, listed buildings also include parks, lighthouses, squares and more. This built heritage is what the city is known for and gives the community its character.

What Does This Mean for the Official Plan?

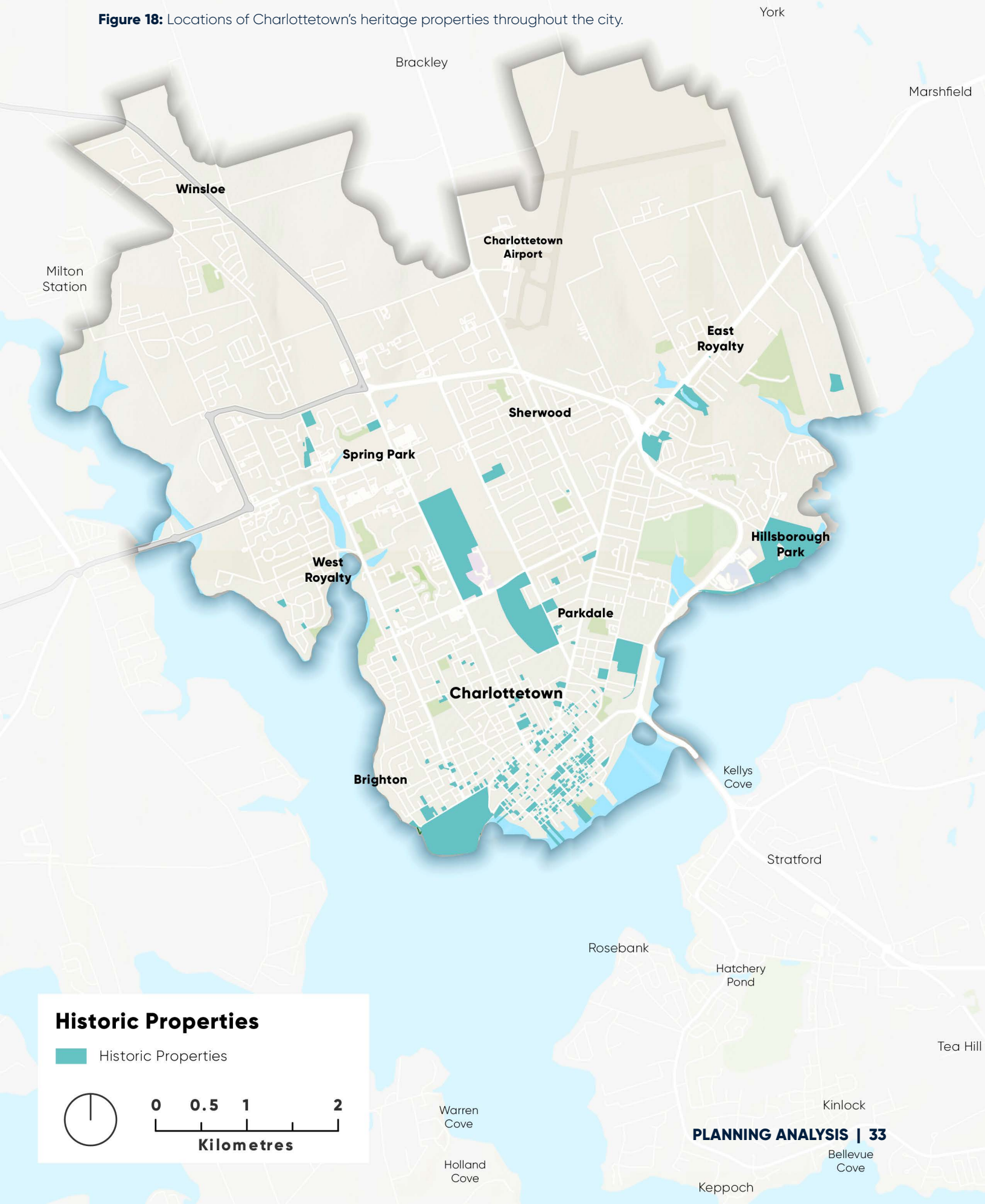
One of the biggest challenges for the Official Plan was accommodating growth while conserving the historic character of the city. This is achieved through development of a design review process and contextual development policies.



Charlottetown has
>400
heritage properties



Figure 18: Locations of Charlottetown's heritage properties throughout the city.



Historic Properties

Historic Properties



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Kilometres

Tourism: Landmarks

A component of Charlottetown's tourism draw is the numerous sporting competitions that the City of Charlottetown and area host each year. The City frequently hosts an Eastern Canadian Softball Championship for a given age group. In 2022, the Canadian Outdoor Archery Championships, Stihl Timbersports Canadian Championships, and U18 and U20 National Flag Football Championships are being held to name a few.

Sports events and conferences are important tourism draws, particularly outside of the summer tourism season. Charlottetown has created a wayfinding system that allows tourists to walk the downtown and visit the different landmarks. In addition to heritage sites, mapping these facilities alongside other the major landmarks, hotels, and public art installations can help paint a picture of Charlottetown's tourism resources spatially.

What Does This Mean for the Official Plan?

Charlottetown's tourism industry faces accessibility and affordability challenges. It also competes within the Atlantic area in attracting tourists during the off-season. The Official Plan seeks opportunities to enhance attraction through events, public infrastructure, and placemaking.



