A VISION FOR THE...

ALGONQUIN STATION AREA

A transit-oriented community.



Queen's University

Ottawa

A Vision for the Algonquin Station Area

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Executive Summary

A Vision for the Algonquin Station Area

The Algonquin Station Area (ASA) is being redesigned to suit the needs of future residents and to improve transit connectivity across Ottawa. This project aligns with the City of Ottawa's plans to extend Line One of the O-Train light rail system west, with the extension scheduled to open in 2026. Algonquin Station functions as the interim terminus station until the line is extended to Barrhaven.

The conversion of the existing Algonquin BRT Station into a multi-modal hub facilitates the intensification of the ASA. This proposal outlines a plan for the redevelopment of the ASA to into a vibrant, livable and transit-oriented community.

This report presents two detailed development plans for the ASA, which encompasses the area surrounding the future Algonquin LRT Station. The contents of this report detail the efforts to achieve a complete 15-Minute Neighbourhood within the ASA, while implementing key principles associated with transit-oriented development. The recommendations of this report are intended to create a socially, physically, economically, and environmentally sustainable neighbourhood.

Vision

The Algonquin Station Area will become an inclusive, vibrant, and well-connected place to live, work, play, and learn. The site will serve as an important destination in the broader Ottawa area, integrating a mix of uses and public spaces to create a diverse, resilient, and complete community.

Study Area

The boundary of the ASA was established following detailed field work and subsequent analysis, considering the area's Zoning and Official Plan designations. The ASA contains College Square, Algonquin College, 100 Constellation Drive and Meridian Theatre.



Figure 0-1: Algonquin Station Area Boundary

Existing Conditions

Following a site visit and analysis, it became evident that the ASA and surrounding area lack pedestrian and active transportation connectivity, vibrant public spaces, and a mix of housing types. This is explained further in the following SWOC analysis.

Strengths (Internal) • Proximity to high-demand destinations. • Algonquin College. • Connectivity to the rest of Ottawa. • Recreational Opportunities.	Weaknesses (Internal) • Car-oriented environment. • Large surface parking lots. • Lack of affordable housing. • Absent public realm.
Opportunities (External) • Vacant and underutilized land. • Cultural diversity. • Increasing Population density. • Foundations of a 15-minute neighbourhood.	Challenges (External) • Gentrification and displacement. • Low demand for retail space. • Isolated parks. • NIMBYism.

Table 0-1: SWOC Analysis.

Case Studies:

Thirty case studies from around the world were collected to create a catalogue that offers inspiration, valuable lessons, and best practices for the redevelopment of the ASA. Tree key categories relevant to the ASA, including transit-oriented mobility hubs, greyfield redevelopment, and affordable housing were reviewed.

Case Study Takeaways:

- Community-Centric Design & Engagement:
- Mixed-Use Development:
- Sustainable & Resilient Design:
- Strategic Phasing:
- Access & Connectivity
- Partnerships & Financing

Project Outline

The project team has prepared two alternative design concepts for the ASA. The first concept considers financial and practical constraints, while the second presents an unconstrained vision for the ASA. Both concepts were evaluated against criteria established through prior research and analysis.

The project team developed the following six design principles for the area:

1. Establish an interconnected network of greenspaces, greenways and community spaces.
2. Design a vibrant main street, complemented by a network of active frontage streets.
3. Develop a series of distinct nodes, each with its own unique character.
4. Create safe and accessible active travel pathways to foster a shift toward active transportation.
5. Prioritize high-density development near rapid transit hubs and corridors to create a vibrant destination for residents, students, and visitors alike.
6. Utilize a variety of building typologies and approaches to address the larger-scale need for affordable housing.

Net Precinct Totals	Gross Floor Area (m^2)	Open Space Area (m^2)	Dwelling Units	Potential Residents
Residential Area A	132,417	15,897	309	774
Residential Area B	186,487	13,081	1,620	4,051
Residential Area C	53,372	14,038	407	1,019
Downtown Area	441,248	39,254	3,265	8,163
Cultural Hub Area	54,734	4,802	440	1,101
Older Adults Area	79,314	12,662	468	1,169
Activator Area	355,583	41,603	2,799	6,999
Totals	1,303,156	141,337	9,310	23,275

Table 0-2: Concept 1 Key Statistics



Figure 0-2: Concept 1 Design



Figure 0-3: Proposed Main Street



Figure 0-4: Concept 2 Design

Net Precinct Totals	Gross Floor Area (m^2)	Office Area (m^2)	Residential Area (m^2)	Open Space Area (m^2)	Dwelling Units
Residential Area A	119,836	0	57,849	22,624	697
Residential Area B	195,571	0	141,764	13,081	1,708
Residential Area C	53,371	0	33,817	14,038	407
Downtown Area	387,791	3,179	237,472	31,038	2,861
Cultural Hub Area	57,530	0	38,784	4,802	467
Older Adults Area	79,314	2,552	38,820	12,662	468
Activator Area	292,636	0	191,746	37,315	2,310
LRT Park Cap	46,568	0	0	10,220	0
Totals	1,186,052	5,732	740,251	135,561	8,919

Table 0-3: Concept 2 Key Statistics



Figure 0-5: Concept 2 Park LRT Cap Rendering

Acknowledgments, Acronyms and Definitions

Land Acknowledgment

The project team would like to acknowledge that the City of Ottawa and Algonquin Station are located on the unceded territory of the Algonquin Anishinaabe Nation, and that Queen's University is situated on traditional Anishinaabe and Haudenosaunee territory.

As aspiring professional planners, we also recognize that the planning profession is rooted in Western practices, with a history of interventions tied to colonialism. With this in mind, we move forward with a commitment to fostering a planning practice that respects and uplifts Indigenous voices.

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Acronyms

AODA - Accessibility for Ontarians with Disabilities Act

ASA - Algonquin Station Area

BRT - Bus Rapid Transit

CMHC - Canada Mortgage and Housing Corporation

DA - Dissemination Areas

DSA - Demographic Study Area

DPAs - Design Priority Areas

FAR - Floor Area Ratio

FSALUD - Forward Sortation Area Local Unit Delivery

FSI - Floor Space Index

GFA - Gross Floor Area

LEED – Leadership in Energy and Environmental Design

LRT - Light Rail Line

MCDP – Master Campus Development Plan

MUP - Multi-use Pathway

MTSA - Major Transit Station Areas

NCC – National Capital Commission

OP – Official Plan

PPS - Provincial Planning Statement

POP – Privately Owned Public Space

ROW - Right-of-Way

SURP – School of Urban and Regional Planning

TOCs – Transit Oriented Communities

TODs - Transit Oriented Developments

Definitions

5 Big Moves- Five policy directions to manage and direct physical change in the New OP. The moves are growth, mobility, urban design, resiliency, and economy.

15-Minute Neighbourhood - A neighbourhood where residents have access to amenities and services within a 15-minute walk. This project is grounded in the idea of a 15-Minute

Neighbourhood with a pedestrian friendly environment.

Affordable Housing - Housing where the monthly carrying cost of a home is affordable to a household at or below the City of Ottawa's 40th income percentile.

Algonquin Station – The terminus light rail transit station the City of Ottawa is building for the extended O-Train Line 1.

College Square – Large shopping centre within the project's design and study area.

Floor Space Index (FSI)- The ratio of gross floor area to parcel area.

Greyfield -Economically outdated or underused land.

Gross Density – Population, dwelling units or GRA divided by the total area of the neighbourhood, including streets, parks and institutional uses.

Gross Floor Area (GFA)- Total amount of floor area (in square metres) inside a building.

Infill: construction on undeveloped land.

Light Rail Transit (LRT) - Passenger urban rail being built in Ottawa.

Mobility Hubs - Key connectivity points where multiple rapid transit lines intersect, balancing various transportation modes and supporting significant residential and employment densities.

Net Density - Dwelling units per net hectare. I.e., units divided by the area of all privately owned land or GRA divided by the parcel area.

Transit-Oriented Development (TOD): Development within 600 metres of a rapid transit station (per the City of Ottawa). TODs are meant to be compact, dense, mixed-use and provide good connectivity to the station.

Woonerfs – a common space created to be shared by pedestrians, bicyclists, and low speed motor vehicles. They are typically streets without curbs and sidewalks, and vehicles are slowed by placing trees, planters, parking areas, and other obstacles in the street.

1.0 Introduction

1.1 Mandate

Each year, second-year graduate students in the School of Urban and Regional Planning (SURP) program at Queen's University work as a consulting team for a public sector client. These partnerships provide students with practical, hands-on experience developing professional plans that address real-world urban and regional planning challenges. Through this initiative, students apply theoretical knowledge, conduct in-depth research, engage with stakeholders, and deliver actionable solutions tailored to the client's objectives and community needs.

1.2 Project Definition

The project team, comprised of 11 students from the School of Urban and Regional Planning at Queen's University, was retained by the City of Ottawa to develop a vision for the area surrounding the future Algonquin Light Rail (LRT) Station. The boundary of the Algonquin Station Area (ASA) was established following a detailed site visit and subsequent analysis, considering the area's zoning and Official Plan designations (see Figure 1-1).



1-1: Algonquin Station Area Map

1.3 Intent

The intent of this project is to guide future development surrounding the Algonquin LRT Station by proposing a transit-oriented community. The design creates a vibrant public realm and offers diverse housing options, contributing to Ottawa's ambition to be North America's most livable mid-sized city.

This proposal aligns with the City of Ottawa's Official Plan, incorporating objectives such as the Strategic Directions, the 5 Big Moves, and guidelines for Protected Major Transit Station Areas (PMTSAs). It also integrates Transit-Oriented Development Guidelines, 15-Minute Neighbourhood principles, accessibility standards, and insights from several North American case studies.

The 15-minute neighbourhood concept, as described in the City of Ottawa's Official Plan, is designed to help residents access their daily and weekly needs within walking distance of their homes by grouping essential services and amenities together. These neighbourhoods focus on fostering safe and enjoyable connections between locations, making walking and rolling practical and accessible for everyone. This approach cuts transportation costs, enhances quality of life, and encourages regular physical activity.

Featured in the 'Five Big Moves,' 15-minute neighbourhood principles support various objectives including urban densification, economic growth, sustainability, climate action, gender equity, and cultural development. Furthermore, planning for 15-minute neighbourhoods is essential for building health resilience, contributing to the creation of healthy and inclusive communities.

The project team's design focuses on two main precincts within the ASA: the redevelopment of College Square on the east side of Woodroffe Avenue, and infill development on public lands to the west. The project will be implemented in multiple phases to ensure effective growth and sensible transition.

1.4 Study Approach

1.4.1 Site Visit & Municipal Stakeholder Interviews

The project team began this project with a virtual tour of the ASA, followed by an in-person site visit. During the site visit, the project team was divided into five groups to explore the ASA on foot. Detailed notes and photographs documented the built environment, quality of transportation modes, and notable natural features. Team members also visited case studies throughout Ottawa to gather insights. This information was consolidated to enhance the team's understanding of the area and to conduct a strengths, weaknesses, opportunities, and challenges (SWOC) analysis (see Chapter 5).



Figure 1-2: Municipal Stakeholder Meeting Attendees

Following the site visit, the team conducted group interviews with City of Ottawa staff to gain insights into stakeholder interests, perspectives, and priorities related to the ASA. The primary stakeholders included policy and transportation planners and urban designers.

1.4.2 Research & Analysis

Following the site visit and stakeholder interviews, the project team conducted an in-depth analysis on the ASA's history, market data, and applicable policies to inform development recommendations. Case studies were also reviewed to identify best practices in three key categories relevant to the ASA: transit-oriented mobility hubs, greyfield redevelopment, and affordable housing. These findings shaped the vision and recommendations for the ASA.

1.4.3 Design Charette

The project team hosted a design charette on October 11th, 2024, bringing together a diverse group of planning professionals, including stakeholders from the City of Ottawa, the City of Kingston, as well as planning students and professors from Queen's University. Participants developed design concepts for the ASA that contributed to the final proposals crafted by the project team. More information on the design charette can be found in Chapter 8.

1.4.4 Design Concepts and Evaluation

Following the design charette, the project team initiated the formal design process and developed two distinct concepts. The first concept considers financial and practical constraints, while the second presents an unconstrained vision for the ASA. Both concepts were evaluated against criteria established through prior research and analysis. While each represents a significant improvement over current conditions, the first concept emerged as the preferred option due to its practicality and alignment with the project's vision.

1.4.5 Report Structure

This report is organized to follow the study's chronological progression. It begins with an analysis of the existing condition of the ASA, policy context, demographics, and key stakeholders. Based on these factors, a SWOC analysis is presented, along with relevant case studies in three categories pertinent to the ASA. The report then details the charrette process and its findings. Subsequently, it introduces the guiding principles and vision for the project, followed by the final design concepts for the ASA. The report concludes with recommendations for implementing its findings.

1.5 History

Ottawa is the traditional, unceded territory of the Anishinaabe Algonquin people. Indigenous peoples first inhabited the area 11,000 to 8,000 years ago after glacial retreat of the Wisconsin glaciers. The Ottawa River, named the Kichi Sibi, was an important trading network for Indigenous peoples who used the surrounding area as a meeting place, trading ground, and hunting ground for thousands of years before European contact (Ottawa Historical Society, n.d.).

European settlements began in Nepean Township following the area's first survey in 1729. The first settlement came in 1810 when Ira Honeywell constructed a home. The survey for Baseline Road was undertaken in 1833 by John Grierson. This road served as a base line delimiting the northern limit of Nepean Township. Woodroffe Avenue was named after the farm estate of Captain George W. Baker, named after the Woodroffe estate in Tipperary, Ireland (Elliott, 1991).

Development, which was slow in the first 20 years of the Township's existence, boomed between 1826 and 1839 during the construction of the Rideau Canal, and again in the 1840s. Early residents worked as farmers during the warmer months and as lumber drives in the winter. In 1872, a record 20 suburban plans were drawn up in Nepean. In 1891, the creation of a commuter rail line, the Ottawa Electric Railway, kickstarted new suburban development in Nepean as people were able to commute to work in Ottawa via train. Between 1889-1950, a significant amount of land was annexed from Nepean by the City of Ottawa, slowing the area's growth (Welch & Payne, 2015). Much of the ASA and surrounding area was farmland until the 1950s and 1960s. In 1950, development on land east of Merivale Road began. Largely funded by National Housing Act-assisted loans, this development became the Meadowlands neighbourhood. In 1958, lands along the south-west corner of Baseline Road and Woodroffe Avenue were purchased by the federal government to house the new headquarters for the Department of National Defence (DND) - despite ultimately being constructed in downtown Ottawa. The 1960s saw a boom of development in Nepean as sewer and water infrastructure were installed, allowing for the development of high-rise apartment buildings and townhomes. This provided greater housing variety in the area (Elliott, 1991).

The lands on the south-east corner of Baseline Road and Woodroffe Avenue were sold to commercial developers in 1960. In 1961, the Shoppers City West mall opened. In the following years, a gas bar, car wash, beer store, fast food restaurant, and additional stores were added to the area. In the late 1960s, landowner Harry Leikin sold part of the farmland south of Shoppers City as a site for The Ontario Vocational Centre (OVC) (Elliott, 1991).

The OVC opened in 1965 and became Algonquin College of the Applied Arts and Technology in 1967 after the OVC and the Eastern Ontario Institute of Technology (EOIT) merged. In 1974, the former DND land was handed over to the Canada Mortgage and Housing Company (CMHC) for the purpose of building a

demonstration housing project – though this idea was ultimately scrapped. In 1980, Minto Construction purchased much of this land and developed the Centrepoint neighbourhood (Elliott, 1991).



Figure 1-3: Shoppers City West, 1961 (Facebook: Bygone Nepean).

Shoppers City was expanded in the late 1980s at the same time Baseline Transit Station was being constructed. Baseline Station has grown to become an important transit and transfer station along the Transitway for the City of Ottawa's transit provider, OC Transpo. In 1985, the City of Nepean purchased the land to construct Civic Square (now Ben Franklin Place at 101 Centrepoint Drive) to house City Hall and a branch of the Nepean library and a theatre. The Centrepoint Theatre, now Meridian Theatre, opened in 1988. In 2001, the City of Nepean, along with ten other urban and rural municipalities, was amalgamated with the old City of Ottawa to create the new City of Ottawa. In May 2001, the Peter D. Clarke Long Term Care Home, Ottawa's largest long term care home, opened. Shoppers City West was closed in July of 2001 and redeveloped as the College Square Shopping Centre. In 2003, the City of Ottawa began leasing 100 Constellation as their west office (Elliott, 1991).

Nepean was a township from 1792 to 1978 and a city from 1978 until its dissolution in 2001. In the early 20th century, Nepean experienced economic growth and an increase in population largely due to its proximity to Ottawa and its transformation from a rural township to a suburban area. Key infrastructure projects, including paved roads, the Canadian Pacific Railway, and the Britannia streetcar line, spurred development in the region. However, the unplanned subdivisions from the early 20th century hindered the overall efficiency and cohesiveness of this growth. Following World War II, the trend of suburbanization led to the development of suburban communities in Nepean (Elliott, 1991).

1.5.2 Annexation of Nepean

The 2001 annexation of Nepean marked a significant expansion of Ottawa's boundaries, integrating a diverse and rapidly growing suburban community into the nation's capital. This strategic move aimed to enhance service delivery, improve infrastructure, and promote cohesive urban development in response to increasing population pressures.

1.5.3 Planning and Design Implications

Nepean's historical development and eventual annexation by Ottawa have implications for the design of the ASA. As the area is organized in a low-density suburban pattern, there is an opportunity to shift towards mixed-use higher-density development through infill and the redevelopment of single-family homes into multi-unit housing or mixed-use developments. As many of Nepean's neighborhoods developed during the post-WWII suburban boom are aging and underutilized by today's density standards, there is opportunity for future redevelopment to focus on transforming the area into a more sustainable, walkable, and transit-oriented community.

2.0 Site Analysis

2.1 Environmental/Infrastructural Constraints

The existing conditions of the ASA and the surrounding area create numerous environmental and infrastructural constraints that are considered in the project's design.

2.1.1 Water and Contamination

The ASA is within the Intake Water Protection Zone. Concern for contaminated runoff from future development activity is high, as paved areas represent a significant portion of the ASA. Concerns about water contamination and general pollution arise from the ASA's proximity to neighbouring residential areas and parks.

2.1.2 Urban Heat Island Effect

The City of Ottawa's emergency rooms see an average of 86 patients each year with various heat-related ailments such as dehydration, heat exhaustion, and stroke. Figure 2-1 shows a heatmap for the ASA on July 18th, 2019, with temperatures ranging from 28 to 33 degrees Celsius. Currently, there is a noticeable lack of urban heat island (UHI) mitigation infrastructure such as trees and shade in the ASA. As temperatures continue rising, vulnerable populations such as older adults, young children, and people with pre-existing health conditions will be subject to greater risk of heat-related ailments.

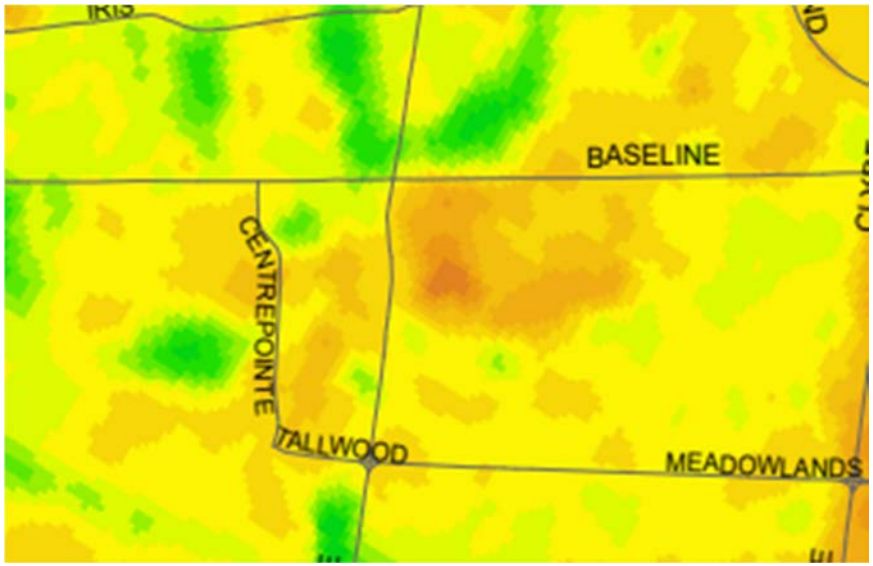


Figure 2-1: ASA temperatures (City of Ottawa, 2019).

2.1.3 Traffic and Vehicular Capacity

Baseline Road and Woodroffe Avenue are two arterial roads with six lanes that provide access to the ASA. Navaho Drive and College Avenue surround Algonquin College, with Navaho being a collector road. Constellation, Centerpointe, and Tallwood Drive are other notable collector roads that service the ASA. Traffic flow is anticipated to be affected by construction, with lane closures on Baseline Road and Woodroffe Avenue. Collector and local road closures will also disrupt traffic flow, potentially creating traffic problems within the ASA.

2.1.4 Noise and Air Pollution

Residential areas adjacent to Baseline Road, Woodroffe Avenue, and Centerpointe Drive experience elevated noise levels and reduced air quality due to traffic. These impacts are expected to intensify once construction begins, and sections of the streets are closed for redevelopment. While noise disruptions are likely to be temporary, it is important to acknowledge that air quality issues may persist beyond the construction phase.

2.1.5 Implications for Planning and Design

The redevelopment process should minimize construction impacts, including reducing runoff, managing traffic flows efficiently, and ensuring safe mobility for pedestrians and cyclists. Efforts to limit noise, air pollution, and the UHI effect should also be prioritised wherever possible. Redevelopment should also enhance connectivity to promote active transportation and improve current and future residents' overall quality of life.

2.2 Land Use Analysis

The ASA features various uses, most of which are institutional, as shown in Figure 2-2. Algonquin College occupies a significant portion of the eastern portion of the ASA. Commercial uses are predominantly located along Baseline Road and serve the surrounding residential neighbourhood, primarily comprised of single-detached dwellings. The ASA is characterized by low-density, segregated land uses with parking lots dominating the built environment, contributing to urban sprawl. The different land uses are further specified in the following sections to provide a clearer understanding of the built character and land uses in the ASA.

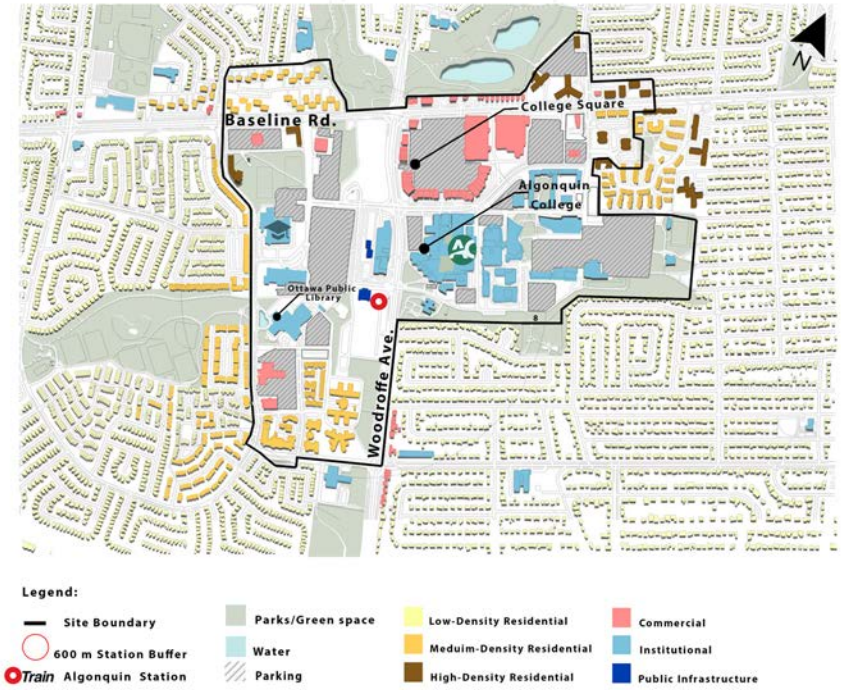


Figure 2-2: Existing land use map.

2.2.1 Commercial uses

Commercial uses in the ASA are typically one-storey shopping plazas or suburban commercial strips with large front setbacks that prioritize vehicle access and large parking lots. College Square is predominantly comprised of large format “big box” stores. On the north side of Baseline Road are strips of commercial buildings featuring 2-3 storey structures that resemble residential dwellings. These contrast with the large format retail stores across the street.



Figure 2-3a: Large formal retail store with a vast parking lot.



Figure 2-3b: House-like commercial uses along Baseline Road.

2.2.2 Residential uses

Residential uses within the ASA boundary are scattered along Baseline Road, with a small portion situated near Tallwood Drive. These uses comprise a variety of building types, architectural styles, and densities. Residential units on the north side of Baseline Road are mainly 1960s apartment-style buildings characterized as bulky structures surrounded by underutilized landscapes and parking lots. Newer mid-rise townhouses are also present with reasonable setbacks from Baseline Road.

Residential uses near Tallwood Drive include low to mid-density townhouses, a retirement community, and a nursing home. The block structures found in this area contrast with the residential neighbourhoods surrounding the ASA, which feature single-detached dwellings in a cul-de-sac road pattern.



Figure 2-4a: Townhouses built close to the sidewalk along Baseline Road.



Figure 2-4b: 1960’s Apartment-style building along Baseline Road.



Figure 2-4c: Apartment buildings with main elevations facing parking lots.

2.2.3 Institutional uses

Institutional uses are located at the centre of the ASA, with the majority occupied by Algonquin College. On the west side of the ASA is the Ottawa Public Library and Theatre, Ottawa Public Health and Court Offices building. Sir Guy Carleton Secondary School is also situated along Centerpointe Drive and Constellation Drive, serving the surrounding residential neighbourhoods, including Centerpointe and Parkway Park. Large parking lots accompanying several buildings, creating a car-centric environment.





Figure 2-5a&b: Shows underutilized institutional uses with large parking lots.

2.2.4 Parks & Green Spaces

Ryan's Farm Park is located along the ASA's southeast boundary, serving as a connection between residential neighbourhoods and Algonquin College. Legacy Skatepark is situated west of Algonquin Station and is a popular gathering destination that is heavily used by teenagers, despite being surrounded by parking lots and transit roads. Tallwood Park is located along Tallwood Drive and has poor accessibility for residents to the north due to its separation by wide roads. Centerpointe Park is located between Centerpointe Drive and is one of the major gathering destinations for residents living in the nearby area. There are various trails and multi-use pathways that connect from this park to the ASA, such as the Experimental Farm Pathway and Pinecrest Creek Pathway.



Figure 2-6a: Ryan's Farm Park.



Figure 2-6b: Legacy Skate Park.

2.2.5 Public Infrastructure

Algonquin Station is located at the centre of the ASA, serving as the temporary terminus station for the line 1 expansion of the O-Train and as the transfer station between the future Baseline Bus Rapid Transit (BRT) route and local bus routes. The new O-Train expansion will run along Woodroffe Avenue, serving Algonquin College and the surrounding residential neighbourhoods. Algonquin Station promotes active transportation in the area and offers many bike parking spaces and bike repair stations. Plans for future expansions to Barrhaven will provide better connections to the broader Ottawa area.



Figure 2-7: Elevated bridge connecting Algonquin Station and Algonquin College .

2.2.6 Implications for Planning and Design

Algonquin Station has the potential to transform the area's low-density, segregated land uses into a more integrated, mixed-use environment. Baseline Road and Woodroffe Avenue present significant barriers to accessibility, particularly when trying to reach Algonquin Station. Wide rights-of-way are currently dominated by cars, making it challenging for pedestrians and cyclists to navigate safely. By realigning rights-of-ways to better serve vehicles and active transportation networks, and creating smaller, more pedestrian-friendly nodes in the area, access to Algonquin Station can be greatly improved. This would encourage more sustainable modes of transportation while enhancing the overall safety and liveability of the area.

2.3 Built Character

2.3.1 Building Types

The ASA showcases various building types, such as high-density 1960s-style bulky apartment slabs and newer residential buildings, including mid-rise apartment blocks and townhouses along Woodroffe Avenue. New mixed-use high-rise towers with large podiums are proposed along Baseline Road because of their location within walking distance of the future Algonquin Station. Many of the commercial buildings are low-density large-format retail stores, service stores, chain cafes, and fast-food restaurants with busy drive-throughs and massive parking lots. They also include suburban commercial strips with multiple driveways. Other commercial buildings resemble residential apartments, which contrast with the large-format retail stores mentioned in section 2.2.1.



Figure 2-8a: New High-rise on Baseline Road.



Figure 2-8b: Mid-rise Apartment on Woodroffe Avenue.

2.3.2 Building Height

There is a variety of building heights within the ASA, with buildings reaching as high as 15 storeys. Most of the buildings are 3-4 storey townhomes that surround Algonquin College. Four apartment buildings ranging from 14-15 storeys are located near Baseline Road.

2.3.3 Figure Ground Analysis

Figure-ground analysis use building footprint data to showcase the built form of an area, giving insights into the overall urban landscape. Figure 2-9 is the figure-ground map for the ASA. Initial analysis of this map highlights the segregated fabric of the ASA and its surroundings, indicating that the ASA has high development potential.

2.3.4 Implications for Planning and Design

The ASA has great potential for development and intensification, as indicated by the building height analysis and figure-ground map. Future development should consider the building style and heights of the neighbouring buildings to ensure a seamless transition into the surrounding area. Establishing a diverse skyline through a variety of building heights is necessary to increase density in the ASA. Concentrating density and development in a close radius of Algonquin Station is vital to create a successful TOD.

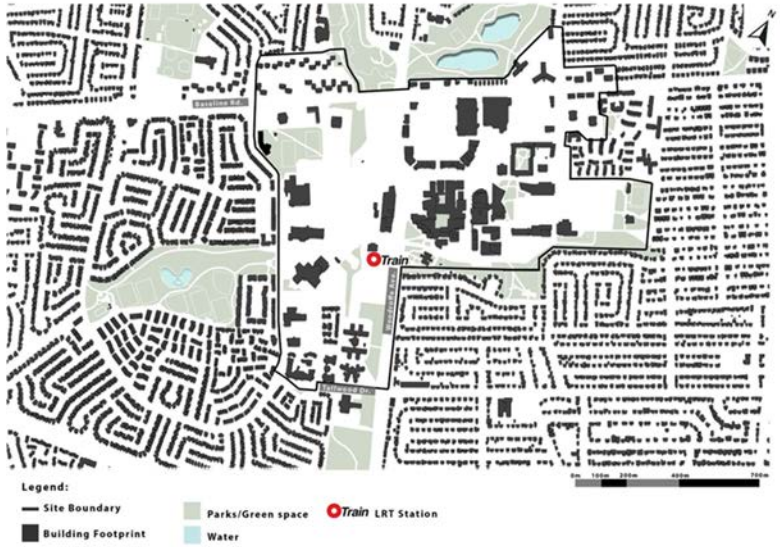


Figure 2-9:Figure Ground Map of the ASA and its surroundings.

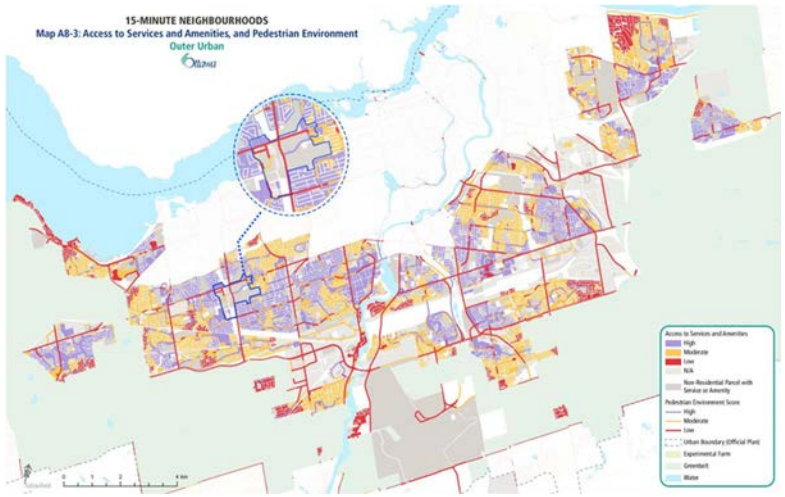


Figure 2-10: Pedestrian network map showing the ASA's low walkability score.

2.4 Connectivity

2.4.1 Pedestrian Network

The pedestrian network in Figure 2-10, taken from the City's 15-minute neighbourhood report, reveals that the ASA has large blocks that lack connectivity and accessibility. The map also shows that the residential neighbourhoods within and surrounding the ASA lack sidewalks, which is corroborated by the team's site visit. A lack of sidewalks discourages residents in these neighbourhoods from walking to public transit.

Although the pedestrian network map has sidewalks within the ASA and on the arterial and collector streets, walking through portions of this network can be uncomfortable due to poorly maintained sidewalks and a car dominant environment. Woodroffe Avenue and Baseline Road feel unsafe, and pedestrians are exposed to the multi-car lanes due to the lack of landscaped zones in between.

Figure 2-11 is a walkshed map demonstrating approximate 10, 15, and 20-minute walks from Algonquin Station based on the existing sidewalk and road network. This map implies a comfortable walking radius from Algonquin Station. However, while pedestrians can travel through the site by walking on roads, a visit to the ASA determined that many roads are not safe for pedestrians. Figure 2-11 illustrates the fragmented pedestrian network plaguing the ASA and surrounding area.

Although the streets within Algonquin College are around 6 metres wide, walking through the College does not feel much different from walking down the commercial strips. The large parking lots and elevated pedestrian bridges seem to be the safest options, especially when crossing Woodroffe Avenue to reach Algonquin Station.

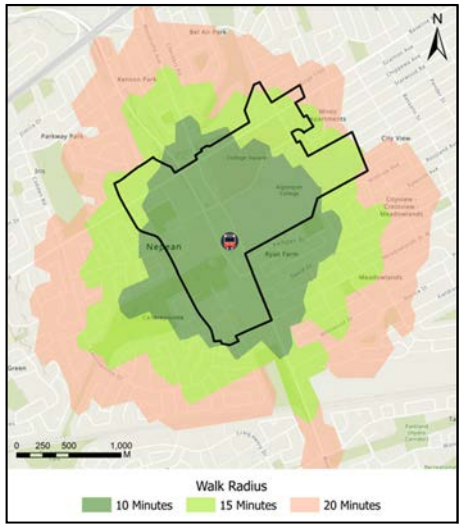


Figure 2-11: Map showing 10, 15, and 20 minute walking radius from Algonquin Station.



Figure 2-12a: Large retail store with windowless frontage.



Figure 2-12b: Poorly maintained sidewalks on Baseline Road.

Centerpointe Drive is another wide street located within the ASA boundary, where Sir Guy Carleton Secondary School is situated. A lack of traffic lights and street curb extensions at the intersection of Centerpointe Drive and Hemmingwood Way can make crossing unsafe for children and may discourage kids from walking to school. Other intersections in the ASA also lack pedestrian crossing infrastructure, resulting in many pedestrians jaywalking.

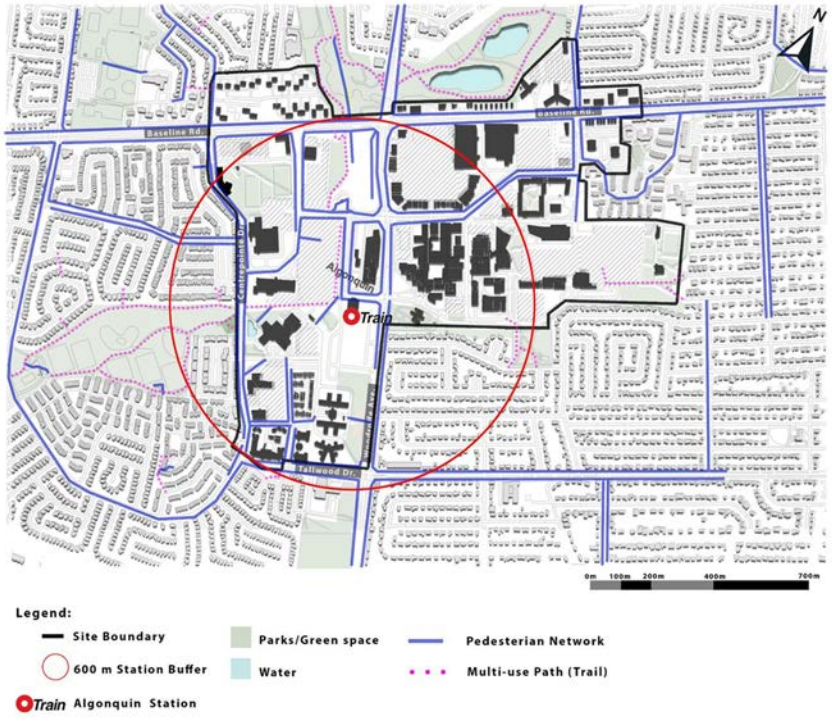


Figure 2-13: Pedestrian Network within the ASA and surrounding area.

