

Glendale District Plan

A Complete Community

Appendix 1
Report PDS 27-2020
September 9, 2020



Table of Contents

1.0 Executive Summary	5	5.0 Glendale District Plan – Key Directions	24	6.0 Summary of Transportation Review and Recommendations	50
2.0 What is a District Plan?	7				
2.1 The Glendale Process	7	5.1 Protect and enhance the landscape/ natural features	25	6.1 Street Network	50
2.2 Authority	8	5.2 A convergence for the area's trails and active transportation facilities	28	6.2 Diverging Diamond Interchange	51
2.3 Vision	8	5.3 Provide an accessible and connected transit system to serve the Glendale area, Niagara and beyond	31	6.3 Character Road	54
2.4 Engagement and Consultation	8	5.4 Create a strategy to build on the existing assets within Glendale and linking Glendale with the greater Niagara-on-the-Lake and Niagara	34	6.4 Transit Hub/Terminal requirements	56
3.0 The Study Area	10	5.5 Create the main street as a transition from the Outlet Collection of Niagara to the adjacent urban neighbourhood	37	6.5 Future Transportation Connections	58
3.1 Demographic Characteristics	11	5.6 Provide a diverse range of housing ensuring choice and affordability	41	6.6 Active Transportation Network	58
3.2 Existing Glendale Secondary Plan (2010)	11	5.7 Create a public/civic space as a focus for Glendale	44		
4.0 Glendale Land Use Concept and Demonstration Plan	12	5.8 Use sustainability measures related to resiliency and climate change	47	7.0 Implementation Plan	60
4.1 Community Structure Direction	12	5.9 Coordination of infrastructure review, capacity and upgrades	49		
4.2 Transit and Community Hub	14				
4.3 Glendale Crossing	16				
4.4 Hospitality District	18				
4.5 Employment Area	18				
4.6 East Glendale	19				
4.7 High Density Residential	19				
4.8 Outlet Collection of Niagara	19				
4.9 Special Study Areas	20				
4.10 Preliminary population and employment forecast	22				

1.0 Executive Summary

The Glendale District Plan is a pro-active development strategy which sets out a high-level framework for the land use planning, design and development of a complete community. Glendale will benefit from a District Plan to direct future growth and guide the transformation of the area into a vibrant, compact, complete mixed-use urban environment.

The Glendale study area is approximately 700 ha generally bound by Queenston Road to the north, the Niagara Escarpment to the south, Concession 7 Road to the east, and the Welland Canal to the west. The QEW bisects the study area and includes the Glendale Avenue interchange.

The creation of the District Plan was a collaborative process with participation from the local municipalities, key stakeholders, the Technical Advisory Committee, a Community Focus Group and the general public. Input from these sources and information collected about the Glendale area assisted in establishing the vision and key directions to transform Glendale.

The District Plan will be implemented through an amendment to the Niagara Region Official Plan, a review and update of the Glendale Secondary Plan, and on ongoing, consistent collaboration amongst the key partners and stakeholders.



The Vision for Glendale District is:

Glendale District will be a vibrant and complete community for people of all ages, lifestyles, and abilities - a place to live, work, play, learn and grow.

Its urban districts, with a mix of uses, will protect, integrate and celebrate the natural and rural surroundings reflecting the distinct character of the area.

Glendale District will be framed by connection to green space along the Welland Canal, the creek valleys, the Niagara Escarpment and agricultural lands.

Glendale District will put mobility first with a robust transit system, cycling trails and pedestrian routes seamlessly connecting areas north and south of the QEW highway.

Key Directions:

- 1 Protect and enhance the landscape/ natural features**
- 2 A convergence for the area's trails and active transportation facilities**
- 3 Provide an accessible and connected transit system to serve the Glendale area, Niagara and beyond**
- 4 Create a strategy to build on the existing assets within Glendale and linking Glendale with the greater Niagara-on-the-Lake and the Niagara**
- 5 Create the main street as a transition from the Outlet Collection of Niagara to the adjacent urban neighbourhood**
- 6 Provide a diverse range of housing ensuring choice and affordability**
- 7 Create a public/civic space as a focus for Glendale**
- 8 Use sustainability measures related to resiliency and climate change**
- 9 Coordination of infrastructure review, capacity and upgrades**

Glendale Study Area



2.0 What is a District Plan?

A District Plan is a pro-active development strategy for a specific area of Niagara, intended to support Niagara Region's focus on growth and economic prosperity. It sets out a high-level framework for the land use planning, design and development of complete communities in areas that currently are, or have the potential to become, iconic in nature.

Policies in A Place to Grow - Growth Plan for the Greater Golden Horseshoe require the efficient use of land and infrastructure by promoting increased intensification with a focus on strategic growth areas. District Plans are foundational instruments for planning for these growth areas and are expected to support the achievement of complete communities, a thriving economy, and a clean and healthy environment.

District Plans are developed in collaboration with a variety of stakeholders, including the local municipalities in which they are situated, other governmental authorities, affected landowners, local businesses, organizations, community groups and residents. They will benefit the people who will work, live, learn in, and visit the district. As the Plan is implemented over time, it will attract new investment and build upon the district's existing assets, making it more prosperous and enjoyable for all.

2.1 The Glendale Process

With its cross jurisdictional boundaries, regional anchors and vacant/underutilized urban lands, Glendale will benefit from a District Plan to direct future growth and guide the transformation of the area into a vibrant, compact, complete mixed-use urban environment.

Recognizing this potential, the Glendale District Plan was initiated in May of 2018 by Niagara Region in cooperation with the Town of Niagara-on-the-Lake and the City of St. Catharines.

The District Plan followed a two-phase approach:

- **Phase 1** took place between May and September 2018 and involved a comprehensive visioning exercise intended to develop an exciting urban vision for the area. Through this phase of the Study, a high-level conceptual demonstration plan was prepared based on the results of the visioning exercise.
- **Phase 2** commenced in October 2018 and concluded with the preparation of the District Plan. The Phase 2 work informs the final land use concept/demonstration plan and includes an overview of the transportation network and urban design/public realm guidance.

Process Timeline



2.2 Authority

This District Plan provides a vision and key directions for the growth and transformation of Glendale. It is endorsed by Niagara Regional Council and intended to be used to guide development proposals and evaluate future planning applications/projects in the area.

2.4 Engagement and Consultation

The Glendale District Plan study was a collaborative process involving input from a Technical Advisory Committee, a Community Focus Group and the general public.

Phase 1 Consultation Summary:

The visioning exercise included a wide array of consultation tools, including two workshops held in June (2 days) and August (1 day) 2018. A representative group of residents, agencies, interest groups, business and government leaders participated in the visioning exercise, in order to ensure that the District Plan reflects the collective input for the future condition of Glendale as it grows and expands.

2.3 Vision

- Glendale District will be a vibrant and complete community for people of all ages, lifestyles, and abilities - a place to live, work, play, learn and grow
- Its urban districts, with a mix of uses, will protect, integrate and celebrate the natural and rural surroundings reflecting the distinct character of the area
- Glendale District will be framed by connection to green space along the Welland Canal, the creek valleys, the Niagara Escarpment and agricultural lands
- Glendale District will put mobility first with a robust transit system, cycling trails and pedestrian routes seamlessly connecting areas north and south of the QEW highway



Technical Advisory Committee:

To assist in understanding the impact of this project, a Technical Advisory Committee was struck at the start of the project in May 2018. Members of the Technical Advisory Committee include representatives from the Town of Niagara-on-the-Lake, the City of St. Catharines, various departments at Niagara Region, and other governmental agencies and utilities. The Niagara Escarpment Commission, Niagara Peninsula Conservation Authority, Niagara College, Ministry of Transportation, Ontario Travel, Niagara EMS, St. Lawrence Seaway Authority, and others were involved in the process throughout both Phase 1 and 2 to provide specialized input into the development of the District Plan.

Community Focus Group:

For Phase 2, a Community Focus Group was established to provide an opportunity for additional input on the draft District Plan. Approximately 18 members of the public agreed to participate on the Community Focus Group, representing a wide range of community interests. The Community Focus Group met on three occasions to provide information on the project and collect insights from the perspective of local residents, landowners and business operators. This input assisted the study team in understanding the local views of the District, as well as the opportunities and challenges faced by the people that live, work and own property in the study area.

Phase 2 Consultation Summary:

Phase 2 also included public engagement at three Public Information Centres to collect input at strategic points throughout the study process.

- **Public Information Centre 1** (January 2019) kicked off the phase 2 process and presented preliminary background information on the study area
- **Public Information Centre 2** (March 2019) presented two land use concept options for consideration
- **Public Information Centre 3** (November 2019) presented the draft Preferred Concept Plan, Demonstration Plan and the key directions for implementing the vision. This consultation effort included an online text-based survey and mapping-based crowdsourcing platform to collect input on the draft land use concept and demonstration plan.

Summary of Input:

The input collected on the preferred Land Use Concept, Demonstration Plan and Key Directions revealed a general excitement regarding the direction for future development proposed in the District Plan.

Opportunities identified related to improving the active transportation network, providing more neighbourhood related commercial uses and amenities, and increasing the amount of green open spaces and linkages.

The challenges cited included existing and increased traffic issues and congestion, concerns regarding the potential for taller building heights and the need for better/additional connection north to south Glendale across the QEW.

The survey responses revealed what the public considers important in Glendale. Providing more affordable and mixed-use housing ranked as the highest priority by those that provided input. Access to amenities like shops, schools and community uses was a close second.

Input collected throughout both Phases of the Glendale District Plan process has been considered in the creation of the final District Plan. Public input will also be carried forward to the update of the Secondary Plan.

3.0 The Study Area

The Glendale study area includes approximately 700 hectares that are generally bound by Queenston Road to the north, the Niagara Escarpment to the south, Concession 7 Road to the east, and the Welland Canal to the west. The QEW bisects the study area and includes the Glendale Avenue interchange.

The majority of Glendale is located within the Town of Niagara-on-the-Lake. The southwest corner falls within the City of St. Catharines.

Approximately 370 hectares of the Glendale District Plan study area is within the urban boundary. The remainder of the lands are outside of the urban boundary.

The Glendale District Plan area is subject to the following policy plans:

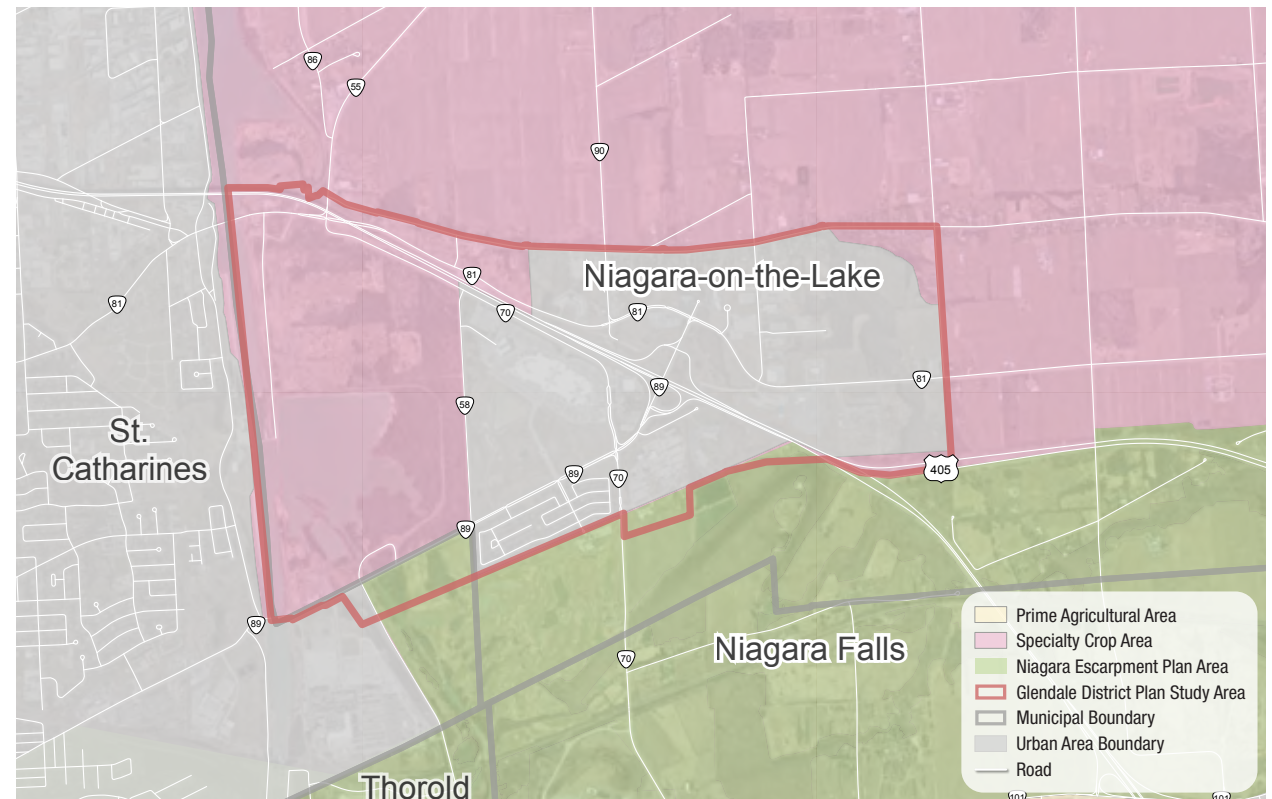
Urban Area:

- A Place to Grow – Growth Plan for the Greater Golden Horseshoe – Undelineated Built-Up Area (due to low existing population)
- Niagara Region Official Plan – Designated Greenfield Area

Agricultural Area:

- Niagara Escarpment Plan – Escarpment Protection Area (west), Escarpment Natural Area (east)
- Greenbelt Plan – Protected Countryside, Specialty Crop designation

Glendale Study Area



3.1 Demographic Characteristics

According to the 2016 Census, the population of Glendale was approximately 2,900, with just over half of the population residing in the Niagara-on-the-Green subdivision.

As of the fall of 2019, approximately 4100 full-time students and 240 part-time students were registered to attend courses at Niagara College's Niagara-on-the-Lake campus. An estimated 500 Niagara College students reside in both on-campus and off-campus housing within the study area.