Figure 19: Charlottetown's cultural, heritage, and landmark attractions

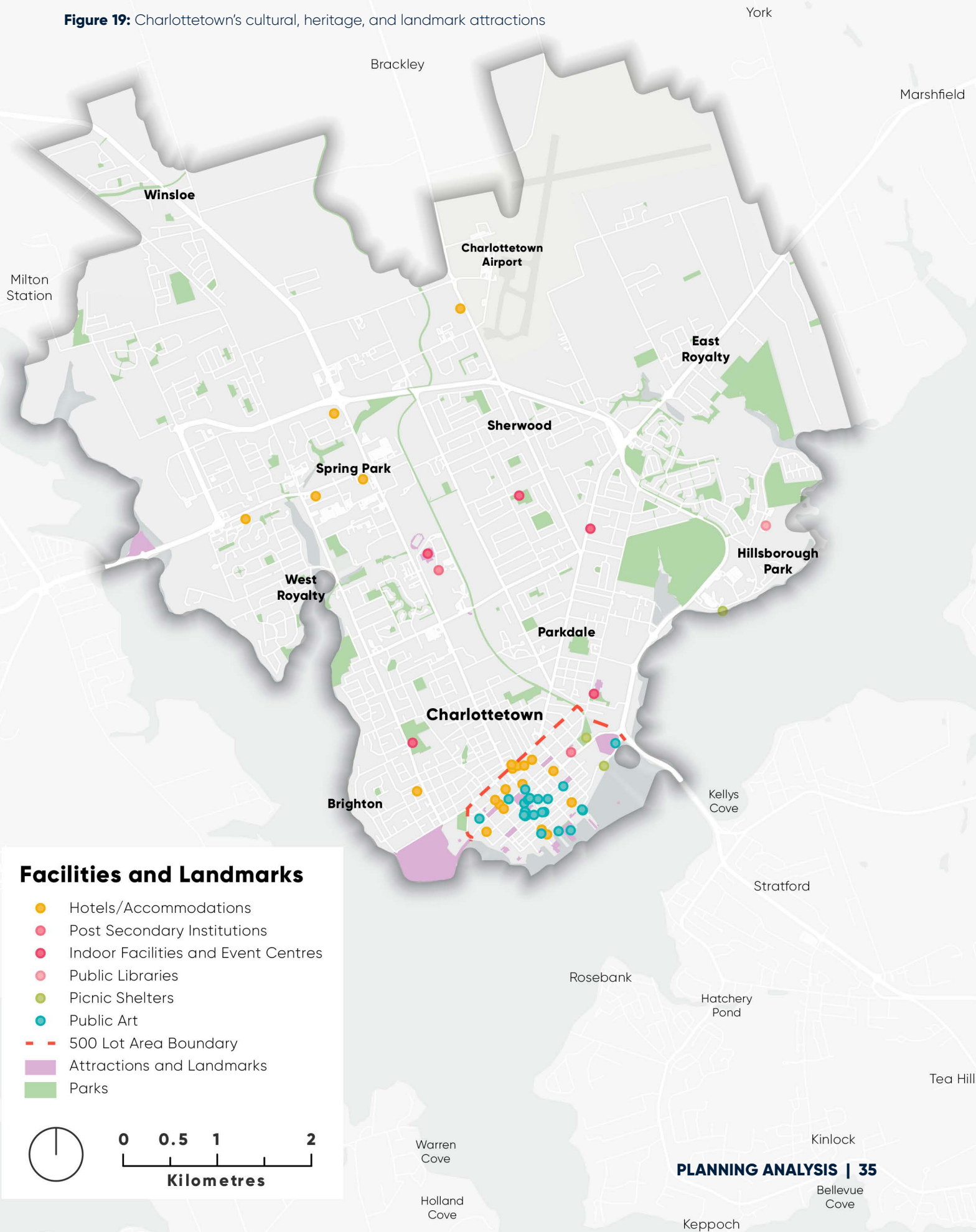
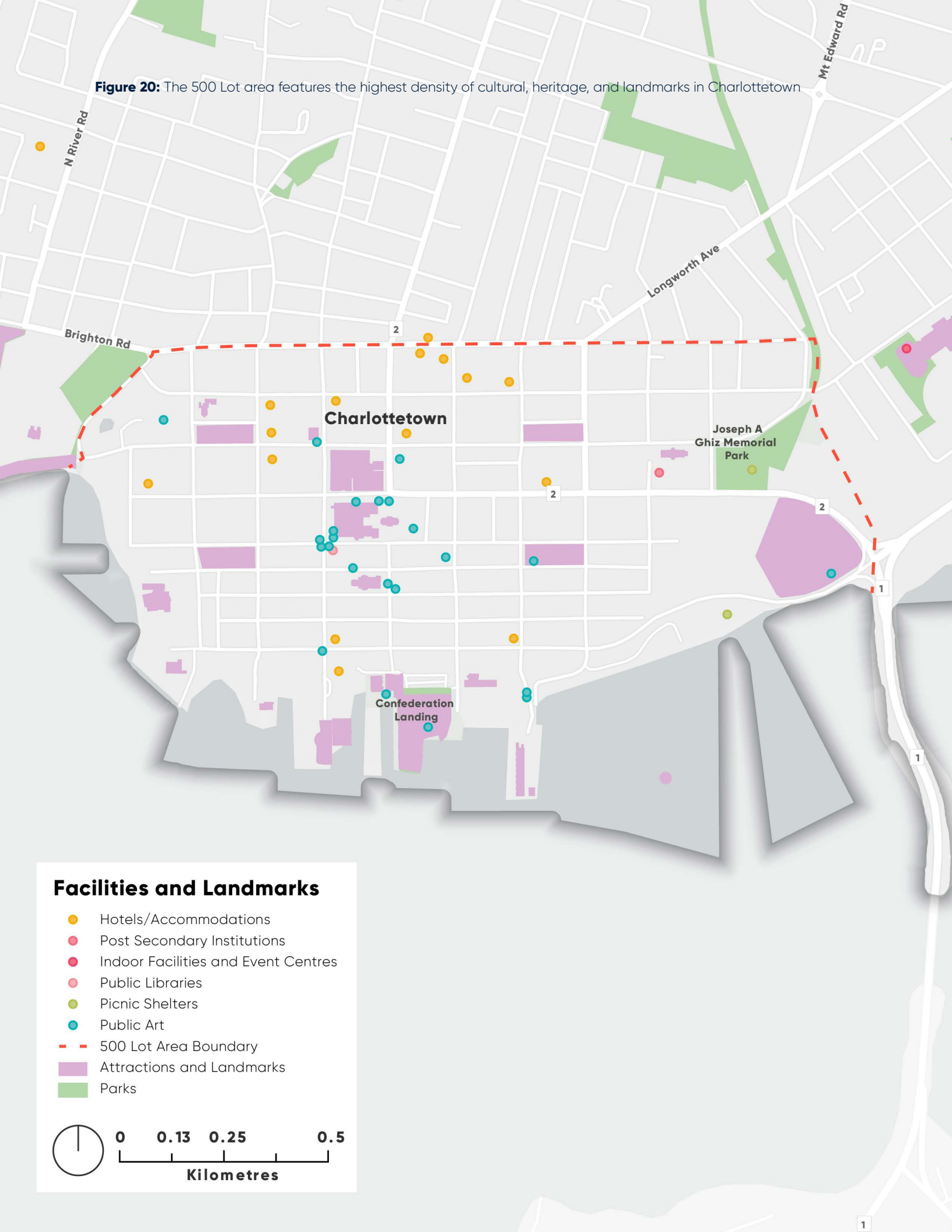
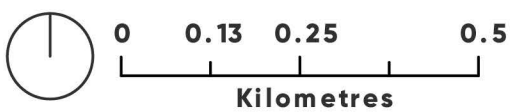