2.4.2 Cycling Network

The cycling network map in Figure 2-14 shows two different networks. The navy lines represent multi-use paths for both pedestrians and cyclists while the pink lines represent exclusive biking lanes. Centerpointe Drive is an interrupting intersection on the multi-use path. Many cyclists choose to ignore the stop light at this intersection rather than wait for the signal to turn green, prioritizing efficiency over safety. Travelling between the parking lots of institutional buildings and the transitway makes the route unattractive and unsafe to pass through at night, negatively impacting the cycling experience and discouraging active transportation through the ASA.

The pink lines on the map represent the fragmented bike lanes located along Woodroffe Avenue and Baseline Road. Cyclists avoid using these lanes due to the unsafe and uncomfortable car-centric environment of these streets. Instead, they travel through College Avenue, taking the Ryan's Farm Park route and heading east through residential neighbourhoods. Although bike lanes are provided, cyclists tend to choose narrower streets that offer more charm and are less dominated by cars.

2.4.3 Vehicular Network

Baseline Road and Woodroffe Avenue are the two arterial roads that service the ASA, with Baseline running east-west and Woodroffe running north-south (see Figure 2-16). Both streets have three lanes of traffic travelling in either direction. Wide rights-of-ways and a lack of fluid pedestrian

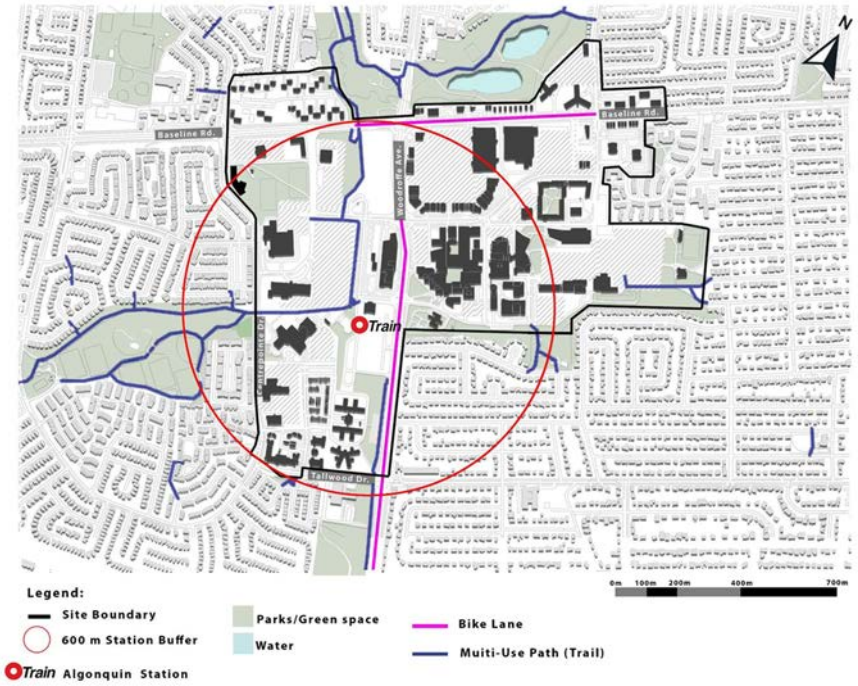


Figure 2-14 shows the cycling network within the ASA and its surroundings.

infrastructure are synonymous with the ASA, with Baseline Road having more than 30 metres of right-of-way, while Woodroffe Avenue has around 40 metres of right-of-way. The street hierarchy is primarily designed to invite vehicles to the main arterial roads, prioritizing vehicles and aiming to facilitate high-speed vehicle movement through the area. This road structure creates a car-centric and uncomfortable environment for pedestrians and active transportation users.

There are limited access points into the deeper ASA, creating points of congestion on the joints of the arterial and collector roads, especially during peak travel hours. The local roads within the ASA are mostly looping, primarily serving as access points to parking lots. The lack of a grid system within the ASA further perpetuates the daily traffic congestion. Outside of Baseline Road, Woodroffe Avenue, and Centerpointe Drive, there are few connections into the adjacent neighbourhoods, worsening the ASA's traffic problems.



Figure 2-15a: Car-centric intersection at Baseline Road and Navaho Drive.



Figure 2-15b: Intersection of Woodroffe Avenue and Navaho Drive. Wide ROW creating a significant barrier for pedestrians.

2.4.4 Public Transit Network

The ASA boasts extensive OC Transpo service, Ottawa's transit provider. Local buses at the Baseline Transitway station connect the ASA with the greater Ottawa area, providing east-west movement across Ottawa for students, workers, and residents. Algonquin Station is scheduled to be the terminal stop for the O-

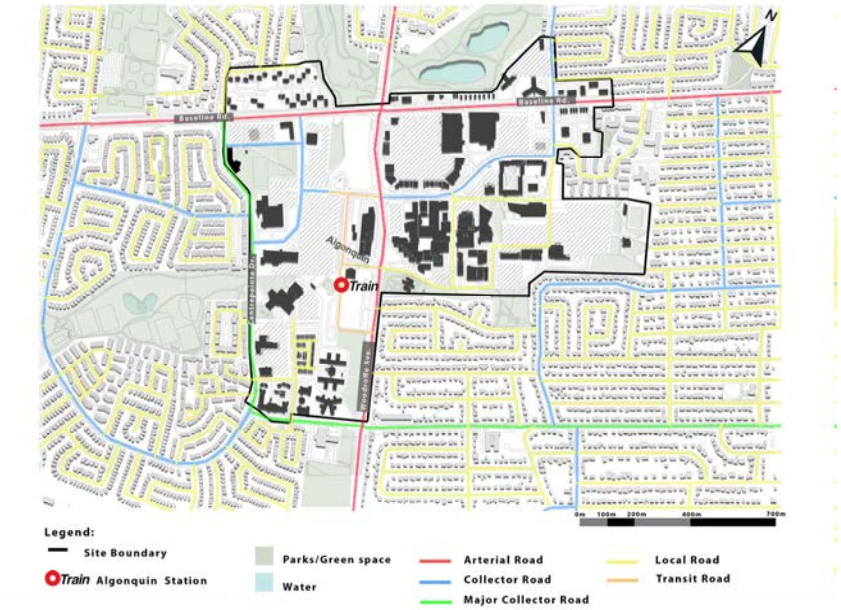


Figure 2-16: Map of the road classification system within the ASA and its surroundings.

Train Line 1 expansion, providing a north-south connection from the ASA. A big function of this station will be as a transfer station between the LRT, BRT, and local buses (see Figure 17). This facility will also have a bike locker and connections to existing multi-use paths, encouraging active transportation. There is a planned extension of the O-line to Barrhaven, further south in the future as per Schedule C2 of the Official Plan. Tallwood Station will be the subsequent stop after Algonquin, although funding for the extension has not been secured. Future stations will strengthen connectivity south of the ASA and open opportunities for neighbouring residents to reduce car usage.



Figure 2-17: New LRT line at Algonquin Station, running south-north connected to the east-west line to downtown Ottawa, along with numerous bus lines serving the area (OC Transpo, 2023).

2.4.5 Implications for Planning and Design

Current conditions for the pedestrian and cycling networks leave much to be desired for safety, user-friendliness, and accessibility. The vehicular network dominates the ASA, limiting the potential usage of a future pedestrian and cycling system through the site. Vehicular infrastructure will be reduced in proposed designs to encourage healthy and sustainable transportation modes. Improving safety for pedestrians and cyclists is a key factor in the future plan to shift the narrative of the ASA being un-walkable and unsafe. Critical considerations from initial observations include widening sidewalk lengths, implementing protected bike lanes, and reducing road widths.

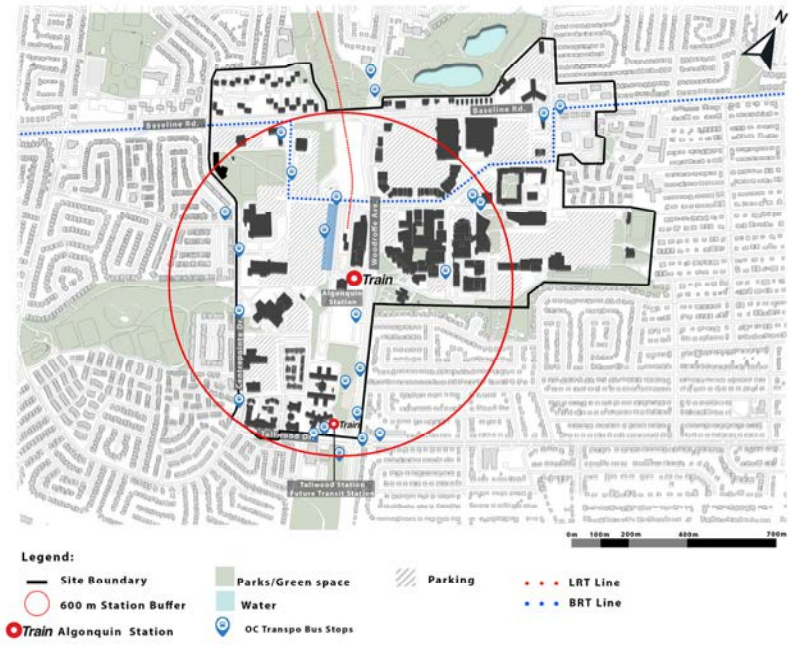


Figure 2-18: Map showing the public transit network in the ASA.

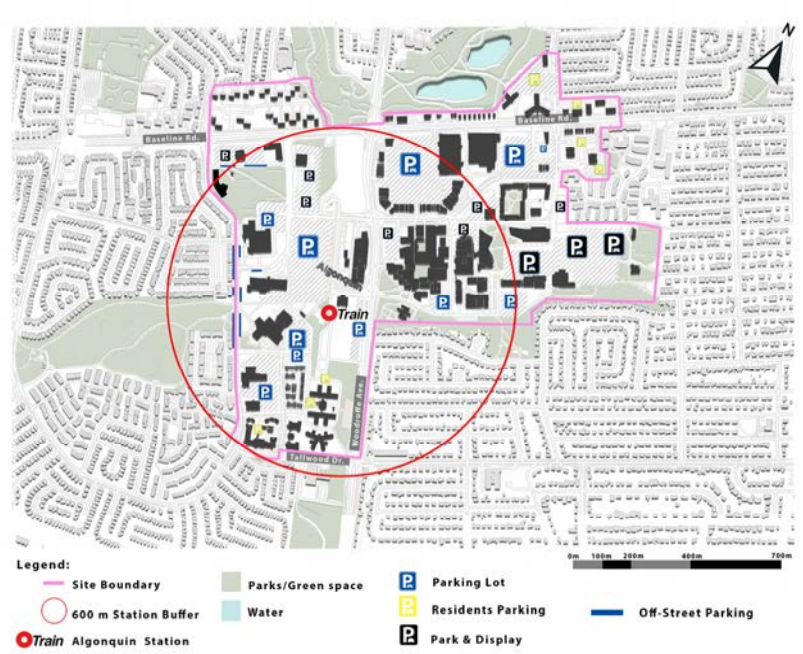


Figure 2-19: Parking lots and on-street parking spaces in the ASA.

2.5 Parking Analysis

The ASA is dominated by vast parking lots, as highlighted previously. Most of the parking within the ASA caters to customers and staff using the commercial, residential, and institutional buildings in the area, as highlighted in blue in Figure 2-19. Many of these lots provide free parking, inviting more cars into the area. 100 Constellation Drive, College Square, and the Baseline Park-N-Ride are the biggest parking lots on the site outside of the Algonquin College campus. Other parking areas are pay-and-display, primarily owned by Algonquin College.

2.5.1 Implications for Planning and Design

100 Constellation Drive and the Baseline Park-N-Ride are prime opportunities for redevelopment. The emergence of Algonquin Station, along with Ottawa's Official Plan which promotes dense development around transit hubs and eliminates parking minimums, allows for the reimagining of parking lots as potential sites for mixed-use development. This shift creates a more vibrant, accessible spaces that support active transportation and foster a healthier community dynamic.

3.0 Algonquin Policy Analysis

Strategic Growth Areas, Section 2.4.2 major Transit Station Areas (MTSA), Section 3.2 Transportation Systems, and Section 3.9 Public Spaces, Recreation, Parks, Trails and Open Space. These policies prioritize compact, transit-oriented development to optimize infrastructure investment, enhance public services, and improve access to housing, employment, essential services, and recreational opportunities. They aim to foster cohesive, inclusive growth that benefits all Ontarians.

High degree of policy relevance/ implementation	
Moderate degree of policy relevance/ implementation	
Low degree of policy relevance/ implementation	

Policy or Report	Level of Importance	Current Conformity
Provincial Policies - Province of Ontario		
Provincial Policy Statement		
Municipal Policies - City of Ottawa		
Official Plan		
Zoning By-Law		
Baseline BRT		
Complete Streets		
Baseline and Woodroffe Secondary Plan		
Designing Neighbourhood Collector Streets		
Greenspace Master Plan		
Ottawa Cycling Plan		
Ottawa Pedestrian Plan		
Parks & Recreation Facilities Master Plan		
Right-of-way lighting		
Transit-Oriented Developments		
Transportation Master Plan		
Urban Design Guidelines for Development Along Arterial Mainstreets		
10-Year Housing and Homelessness Plan		
15-Minute Neighbourhoods Baseline Report		
100 Constellation Dr		

Table 3-1: Findings on how policies affect, encourage, or hinder development in the ASA.

3.2 The City of Ottawa Official Plan, 2021

The new Official Plan provides a comprehensive policy framework to guide growth and development in the city until 2046. The Plan includes policies and schedules that address housing and growth management; long-term planning for employment and infrastructure; water resource, natural heritage, and agricultural protection; a plan for climate change; and safeguards for public health and safety. Big Policy Move 1 and 2 and sections 2.2.1, 4.1, 4.2, 4.3.1, 4.6.3, 4.6.6, 5.3, and 6.1 focus on sustainable growth by prioritizing infill development, creating 15-minute neighbourhoods, expanding active transportation, and promoting affordable housing. Key strategies include intensifying development around transit hubs, integrating diverse housing types, enhancing public spaces, and supporting gradual, context-sensitive building heights for livable communities.

3.2.1—15-Minute Neighbourhoods Baseline Report, 2021

The 15-Minute Neighbourhood Baseline report is part of Ottawa's Official Plan and aims to create more sustainable and livable communities. The 15-minute neighbourhood focuses on ensuring that essential services and amenities such as grocery stores, parks, and health services are within a 15-minute walking distance of residential areas. Through promoting walkability, the initiative seeks to enhance public health, social equity, and urban resilience, aligning with Ottawa's strategic growth and mobility goals.

3.3 Transportation Master Plan, 2023

To ensure conformity with the Official Plan, in the 2023 the City of Ottawa completed part 1 of its Transportation Master Plan (TMP). The TMP is the blueprint for Ottawa's transportation network, supporting the city's growth while prioritizing sustainability, health, and equity. The city is currently working on Part 2 of the update to the TMP, which will outline the City's proposed funding and timelines for transit and transportation projects. The TMP emphasizes accessibility, climate resilience, and fiscal responsibility with the aim of creating a safe, reliable, and environmentally sustainable transportation system. It seeks to reduce greenhouse gas emissions, integrate climate-resilient infrastructure, and ensure equitable transportation access for all residents.

3.4 Draft Zoning By-law

The City of Ottawa is in the process of replacing its current Zoning By-law 2008-250, which outlines permitted uses and requirements for land uses throughout the municipality. This report looks at the provisions of the draft Zoning By-law, rather than Zoning By-law 2008-250, as it is more aligned with the direction of the new Official Plan. The draft Zoning By-law is subject to change and is set to be approved by Council in 2025. The areas adjacent to and surrounding the existing transit station under the current Zoning By-law are zoned Mixed-use, while under the draft By-law they are zoned Hub Zone 2 (H2). Hub Zone 2 allows for a variety of uses and promotes an urban form in mixed-used nodes throughout the City of Ottawa.

3.5 Transit-Oriented Development Guidelines, 2007

Ottawa's Transit-Oriented Development (TOD) Guidelines apply to development within 600 meters of a transit stop. Comprising 56 guidelines across six categories, these rules are outlined in 'Appendix A'. The existing built form within 600m of the proposed Algonquin Station LRT station fails to meet Ottawa's TOD Guidelines. The proposed development will conform to the TOD guidelines to improve the existing condition of the ASA.

3.6 Implications for Development

With the expansion of Algonquin Station to include rail, it is evident that intensification, higher density, and the use of sustainable planning practices are needed for the ASA to become a successful TOD. With the current supportive policies in place, planners will be better equipped to implement effective design concepts and strategies, fostering the development of a successful transit-oriented destination.

4.0 Demographics & Market

A demographic analysis was completed for the Demographic Study Area (DSA), the Algonquin Station Area (ASA), and the broader City of Ottawa using analysis done at the level of dissemination areas (DAs) and full postal codes (forward sortation area local unit delivery, FSALUD). It was necessary to analyze an area larger than just the ASA because there are few residential land uses within its boundary. Further, within sections 4.1.3 (Family & Children) and 4.1.5 (Transportation), comparisons were made with Centretown, which is a neighbourhood in downtown Ottawa identified as having desirable and undesirable features by the project team. The analysis was completed using 2024 Environics Analytics data as well as the 2021 Census.

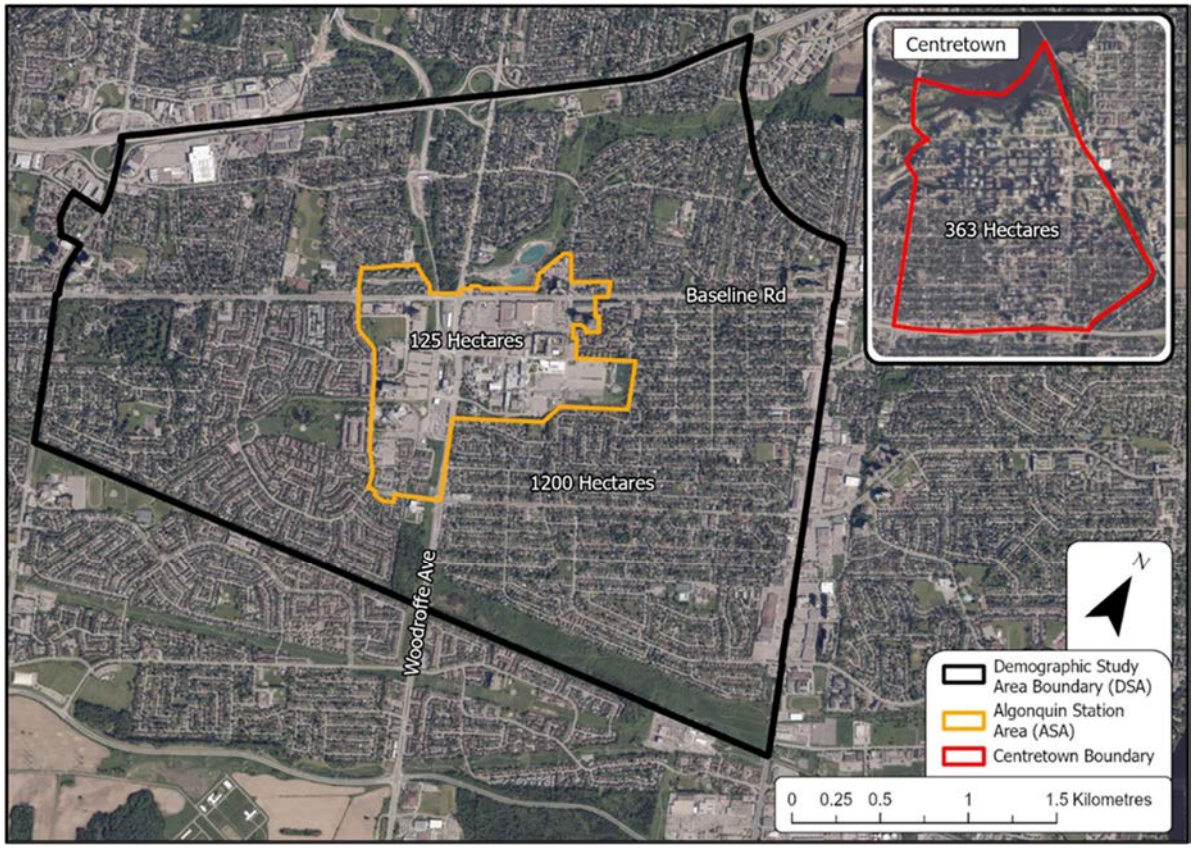


Figure 4-1: Demographic Study Area Boundary

4.1 Population & Income

The ASA has a population of approximately 3,311 as of 2024. Much this population lives around Baseline Road, Algonquin College, and Tallwood Drive because of the presence of parking lots in the centre of the ASA. The median age in the ASA is 29.8, which is lower than the median age of 38.55 in the City of Ottawa. The population of the DSA as of 2024 is approximately 36,922, with a median age of 36.77.

Ottawa has seen significant growth over the past 20 years. Between 2006 and 2016 Ottawa grew by 15%, faster than the median growth of Ontario (10.6%) and Canada (11.2%). As a result, the City of Ottawa alongside the DSA are expected to grow significantly over the next 10 years.

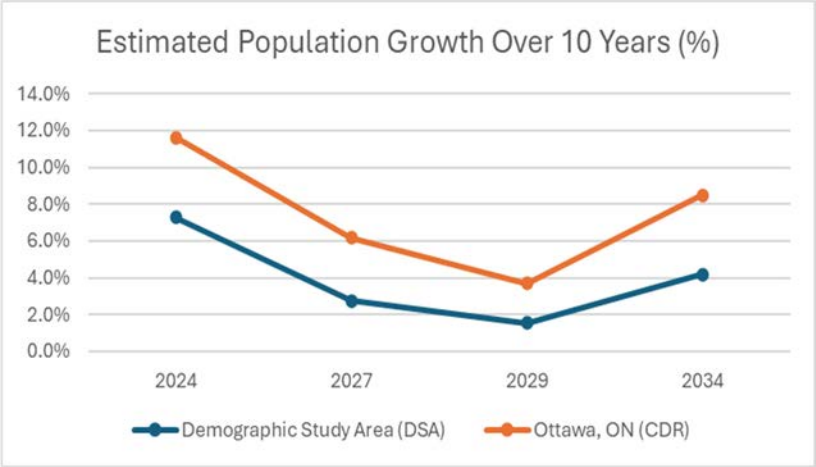


Figure 4-2: 10 Year Population Estimates Based on 2024. Environics Projections.
Note 1: ASA was not included due to small sample size.
Note 2: Population estimates become less accurate the further they estimate.

The median household income in the DSA is approximately $94,211 as of 2024, below Ottawa's median of $101,409. Assuming a constant dollar value, the median household income within Ottawa is projected to grow by 11.5% over the next ten years while the DSA is projected to grow by 10.9%. However, the Algonquin Transfer station and Baseline BRT could attract investment to the DSA, potentially enabling the neighbourhood to catch up with the rest of Ottawa.

4.2 Diversity

According to the project team's analysis, the DSA currently serves as a significant landing point for many new immigrants. As seen in Figure 3-4, the percentage of immigrants within the DSA is lower than the Ottawa average; however, the percentage of Non-Permanent Residents is significantly higher than the Ottawa average .

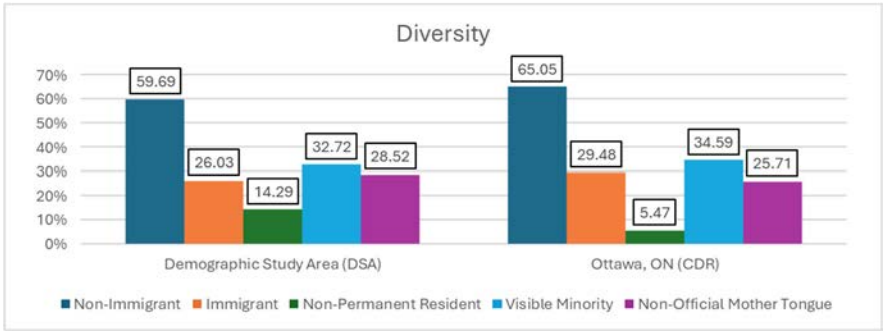


Figure 4-3: Diversity Related Variables, 2024 estimates (Environics Analytics, 2024).

4.3 Family & Children

The DSA has smaller and fewer families compared to the rest of Ottawa. Within the DSA, 61.8% of families are classified as census families, compared to 65.1% citywide. Additionally, 49.8% of the DSA population is married or in a common-law relationship, while the figure for Ottawa is 55.3%.

As the population and density of the DSA continue increasing, special attention should be given to families and children. High densification often results in neighbourhoods losing their

attraction to families, particularly those with children, instead disproportionately attracting young working populations. Centretown is a prime example, with only 31.3% of the population being part of a census family, 41.4% being married, and an average of 0.47 children per census family. Similarly, the cohort of people aged 25 to 34 is significantly overrepresented, making up 35.23% of the population.

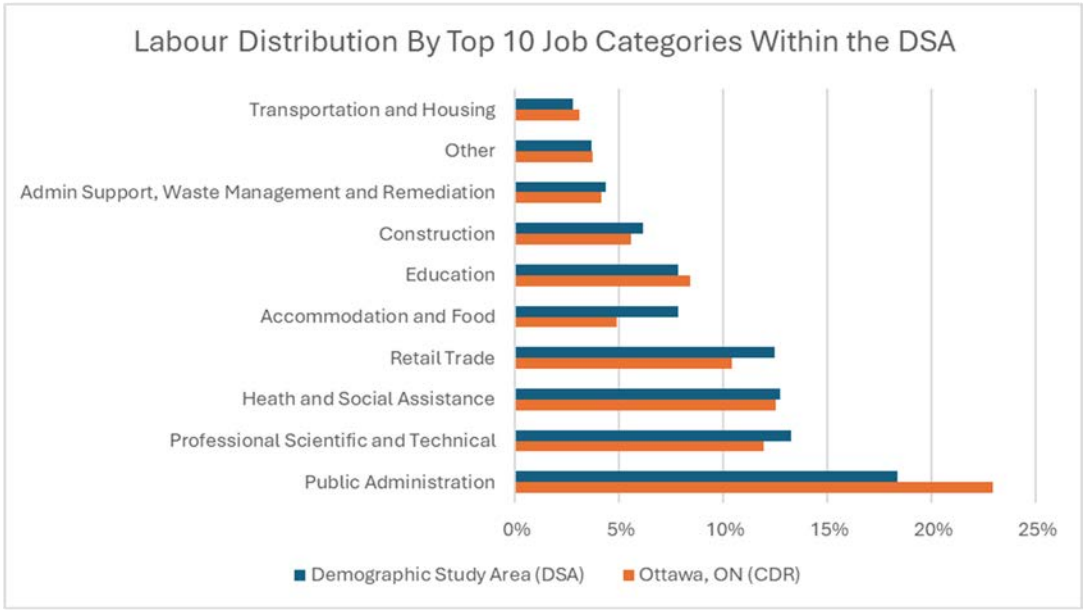


Figure 4-4: Labour Distribution, 2021 Census Data (Statistics Canada, 2021).

4.4 Employment & Transportation

The City of Ottawa is a significant hub for public sector employment. The DSA was found to be no different, with the 2021 census showing that 18.4% of the population works in public administration (see Figure 4-4). It should be noted that because of the global pandemic (COVID-19), the 2021 unemployment rate in the area was 11.9%. With major economic shocks such as COVID-19, public employment tends to be one of the most stable sectors. As the employment rate recovers (Environics estimates 9.4% for 2024), the ratio of public sector workers will likely decrease. Nonetheless, this does not dimmish the sector's importance to the DSA and City more broadly.

Within the DSA there are three major employers, including Algonquin College, the City of Ottawa, and the Government of Canada. The City of Ottawa and the federal government have large office buildings within the DSA. Despite this, the proportion of DSA residents working in public administration and education is4.5 and 0.6 percentage points lower than the Ottawa average. This indicates that many employees of these major employers live outside the DSA and commute in.

4.5 Transportation & Health

Within the City of Ottawa, including the DSA and Centretown, many residents commute to work using a private vehicle, as seen in Figure 4-5. Within the DSA, public transportation ridership is 3.7 percentage points higher than in the rest of Ottawa, while biking and walking are measurably lower. It is plausible that increased public transportation use is from the cannibalization of walking and biking. It is also possible that the built form of the DSA contributes to this phenomenon; however, further investigation is required to confirm such a causality.

Of relevance to the topic of transportation is the health of the DSA. As seen in Figure 4-6, Environics data indicates that the perception of fair and poor health among individuals in the DSA is higher than the Ottawa average. Further, a disproportionate number of individuals in the DSA live sedentary lifestyles, likely contributing to the poor perception of heath. Figure 4-6 also shows that Centretown has significantly better perceived health and significantly lower levels of sedentary lifestyles. Along with the median age of the population, the significantly higher proportion of commuters that walk or bike within Centretown compared to the DSA and the rest of Ottawa is likely a major contributing factor.

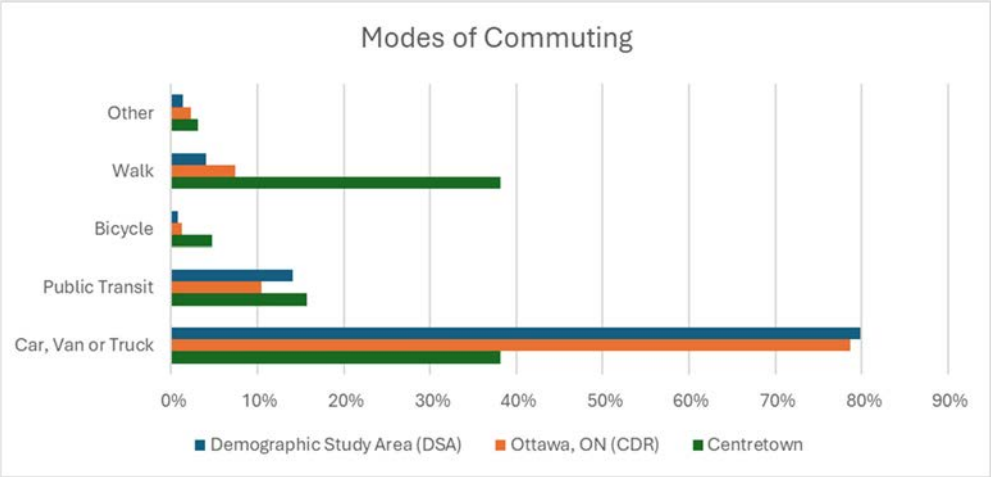


Figure 4-5: Mode of Commute, 2021 Census Data (Statistics Canda, 2021). Note: The COVID-19 pandemic caused a reduction of public transportation commutes for the census year. Inter-neighbourhood comparison, should not have been affected.

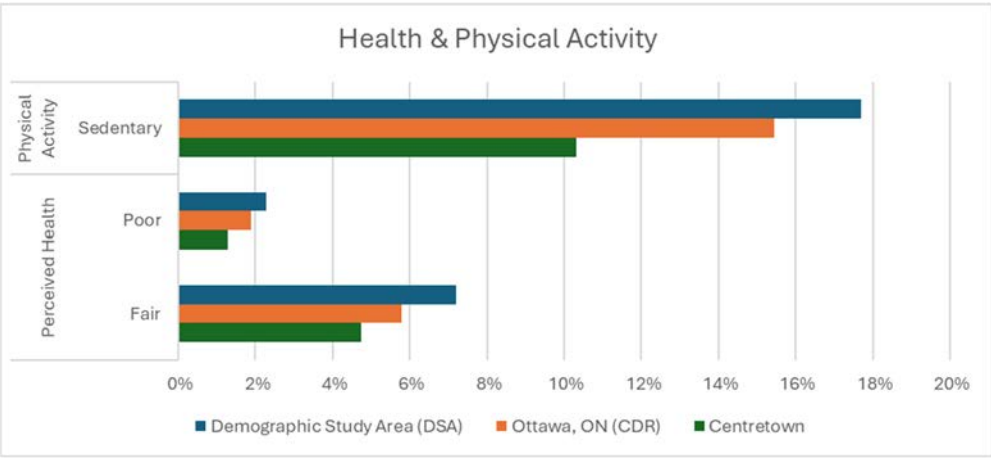


Figure 4-6: Perceived Health (12+) & Physical Activity, Environics 2024 Estimates (Environics Analytics, 2024)

4.6 Bringing it all Together: PRIZM

PRIZM is a segmentation analysis conducted by Environics Analytics on Canadian neighbourhoods at the postal code level. It classifies postal codes into one of 67 segments, representing different lifestyles, demographics and values, as can be seen in Table 4-1.

The DSA is highly diverse, with the top 5 PRIZM segments represent 56% of the households in the area. Nonetheless, Segments 23, 7 and 2 make up 39.1% of DSA households. These segments are similar, representing older, middle to upper income homeowners living in single-detached homes. This dominance is despite the DSA having a median age, income, and home ownership rate lower than the City of Ottawa. These factors point to an older generation of established residents who have stayed within the community despite new growth. The second significant chunk of households (22.7%) is made up of Segments 47, 52 and 32. These segments represent middle-to-lower-middle-income young, culturally diverse populations, typically renting an apartment or other higher-density dwelling. The remaining 38.2% of households are made up from a large variety of lifestyle, income and age groups that are more difficult to categorize.

Symbol	Segment Code	PRIZM Descriptor	Demographic Study Area (DSA)	Ottawa, ON (CDR)
	23	Older city homeowners	17.3%	5.0%
	7	Older, successful city dwellers	15.4%	5.5%
	47	Young, culturally diverse singles in city apartments	8.9%	6.2%
	16	Middle-income seniors in urban apartments	7.5%	6.5%
	52	Young, culturally diverse lower-middle-income city dwellers	7.2%	5.4%
	51	Culturally diverse city seniors in apartment rentals	6.6%	6.9%
	32	Middle-income, younger and middle-aged city dwellers	6.6%	6.1%
	2	Wealthy, older city sophisti-cates	6.3%	4.1%
	64	Urban, lower-middle-income families and singles	5.7%	2.9%
	22	Younger and middle-aged ur-ban singles and couples	4.8%	1.3%

Table 4-1: Top 10 PRIZM Segments within the DSA, (Environics Analytics, 2024)
Note 1: Please see Appendix B for a segment reference guide
Note 2: Similar segments are assigned the same shape, circle represents generic (i.e., not similar).

As can be seen in Figure 4-7, the two identified primary groups typically cluster. Supporting earlier studentification analyses, the apartments north of Algonquin College are primarily occupied by the second group, with the remainder dispersed around the DSA. A notable exception is Segment 32, which represents a transitionary age group between young and middle-aged adults.

Segment 2 represents the wealthiest group within the DSA (>$250K household income), clustering just west of Centerpointe Park. The cluster is further surrounded by other wealthy segments, with Segment 7 being the second wealthiest (>$175K household income) group within the DSA. Overall, there is a clear separation, with older, high-income individuals typically occupying the portion of the DSA that is south of Baseline Road and West of Woodroffe Avenue (Environics Analytics, 2024).

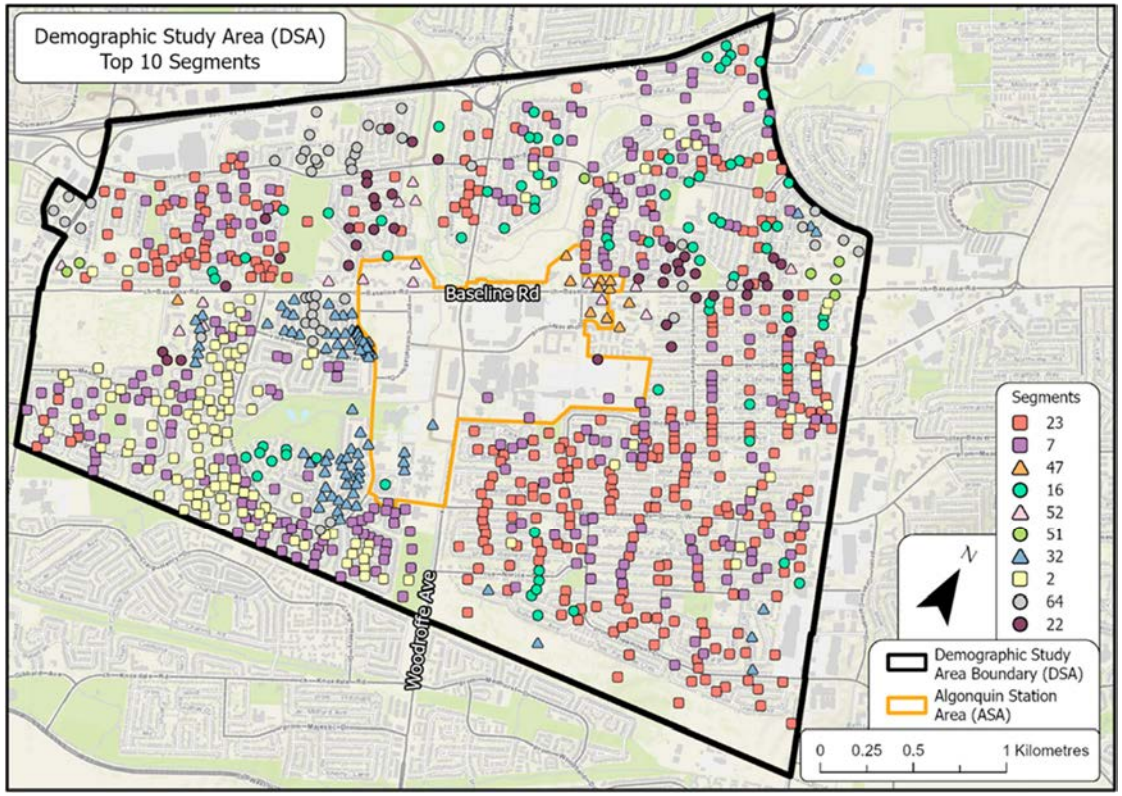


Figure 4-7: Top 10 PRIZM segments within the DSA (Environics Analytics, 2024).