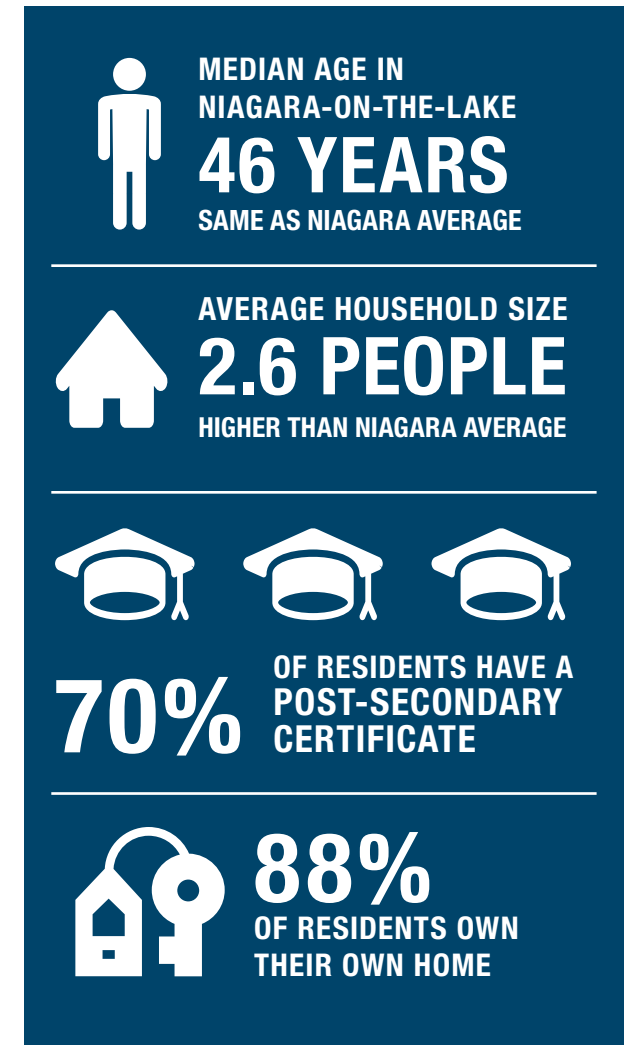
In addition to the residents and student population, approximately 10 million people visited Niagara in 2016, with a substantial portion of visitors either driving through Glendale or visiting the study area's attractions and amenities.

According to Niagara Region's 2019 employment survey, 88 businesses that employ 4,468 people are located within Glendale, with 71 per cent (i.e. 3,221) of the jobs reported as being full-time positions. The largest employers in the study area are the Outlet Collection at Niagara, Niagara College, White Oaks Resort, Henry Schein Canada, Niagara Emergency Management Services (EMS) and First Student Canada.

3.2 Existing Glendale Secondary Plan (2010)

A Secondary Plan is currently in place for the urban area of Glendale. The Glendale Secondary Plan was adopted in 2010; however, despite having this detailed policy direction, Glendale has not developed as anticipated.

The District Plan's vision and key directions will be a starting point for the update to the Secondary Plan. The update will also be informed by technical component studies including a review of transportation and infrastructure. The new Secondary Plan will implement the direction of the District Plan for Glendale to realize its potential and transition to a complete community.



4.0 Glendale Land Use Concept and Demonstration Plan

The Preferred Land Use Concept illustrates land use direction to implement the vision for a complete, vibrant Glendale area that reflects the collective input from the various consultations throughout the study process.

The Demonstration Plan is for illustrative purposes only. It shows how the study area can evolve into a complete community with a mix of uses and a population to support the commercial offerings and amenities

4.1 Community Structure Direction

A complete community relies on density and diversity through a variety of land uses and built form, an activated public realm, and walkable, connected streets. It must also establish a population that will support local services, facilities and commercial offerings.

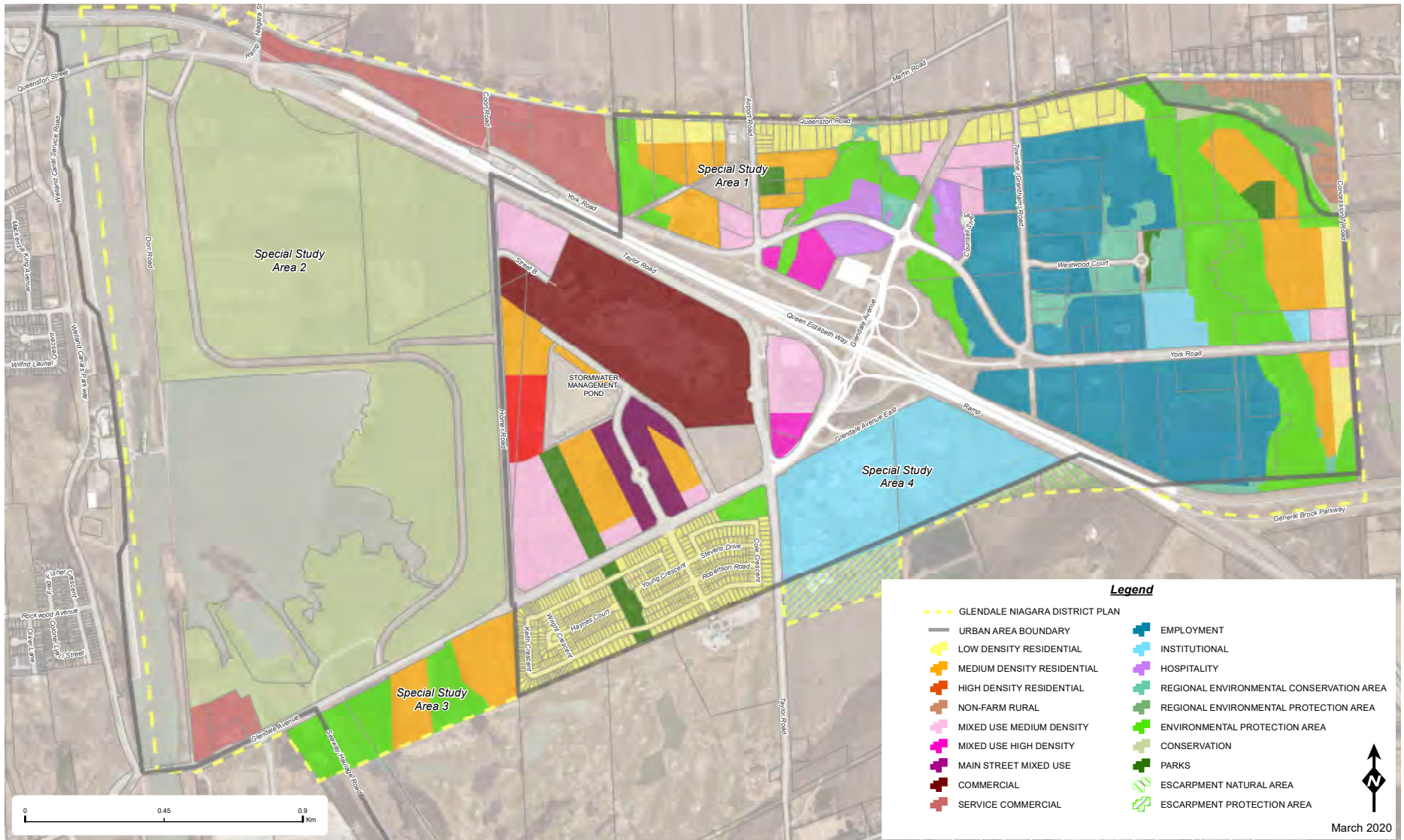
Urban design is also important in creating a complete community. Complete communities thrive when well-designed public spaces are integrated. People value places where various opportunities for social interaction are created and the ability to discover and enjoy amenities is offered. Good design will assist in creating a positive image and a strong identity for Glendale.

The vision for Glendale is a community with a full range of land uses. The study area already contains a number of key elements that will support the creation of a complete community. There are low-density residential areas, an outlet mall, an employment area and hospitality uses to provide jobs, Niagara College providing higher education and business synergies, and open spaces for passive and active recreation space. The District Plan will continue to build upon these assets.

The District Plan will also encourage new uses to support and complement the existing assets. The Main Street will provide a different experience with local commercial uses in a neighbourhood setting. Mixed-use development will add housing diversity. The transit hub will bring operators to a single site to provide a more efficient transit service. Additional green space will be woven through the study area providing opportunities for off-road connections and active transportation. New community facilities will become a central focus for recreation, services and public gathering spaces.

The success of a community is measured by how people interact with it. A complete community meets the daily living needs of its residents and provides options for remaining within the community throughout an individual's life cycle.

Land Use Concept



4.2 Transit and Community Hub

The transit hub and community hub is combined at the corner of Taylor Road and Glendale Avenue. The Community Hub is planned to accommodate community facilities for recreation and services. This may include a recreation space, multi-purpose rooms, daycare and a library. Opportunities could also be explored for a mixed-use building where the community facilities are located on the ground floor with residential units above. Transit terminal facilities for ticketing, tourist information, washrooms, concessions and indoor waiting areas could be incorporated into the community building.

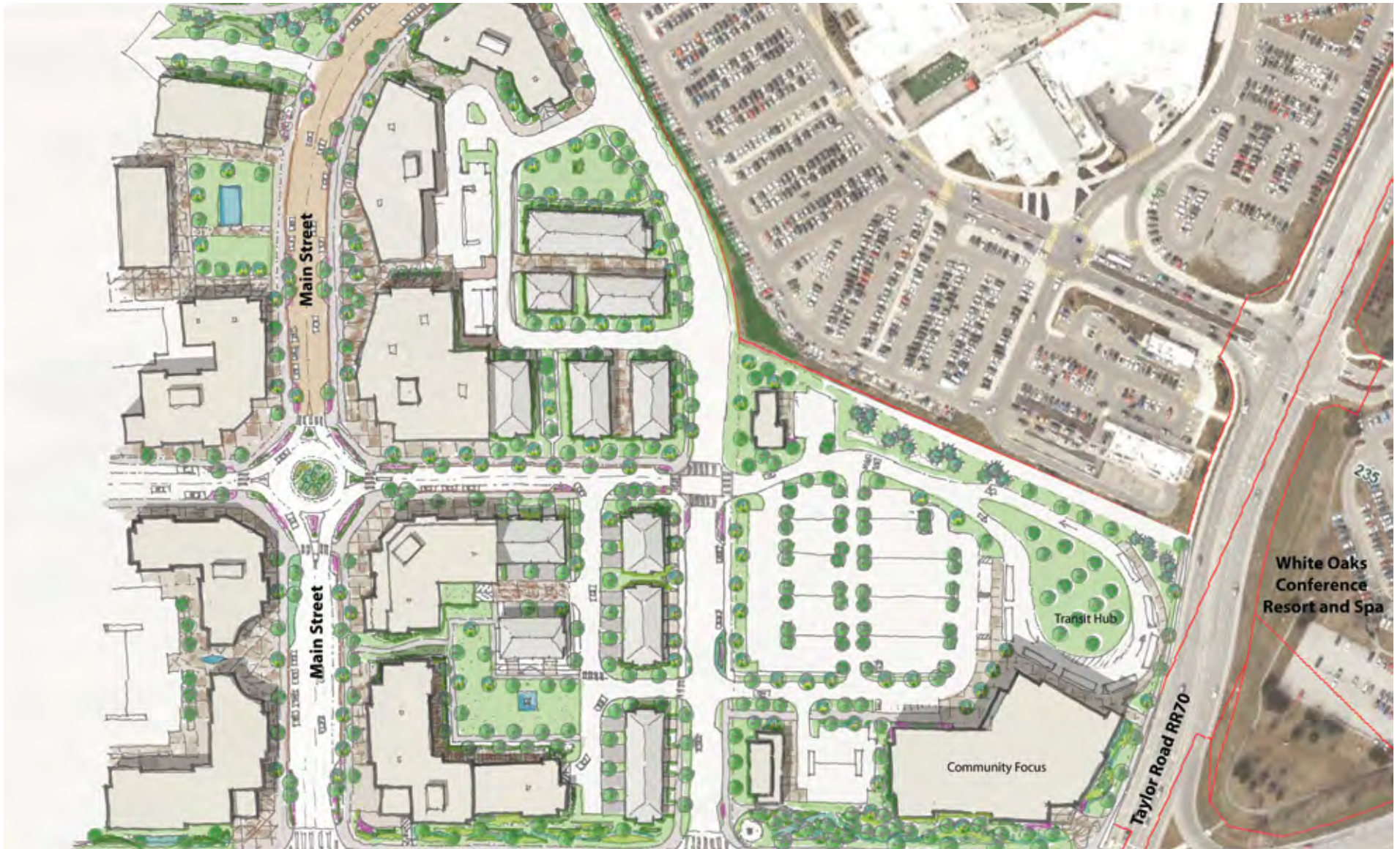
The transit station will be a multi-modal hub. The hub will have the potential to accommodate many forms of transit, such as local, inter-municipal, GO, tourism and on-demand. The facility may provide car-share or bike-share facilities in the future. A large parking area will be provided; however, it can adapt to future development opportunities should the need for parking decrease in the future.



Meghan Birbeck, Climate Change & Sustainability Coordinator, Township of West Lincoln



Urban Design Perspective



4.3 Glendale Crossing

Glendale Crossing is the largest area of vacant land for development within the study area. It is located south of the Outlet Collection of Niagara shopping centre and proposes a variety of land uses. This will promote a mix of residential built form, local commercial uses, greenspace and a grid-pattern for local streets.

The Main Street area is planned to accommodate mixed-use development. This will consist of commercial uses including retail, restaurants and other personal services at the street level. Residential units could be located above the street level. The Main Street is envisioned to include attractive buildings that frame a walkable and comfortable pedestrian realm. Lush boulevards with streets trees, planters, benches, decorative lighting, public art and other pedestrian enhancements are just some of the ingredients.

The enhanced roundabout can be used as an opportunity to include additional design elements. Public and private green space is woven along the street. Behind the main street buildings, there are opportunities for rest, reflection and gathering. The buildings and street connections may accommodate the temporary closing of Main Street for community events and festivals.



Urban Design Perspective



For illustration purposes only

4.4 Hospitality District

The Hospitality District will build upon the existing cluster of hotels and provide opportunities for uses to support the hotels. This location has easy access to the QEW and may cater to the travelling public while providing more commercial offerings to the surrounding local residents and businesses. In addition, future policy may provide flexibility to consider a combination of hotel/condominium built form.