Figure 20: The 500 Lot area features the highest density of cultural, heritage, and landmarks in Charlottetown



Facilities and Landmarks

- Hotels/Accommodations
- Post Secondary Institutions
- Indoor Facilities and Event Centres
- Public Libraries
- Picnic Shelters
- Public Art
- - 500 Lot Area Boundary
- Attractions and Landmarks
- Parks



Recreation

Charlottetown offers an array of recreation opportunities for its residents and visitors. The City's Parks and Recreation Department offer year round activities ranging from all different sports to music, pottery, and social activities for all ages.

The City also partners with other organizations to provide recreation opportunities throughout the city such as the school district, university, and sports and recreation clubs, this allows for the more efficient use of land and facilities. The Bell Alliant Centre at the University is a good example of partner facilities that serve both residents and attract visitors.

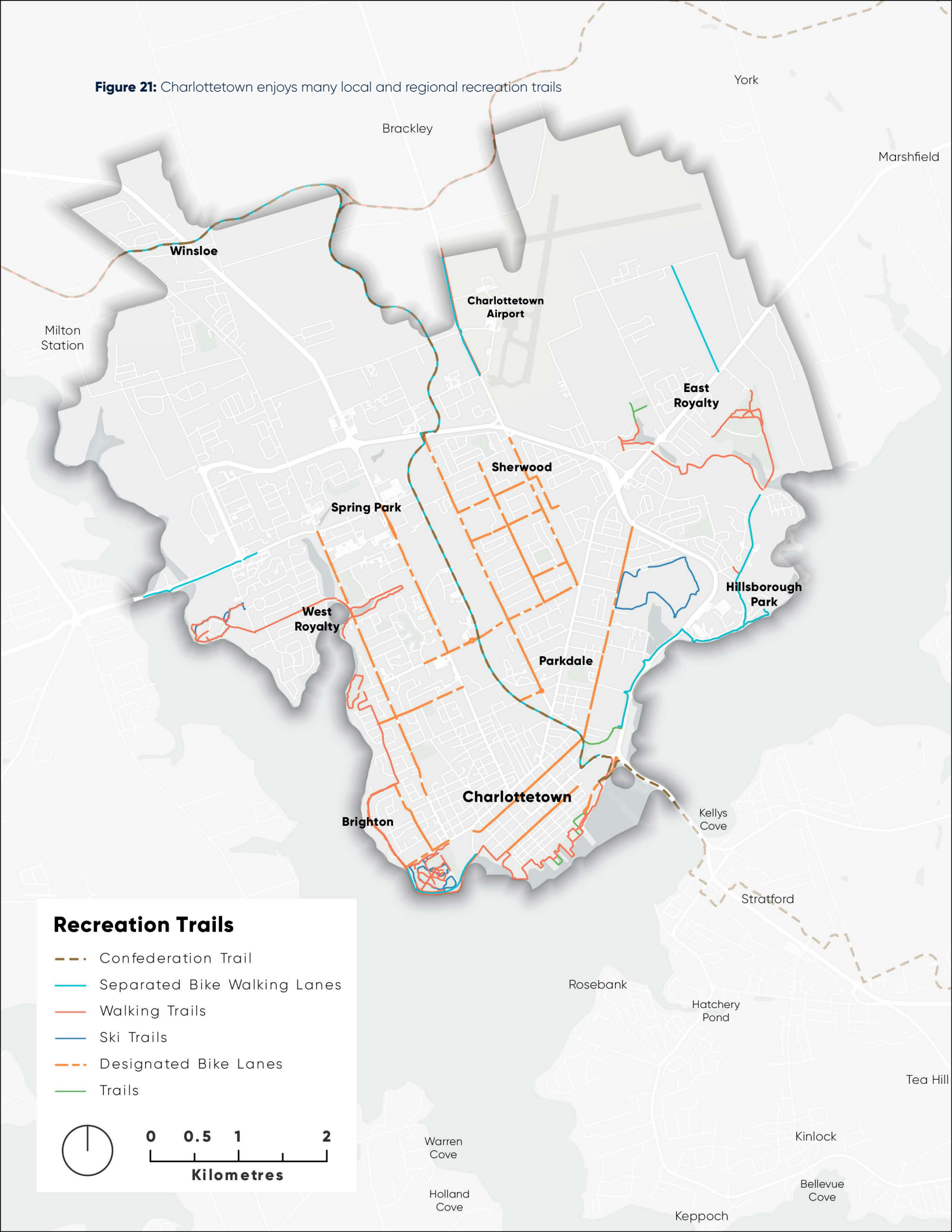
Outdoor linear recreation opportunities are illustrated in Figure 8. Aside from Confederation Trail connecting Charlottetown to the remainder of PEI, walking and cycling opportunities are largely limited to the waterfront area. Some trail and sidewalk infrastructure exists throughout the city. Strava App trip data shows that these trails are quite popular with residents and visitors alike who use them to get out and recreate.