4.7 Real Estate Trends

The following section summarizes current market trends affecting the ASA, and an analysis of their implications for development.

4.7.1 Office

In the 2nd quarter of 2024, the market for office real estate in Ottawa had a positive net absorption of 308,000 sq. ft. Office vacancy declined 1.2%, from 13.3% to 12.1% over the past year. Discussions about a "return-to-office" have continued across the city, with the Treasury Board requiring a greater in-office

presence among public servants. Ottawa West (see the boundary on Figure B-2 in Appendix B) currently has an inventory of 6,732,645 sq. ft. of office space and a vacancy rate of 9.0%, slightly lower than Ottawa as a whole. Additionally, Ottawa West has observed a net absorption rate 34,030 sq. ft. Finally, the average rental price for offices in Ottawa West is $15.33 per sq. ft. while the City of Ottawa average is $17.57 (CBRE, 2024).

4.7.2 Commercial/Retail

As of February 2024, the retail leasing market in Ottawa was stable. There has been a small decline in the availability of retail space, relatively low absorption levels, and a net increase in rental rates. Finally, retail sales growth in Ottawa had a notable slowdown in 2023, with minimal or no expected growth for 2024 (CBRE, 2024).

4.7.3 Residential

The Canadian Mortgage and Housing Corporation (CMHC) anticipated an increase in housing development in 2024, especially for multi-unit housing types. They report that declining financing costs, easing inflation, and policies aimed at reducing development costs will bolster future construction activity, leading to increased supply. Furthermore, they project that housing prices will increase modestly in 2024, supported by a gradual decrease in mortgage rates that will incentivize more buyers to participate in the market. Ultimately, they predict that Ottawa's vacancy rates and rental prices will generally increase due to sustained high rental demand (CMHC, 2023).

The CMHC also observed that rental supply and demand increased at such a pace that the vacancy rate in the Ottawa region remained stable, at 2.1%. They also noted that few units are available in the lower price ranges. For example, the vacancy rate for a 2-bedroom apartment under $750 per month is 0.0%, and the average rent increase for a 2-bedroom unit in 2023 was 4.0%. Further, the average rent remained higher for units turned over to new tenants ($1,903) than for non-turnover units ($1,643). Finally, the rental condominium vacancy rate stayed low at 0.4%, below 1% since 2021 (CMHC, 2023)

4.7.4 Implications For Development

The following implications and conclusions have been drawn for the future of the DSA:

- The new Line 1 of the O-train and changes to the Zoning By -law will result in significant growth.
- Developments should focus on providing rental opportunities and affordable housing.
- New development should be inviting to families.
- Housing should be built within walking/biking distance of major local employers.
- The car-dominant environment should be adjusted to allow for active transportation and public transit.
- The provision of additional office and retail space may be economically feasible.

For more detailed demographic information, see Appendix B.

5.0 SWOC Analysis

A Strengths, Weaknesses, Opportunities, and Challenges (SWOC) analysis consolidates the key features that may affect the redevelopment of a site. The SWOC findings of Table 5-1 are based on site visit observations, interviews with stakeholders, and research.

Strengths (Internal) • Algonquin Station's proximity to Algonquin College and other high demand destinations supports TOD goals. • Public transit availability increases accessibility across the city, reducing car dependency. • Algonquin College drives demand for housing, services, and amenities and provides employment opportunities. • Recreational opportunities and green spaces in the area including NCC owned greenspace and Centrepointe Park & Trails. • Approximately 30% of the ASA population are long term residents, supporting neighborhood stability. - Potential to improve infrastructure to support active transportation, aligning with sustainable urban mobility goals.	**Weaknesses (Internal)** • Existing roads do not meet AODA standards for accessibility. • Unsafe and uncomfortable environment for pedestrians and cyclists due to high vehicular traffic, and lack of designated cycle lanes and pedestrian walkways. • Separation of land uses limits community interaction. • Large parking lots and windowless, block style buildings reduce aesthetic appeal. • Cycling infrastructure within the ASA is poorly connected to Ottawa's broader network. • Baseline Road and Woodroffe Avenue act as barriers, isolating the ASA from nearby communities and Algonquin Station. • Lack of affordable housing limits socioeconomic inclusivity.
Opportunities (External) • Ample open spaces for development, including opportunities for green space connections, infill projects, and affordable housing. • Proximity to Centrepointe Park & Trails provides access to recreational opportunities and green spaces. • Stable demand for office space in the area. • Significant population of newcomers to Canada creates opportunities for growth. • Local population has a high rate of public transit usage.	**Challenges (External)** • NIMBYism: Resistance to change from long-time residents, particularly those attached to Nepean's suburban identity. • New developments risk altering the existing community identity and may lead to gentrification. • Local parks are not well-connected to the surrounding neighborhoods, limiting their use. • Low demand for retail space, with the population growing at a slower rate than the rest of Ottawa.

Table 5-1: SWOC Analysis

5.1 Strengths

ASA's location near Algonquin Station and Algonquin College is a significant strength. Proximity to a major educational institution creates a natural pull factor, increasing transit usage and improving accessibility. Additionally, Algonquin College serves as a local economic driver, creating employment opportunities and driving demand for housing, services, and amenities. The improved public transit system will support mobility across Ottawa, aligning with sustainable urban planning goals. Further, the Zoning By-law encourages transit-oriented development (TOD), supporting denser, mixed-use development near transit hubs. Additionally, nearby Centrepointe Park and trails provide ample recreational spaces, enhancing residents' quality of life by encouraging active lifestyles.

5.2 Weaknesses

Despite the ASA's strengths, car dependence remains a significant issue. Infrastructure prioritizes vehicle movement, as major roads like Baseline Road and Woodroffe Avenue have been designed to ensure the flow of significant traffic. This car-centric design undermines pedestrian and cyclist safety, creating an environment that is not comfortable and secure for those not using a vehicle. The ASA lacks adequate walkability, bike lanes, and a well-connected cycling network. The separation of different land uses within the ASA also limits community interaction, as it restricts accessibility and integration between spaces. Lastly, the presence of large parking lots and bulky, windowless buildings further detracts from the ASA's aesthetic appeal and sense of community.

5.3 Opportunities

There is ample opportunity for development within the ASA, including the potential to connect existing green spaces, develop infill projects, and introduce affordable housing. Nearby Centrepointe Park and trails present opportunities to further improve recreational spaces, enhancing residents' access to high-quality public spaces and green areas. Demand for office space is steady, suggesting potential for increased commercial development. Additionally, the ASA has a significant population of newcomers to Canada, presenting opportunities to create a welcoming environment that encourages community growth. High public transit use in the area supports efforts to expand active transportation infrastructure, as residents are already inclined toward sustainable mobility options.

5.4 Challenges

Several challenges must be addressed to fully realize the ASA's potential. Resistance to change, particularly from long-time residents with a strong attachment to Nepean's identity, poses a barrier to new development. As the area grows, there is a risk of gentrification, which could alter the community's existing character and displace lower-income residents. Local parks currently lack integration with surrounding neighborhoods, limiting their accessibility and appeal. Retail demand is low, and the area's population growth is behind the rest of Ottawa, presenting obstacles for potential commercial development.

5.5 Implications for Redevelopment

The SWOC analysis highlights several important implications for redevelopment of the area. Proximity to Algonquin College, public transit opportunities within the ASA, and existing zoning policies provide a strong foundation for transit-oriented and mixed-use developments. These assets support the potential for infill development and active transportation infrastructure, which can address current issues of car dependency and limited connectivity. However, this analysis also reveals significant challenges, such as community resistance and risks of gentrification, which require careful planning to maintain the area's social fabric and affordability. The predominance of car-centric design elements—such as wide roads and extensive parking—underscores the need to re-prioritize pedestrian safety and active transportation. Finally, enhancing the public realm, diversifying commercial offerings, and creating better connectivity to green spaces can improve livability while preserving the community's established character.

6.0 Case Studies

Case Study research was completed to create a catalogue for inspiration, lessons learned, and examples of best practices for the ASA. The thirty four case studies reviewed from around the world fall under three themes: transit-oriented mobility hub; greyfield redevelopment, and; affordable housing. Appendix C contains the entire case study catalogue. Twelve core case studies were selected due to their relevance to the ASA.

6.1 Transit-Oriented Mobility Hubs

Transit-oriented development (TOD) focuses on creating vibrant, walkable neighborhoods centred around public transit stations. Ottawa's TOD Guidelines define these developments as areas with moderate to high-density land uses easily accessible by foot from rapid transit stops. The aim is to promote transit use while seamlessly integrating development into the local community. Key objectives include offering a diverse mix of uses and densities to benefit both transit riders and local residents, designing spaces that encourage transit use and ensure safe circulation for pedestrians, cyclists, and vehicles, and creating high-quality public areas that provide direct and attractive access to transit. Ottawa's strategic priority for TOD emphasizes maximizing density around transit stations and supporting infrastructure that offers varied mobility options.

6.1.1 Mobility Hubs

Mobility hubs are key connectivity points where multiple rapid transit lines intersect, balancing various transportation modes and supporting significant residential and employment densities. Typically, mobility hub areas encompass an 800-metre radius around a rapid transit station. This differs from the 'Hub' designation under the City of Ottawa's Official Plan, which are "areas adjacent to, or within a short walking distance of an identified rapid transit station or major frequent street transit stop."



Figure 6-1: https://www.intelligenttransport.com/organisations/meristem-design/

6.1.2 Transit-Oriented Mobility Hubs

A transit-oriented mobility hub represents a dynamic urban area centered around a major transit interchange, integrating multiple transportation modes to create a seamless travel

experience. This approach merges the principles of TOD, emphasizing high-density, mixed-use development around transit nodes for sustainable living, with the characteristics of a mobility hub that enhances connectivity through diverse transportation options. This integrated strategy fosters compact, walkable neighborhoods, facilitates smooth transitions between different travel modes, and aims to reduce reliance on personal vehicles, ease traffic congestion, and promote vibrant, sustainable communities.

Meanwhile, the concept of TODs is evolving toward Transit-Oriented Communities (TOC). This shift is motivated by the desire to harmonize community development with transit investments, creating walkable, human-scaled places that blend various land uses with transit access. TOC emphasizes a holistic view of community needs, incorporating integrated, systems-level thinking into development processes.

A mobility hub system within a TOC features interconnected networks that extend the benefits of transit investment to more individuals. By promoting alternative travel modes such as biking and electric scooters, this approach encourages a transition away from personal vehicles.

Planning for diverse travel modes from the outset allows for infrastructure that supports all users, enhancing road safety and contributing to sustainability by reducing CO2 emissions from traffic. The true value of mobility hubs emerges when they function as part of a multimodal system, aligned with the movement patterns of the communities they serve.

6.1.3 Relevance to the ASA:

The ASA is well-suited to become a vibrant transit-oriented mobility hub. Currently, the area is largely accessed via private vehicles, with extensive parking and a fragmented active transportation network. However, the presence of Algonquin College, which draws a significant number of students and staff, combined with existing residential, commercial, and employment areas, provides a solid foundation for high-density, mixed-use development. The Algonquin Transit Station, a key node for higher-order transit, is ideal for integrating various transportation modes as a major mobility hub. By concentrating growth around this transit hub, the ASA can embody the principles of TOD, shifting from its current car dependency to a model of efficient, sustainable urban development that improves connectivity, reduces traffic congestion, and supports a vibrant, mixed-use community.

6.1.4 Selected Case Studies:

Over 20 TOD and Mobility Hub case studies were examined for this project. Of these case studies, 4 examples were chosen to be studied in-depth. These case studies were chosen based on their relevance to the ASA and the following criteria:

- Age.
- Previous site characteristics.
- Proposed use.
- Integration of sustainable transportation options.
- Accessibility and security for travellers.
- Creation of a sense of “place”.
- Community Engagement.

The following case studies were examined in depth:

1. Brentwood Station, Burnaby, British Columbia
2. Bloor and Dundas Master Plan, Toronto, Ontario
3. The Bridges, Calgary, Alberta
4. University City, Calgary, Alberta



Fig. 6-2: Ali, L., et al. (2021) Dynamics of Transit Oriented Development, Role of Greenhouse Gases and Urban Environment: A Study for Management and Policy. Sustainability. 15(5) https://doi.org/10.3390/su13052536

6.1.5 Lessons Learned

Prioritize Multimodal Connectivity: Ensure robust multimodal connectivity to Algonquin Station throughout the ASA, prioritizing pedestrian access while minimizing vehicular access.

Enhance Public Spaces: Develop public spaces near transit stations to foster place-making and create a vibrant public realm that encourages community engagement.

Strategic Development Phasing: Carefully time the phasing of development around Algonquin Station to support transit-oriented planning, ensuring that high-priority destinations are accessible as early as possible.

Optimized Station Design: Design stations to take advantage of lines of sight, utilizing color and art to guide travelers and enhance the sense of place, while integrating technology for real-time transit updates.

Consider Diverse Demographics: Incorporate the needs of current and future user demographics into station design to maximize usability and functionality for all community members.

Create Distinct Yet Interconnected Communities: Foster distinct communities as part of the phased development process, implementing specific policies to ensure the surrounding area is dense and mixed-use, promoting greater accessibility and transit-oriented growth to enhance overall livability.

6.2 Greyfield Redevelopment

Greyfield redevelopment is an urban strategy focused on repurposing underutilized or economically obsolete commercial properties, often in the form of ageing malls and strip malls, into vibrant, sustainable, and mixed-use communities. These areas typically feature large expanses of parking lots and car-oriented infrastructure, which are no longer conducive to modern urban growth or sustainable living. Large parking lots, while not currently welcoming, represent a blank canvas to create innovative, vibrant cities that can accommodate much needed growth.

As cities like Ottawa shift towards higher-density development, greyfield redevelopment offers a critical opportunity to revitalize distressed commercial areas and integrate them into the surrounding urban fabric. By prioritizing walkability, active transportation, and mixed-use design, greyfield sites can become catalysts for creating livable, connected communities that support both residential and commercial growth. This redevelopment approach is not only a sustainable form of growth, but it also aligns with broader city planning goals, such as those outlined in the City of Ottawa's new Official Plan (OP), which seeks to replace greenfield expansion with intensified urban infill, transforming once stagnant areas into hubs of activity and social engagement.

6.2.1 Relevance

Large portions of the ASA represent underutilized greyfields, most notably College Square which is a typical car-oriented strip mall. The mall's design is centred around a large parking lot, prioritizing vehicle access over pedestrian convenience. Storefronts face the parking area rather than the surrounding community, creating a disconnect from Algonquin College. This layout limits the plaza's potential as a hub for students and residents. Additionally, the lack of sidewalks and pedestrian pathways present safety concerns for those walking to and from the site, reducing accessibility for active transportation users.

Given its strategic location, College Square holds great potential for greyfield redevelopment. The site is well-served by public transit, including rapid bus routes, and the future LRT, making it well-connected to other parts of the city. Redeveloping the area into a mixed-use, pedestrian-friendly environment will enhance connectivity with Algonquin College and nearby neighborhoods. The site could become a walkable community hub by replacing the expansive parking lots with multi-functional spaces that combine residential, retail, and recreational areas.

6.2.2 Selected Case studies

This study examined 11 greyfield redevelopment cases, focusing on large suburban shopping plazas that have been transformed into thriving mixed-use developments. Of these case studies, four examples of mixed use greyfield redevelopments were chosen for an in-depth analysis. In depth case studies exhibit the following where possible:

- Suburban location
- North American designs
- Award winning designs

A full review of the criteria used to evaluate the case studies against one another, and detailed case studies can be found in Appendix C. The following case studies were examined in depth:

1. Don Mills, Toronto, Ontario
2. Collingwood Village, Collingwood, British Columbia
3. Cloverdale Mall Master Plan, Toronto, Ontario
4. Santana Row, San Jose, California



Fig. 6-3 Cloverdale Mall Redevelopment Main Street, image by Giannone Petricone Architects (Urban Strategies, 2024)

6.2.3 Lessons Learned

Use regulatory tools, public financing, and strategic public-private partnerships: Leverage a combination of regulatory tools, public financing, and strategic public-private partnerships to effectively incentivize community benefits and enhance local development. This can be accomplished through mechanisms such as density bonuses, which allow for increased building capacity in exchange for community contributions; up-zoning, which enables more flexible land use; and expedited permitting processes that streamline project approvals.

Adopt appropriate phasing: Successful projects often start by developing the areas closest to existing or planned transit hubs, civic buildings, main streets, or public spaces. Early phases of construction should be visible from outside the site to attract new users.

Focus on public space and place-making: Include amenities such as lively open spaces, park connections, and well-designed lighting to ensure safety and usability at all hours. Incorporate year-round attractions and activities that make the space inviting and functional throughout all seasons.

Prioritize community engagement: Creating an engagement strategy where citizens can actively be involved early in the planning process can ensure the project meets local needs, while also contributing to community buy-in.

Incorporate civic, institutional, and public uses and amenities to create a sense of place: Creating welcoming and inclusive public spaces through a variety of ownership concepts can help establish a sense of community and encourage high design standards.

Pedestrian forward design: Create walkable, interconnected blocks that facilitate a safe and efficient pedestrian experience.

Sustainable Design: Incorporating sustainable design elements into greenfield redevelopment enhances long-term viability and ensure long-term climate resilience.

6.3 Affordable Housing

As cities grow and economies evolve, the need for affordable housing becomes a pressing issue, particularly in urban centers like Ottawa. With rising populations, increasing rental costs, and limited vacancy rates, many residents are struggling to find housing that is affordable and suitable for their needs. This challenge is especially significant for those living on low to moderate incomes, who find it harder to access housing in the neighborhoods where they wish to live. The Provincial Planning Statement (2024) emphasizes the importance of creating healthy, livable, and safe communities by accommodating a mix of housing options, both affordable and market-based. Ottawa, a city known for its high quality of life, vibrant cultural scene, and strong economy, is not immune to these housing pressures. Despite the city's overall prosperity, there is a growing divide between high-income earners and those struggling to afford necessities, including housing.

Affordable housing is foundational to a person's well-being, affecting everything from health and education to employment and community engagement. As the City of Ottawa (and many other cities) continue to grow, driven by both immigration and migration, the need for a diverse range of housing options has become even more critical. Rising rents and limited availability in the housing market have forced many to remain in the emergency shelter system or on lengthy waiting lists for social housing. To address these challenges, the City of Ottawa's Housing and Homelessness Plan (2020-2030) sets the target to create between 5,700 and 8,500 new affordable housing units targeted at those with low to moderate incomes. This initiative underscores the city's commitment to building inclusive, liveable communities where all residents can thrive, regardless of income.

6.3.1 Relevance

One of the key challenges in developing affordable housing is acquiring land. However, the ASA, which includes a large parking lot adjacent to Algonquin Station which could be owned by the city in the future, holds significant potential for redevelopment. Given its prime location near public transit, it represents an ideal site for a mixed-use development that should incorporate a diverse range of housing options, including a high volume of affordable housing units. By transforming this parking lot into a TOC, the city could address both the need for affordable housing and the growing demand for sustainable, connected neighborhoods.

6.3.2 Selected Case studies

This study examined twelve housing developments that emphasized affordable housing, mixed tenure and mix of housing options. Of these case studies, four examples of housing redevelopments were chosen for an in-depth analysis. A full review of the criteria used to evaluate the case studies against one another, and detailed case studies can be found in Appendix C.

The following precedence were examined in depth:

1. Rosemont Municipal Workshops Site, Montreal, Quebec
2. St. Lawrence Neighbourhood, Toronto, Ontario
3. Regent Park, Toronto, Ontario
4. Prospect Plaza, Brooklyn, New York



Fig. 6-4: Prospect Plaza, Dattner Architects (Penrose, 2024)

6.3.3 Lessons Learned

Use regulatory tools, public financing, and strategic public-private partnerships: Leverage a combination of regulatory tools, public financing, and strategic public-private partnerships to effectively incentivize community benefits and enhance local development.

Mixed-use and Mixed-income Development: Incorporating affordable housing into mixed-use and mixed-income developments promotes diverse and inclusive communities that can help diminish the stigma commonly linked to low-income housing.

Energy Efficient Building Design: Energy-efficient building design and environmentally friendly materials can reduce long-term operational costs for new community members. Sustainable building design can also ensure the developments are climate resilient.

Prioritize Community Involvement: Involving residents in the planning and decision-making process helps ensure that development aligns with community needs and can create a sense of ownership. This often results in successful long-term outcomes, and an easier implementation process.

Proximity to Transit and Amenities: Locating affordable housing near public transportation, schools, healthcare, and employment hubs reduces transportation costs and improves access to opportunities for residents, making the housing more practical.

Public Private Partnership: Collaboration between governments, non-profit organizations and private developers has proven to be an effective model for securing funding and resources for affordable housing.

Integrating Support Services: Combining affordable housing with easy access to social services, such as childcare and job training, can enhance residents' ability to thrive.

Quality Place Based Design: Place-based design is an approach that focuses on creating spaces that are deeply connected to their specific context, community, and environment. This method of design can create environments that resonate with the people who live and work there, fostering a sense of ownership and belonging.

Investigate a Range of Financing Models: Utilizing a mix of federal, provincial, local subsidies, tax incentives, etc. can help reduce the financial burden on developers and make projects viable.

Scalable and Replicable: Creating scalable housing models that can be replicated in different areas and regions allows the project to have a broader impact and adapt to various contexts.

Prioritize Quality and Liveability: Affordable housing should be built to last. Developers must focus on high-quality, innovative designs that provide longevity while remaining within budget. Creative and innovative design approaches can often overcome financial limitations, ensuring that affordable housing is both durable and livable.

7. 0 Preliminary Stakeholder Analysis

This chapter presents an overview of stakeholders with current or potential interest in the redevelopment of the ASA. Working alongside these key stakeholders is essential to create a desirable plan that meets the needs of all interested and affected parties. It should be noted that this list is preliminary, as new stakeholders may be identified as the project advances into the design phase.

7.1 Key Stakeholders

The report explores transforming the ASA into a TOD that is accessible to pedestrians, cyclists, and transit users. Stakeholders in this redevelopment process include the City of Ottawa Planning Staff, Ottawa City Councilors, residents, developers, OC Transpo, commercial property owners, and others. By analyzing the interests, resources, and avenues for action primary and secondary stakeholders have, we can gain insight into the relationships and power dynamics that could drive change within the ASA.

7.2 Implications

This analysis highlights the interests, roles, and resources of essential stakeholders in the ASA, shedding light on relationships that may affect redevelopment. While the City of Ottawa is crucial for project initiation and coordination, various public and community groups will also shape the project's direction. It is important to recognize and consider the interests of stakeholders who may not be directly involved but are still affected. The redevelopment's success will depend on comprehensive engagement, effective coordination, and collaboration among all parties.

The initial stakeholder analysis reveals that several individuals, groups, and organizations may be impacted by proposals for the ASA outlined in this report. The primary stakeholders identified have essential roles and resources needed for the ASA's redevelopment. Effective coordination among these stakeholders is critical for success during the conceptual design phase. As a result, achieving the goal of creating a 15-Minute Neighbourhood in this area requires the engagement and collaboration of the identified primary stakeholders.

There are also important secondary stakeholders within the ASA that should not be overlooked. Examples include community transportation advocacy groups, local transit users, and retail tenants – all of whom stand to be affected by redevelopment. While these secondary stakeholders may have limited resources or influence, their input is valuable. Ensuring that these stakeholders are included in the planning process and have a platform to share their perspectives will be crucial for development within the ASA.

Primary Stakeholders	Interests	Secondary Stakeholders	Interests
Ottawa City Councillors	• Maintaining and improving the quality of life for Ottawa residents and constituents	Community Transportation Advocacy Groups (Ottawa Transit Riders & Bike Ottawa)	• Safe and efficient travel through the ASA • Well-connected and safe active transit network
City of Ottawa Planning Staff	• Effective urban design and intensification • Sustainable transportation • Public health and environmental resiliency • Economic development • Housing affordability	Local Transit Users	• Safe and efficient travel through the ASA • Access to amenities in the ASA
Study Area Community Residents	• Affordable and varied housing options Amenities to support daily life Efficient connection to amenities	Office Tenants	• Affordable and varied office spaces that suit operational need • Proximity to transit, ease of access for existing and potential employees
Developers	• Maximize profit from investment in the area	Retail Tenants	• Affordable and suitable retail space • Proximity to transit High traffic from multiple transit modes
OC Transpo	• Transit-supportive development • Efficient public transit operation	General Public	• Safe and efficient travel through the ASA • Access to amenities in the ASA
Commercial Property Owners	• Improve financial performance, land and building value		
Sir Guy Carleton Secondary School	• Safe and efficient transit to and from the ASA for students and employees		

Table 7-1: Primary and Secondary Stakeholder Interests

7.3 Limitations

There are limitations regarding the level of stakeholder engagement undertaken for this project. Currently the only stakeholders consulted are City of Ottawa planning staff. The project team had the opportunity to meet and conduct interviews with representatives from the City of Ottawa's policy, parks, transportation, heritage, and urban design departments. However, due to the constrained timeline and the extensive scope of the ASA, insights from Indigenous communities and other key stakeholders could not be collected to further inform the report and proposal. It is important to recognize that the stakeholders mentioned are potential contributors to the redevelopment of the ASA that were not directly involved in this process. Additionally, public engagement should be prioritized for any future development in the ASA.

8.0 Design Charette

Following background research and policy analysis, the project team hosted a design charrette on October 11, 2024. This charrette brought together professional planners from the municipalities of Kingston and Ottawa, along with professors and graduate students from the Queen's University School of Urban and Regional Planning (SURP). The diverse backgrounds, interests, and expertise enriched the brainstorming process. Attendees included: Clancy Ngolah, Chaitali Joshi, Spencer Mulvaney, Aaron Ling, Zara Paris, Jennifer Rodriguez, Wendy Shengwen Yang, Rob Maxwell, Danielle Gallina from SURP; Molly Smith, Peter Giles, Justin Grift, Taavi Siitam, Shahira Jalal, Jocelyn Cadieux, Natalie Persaud Planners from the City of Ottawa; Chris Wicke, Ajay Agarwal, and Sukirti Agarwal Planners from Kingston, ON.

The ASA is spilt into five distinct areas, the charrette explored design options for four quadrants of the ASA, not including Algonquin College in the options.

To introduce the site context, the project team led an information-sharing session. A PowerPoint presentation highlighted the background research and analysis conducted over the preceding weeks, alongside a strengths, weaknesses, opportunities, and challenges (SWOC) analysis of the ASA.

A panel session, organized by the project team, provided focused information around four key themes to guide the planning and design process. These themes included land-use analysis, market analysis, mobility analysis, and development precedents. Each five-minute presentation helped participants familiarize themselves with the concepts, their relevance to the project, and case study examples. Two members of the project team delivered each presentation, facilitated discussion, and addressed participant questions.

The charrette then transitioned into a technical group design workshop, where participants were divided into four groups to examine one of the ASA's four design quadrants: College Square, Baseline Station Park-N-Ride, 100 Constellation Drive, and Ben Franklin Place. After completing their designs, the groups reconvened to present their vision and insights. Each quadrant offers a unique context, resources, and challenges, and the design ideas generated from the charrette helped inform the final designs proposed for the ASA.



Figure 8-1: SURP MPL student presenting the team's design for College Square.

8.1 Design Charette Recommendations

8.1.1 College Square

This group focused on College Square Shopping Centre. The key areas of concern for this group were the long-term development of the parking lots and shopping structures as well as connectivity to Algonquin College and green space within the ASA. Below are the key themes and recommendations used to develop design strategies for specific sites in the ASA.

Key Themes:

- Connectivity between College Square, Algonquin College and the NCC Park.
- Divide the ASA into smaller street blocks.
- Create a vibrant main street.
- Increase the mix of uses.

Recommendations

- Create a main street in the middle of square, running west–east.
- Re-arranging the street grid. Create a new entrance/exit to College Square from Navaho that is 90 degrees.
- Include green space within the block and a market square.
- Transform surface parking into innovative, multi-use spaces.
- Re-locate major commercial closer to the arterial street.

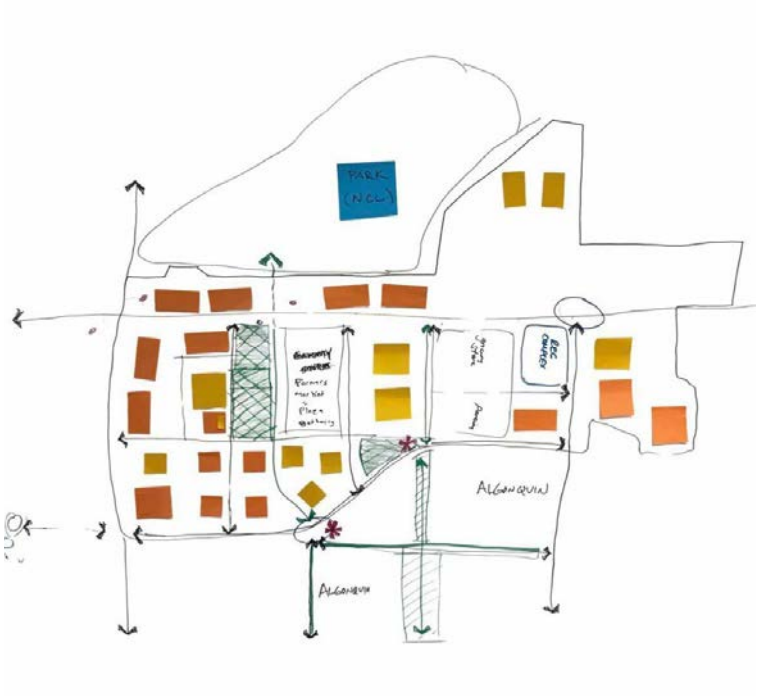


Figure 8-2: Image of draft design for College Square

8.1.2 Ben Franklin Place

This group focused on Ben Frenklin Place, and the area bordered by Tallwood Drive in the south, Constellation Drive to the west and Woodroffe Avenue to the east. The key areas of concern for redevelopment were the long-term care home and the surface parking lots below Ben Franklin Place. Below are the resulting key themes and recommendations used to develop design strategies for specific sites in the ASA:

Key Themes

- Enhance connectivity between green spaces throughout the ASA.
- Increase residential density near Algonquin Station.
- Transform surface parking into innovative, multi-use buildings.
- Develop community amenities and spaces as well as improve the quality of both the new and existing public realm.

Recommendations

- Move the current Peter D Clark Centre Long Term Care closer to Meridian Theatre and the existing medical building.
- Develop residential and mixed-use buildings on previous site of Peter D Clarke building.
- Include grocery store for new residents.
- Tie in green spaces/urban parks to increase vibrancy surrounding Ben Franklin and Meridian Theatre.
- Large mixed-use residential building next to the LRT line and Meridian Theatre.
- Enhance Skate Park in size.



Figure 8-3: Image of draft design for Ben Franklin Place

8.1.3 100 Constellation Drive

This group focused on 100 Constellation Drive and the surrounding area, which includes 100 Constellation Drive, Sir Guy Carleton Secondary School and new developments proposed along Baseline Road. The area with the greatest potential for redevelopment is the eight City of Ottawa owned parking lots. Below are the resulting key themes and recommendations used to develop design strategies for specific sites in the ASA:

Key Themes:

- Develop the parking lots and add mix use to the area.
- Include parking for local employees, city-owned vehicles and residents.
- Connect greenways and pathways within the ASA.

Recommendations:

- Create a mixed-density area with high rises on the corners and step-back buildings in the interior to have a cohesive change in grade.
- Create a parking garage adjacent to 100 Constellation Drive.
- Create pedestrian and multi-use paths to enhance the connectivity in the area.
- Connect greenways and pathways within the ASA.

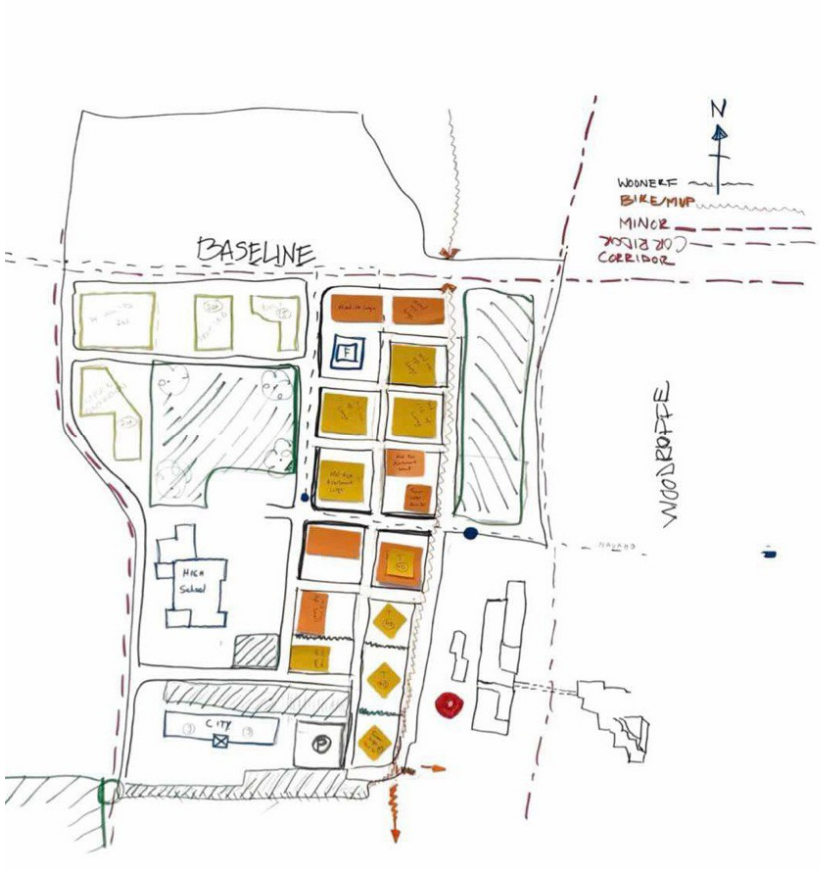


Figure 8-4: Image of draft design for 100 Constellation Drive

8.1.4 Baseline Station Park-N-Ride

This group focused on the current Park-N-Ride for the BRT line at Algonquin Station. This area was smaller than the three other sites, with limited area for redevelopment. Below are the resulting key themes and recommendations used to develop design strategies for specific sites in the ASA:

Key Themes:

- Enhance connectivity by linking existing greenway networks and paths, making the site more accessible for pedestrians and cyclists.
- Expand the skate park area.
- Plan for mixed-use high-rise and mid-rise residential towers near Algonquin Station.

Recommendations

- Strengthen greenway and pathway connections with surrounding neighborhoods, enhancing pedestrian and cyclist movement across the ASA.
- Enhance and expand recreational areas.
- Position mixed-use and residential towers to face public roads, incorporating podium structures to ensure easy access to transit.
- Design public spaces according to Ottawa's park development standards, avoiding linear park layouts, and ensure high-rise floorplates and building frontages align with Ottawa's OP.

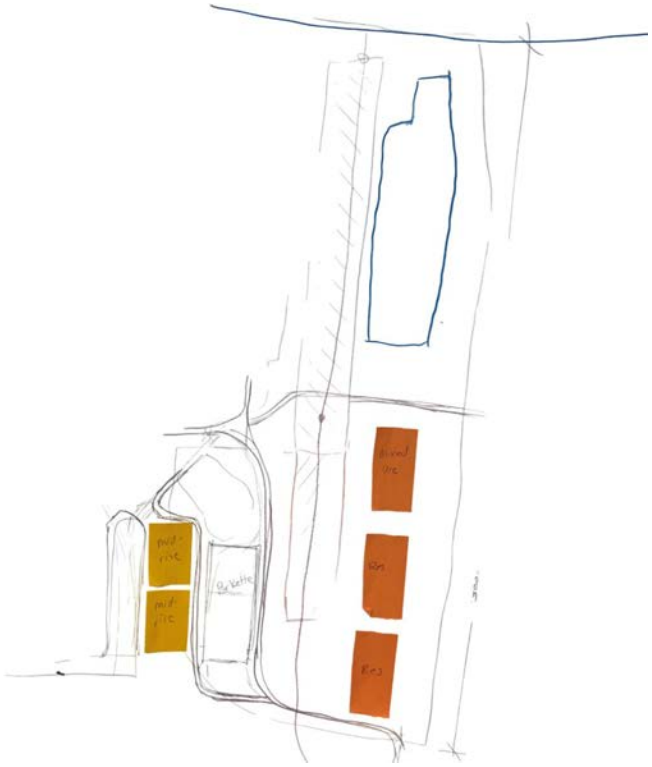


Figure 8-5: Image of draft design for Baseline Station Park-N-Ride.