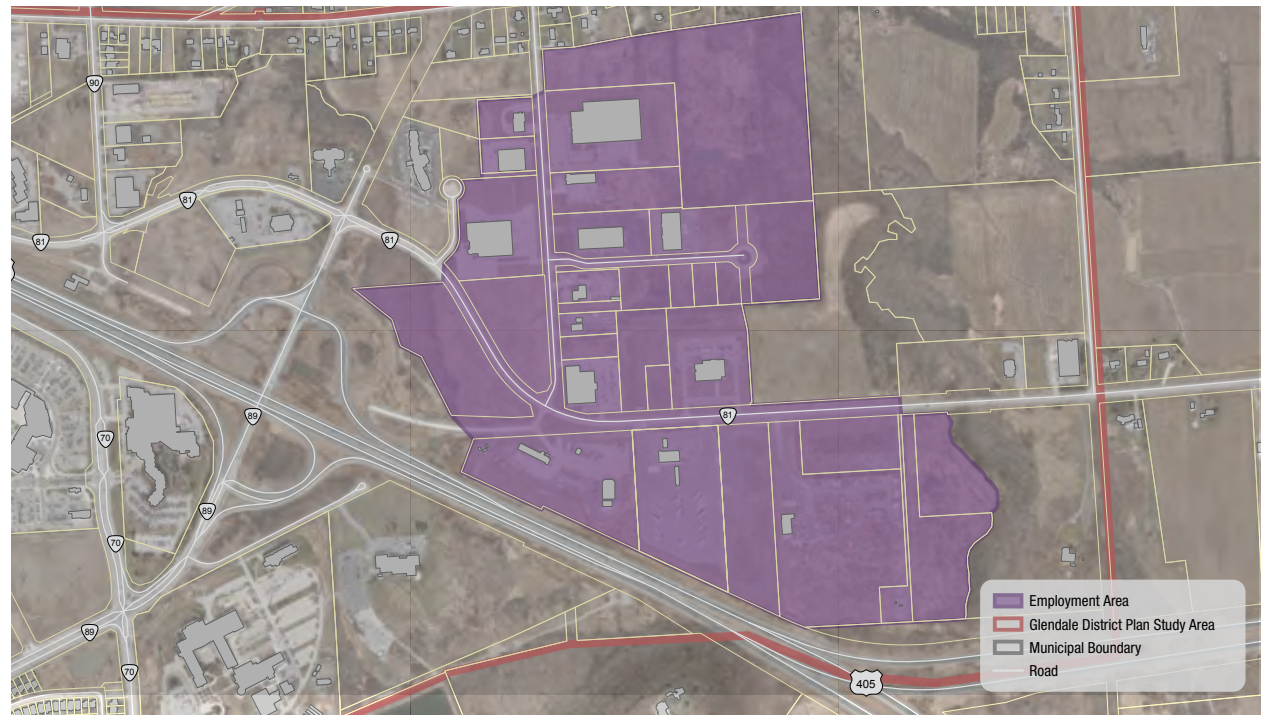
4.5 Employment Area

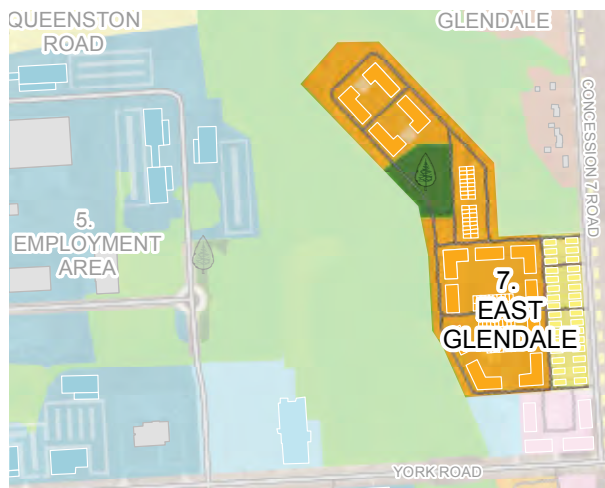
The employment area recognizes the existing cluster of industrial businesses that will be maintained and protected for employment uses over the long term. This area will provide employment opportunities for Glendale and the broader municipality. It is well-positioned to benefit from the Niagara District Airport, access to the QEW and close proximity to international borders. Future development proposals could include a circuit of new roads, enhanced urban design guidance and sustainability elements.



Photo Courtesy of Holiday Inn Express & Staybridge Suites Niagara-on-the-Lake

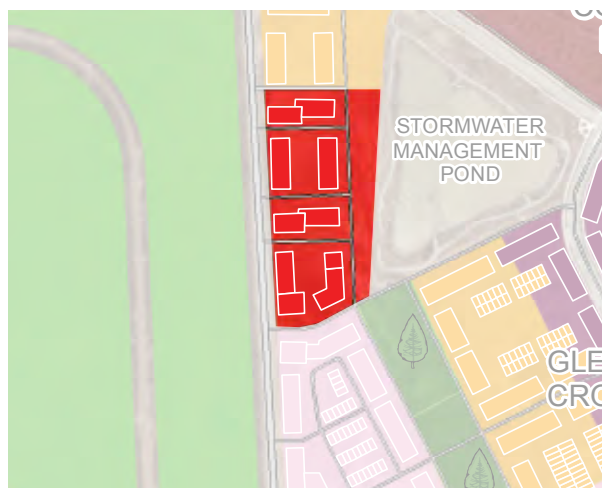
Glendale Employment Area





4.6 East Glendale

The East Glendale area is somewhat isolated from the rest of the plan area by the Six Mile Creek and associated environmental features. For this reason, the District Plan recommends the change in land use from an employment designation to a low-medium density residential area. Consideration of the land use change will be further reviewed through the Secondary Plan update.



4.7 High Density Residential

Fronting onto Homer Road, the higher density residential area has been strategically located away from the existing low density neighbourhoods and situated between the existing stormwater management pond and the greenspace of the St. Lawrence Seaway Authority lands. It has been located in close proximity to the transit hub, Main Street and Outlet Collection to encourage opportunities for active transportation.



4.8 Outlet Collection of Niagara

The Outlet Collection of Niagara provides a number of retail options and is a major tourism draw, attracting many visitors from outside Niagara. There is significant opportunity for this site to evolve over time. Flexible policy will allow the addition of mixed-use buildings that interface with Glendale Crossing.

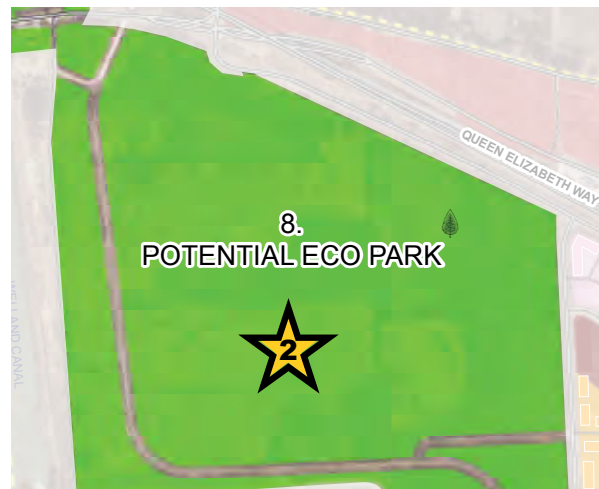
4.9 Special Study Areas

There are four Special Study Areas within the District Plan.



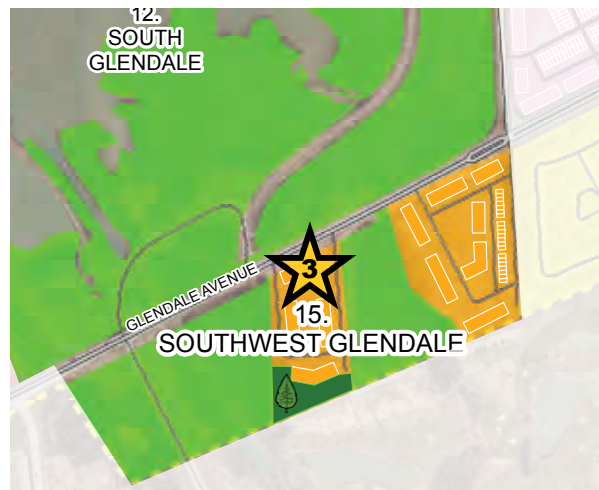
Special Study Area 1

Represents the Niagara Regional Native Centre located in the north-west area of the Glendale. The Niagara Regional Native Centre's mission is to provide programs and services to the urban indigenous population and promotes awareness of the cultural and social interests of the indigenous peoples. Niagara Regional Native Centre is also undertaking a Master Plan process to direct the future use of their holdings. The District Plan shows no land use direction for the Niagara Regional Native Centre lands and will recognize the ongoing work of the Master Plan.



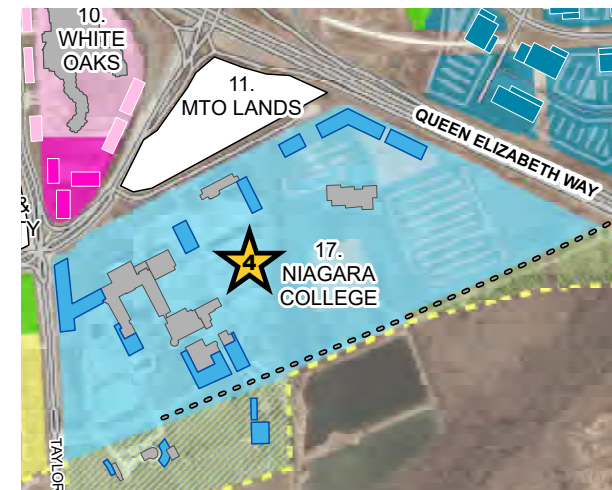
Special Study Area 2

Is located in the western portion of the Glendale study area and recognizes the policy and land use constraints of implementing the future Eco-Park. It identifies the need to work with the St. Lawrence Seaway Authority, Province and local municipality to determine the potential opportunities for recreational uses, a trail system, agriculturally-supportive uses or other uses deemed appropriate.



Special Study Area 3

Is the area known as Southwest Glendale and is subject to the Niagara Escarpment Plan. A request was made to change the designation of the lands from the Environmental Protection Area to Urban Area via the Coordinated Plan Review in 2017. This decision was deferred by the Ministry of Natural Resources and Forestry and the outcome of the deferral is pending. The District Plan shows an urban land use concept for this area; however, the decision on the deferral, as well as future planning applications, will ultimately determine if the land can be developed as shown on the land use concept.



Special Study Area 4

Represents the Niagara College land holdings located in the southeast of the study area. The College is undertaking its own Campus Master Plan process to establish a proactive plan for growth and development on their property. The College also recently purchased the lands to the east, known as the Niagara Corporate Business Centre, which has been incorporated into their Master Plan process. The Special Study Area acknowledges the ongoing work to complete a Campus Master Plan and the continued collaboration with the College through this process.

4.10 Preliminary population and employment forecast

Using the demonstration plan, an estimated total population at build out could be approximately 15,000 people and 7,500 jobs. This number includes the existing population and jobs. It is recognized that the ultimate build out of the entire Glendale study area would be beyond the current 2041 planning horizon.

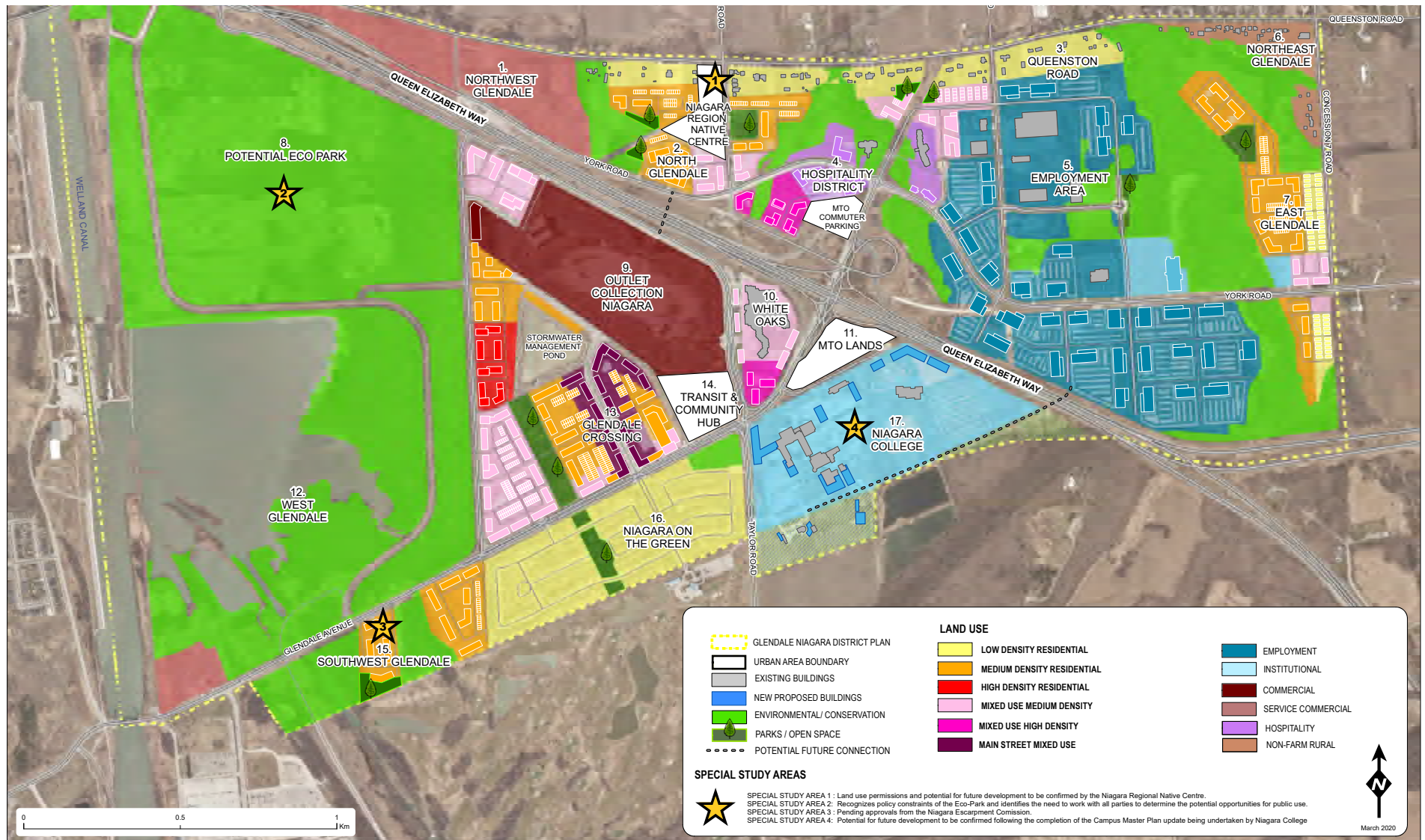
The following provides an example of a built form that could be found in each of the land use categories:

- **Low density** – ground related residential built form such as single detached, semi-detached and townhouses
- **Medium density** – denser built form such as townhouses, stacked or back-to-back townhouses, as well as low-rise and mid-rise apartment buildings
- **High Density** – characterized by mid to high-rise built form such as apartment buildings
- **Mixed-use** – a development that includes more than one type of land use within the same building or on the same site

The approximate population is based on the conceptual demonstration plan and average Floor Space Index calculations; however, this will be further tested through design and technical considerations. Exact building heights have not been assigned and will be assessed and determined through the update to the Secondary Plan. The preliminary forecast may change as a result of more detailed work completed through the Secondary Plan update.