What Does This Mean for the Official Plan?

For recreation, the biggest challenge facing the City is the continued monitoring and adjusting of recreational programming to service a growing and increasingly diverse population. The Official Plan identifies opportunities to enhance the recreational options of residents and tourists, including improvements to the local pathway and greenway connections throughout the city, improved access to facilities for all residents through more mobility options, and creating for flexible space that can accommodate a range of sports.



Figure 21: Charlottetown enjoys many local and regional recreation trails



Recreation Trails

- Confederation Trail
- Separated Bike Walking Lanes
- Walking Trails
- Ski Trails
- Designated Bike Lanes
- Trails



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Kilometres

Transportation: Road Network

The City of Charlottetown uses a functional street classification system (Figure 22) that establishes a hierarchy of roads that provide varying levels of access and mobility. Charlottetown's road classification system is broken down into four categories, and are listed in decreasing order of level of access control and proportion of local traffic:

1. Major Arterial Streets
2. Arterial Streets
3. Collector Streets
4. Local Streets

Charlottetown's road network has its foundation on a Major Arterial Street and Arterial Street system that provides access throughout the city and is focused on moving higher volumes of traffic. These streets, including Highway 1, St. Peters Road/Highway 2, and University Avenue, facilitate higher traffic volumes and speeds and they tend to be wider (with more traffic lanes) in their design. Major Arterial Street and Arterial Street are supported by lower-level streets, including Collector and Local Streets, which are meant to provide access to properties and facilitate moderate levels of traffic movement.

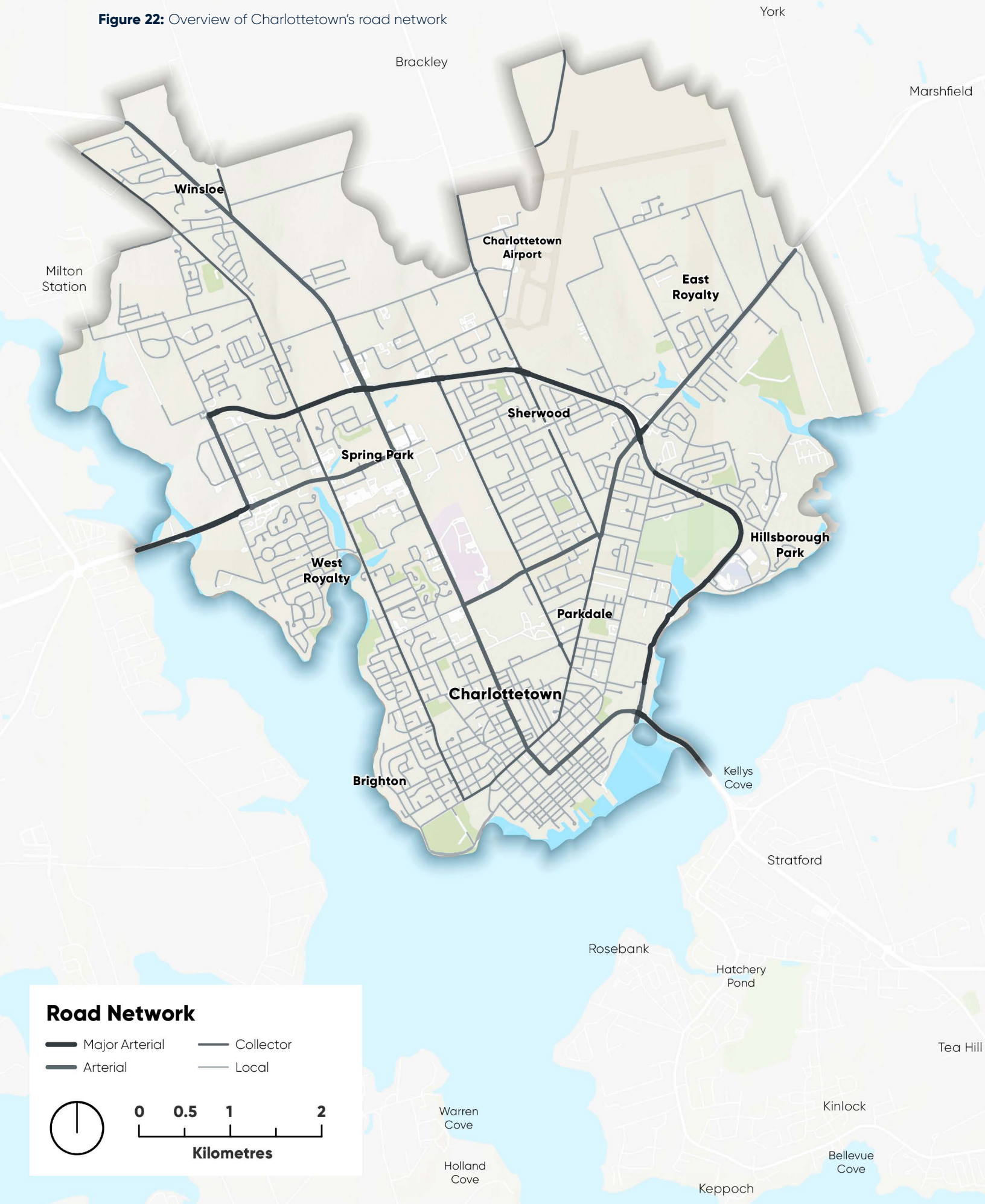
Streets that facilitate higher traffic volumes and speeds fragment areas of the city from one another because of their design—wide streets with high traffic volumes and speeds and few pedestrian crossings discourage pedestrian movement. Development along these streets also tends not to include residential dwellings, creating spatial gaps in the city's overall residential fabric.