8.2 Implications for Planning

After collaborating and designing in breakout groups, participants reconvened to share their designs with the other groups and the project team. A representative from each site presented key themes, recommendations, and map-based insights. These strategies translate into the following implications for the project:

- Intensification across the site to support the creation of a transit-oriented community.
- Develop a vibrant main street with mixed-use buildings and active transportation routes.
- Utilize existing natural corridors to improve connectivity to the surrounding neighbourhoods.
- Build a variety of housing options including mid & high-rise buildings and affordable units.



Figure 8-6: SURP MPL student sharing the team's design for the Ben Franklin Place at the Charette.

9.0 Vision and Guiding Principles

The following vision and guiding principles have been established from analysis and observation of the ASA, conversations with stakeholders, background research, the design charette process, and analysis of similar redevelopment projects.

9.1 Vision Statement

The Algonquin Station Area will become an inclusive, vibrant, and well-connected place to live, work, play, and learn. The site will serve as an important destination in the broader Ottawa area, integrating a mix of uses and public spaces to create a diverse, resilient, and complete community.

The vision statement is supported by the following guiding principles derived from our review of best practices from precedent projects.

9.2 Guiding Principles

Mobility
Enhance active transportation through the ASA by creating a comprehensive network of integrated pathways, including sidewalks and dedicated bike lanes, that connect key destinations.

Placemaking
Foster a vibrant sense of community in the ASA through thoughtful design that creates a lively pedestrian-friendly main street.

Economic resilience
Cultivate economic resilience around Algonquin Station by creating a vibrant, mixed-use community where businesses can thrive. Integrating diverse commercial, residential, and recreational spaces within a 15-minute radius ensures accessible economic opportunities for residents and local entrepreneurs.

Environmental Sustainability
Enhance environmental sustainability in the ASA by promoting a mobility shift that reduces car dependency and encourages engagement with active transportation. The redevelopment will ensure that the growth will include sustainable building practices, such as energy-efficient materials, green roofs, and the recycling of construction materials to create a sustainable community.

Growth
Ensure the ASA responsibly grows by providing diverse housing options in a transit-oriented community. A phased development approach will be implemented, prioritizing projects near Algonquin Station to create a vibrant, accessible environment that encourages public transit use and enhances community connectivity.

Algonquin / Community Integration
Achieve seamless integration between Algonquin College and the surrounding community by designing the site to harmonize with existing development. The ASA will enhance connections from Algonquin College and nearby neighborhoods to Algonquin

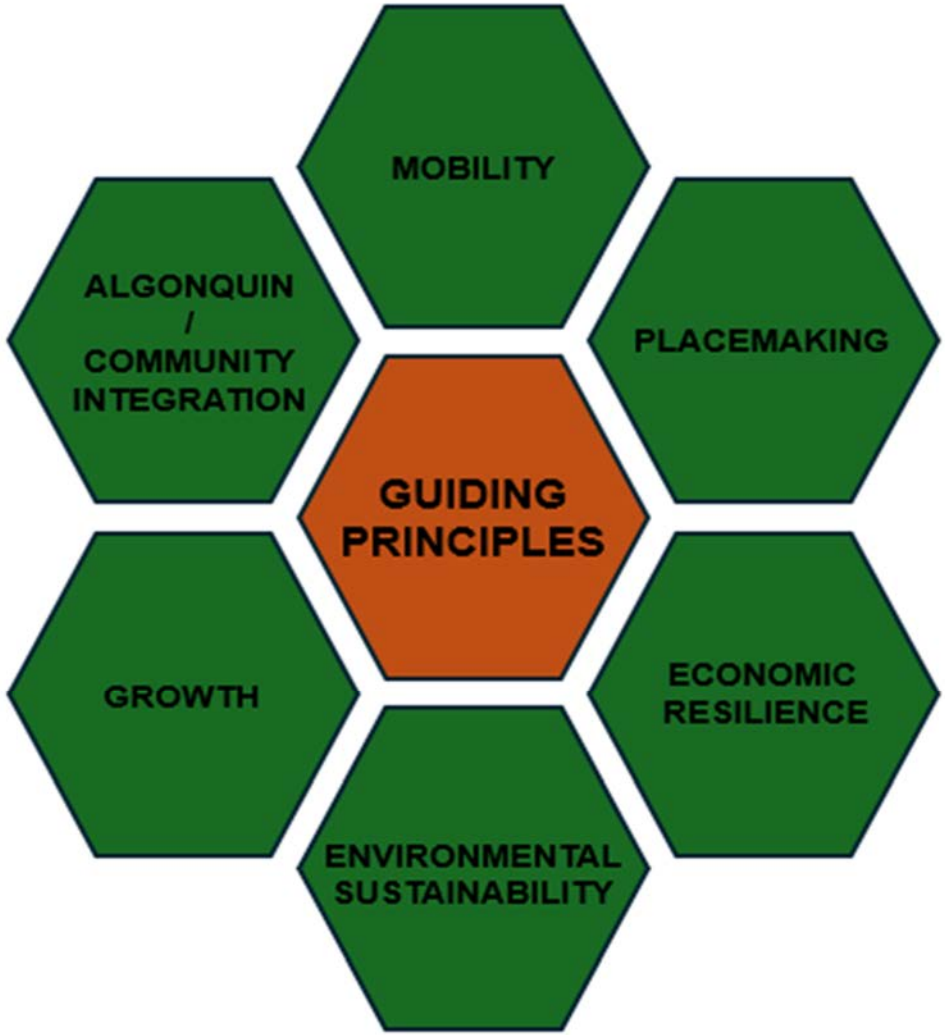


Figure 9-1: Guiding Principles

10.0 Design Concepts

The project team drafted two separate design concepts for the ASA. One design concept focuses on achieving the goals set out by the team's guiding vision in an economically feasible manner. The second design concept ignores the economic realities of the site to allow for more creative (and expensive) design.

10.1 Design One: Business as Usual

In drafting Design One, the project team sought to create an economically feasible design in line with our guiding principles. This was achieved by implemented building archetypes with a history of successful construction in the City of Ottawa and by opting for tried-and-true designs for improving the site.

See the next page for an overview of Design Concept One.



Figure 10-1: Design Concept One: Business as Usual

Net Precinct Totals	Gross Floor Area (m^2)	Open Space Area (m^2)	Dwelling Units	Potential Residents
Residential Area A	132,417	15,897	309	774
Residential Area B	186,487	13,081	1,620	4,051
Residential Area C	53,372	14,038	407	1,019
Downtown Area	441,248	39,254	3,265	8,163
Cultural Hub Area	54,734	4,802	440	1,101
Older Adults Area	79,314	12,662	468	1,169
Activator Area	355,583	41,603	2,799	6,999
Totals	1,303,156	141,337	9,310	23,275

Table 10-1: Design One Development Parameters. For greater detail refer to Appendix E

10.1 Design Directions

To explore the many small decisions that went into this design, the project team has summarized our work with five key design directions.



Figure 10-2: Greenways and Community Spaces in Concept One

10.1.1 Establish an interconnected network of greenspaces, greenways and community spaces.

The area surrounding the ASA features several high-quality parks and green spaces. The proposed design continues this trend by introducing multiple new green spaces. Additionally, several multi-use and greenway connections have been made between major green and community spaces to ensure a pleasant traveling experience.



Figure 10-3: Green Network of the Proposed BAU Development Concept



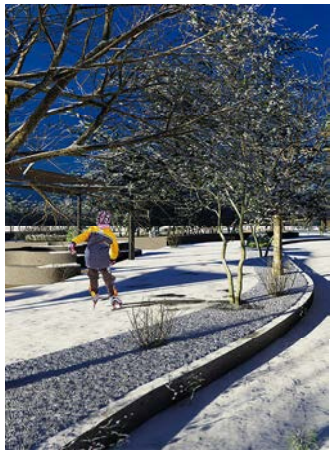




Figure 10-4: Proposed College Park

10.1.2 Design a vibrant main street, complemented by a network of active frontage streets.

The proposed design features a commercial main street on the eastern portion of the ASA which will run north-south between Algonquin College and Baseline Avenue and interface with the main street proposed by the Algonquin College Master Plan.

The proposed street has been designed to provide a pleasant and comfortable pedestrian experience, while supporting commercial and residential uses. Additionally, the project team has proposed several active frontage streets, which will also focus on providing a pleasant pedestrian experience for all modes of transportation.



Figure 10-5: Mainstreet and Active Frontage Streets



Figures 10-6 and 10-7: Proposed Mainstreet





Figure 10-8: Proposed Plaza Abutting Algonquin College at the Southern-end of the Proposed Mainstreet

10.1.3 Develop a series of distinct nodes, each with its own unique character.

Our proposed design features seven distinct nodes:

- Residential Node A/B/C
- Commercial District
- Activator/TOD
- Older Adult Node
- Nepean Cultural Hub Node

Each node features a distinct land use pattern, right-of-way design, and built form to support their purpose and character. Residential Zones A and B provide several efficiently built housing units with easy access to greenspace and multiple mobility options. The main street zone provides a commercial hub for the area, and an enjoyable pedestrian experience. The activator node provides significant housing within walking distance of Algonquin Station. The older adult node features a network of highly accessible streets (woonerfs) along with essential services for older adults including a medical facility and grocery store. The cultural hub node includes several community assets, including the old City of Nepean Town Hall, a theatre, and a public library.

See next page for a map of the project team's ASA character areas.

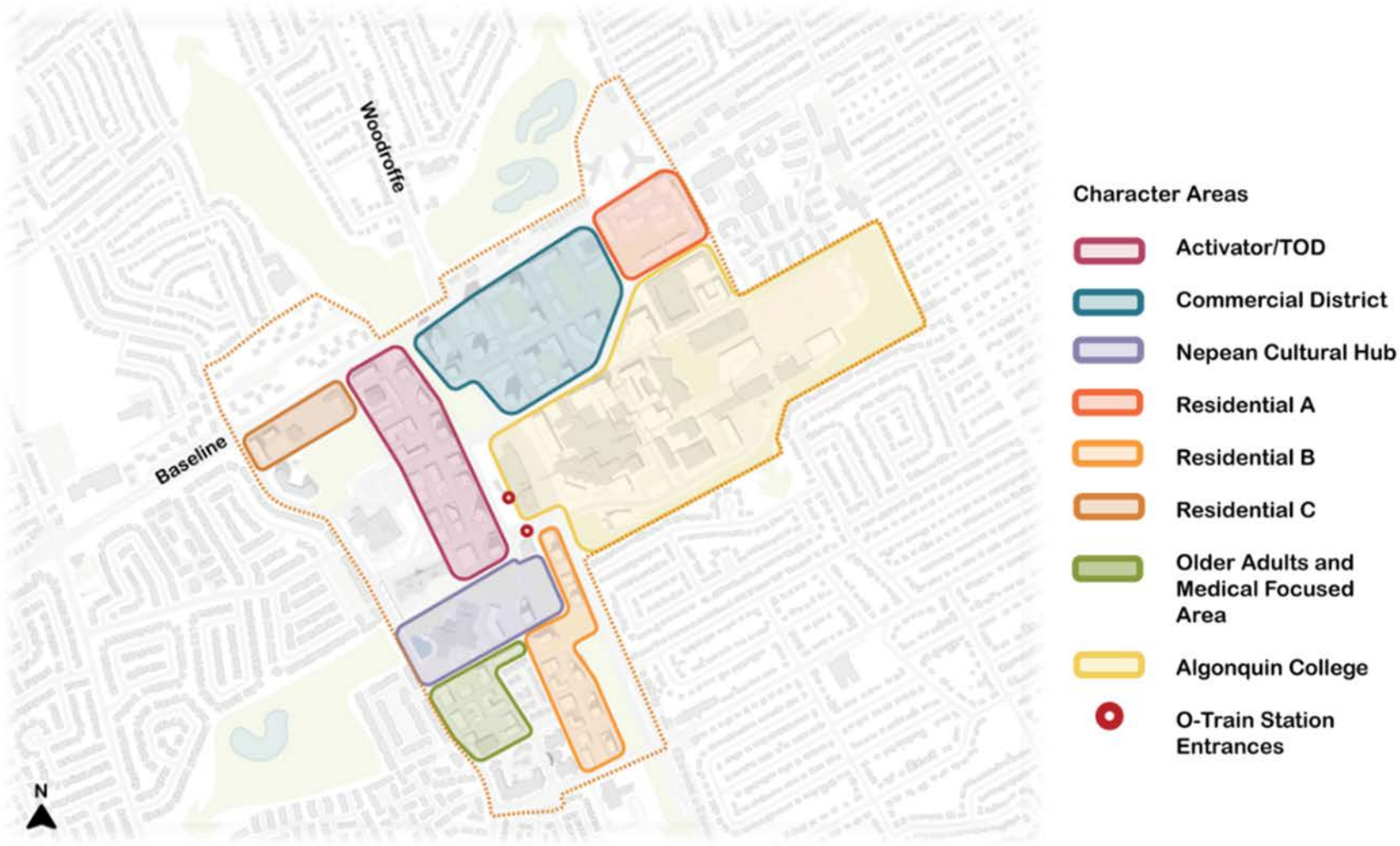


Figure 10-9: Algonquin Station Character Areas

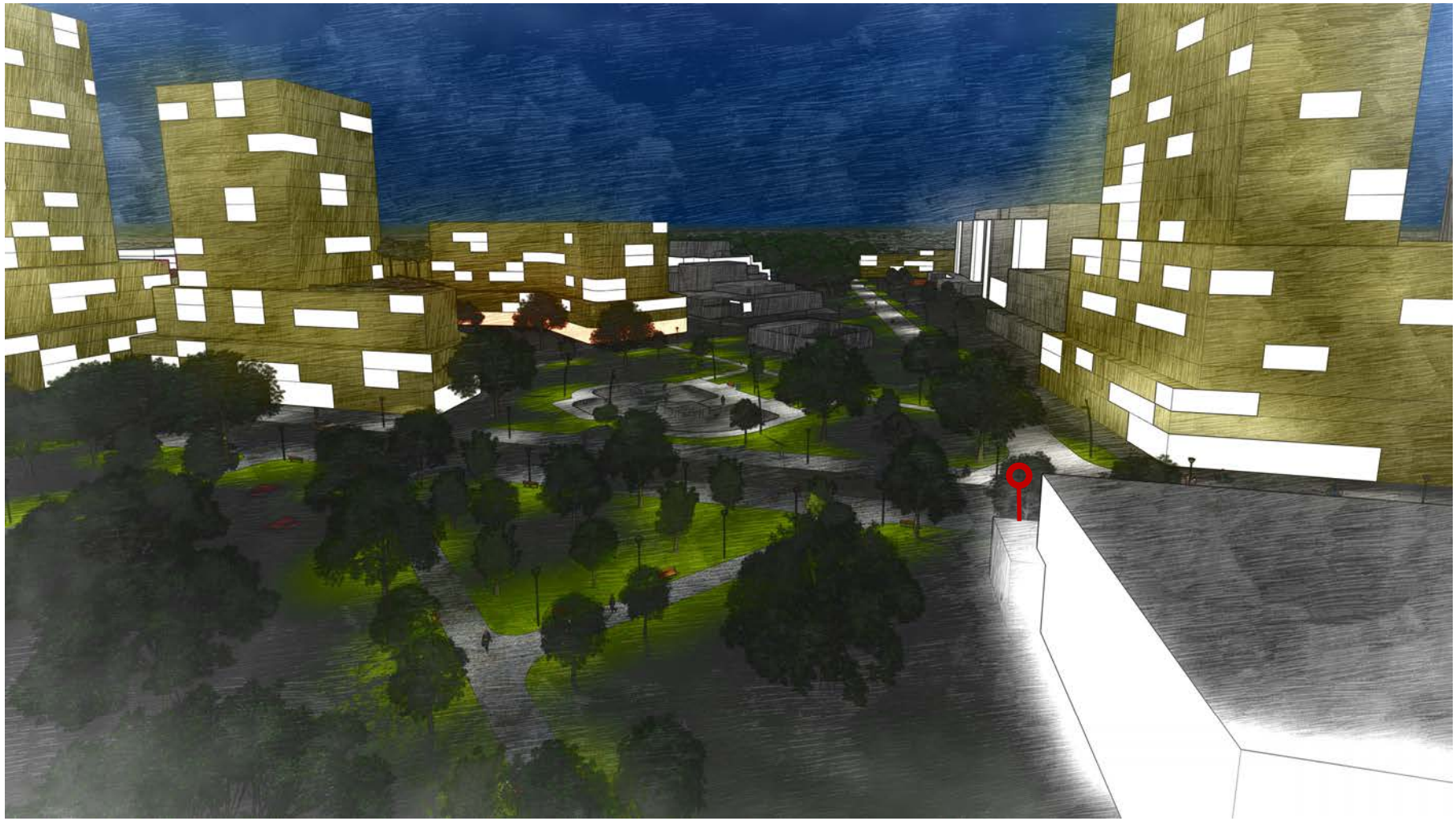


Figure 10-10: Rendering of Proposed Cultural Hub at Night

10.1.4 Create safe and accessible active travel pathways to support sustainable travel modes.

The proposed design features a series of complete streets in keeping with the City of Ottawa's design standards to support multi-modal mobility. Each proposed street, aside from the woonerf, features a protected multi-use lane. Additionally, the design features several dedicated multi-use pathways which seek to repair the ASA's fragmented cycling network.

The ASA offers excellent vehicular connectivity to the rest of Ottawa, often at the expense of sustainable transportation options. The area features disconnected and fragmented active transportation networks that discourage pedestrians and cyclists. To address this problem, the project team has proposed shrinking road widths, implementing pedestrian-oriented infrastructure, upgrading and adding connections to existing pathways, and reducing car infrastructure. Together with the anticipated O-Train expansion and introduction of the BRT line, these interventions will encourage a modal shift towards sustainable transportation options.

See the next page for the proposed street network.

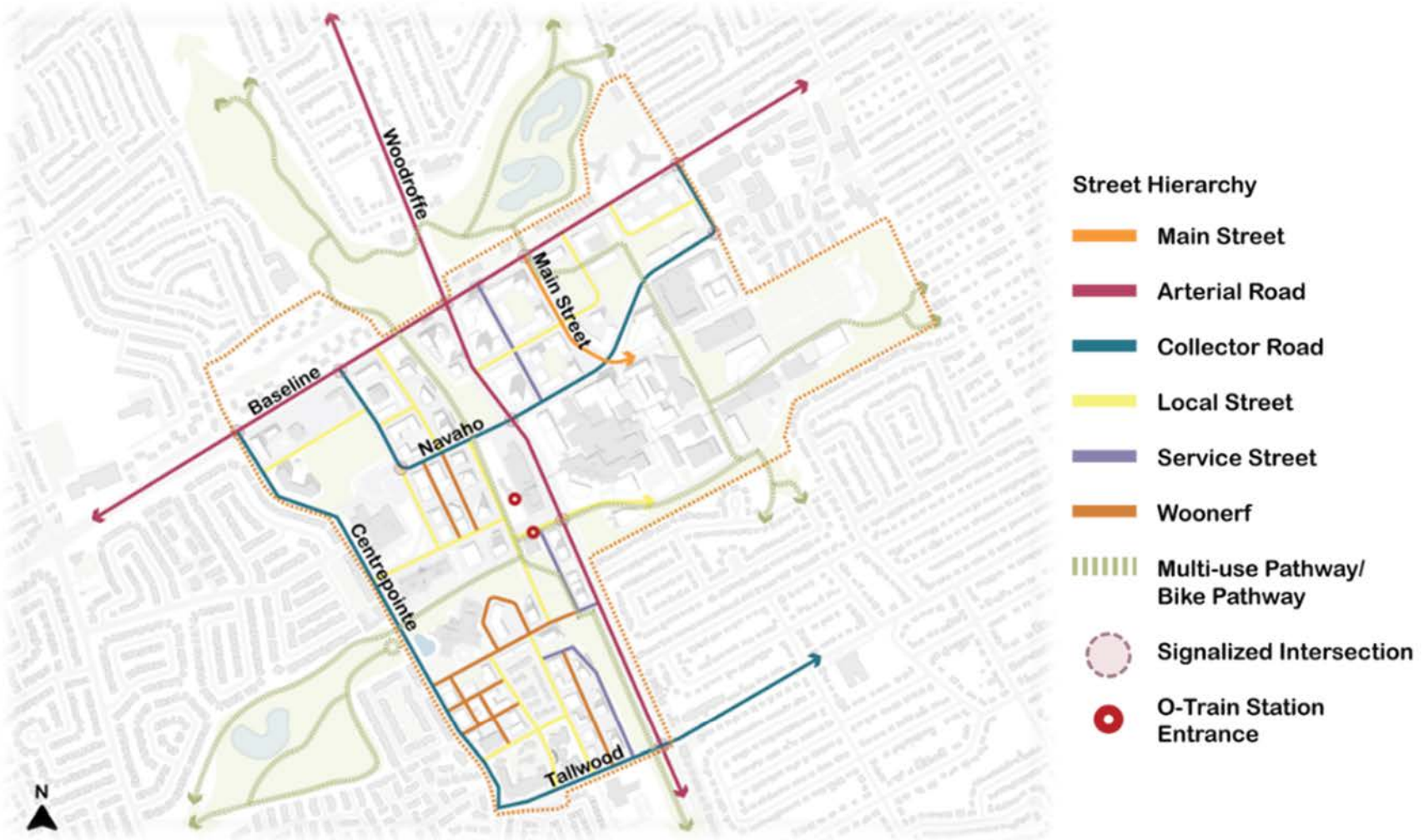


Figure 10-11. Proposed Street Network



Figure 10-12: Low-rise Development on the East Side of the ASA

10.1.5 Prioritize highest density development closest to rapid transit hubs and corridors.

With the expansion of the O-Train Line 1 and the introduction of a new BRT line, the ASA has the potential to become accessible to a large catchment of people across the city. Concentrating high-density development near key transit areas encourages greater public transit ridership, reduces reliance on personal vehicles, and creates a vibrant, dynamic community that meets the needs of all residents and visitors.



Figure 10-13: Proposed Density Distribution



Figure 10-14: Proposed High Density Development Render Shown in the Morning

10.6 Integrate a mix of land uses within a 15-minute radius to create an accessible, vibrant, and cohesive community.
As Ottawa continues to grow, infill developments, like this one will be crucial for ensuring that current and future residents are accommodated sustainably. The project team's vision is for residents to be able to access goods, services, employment and multiple mobility options within a 15-minute walk of their home.



Figure 10-15: Efficient, Mixed Land Use Pattern for Business-as-Usual Design



Figure 10-16: Primary Proposed Grocery Store

10.2 Design Two: Creative Design

The project team's second design "without limitation" focused on developing creative and unorthodox designs to create a great park within the ASA. This design features a few key changes from the original.



Figure 10-17: Design Concept Two: Maximizing Potential

Net Precinct Totals	Gross Floor Area (m^2)	Office Area (m^2)	Residential Area (m^2)	Open Space Area (m^2)	Dwelling Units
Residential Area A	119,836	0	57,849	22,624	697
Residential Area B	195,571	0	141,764	13,081	1,708
Residential Area C	53,371	0	33,817	14,038	407
Downtown Area	387,791	3,179	237,472	31,038	2,861
Cultural Hub Area	57,530	0	38,784	4,802	467
Older Adults Area	79,314	2,552	38,820	12,662	468
Activator Area	292,636	0	191,746	37,315	2,310
LRT Park Cap	46,568	0	0	10,220	0
Totals	1,186,052	5,732	740,251	135,561	8,919

Table 10-2: Development Parameters for Design Two. For greater detail refer to Appendix E

10.2.1 Key Change One

Design Two removes some building sites, and caps the Light Rail Transit line just north of Algonquin Station. This cap would create a significant amount of open space with excellent flexibility for future programming.



Figure 10-18: Cap Covering LRT Ditch.

10.2.2 Key Change Two

Design Two also proposes consolidating the green space in the eastern portion of the ASA to create a large central park. This feature will reduce the number of residential units possible on the site but provides valuable amenity space for the community.



Figure 10-19: Large Consolidated Park North of Algonquin College.

10.2.3 Key Change Three

Finally, Design Two features a much taller built form. Building heights near Algonquin Station are significantly taller at 25-40 storeys. This change would maximize park space while providing a similar number of new residential units.



Fig 10-20: Building Heights up to Forty Storeys

11.0 Evaluation

11.1 Land Use

Design One's proposed residential density of 220 units per hectare exceeds the City of Ottawa's target density of 200 residential units per hectare. This target comes from the Official Plan, adopted in 2022. In addition to meeting the density target, the design achieves a mix of land uses, including residential, commercial, open space, institutional and community uses. This mix of land uses transforms the ASA into a complete community demonstrating the 15-minute Neighbourhood concept. Existing community amenities, such as the Loblaws and Home Depot, remain in new mixed-use structures. Parks and existing pathways are retained and improved, enhancing connectivity throughout the ASA.

11.2 Place Making

The primary objective of this report is to transform the ASA into a vibrant destination to live, work, play, and learn. This vision requires thoughtful urban design and a cohesive aesthetic that creates a high-quality public realm that attracts people to the ASA. Key components include landscaping, expanded sidewalks, multi-use pathways, and shared bike lanes to support an engaging, pedestrian-friendly environment.

A new main street, designed at a pedestrian scale, features high-quality facades and tree-lined streetscapes that create a safe, inviting, and walkable space. New buildings respect local heritage and existing architectural forms found in the adjacent residential neighbourhood and Algonquin College.

11.3 Mobility

Enhancing mobility and connectivity throughout the ASA is a central goal of this redevelopment project. A new main street in College Square forms part of the area's pedestrian network, including well-designed pedestrian paths linking Algonquin College, the main street, and the northern lands owned and operated by the National Capital Commission (NCC). The site features improved pathways for safe and convenient pedestrian access, alongside protected bike lanes along Baseline Road and Woodroffe Avenue. This comprehensive mobility network prioritizes active transportation, making it easier for residents, students, and visitors to navigate the area on foot or by bike, thereby reducing car dependency and supporting a vibrant, walkable community.

11.4 Economic Diversity

A wide range of commercial and office land uses is introduced to the ASA to foster economic growth and expansion. Commercial uses are located within mid and high-rise buildings at grade, providing employment opportunities and convenience for residents. Additionally, significant infill and intensification create more jobs per hectare and attract new employment opportunities.

11.5 Safety and Inclusivity

In alignment with the policy directions outlined in the City of Ottawa's new Official Plan, the ASA features accessible, pedestrian-friendly streetscapes that prioritize comfort, safety, and inclusivity for people of all genders, ages, and abilities. The addition of wide, tree-lined sidewalks, shared-use bike lanes, and expanded multi-use pathways enhances mobility and safety, encouraging active transportation over driving. Improved lighting and unobstructed sightlines further promote safety and enhance perceptions of safety, especially at night. Streetscapes incorporate accessible features, including tactile paving, curb ramps, and ample resting spaces, ensuring that everyone can navigate the area comfortably and independently.

11.6 Growth and Intensification

Achieving the target density of 200 residential units and jobs per hectare requires substantial infill development and intensification in the ASA. High-density, mixed-use high-rises surround Algonquin Station, implementing the project's TOD goals. Building heights and density decrease as development transitions outward, aligning with the scale of nearby detached homes.

11.7 Environmental Resiliency

Protecting and enhancing the environment is essential for long-term resiliency. This redevelopment promotes high building standards, such as LEED certification, to prioritize energy efficiency, sustainable materials, and waste reduction. Reusing materials from existing structures and selecting eco-friendly alternatives further reduce the project's carbon footprint. Additionally, the project's focus on active transportation—with improved pedestrian pathways, bike lanes, and seamless transit access—reduces car dependency, lowering emissions and enhancing air quality. Together, these strategies create a resilient, low-impact urban environment aligned with the City of Ottawa's proposed "High Performance Development Standards" (not yet adopted).

See next page for the proposed evaluation matrix.

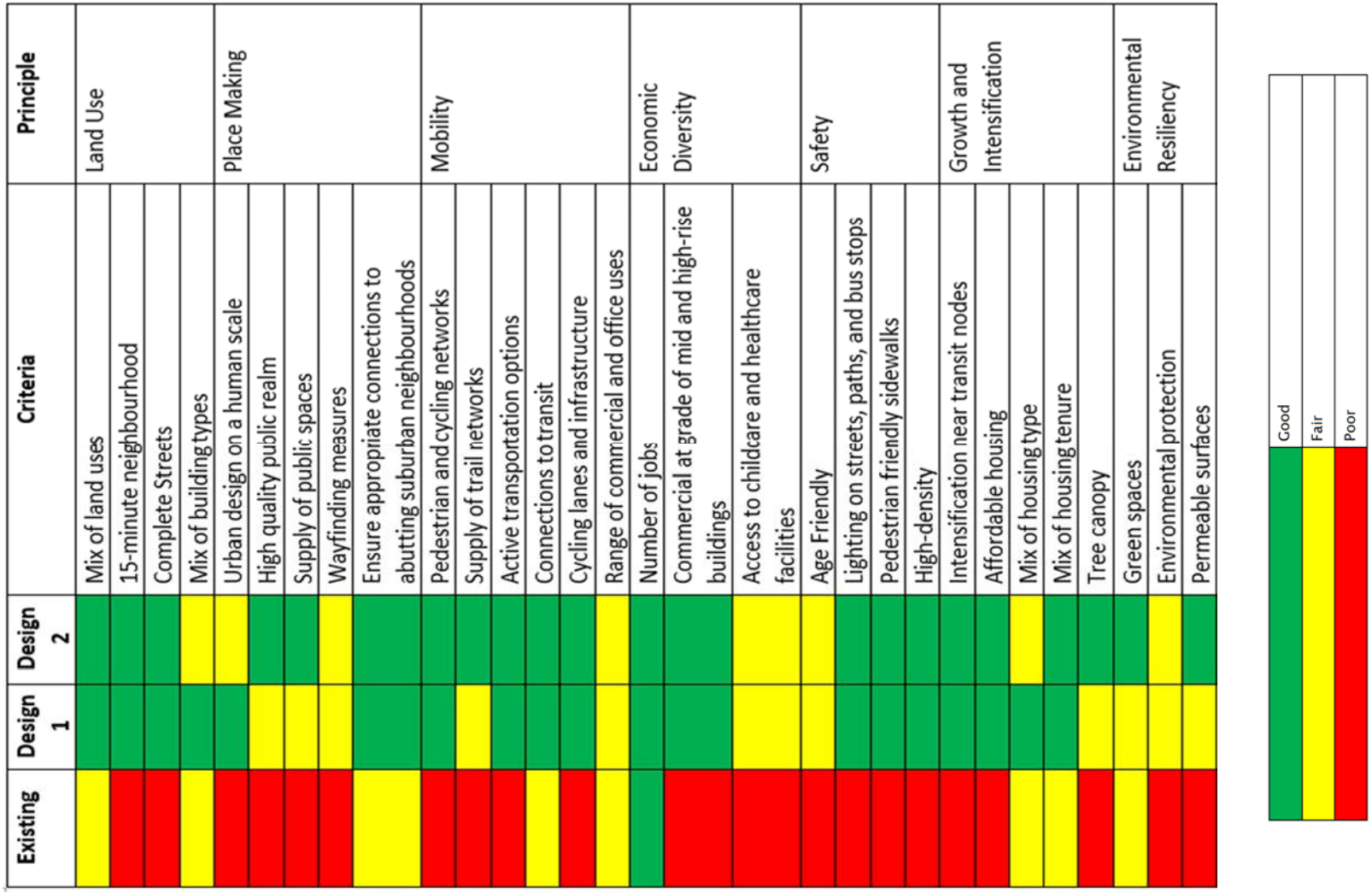


Figure 11-1: Evaluation Criteria

12.0 Phasing Plan

A phasing plan comprising five strategic phases over 20 years is proposed to redevelop the ASA in a sustainable and equitable way.

12.1 Phase 1

Phase one, coloured in red, concentrates on developing sites adjacent to Algonquin Station along the edges of the ASA. This utilizes sites that are currently vacant and used for parking. The public park on the west side of the ASA, bordering Navaho Drive, will be built in this first phase to allow the community to benefit from the very beginning of the ASA's redevelopment. A parking structure will be built during this phase on both the western side and the eastern side of the ASA beside 100 Constellation Drive to provide parking for the area and City of Ottawa staff while the vacant parking lots are redeveloped during the second phase.

12.2 Phase 2

Phase two, coloured in purple, is focused on building a new neighbourhood main street to create a vibrant nexus for the community. This phase will also develop more public and private green spaces across the ASA to facilitate active recreation. The redevelopment of underutilized lots, such as parking lots and small buildings, have also been included in this phase as their redevelopment has minimal impact on the broader community. The redevelopment of vacant parking lots adjacent to 100 Constellation is a major part of this phase.

12.3 Phase 3

Phase three, coloured in green, focuses on increasing the stock of residential buildings and increasing density in the ASA.

12.4 Phase 4

Phase four, coloured in orange, focuses on redeveloping uses that will be phased out or moved elsewhere on the site. One example is the moving of the Loblaws grocery store from its current location to the corner of Woodroffe Avenue and Navaho Drive, which is set to be completed during Phase 1.

12.5 Phase 5

The fifth and final phase, coloured in dark blue, focuses on the redevelopment of sites with long-term tenants that must be relocated within or outside the ASA. This includes the demolition of the Home Depot, which will be relocated to the corner of Baseline Road and Woodroffe Avenue, and Peter D. Clarke Long Term Care Home, which will be redeveloped into a mix of medium and high-density residential buildings.

See the next page for a visualization of the phasing plan.

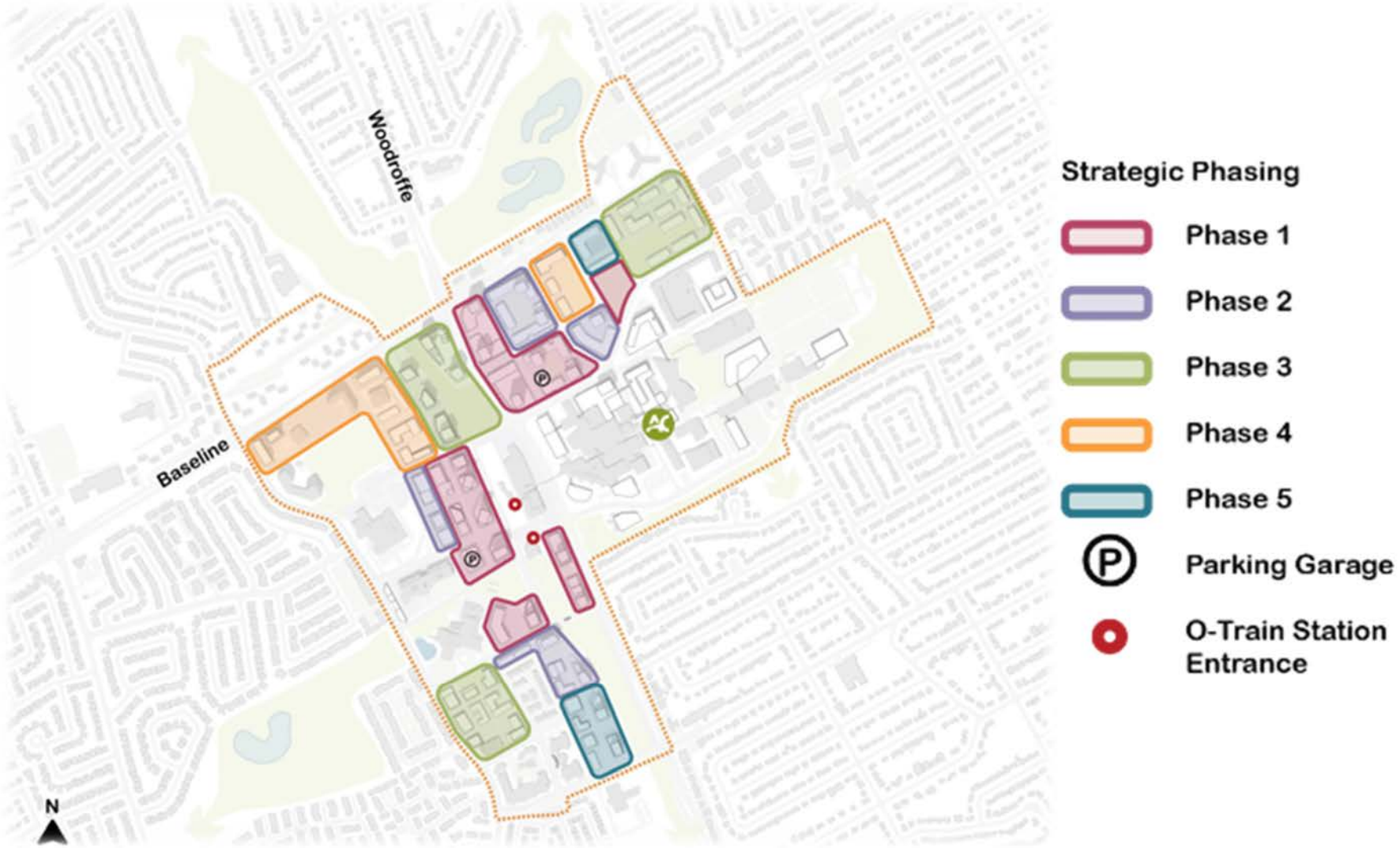


Figure 12-1. Phasing Plan for the Algonquin Station Area

13.0 Recommendations & Conclusion

To support the implementation of this project, we have identified six key recommendations related to land use, housing, mobility, urban design, community, and environmental sustainability. These recommendations help achieve the optimal redevelopment of the ASA in accordance with the vision and best practices identified.