Demonstration Plan



5.0 Glendale District Plan – Key Directions

The Glendale District Plan is comprised of nine key directions that reflect the vision and provide a path forward for the creation of a complete, vibrant community. Each direction includes a description and strategies. A series of recommendations are also provided for consideration through the implementation of the plan.

Urban design guidance will encourage a consistent design approach to create a unified character, a positive urban experience and a comfortable public realm. The District Plan's high level guidance will be further refined through the update to the Secondary Plan.

1 Protect and enhance the landscape/natural features

4 Create a strategy to build on the existing assets within Glendale and linking Glendale with the greater Niagara-on-the-Lake and Niagara

7 Create a public/civic space as a focus for Glendale

2 A convergence for the area's trails and active transportation facilities

5 Create the main street as a transition from the Outlet Collection of Niagara to the adjacent urban neighbourhood

8 Use sustainability measures related to resiliency and climate change

3 Provide an accessible and connected transit system to serve the Glendale area, Niagara and beyond

6 Provide a diverse range of housing ensuring choice and affordability

9 Coordination of infrastructure review capacity and upgrades



1 Protect and enhance the landscape/natural features

The abundance of greenspace in and around the Glendale study area is an important element of the District Plan. Significant natural features – the Niagara Escarpment, the adjacent Woodend conservation area, Six Mile Creek, and the Welland Canal and associated lands – all contribute to this green, environmental system. Protecting these natural features, incorporating them into development plans and weaving open space connections throughout the study area will be key to the success of this direction.

Additional work will be undertaken to investigate the incorporation a large Eco-park within the Glendale area. This Eco-Park area has been shown as Special

Study Area 2 and will support the connection to nature, offering opportunities for improved physical and mental health for residents and visitors alike.

Glendale offers incredible views and vistas to the Escarpment, the agricultural lands and the vineyards of Niagara-on-the-Lake. Given the development potential in the study area, it is important to identify and protect these viewsheds at the outset. This will set Glendale apart from other communities.

An appropriate transition to the agricultural area shall be provided through a lower density designation along the major boundaries.

Urban Design direction for open space and buffers:

- Provide landscape buffers and built form transitions for appropriate visual and physical transition to the rural area
- Consider a design vocabulary that celebrates the natural and rural surroundings
- Prepare a visual impact analysis, to identify the significant views and vistas to important natural features
- Arrange building heights to allow views to the Escarpment. Design built form to provide views to the Escarpment (window placement, rooftop amenity spaces)
- Landscape palette (softscape): Plant material should be native, Carolinian, non-invasive species. Ensure that street trees have ample room for soil volume (i.e. root habitat)
- Landscape palette (hardscape): Where possible, use materials that are local to Niagara (rock, stone, wood, etc.)

The Glendale District is generally bounded by the agricultural areas to the north and east, the Niagara Escarpment to the south and the Welland Canal to the west. Glendale has the unique opportunity to provide a dense urban area with a close relationship to agricultural and natural areas.

The Niagara Escarpment is a UNESCO World Biosphere Reserve. The Biosphere Reserve protects biodiversity through environmentally and socially sustainable development. It also aims to promote education and research of the interconnection between social and ecological systems.

As a potential UNESCO Global Geopark, there is an opportunity in the future for the creation of an open space in Glendale that could integrate many aspects of environmental education, providing an avenue to engage formally and informally with the broader community to enhance their appreciation of the landscape, history and culture.

This key direction will recognize and promote passive recreational opportunities and connection to the natural environment while protecting and enhancing the natural features and biosystems.

Strategies to Implement:

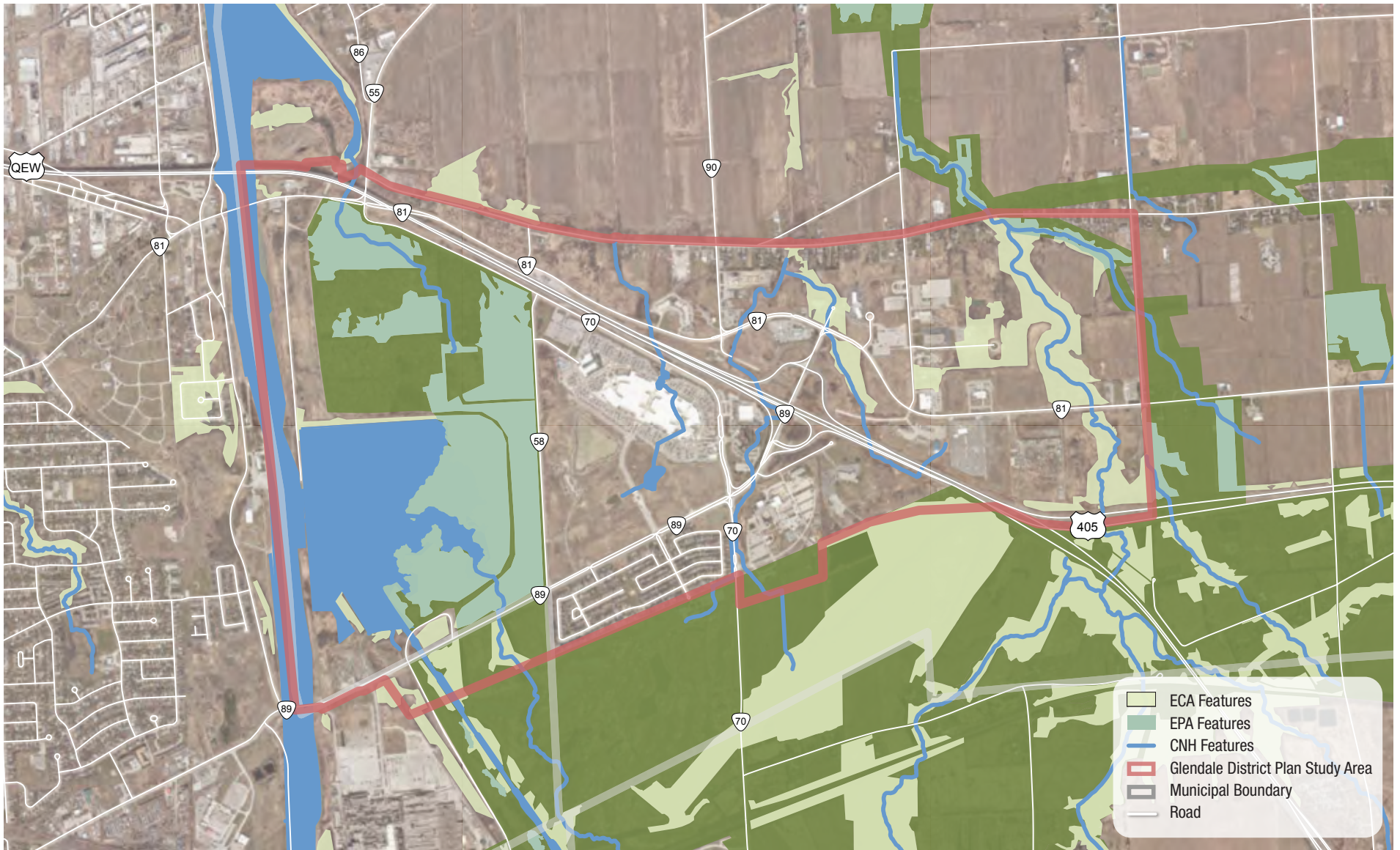
- a. Create an Eco Park, investigate opportunities for other complementary uses.
- b. Preserve and protect views and vistas to the Niagara Escarpment, natural and agricultural areas.
- c. Appropriately transition from built form and urban uses to the rural area.
- d. Review and confirm the Natural Heritage System.
- e. Leverage the connection to the escarpment and the UNESCO World Biosphere Reserve designation, agricultural lands, wine industry, etc. as a unique destination.



Global Geoparks:

defined by UNESCO as a single unified geographical area, where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development.

Natural Heritage System





2 A convergence for the area's trails and active transportation facilities

Trails and active transportation facilities are important for promoting healthy lifestyles and connectivity in the Glendale area. There is an existing network of on-street and off-street paths, sidewalks and cycling facilities. This network includes the Bruce Trail, Laura Secord Trail, Woodend Conservation Area, sidewalks and cycling lanes, and several informal paths. As Glendale develops, new proposals should consider the connection to existing active transportation facilities and look for opportunities to expand this network.

Despite the existing active transportation network within the study area, it is difficult to move through the area without a car. Safety concerns, including missing pedestrian and cycling links, have been identified through the consultations. As we move forward, building complete streets will ensure a continuous active transportation network creating a safe environment for walking and cycling, complete with destinations to visit and places to rest along the way.

Urban Design direction for active transportation:

- Ensure that complete streets principles are applied to the design of the street network
- Provide a description of the various road types throughout the district, identifying the types of active transportation associated with each road type
- Provide trail connections to destination locations throughout the study area, consisting of appropriately located trailheads, wayfinding and meeting places
- Where appropriate, provide trails along or adjacent to valleylands and woodlots
- Align the road network to capture significant views to the escarpment and other areas outside the urban boundary

Existing Trail System





Laura Secord Legacy Trail:

The study area is rich with history, including being part of Stage Three of the famous Laura Secord 1813

trek. The trail spans 32 kilometres from the Laura Secord Homestead in Niagara-on-the-Lake to Decew House in Thorold, through the Glendale study area. Opportunities can be investigated to provide additional connections to this trail and commemorate this trek through markers or historic/interpretive signage.

Creating a safe and comfortable public realm is essential for a complete and active community. Incorporating enhanced urban design guidance will assist in creating that comfortable public realm. The addition of street trees, landscaping, seating, lighting, and sustainability measures can all contribute to a positive pedestrian experience.

The QEW is a significant physical barrier for connecting the north and south areas of Glendale. The Glendale Avenue interchange is currently the only major crossing of the QEW within the study area. Although there are sidewalks over this interchange, the pedestrian environment is unwelcoming and can feel unsafe. The re-design and re-construction of the Glendale Avenue interchange to a Diverging Diamond Interchange configuration with a centerline multi-use path will improve this active transportation connection.

The District Plan identifies two new potential future connections across the QEW. The connection west of the interchange was identified initially for active transportation modes due to the grading requirements to accommodate a full vehicular link. The connection east of the interchange could be considered for a full bridge/road configuration for all modes of travel. Further technical study and consultation with adjacent property owners are required to determine the feasibility of these connections. They are identified conceptually on the Demonstration Plan and may be further reviewed through the transportation study work as part of the Secondary Plan update.

This key direction aims to ensure a more appropriate balance for all modes of travel both into and throughout the study area.

Strategies to Implement:

- a. Provide opportunities to connect new active transportation facilities with existing and proposed trails.
- b. Connect the on-street bike lanes along Glendale Avenue from Homer Rd to the Welland Canal.
- c. Create more opportunities to enhance walkability. Review the sidewalk connections and look for opportunities to connect and enhance the pedestrian network.
- d. Continue to investigate additional opportunities for connection from north Glendale to south Glendale over the QEW.





3 Provide an accessible and connected transit system to serve the Glendale area, Niagara and beyond

Establishing a central multi-modal transit hub and improving options for entering, exiting and travelling within the study area will be key in realizing this direction. The hub should be centrally located and able to accommodate inter-municipal transit, local transit, GO transit and other transit options.

As the hub is further investigated, the Technical Advisory Committee will continue to work with the Inter-municipal Transit Working Group, Niagara College, the local municipalities and others to coordinate transit operation efforts.

Providing opportunities for shared parking facilities, car share, bike share and on-demand transit will also be investigated to help reduce parking requirements and provide greater connectivity throughout the study area.

A GO rail transit stop was also identified as another transit option for further investigation. The District Plan will continue the dialogue with the GO Implementation Team and Metrolinx to encourage a new GO train station area as a long-term goal. A location on either side of the Welland Canal within 2 kilometre of Glendale along the existing rail line located south of the study area should be investigated.

Urban Design direction for gateways:

- Glendale is centrally located within Niagara, and provides easy access to the QEW and Niagara District Airport, and acts as a gateway to several local municipalities
- Major Gateways are located at strategic locations and should reflect a consistent design language to express a sense of identity within the District
- Minor gateways should be reflective of the design language of the major gateways at a smaller scale
- Consider the placement and relationship of gateways with respect to views and vistas of natural features (i.e. Niagara Escarpment)
- Building designs at gateway locations should address the gateway by locating entrance doors and windows that face and activate these areas and include active uses at grade
- Lighting and nighttime visual interest should be considered in the overall design of gateway features

Potential Gateway Locations



Major Gateways:
are strategic entry points into the community, such as the Glendale Avenue interchange, and can include a significant architectural feature that is complemented by planting, water features or lighting.

Minor Gateways:
are secondary entrances to the community and can include a smaller-scale architectural feature complemented by planting and lighting. Minor gateways may also be located at entrances to a significant area of the community

Character Gateways:
may use specific urban design treatments to signify the entrance to a special area within the community (e.g. the Main Street)

This key direction recognizes the importance of providing an efficient and connected multi-modal transit system to achieve a complete community.

Strategies to Implement:

- Provide a multi-modal transit hub for inter-regional transit, GO Transit, tourism buses, and terminal facilities.
- Create synergies between the transit hub and community focus by locating these facilities and functions in close proximity to one another.
- Continue to encourage a GO Transit Rail stop location within 2 kilometres of the study area.
- Provide guidance for integrating transportation demand management objectives into development plans.
- Identify and integrate gateway features at major entry points into the District.
- Create a wayfinding strategy to co-ordinate directional signage for vehicles, cyclists, pedestrians and transit users. Ensure that the history and character of Glendale is reflected in the wayfinding strategy.





Image provided by Outlet Collection at Niagara Ivañhoé Cambridge

4 Create a strategy to build on the existing assets within Glendale and linking Glendale with the greater Niagara-on-the-Lake and Niagara

The Glendale study area currently has a number of assets that will contribute to a successful urban district; Niagara College, the Outlet mall, White Oaks Conference Centre and Spa, QEW access, the nearby Niagara District Airport and clusters for hospitality, employment and a range of residential uses. The District Plan will continue to build on, enhance and promote these assets.