What Does This Mean for the Official Plan?

The new Official Plan supports an efficient transportation system through the City's street network and facilitates and enables mobility across Charlottetown by promoting appropriate development densities, patterns, and designs. By integrating land use decisions with the transportation network, the Official Plan helps to support multi-modal transportation including walking and cycling as viable transportation modes.

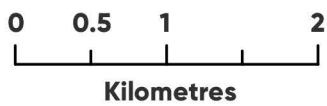
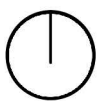


Figure 22: Overview of Charlottetown's road network



Road Network

- Major Arterial
- Arterial
- Collector
- Local



Transportation: Transit Network

Originating as Charlottetown Transit in 2005, T3 Transit (“Take Transit Today”) is a public transportation service offered by the City of Charlottetown, with funding from the Federal Government, that provides services throughout the city and to surrounding communities and municipalities. With eight routes within Charlottetown, T3 Transit provides public transit service to a large portion of the developed areas of Charlottetown (Figure 23). Although route ridership details are not available, T3 Transit suggests that there are over 450,000 annual riders. T3 Transit’s routes have designated bus stops, but the service also allows riders to ‘flag’ for the bus at any stop sign along a bus’ route.

While much of the City’s developed areas fall within a portion of T3 Transit’s service area (within approximately a 10-minute walk of a route), some areas of the city are better serviced than others. T3’s service within Charlottetown is broken down into three categories:

- Weekday, evenings, and weekend service
- Weekdays and some evenings and weekend service
- Weekday service only

Generally, areas along St. Peters Road and University Avenue and in the downtown are better served by transit than the remainder of the city, with weekday and weekend services provided in these areas. These routes serve some of the higher-density areas of Charlottetown (such as the downtown) and some of the key institutions (e.g., UPEI) and commercial areas (e.g. Charlottetown Mall) of the city; however, the service areas of these routes also coincide with much of the under- and undeveloped land between University Avenue and Mt Edward Road.

What Does This Mean for the Official Plan?

The new Official Plan strengthens the integration of land use and transportation decision-making. Promoting denser forms of development along key routes and at key nodes will help to increase transit ridership, creating a more overall efficient system.