13.1 Recommendations

13.1.1 Land Use

- Create a walkable, 15-minute neighbourhood by integrating diverse commercial, residential, and recreational spaces. This will help ensure that residents must walk at most 15 minutes to access these key services.
- Locate highest density and tallest buildings near Algonquin Station and along major roads to ensure that residents are connected to key features, shadow impacts are minimized, and vehicular-related sound is buffered.
- Provide a transition of built form surrounding low-rise residential neighbourhoods.

13.1.2 Mobility

- Construct a multi-use path network, providing direct access from areas of intensification to Algonquin Station as well as between the ASA's major green spaces.
- Create complete streets that include cycle lanes and widened sidewalks along Baseline Road, Woodroffe Avenue, and other important networks, supporting multimodal transportation.
- Focus on active transportation to support healthy lifestyles and the 15-minute neighbourhood concept.

13.1.3 Housing

- Utilize a variety of building types and approaches to address the larger-scale need for affordable housing and to attract residents of varying demographics.
- Supply affordable rental housing units on City-owned lots to diversify the population and housing market.
- Consider the introduction of secondary residential units in existing low-density neighbourhoods to meet density targets.
- Create more "missing middle" housing by developing dense, low-rise building types.

13.1.4 Urban Design

- Design a vibrant main street in college square complemented by a network of active frontage streets that provide ground-oriented retail, service, and commercial uses catered to pedestrians.
- Design open spaces that are scaled to the pedestrian with viewsheds, pedestrian infrastructure, and an engaging public realm.
- Strive for small, permeable blocks with midblock connections on greyfield sites.
- Feature residential point towers with step-backs above mixed -use podiums to increase density while maintaining human-scaled development.
- Activate public plazas and parks through art, furniture, and recreational features to ensure a vibrant and safe public realm.

13.1.5 Community

- Establish an interconnected network of greenspaces, greenways and community spaces.
- Develop a series of distinct nodes, each with its own unique character.
- Supply new city parks and support third places for gatherings such as public plazas and a network of pathways.
- Support community events in new plazas such as farmers markets, music festivals, art shows, holiday markets, skating rinks, and more.

13.1.6 Environmental Sustainability

- Improve the tree canopy to increase surface permeability.
- Explore alternative energy sources, such as green roofs and solar panels.
- Consider energy-efficient building features and materials that reduce the ecological footprint and long-term maintenance cost of development and employ sustainable building standards such as LEED.
- Provide green vehicle charging stations throughout the ASA, including at Algonquin Station and loading docks.
- Reassess demands on public utility infrastructure throughout phased development.

13.2 Conclusion

13.2.1 Project Summary

The ASA is being redesigned to suit the needs of the current and future community, and expand transit connections across Ottawa. The City of Ottawa is planning a western extension of the Confederation Line, set to open in 2026. The City of Ottawa has also approved a functional design for the Baseline Bus Rapid Transit (BRT) line. The team designed two alternative design concepts for the ASA.

We proposed six design principles to turn the Algonquin Station Area into a transit-oriented development, including:

- Establish an interconnected network of green spaces, greenways, and community spaces.
- Design a vibrant main street, complemented by a network of active frontage streets.
- Develop of a series of distinct nodes, each with its own unique character.
- Create a safer, more accessible active travel pathways to foster a shift towards sustainable transportation choices.
- Prioritize high density development near rapid transit hubs, and corridors to help create a unique destination that caters to residents, students, and visitors.
- Utilize a variety of building types and approaches to address the need for affordable housing.

We believe that these concepts, along with the recommendations above will turn the ASA into a strong, transit-oriented community. With care taken to serve the existing and future residents and visitors, we believe this new community will thrive for years to come.

13.2.2 Final Presentation to Client

After conducting a thorough analysis and developing a vision for the ASA, the project team presented our design and recommendations for its redevelopment on December 5th, 2024, at Knox Presbyterian Church in Ottawa.

The project team concluded the presentation by inviting feedback and questions regarding the design and completed report from the audience. This Q&A can be found in Appendix H.

APPENDICES

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APPENDIX A – POLICY ANALYSIS

Provincial Planning Statement (PPS), 2024

Section 2.1 Planning for People and Homes

To accommodate the needs of current and future residents, planning authorities must support a range of housing options and densities, including affordable housing. The city should promote higher-density development that maximizes the efficient use of land, infrastructure, and public services while encouraging active transportation. The PPS further advocates the development of complete communities, integrating diverse land uses such as housing, transportation, employment, public services, and recreational spaces to address the community's needs. The project team believes the ASA has the potential to become a complete community incorporating mixed-use developments within the strategic growth area.

Section 2.4.1 General Policies for Strategic Growth Areas

General policies for strategic growth areas are crucial for accommodating population and employment growth. This will be done through the development of mixed-use neighbourhoods that promote housing diversity, intensify land use, and support educational, commercial, and recreational growth.

Section 2.4.2 Major Transit Station Areas (MTSA) and Section 3.2 Transportation Systems

Major Transit Station Areas provide strong connections to local and regional transit networks. The need for infrastructure to cater to the diverse multimodal transportation network allows for facilities such as commuter pickup and drop-off locations to enhance transportation efficiency, moving toward active transportation goals.

Section 3.9 Public Spaces, Recreation, Parks, Trails and Open Space

Public spaces, recreation, parks, trails and open space promote healthy active and inclusive communities that require planning for public spaces, streets, and facilities. The PPS prioritizes safety and accessibility for all age groups and abilities to encourage active transportation and social interaction. Our team has designed the ASA to include features that provide safety and accessibility to create a strong and healthy community.

The City of Ottawa Official Plan, 2021

Big Policy Moves

Section 2.1- Big Policy Move 1

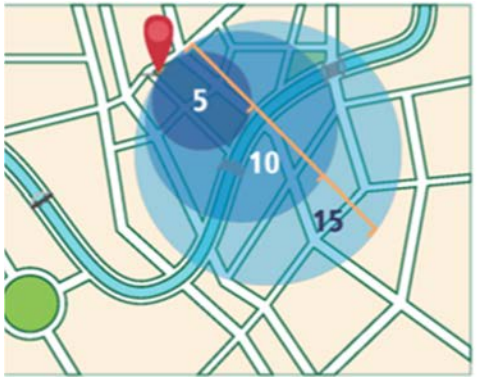
With the anticipated growth of Ottawa and the introduction of Algonquin Station, the ASA will grow through infill and the redevelopment of underutilized parcels of land.

Section 2.1- Big Policy Move 2

With sustainable transportation as a priority, the OP aims for over half of all trips to be made using sustainable modes of transportation by 2046. This can be achieved through the expansion of the O-Line Light Rail Transit (LRT) and Bus Rapid Transit (BRT) routes. The ASA is a Protected Major Transit Station

Areas (PMTSA) with two O-Train Stations and six Transitway Stations that service the LRT and the BRT.

Section 2.2.1- Intensification and Diversifying Housing Options
Residential growth will be directed within the urban area to create 15-minute neighbourhoods. Residential intensification is planned to be located within Hubs, Corridors and surrounding neighbourhoods, ensuring people live in areas where they can access their daily and weekly needs within a 15-minute walk. The ASA does not have a diverse housing stock as it is primarily low-rise residential areas abutting large commercial plazas and Algonquin College. Housing diversification and intensification is crucial to transform the current greyfield landscape. Mixed-use developments in commercial plazas will provide affordable and accessible housing options, while also expanding the variety of housing in the area.



Walking Distance

Radius Distance (metre)	Network Distance (metre)	Walking Time (minute)
300	400	5
600	800	10
900	1200	15

Figure A-1: 15-Minute Walking Distance Radius (City of Ottawa, 2024c)

Section 3.3- Design 15-Minute Neighbourhoods
Throughout the OP, neighbourhoods are believed to support the needs of an increasing and diverse population, while improving accessibility, connectivity, and services within neighbourhoods. The OP equates a 15-minute walk with a radius of 900 metres, or 1,200 metres as a designated pedestrian network, see Figure A-1 below.
The ASA has the potential to become a successful 15-minute neighbourhood.

Section 4.1-Mobility
A commitment to creating equitable, safe, and healthy communities while addressing climate change is emphasized in the OP. Priority will be given to space-efficient and cost-effective transportation modes, reducing reliance on cars and promoting public transit and active transportation. The OP prioritizes sustainable transportation, emphasizing the importance of reducing reliance on cars and enhancing public transit options. With its density, walkability, and proximity to transit, the ASA has strong potential to become a thriving transit-oriented neighbourhood.

Section 4.2-Housing
Adequate, safe, and affordable housing is crucial for Ottawa's well-being and economic growth. Ottawa will continue to support affordable housing through initiatives such as the 10-year Housing and Homelessness Plan. Tools such as inclusionary zoning and flexible planning incentives will promote housing for

diverse incomes and needs. The ASA is filled with low-rise residential housing. Increasing housing diversity and density will allow for more affordable housing and economic growth in the area.

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Section 4.6.6- Integrate Low-Rise, Mid-Rise and High-Rise Buildings to Ensure Ottawa Meets its Intensification Targets while Considering Liveability for All
New development, including low, mid, and high-rise buildings, will be designed considering their surroundings. Gradual height and massing transitions will ensure liveability and maintain harmony with adjacent low-rise neighbourhoods, guided by the zoning provisions and design standards. According to the OP, The ASA is located in a low-rise residential area. This project will create a gradual shift from low-rise to mid and high-rise buildings and continue to meet intensification targets while integrating a gradual shift in development, as seen in Figure A-2.

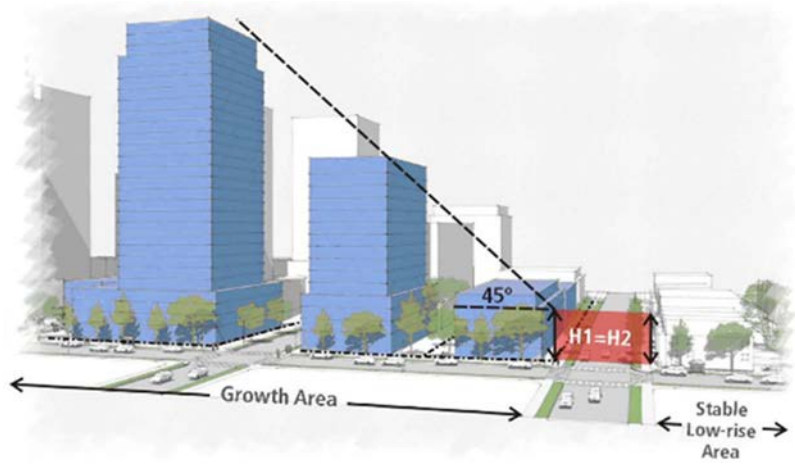


Figure A-2: Illustrate the Transitions between Low, Mid and High-rise buildings (City of Ottawa, 2024d)

Section 5.3- Outer Urban Transect

The Outer Urban Transect comprises neighbourhoods built in the late 20th century, originally inside the Greenbelt and designed around car travel with low-density housing. Most of the area's building stock is too recent to expect wholesale redevelopment. However, the focus of this project is to foster growth in local hubs and corridors and promote more diverse housing options to adapt to changing demographics. This will be seen throughout the ASA as it is a hub which will be home to multiple transit stations.

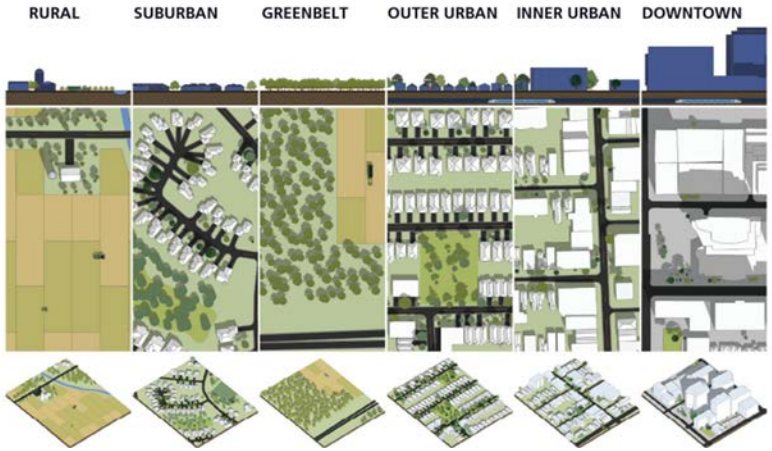


Figure A-3: City of Ottawa Urban-to-Rural Transects (City of Ottawa, 2024e).

Section 5.3.1-Recognize a Suburban Pattern of Built Form and Site Design

Development in the Outer Urban Transect will mostly be low-rise in neighbourhoods and minor corridors. Mid or high-rise development is planned along main streets and hubs. Strategic locations near transit stations will see mixed-use urban development to support transit and create urban environments. Building heights along main streets will vary based on street width and site size, with transitions and setbacks to integrate with low-rise areas. The goal of the ASA is to incorporate mixed-use development into a transit-oriented development to ensure that the 15-minute complete neighbourhood is achieved.

Section 6.1-Hubs

Hubs are centred around rapid transit or frequent street transit stops, serving as areas for higher-density development and mixed uses. They will concentrate on diverse functions, foster major employment centres, and enhance transit connectivity. Hubs are also designated as PMTSAs under provincial policy. The OP designates the ASA as a Hub/PMTSA. As a hub, the ASA allows for diverse, high-density development.

15-Minute Neighbourhoods Baseline Report, 2021

The 15-Minute Neighbourhood Baseline Report is part of Ottawa's OP and aims to create more sustainable and livable communities. The 15-minute neighbourhood focuses on ensuring that essential services and amenities, such as grocery stores, parks, and health services, are within a 15-minute

walking distance of residential areas. Through promoting walkability, the initiative seeks to enhance public health, social equity, and urban resilience, aligning with Ottawa's strategic growth and mobility goals, including the "Five Big Moves" framework.

The report also includes a baseline assessment to identify existing conditions involving a scoring system, and later an analysis to determine how neighbourhoods can improve their 15 -Minute Neighbourhood scores. The report concludes with a section dedicated to the improvements and the next steps for each specific area by score.

Within the Baseline Report, Woodroffe Avenue and Baseline Road are identified as having high to moderate access to services and amenities with a low score in the pedestrian environment

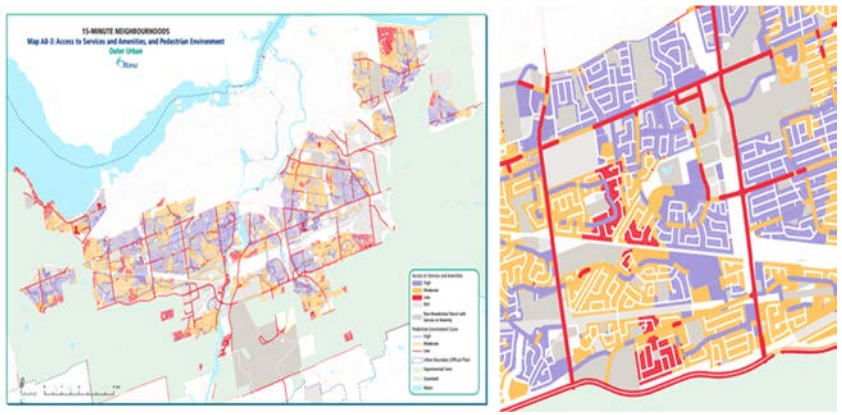


Figure A-4: 15-Minute Neighbourhood Services and Pedestrian Environment Outer Urban Score (City of Ottawa, 2021 b)

see Figure A-3. According to the report, some improvements for neighbourhoods within the outer urban area with moderate and low scores include:

- Providing commercial space for small-scale retail that is oriented to the street and provides active frontage.
- Thread new mixed-use buildings into the surrounding urban fabric to facilitate new pedestrian linkages that include public streets and pathways.
- Reduce traffic volumes and speeds through traffic calming and by reallocating space in the public right-of-way away from vehicular circulation to pedestrian-supportive infrastructure.
- Increase year-round access to O-Train stations and adjacent services.

Transportation Master Plan, 2023

The 2023 Transportation Master Plan (TMP) serves as the blueprint for Ottawa's transportation network, aiming to support the city's growth until 2046. It focuses on sustainability, health, and equity while promoting accessibility, climate resilience, and fiscal responsibility. The plan envisions a safe, reliable, and sustainable system that reduces greenhouse gas emissions, includes climate-resilient infrastructure, and provides accessible and equitable transportation.

Policy 1-1 Design the Transportation System to Achieve GHG Emission Reduction Targets

Designing the transportation system to achieve GHG emission

reduction targets and sustainable resilient transportation is one of Ottawa's major goals. The TMP encourages a shift from personal vehicle use to sustainable modes such as walking, cycling, and transit. By 2030, the TMP has the target of 58% of trips being made using sustainable modes. The ASA aims to provide access to safe, reliable, sustainable public transit in the surrounding area.

Policy 1-4 Ensure That Maintenance and Operations Are Resilient to Future Climate Conditions
The TMP aims to improve walkability, cycling network expansion, and transit while promoting safe streets for all users. The plan integrates climate action by supporting the transition to electric vehicles and using data-driven strategies to enhance transportation planning. This framework aims to satisfy Ottawa's future transportation needs while ensuring sustainability, equity, and inclusivity.

Policy 5-2 Prioritize Modes of Travel That are Space-Efficient
The TMP emphasizes a multimodal transportation network which reinforces the complete streets approach. This accommodates pedestrians, cyclists, transit, and drivers. Expanding cycling and pedestrian infrastructure is prioritized in the TMP as well as in the ASA, as it creates a safe and connected area. This expansion will ensure that underserved areas will have access to affordable and accessible transit.

Zoning By-law
The City of Ottawa is in the process of updating Zoning By-law 2008-250, which controls all land uses in the municipality. All zones in the proposed designs align with the objectives of the OP. The next section provides a more detailed overview of the zoning provisions found within the ASA.

Hub Zone
Lands within this zone accommodate a mid-to-high density-built environment and mixed-use neighbourhoods that provide a full range of services to residents. The Hub Zone allows for significant development surrounding transit stations. The ASA falls within the Outer Urban Transect. The OP sets a height range of 3 to 40 storeys for building developments in this zone, allowing for low, mid, and high-rise buildings.

Institutional Zone
Within the ASA, there are two locations zoned for institutional use, include Algonquin College and 55 Centrepointe Drive. Both these locations are educational institutions, with one being a post-secondary college and the other a high school.

Airport Vicinity Development Zone
Within the new Zoning By-Law, a small section of the ASA is within the Airport Vicinity Development Zone. The Airport Influence Overlay provisions outline specific regulations regarding the areas around airports. These include the Airport Operating Influence Zone (AOIZ) and the Airport Vicinity

Development Zone (AVDZ), which are based on the Noise Exposure Forecast (NEF) and the Noise Exposure Projection (NEP) contours. These zones are designed to predict and manage the impact of aircraft noise, with the NEF and NEP contours using data from Transport Canada's system. The zones do not measure actual noise levels but aim to mitigate potential noise impacts from aircraft operations and protect airports from conflicting uses. Any changes to airport operations may increase noise exposure in these zones.

Additionally, the Ottawa Macdonald-Cartier International Airport Zoning Regulations (AZRs), enacted under the Aeronautics Act, apply to lands surrounding the airport. The purpose of the AZRs is to prevent incompatible land development near the airport, ensuring safety and proper airport operations. These regulations impose height limits, restrictions on natural growth, bird hazard management, and prevent interference with navigation aids. The AZRs are enforced by Transport Canada and will take precedence over conflicting local by-laws. Any development application in the vicinity of the airport must be circulated to the Ottawa Macdonald-Cartier International Airport Authority, NAV Canada, and Transport Canada for approval based on their requirements.

Parking

As outlined in the OP, the Zoning By-law shall regulate motor vehicle parking in a way that supports the Hub's focus on transit, walking, and cycling. Regulations regarding on-site parking minimums may be reduced or eliminated. This zoning provision supports the creation of transit-oriented developments within the ASA. In the new Zoning By-law specific businesses have parking minimums.

Implications for Zoning

The new Zoning By-law for the City of Ottawa offers the flexibility to create a TOD in the ASA. The flexibility in building types, the focus on sustainable transportation, and the support for institutional growth, combined with limitations on car-centric infrastructure contribute to a more walkable, TOC. Consideration of the Airport Vicinity Development Zone restrictions will be necessary to ensure that development aligns with airport safety and noise mitigation requirements.

City of Ottawa Pedestrian Plan, 2013

The City of Ottawa Pedestrian Plan 2013 (OPP 2013) aims to transform Ottawa into a pedestrian-friendly city by enhancing walkability through improved infrastructure, policies, and community planning. The vision focuses on creating vibrant, equitable, safe, sustainable, and integrated spaces where walking is accessible and appealing year-round. Key goals include increasing the walking modal share to 10% by 2031 and ensuring safe and direct routes for pedestrians to transit, schools, and parks. To achieve this, OPP 2013 proposes expanding the pedestrian network with new sidewalks, pathways, and pedestrian-friendly intersections, emphasizing the importance of multi-use pathways connecting natural and urban barriers. Improving the pedestrian connectivity around and throughout

the ASA is a priority.

City of Ottawa Cycling Plan
The City of Ottawa Cycling Plan emphasizes the creation of a vast network of cycling routes throughout the City of Ottawa. This plan works alongside the direction set out in the OP regarding sustainable transportation, the Transportation Master Plan and the Parks and Recreation Facilities Master Plan to enhance the connectivity and accessibility of the city's transportation infrastructure, particularly cycling routes and pathways. This plan also promotes sustainable mobility to accommodate future growth. The ASA is identified within this plan as an employment area that shows strong trip linkages with the Bayshore, Barrhaven, and Merivale areas.

Parks and Recreation Facilities Master Plan
The Parks and Recreation Facilities Master Plan for Ottawa focuses on developing recreational spaces to meet future growth demands until 2031. The primary objectives include maintaining park provision levels, acquiring new parklands, enhancing facilities, and aligning with Ottawa's 15-minute neighbourhood strategy. The plan identifies parkland needs by population and geographic areas (transects), the optimization of existing spaces, and improving accessibility to parks citywide. The ASA falls within the suburban zone targeted for future recreational improvements and parkland acquisition. This plan emphasizes increasing access to parks in rapidly growing areas.

Former Baseline and Woodroffe Secondary Plan
The former Baseline and Woodroffe Secondary Plan designed the area as a focal point for employment, business, and transit development. The plan focused on the southern half of the Baseline and Woodroffe intersection. It capitalized on its proximity to rapid-transit stations, aiming to create a balanced urban area that supported residential growth while fostering job opportunities and a robust transportation system. The plan aimed to improve the area's visual appeal and promote healthy living with pedestrian pathways, green spaces, and recreational amenities. It also sought to balance residential and business growth while maintaining the character of adjacent low-density neighbourhoods.

The plan divided the area into four precincts: Constellation, Meridian, College Square, and Algonquin, with each having a specific designation and purpose. The Constellation Precinct featured a mix of residential, commercial, and office spaces. The Meridian Precinct focused on civic and residential development around Ben Franklin Place. College Square remained a retail hub, with an emphasis on integrating office and entertainment spaces. The Algonquin Precinct is centred around Algonquin College, with development guided by a master plan for future growth.

The Baseline and Woodroffe Secondary Plan was repealed and will be replaced with an updated Secondary Plan to align with the City of Ottawa's new Official Plan.

100 Constellation Drive, 2024

The ASA includes 100 Constellation Drive, a nine-storey high office building on a 6.88 hectares lot that has been leased by the City since 2002. The City negotiated an option to buy the property, which is now worth $84-92 million, for a total acquisition cost of $12.2 million, including $2 million in land transfer taxes and other fees. This site is crucial to the redevelopment of the ASA as it is a large building that is surrounded by parking lots in proximity to Algonquin Station. The site can be redeveloped into mixed-use buildings, allowing for the necessary intensification of the area.

Baseline Bus Rapid Transit (BRT), 2017

The Baseline BRT is planned to run directly through the ASA and increase public transit to the site. This line will span from Bayshore to Heron Station and aims to improve mobility, reduce traffic, and provide efficient transit which can be seen in Figure A -4. It includes 14 km of median bus lanes, 24 new stations, and multi-modal options including 22 km of cycle tracks and 23 km of sidewalks. This project is designed under the complete streets framework and accommodates buses, pedestrians, and cyclists. The BRT is projected to cut peak-hour travel times by 11 minutes and promote urban growth through TOD.

10-Year Housing and Homelessness Plan 2020–2030, 2020

The housing and homelessness plan addresses the housing crisis by ensuring there is affordable, adequate housing for all. This plan focuses on reducing homelessness, increasing affordable units (5,700–8,500) by 2030, and supporting vulnerable populations. Key strategies include expanding affordable rental units, adopting innovative models like modular housing, and using a housing first approach to eliminate unhoused individuals. The plan includes systemic changes to end chronic and veteran homelessness by 2030, with targeted strategies for Indigenous communities and marginalized groups. Innovative housing solutions like modular homes and micro-suites, inclusionary zoning, and having 10% of housing be accessible for persons with disabilities is integral.

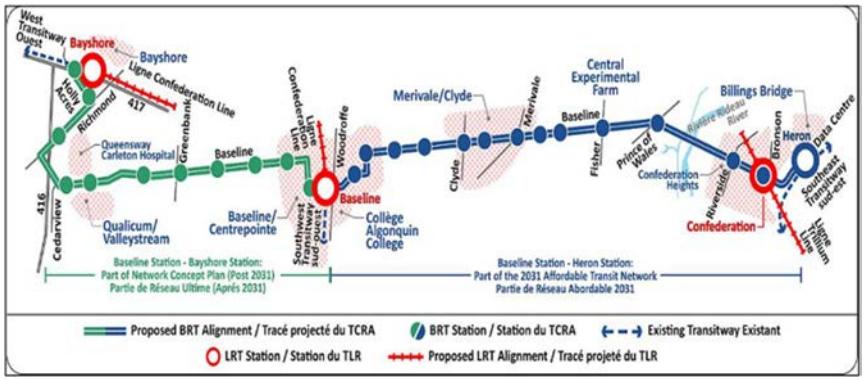


Figure A-5: Recommended Alignment for the BRT Facility and Proposed Station Locations (Chi, 2017).

The ASA will allow for sustainable housing with access to transit. Having access to transit adjacent to housing allows for members of the community to access basic needs. To end the housing and

homelessness crisis in Ottawa our group focused on adding affordable units to the plan and follow the strategies to house marginalized communities within the ASA.

Design Guidelines for Transit-Oriented Developments (TODs), 2007

Land-Use Guidelines

- Transit-Supportive Land Uses: Encourage high residential and employment densities within a 600-metre radius of transit stops to support transit use and efficient transportation. These land uses should:
  - Promote off-peak and reverse-commute travel.
  - Attract pedestrian and cycling traffic.
  - Encourage extended hours of activity throughout the day and week.
- Mixed-Use Community Hubs: TODs should be multi-purpose destinations where residents and transit users can meet many daily needs locally, reducing the need for travel.
- Non-Transit-Supportive Land Uses: Discourage land uses that are car-oriented, including
  - Large surface parking lots.
  - Low-density developments.
  - Those generating high vehicle traffic or negatively impacting pedestrian environments (e.g., isolation, wind tunnels, frequent driveway crossings).
- Density Transition: Cluster high-density, mixed-use buildings (apartments, offices) near transit stations, gradually stepping down building heights and densities toward adjacent lower-density areas to protect nearby residential neighbourhoods.

Layout & Connectivity Guidelines

- Street and Pathway Layout: Design street networks with short block lengths (no more than 150 metres) that offer multiple route choices for pedestrians and cyclists. Streets should prioritize direct access to transit.
- Pedestrian and Cycling Connections: Provide “shortcuts” for pedestrians and cyclists leading directly to transit stations. Ensure these paths are at least 6 metres wide, maintained year-round, and connected to broader greenspace and active transportation networks.
- Building Placement: Place buildings close to each other and along the street front to promote ease of walking between buildings and transit stations. Transit stops should be integrated into the layout early in the design process.
- Visibility and Safety: Ensure clear, visible pedestrian connections. Avoid hidden or recessed areas that could conceal potential threats, using Crime Prevention Through Environmental Design (CPTED) principles to create safe spaces.

Built Form Guidelines

- Building Orientation: Position buildings toward transit stations, providing direct pedestrian access with minimal vehicle conflict. Integrate buildings with Algonquin Station for seamless connectivity.
- Human Scale Design: For buildings taller than 5 storeys, use step-backs to maintain a human-scale environment along the street and minimize wind and shadow impacts in the public realm.
- Landmarks: Incorporate distinctive architectural features or tall buildings that serve as recognizable landmarks, aiding wayfinding and contributing to the visual identity of the area.
- Architectural Variety: Use varied materials, windows, and design elements on lower building levels to engage pedestrians and create an active, attractive streetscape.
- Transparency: Ensure clear windows and doors on street-facing facades to enhance visual interest, security, and ease of access.

Active Transportation Guidelines (Pedestrians & Cyclists)

- Pedestrian Connections: Design pedestrian routes to be safe, comfortable, and barrier-free. Sidewalks and greenways should lead directly to transit stations and remain open during all transit service hours, even outside regular business hours.
- Pedestrian Comfort: Minimize grade-separated pedestrian crossings. When necessary, ensure they are continuous and visible, incorporating natural lighting and clear connections to the surrounding area.
- Cycling Integration: Place bicycle parking near building entrances, visible from inside, protected from the weather, and clear of pedestrian walkways. Provide cycling amenities like showers, lockers, and change rooms in buildings to support cyclists.
- Cycling Infrastructure: Invest in cycling infrastructure that improves the environment for cyclists and enhances access to transit stations.

Vehicles & Parking Guidelines

- Parking Reduction: Consider reducing car parking requirements in exchange for enhanced cycling and pedestrian amenities. This encourages non-car travel and supports the broader goals of TOD.
- Parking Placement: Avoid large surface parking areas that encourage car use. Instead, prioritize structured or underground parking solutions, minimizing the impact on pedestrians and cyclists.

Streetscape & Environment Guidelines

- Pedestrian Comfort and Streetscape: Have large buildings be set back 3 to 6 metres from property lines to provide ample space for pedestrians and landscaping. Use weather protection features like building overhangs or covered waiting areas at transit stops.

- Street-Level Activity: Activate ground floors with pedestrian-friendly uses, such as retail, services, cafes, and residences to enhance the vibrancy of the streetscape.
- Crosswalk Design: Use a variety of materials and treatments for crosswalks to highlight pedestrian routes and ensure driver awareness.
- Accessibility: Ensure ramps are designed with a gentle slope (max 1:20) and that escalators, ramps, or elevators are available within 100 metres of transit connections to ensure accessibility for all users.
- Wayfinding and Signage: Provide clear indoor and outdoor signage guiding transit users to stations. Signage should be easily visible and comprehensible.
- Amenities: Include public amenities such as benches, kiosks, public phones, and art installations along pedestrian pathways, enhancing comfort and security.

Designing Neighbourhood Collector Streets, 2019

The City of Ottawa's Neighbourhood Collector Streets design policy emphasizes the use of complete streets for urban areas. These streets are key to neighbourhood connectivity, access to development, and the public realm. The design aims for compact, safe, green, and serviceable streets that foster community engagement and include cost-effective infrastructure. In the ASA, Centrepointe Drive, Tallwood Drive, Constellation Drive, and Navaho Drive serve as the primary collector streets, supporting the goals of accessibility and connectivity.

The guideline dictates that streets should incorporate trees where soil conditions allow, and right-of-way (ROW) widths can range from 22m to 26m depending on site conditions. Active transportation facilities, such as 2.0m-wide sidewalks and cycle tracks, are prioritized for pedestrian and cyclist safety, with additional accessibility considerations like tactile indicators. Street design must balance space for municipal services, utilities, and on-street parking while minimizing ROW width without compromising functionality.

These guidelines will help ensure that the ASA is redesigned to suit the needs of the community, putting the pedestrian first. The guidelines also highlight the public realm, which is currently lacking in the ASA. The group redesigned the area to be inviting, connected, and safe for all to use.

Urban Design Guidelines for Development Along Arterial Mainstreets, 2006

Arterial mainstreets, as defined in Ottawa's OP, offer opportunities for compact, mixed-use development and pedestrian-friendly environments. The guidelines promote pedestrian-focused streetscapes, gradual development intensification, and enhanced connections to public transit. The OP encourages compatible, high-density uses like mixed-use

buildings and the redevelopment of parking lots. Traditionally, development on these streets has been low-profile and setback, but there is potential to improve the pedestrian environment. The ASA includes both collector and arterial roadways (Baseline Road and Woodroffe Avenue). With the goal of intensifying the area, the design guidelines for development along arterial main streets were considered and implemented through the proposed redevelopment of parking lots into mixed-use buildings. As well, creating a pedestrian-friendly environment was crucial for the redevelopment of the ASA, as it is home to multiple pedestrian paths and transit stations.

Building Better and Smarter Suburbs- Strategic Directions and Action Plan, 2015

The Building Better and Smarter Suburbs report addresses suburban growth in Ottawa, aiming to improve community design, increase housing diversity, and promote sustainability. The plan envisions complete, walkable, and transit-friendly communities with efficient land use, active transportation prioritization, and sustainable infrastructure through a modified grid street network. This plan does not relate to the ASA directly but does for the surrounding area.

Traffic Calming Design Guidelines, 2019

The City of Ottawa's Traffic Calming Design Guidelines provide a framework to improve road safety by reducing vehicle speeds and enhancing the urban environment. These guidelines address retrofitting streets for traffic calming and integrating speed

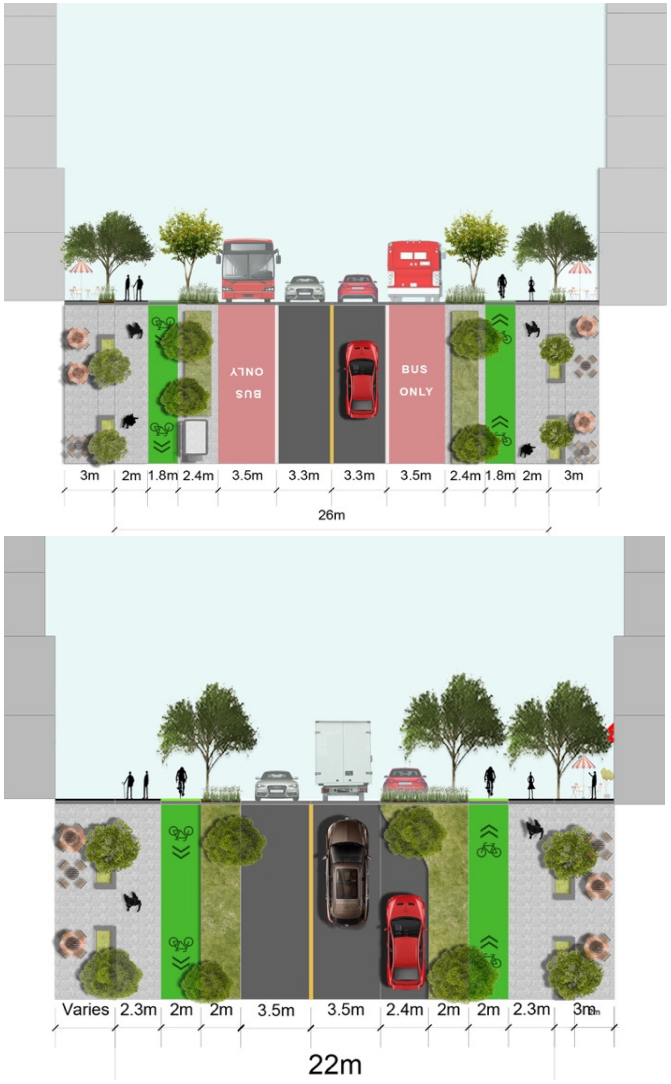


Figure A-6: Cross-Section for Navaho Dr (Top) and Tallwood Dr (Bottom).

management for all road users. Key elements include specifying turning radii based on vehicle types, using streetscaping to improve aesthetics and safety, and employing various traffic calming tools like road diets, textured surfaces, speed kidneys, and shared spaces. The guidelines stress a strategic approach to identifying traffic issues, setting objectives, and involving the community through education and awareness. Future considerations include broader street network planning, innovation, and technological advancements in traffic calming. The redevelopment of the ASA will utilize a handful of these guidelines for street redesign. These guidelines will help prioritize the public and ensure that cars are not the priority on the street.