The District Plan will support the Niagara Region's employment strategy by identifying an employment area for a cluster of employment uses over the long-term. It is important to protect the employment

area in Glendale as it provides the majority of the employment designated lands for all of Niagara-on-the-Lake. It is also a prime location for employment uses to locate as it is within minutes to the international border crossings and has excellent visibility and accessibility to the QEW.

Although not within the study area, the Niagara District Airport is an important asset to Niagara-on-the-Lake and Niagara. The Niagara District Airport is in close proximity to Glendale and can support important social and economic links, including passenger connections, tourism and movement of goods. Further collaboration

Urban Design direction for innovation hubs:

- Develop an urban design approach to cluster and orient buildings within innovation hubs and employment areas
- Design buildings in a campus like manner to create spaces with opportunities to enrich social interaction, collaboration, health and well-being
- Create edges that address public streets with well-designed high quality architecture

with the Niagara District Airport, the local municipality and the other partners is needed to prepare an Airport Strategy/Master Plan to review opportunities for connections and other synergies between Glendale and the airport.

There is great potential for an enhanced connection between the airport and the employment area. The Niagara Region will work with Niagara-on-the-Lake to brand and market the employment area as a premier location for shipping and goods movement.

Niagara College is located within the study area and offers a wide range of programs and learning opportunities. This direction recognizes the College as a catalyst to contribute to the creation of an innovation hub. Innovation hubs are campuses that attract learning, creative thinking and investment. They offer employment opportunities geared towards technology, research and development. These campuses represent the idea that good work comes from people who have been rewarded with high-quality, well-designed buildings and spaces.

An economic development strategy should be developed to attract entrepreneurial businesses, start-ups and incubator/shared spaces that complement the Niagara College programs and surrounding employment uses to facilitate the creation of an innovation hub.

A tourism strategy could assist with building on Glendale's assets, connecting tourism destinations, such as the Outlet Mall and the planned Hospitality District, to the broader tourism destinations throughout Niagara-on-the-Lake and Niagara. It will investigate ways to market the area and leverage its well-connected location.

Actions associated with this direction will be implemented through additional collaborative efforts amongst stakeholders and through the ongoing work of a technical advisory committee.

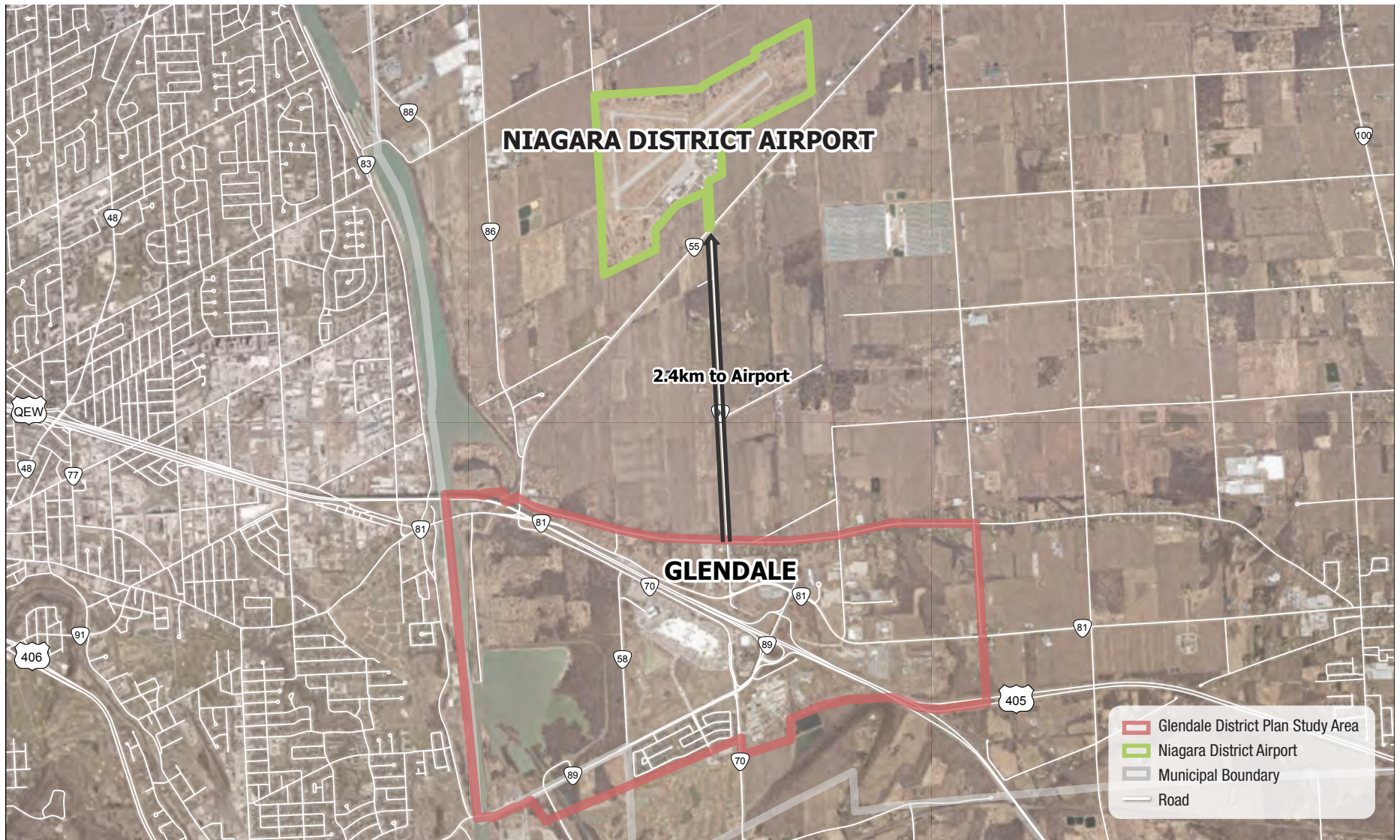
Strategies to Implement:

- a. Protect an identified employment area in Glendale.
- b. Create a policy framework for the creation of an innovation hub.
- c. Integrate Niagara College into the District, accommodate its expansion and create a focus on food/tech industries.
- d. Prepare a tourism strategy.
- e. Work with the Niagara District Airport to identify synergies with Glendale, Niagara-on-the-Lake and Niagara.
- f. Create a branding strategy for the Employment Area.
- g. Prepare a Commercial Lands Review to analyze the amount of commercial space that can be supported in the study area.
- h. Investigate opportunities for private sector sponsoring (naming rights) to offset the costs of community facilities.



Map data ©2018 Google

Proximity of Airport to the Study Area





5 Create the main street as a transition from the Outlet Collection of Niagara to the adjacent urban neighbourhood

Located just south of the Outlet Mall, represents a great opportunity for a Main Street lined with multi-storey, mixed-use buildings. The Main Street will be a key component in achieving a complete community by offering commercial uses, restaurants, cafes, and other retail uses. It will serve the current and future population of Glendale by providing a different experience that is smaller in scale and more focused on uses that serve the surrounding neighbourhood.

A woonerf, or living street, design provides an opportunity for all travel modes to coexist and allows the space to be used in multiple ways. The street is designed to calm traffic and enhance opportunities for active transportation.

Often these streets have design elements that set them apart from a regular street, such as modified or no curbs, permeable pavers, or distinctive design elements at crosswalks. They can also offer the possibility of temporary street closures for community events, activities, and festivals. Since there is already a road connection where the Main Street has been identified, a woonerf street design may be investigated in the future when the Main Street is reconstructed. Until that time, enhanced design elements and streetscaping can be incorporated through development applications.

This key direction will draw on urban design guidance and flexibility in building design to create a welcoming public realm. Ground floor uses will be encouraged to spill-out with display areas and patios to activate and enliven the main street. Policies should direct important design elements for the Main Street to ensure they are identified and realized through development proposals and municipal capital projects.

Through the future completion of the commercial lands review study, the short and long term viability should be investigated for the main street commercial uses.



This work should consider the layout of the main street, the type of commercial offerings, the permanent population and the visitor/tourist population, etc. It should review the main street and provide specific recommendations to assist in achieving a successful, mixed-use community.

The Outlet Collection at Niagara has the potential to grow and evolve over time. As consumer trends shift and parking requirements change, flexible policy can allow the site to transition to a mix of uses similar to other large mall sites throughout Ontario. The District Plan recommends a flexible planning policy to allow for the continuation of the existing uses, as well as provide for the evolution to a mix of uses in the future.

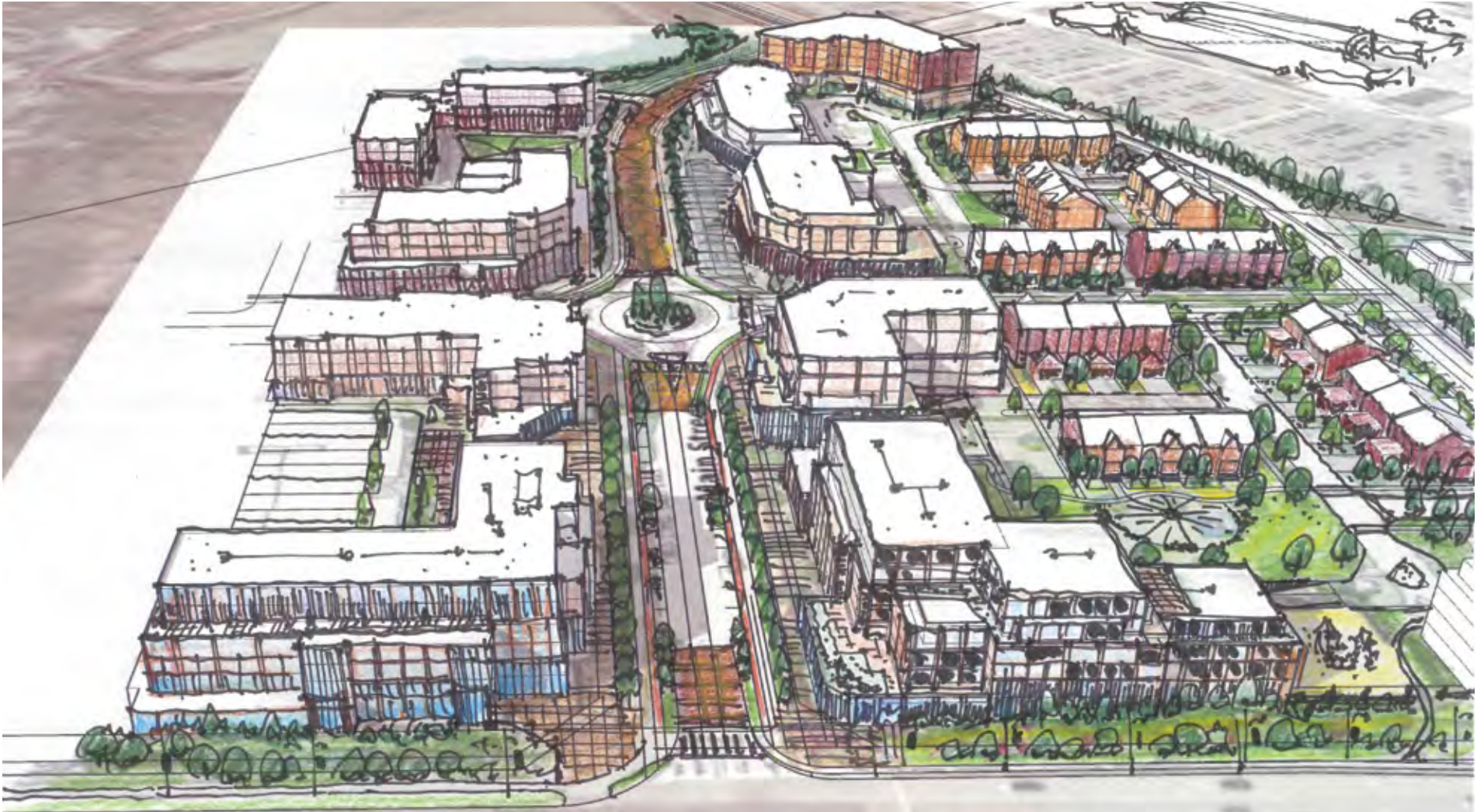
Urban Design direction for the Main Street:

- The creation of urban design guidelines shall analyze successful examples of Main Streets, new and old, and develop relevant criteria for elements that can be applied to Glendale
- Public realm criteria can specify sidewalk widths and treatments, tree planting locations, utilities and lighting, street furniture, spill-out or marketing areas, transit locations, cycling facilities, on-street parking provisions, placemaking and public art
- Private realm criteria may include building massing, materials/treatments, ground floor building design parameters, design of upper floors, building entrance treatments, patios, and signage design
- Driveways to surface parking lots, underground garages and loading areas should not be located along the Main Street or Glendale Avenue
- Main Street buildings should be designed with flexibility and adaptability of the ground floor to accommodate a range of compatible uses
- The transition to the Outlet Mall is strengthened by a high quality streetscape experience
- Explore options for closure of all or a section of the Main Street for festivals and community events
- Consider the night time experience through enhanced sidewalk lighting, accent lighting, decorative displays, and public art pieces



Niagara-on-the-Lake has had many exceptional and prominent women throughout its history. Consideration should be given to formally recognize and commemorate these women through historical markers, public art or other means along the proposed Main Street.

Main Street Perspectives



For illustration purposes only

This key direction aligns with the vision to create a Main Street as a prominent part of the District. It will provide a unique destination with local commercial uses, amenities and a strong linkage to the Outlet Collection.

Strategies to Implement:

- a. Require all buildings along the Main Street area to have commercial at grade.
- b. Prepare specific urban design guidance for the Main Street area.
- c. Review the viability of commercial lands within the main street. Actively engage with retail, service and grocery store chains to attract new commercial offerings to the area.
- d. Work with the owner of the Outlet Collection of Niagara to understand the long term plan and opportunities for the site.



Map data ©2018 Google





6 Provide a diverse range of housing ensuring choice and affordability

Providing new, diverse and affordable housing options is important for the Glendale area, as well as across Niagara. Currently, residential uses in the study area are primarily low density, ground related built form. The Glendale District Plan provides an opportunity to integrate more medium and higher density housing, purpose-built rental, and mixed-use buildings to diversify the housing options within the study area.

The District Plan supports the need for affordable housing. Further consultation with Niagara Regional Housing and other housing providers/operators in Niagara will be undertaken. In addition, information and recommendations from the Housing and Homeless Action Plan and the Housing Strategy will inform a

policy framework that will support the construction of an adequate supply of affordable housing, both for rental and private ownership. In particular, given the proximity to the Niagara Regional Native Centre, this direction will encourage the investigation of opportunities for indigenous supportive housing.