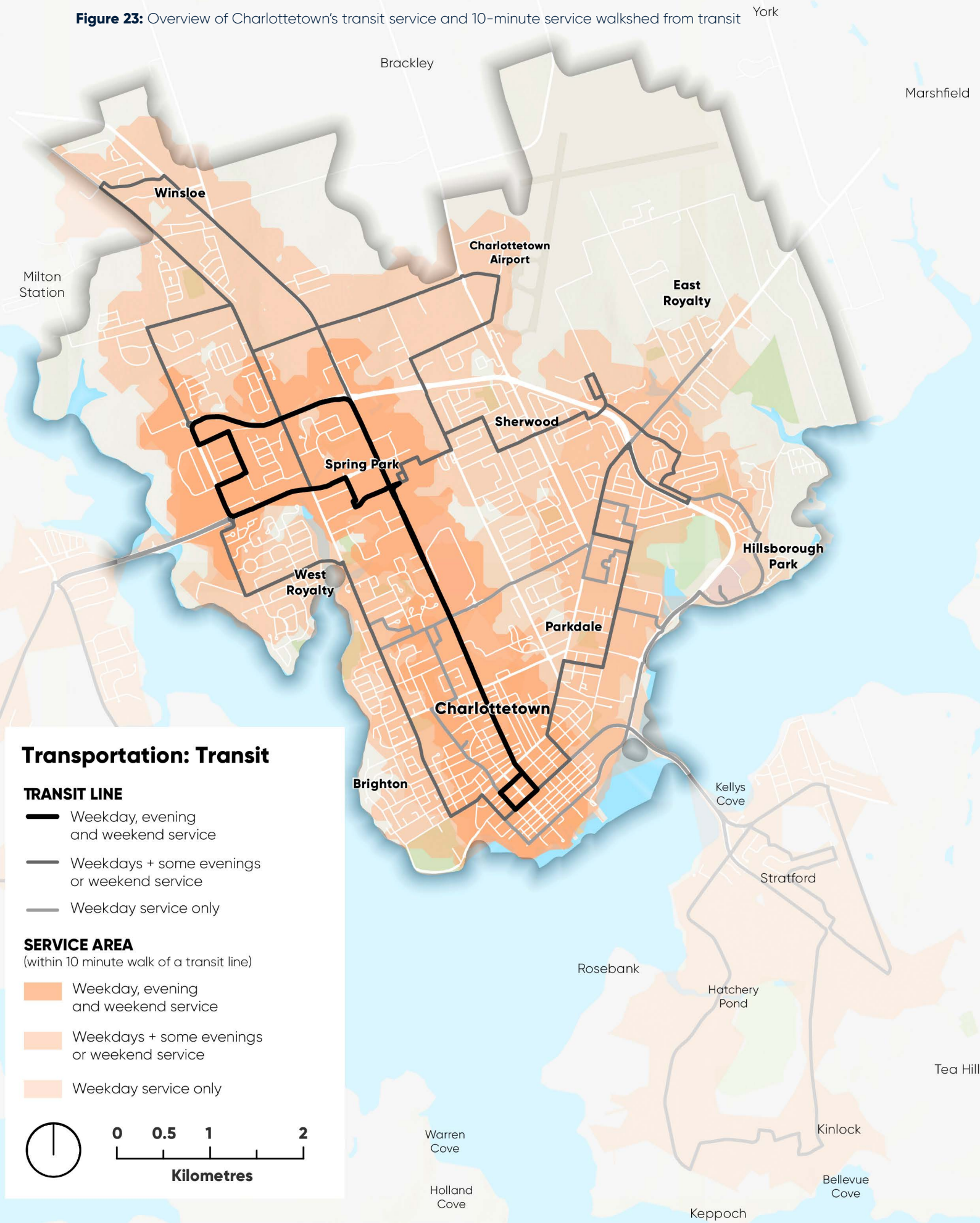
T3 doesn’t just serve Charlottetown.

Buses also serve:

- Stratford
- Cornwall
- Summerside
- Outlying Rural Areas



Figure 23: Overview of Charlottetown's transit service and 10-minute service walkshed from transit



Transportation: Active Transportation

Charlottetown's walking and cycling trails travel throughout the city and help to connect residents and visitors to various areas, destinations, and neighbourhoods in Charlottetown. Bicycle ridership counts collected from Strava (Figure 24), a web-based app where users can track physical activities using GPS, suggests that there are several key cycling routes within Charlottetown. While the Strava data does not differentiate between utilitarian or recreational rides; who, demographically, is tracking their activity; or the origin or destination of riders, it helps to highlight those streets which accommodate higher levels of cycling activity than others.

The Confederation Trail, North River Road, and Queen Elizabeth Drive/Victoria Park Roadway accommodate some of the highest number of cyclists in the city, and ridership counts generally decrease as the distance from the downtown increases. Nevertheless, streets outside of the downtown with higher ridership counts largely correlate to streets with bicycle facilities on them, indicating that bicycle facilities, at least in the choice of cyclists, are preferred. The data would suggest there are strong north-south routes through the city; however, east-west corridors are more limited.



Charlottetown has
>40km of trails

What Does This Mean for the Official Plan?

With an existing walking and cycling network, the new Official Plan promotes greater uptake of active transportation. Relative to other forms of transportation, active transportation, including cycling, is a low-cost alternative that promotes physical exercise and results in fewer carbon emissions than traditional transportation modes. Active transportation is promoted by enabling higher-density forms of development along existing (or future) active transportation routes and by expanding the type and extent of active transportation facilities throughout the city.



Figure 24: Strava data provides insight into the most popular active transportation corridors throughout the city



Servicing: Water & Sewer

The provision of municipal water and sanitary sewer are significant expenditures for any municipal government. The implementation, maintenance, and replacement of this infrastructure are costly, meaning it must be used efficiently and effectively where it does exist.

The City of Charlottetown provides comprehensive sanitary sewer (Figure 25) and water systems (Figure 26) which serves a large portion of the city's land area. The City's drinking water supply system is divided into two interconnected systems—one system that generally serves the northern half of the city and the other that generally serves the southern half. Both the northern and southern systems derive their water from underground wellfields which is pumped to the City's reservoir system and to water customers.

Conversely, waste water and sewage are collected from homes and businesses and transported to the City's waste water treatment plant on Riverside Drive where it is treated and discharged into the Hillsborough River and the Charlottetown Harbour. The sanitary sewer system uses gravity mains and pumping stations to move waste water from properties to the treatment facility, but there are existing capacity issues in the system where upgrades may be necessary.

What Does This Mean for the Official Plan?

The new Official Plan focuses on how the City can more efficiently and effectively use its existing infrastructure, while also creating a policy framework that ensures where new infrastructure is developed or needed, it is done so responsibly.