Right-of-Way Lighting

The Right-of-Way Lighting Policy by the City of Ottawa establishes guidelines for the design and application of roadway and sidewalk lighting throughout the city. Key components of the policy include:

Uniform Lighting Standards: Recommended minimum lighting levels, and acceptable styles for lighting poles and luminaires, and the need to reduce light pollution while allowing for decorative elements like banners and flower baskets.
Economic and Social Benefits: The policy aims to enhance public safety by reducing nighttime accidents, facilitating traffic flow, promoting downtown commercial activities, and assisting in crime prevention.

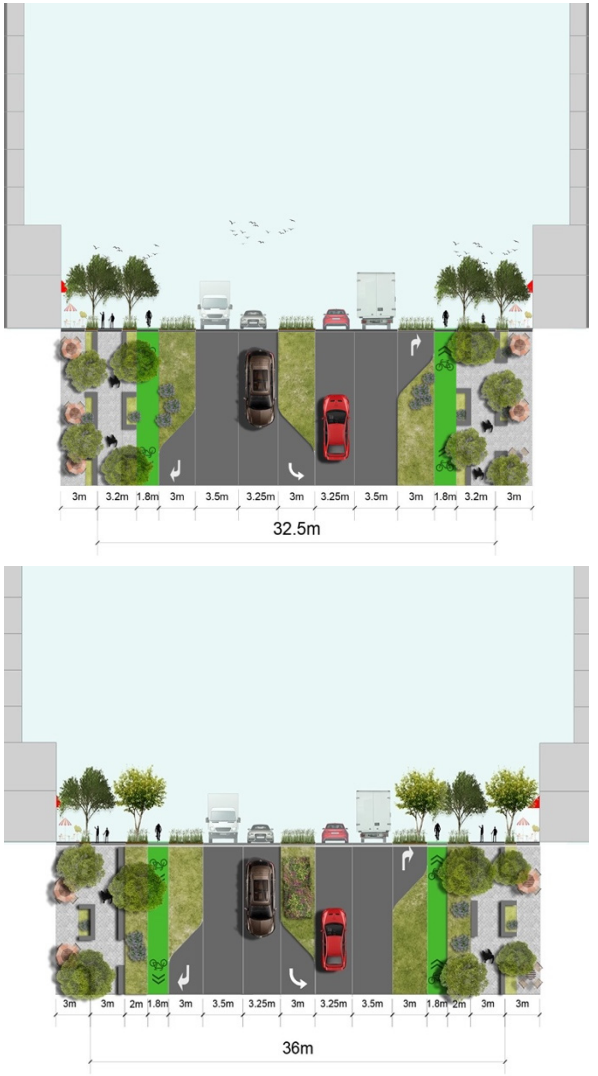


Figure A-7: Cross-Section for Baseline Dr (Top) and Woodroffe Ave (Bottom).

Negative Impacts: It acknowledges potential adverse effects, such as increased night-time sky glow and light trespass onto adjacent properties.

Lighting Calculations: The policy mandates that lighting calculations cover the full width of roadways and sidewalks, with LEDs required to have a minimum lifespan of 70,000 hours. Dimming features should optimize energy savings while meeting illumination standards.
Luminance and Illuminance Criteria: The policy introduces a luminance method for designing roadway lighting, which will be applied to all tangent road sections. The illuminance criteria will be used for field verification.

Intersection Lighting: Urban intersections must be fully lit. Rural intersections will follow specific recommended lighting levels based on traffic signal presence. If necessary, lighting levels at intersections must be adjusted to ensure adequate illumination.

Lighting Pole Locations: Poles can be placed in various locations, including behind barriers or mounted on structures, and must ensure the safety of cyclists by adhering to recommended roadway lighting levels.
Environmental Considerations: The design must consider the impact on Urban Natural Features (UNFs), with strategies to minimize light intrusion into these areas by using luminaires that direct light appropriately.
Overall, the policy aims to enhance safety and usability in public rights-of-way while considering environmental impacts and energy efficiency.

Protected Intersection Design Guide, 2021
This framework enhances safety and accessibility at intersections by adapting designs to local conditions to prioritize pedestrian, cyclist, and motorist safety through clear paths, and visibility. Key principles focus on accommodating diverse users, incorporating elements like pedestrian navigation aids, cyclist facilities, and signalization measures. This guideline details various intersection types, including protected and dedicated corners for high pedestrian traffic. Accessibility is emphasized with clear pathways, reduced crossing distances, and accessible signals. The overall goal of this project is to ensure that the public is protected and feels safe on all roads. Using the protected intersection guide helps create user-friendly intersections and a safe and connected community.

Permitted Uses within Hub Zone 2
Residential Uses:
- Dwelling units

Non-Residential Uses:
- Animal care establishment
- Artist studio
- Bank
- Broadcasting and production studio
- Catering establishment

- Community Centre
- Courthouse
- Daycare
- Diplomatic residence
- Emergency service
- Funeral home
- Hospital
- Hotel
- Indoor entertainment facility
- Instructional facility
- Library
- Medical Facility
- Micro-distribution facility
- Municipal service centre
- Museum
- Nightclub
- Office
- Parking garage
- Payday loan establishment
- Personal service business
- Place of assembly
- Place of worship
- Post-secondary educational institution
- Recreation and athletic facility
- Research and Development Centre
- Restaurant
- Retail store
- School
- Sports arena
- Storefront industry
- Theatre

Hub Zone 2 Provisions:

(2) Where the ground floor is occupied by non-residential use, the minimum height of the ground floor is 4.5 metres.

(3) At least 50 percent of the frontage along the front lot line and exterior side lot line must be occupied by building walls located within 4.5 metres of the frontage for a residential-use building, and within 3 metres for non-residential and mixed-use buildings.

(4) Exterior building walls located on the ground floor and located within 4.5 metres of a front or exterior side lot line must:

(a) provide a minimum of one active entrance from each individual occupancy on the ground floor located adjacent to the front lot line or exterior side lot line in the case of non-residential uses;

(b) provide a minimum of one active entrance in the case of a residential use building;

(c) a minimum of 50 percent of the surface area of the ground floor façade, measured from the average grade up to a height of 4.5 metres, facing a public street must be comprised of transparent glazing and active customer or resident entrance access doors; and,

(d) not be obstructed by parking spaces, parking aisles, or driveways.

(5) The maximum front or exterior side yard setback may be increased to 4 metres to accommodate:

(a) an outdoor commercial patio;
(b) bicycle parking;
(c) trees, shrubs, or other intensive landscaping; or,
(d) benches or other street furniture.

(6) Outdoor storage is not permitted.

(7) A soft landscaped buffer of a minimum of 3 metres must be provided abutting any lot line shared with lands zoned N1-N6 – Neighbourhood or GRN – Greenspace, or

(a) where an opaque screen with a minimum height of 1.4 metres is provided, the soft landscaping buffer may be reduced to 1 metre; and,
(b) where parking spaces are provided, an opaque screen with a minimum height of 1.4 metres must be provided.

(8) In the case of a phased development, all phases must be shown on a site plan approved pursuant to Section 41 of the Planning Act, and must satisfy the following:

(a) the first phase is required to satisfy subsection 902 (3) prior to or concurrent with the construction of any building at the interior or rear of the lot for the portion of property shown in that phase;
(b) all subsequent phases are not required to comply with subsection 902(3) independently, provided that 902(3) is satisfied upon the completion of all phases; and,
(c) the boundary of a phasing line will be determined through Site Plan Control, and each phase of development must comply with the zone requirements and incorporate the site plan elements required and provided to support the uses of land within that phase.

(9) A building existing as of [the date of the passing of the By-law] may be expanded without having to comply with subsection (3), provided:

(a) the addition does not exceed the greater of 600 square metres or 20 percent of the gross floor area of the existing building; and,
(b) subsequent additions are not permitted within 12 months of an issued building permit for expansion of the same building.

Hub Zone 2 Provisions

Table A-1: Hub 2 Provisions

Zoning Mechanism		Provisions
(a) Minimum Lot Area		No minimum
(b) Minimum Lot Width		No minimum
(c) Front and exterior side yard setback (m)	For the first 15m above grade	Maximum 2
	For any part of the building greater than 15m above grade	Minimum: 1.5
(d) Minimum interior side yard setbacks (m)	Where abutting lands zoned N1-N6 - Neighbourhood	3
	Where abutting a rapid transit corridor	2
	In all other cases	No minimum
(f) Minimum rear yard setback (m)	In Area A of Schedule A1:	4 storeys
	In Area B and C of Schedule A1:	3 storeys
(h) Maximum building heights (m)	(i) For any area up to and including 15m from a lot line abutting a N1, N2 N3 or N4 zone	The lesser of 2 m or 6 storeys
	(ii) For any area greater than 15m away from a lot line abutting a N1, N2, N3 or N4 zone, or where a lot does not abut a	The lesser of 30m or 9 storeys

Zoning Mechanism	Provisions
(iii) All other cases	1. For areas up to and including 30m from a lot line abutting
	2. For any area greater than 30m away from a lot abutting an N1, N2, N3 or N4 zone: the lesser of 132 m or 40 storeys, unless otherwise specified by an H suffix, schedule, or exception.

Parking Provisions

The Zoning By-law shall regulate motor vehicle parking in a way that supports the Hub's focus on transit, walking, and cycling. These regulations may include:

I. Reducing or eliminating the minimum on-site parking requirements
II. Setting maximum limits on the total parking supply
III. Prohibiting surface parking lots as a primary or accessory use, except for publicly-operated park-and-ride facilities
IV. Regulating, pricing, metering, and enforcing public on- and off-street parking to maintain a balance between supply and demand
V. Establishing residential on-street parking permit zones
VI. Despite these measures, visitor parking will still be required for high-density residential developments to ensure that visitor parking needs do not place an excessive burden on public parking facilities.

Parking Provisions for Specific Building Types

Table A-2: Parking Provisions

Category & Land Use(s)	(a) Area A	(b) Area B	(c) Area C	(d) Area E
(a) Dwelling unit (inclusive of visitor parking)	1 per dwelling unit	1.25 per dwelling unit	1.75 per dwelling unit	1.75 per dwelling unit
(b) Office	1 per 100 m² of gross floor area	1.25 per 100 m² of gross floor area	2.2 per 100 m² of gross floor area	2.7 per 100 m² of gross floor area
(c) Research and Development Centre	1 per 100 m² of gross floor area			
(d) Medical Facility	3 per 100 m² of gross floor area	5 per 100 m² of gross floor area		
(e) Post-secondary institution	1.2 per 100 m² of gross floor area	1.2 per 100 m² of gross floor area	1.5 per 100 m² of gross floor area	1.5 per 100 m² of gross floor area
(f) Personal Service Business, Retail Store, Restaurant	2 per 100 m² of gross floor area	2.75 per 100 m² of gross floor area	3.6 per 100 m² of gross floor area	4 per 100 m² of gross floor area
(g) Shopping	1 per 100 m² of gross floor area			

APPENDIX B – DEMOGRAPHIC ANALYSIS

The facts of importance identified by the demographic analysis of the DSA are as follows:

1. The population of the DSA is growing in conjunction with the City of Ottawa, albeit slightly slower.
2. The DSA has a slightly lower income than the rest of the City of Ottawa.
3. The DSA is a landing point for new Canadians; however, the retention rate is low once granted permanent/ citizenship status.
4. The DSA has fewer and smaller families compared to the Ottawa average
5. The DSA contains a disproportionate amount of Single-Detached housing.
6. A significant portion of employees of major local employers live-outside of the DSA.
7. Transit use is disproportionately high, while walking and biking is disproportionately low.
8. Perceived Health is disproportionately low, and sedimentary lifestyles are high.
9. Studentification exists, but is relatively low, and unlikely to increase.
10. There appears to be a division between established residents and incoming populations.
11. Demand for both office space and commercial space has grown moderately in recent months in the ASA. Return to the office for public servants suggests that demand will likely continue to rise.
12. There is significant residential demand within the City of Ottawa, particularly for affordable units.

Population Analysis Details:

Between 2016 and 2021, the City of Ottawa grew by 8.9%, surpassing 1,000,000 residents. Growth is expected to continue, with the city projecting a population of 1.4 million by 2046. If growth continues at its current pace, the DSA will fall behind the rest of the metro area. Despite this, an average growth of 700 people is still expected each year. Further, with the opening of the Algonquin Light Rail Transit (LRT) Station, the eventual Baseline Bus Rapid Transit (BRT) Route, and future regulatory changes, these figures will likely increase.

Family and Children Details:

The average number of children per census family in the DSA is 0.94, slightly lower than the Ottawa average of 1.05. In total there are approximately 8,744 children within the DSA, served by 11 educational institutions of all levels (including Algonquin College).

Market Trends Research Methodology:

To understand the state of the real estate market, our team conducted research through Google's Search Engine using the following phrases:

Ottawa commercial/Retail Real Estate Market report

Ottawa Office Real Estate Market Report

Ottawa Residential Real Estate Market Report

From this search, we identified documents which were published within the past 5 years by a reputable source.

From this search, we identified 5 relevant documents:

- Ottawa Office Figures Q2 2024 Published by CRBE Group
- Ottawa retail insight 2024 Published by JLL
- Ottawa Market beats Retail H1 2023 Published by Cushman & Wakefield
- Housing Market Outlook 2024 Published by the CMHC
- Rental Market Outlook 2024 Published by the CMHC

Commercial Market Analysis Continued:

There is currently a limited supply of retail real estate available in Ottawa; however, optimism remains high due to several residential projects set to be completed in the coming years. For example, Colonnade Bridgeport has an extensive development pipeline aimed at addressing Ottawa's housing crisis, encompassing 14 buildings across the city. The multi-billion-dollar pipeline is set to deliver over 3,400 residential units upon completion. These towers are to be strategically positioned in areas with transit access to the downtown core.

Additionally, Cushman and Wakefield offer an Ottawa "Market Beat Report" for the second quarter of 2023. This report states that the Nepean's "(Merivale Road Area)" currently houses 668,236 sq. ft. of retail space in 20 separate buildings with a vacancy rate of 1.3%. This is significantly lower than the City of Ottawa's rate of 2.9%. The Nepean (Merivale Road Area) also has an absorption rate of 2,620 sq.ft, and a gross asking rent of $35.25 per sq. ft. This is slightly less expensive than the City of Ottawa's average rate of $36.33, but is more expensive than most market segments, apart from the Downtown Core, Westboro, and Kanata/Stitsville.

Housing Predictions CMHC:

CMHC provides the following prediction for housing:

Forecast Summary — Ottawa CMA

				2024 (F)		2025 (F)		2026 (F)	
	2021	2022	2023	(L)	(H)	(L)	(H)	(L)	(H)
New Home Market									
Starts:									
Single-Detached	3,658	2,784	1,535	1,600	2,100	1,700	2,300	1,750	2,500
Multiples	7,517	8,695	7,710	7,700	8,900	7,100	8,500	7,250	8,800
Starts — Total	11,175	11,479	9,245	9,300	11,000	8,800	10,800	9,000	11,300
Resale Market									
MLS® Sales	20,625	15,314	13,670	14,300	16,400	15,500	18,500	16,200	19,700
MLS® Average Price ($)	646,139	691,736	654,795	665,000	695,000	675,000	745,000	685,000	775,000
Rental Market									
Vacancy Rate (%)	3.4	2.1	2.1	2.3		2.5		2.7	
Average Rent Two Bedrooms ($)	1,550	1,625	1,698	1,780		1,860		1,935	

The forecasts included in this document are based on information available as of March 21, 2024.
Sources: CREA, CMHC

Table B-2 CMHC housing supply predictions as of March 21, 2024 (CMHC, 2024)

Rental Market Analysis CMHC:

Monthly rent range	Vacancy rate (%)
$749 or less	0.0
$750 to $1,399	3.6
$1,400 to $2,049	1.5
$2,050 to $3,049	2.6
$3,050 or more	4.3

Source: CMHC

Table B-3. Vacancy Rates for Various Rental Price Ranges Within the City of Ottawa (CMHC, 2023)

Housing Analysis Continued

A significant portion (40.6%) of housing within the DSA was built between 1961 and 1980. As demonstrated in Table B-4 the most popular form of housing is Single-Detached, resulting in a relatively low-density measurement of 3,077 people per square kilometre.

The rate of ownership with the DSA is 58.4%, slightly lower than Ottawa's 62.8%. This is likely the result of the area being lower

	Demo-graphic Study Area	Ottawa, ON (CDR)	Cen-tretow n
Houses	**73.0%**	**68.2%**	**7.5%**
Single-Detached House	50.6%	41.5%	2.8%
Semi-Detached House	5.5%	5.3%	1.4%
Row House	16.9%	21.4%	3.3%
Apartments	**27.0%**	**31.5%**	**92.3%**
Apartment, Build-ing That Has Five Or More Story	16.0%	19.1%	67.1%
Apartment, Build-ing That Has Few-er Than Five Story	9.9%	10.6%	23.6%
Detached Duplex	1.2%	1.9%	1.6%
Other Dwelling Types	**0.0%**	**0.3%**	**0.2%**
Other Single-Attached House	0.0%	0.1%	No data
Movable Dwelling	0.0%	0.2%	No data

Table B-4: Housing Typology, 2024 Environics Estimates

income, and partially studentified. On average the DSA has 2.58 persons per household, which is similar to the citywide average of 2.55. However, again, because of studentification, the real number is expected to be slightly higher.

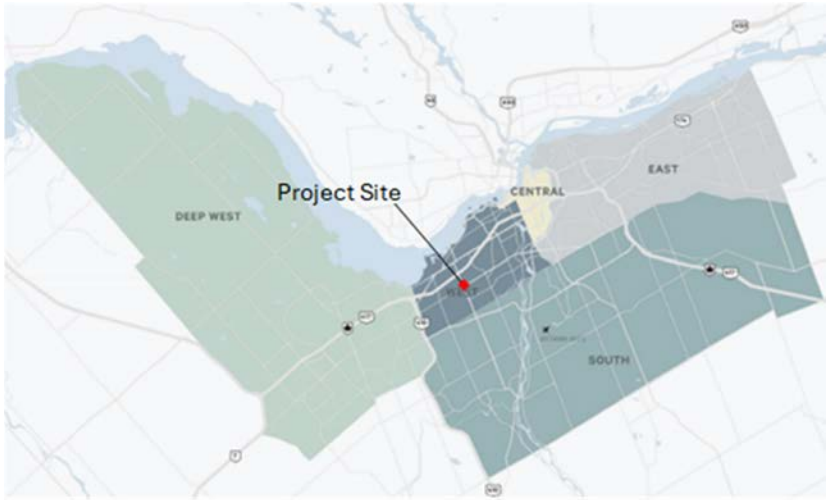


Figure B-2: Ottawa West, as Defined by CRBE

The Prevalence of Studentification

Studentification is the congregation of students in low and middle-income neighbourhoods, the displacement of existing residents, and the creation of student neighbourhoods. Being a part of a major metropolitan area, the studentification caused by Algonquin College is not significant, as many students commute from their existing homes. Nonetheless, there is some evidence of studentification north of Algonquin College. Using a method developed by Lauzon (2022) and Whitfield (2023), a rough metric of studentification can be calculated.

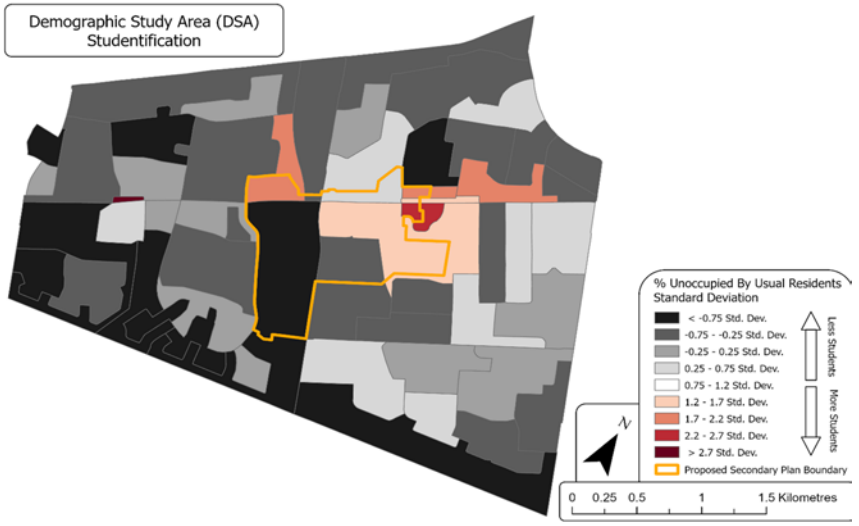


Figure B-3: Studentification Estimates, Derived from 2021 Census Data at a Dissemination Area Level

As seen in Figure B-3, the majority of studentification within the DSA is located adjacent to Algonquin College. All dissemination areas within the DSA measure <20% studentification. For context, medium sized cities with major education institutions such as Kingston, Waterloo, or London, have several dissemination areas over 50%. Further, Algonquin College has plans to add 1200 student residence beds in the future, further reducing the existing low levels of studentification.

PRIZM Reference Guide (Top 10 DSA Segments)

Tables B:5-10

Segment Number	SG_Sort	Social Group Code	Social Group	Urbanity	LS_Sort	LS	IULSX	IULSY
2	1	U1	U1 - Urban Elite	Urban	7	M1	5.25	82
7	4	F1	F1 - High-Income Urban Fringe	Urban Fringe	7	M1	8.5	68
16	10	U2	U2 - Urban Older	Urban	7	M1	5.75	50
22	13	U3	U3 - Young Urban Core	Urban	2	Y2	2	44
23	10	U2	U2 - Urban Older	Urban	7	M1	5	48
32	11	F3	F3 - Middle-Income Urban Fringe	Urban Fringe	4	F1	14.5	29
47	13	U3	U3 - Young Urban Core	Urban	1	Y1	2	3
51	10	U2	U2 - Urban Older	Urban	8	M2	4	8
52	19	U5	U5 - Younger Urban Mix	Urban	2	Y2	3.5	11
64	16	U4	U4 - Urban Diversity	Urban	6	F3	3	10

Segment Number	Lifestage	PRIZM Name	PRIZM Descriptor
2	M1 - Older Families & Empty Nests	**Wealthy & Wise**	Wealthy, older city sophisticates
7	M1 - Older Families & Empty Nests	**Mature & Secure**	Older, successful city dwellers
16	M1 - Older Families & Empty Nests	**Savvy Seniors**	Middle-income seniors in urban apartments
22	Y2 - Younger Singles & Couples	**Indieville**	Younger and middle-aged urban singles and couples
23	M1 - Older Families & Empty Nests	**Mid-City Mellow**	Older city homeowners
32	F1 - School-Age Families	**Diverse & Determined**	Middle-income, younger and middle-aged city dwellers
47	Y1 - Very Young Singles & Couples	**Social Networkers**	Young, culturally diverse singles in city apartments
51	M2 - Mature Singles & Couples	**On Their Own Again**	Culturally diverse city seniors in apartment rentals
52	Y2 - Younger Singles & Couples	**Friends & Roomies**	Young, culturally diverse lower-middle-income city dwellers
64	F3 - Middle-Age Families	**Midtown Movers**	Urban, lower-middle-income families and singles

Segment Number	Population	Households	% of Total Households	Cultural Diversity Index
2	464,564	158,375	0.99%	Low
7	658,007	222,746	1.39%	Medium
16	791,932	348,210	2.17%	Low
22	507,072	210,899	1.32%	Low
23	1,003,410	362,670	2.26%	Low
32	627,284	271,627	1.70%	High
47	418,076	227,438	1.42%	High
51	473,005	266,937	1.67%	High
52	803,043	392,664	2.45%	High
64	440,518	161,351	1.01%	High

APPENDIX C – PRECEDENT CATALOGUE

Appendix C1 - Complete Case Study List

Transit-Oriented Mobility Hub (Table C-1):

Project Name	Location	Developer(s)	Site Size (ha)	Timeline
Brentwood Station	**Burnaby, BC**	**Shape Properties**	**11.33 ha**	**1997, 2011-Present**
Bloor and Dundas Master Plan	**Toronto, ON**	**Hariri Pontarini Architects**	**4.05 ha**	**2009-2011, 2020-Present**
The Bridges	**Calgary, AB**	**City of Calgary Corporate Properties & Buildings**	**14.9 ha**	**2000-2011**
University City	**Calgary, AB**	**Brookfield Residential and Truman**	**10.9 ha**	**2014-2016**
Surrey Central	Surrey City, BC	Surrey City Development Corp	570 ha	Began in the early 200s and is ongoing
Metropolis	Burnaby, BC	Ivanhoe Cambridge	14.16 ha	2019, with phases planned for 2025-2054
Pimisi Station	Ottawa, ON	National Capital Commission	21 ha	2014-2019
Orenco Station	Portland, OR	Pacific Reality Associ-	84.57 ha	1997-2003
The Orbit	Innisfil, ON	Cortel Group	323.75 ha	2019-present, with plans until 2050
Mockingbird Station	Dallas, TX	UC Urban & Simpson Property Group	4.04 ha	Completed 2008
Pleasant Hill	Pleasant Hill, CA	Gemdale USA	3.23 ha	2008-2010

Greyfield Redevelopment (Table C-2):

Project Name	Location	Developer(s)	Site Size (ha)	Timeline
Westbrook Village	Calgary, AB	City of Calgary/Cushman & Wakefield	20.23 ha	Ongoing
Northgate Mall	Seattle, WA	Allied Stores / Simon Property Group	16.6 ha	2009 - 2015
Richmond Centre	Richmond, BC	Cadillac Fairview/ SHAPE Properties	10.9 ha	2019 - 2026
San Francisco by the Bay	Pickering, ON	S & R Development Inc.	10.6 ha	2006
Cloverdale Mall	**Toronto, ON**	**QuadReal Property**	**12.9 ha**	**2018 - Ongoing**
Don Mills	**Toronto, ON**	**Cadillac Fairview/ Fram Building Group**	**16.6 ha**	**2006 - 2017**
Zibi	Ottawa, ON	Dream	13.6 ha	2007-2020
Collingwood Village	**Collingwood, BC**		**11.3 ha**	**2007**
Lansdowne Town Centre	Richmond, BC	Vanprop Investments Ltd.	20.2 ha	2022-2024
Santana Row	**San Jose, CA**	**Federal Realty Investment Trust/Wilson**	**17 ha**	**2002-2010**

Affordable Housing (Table C-3):

Project Name	Location	Developer (s)	Site Size (ha)	Timeline
Leləm̓ Village	Vancouver, British Columbia	Musqueam Capital Corporation, Musqueam First Nation, Polygon	8.5 ha	2017 - ongoing
Regent Park Revitalization	**Toronto, Ontario**	**City of Toronto, Tridel Builders Inc., Daniel's Corporation, Toronto Community Housing Corporation**	**28 ha**	**Phase 1-3: 2005-2024 Phase 4 and 5: 2024-2029**
Benny Farm	Montreal Quebec	City of Montreal, Canada Lands Company, 4 non-profits, Société d'habitation et de développement de Montreal, 2 co-operatives, other private developers	7.3 ha	2005 - 2010
Gladstone Village	Ottawa, Ontario	Ottawa Community Housing and the City of Ottawa	3.2 ha	2024 – Ongoing
Kabelwek	Vienna, Austria		10 ha	1996 to 2010
Beaver Barracks	Ottawa, Ontario	Centretown Citizens Ottawa Corporation	1.7 ha	2010 - 2012
Paseo Verde	Philadelphia, Pennsylvania	Asociación Puertorriqueños en Marcha (APM), Johnathan Rose Companies	1 ha	2009 - 2013

Affordable Housing (Table C-3) Continued:

Nigel Valley Redevelopment	Saanich, British Columbia	BC Housing in partnership with the federal government, Greater Victoria Housing Society, The Garth Homer Foundation, Island Community Mental Health, and Broadmead Care Society.	3.6 ha	2024 - Ongoing
Rochester Heights	Ottawa, Ontario	Ottawa Community Housing	1 ha	Phase 1: 2018 – 2021 Phase 2: Ongoing
St. Lawerence Neighbourhood	**Toronto, Ontario**	**City of Toronto, many private developers and non-profits.**	**23 ha**	**2006 - 2018**
Rosemont Municipal Workshops Site	**Montreal, Quebec**	**City of Montreal, Rachel Julien, Non-profits and cooperatives: the Office municipal d'habitation de Montréal (OMHM), Le Coteau Vert, Un toit pour tous.**	**4 ha**	**2005 - 2023**
Prospect Plaza	**Brooklyn, New York**	**New York City Housing Authority (NYCHA), Oceanhill LLC (Pennrose Properties, Blue Sea Development, Duvernay + Brooks, and Rosenberg Housing Group**	**1.8 ha**	**2010 - 2016**

Transit-Oriented Mobility Hub:
Relevance & Key Features (Table C-4):

Relevance	
Age	Evaluating the age of a development is essential when considering case studies for Transit-Oriented Developments (TODs) and mobility hubs because it ensures relevance to current standards and practices. Newer projects incorporate advanced technologies and modern design principles that reflect up-to-date user needs and planning policies. They offer insights into contemporary amenities, sustainable practices, and policy changes that older developments may not address. By focusing on recent examples, current best practices and future trends can be understood and implemented.
Previous Site Characteristics	The characteristics of an area, and the size of the area being developed, are crucial considerations for evaluating case studies for TODs and mobility hubs. Site characteristics, including location, existing infrastructure, and surrounding land uses, determine how well a development can integrate with existing transportation networks and community needs. Sites with similar characteristics before development and a similar area under development received
Proposed Use	The characteristics of proposed uses are vital for evaluating case studies for TODs and mobility hubs. Developments that include essential features—such as high-density, mixed-use environments, accessible pedestrian pathways, safe cycling infrastructure, and inviting public spaces—received a higher score out of 3.
Mode of Sustainable Transportation	Considering the type of transportation in TOD and mobility hub case studies is important because different transportation modes have distinct design, operational, and integration requirements. By examining past projects with similar forms of transport—such as Light Rail Transit (LRT), bus systems, and cycling infrastructure—you gain insights into the specific challenges and solutions associated with each mode. Projects featuring transportation modes similar to those existing and proposed around the ASA re-

Relevance & Key Features (Table C-4) Continued:

	Key Features
Accessibility and Security for Travellers	Accessibility measures encompass the services and infrastructure within and around mobility hubs that ensure inclusivity for people of all ages and abilities. Key elements to improve accessibility include adhering to universal design principles and integrating responsive, inclusive features in street and transit systems. These efforts create welcoming environments that empower everyone to navigate their communities. Safety is crucial for fostering a sense of security that encourages people to use public transit and engage with their surroundings. When individuals feel safe, they are more likely to explore their communities, utilize local amenities, and participate in public life. This increased engagement promotes vibrant, active spaces that support social interaction and community cohesion. Projects with an emphasis on accessibility and safety for users received a higher score out of 3.
Creation of a sense of "place"	A strong sense of place is essential for creating spaces that foster community engagement, enhance quality of life, and promote social interaction. By prioritizing the needs and preferences of local residents, placemaking helps create vibrant, inclusive environments that attract people and encourage diverse activities. Projects that emphasize creating a sense of place received a higher score out of 3.
Community Engagement	Evaluating the community engagement process of case studies is key to judging a project's success because it highlights the role of effective community engagement in achieving positive outcomes. By examining how past projects implemented their public engagement strategies, you can assess how well they addressed local concerns, incorporated community feedback, and secured public support. Projects that engaged and adequately considered feedback from the public received a higher score out of 3.

Table C-5: Transit Oriented Mobility Hub Case Study Ratings.

Project	Relevance				Key Features			Score
	Age	Previous Charac-ter.	Proposed Use	Modes of Trans.	Accessibility & Security	Sense of "Place"	Community Engagement	
Brentwood Station	3	3	3	2	3	3	3	20
Bloor & Dundas	3	2	3	3	3	3	3	20
The Bridges	2	2	3	3	3	3	3	19
University City	2	2	3	3	3	3	3	19
Surrey Central	3	3	3	2	2	3	3	19
Metropole	3	3	3	2	2	2	3	18
Pimisi Station	3	3	2	3	2	2	3	18
Orenco Station	2	2	2	3	3	2	3	17
The Orbit	3	1	3	3	3	3	N/A	16
Mockingbird Station	1	3	2	3	2	3	2	16
Pleasant Hill	1	2	3	2	2	2	2	14

Brentwood Station, Burnaby, British Columbia

Before redevelopment, the Brentwood station area was an auto-centric mall and low-density residential neighbourhood reliant on surface parking lots. With the construction of the Millennium SkyTrain line, the City of Burnaby recognized the opportunity to transform the area into a vibrant town centre.



Figure C-1: Ground Analysis of Brentwood Station

The Brentwood Town Centre Station is part of TransLink's Millennium Line and is situated in a zone of significant urban development. Upgrades to the station enhanced accessibility at the south entrance and improved connections to bus services, nearby amenities, and residential developments. Key project features include the construction of a street-level elevator at the south entrance to facilitate commuter access, the replacement of existing stairs from the ground level to the mezzanine to enhance ambience and safety, and the installation of an operator washroom to streamline transitions for bus operators.



Figure C-2: Brentwood Station

The redevelopment plan also focuses on creating a dynamic urban residential and retail village surrounding the Brentwood SkyTrain station via a Master Plan. This initiative is organised into distinct precincts, each serving a specific purpose. The urban

residential area provides a transition from low-density neighbourhoods to a mixed-use centre, while the mixed-use precinct features a blend of residential, office, and commercial spaces, achieved through the development of tall buildings and podiums near the station. The retail village reimagines the existing big box mall as an urban retail Main Street, enhancing the shopping experience.

Additionally, the transit hub at Brentwood accommodates the highest densities, with parking reduced to promote access via public transit. Since 2011, the project has gained momentum, with plans for 11 towers in the Brentwood Station area and even more in adjacent districts. The development also prioritizes affordable housing, ensuring a diverse range of housing types to meet community needs. This transformation not only enhances connectivity and accessibility but also fosters a vibrant, sustainable community that exemplifies the principles of transit-oriented development.

Key Features (Table C-6):

Size	11.3 hectares
Development Timeline	1997, 2011-present
Modes of Trans-portation	Sky Tain, busses, pedestrian network, cycling infrastructure
Mix of Uses	Residential, retail, office, public greenspaces
Residential units	815 units

Lessons Learned:

- This project highlights the importance of integrating residential, commercial, and recreational spaces around major transit hubs. This approach not only maximizes land use but also encourages public transit use, reducing traffic congestion and environmental impact.
- Effective community engagement and community involvement is crucial. Engaging with residents and stakeholders early in the planning process helps address concerns, gather valuable feedback, and build support for a project.
- Incorporating green spaces, energy efficient buildings, and sustainable practices is essential.
- The ability to adapt plans based on changing needs and circumstances is vital. The Brentwood project saw many revisions and updates to meet evolving market demands and community needs.

Bloor and Dundas Master Plan, Toronto, Ontario

The Dundas West-Bloor Avenue Study was initiated to explore connections between major transportation modes, specifically linking the GO commuter train with the subway line along Metrolinx's Georgetown rail corridor. The area encompassed an 800-metre radius around the intersection of Dundas Street West and Bloor Street West, which Metrolinx has designated as a gateway—where two or more regional transit lines converge. A key recommendation from this study was the creation of a weather-protected connection between transportation modes. Additionally, the study emphasizes the promotion of active transportation by incorporating bicycle facilities and enhancing pedestrian-friendly streetscapes. It advocated for intensified development in the areas adjacent to the mobility hub to support a diverse mix of land uses.

Following this study, a proposal was made for a 4-hectare master -planned site at the corner of Bloor and Dundas Streets, aimed at enhancing commercial and residential density in Toronto's West End. This project will feature a new transit hub, W Toronto Station, which will facilitate connections to GO trains, the UP Express, and major streetcar routes. This development presents a unique opportunity to create a well-connected neighbourhood that is accessible from all corners of the city, promoting greater mobility and community integration.



Figure C-3: Ground Analysis of Bloor-Dundas West in Toronto, ON.



Figure C-4: Bloor and Dundas, https://hariripontarini.com/project-category/mixed-use/

Plans include the addition of three new streets—two running east-west and one north-south—along with a pedestrian promenade lined with retail shops, which will draw people into the heart of the development from the southeast corner of Bloor and Dundas, fostering a vibrant streetscape. The mixed-use development will comprise 60% residential units and amenities and 40% commercial space, resulting in a lively blend of work and leisure. Nine residential towers, featuring a mix of condominiums and purpose-built rental units, will be situated along the northern and western edges of the site, adjacent to Bloor and Dundas Streets.



Figure C-5: Bloor and Dundas https://hariripontarini.com/project-category/mixed-use/

Key Features (Table C-7):

Size	4.05 hectares
Development Timeline	2009-2011, 2020-Present
Modes of Transportation	TTC Subway, streetcars, GO Train, UP Express, pedestrian pathways, and cycling infrastructure
Mix of Uses	Residential, commercial, public spaces
Residential units	2,600 units

Lessons Learned:

- Enhancing the public realm through better pedestrian pathways, green spaces, and public amenities can make an area more walkable and enjoyable, encouraging more people to use public spaces.