Denser built form options will increase housing options to accommodate a variety of family sizes, ages and incomes. When introducing medium and high density built form often concerns related to compatibility are raised. It is important to ensure that new denser forms of housing are appropriately integrated with the existing community. Urban design guidance will

provide direction for building design to ensure suitable transitions between low to higher density buildings.

Housing options for Niagara College students will also need to be explored. While some of these students live outside of the study area and travel in, others live in the student residence and within rental housing in the adjacent Niagara on the Green subdivision. Niagara College is currently preparing its Campus Master Plan for the Niagara-on-the-Lake campus and has identified the need for more purpose-built student housing on-site, as well as exploring opportunities with area developers to integrate student housing within the study area. The project team will continue to investigate opportunities to achieve this.

Urban Design direction for housing aims to:

- Demonstrate that higher density housing forms can be designed to be compatible with lower density forms through building-to-building relationships, building massing and orientation, transition and gradation, high quality exterior building design, sun-shadow studies and overview, and the use of landscaping to enhance the overall quality and design
- Include housing alternatives for accessible, age friendly and options that are designed to accommodate secondary suites. Secondary suites can add to affordable rental options throughout the community and can provide additional income for homeowners.
- Street oriented housing forms must address streets with front doors, windows and front porches that can enliven streets and enhance social interaction
- Demonstrate how affordable housing options can be integrated within market rate housing
- Promote high quality exterior building design and landscaping design of affordable housing forms through the use of durable and visually appealing materials
- Where appropriate, reduction of parking ratios to reduce the cost of construction and operation of developments should be considered (especially for affordable housing). Site areas that might have been devoted to parking can become green spaces, community gardens, and or other buildings.
- Improve the quality of streetscapes by avoiding the placement of surface parking between the buildings and streets

Offering diversity of housing provides the opportunity to stay within or close to your neighbourhood as housing needs change over time. It will contribute to a vibrant and complete community by offering people a variety of options that are suited to their choices and lifestyles.

Strategies to Implement:

- a. Encourage a range and mix of medium to high density housing to achieve a population that will support a complete community.
- b. Encourage a range of unit sizes to accommodate different family sizes.
- c. Create design guidance to inform how new higher density built form can be appropriately integrated with the existing community.
- d. Provide affordable housing options within the study area for both rental and private ownership.
- e. Integrate age-friendly and accessible best practices in the design of buildings, spaces and the public realm.
- f. Work with Niagara College to investigate student housing options.



6% OF HOUSEHOLDS
are in Core Housing Need
in Niagara-on-the-Lake
on par with the Niagara average

households are spending over
30% of income on shelter costs
much higher than the Niagara average.

Little housing diversity in Niagara-on-the-Lake



82% OF UNITS ARE
SINGLE DETACHED
DWELLING

there are limited apartment units in the municipality



26% INCREASE IN
HOUSING PRICES
from 2016 to 2017



7 Create public/civic space as a focus for Glendale

A community hub will be a central focus of Glendale's complete community. Future work will investigate possible partnerships for the hub location, for example, public health offices, police services, Niagara College satellite space, Niagara Regional Native Centre programs, and/or other service providers all integrated into the space. The community hub can also offer recreational space and programming, a library site, daycare services, multi-purpose rooms and incorporate the transit service terminal. It will become an important destination for social interaction and offerings.

The community hub could also be a multi-storey building to provide additional space for community

uses, offices or housing on the upper floors. In line with Key Direction 6, partnerships could include Niagara Regional Housing or Niagara College to provide specialized affordable housing.

Complete communities thrive when well-designed, high quality public spaces are integrated into the overall community design. Green space for recreation shall be woven throughout the community through public and publicly accessible spaces. Urban design guidance will consider different scales of parkland and open space to encourage a variety of opportunities for active living throughout the District Plan area. Active living directly contributes to a healthier population.

Urban Design direction for public spaces:

- Public spaces of various scales are integrated into the fabric of Glendale. Within each of these spaces visitors will enjoy trees, seating, lighting, paved areas, walking paths, and programming elements that create well-being through music, food, markets, and active lifestyles.
- Public spaces provide opportunities for public art that celebrates community spirit and promotes vibrancy
- Adjacent buildings include entrances and windows that are oriented towards public spaces to assist in activating the space
- Design the transit hub with public space for visitors to wait, meet, and be around people
- Design public and civic spaces that are both permanent and temporary
- Policies and guidelines for the long term maintenance and operation of public spaces should be developed so that municipalities can budget adequately to ensure that these spaces remain attractive and in good form

Perspective From Community Focus



For illustration purposes only

In addition to a community hub, through the update to the Secondary Plan, the School Boards will be consulted to determine if an elementary or secondary school site is needed. School sites could be combined on a campus type setting or with the community hub to share facilities. The study team will review the possibility of more urban footprints for school sites in order to maximize the land available for development and the ability to achieve a complete community that will support the land uses proposed. Any location chosen would need to be reviewed to ensure the overall intent of the District Plan is maintained.

Public art will assist in creating a unique identity and sense of place for Glendale. Public art is any form of art that is enjoyed by the public and can include statues, murals, sculpture, fountains or functional art (i.e. artistically designed benches). An attractive public realm will also enhance the sense of social inclusivity and positive mental health. In this way, public spaces play a key role in evoking a sense of place and identity.



Strategies to Implement:

- a. Plan for a central recreation/community hub location for the community. Promote partnerships with various stakeholders to create centralized services for the community in one location.
- b. Develop a strategy for 4-season community needs, cultural offerings.
- c. Provide outdoor recreational facilities to support the community needs.
- d. Incorporate public art that is unique to the Glendale and Niagara area.
- e. Work with the school boards to evaluate and understand need.





8 Use sustainability measures related to resiliency and climate change

Sustainability measures such as low impact development techniques and green infrastructure design will be supported and encouraged throughout Glendale. Sustainable measures must be considered at a broad scale throughout the entire plan area, at a sub-area or block level and at an individual property level.

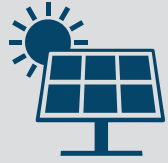
There are many benefits to incorporating sustainability measures. Where possible, new development should employ innovative stormwater management practices that reduce runoff and stormwater pollution. The use of bioswales, rain gardens, permeable pavers and other surface water treatment techniques will assist in managing and treating stormwater at the source.

These measures, and other appropriate sustainability measures, will contribute to a successful stormwater management strategy.

Additional sustainability opportunities include strategically utilizing landscape and open space features. For example, local food production such as community gardens, a local farmers market and edible landscaping can help support local farmers, add to the unique community image and decrease emissions by reducing the distance from farm to table. Using locally sourced building material, promoting waste diversion from landfills through the provision of recycling or tri-sorting stations, and adding electric car charging stations should also be considered.

Urban Design direction for sustainable elements and features:

- Consider the use of green or passive energy sources (i.e. solar energy, geothermal energy) for buildings where feasible
- Consider the orientation of buildings and windows to maximize solar gain
- Use plant material strategically to create shade and block wind
- Implement green building elements into built form, such as green roofs



Sustainability tools and interventions can include measures for energy/ carbon reduction, water use and waste management, material resources and solid waste reduction, green building design, and enhanced green space strategies.

Sustainable communities also consider the materials that are used in building and site design. New development within the study area should also consider a more sustainable building design to promote energy efficiency. The preparation of green building design guidance will encourage new development and redevelopment to incorporate more efficient and sustainable design elements. The incorporation of green roofs can reduce energy consumption by adding a layer of insulation from extreme cold, as well as support biodiversity by providing additional green space throughout the study area.

Through the preparation of a sustainability strategy, sustainability performance indicators and benchmarks for new development, redevelopment and intensification opportunities can be created. Based

on these indicators, there is potential for current or future incentives to be linked to these enhanced requirements.

Strategies to Implement:

- a. Prepare a sustainability strategy for the Glendale.
- b. Encourage sustainable, green streets and parking areas throughout the District.
- c. Investigate innovative stormwater management techniques.
- d. Encourage green building design.



9 Coordination of infrastructure review, capacity and upgrades

The Glendale plan will encourage ongoing monitoring and collaboration with the major stakeholders in the area to ensure that infrastructure capacity is available and ready when development applications are submitted.

Given all available information at the present time, the capacity range for the sanitary sewer system servicing Glendale plan area, Walker Industries and Airport Rd. correlates to a build out of approximately 21,500 population equivalents including residential and employment, existing and future. This capacity will be further investigated through the detailed technical work and the creation of a phasing plan through the Secondary Plan update.

Servicing Details

- Primary water supply - Decew Falls Water Treatment Plant
- Port Weller Wastewater Treatment Plant catchment area

It is recognized that the potential forecasted population and employment numbers may need to be adjusted to accommodate the results of the infrastructure review.

Further investigation will be undertaken to consider revenue sources for infrastructure improvements. Avenues for consideration include a local area-specific development charge or incentive program. Public service facilities and other community amenities should be included in the future Community Benefits Charge Strategy. The Technical Advisory Committee will undertake this review and make recommendations for consideration.

Transportation capacity will be further reviewed via a transportation study to analyze current and future travel patterns as the study area evolves.

An area of particular focus is the Glendale Avenue and Taylor Road intersection. There is a high volume of traffic moving through this intersection to access Niagara College, the Outlet Collection and White Oaks; particularly at certain times of the day and certain times of the year. With the potential of a Transit Hub at the corner of Taylor Road and Glendale Avenue, assessing the safe movement of pedestrians through this intersection becomes even more important.



Strategies to Implement:

- a. Monitor the implementation of the Glendale District Plan to proactively plan for infrastructure upgrades.
- b. Investigate the use of a Community Planning Permit System.
- c. Provide direction for a Community Benefit Charge Strategy.
- d. Allow for consideration of cross-border servicing between Niagara-on-the-Lake and St. Catharines
- e. Encourage the Town to investigate an area-specific development charge by-law

6.0 Summary of Transportation Review and Recommendations

A high level transportation analysis reviewed the opportunities and challenges for the existing transportation network, active transportation network and road conditions within the study area.

6.1 Street Network

The study area is currently serviced by an existing network of Niagara Region and local roads. This network is well travelled and there may be little opportunity to change the configuration of the existing street network. The future transportation study will review and ensure the optimal location for new road connections and make recommendations on how to enhance the network with active transportation facilities.

Using a grid pattern for new local roads will create a walkable, urban context. The block size should be relatively small to allow for connections to destinations throughout the community. The grid pattern will activate the public realm, offer opportunities for a variety of travel routes for connecting to key destinations, adding a level of discovery and traffic calming.



The Taylor Road and Glendale Avenue intersection is a central point within the Glendale District Plan dominated by key destinations of interest. Pedestrian and cycling movements through the intersection should be prioritized through the integration of transportation and streetscape facilities that improve how people cross this large intersection. Some of the options include longer crossing times, increasing the phasing times to create more pedestrian and cycling crossing opportunities, refuge islands and medians, digital technologies that can cater to movement by monitoring and activating phasing as needed, traffic calming, and others.

Urban Design direction for Glendale Avenue and Taylor Road Intersection:

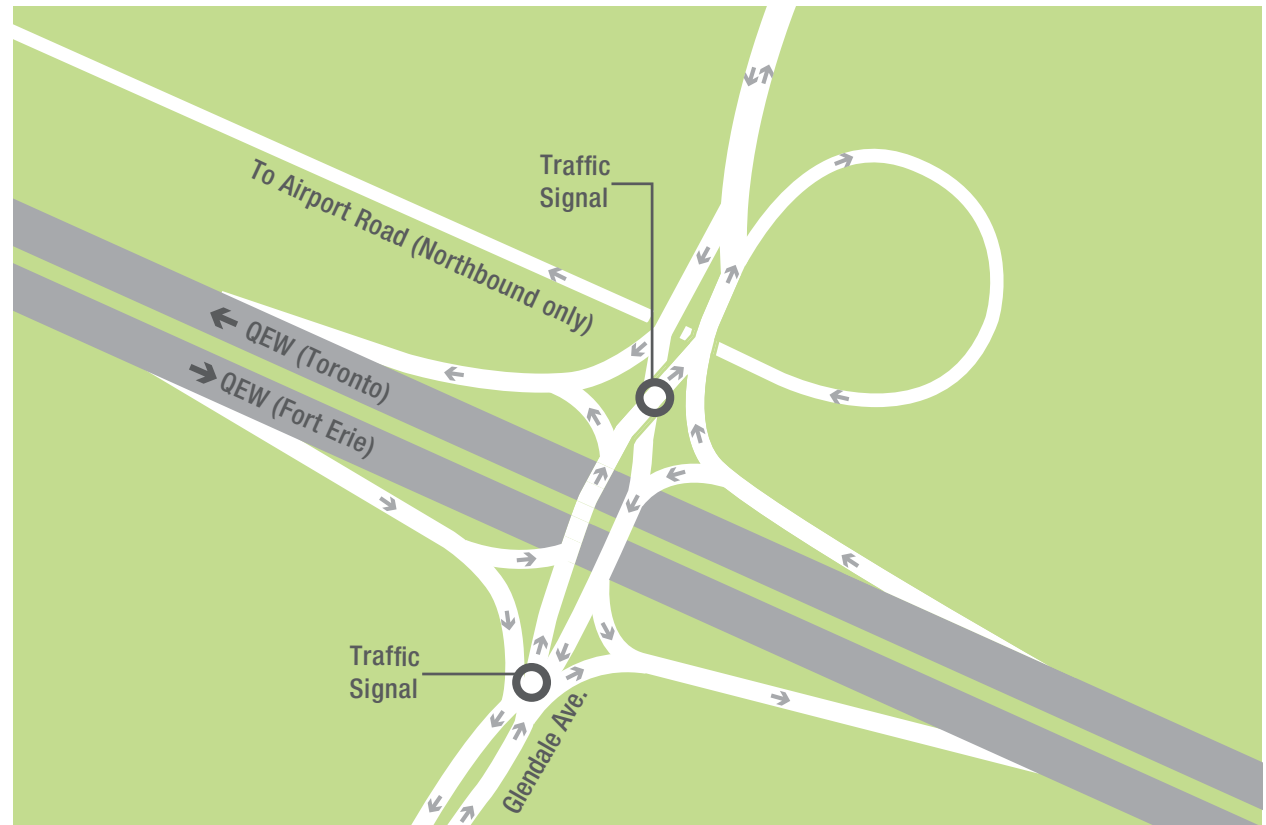
- Integrate vibrant displays and greenery, public art, seating opportunities, better lighting, and paving treatments
- The large intersection can be designed to be more pedestrian scale through the placement of attractive, high quality buildings and spaces close to the intersection



The names of streets, sub-districts, neighbourhoods, parks, public monuments, infrastructure, and other development features should be locally relevant, recognizing and celebrating the landscapes, history, heritage, and significant people of the area.