189L/day
water usage of the
average islander



Figure 25: Charlottetown's sewer servicing infrastructure



Servicing: Sewer

- Storm sewer line
- Sanitary sewer line
- Sanitary Catchment Area

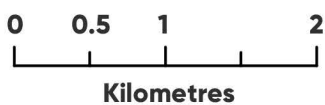
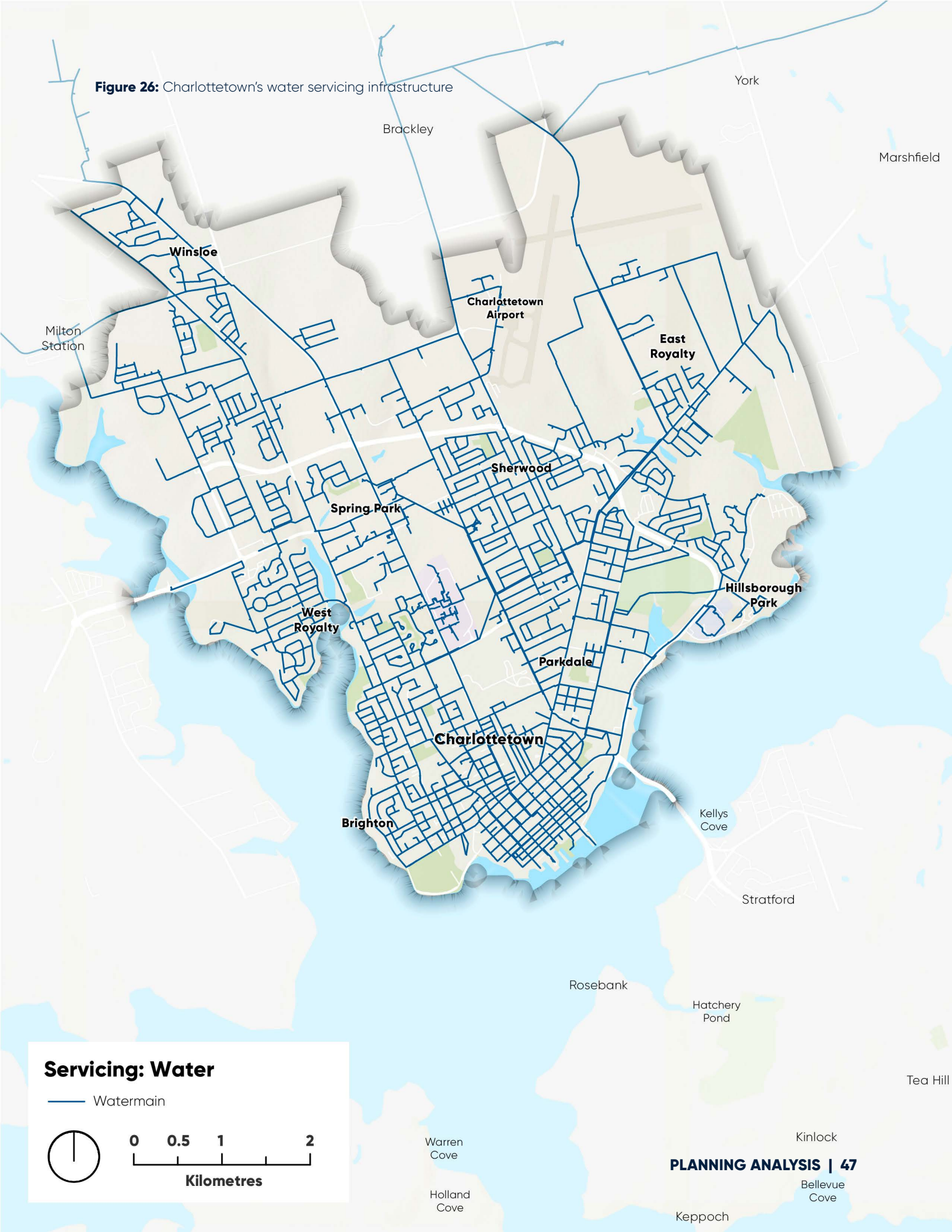
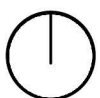


Figure 26: Charlottetown's water servicing infrastructure



Servicing: Water

— Watermain



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Kilometres

Coastal Flooding & Climate Change

Charlottetown has approximately 31 km of shoreline. While downtown is characterized by its developed waterfront and continuous seawall, most shoreline within City limits remains in a natural state and contributes to coastal habitat and natural processes. Charlottetown's waterfront is a dynamic environment. During peak time periods (approximately 6-8 times a year) the tidal range between the lowest and highest astronomical tides is over 3m in height. The vertical tidal range is easily observed at the seawall, but in upper estuaries the tide range widens or expands saltmarshes. Where development restricts saltmarshes from expanding, the tide is pushed further up the estuary and into freshwater streams. During heavy rainfall, the combination of high tide and stormwater runoff can cause localized flooding.

Coastal flooding also occurs due to storm surge events. These occur when atmospheric pressure drops and strong winds push water towards shore. Storm surges typically occur during storms such as hurricanes and Nor'easters. Storm surges cause overland flooding of low-lying areas and can also flood the City's stormwater outflow infrastructure, preventing stormwater from properly draining during extreme weather events. The highest water level on record for Charlottetown is 2.2 m (CGVD13) when a strong storm surge coincided with the high tide on January 21, 2000. Higher storm surge events have occurred since this time but fortunately did not coincide with high tide.

The Province has prepared a Coastal Hazard Map for Charlottetown that provides detailed information on current and projected flood water elevations and delineates the coastal floodplain. The coastal floodplain is the area of land that could be inundated by a 1-in-100 year storm event coinciding with a high tide. For Charlottetown the elevation of the coastal floodplain is 2.24m. As sea level rises the floodplain boundary will move further inland. By 2100 the projected floodplain water elevation is 3.05m (Figure 27), with an extreme scenario of 4.17m provided to account for uncertainty in climate change projections. The future floodplain covers large sections of Charlottetown's waterfront, including its downtown and several low-lying areas along the North River and Hillsborough River that are susceptible to coastal flooding.