The Bridges, Calgary, Alberta

The Bridges is a master-planned urban village situated in one of Calgary's historic neighbourhoods. The development includes 1,575 mid-rise, multi-family units as well as substantial commercial and retail spaces. Positioned just south of a light rail transit station, The Bridges was developed by the City of Calgary Corporate Properties & Buildings between 2000 and 2011, with various builders acquiring sites through a tendering process.

The Bridges was designed as a compact urban village that complements and enhances the surrounding area while establishing its own unique character. It is designed to be pedestrian-friendly, incorporating features like wide, tree-lined boulevards, distinctive lighting, and pathways to facilitate convenient, safe, and enjoyable walking to public transit, work, shopping, and recreational amenities.

Approximately 4.9 hectares (12 acres) of the total 14.9 hectares (36.8 acres) were made available after the closure and demolition of the Calgary General Hospital in 1997. The Bridges includes public open space, originally located south of the hospital and adjacent to the Bridgeland LRT station. The approved Bow Valley Centre (BVC) Concept Plan reallocated this open space to support transit-oriented development and redesign community facilities to better serve local needs.

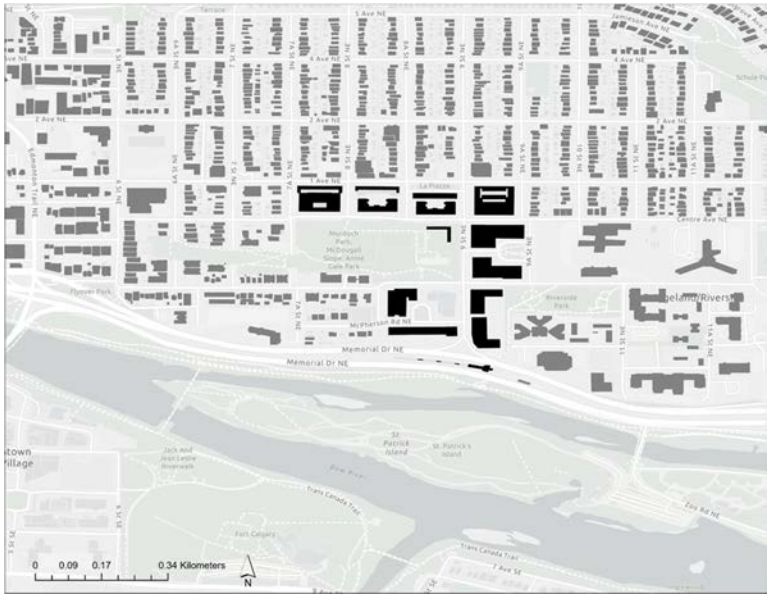


Figure C-6: Ground Analysis of-The Bridges in Calgary, AB.

Upon completion, The Bridges can accommodate 2,500 new residents in 1,575 multi-family units. The development adhered to land-use and design criteria which ensured new buildings were in harmony with the surrounding lower-density environment. The City of Calgary handled planning approvals and infrastructure development, selling serviced sites to private builders in phases.



Figure C-7: The Bridges Pedestrian Paths - https://architizer.com/projects/the-bridges-master-plan/

Key Features (Table C-8):

Size	14.9 hectares
Development Timeline	2000-2011
Modes of Trans-portation	Light Rail Transit (LRT), busses, pedestrian pathways, cycling infrastructure
Mix of Uses	Residential, mixed use (residential/ commercial), public spaces.
Residential units	1,575 units

Lessons Learned:

- Community Engagement creates mutual understanding and identifies community needs.
- Decreased densities further from the station creates transition into the surrounding environment.
- Pedestrians can be prioritized through wide sidewalks and traffic calming measures, and public space can provide pedestrian access to the station and new development.
- Diverse housing options contribute to affordability and social mix.
- Environmental sustainability can drive market interest and public support.

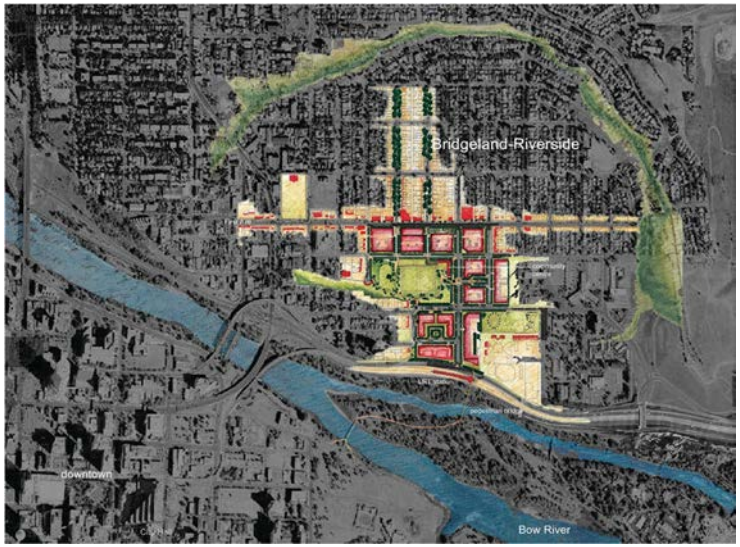


Figure C-8: The Bridges Land Use Plan

University City, Calgary Alberta

University District in Calgary is an innovative urban community designed with a focus on sustainability, connectivity, and vibrancy. Located adjacent to the University of Calgary, it blends residential, commercial, and recreational spaces into a cohesive environment that promotes community engagement. The development seeks to redefine urban living by emphasizing a mindful approach to design that fosters a sense of belonging and enhances the quality of life of its residents. One of the standout features of this community is its inclusion of an LRT station, which provides residents with convenient access to Calgary's extensive public transit network. This connectivity not only reduces reliance on cars but also encourages a more sustainable and mobile lifestyle.

At the heart of University District is its commitment to being a complete urban environment. This means providing diverse amenities such as fine dining, shopping, medical facilities, and recreational spaces all within a short distance. The community is designed to encourage residents to live, work, and play in close proximity, creating a self-sufficient and integrated lifestyle. By prioritizing walkability and accessibility, University District promotes outdoor activity and social interaction among residents.



Figure C-9: University City Area Map

Sustainability is a core principle of University District, which has achieved LEED-ND Platinum certification, a mark of excellence in neighbourhood design. This certification reflects the community's commitment to environmental stewardship, energy efficiency, and thoughtful land use. By incorporating green

spaces and sustainable building practices, University District sets a new standard for urban development in Calgary, ensuring that the natural environment is respected and preserved.



Figure C-10: University City Streetscape

Moreover, proximity to the University of Calgary enriches University District, making it a cultural and educational hub. This connection provides residents with access to a variety of cultural events, learning opportunities, and a vibrant academic atmosphere. The community is designed to welcome people of all ages and backgrounds, fostering a sense of inclusivity and shared purpose.

Key Features (Table C-9):

Size	10.9 hectares
Development Timeline	First Phase: 2014 Second Phase: 2016
Modes of Transportation	CTrain (light rail), busses, pedestrian path-ways, cycling infrastructure
Mix of Uses	Residential, retail/commercial, institutional, public spaces

Lessons Learned:

- Development around transit stations can contribute to placemaking across the city through unique design elements including scale, mix of uses and public art.
- The process of planning TOD in communities can provide cities and developers with a better understanding of what is important to residents and businesses experiencing growth and change.
- By providing a range of housing choices (including affordable housing), commercial space for small businesses and a mix of amenities and community services, TOD can help support objectives for more equitable and inclusive communities.
- TOD is an important approach to reducing our impact on climate change by providing low-carbon mobility options. The scale and form of TOD can also serve as an opportunity for environmentally sustainable design practices related to storm water management and energy production, such as district heating and local energy production.

Greyfield Redevelopment

Relevance & Key Features (Table C-10):

Relevance	
Age	The age of greyfield redevelopments will be considered as part of the relevance evaluation. The scoring metric will focus on how recently the case study was constructed or updated, with an emphasis on modern and innovative designs to inspire a forward-thinking approach. Projects completed within the past 10 years will score a '2', while those built within the last 25 years will score a '1'. Any case study older than 25 years will receive a '0'. For context, College Square originally opened in 1961.
Proximity to a School and Transit	The ASA is located adjacent to both a major transit hub and a college. Case studies situated near both a post-secondary institution and a transit hub will receive a score of '2'. If the case study is next to either a transit hub or a post-secondary institution, it will score a '1'. Case studies located near neither will be given a score of '0'.
Centre Type	The type of Greyfield redevelopment centre will also be evaluated. Centres with regional status will receive a score of 1, local plazas will receive a score of 2, and other Greyfield development types will be assigned a score of 0.
Information Availability	The amount of information available about the project will influence the ability to gain a comprehensive understanding of its context. If there is a lot of publicly accessible information, and the project is completed, the project will receive a score of 2. If there is a lot of information available but the project is ongoing it will receive a score of 1. If only limited detailed information is available, it will receive a score of 0.

Relevance & Key Features (Table C-10) Continued:

	Key Features
Community Integration and Accessibility	Community integration and accessibility are key to successful redevelopments. Case studies that demonstrate seamless integration with surrounding neighbourhoods, offering excellent public transit access, walkability, and inclusive, community-focused spaces, will receive a score of ‘2’. Projects with moderate integration, including some focus on accessibility, such as partial transit connectivity or pedestrian-friendly design, will score a ‘1’. Case studies with poor integration and limited accessibility features will receive a score of ‘0’. This ensures the redevelopment fosters a strong connection with the community and promotes inclusivity.
Variety of Ownership	The ASA is comprised of land from multiple owners. Case studies that feature a diverse mix of ownership models, such as public, private, and community ownership, will receive a score of '2'. Those with some ownership diversity, incorporating at least two different models, will score a '1'. Case studies with a single or limited ownership model will receive a score of '0'.
Resilience and Future Proofing	Building resilience and sustainability into a redevelopment project ensures long-term viability. Case studies that demonstrate strong adaptability to future economic, environmental, or social changes, integrating climate resilience and smart technologies, will score a ‘2’. Those with moderate adaptability and some sustainable features will score a ‘1’, while projects lacking future-proofing elements will receive a ‘0’. This approach guarantees the space can be used for years to come, adapting to evolving challenges.

Table C-11: Greyfield Redevelopment Case Study Rating Rubric

Project	Relevance				Key Features			Score
	Age	Proximity	Centre Type	Info Avail.	Community Integration & Access.	Variety of Owner.	Resilience & Future Proofing	
Westbrook Village	2	1	1	1	2	1	2	10
Northgate Mall	2	1	1	2	2	1	1	10
Richmond Centre	2	1	1	1	2	1	2	10
San Francisco by the Bay	1	1	2	1	2	1	1	9
Cloverdale Mall	2	1	2	1	2	1	2	11
Don Mills	2	1	1	2	2	1	2	11
Zibi	2	1	0	2	1	2	2	10
Collingwood Village	1	1	0	2	2	2	2	10
Lansdowne Town Centre	2	1	1	1	2	1	2	10
Santana Row	1	1	2	2	2	2	1	11

Collingwood Village, Collingwood, British Columbia

Collingwood Village is a vibrant, high-density, mixed-use community centred around the Joyce–Collingwood SkyTrain Station in Vancouver. Spanning 11.3 hectares, it was the largest master-planned development in British Columbia, featuring 2,700 residential units. Initially developed by the Vancouver Land Corporation and later acquired by Concert Properties, the community includes essential amenities such as a community centre, daycare, and a community policing station, which collectively enhance its appeal as a well-rounded urban village. Designed as part of a regional strategy to focus growth around transit hubs, Collingwood Village successfully integrates high-density living with convenient transit access and diverse land uses. According to a resident survey, 56 percent of locals primarily use transit for their commutes.

Previously, the area surrounding Joyce–Collingwood Station was an industrial site and active rail yard, often referred to as a greyfield. The development, which took 16 years to complete, involved extensive negotiations between the developer and the city. This project illustrated how a new rapid transit system can drive coordinated land use planning on a large scale. A notable feature of the development is its progressive parking strategy, as the initial requirement for 1.75 parking spaces per unit was later reduced to 1.04 spaces per unit in response to high transit usage. All parking is located underground, maximizing the land available for transit-supportive uses at the ground level.

Crowley Street, the primary commercial artery of the development, extends from the transit station into the heart of the community. The design includes numerous mid-block pedestrian pathways that enhance connectivity and integration with surrounding residential areas. The layout prioritizes excellent pedestrian access to the SkyTrain, encouraging walking and contributing to the community's safety and vibrancy. Residential buildings feature ground-oriented units to enrich the pedestrian experience, while taller structures have a street-oriented base of 4-6 stories to create a more human-scale environment. Landscaping and thoughtful building orientation help mitigate the impact of the SkyTrain system, ensuring a harmonious integration with the community.

Key Features (Table C-12):

Size	11.33 hectares
Development Timeline	2007
Previous Site Characteristics	Industrial Lands
Cost of Redevelopment	$250 million
Residential Units	2,700 units



Figure C-11: Collingwood

Santana Row, San Jose, California

Santana Row is an initiative that revitalized a struggling strip mall into a lively mixed-use community featuring retail, residential spaces, and pedestrian-friendly streets. Designed to evoke the vibrant atmosphere of Barcelona's Ramblas de Catalunya, Santana Row has become a focal point in San Jose, drawing visitors from across the South Bay area. Despite challenges such as a devastating fire and the economic downturn of the late 2000s, the project has flourished, demonstrating the potential of well-planned urban environments to foster community engagement and economic vitality.

At street level, the continuous flow of narrow shops and restaurants blurs the boundaries between indoor and outdoor spaces, creating a seamless experience that extends from block to block. The streets are predominantly narrow, interspersed with several parks throughout the district. Sidewalks are wide and often shaded by a tree canopy and arcades, encouraging individuals to stop, preform and linger. The short blocks encourage exploration beyond the main thoroughfare, promoting alternative routes and experiences.



Figure C-12: Santana Row — Design for Walkability

While the district is accessible by car, parking is cleverly located in the interior of the blocks, limiting visual clutter and prioritizing pedestrian traffic. The area's character is enriched by a consistent use of art, culture, and local artifacts. This helps with engagement, curiosity, and discovery by visitor—ideal qualities for a pedestrian-centric environment. Unlike traditional planning methods that segregated neighbourhoods by function, Santana Row's density and variety of uses create a vibrant, 24/7 environment that remains alive at all hours. It is described as a diverse, authentic, and integrated community with broad appeal.

Moreover, Santana Row illustrates the growing demand for well-designed urban spaces in suburban contexts. The project has attracted significant interest from developers, with new commercial office buildings underway, indicating a strong market for urban amenities that enhance quality of life. By investing in high-quality design and creating inviting public spaces, Santana Row showcases the long-term value of urban development that prioritizes walkability, sustainability, and community well-being, ultimately benefiting both residents and local businesses.

Key Features (Table C-13):

Size	17 hectares
Development Timeline	2001-2005 (A new master plan is now looking to intensify this area due to its success)
Previous Site Characteristics	Strip mall with large parking lots
Cost of Redevelopment	$450 million +
Residential Units	1,201 units

Lessons Learned:

- Well-designed streets and public spaces that focus on pedestrian experience can be attractions in themselves. While the up-front cost of such areas is expensive, successful spaces will create sustained value.
- Successful spaces do not die off once the workday is over. Creating opportunities for people to use spaces day and night should be integrated into the design of a mixed-use space.
- By keeping parking out of sight, one can minimize vehicle dominance, making the pedestrian experience central. This approach encourages people to explore the area without the distraction of cars.
- Incorporating art and local culture enriches the environment, enabling curiosity and discovery. This focus on cultural elements makes the district more engaging and memorable, establishing a sense of place.

Cloverdale Mall Master Plan, Toronto, Ontario

Cloverdale Mall, a shopping hub in Etobicoke which opened in 1956, is set to undergo a redevelopment aimed at revitalizing the 12.9-hectare site into a vibrant mixed-use urban community. This ambitious master plan will create over nine acres of public space, 16,722 square metres of new retail, and 21,367 square metres of communal amenities, all integrated with a community trail system. This project will introduce 5,268 new condominium and rental units, alongside two public parks and additional green spaces.

The redevelopment is indicative of a larger trend in Canadian urban planning, where residential and retail spaces merge to foster multi-functional environments. QuadReal, the project's developer, has a long-term vision that prioritizes community engagement and sustainable design, ensuring the redevelopment meets the needs of new residents while strengthening connections within the existing neighbourhood. The design process has been informed by extensive public consultations, gathering feedback from over 15,000 local constituents and collaborating with the City of Toronto to maintain Cloverdale's significance as a community centre even as the development takes place.



Figure C-13: Cloverdale Mall Master Plan - Urban Strategies

As the project unfolds, QuadReal is committed to a phased approach that emphasizes sustainability, improved transit integration, and connectivity. The revitalized site will feature an updated retail space that honors long-standing community tenants, complemented by a new network of streets and blocks to connect essential amenities. The transformation will ultimately create a renewed sense of place, ensuring that Cloverdale remains a cherished hub for current and future generations.



Figure C-14: Cloverdale Mall Master Plan - Urban Strategies

Key Features (Table C-14):

Size	12.9 hectares
Development Time-line	2018 – ongoing (2024 breaking ground)
Previous Site Char-acteristics	Regional Shopping Mall
Cost of Redevelop-ment	$6 billion
Residential Units	5,268 units

Lessons Learned:

- A long-term, phased approach allows for community services and amenities to remain operational during construction. This minimizes disruption for existing residents and helps maintain the vibrancy of the area.
- Remaining open to change based on community feedback allows for adjustments that can lead to improved designs and services. Staying responsive to evolving community needs is essential for long-term success.

Don Mills, Toronto, ON

The Shops at Don Mills mark a significant redevelopment initiative, transforming an outdated mall into a vibrant, community-focused space. Originally characterized by its aging structure and sprawling surface parking, the former mall faced the common challenges of greyfields that have lost their relevance and design appeal. This revitalization breathed new life into the community, offering a modern, engaging environment that meets the needs of residents.

Cadillac Fairview recognized the potential for revitalization after the closure of Eatons, the mall's major tenant. In 2001, they proposed a comprehensive redevelopment plan, engaging in extensive consultations with the community and the City to refine their vision. After navigating various challenges, the Ontario Municipal Board granted site plan approval in 2006, leading to the demolition of the old mall.

The first phase of The Shops at Don Mills opened in 2009, transforming the site into a vibrant outdoor, mixed-use destination. This redevelopment significantly enhanced the density and quality of public spaces, introducing a private street system, inviting outdoor retail areas, and a central open square designed for community interaction. The addition of condominium towers ranging from 8 to 20 storeys further diversified the area, increasing residential options and revitalizing the local skyline.



Figure C-15: Render of the Don Mills redevelopment

Key Features (Table C-15):

Size	15.2 hectares
Development Timeline	2003-2009
Previous Site Characteristics	Regional Shopping Mall
Cost of Redevelopment	$200 million
Residential Units	1,300 units

Lessons Learned:

- Successful greyfield redevelopments can be economically sustainable by carefully planning to attract businesses and residents, ensuring a steady flow of income and activity in the area.
- Existing structures can be repurposed o preserve historicak and architectural significance while reducing construction costs and environmental impact. This approach can also ,maintain a sense of continuity and identify for the community.

Affordable Housing

Relevance (Table C-16):

Relevance	
Age	The age of the redevelopment will be considered as part of the relevance evaluation. The scoring metric will focus on how recently the project was constructed or updated, with an emphasis on modern and innovative designs to inspire a forward-thinking approach. Projects completed within the past 10 years will score a '2', while those built within the last 25 years will score a '1'. Any case study older than 25 years will receive a '0'. For context, College Square originally opened in 1961.
Proximity to Transit	The redevelopment area in the ASA that is best suited for affordable housing is located adjacent to a major transit hub. Case studies situated beside a transit hub will receive a score of '2'. If the case study is within walking distance of a transit hub, or local transit options, it will score a '1'. Case studies not located near a major transit hub, or local priority transit will be given a score of '0'.
Location within the regional context	The location within the regional context will also be evaluated. Projects in suburban areas with transit access will receive a score of 2, those in downtown cores will receive a score of 1, and all other locations will be assigned a score of 0.
Information Availability	The amount of information available about the project will influence the ability to gain a comprehensive understanding of its context. If there is a lot of publicly accessible information, and the project is complete, it will receive a score of 2. If there is a lot of information available but the project is ongoing it will receive a score of 1. If only limited detailed information is available, it will receive a score of 0.

Relevance (Table C-16) Continued:

Key Features:	
Community Engagement	Community support is critically important to any development. To achieve this, the development team must actively engage not only with the families and individuals who will be the end-users, but also with surrounding neighbors, businesses, local citizens, and other community stakeholders. Case studies with strong community involvement, where local stakeholders played an active role in planning and decision-making, will receive a score of '2'. Projects with moderate input, such as consultations or feedback sessions, will score a '1'. Case studies with minimal or no community engagement will receive a score of '0'.
Mix of Tenure	A diverse mix of tenure is crucial for accommodating various needs within a redevelopment. Case studies that provide a broad range of housing tenures, such as rental, ownership, and co-housing will receive a score of '2'. Projects offering some diversity, with at least two different tenure types, will score a '1'. Those with limited tenure options will be given a score of '0'.
Mix of Housing Options and Unit Sizes	Case studies that offer a wide range of housing types, such as affordable, market-rate, and unit size will receive a score of '2'. Projects providing some variety in housing options, including at least two different types, and unit sizes will score a '1'. Those with limited housing options will be given a score of '0'.

Table C-17: Affordable Housing Case Study Ratings

Project	Relevance				Key Features			Score
	Age	Proximity to transit	Location	Info Avail.	Community Engagement	Tenure	Housing Options	
Leləm̓	2	1	1	1	2	2	2	11
Regent Park	2	1	1	2	2	2	2	12
Benny Farm	1	1	2	2	2	1	2	11
Gladstone Village	2	2	2	1	1	2	2	12
Kabelwek	1	2	1	2	2	2	2	12
Beaver Barracks	1	1	1	2	2	2	2	11
Paseo Verde	2	2	1	2	2	1	2	12
Nigel Valley	2	1	2	1	2	2	2	12
Rochester Heights	2	1	1	2	2	1	2	11
St. Lawerence Neighbourhood	2	1	1	2	2	2	2	12
Rosemont Municipal Workshop	2	2	1	1	2	2	2	12
Prospect Plaza	2	1	2	2	2	1	2	12

Rosemont Municipal Workshops Redevelopment, Montreal, Quebec

The Rosemont Municipal Workshops Redevelopment project in Montreal is a significant initiative aimed at revitalizing a historically rich site that has been part of the city's fabric since 1909. Once a bustling workspace for artisans, including tinsmiths and carpenters, the site became vacant after municipal activities relocated in 2005. Covering more than 4 hectares in the heart of the Rosemont-La Petite-Patrie borough, this prime site, owned by the City and directly linked to the metro network, presents a unique opportunity for mixed-use development that meets the community's needs for housing, green space, and facilities for sports, culture, and recreation.

The redevelopment plan emphasizes creating a diverse and inclusive community by introducing approximately 868 housing units, with 60% designated for social housing managed by cooperatives or non-profit organizations. Developed with input from a diverse working group—including elected officials, neighbourhood representatives, and city servants—the proposal encouraged the diversification and intensification of activities around a metro station to encourage more sustainable modes of transportation.

Central to the vision for this project is the enhancement of public spaces, such as parks and plazas, to promote community interaction and outdoor activities. The design also prioritized accessibility and connectivity with linkages to transit, local commercial and parks.



Figure C-16: Rosemont Municipal Workshop Redevelopment Rendering.

Additionally, sustainability was a key focus of the redevelopment. The various developments that took place within this area prioritized sustainability by incorporating advanced green building techniques. This includes strategically orienting buildings for optimal solar heating, implementing efficient drainage and water management basins to manage stormwater, and utilizing geothermal systems to harness renewable energy.

The project comprises several developments supported by different ownership structures and partnerships that enabled the high proportion of social housing units. Key projects within the Rosemont Municipal Workshops area include:

- **L'ilot Rosemont**: An eight-storey subway topping complex offering 193 affordable housing targeted for low-income seniors, as well as serving as the administrative headquarters for the Office Municipal D'habitation de Montréal (OMHM) for over 300 employees.
- **Ateliers Rosemont**: A community of 200 affordable housing units designed by the housing co-operative, Le Coteau Vert, and the non-profit organization, Un toit pour tous specifically for single-parent families and individuals. The project is an example of a holistic approach to sustainable development that considered the social, economic and environmental aspects of affordable housing.
- **Quartier 54**: The development features a high-density housing complex comprising a 343-unit condominium offering a variety of housing units ranging from 1-4 bedrooms.
- **Additional facilities**: Various other projects, including the Marc-Favreau Library, a childcare centre with 60 places, and several parks

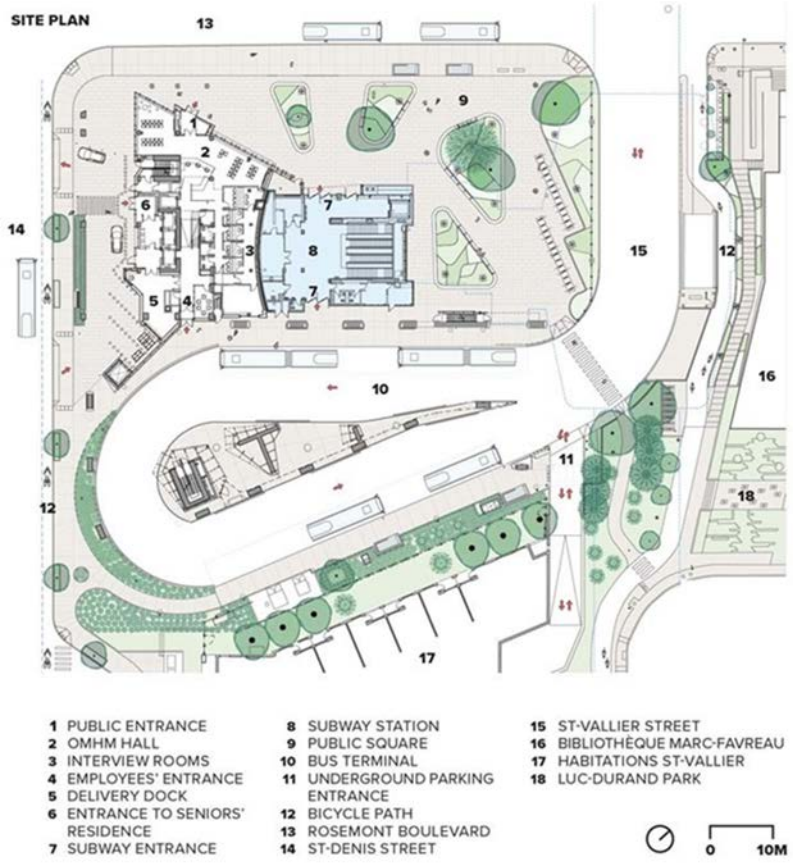


Figure C-17: L'ilot Rosemont Site Plan

Lessons Learned:

- Successfully integrating energy-efficient and sustainable features in affordable multi-unit residential buildings demands ongoing attention from development and management teams regarding installation, commissioning, and monitoring. The Ateliers Rosemont social housing project demonstrates that higher-performing buildings can be achieved with only modest increases in capital costs but can lead to long-term reductions in operational expenses.
- Creating an ecosystem of different collaborators between governments, non-profit organizations and private developers is an effective model for securing funding and resources for affordable housing.
- The project successfully incorporated a significant percentage of social housing units, and a diversity of unit sizes demonstrating that it is possible to blend various housing types and tenure to meet diverse community needs. This mix not only addresses affordability but also promotes social diversity.

Key features (Table C-18):

Landowner	The City of Montreal
Developers	• City of Montreal, Rachel Julien • Non-profits and cooperatives: the Office municipal d'habitation de Montréal (OMHM), Le Coteau Vert, Un toit pour tous.
Site Area	4 ha
Development Date	2006-2023
Previous Site Use	Municipal workshops
Planned Site Use	Mixed-use, social housing, TOD
Projected population	Approx. 2100
Residential units	868 units • Bachelors to three or more bedrooms dependant on the target demographic
Gross Residential Density (U/ha)	217 units per hectare
Social Housing Split	60%
Objectives	• Reimagine the area to address housing needs by developing diverse housing options that cater to various vulnerable demographics. • Transform the site into a space that enhances community life by including parks, public spaces and amenities that foster social interaction. • Incorporate green technologies in construction to ensure the long-term sustainability and viability of the development. • Enhance connectivity to the active transportation network and promote the use of sustainable transportation options.

St. Lawrence Neighbourhood, Toronto, Ontario

The St. Lawrence neighbourhood is a dense mixed-use residential community in Toronto, just steps away from downtown and bordered to the south by railway tracks and an expressway. This area serves as a vital transitional zone between the contemporary developments of the downtown core and the historic City of York. It represents one of Canada's early efforts to create a deliberate mixed-use, mixed income neighbourhood that integrates market-priced housing with public, non-profit and co-op residences with all the services necessary to build a true community – schools, daycare facilities, supermarkets and retail shops in a former parking lot.

Recognized as a model of a complete community, St. Lawrence integrates essential social planning elements into its development process. The neighbourhood is designed with residents in mind; by integrating various housing options, the community becomes a space where individuals from different socioeconomic backgrounds can coexist and thrive. Its urban design has garnered praise for successfully achieving high densities while ensuring that amenities are easily accessible, and the overall atmosphere remains human-scaled.

What distinguishes the St. Lawrence project is its decision to forgo high-rise point towers in favor of achieving density through a high-density, medium-rise fabric on a traditional street grid. This design allows buildings to face and engage with the streets at a human scale. The final layout includes a central linear park with adjacent playgrounds, three-storey row houses along interior roads, and eight-ten storey apartment buildings that buffer the residential areas from busy thoroughfares.

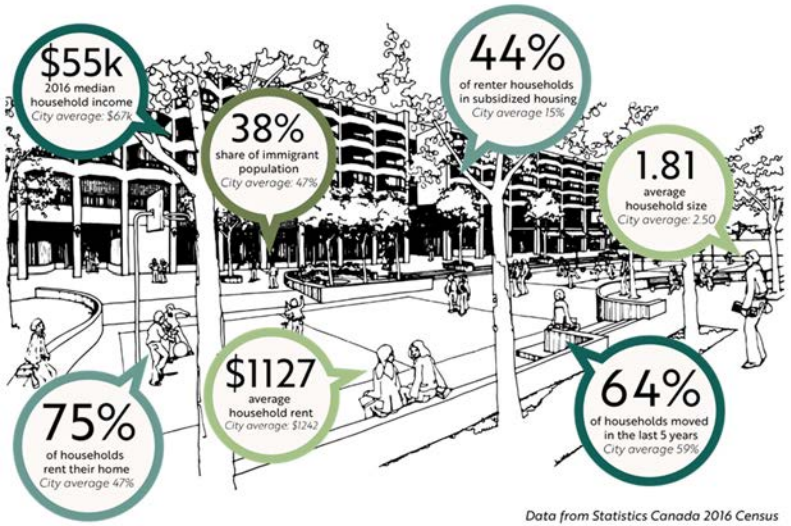


Figure C-18: St. Lawerence Neighbourhood.

Key features (Table C-19):

Developers	City of Toronto, several private developers, several non-profits and co-operatives
Lot Size	23 ha
Project Timeline	1974 to 2018
Previous Site Use	Industrial and underutilized land
Planned Site Use	Mixed-use, commercial, institutional, residential
Projected population	10775
Residential units	4310 units Bachelor's to three or more bedrooms Average unit size: Assisted living – 85 square metres Market housing – 107 square metres
Social Housing Split	57%
Gross Residential Density (U/ha)	190 units per hectare
Objectives	Reinvent the area and create a transition from the downtown. Establish a mixed-income, high density community that provides access to local amenities. Develop the site based on sound planning principals rather than solely on market demand. Create a liveable environment that fosters a strong sense of community.

Lessons Learned:

- The efficient distribution of uses can increase density and circulation without having high-rise apartment towers, superblocks and complicated curvilinear street patterns.
- A mix of tenures housing types and income levels combined with mixed uses that generate employment opportunities creates a dynamic neighbourhood and encourages social interaction.
- Creating open and democratic forms of community engagement from the early stages of the project through to after implementation is important for the community's success as it fosters a sense of pride and belonging.
- Planning in phases can allow for the project to adapt and respond to the changing demographics and economic conditions.

Prospect Plaza, Brooklyn, New York

Prospect Plaza is an ambitious initiative aimed at revitalizing a 1.8 hectare former New York City Housing Authority (NYCHA) site. Situated in a historically underserved neighbourhood, this multi-phase project was focused on replacing the existing high-rise "Towers in the Park" design with low to mid rise buildings that better fit the area's character. By engaging closely with former residents, community leaders, and city agencies, the design team took a comprehensive approach to engagement, prioritizing the creation of sustainable public and private affordable housing. Plans for the new Prospect Plaza centreed on improving resident health outcomes—a particularly acute need, as the Ocean Hill–Brownsville neighbourhood experienced the highest death rates in New York City caused by avoidable chronic health conditions as recently as 2012, according to the Office of Vital Statistics. The overall site, residences, and community spaces were planned to make regular physical activity and healthier choices more inviting and integrated into daily routines, considering not only the layout of building components, but proximity to transportation, recreation, and healthy food access.

The project was undertaken in three distinct phases and resulted in 394 affordable housing units alongside vital community resources, such as a new supermarket, community centre, and recreational spaces. Phase I, completed in 2016, introduced 110 affordable units and achieved LEED Platinum certification. Its focus on active mobility made it the first multi-family building nationwide to earn Active Design Verified status from the Partnership for a Healthier America. Following this, Phase II was finalized in the spring of 2017, adding 149 affordable units and receiving LEED Gold Certification. This phase features amenities such as an indoor gym, a children's playground, and a mural created by residents. The final phase includes 135 additional affordable units within a mixed-use building, offering 20,000 square feet of retail space, including a much-needed supermarket, as well as a community centre run by Brooklyn Community Services and a new through-block park.

The Prospect Plaza initiative showcased the strength of collaborative efforts, bringing together community residents, government agencies, nonprofit organizations, and private sector partners to maximize resources and support. By transforming three under-utilized sites, the project not only provides essential affordable housing but also enhances access to fresh food through community gardens, greenhouses and a supermarket. The incorporation of active design elements encourages healthier lifestyles, while the community centre promotes social connectivity. The newly developed public park also offers a range of recreational opportunities for all age groups, including children's play areas, a basketball court, and landscaped walkways.



Figure C-19: Prospect Plaza

Key features (Table C-20:

Landowner	New York City Housing Authority
Developers	Blue Sea Development, Pennrose Properties LLC, Duverney + Brooks, Rosenburg Housing Group, New York City Housing Authority
Site Area	1.8 ha
Development Date	2010-2016
Previous Site Use	Affordable housing towers
Planned Site Use	Affordable housing, Commercial, Mixed-use
Projected population	985
Residential units	394 units Bachelor to three or more bedrooms, dependant on the target demographic
Gross Residential Density (U/ha)	219 units per hectare
Social Housing Split	100%
Objectives	Support access to fresh local and healthy food options. Revitalize the neighbourhood to support a more human scale development that responds to the street network. Support more positive resident health outcomes

Lessons Learned:

- Involve local residents and stakeholders in the planning process to ensure the redevelopment meets community needs and desires. This can be achieved through various methods such as advisory committees, design charrettes, site visits, and more. Utilizing a range of outreach strategies allows for diverse feedback and perspectives.
- Providing access to healthy food options and designing spaces that encourage active mobility can significantly contribute to stability for low-income residents. These populations often face greater vulnerability to financial hardships stemming from health issues. By prioritizing projects that support the health and well-being of residents, planners can encourage more stable and resilient communities.
- Incorporating ongoing programming into the final outcomes of the site can actively engage residents in their community. For instance, at Prospect Plaza, workshops for community gardens and various initiatives organized through the community centre encourage individuals to participate and connect with their neighbourhood. This involvement fosters a sense of ownership and strengthens community ties.

Regent Park Revitalization, Toronto, Ontario

Regent Park, a historic neighbourhood in Toronto, has a complex past marked by social challenges and change. Today, it is being transformed through an extensive revitalization project aimed at creating an inclusive community. This initiative incorporates a diverse mix of housing options, including rent-geared-to-income (RGI) units, affordable rentals, and market condominiums. Designed to foster social cohesion, residential space is located within proximity to retail, commercial areas, parks, and community facilities.



Figure C-20: Regent Park Revitalization Site Plan

Central to the revitalization is the Regent Park Social Development Plan, developed through extensive community engagement, which focuses on enhancing social inclusion and providing residents with access to employment, training, and scholarship opportunities. The redevelopment also prioritizes architectural diversity, integrating new buildings with the surrounding urban landscape and reconnecting Regent Park to Toronto's Street grid.