6.2 Diverging Diamond Interchange

The Glendale Avenue interchange is being re-constructed to a Diverging Diamond interchange. The Diverging Diamond interchange has a more compact footprint than the existing cloverleaf design and will more efficiently move traffic by reducing the number of conflict points. In addition, a north to west loop ramp will be constructed on the north side of the QEW connecting Glendale Avenue directly to Airport Road via a new connection. The intersection of Glendale Avenue and York Road will also be reconstructed as a single lane roundabout with protections in place for converting to a dual-lane roundabout should the future need arise. The Diverging Diamond interchange accommodates active transportation users through the inclusion of multi-use pathways. Pedestrians and active transportation users are channeled to the east and/or west ends of the Diverging Diamond interchange through dedicated, signalized crossings at the approaches.



for illustration purposes only

Existing Road Network Table

Roadway	Jurisdiction	Region's Transportation Master Plan, (2017)	Service Function	Divided/ Undivided	Regulatory Speed Limit (km/h) (may vary)	Number of Thru-Lanes	Estimated Roadway Carrying Capacity (veh/day)	Average Annual Daily Traffic (AADT) (veh/day)
Queen Elizabeth Way (QEW)	Provincial	Urban	Freeway	Divided	100	6	132,000	95,000
Regional Road 58 (Homer Road)	Regional	Rural	Collector	Undivided	80	2	8,750	2,700
Regional Road 70 (Taylor Road)	Regional	Urban	Arterial	Undivided	60	2	17,500	9,300
Regional Road 81 (York Road)	Regional	Rural	Arterial	Undivided	60	2	17,500	10,100
Regional Road 89 (Glendale Avenue)	Regional	Urban	Arterial	Divided	50	4	35,000	13,000
Regional Road 90 (Airport Road)	Regional	Rural	Arterial	Undivided	60	2	8,750	5,800
Queenston Road	Municipal	Rural	Collector	Undivided	70	2	8,750	-
Townline Road	Municipal	Rural	Local	Undivided	50	2	8,750	-
Niagara-on-the- Green (Main Street)	Municipal	Urban	Local	Undivided	50	2	8,750	-
Concession 7 Road	Municipal	Rural	Local	Undivided	50	2	8750	-

Remaining Roadway Carrying Capacity (veh/day)	Proposed Complete Streets Typology	Region's Transportation Master Plan, 2017	Recommended Strategic Improvements
37,000	Not Applicable	<ol style="list-style-type: none"> Capacity Improvements/Widening (2022-2031) Interchange Improvements at Regional Road 89 (Glendale Avenue) (2022-2031) 	Continue Design-Build Partnership with Ministry of Transportation for Interchange Improvements at QEW and Regional Road 89 (Glendale Avenue), Intersection Improvements (Roundabout) at Regional Road 89 (Glendale Avenue) and Regional Road 81 (York Road), and Regional Road 89 (Glendale Avenue) to Regional Road 90 (Airport Road) Bypass Ramp
6,050	Transitioning	None	None
8,200	Transitioning	None	None
7,400	Transitioning	None	None
22,000	Transitioning	<ol style="list-style-type: none"> New Road (Regional Road 81 (York Road) to Queenston Road) (2022-2031) 	Continue Design-Build Partnership with Ministry of Transportation for Interchange Improvements at QEW and Regional Road 89 (Glendale Avenue), Intersection Improvements (Roundabout) at Regional Road 89 (Glendale Avenue) and Regional Road 81 (York Road), and Regional Road 89 (Glendale Avenue) to Regional Road 90 (Airport Road) Bypass Ramp
2,950	Transitioning	<ol style="list-style-type: none"> Capacity Improvements/Widening (2022-2031) 	None
8,750	Rural/Character	<ol style="list-style-type: none"> New Road (Regional Road 81 (York Road) to Queenston Road) (2022-2031) 	Realign Queenston Road with QEW Skyway Bridge Twinning Led by Ministry of Transportation
8,750	Rural	Not Applicable	None
8,750	Main Street	Not Applicable	None
8,750	Rural/Character	Not Applicable	None

6.3 Character Road

Queenston Road and Concession 7 Road could form a character road network. A character road employs a modified rural cross-section to transition the urban area to the adjacent rural landscape. The use of landscape planting, lower density built form, variation in building setbacks, and wider multi-use paths (instead of separate bike lanes and sidewalks) will assist with this transition. Other character roads may be identified through future urban design work.



Key Destination Features



6.4 Transit Hub/Terminal requirements

In 2019, Glendale and Niagara College Niagara-on-the-Lake Campus has regular transit service via:

Transit System	Routes	Frequency (Approx.)
Niagara Regional Transit	Route 40	60 min
	Route 45	60 min
	Routes 40A/40B	15 min/15 min
	Routes 45A/45B	15 min/15 min
Niagara-on-the-Lake Transit	One bus In-Bound/ Outbound	60 min
GO Bus	From Burlington to Niagara-on-the-Lake to Niagara Falls	60 min
	Niagara Falls to Niagara-on-the-Lake to Burlington	60 min

A transit hub/terminal will need to consider a number of elements within the site design. The number of transit routes to Glendale and frequency of buses suggests the potential to accommodate 8 bays, plus provision for 2 bays on the street. The configuration should consider both larger 60' articulated buses, as well as standard 40' buses. The final number of bus bays will be further investigated through a future feasibility study.

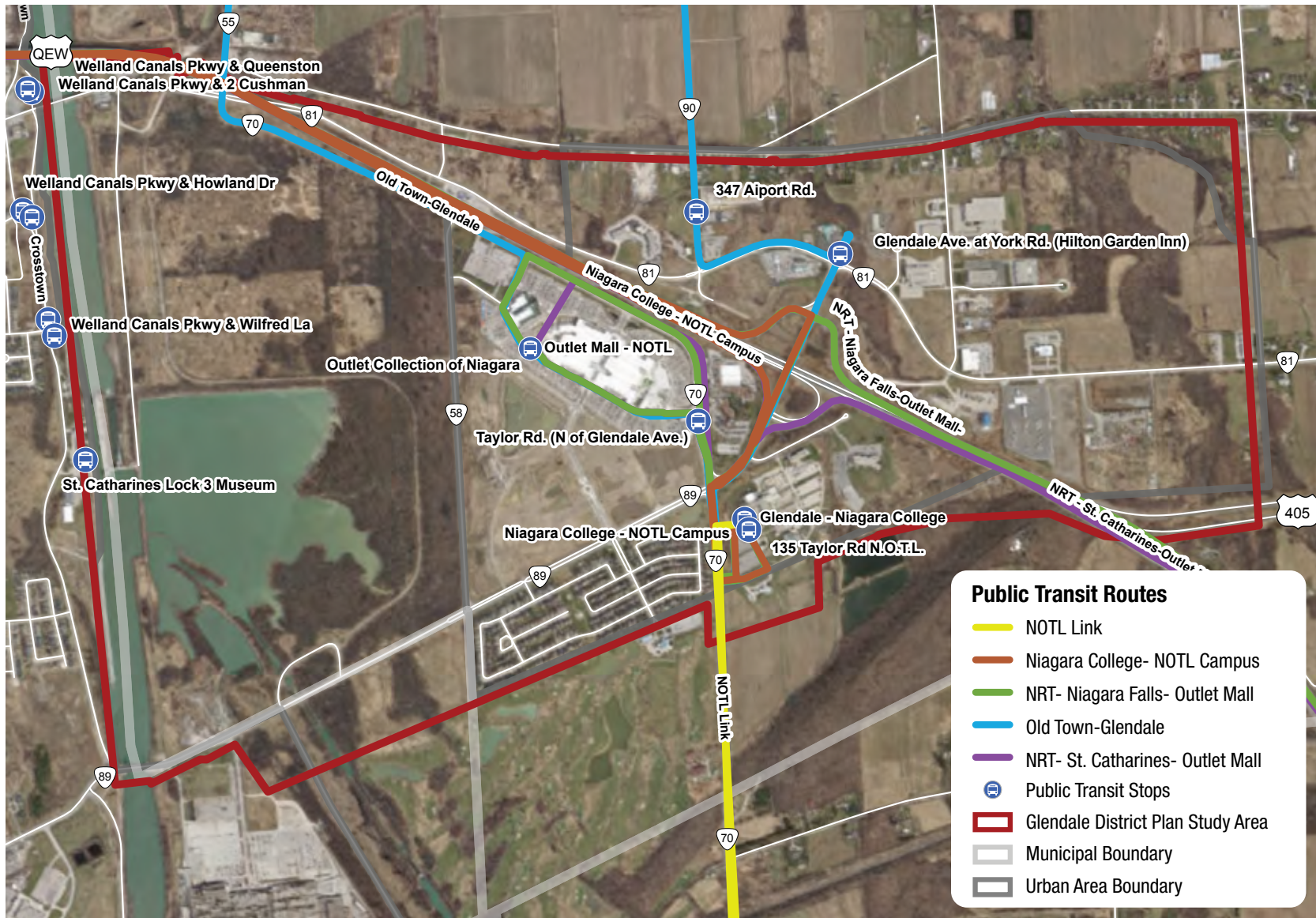


Additional site requirements to consider include:

- Pick-up and drop-off spots for micro-transit and ride-sharing services for transfers;
- 1 or 2 spots for specialized transit pick-up and drop-off with one spot that can accommodate a larger van 30' size
- Provision for bike shelter/ bike rental kiosks near the terminal
- Passenger amenities such as transit shelters, benches, and waste receptacles
- Access to bus-bays through covered walkway/ corridor is desirable
- Washroom amenities for drivers
- Access and egress roads/ driveways for the unimpeded flow of bus traffic; and,
- A configuration that will allow for future expansion of the bays should the need arise in the future.

Types of buses: 60 foot articulated, 40 foot, and GO Buses

Public Transit Routes



6.5 Future Transportation Connections

The Glendale Demonstration Plan identifies two possible locations for future transportation connections east and west of the Glendale Avenue interchange. These connections will provide additional vehicular or active transportation links in the future. Additional technical investigation and consultations will be required through future transportation study.

6.6 Active Transportation Network

The active transportation network includes on-road and off-road cycling and pedestrian facilities. As noted in the key directions, providing these active transportation connections are important to creating and maintaining a complete community. There are currently sidewalks and on-street bike lanes on several roads in the study area. However, there are missing links and opportunities to complete and enhance the active transportation experience.

The Active Transportation Table provides information on the existing active transportation network and any recommended strategic improvements.



Active Transportation Network

Roadway	Cyclist Facilities	Pedestrian Facilities	Recommended Strategic Improvements
Queen Elizabeth Way (QEW)	None	None	None
Regional Road 58 (Homer Road)	None	None	Incorporate cyclist and pedestrian facilities coinciding with roadway reconstruction
Regional Road 70 (Taylor Road)	1.00 Metre-wide asphalt paved shoulder (northbound and southbound)	1.80 Metre-wide concrete sidewalk (discontinuous)	Incorporate cyclist and pedestrian facilities coinciding with roadway reconstruction
Regional Road 81 (York Road)	None	None	Incorporate cyclist and pedestrian facilities coinciding with roadway reconstruction
Regional road 89 (Glendale avenue)	1.50 Metre-wide bike lanes (eastbound and westbound) discontinuous	1.80 Metre-wide concrete sidewalk (discontinuous) 3.00 Metre-wide asphalt multi-use path (continuous)	Infill gaps in cycling and pedestrian facilities (concrete sidewalks) Note: bike lanes scheduled for 2024 in 10-year cap. plan
Regional Road 90 (Airport Road)	None	None	Incorporate cyclist and pedestrian facilities coinciding with roadway reconstruction
Queenston Road	None	None	Incorporate cyclist and pedestrian facilities coinciding with roadway reconstruction
Townline Road	None	None	Incorporate cyclist and pedestrian facilities coinciding with roadway reconstruction
Niagara-on-the-Green (Main Street)	None	1.80 Metre-wide concrete sidewalk on both sides	Direction from district plan
Concession 7 Road	None	None	Incorporate cyclist and pedestrian facilities coinciding with roadway reconstruction

7.0 Implementation Plan

The District Plan will be implemented through an amendment to the Niagara Region Official Plan where the vision, objectives and key directions are embedded into policy. This policy direction will ensure that future decisions within the Glendale study area are consistent with the vision and direction of the District Plan and any other implementing strategies as a result of this plan.

The Niagara Region will work with the Town of Niagara-on-the-Lake to update the Glendale Secondary Plan to further assess the land use concept and prepare detailed policy and mapping to implement the direction of the District Plan. The Secondary Plan update will include supporting technical studies to test the land uses and ensure that the final plan is both feasible and achievable.

The lands within the City of St. Catharines are subject to the Ministry of Natural Resources and Forestry's decision on the deferral. If the decision amends the Niagara Escarpment Plan designation to Urban Area it would be the first step towards implementing the land use concept as shown in the District Plan. Since these lands are relatively small and owned by one landowner, the landowner would need to make the required planning applications to the City of St. Catharines and Niagara Region to implement the vision of the District Plan. This will also require consideration of an urban boundary expansion.

The success of the Glendale District Plan relies on ongoing, consistent collaboration amongst the key partners and stakeholders. The Technical Advisory Committee membership will be reviewed to determine continued participation. Since some of the recommendations will be implemented through this ongoing collaboration, the Technical Advisory Committee will continue to meet to discuss the strategies and recommendations of the District Plan.

Following the endorsement of the District Plan, an detailed action plan will be prepared in consultation with the Technical Advisory Committee. The detailed action plan will review the following implementation plan to assign tasks, timing and next steps.