Coastal environments, including salt marshes and sandy beaches currently provide natural adaptive capacity to absorb energy from storm waves. These environments are vulnerable to coastal squeeze where development restricts their ability to migrate landward as sea level rises. As a result, sea level rise is likely to result in permanent inundation of these vulnerable coastal environments and will cause more frequent flooding of inland properties in Charlottetown during storm events.

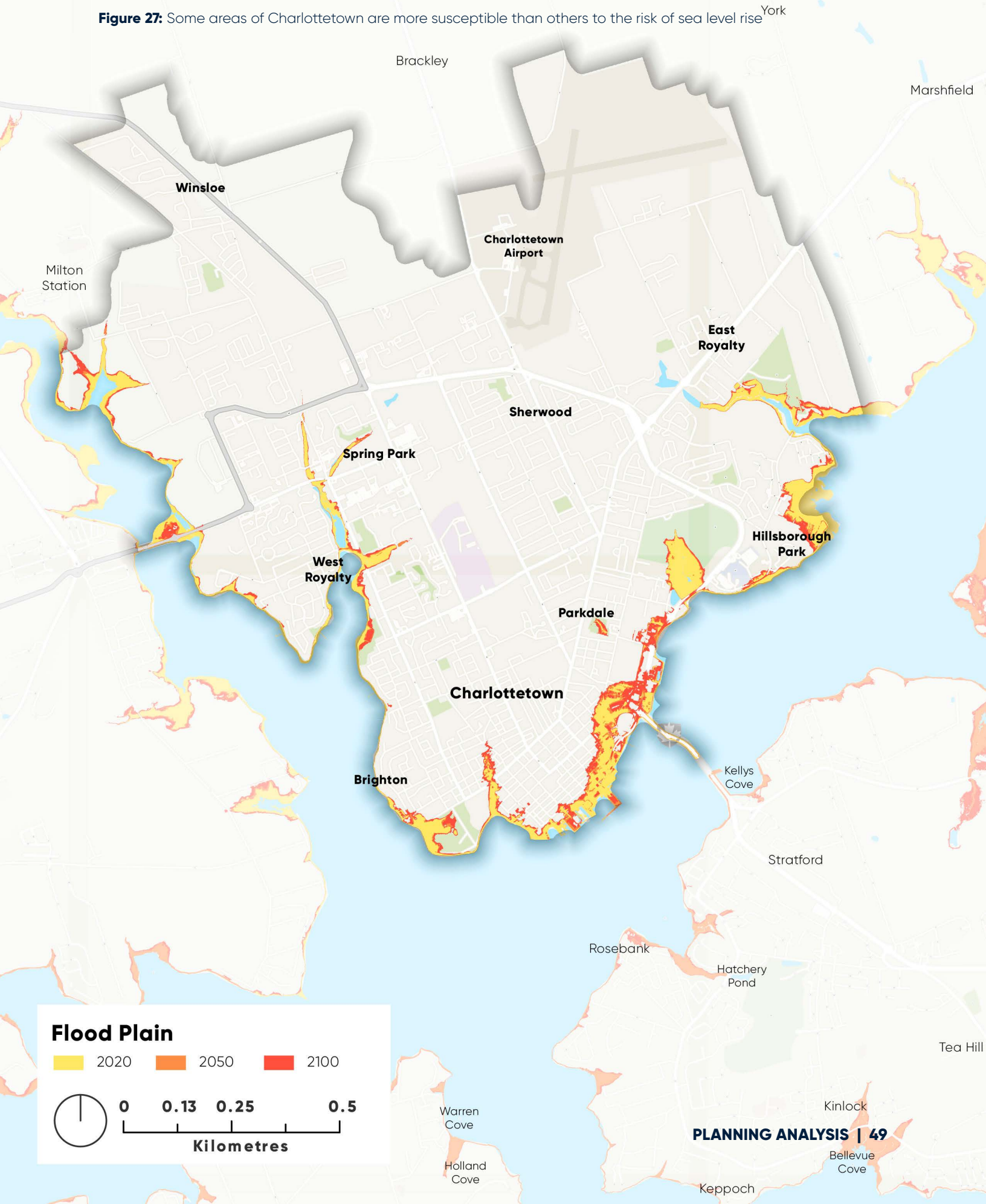
What Does This Mean for the Official Plan?

The City of Charlottetown will be impacted by sea level rise and storm surge coastal flooding. Since 2005 when the last Official Plan was adopted, new technologies and information regarding sea level rise and climate change have emerged and there are opportunities to better prepare the city and community to adapt to the changing circumstances that climate change brings. Coastal hazard disclosure and incorporation into the Official Plan is an important first step to avoid increasing vulnerability and future damages to properties.

Land 3.05 m in elevation or below are **at risk from 1-in-100 year floods** by 2100.

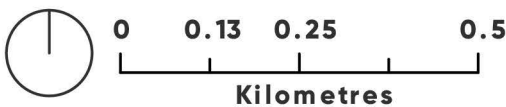
Properties located within the coastal floodplain have at least **a 22.2% chance of flooding** over a 25-year mortgage.

Figure 27: Some areas of Charlottetown are more susceptible than others to the risk of sea level rise



Flood Plain

2020 2050 2100



CONCLUSION

The Planning Analysis presents a wide range of important topics that have influenced how the City's Official Plan was prepared. Many of these topics overlap, complement, or contrast one another, and it was important for the Official Plan to look holistically at all of the data available to Charlottetown. By carefully considering and seeking to understand what the trends and information presented in this Planning Analysis told us about how Charlottetown is growing, we have worked to ensure that the Official Plan responds appropriately and in a measured fashion to addressing these topics.





CHARLOTTETOWN