Implementation Plan

Key Direction 1: Protect and enhance the landscape/natural features

Strategies	Recommendations
1a: Create an Eco-park, investigate opportunities for other complimentary uses	<ul style="list-style-type: none"> • Work with the St. Lawrence Seaway Authority (or future owner) and local municipality to investigate opportunities for the creation of an Ecological Park with passive recreational uses. Investigate opportunities for a Geopark site • Work with Ontario Ministry of Agriculture, Food and Rural Affairs /Ministry of Municipal Affairs and Housing to review the Specialty Crop designation and investigate opportunities for complimentary uses within the Eco Park that celebrate Niagara
1b: Preserve and protect views and vistas to the Niagara Escarpment, natural and the agricultural areas	<ul style="list-style-type: none"> • Prepare a viewshed analysis/line of sight to determine the important views and vistas to protect. Implement guidance through urban design policy in the updated Secondary Plan
1c: Appropriately transition from built form and urban uses to the rural area	<ul style="list-style-type: none"> • Review and recommend appropriate transitions to the agricultural area in terms of land use and built form. Prepare transition policy for the Secondary Plan
1d: Review and confirm Natural Heritage System	<ul style="list-style-type: none"> • As part of the Secondary Plan exercise, undertake an environmental planning study to review/coordinate the natural heritage policy and mapping to provide consistent direction for boundary identification, buffer protection and mitigation measures • Promote the natural features of the Glendale area through marketing opportunities
1e: Leverage the connection to the UNESCO World Biosphere, agricultural lands, wine industry, etc. as a unique destination	<ul style="list-style-type: none"> • Through the creation of urban design/sustainability guidance, investigate ways to incorporate natural heritage features into the design of new developments • Consider connecting to Niagara College environmental studies programs to determine ways to leverage the natural heritage system as a hands on resource for future educational opportunities

Key Direction 2: A convergence for the area's trails and active transportation facilities

Strategies	Recommendations
2a: Provide opportunities to connect new active transportation facilities with existing and proposed trails	<ul style="list-style-type: none"> • Enhance connections to the Welland Canal and Bruce Trail, where possible • Investigate opportunities to enhance the streetscape and implement complete streets. Coordinate efforts through the capital budgeting process for identified improvements • Review the existing trail network and investigate new connections from the on-street network, Eco Park opportunities, etc. • Prepare a wayfinding study that will direct users to trails and destinations throughout the study area • Investigate ways to incorporate and celebrate the former Welland Canal location • Explore opportunities to incorporate a Geopark site within the Glendale area
2b: Connect the on-street bike lane along Glendale Avenue from Homer Rd to the Welland Canal	<ul style="list-style-type: none"> • The reconstruction of Glendale Avenue from Homer Road to the Welland Canal (including multi-use path) is currently in the 10 year capital forecast for 2024. This item should be flagged to ensure that it is not pushed back was originally budgeted for in 2021 • Review and incorporate the Welland Canals Museum as a destination
2c: Create more opportunities to enhance walkability. Review the sidewalk connections and look for opportunities to connect and enhance the pedestrian network	<ul style="list-style-type: none"> • Investigate guidelines for a walkability audit (or other measurement) for new development • Through development review, assess the street network to recommend active transportation connections to destination locations (i.e. Main Street, Transit Hub, etc.) to encourage walking over vehicular use
2d: Continue to investigate additional opportunities for connection from north Glendale to south Glendale over the QEW	<ul style="list-style-type: none"> • Work with Ministry of Transportation, Niagara College, Niagara-on-the-Lake and the owner(s) to the north, to assess opportunities for active transportation and/or vehicular overpass opportunities east of Glendale Avenue interchange • Work with Ministry of Transportation, Niagara College, Niagara-on-the-Lake and the owner(s) to the north, to assess opportunities for active transportation connection from the Outlet Collection of Niagara to the north over the QEW • Investigate funding/grant/incentive opportunities for active transportation connections

Key Direction 3: Provide an accessible and connected transit system to serve the Glendale area, the greater Niagara Region and beyond

Strategies	Recommendations
3a: Provide a multi-modal transit hub for inter-regional transit, GO Transit, tourism buses, and terminal facilities	<ul style="list-style-type: none"> Investigate land requirements and how the site can evolve over time Work with the Inter-municipal Transit Working Group, Niagara College, the Local Municipality and others to coordinate transit operation efforts. Work with transit providers, or investigate other innovative approaches, to provide on demand service to connect the area Work with the Niagara District Airport to enhance connections and frequency of transit options
3b: Create synergies between the transit and community hub focus by locating these facilities and functions in close proximity to one another	<ul style="list-style-type: none"> Work with Ministry of Transportation and others (as appropriate) to determine the potential land use opportunities for the excess interchange lands for possible gateway features.
3c: Continue to encourage a GO Transit Rail stop location within 2 kilometre of the study area	<ul style="list-style-type: none"> Continue to work with the GO Implementation Team and Metrolinx to encourage an additional GO train stop. Possible location could include south of Glendale study area on Taylor Road.
3d: Provide guidance for integrating transportation demand management objectives into development plans	<ul style="list-style-type: none"> Investigate opportunities for shared parking facilities between the new development and the Outlet Collection of Niagara Investigate opportunities for car share or bike share at the transit hub or integrated into higher density development proposals
3e: Investigate and integrate gateway features at major entry points into the District	<ul style="list-style-type: none"> Prepare a gateway design strategy as an important component to placemaking
3f: Create a wayfinding strategy to co-ordinate directional signage for vehicles, cyclists, pedestrians and transit users. Ensure that the history and character of Glendale is reflected in the wayfinding strategy	<ul style="list-style-type: none"> Prepare a wayfinding strategy that represents the uniqueness of Glendale itself but also signifies an entry into the greater Niagara area

Key Direction 4: Create a strategy to build on existing assets within Glendale and linking Glendale with the greater Niagara-on-the-Lake and the Niagara Region

Strategies	Recommendations
4a: Protect an identified employment area in Glendale	<ul style="list-style-type: none"> Identify and plan for an Employment Area as required by the Growth Plan and other Provincial Policies Protect an identified employment area over the long term in Glendale Investigate the availability and opportunity for the creation of an employment incentive program to attract employers Create a branding plan for the employment area which features the prominent, premier location of the employment area in proximity to the airport, QEW and the international borders
4b: Create a policy framework for the creation of an innovation hub	<ul style="list-style-type: none"> Work with the Technical Advisory Committee to create a strategy that will attract entrepreneurial businesses, start-ups and incubator/shared spaces that complement the Niagara College programs Investigate opportunities for promotion of agri-business
4c: Integrate Niagara College into the District, accommodate its expansion and create a focus with food/technology industries	<ul style="list-style-type: none"> Investigate opportunities for connection between Niagara College and the employment area
4d: Prepare a tourism strategy	<ul style="list-style-type: none"> Work with the Ontario Tourist Centre to integrate this resource into the Transit/Community Hub Work with the broader town and region and encourage work with Tourism Partnership of Niagara and the Chamber of Commerce to prepare a tourism strategy that will connect Glendale with the Niagara-on-the-Lake and encourage tourist offerings/events/activities within the District
4e: Work with the Niagara District Airport to identify synergies with Glendale, Niagara-on-the-Lake and Niagara Region	<ul style="list-style-type: none"> Work with the Niagara District Airport, the local municipality and the other partners to prepare an Airport Strategy/Master Plan to review connections and synergies between Glendale and the airport
4f: Create a branding strategy for the Employment Area	<ul style="list-style-type: none"> Build off of the Niagara District Airport Strategy/Master Plan and create a branding/marketing strategy for the Glendale Employment Area.
4g: Prepare a Commercial Lands Review to analyze the amount of commercial space that can be supported in the study area	<ul style="list-style-type: none"> Complete the Commercial Land Review as part of the Secondary Plan to provide the rationale, background information and targeted engagement strategy for attraction of commercial uses. Actively engage with the major grocery store chains to attract a grocery store to the area. Consult with the owners of the Outlet Collection of Niagara to determine the long-term vision for the outlet mall and if flexible policy framework would assist in achieving this vision
4h: Investigate opportunities for private sector sponsoring (naming rights) to offset the costs of community facilities	

Key Direction 5: Create a “main street” from the Outlet Collection of Niagara to the adjacent urban neighbourhood

Strategies	Recommendations
5a: Require all buildings along the Main Street area to have commercial at grade	<ul style="list-style-type: none"> • Prepare Secondary Plan policy and zoning that requires at grade commercial uses along the main street. Zoning for the Main Street shall consider flexible setbacks, patios, etc.
5b: Prepare specific urban design guidance for the Main Street area	<ul style="list-style-type: none"> • Provide design guidance for uses adjacent to the Outlet Collection to avoid backlotting • Design the Main Street to accommodate temporary closures for community events, activities, festivals • Investigate the opportunity for a public realm incentive program • Provide direction for wider sidewalks, consistent street furniture, native species of plantings, lighting, etc.
5c: Review the viability of commercial lands within the main street. Actively engage with retail, service and grocery store chains to attract a new commercial offerings to the area	<ul style="list-style-type: none"> • Through the Commercial Lands Review, the short and long term viability should be investigated for the main street commercial. This work should consider the layout of the main street, the type of commercial offerings, the permanent population and the visitor/tourist population, etc. It should review the main street and provide specific recommendations to assist in achieving success. • Create a strong connection to agriculture, investigate the opportunity for seasonal or permanent Farmers’ Market
5d: Work with the owner of the Outlet Collection of Niagara to understand the long term plan	<ul style="list-style-type: none"> • Prepare a plan for the Main Street that will allow for a positive interaction and connection with the Outlet mall. Guidance for this interface will be provided in the urban design guidelines.

Key Direction 6: Provide a diverse range of housing ensuring choice and affordability

Strategies	Recommendations
6a: Encourage a range and mix of medium to high density housing to achieve a population that will support a complete community	<ul style="list-style-type: none"> Review the Housing and Homelessness Action Plan and the Region's Housing Strategy. Review housing need with affordable housing providers/operators in Niagara and work with Niagara Regional Housing to determine need for affordable housing with Glendale and surrounding area
6b: Encourage a range of unit sizes to accommodate different family sizes	<ul style="list-style-type: none"> Prepare policy direction that require a percentage of new units in apartment buildings to have 2-3 bedrooms to attract and retain families Investigate housing and service opportunities for indigenous supportive housing given the close proximity to the Niagara Regional Native Centre
6c: Create design guidance to inform how new higher density built form can be appropriately integrated with the existing community	<ul style="list-style-type: none"> Require sun/shadow studies for any proposed new buildings taller than 6 storeys Prepare additional guidance that will assist in community design for a range of built form
6d: Provide affordable housing options within the study area for both rental and private ownership	<ul style="list-style-type: none"> Require a minimum of 25% of new housing built to be affordable
6e: Integrate age-friendly and accessible best practices in design of buildings, spaces and the public realm	<ul style="list-style-type: none"> Prepare policy direction for the Secondary Plan that encourages and supports a range of housing types appropriate to the Glendale area Work with Public Health to pilot a Health Impact Assessment tool to assess impacts and reduce social inequities in health
6f: Work with Niagara College on options for student housing	<ul style="list-style-type: none"> Participate in Niagara College's Master Plan project and consider/encourage purpose built student housing on site

Key Direction 7: Create public/civic space as a focus for Glendale

Strategies	Recommendations
7a: Plan for a central recreation/community hub location for the community. Promote partnerships with various stakeholders to create centralized services for the community in one location	<ul style="list-style-type: none"> Investigate possible partnerships for the community/recreation hub (i.e. public health, police services, Niagara College, Niagara Regional Native Centre, other service providers) to create a space that centralizes services for the community in one location Investigate funding/grant/incentive opportunities
7b: Consider 4-season community needs, cultural offerings	<ul style="list-style-type: none"> Connect to the tourist strategy
7c: Provide outdoor recreational facilities to support the community needs	<ul style="list-style-type: none"> Review recreational needs and undertake a community engagement exercise to gather input on park design Provide park/open space areas throughout the District area to facilitate informal meeting/gathering space Create urban design guidance for different scales of parkland and open space to encourage opportunities throughout the District Plan area
7d: Incorporate public art that is unique to the Glendale and Niagara area	<ul style="list-style-type: none"> Create opportunities for placemaking throughout the District Create a strategy for public art installation Investigate opportunities for tactical urbanism throughout the study area. Use tactical urbanism enhancements to create excitement and energy in the community. Use storytelling as a way to create a narrative for Glendale
7e: Work with the school boards to evaluate and understand need	<ul style="list-style-type: none"> Investigate opportunities for combined campuses, urban foot prints and shared facilities.

Key Direction 8: Use sustainability measures related to resiliency and climate change

Strategies	Recommendations
8a: Prepare a sustainability strategy for Glendale	<ul style="list-style-type: none"> • Implement sustainability performance indicators and benchmarks for new development, redevelopment and intensification opportunities. Connect these enhanced requirements to Niagara Region incentive programs, where applicable • Ensure that the strategy considers sustainability measures for the entire study area, at a larger block level and for individual properties • Investigate/encourage smart cities technology as part of new development proposals • Prepare detailed streetscape cross sections for the Glendale streets and included in the Secondary Plan
8b: Encourage sustainable, green streets and parking areas throughout the District	<ul style="list-style-type: none"> • Use bioswales, landscape medians and other surface water treatment techniques to manage runoff • Prepare green infrastructure standards for sewer, waste, water, stormwater and lighting
8c: Investigate innovative stormwater management techniques	<ul style="list-style-type: none"> • Use stormwater management facilities as community focal points and provide opportunities for trail connections, seating areas and enhanced landscaping.
8d: Encourage green building design	<ul style="list-style-type: none"> • Prepare Green Building Design guidance and provide direction through the Secondary Plan to encourage new development and redevelopment to implement more efficient, green building design • Consider District Energy to provide for on site renewable energy generation and cogeneration and district energy systems

Key Direction 9: Coordinate of infrastructure capacity review and upgrades

Strategies	Recommendations
9a: Monitor the implementation to proactively plan for infrastructure upgrades	<ul style="list-style-type: none"> • Prepare a detailed phasing plan as part of the Secondary Plan update
9b: Investigate the use of a Community Planning Permit System	<ul style="list-style-type: none"> • Review the opportunities and challenges of implementing a Community Planning Permit System within the Glendale area
9c: Allow for consideration of cross-border servicing between Niagara-on-the-Lake and St. Catharines	<ul style="list-style-type: none"> • Work with key stakeholders in the study area to understand their (re)development plans and impacts to infrastructure capacity
9d: Encourage the Town to investigate an area specific development charge by-law	<ul style="list-style-type: none"> • Consider development charges and other revenue sources for infrastructure improvements
9e: Provide direction for a Community Benefits Charge Strategy	<ul style="list-style-type: none"> • Include community amenities in the future Community Benefits Charge Strategy.

Acknowledgements

The project team wishes to thank the following organizations and committees for their participation and collaboration on this project:

- Town of Niagara-on-the-Lake
- City of St. Catharines
- Niagara College
- St. Lawrence Seaway Authority
- Niagara Regional Native Centre
- Ministry of Transportation
- Business owners and landowners throughout the study area
- Members of the Technical Advisory Committee
- Members of the Community Focus Group
- All participants at the various Public Information Centres

Glendale District Plan

A Complete Community



niagararegion.ca/projects

August 2020