Over the past decade, numerous amenities have been built in the area, such as a community park, recreational centre, athletic grounds, and health services, all aimed at enhancing the community's way of life. Further, this project provides job opportunities, enabling job security for some residents. With a focus on creating long lasting impacts, Regent Park is a model for reimagining neighbourhoods, demonstrating the influence thoughtful redevelopment can have on social and economic vitality.

Key Features (Table C-21):

Landowner	City of Toronto
Developers	City of Toronto, Tridel Builders Inc., Daniel's Corporation, Toronto Community Housing Corporation
Site Area	28 ha
Development Date	Phase 1-3: 2005-2024 Phase 4 and 5: 2024-2029
Previous Site Use	Affordable housing
Planned Site Use	Mixed-use, social housing
Projected population	17000
Residential units	3246 units Bachelor to three or more bedrooms, dependant on the target demographic
Gross Residential Density (U/ha)	115 units per hectare
Social Housing Split	25%
Objectives	The redeveloped community will include people from a range of socio-economic groups. This project provides not only the spaces for people to live, but a range of supports and spaces for people to thrive, work, and play. Provide a range of housing options.

Lessons Learned:

- Prioritizing high-quality residential spaces alongside practical community facilities, retail areas, and parks, can create a neighbourhood atmosphere.
- By creating a community that includes individuals from diverse socio-economic backgrounds, a development can help reduce the stigma associated with social housing and foster beneficial connections for low-income residents. Additionally, the introduction of market units contributes to lowering the costs of affordable housing.
- Redeveloping a community goes beyond simply providing new housing; it involves ensuring that residents, particularly those with lower incomes, have access to essential services and support systems that support their well-being.

APPENDIX D – EXISTING BUILDING INVENTORY AND DENSITY

Assumptions

Floorspace per worker (FSW)

- Office: 29 m^2
- Retail/Commercial: 28 m^2
- Community Services: 40 m^2
- Efficiency: 70.00%

Avg person per household

- 2.5 per household

Average Dwelling Unit

- *Family Housing & Independent Seniors Housing Size:* 70.6 m^2
  - Efficiency 82.00%
- *Average Dwelling Unit Size:* 83 m^2
  - Efficiency 80.00%

Parking

Average GFA per Space

- (Minimum 20 Residential Units) 39 m^2 per # of Spaces per dwelling unit, including visitor parking 0.6 per/dwelling unit
- Mixed-use (non-residential) over 200m^2: 2 Spaces per every 100 m^2 over 200 m^2 GFA.
  - Originally 5 per 100m2 over 200m2, reducing to 2 for TOD
- Office: 1 Spaces per every 100m^2 of GFA

Park Area = Recreational Area

Open Space = Sidewalks, paths, etc.

FSI = Buildings only
Block Coverage = Buildings only

Buildings labeled as "0" indicate either Recreational space or Open space
X.1 = Ground Floor/Base Floor Plate
X.2, X.3, etc. = Second floorplate, third floorplate, etc.

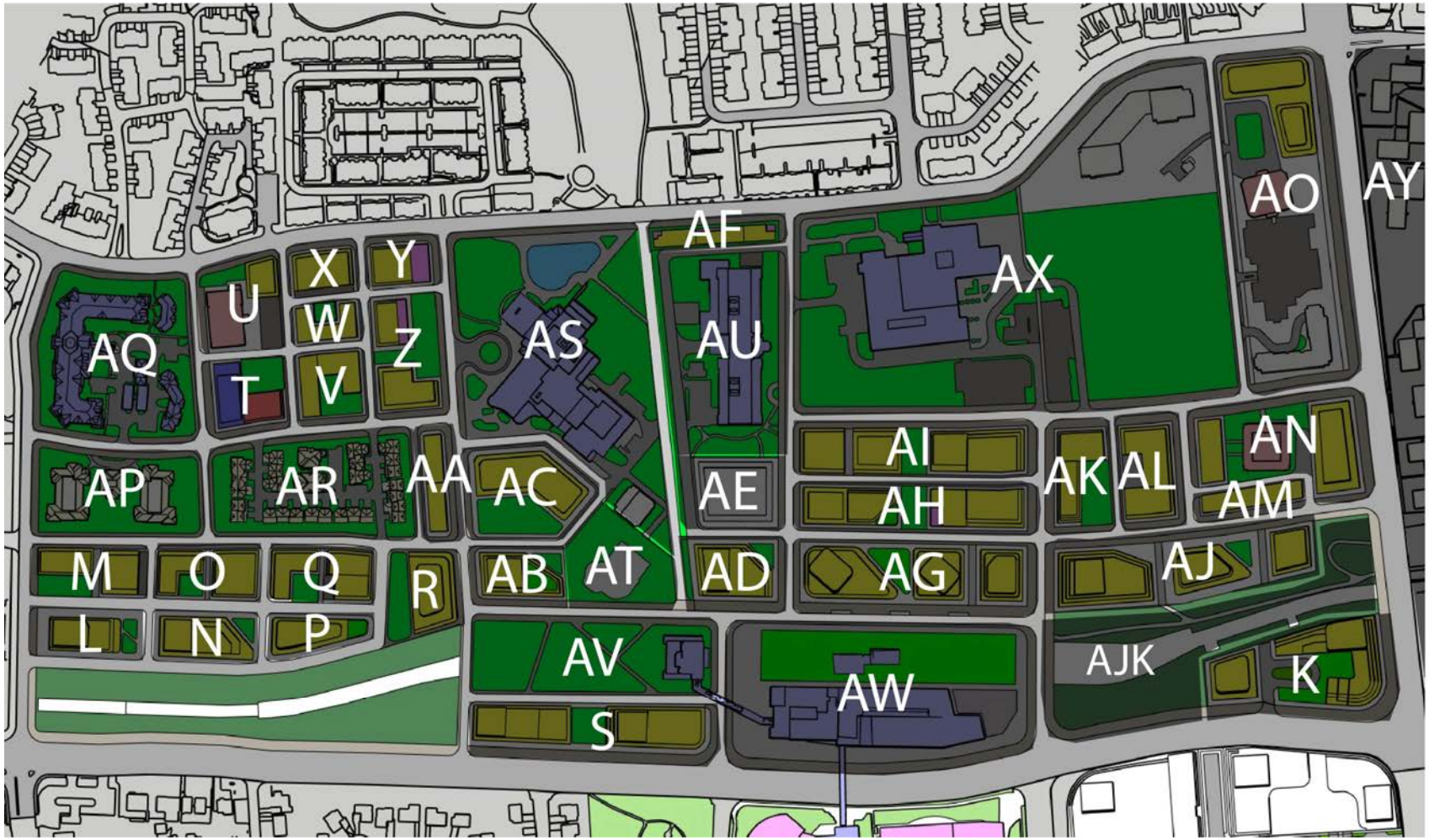


Figure D-1: Block Map for the Western Portion of the ASA.



Figure D-2: Block Map of the Eastern Portion of the ASA.

Table D-1: Existing Building Inventory and Density

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes	Demolish
Residential Area B	DNE	N/A	1	3145.25	1	3145.25	N/A	N/A	Residential			1	2516									21			36	89	Peter D Clark Long-Term Care Home	Yes
Residential Area B	DNE	N/A	2	5449.83	2	10899.66	N/A	N/A	Residential			2	8720									74			124	309	Peter D Clark Long-Term Care Home	Yes
Private Block A	AP	10317	3	2972.58	4	11890.32	29%	1.2	Residential			4	9512														Meridian Retirement Home	No
Private Block A	AQ	18309	4	4168.81	3	12506.43	23%	0.7	Residential			3	10005									85			142	354	Crystal View Lodge	No
Private Block A	AQ	18309	5	329.21	1	329.21	2%	0.0	Residential			1	263									2			4	9	Crystal View Lodge	No
Private Block A	AQ	18309	6	580.61	1	580.61	3%	0.0	Residential			1	464									4			7	16	Crystal View Lodge	No
Private Block A	AQ	18309	7	509.87	1	509.87	3%	0.0	Residential												510						Garage/ Storage	No
Private Block A	AR	14231	8	236.76	2	473.52	2%	0.0	Residential			2	379									2			4	10	Townhouse Complex	No
Private Block A	AR	14231	9	478.97	2	957.94	3%	0.1	Residential			2	766									4			6	15	Townhouse Complex	No
Private Block A	AR	14231	10	480.58	2	961.16	3%	0.1	Residential			2	769									4			6	15	Townhouse Complex	No
Private Block A	AR	14231	11	320.73	2	641.46	2%	0.0	Residential			2	513									2			4	10	Townhouse Complex	No
Private Block A	AR	14231	12	395.19	2	790.38	3%	0.1	Residential			2	632									4			7	18	Townhouse Complex	No
Private Block A	AR	14231	13	389.64	2	779.28	3%	0.1	Residential			2	623									4			6	15	Townhouse Complex	No
Private Block A	AR	14231	14	260.69	2	521.38	2%	0.0	Residential			2	417									2			4	10	Townhouse Complex	No
Private Block A	AR	14231	15	389.48	2	778.96	3%	0.1	Residential			2	623									4			6	15	Townhouse Complex	No
Private Block A	AR	14231	16	483.78	2	967.56	3%	0.1	Residential			2	774									4			6	15	Townhouse Complex	No
Private Block A	AR	14231	17	419.19	2	838.38	3%	0.1	Residential			2	671									4			6	15	Townhouse Complex	No
Private Block A	AR	14231	18	544.02	2	1088.04	4%	0.1	Residential			2	870									5			8	20	Townhouse Complex	No
Older Adults Area	U	5369	19	1448.54	4	5794.16	27%	1.1	Commercial	4	4056											81	140				Thales Systems Canada	No
Older Adults Area	DNE	N/A	20	3595.74	1.5	5393.61	25%	0.4	Commercial	1	1259					1	2517					72	43	90			RBC Strip Mall	Yes
Cultural Hub Area	AS	32632	21	6370.58	3	19111.74	20%	0.6	Institutional									3	13378			264					Ottawa Public Library + Theatre	No
Activator Area	AU	14814	22	5566.55	9	50098.95	38%	3.4	Institutional	4	15586			5	19483							697	537				Ottawa Public Health	No
Algonquin College Area	AV	13138	23	1227.23	2	2454.46	9%	0.2	Institutional					2	1718												Algonquin Station Exit	No
Algonquin College Area	AW	30986	25	7786.27	4	31145.08	25%	1.0	Institutional					3	16351												Algonquin Station Exit + Building	No
Algonquin College Area	AW	30986	26	750.5	1	750.5	2%	0.0	Institutional					1	525												Algonquin Station Exit	No
Private Block B	AX	76722	27	7916.81	2	15833.62	10%	0.2	Institutional					2	11084							218					Sir Carleton Secondary School	No

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes	Demolish
Private Block B	AX	76723	28	92.57	1	92.57	0%	0.0	Commercial	1	65																Bell Service Building	No
Private Block B	AX	76724	29	3034.23	1	3034.23	4%	0.0	Residential																		Residential Building, In Development	No
Residential Area C	AO	25642	30	1258.35	4	5033.4	5%	0.2	Institutional	1	881			3	2643							66	30				LifeLabs Medical Laboratory Building	No
Residential Area C	AO	25642	31	1448.74	14	20282.36	6%	0.8	Residential			14	16226									160			267	668	Gemini Towers	No
Private Block C	AY	56901	32	288.21	3	864.63	1%	0.0	Residential			3	692									5			8	21	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	33	280.34	3	841.02	0%	0.0	Residential			3	673									5			8	20	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	34	274.54	3	823.62	0%	0.0	Residential			3	659									5			8	20	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	35	280.1	3	840.3	0%	0.0	Residential			3	672									5			8	20	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	36	283.15	3	849.45	0%	0.0	Residential			3	680									5			8	20	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	37	279.64	3	838.92	0%	0.0	Residential			3	671									5			8	20	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	38	350.71	3	1052.13	1%	0.0	Residential			3	842									6			10	25	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	39	257.36	3	772.08	0%	0.0	Residential			3	618									4			7	19	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	40	267.41	3	802.23	0%	0.0	Residential			3	642									5			8	19	The Haryana Network Affordable Housing	No

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes	Demolish
Private Block C	AY	56901	41	269.36	3	808.08	0%	0.0	Residential			3	646									5			8	19	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	42	266.51	3	799.53	0%	0.0	Residential			3	640									5			8	19	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	43	98.94	1	98.94	0%	0.0	Residential	1	69											1	2				The Haryana Network Affordable Housing	No
Private Block C	AY	56901	44	370.35	3	1111.05	1%	0.0	Residential			3	889									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	45	372.11	3	1116.33	1%	0.0	Residential			3	893									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	46	363.07	3	1089.21	1%	0.0	Residential			3	871									6			10	26	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	47	364.09	3	1092.27	1%	0.0	Residential			3	874									6			11	26	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	48	368.4	3	1105.2	1%	0.0	Residential			3	884									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	49	367.81	3	1103.43	1%	0.0	Residential			3	883									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	50	367.89	3	1103.67	1%	0.0	Residential			3	883									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	51	281.01	3	843.03	0%	0.0	Residential			3	674									5			8	20	The Haryana Network Affordable Housing	No

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes	Demolish
Private Block C	AY	56901	52	365.64	3	1096.92	1%	0.0	Residential			3	878									6			11	26	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	53	368.29	3	1104.87	1%	0.0	Residential			3	884									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	54	368.45	3	1105.35	1%	0.0	Residential			3	884									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	55	369.21	3	1107.63	1%	0.0	Residential			3	886									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	56	371.36	3	1114.08	1%	0.0	Residential			3	891									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	57	370.39	3	1111.17	1%	0.0	Residential			3	889									6			11	27	The Haryana Network Affordable Housing	No
Private Block C	AY	56901	58	370.82	3	1112.46	1%	0.0	Residential			3	890									6			11	27	The Haryana Network Affordable Housing	No
Private Block D	AZ	14504	59	450.25	1	450.25	3%	0.0	Commercial							1	315					2		11			Optician, Spa	No
Private Block D	AZ	14504	60	817.58	1	817.58	6%	0.1	Commercial							1	572					7		20			Summerhays Grill	No
Private Block D	AZ	14504	61	429.6	1	429.6	3%	0.0	Commercial							1	301					2		11			Algonquin Animal Hospital	No
Private Block D	AZ	14504	62	181.15	1	181.15	1%	0.0	Commercial							1	127					-1		5			Indian Restaurant	No
Private Block D	AZ	14504	63	290.86	1	290.86	2%	0.0	Commercial							1	204					0		7			Delux Paints	No
Private Block D	AZ	14504	64	143.56	3	430.68	1%	0.0	Residential							3	301					2		11			Multi-Unit Commercial Apartment	No
Private Block D	AZ	14504	65	143.1	3	429.3	1%	0.0	Residential							3	301					2		11			Multi-Unit Commercial Apartment	No
Private Block D	AZ	14504	66	143.63	3	430.89	1%	0.0	Residential							3	302					2		11			Multi-Unit Commercial Apartment	No
Private Block D	AZ	14504	67	143.74	3	431.22	1%	0.0	Residential							3	302					2		11			Multi-Unit Commercial Apartment	No
Private Block D	AZ	14504	68	143.59	3	430.77	1%	0.0	Residential							3	302					2		11			Multi-Unit Commercial Apartment	No

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes	Demolish
Private Block D	AZ	14504	69	143.69	3	431.07	1%	0.0	Residential							3	302					2		11			Multi-Unit Commercial Apartment	No
Private Block D	AZ	14504	70	143.56	3	430.68	1%	0.0	Residential							3	301					2		11			Multi-Unit Commercial Apartment	No
Private Block D	AZ	14504	71	143.7	3	431.1	1%	0.0	Residential							3	302					2		11			Multi-Unit Commercial Apartment	No
Private Block E	BA	30437	72	1608.38	3	4825.14	5%	0.2	Residential			3	3860									28			47	116	Extendicare Medex Nursing Home	No
Private Block E	BA	30437	73	2359.96	10	23599.6	8%	0.8	Residential			10	18880									136			227	569	Meadowbrook Place Apartment Complex	No
Private Block E	BA	30437	74	690.12	14	9661.68	2%	0.3	Residential			14	7729									56			93	233	Greenview Apartments	No
Private Block F	BB	12844	75	236.37	1	236.37	2%	0.0	Commercial							1	165					-1		6			Circle K	No
Private Block F	BB	12844	76	672.49	6	4034.94	5%	0.3	Residential			6	3228									23			39	97	Baseline Court	No
Private Block F	BB	12844	77	659.18	6	3955.08	5%	0.3	Residential			6	3164									23			38	95	Baseline Court	No
Private Block F	BB	12844	78	674.03	6	4044.18	5%	0.3	Residential			6	3235									23			39	97	Baseline Court	No
Private Block F	BB	12844	79	662.84	6	3977.04	5%	0.3	Residential			6	3182									23			38	96	Baseline Court	No
Private Block G	BC	25405	80	478.13	4	1912.52	2%	0.1	Residential			4	1530									4			6	15	New Townhomes	No
Private Block G	BC	25405	81	457.98	4	1831.92	2%	0.1	Residential			4	1466									4			6	15	New Townhomes	No
Private Block G	BC	25405	82	465.46	4	1861.84	2%	0.1	Residential			4	1489									4			6	15	New Townhomes	No
Private Block G	BC	25405	83	1000.5	15	15007.5	4%	0.6	Residential			15	12006									87			145	362	Deerfield Apartment Complex	No
Private Block G	BC	25405	84	1017.24	15	15258.6	4%	0.6	Residential			15	12207									88			147	368	Deerfield Apartment Complex	No
College Square	BD	142398	85	654.06	1	654.06	0%	0.0	Commercial							1	458					5		16			Beer Store	Yes
College Square	BD	142398	86	617.2	1	617.2	0%	0.0	Commercial							1	432					5		15			BMO	Yes
College Square	BD	142398	87	1136.83	1	1136.83	1%	0.0	Commercial							1	796					12		28			Retail Frontage	Yes
College Square	BD	142398	88	2191.7	1	2191.7	2%	0.0	Commercial							1	1534					27		55			Retail Frontage	Yes
College Square	BD	142398	89	2023.75	1	2023.75	1%	0.0	Commercial							1	1417					24		51			Retail Frontage	Yes
College Square	BD	142398	90	2204.97	1	2204.97	2%	0.0	Commercial							1	1543					27		55			Retail Frontage	Yes
College Square	BD	142398	91	3406.67	1	3406.67	2%	0.0	Commercial							1	2385					44		85			Retail Frontage	Yes
College Square	BD	142398	92	11017.54	1	11017.54	8%	0.1	Commercial							1	7712					150		275			Loblaws	Yes
College Square	BD	142398	93	11671.62	1	11671.62	8%	0.1	Commercial							1	8170					159		292			Home Depot	Yes
College Square	BD	142398	94	543.24	1	543.24	0%	0.0	Commercial							1	380					4		14			Mcdonalds	Yes
College Square	BD	142398	95	729.39	1	729.39	1%	0.0	Commercial							1	511					6		18			Tim Hortons & Subway	Yes
						0																						
Total										**12**	**21916**	**219**	**147208**	**16**	**51804**	**42**	**31951**	**3**	**13378**	**175855**	**230245**	**2919**	**753**	**1141**	**1719**	**4298**		

Table D-2: Existing Building Inventory and Density

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Instituitional Area (m^2)	Commercial Storeys
Existing Precinct Totals (Estimates)	**Gross Block Area**	**Gross Building Footprint Area**	**Gross Floor Area**	**Office Area (m^2)**	**Residential Area (m^2)**	**Institutional Area (m^2)**	**Commercial Area (m^2)**	**Art/Cultural Area (m^2)**	**Recreation Area (m^2)**	**Open Space Area (m^2)**	**Parking Spaces**	**Office Jobs**	**Commercial Jobs**	**Dwelling Units**	**Residents**	**Demolish?**
Activator Area	29629.78	5566.55	59346.79	15,586	0	19,483	0	0	5,893	3,355	697	537	0	0	0	No
Algonquin College Area	70401.93	9764	68968.08	0	0	18,595	0	0	24,008	10,610	0	0	0	0	0	No
College Square	142397.78	36196.97	142397.78	0	0	0	25,338	0	0	106,201	463	0	905	0	0	Yes
Cultural Hub Area	38100.12	6370.58	53658.69	0	0	0	0	13,378	20,043	14,504	264	0	0	0	0	No
Older Adults Area	5369.3	5044.28	11187.77	5,314	0	0	2,517	0	0	0	153	183	90	0	0	No
Private Block A	63495.03	12960.11	72976.79	0	27,284	0	0	0	25,759	13,113	129	0	0	215	538	No
Private Block B	383619.4	11043.61	83946.67	65	0	11,084	0	0	34,688	30,298	218	0	0	0	0	No
Private Block C	56900.72	8635.16	73973.16	69	20,487	0	0	0	42,414	5,880	149	2	0	247	617	No
Private Block D	14503.51	3318.01	16800.65	0	0	0	3,931	0	0	11,186	27	0	140	0	0	No
Private Block E	30436.75	4658.46	63864.71	0	30,469	0	0	0	9,568	16,210	220	0	0	367	918	No
Private Block F	12843.5	2904.91	26632.58	0	12,809	0	165	0	2,044	8,341	92	0	6	154	386	No
Private Block G	25404.5	3419.31	57857.57	0	28,698	0	0	0	11,438	10,547	186	0	0	310	774	No
Residential Area B	0	5449.83	14044.91	0	11,236	0	0	0	0	0	95	0	0	159	398	Yes
Residential Area C	25642.2	2707.09	25315.76	881	16,226	2,643	0	0	0	0	227	30	0	267	668	No
Totals	**898,745**	**118,039**	**770,972**	**21,916**	**147,208**	**51,804**	**31,951**	**13,378**	**175,855**	**230,245**	**2,919**	**753**	**1,141**	**1,719**	**4,298**	

APPENDIX E – PROPOSED BUILDING INVENTORY AND DENSITY

Business-As-Usual Model

Table E-1: Proposed Building Inventory and Density—Business-As-Usual Model

Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
1.1	850	6	5099	6%	0.4	Mixed-Use			5.00	3400			1.00	595					32		21	41	102	
2.1	941	6	5648	7%	0.4	Mixed-Use			5.00	3765			1.00	659					36		24	45	113	
3.1	1959	1	1959	15%	0.1	Mixed-Use			0.25	392			0.75	1029					19		37	5	12	
3.2	1844	5	9218		0.7	Mixed-Use			5.00	7375									53			89	222	
3.3	1048	6	6286		0.5	Mixed-Use			6.00	5028									36			61	151	
4.1	862	6	5172	6%	0.4	Residential			6.00	4138									30			50	125	
5.1	1411	6	8466	11%	0.6	Residential			6.00	6773									49			82	204	
0	7362	1	7362	55%		Open Space												7326						
1.1	1158	6	6948	8%	0.5	Residential			6.00	5558									40			67	167	
2.1	1012	1	1012	7%	0.1	Mixed-Use							1.00	709					10		25			
2.2	911	5	4555		0.3	Mixed-Use			5.00	3644									26			44	110	
3.1	1161	6	6966	8%	0.5	Residential			6.00	5572									40			67	168	
4.1	1070	6	6421	8%	0.5	Residential			6.00	5137									37			62	155	
0	4768	1	4768	33%		Open Space											4767							
0	4946	1	4946	35%		Open Space												4946						
1.1	1394	1	1394	9%	0.1	Mixed-Use			1.75	1951			0.25	244					15		9	24	59	
1.2	1355	5	6777		0.4	Mixed-Use			5.00	5421									39			65	163	
0	8556	1	8556	52%		Open Space											8556							
0	6389	1	6389	39%		Open Space												6389						
1.1	1204	1	1204	13%	0.1	Mixed-Use			1.66	1599			0.33	278					13		10	19	48	
1.2	1204	5	6019		0.7	Mixed-Use			5.00	4815									35			58	145	
2.1	2316	1	2316	25%	0.3	Mixed-Use			1.75	3242			0.25	405					28		14	39	98	
2.2	2164	5	10819		1.2	Mixed-Use			5.00	8655									63			104	261	
0	4562	1	4562	49%		Open Space												4562						
0	1301	1	1301	14%		Open Space											1301							
1.1	717	20	14333	6%	1.2	Residential			20.00	11466									83			138	345	
2.1	3734	1	3734	30%	0.3	Mixed-Use			0.25	747			0.75	1980					41		70	9	22	
2.2	3346	5	16729		1.4	Mixed-Use			5.00	13383									97			161	403	
0	7937	1	7937	64%		Open Space												7937						
1.1	1032	1	1032	7%	0.1	Mixed-Use			0.25	206			0.75	542					8		19	2	6	
1.2	906	5	4529		0.3	Mixed-Use			5.00	3623									26			44	109	
2.1	826	1	826	5%	0.1	Mixed-Use							1.00	578					8		21			
2.2	757	5	3784		0.3	Mixed-Use			5.00	3027									22			36	91	
3.1	2070	1	2070	14%	0.1	Mixed-Use			0.50	828			0.50	724					16		26	10	25	
3.2	1893	5	9465		0.6	Mixed-Use			5.00	7572									55			91	228	
3.3	1616	2	3233		0.2	Mixed-Use			2.00	2586									19			31	78	
0	8849	1	8849	59%		Open Space												8849						
0	5599	1	5599	37%		Open Space											5599							
1.1	3336	1	3336	18%	0.2	Mixed-Use			0.40	1067			0.60	1401					32		50	13	32	
1.2	3042	5	15210		0.8	Mixed-Use			5.00	12168									88			147	367	
1.3	717	16	11466		0.6	Mixed-Use			16.00	9173									66			111	276	
2.1	3791	1	3791	21%	0.2	Mixed-Use			0.10	303			0.90	2389					46		85	4	9	
2.2	3665	5	18327		1.0	Mixed-Use			5.00	14662									106			177	442	
2.3	2152	2	4305		0.2	Mixed-Use			2.00	3444									25			41	104	
2.4	615	20	12307		0.7	Mixed-Use			20.00	9846									71			119	297	
3.1	1445	3	4334	8%	0.2	Mixed-Use			3.00	3467									25			42	104	
3.2	1324	3	3973		0.2	Mixed-Use			3.00	3178									23			38	96	
0	5850	1	5850	32%		Open Space												5850						
0	4029	1	4029	22%		Open Space											4021							
1.1	1376	1	1376	8%	0.1	Mixed-Use			1.00	1100			1.00	963					23		34	13	33	
1.2	1239	5	6194		0.4	Mixed-Use			5.00	4955									36			60	149	

Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
1.3	717	17	12183		0.7	Mixed-Use			17.00	9746									70			117	294	
2.1	3360	1	3360	20%	0.2	Mixed-Use			1.00	2688			1.00	2352					62		84	32	81	
2.2	3080	5	15402		0.9	Mixed-Use			5.00	12321									89			148	371	
2.3	717	17	12183		0.7	Mixed-Use			17.00	9746									70			117	294	
3.1	902	6	5413	5%	0.3	Mixed-Use																		Parking Garage
4.1	1212	1	1212	7%	0.1	Mixed-Use							1.00	848					13		30			
4.2	1124	5	5619		0.3	Mixed-Use			5.00	4495									32			54	135	
4.3	1032	2	2064		0.1	Mixed-Use			2.00	1651									12			20	50	
0	6545	1	6545	40%		Open Space												6545						
0	3155	1	3155	19%		Open Space											3155							
1.1	6758	1	6758	66%	0.7	Mixed-Use							1.00	4731					91		169			
1.2	6637	1	6637		0.6	Mixed-Use	0.20	929					0.80	3717					89	32	133			
1.3	6371	2	12743		1.2	Mixed-Use			2.00	10194									74			123	307	
1.4	2105	2	4210		0.4	Mixed-Use			2.00	3368									24			41	101	
1.5	615	20	12307		1.2	Mixed-Use			20.00	9846									71			119	297	
1.1	9068	1	9068	73%	0.7	Mixed-Use			1.00	5078			1.00	1904					71		68	61	153	
1.2	8912	2	17825		1.4	Mixed-Use	2.00	1872	2.00	2852			2.00	8110					216	65	290	34	86	
1.3	5406	2	10812		0.9	Mixed-Use	1.00	378	2.00	7785									64	13		94	234	
1.4	717	18	12900		1.0	Mixed-Use			18.00	10320									75			124	311	
1.5	615	35	21538		1.7	Mixed-Use			35.00	17230									125			208	519	
0	3367	1	3367	27%		Open Space												3367						
1.1	1357	5	6785	10%	0.5	Residential			5.00	5428									39			65	164	
1.2	722	30	21669		1.7	Residential			30.00	17335									125			209	522	
2.1	3347	2	6694	26%	0.5	Residential			2.00	5355									39			65	161	
2.2	3266	1	3266		0.3	Residential			1.00	2613									19			31	79	
2.3	2684	1	2684		0.2	Residential			1.00	2147									16			26	65	
2.4	2290	1	2290		0.2	Residential			1.00	1832									13			22	55	
2.5	1770	1	1770		0.1	Residential			1.00	1416									10			17	43	
2.6	1249	1	1249		0.1	Residential			1.00	999									7			12	30	
2.7	897	2	1793		0.1	Residential			2.00	1435									10			17	43	
2.8	739	31	22898		1.8	Residential			31.00	18318									132			221	552	
0	1528	1	1528	12%		Open Space											1528							
0	6706	1	6706	52%		Open Space												6706						
1.1	1621	1	1621	41%	0.4	Residential			1.00	1297									9			16	39	
1.2	1462	2	2924		0.7	Residential			2.00	2339									17			28	70	
1.3	1177	2	2354		0.6	Residential			2.00	1883									14			23	57	
1.4	619	15	9290		2.4	Residential			15.00	7432									54			90	224	
0	2002	1	2002	51%		Open Space												2002						
0	294	1	294	8%		Open Space											294							
1.1	1026	3	3077	24%	0.7	Mixed-Use			2.50	2051			0.50	359					18		13	25	62	
1.2	729	3	2188		0.5	Mixed-Use			3.00	1750									13			21	53	
2.1	1062	3	3185	25%	0.8	Mixed-Use			2.75	2336			0.25	186					17		7	28	70	
2.2	714	4	2857		0.7	Mixed-Use			4.00	2286									17			28	69	
0	1353	1	1353	32%		Open Space												1353						
0	768	1	768	18%		Open Space											768							
1.1	2324	3	6971	62%	1.9	Residential			3.00	5577									40			67	168	
1.2	1503	2	3006		0.8	Residential			2.00	2405									17			29	72	
1.3	1207	3	3621		1.0	Residential			3.00	2897									21			35	87	
1.4	565	15	8480		2.3	Residential			15.00	6784									49			82	204	
0	1182	1	1182	32%		Open Space												1182						
0	214	1	214	6%		Open Space											214							
1.1	1028	3	3083	26%	0.8	Residential			3.00	2466									18			30	74	
1.2	677	3	2030		0.5	Residential			3.00	1624									12			20	49	
2.1	1438	3	4313	36%	1.1	Residential			3.00	3450									25			42	104	

Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
2.2	1116	3	3349		0.8	Residential			3.00	2679									19			32	81	
0	334	1	334	8%		Open Space											334							
0	1208	1	1208	30%		Open Space												1208						
1.1	1786	3	5357	65%	1.9	Residential			3.00	4286									31			52	129	
1.2	904	3	2712		1.0	Residential			3.00	2170									16			26	65	
1.3	575	19	10922		4.0	Residential			19.00	8737									63			105	263	
0	208	1	208			Open Space											208							
0	1008	1	1008	36%		Open Space												1008						
1.1	1034	3	3102	24%	0.7	Residential			3.00	2482									18			30	75	
1.2	814	5	4070		1.0	Residential			5.00	3256									24			39	98	
2.1	1359	3	4076	32%	1.0	Mixed-Use			2.50	2717			0.50	475					25		17	33	82	
2.2	1056	3	3167		0.7	Mixed-Use			3.00	2533									18			31	76	
2.3	566	1	566		0.1	Mixed-Use			1.00	452									3			5	14	
0	496		0	12%		Open Space											496							
0	1374		0	32%		Open Space												1374						
1.1	2286	3	6857	51%	1.5	Residential			3.00	5485									40			66	165	
1.2	1825	4	7301		1.6	Residential			4.00	5841									42			70	176	

Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
1.3	818	17	13903		3.1	Residential			17.00	11122									80			134	335	
0	1196	1	1196	27%		Open Space											1196							
0	982	1	982	22%		Open Space												982						
1.1	2433	3	7299	24%	0.7	Residential			3.00	5839									42			70	176	
1.2	1805	3	5414		0.5	Residential			3.00	4331									31			52	130	
1.3	1218	3	3653		0.4	Residential			3.00	2922									21			35	88	
1.4	555	11	6100		0.6	Residential			11.00	4880									35			59	147	
2.1	2701	3	8102	27%	0.8	Mixed-Use			2.50	5401			0.50	945					54		34	65	163	
2.2	2059	3	6177		0.6	Mixed-Use			3.00	4941									36			60	149	
2.3	739	3	2217		0.2	Mixed-Use			3.00	1774									13			21	53	
2.4	584	13	7588		0.8	Mixed-Use			13.00	6070									44			73	183	
0	836	1	836	8%		Open Space											836							
0	3972	1	3972	40%		Open Space												3972						
1.1	1150	3	3449	23%	0.7	Institutional					3.00	2415							44					
1.2	688	3	2065		0.4	Institutional					3.00	1446							25					
2.1	773	3	2318	15%	0.5	Commercial	3.00	1622											32	56				
2.2	664	2	1328		0.3	Commercial	2.00	930											19	32				
0	940	1	940	18%		Open Space											940							
0	2241	1	2241	44%		Open Space												2241						
1.1	844	3	2531	16%	0.5	Mixed-Use			2.50	1688			0.50	295					14		11	20	51	
1.2	535	3	1606		0.3	Mixed-Use			3.00	1285									9			15	39	
0	434	1	434	8%		Open Space											434							
0	2814	1	2814	52%		Open Space												2814						
1.1	1584	6	9502	44%	2.7	Residential			6.00	7602									55			92	229	
1.2	834	1	834		0.2	Residential			1.00	668									5			8	20	
0	885		0	25%		Open Space											885							
0	1104		0	31%		Open Space												1104						
1.1	1010	5	5048	51%	2.5	Residential			5.00	4038									29			49	122	
0	283	1	283	14%		Open Space											281							
0	700	1	700	35%		Open Space												700						
1.1	1486	3	4457	57%	1.7	Mixed-Use			2.50	2971			0.50	520					28		19	36	89	
1.2	1178	3	3533		1.4	Mixed-Use			3.00	2826									20			34	85	
0	1113	1	1113	43%		Open Space												1113						
1.1	1535	3	4606	58%	1.7	Mixed-Use			2.25	2764			0.75	806					32		29	33	83	
1.2	1346	2	2691		1.0	Mixed-Use			2.00	2153									16			26	65	
1.3	473	1	473		0.2	Mixed-Use											473							Patio
0	1098	1	1098	42%		Open Space												1098						
1.1	992	3	2976	16%	0.5	Mixed-Use			2.00	1587			1.00	694					21		25	19	48	
1.2	851	1	851		0.1	Mixed-Use			1.00	681									5			8	21	
1.3	297	1	297		0.0	Mixed-Use											297							Patio
2.1	1414	3	4242	23%	0.7	Mixed-Use			2.00	2263			1.00	990					32		35	27	68	
2.2	971	4	3893		0.6	Mixed-Use			4.00	3106									22			37	94	
0	1740	1	1740	28%		Open Space											1740							
0	2083	1	2083	33%		Open Space												2083						
1.1	1180	6	7077	44%	2.6	Mixed-Use			5.25	4954			0.75	619					44		22	60	149	
1.2	590	1	590		0.2	Mixed-Use			1.00	472									3			6	14	
0	1509	1	1509	56%		Open Space												1509						
1.1	2091	3	6274	53%	1.6	Residential			3.00	5019									36			60	151	
1.2	1545	3	4636		1.2	Residential			3.00	3709									27			45	112	
1.3	389	1	389		0.1	Residential											389							Rooftop Park
1.4	699	12	8389		2.1	Residential			12.00	6711									49			81	202	
0	238	1	238	6%		Open Space											238							
0	1626	1	1626	41%		Open Space												1626						
1.1	3137	3	9411	42%	1.3	Mixed-Use			2.25	5646					0.75	1647			70			68	170	

Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
1.2	2173	7	15208		2.1	Mixed-Use			7.00	12166									88			147	366	
0	1800	1	1800	24%		Open Space											1800							
0	2477		0	33%		Open Space												2477						
1.1	2438	3	7315	48%	1.4	Residential			3.00	5852									42			71	176	
1.2	2042	2	4084		0.8	Residential			2.00	3267									24			39	98	
1.3	1896	4	7586		1.5	Residential			4.00	6069									44			73	183	
1.4	695	15	10426		2.0	Residential			15.00	8341									60			100	251	
0	485	1	485	10%		Open Space											485							
0	2169	1	2169	43%		Open Space												2169						
1.1	2913	2	5826	64%	1.3	Commercial												5826						Parking Garage
1.2	1968	4	7870		1.7	Commercial												7870						
0	1607	1	1607			Open Space												1607						
1.1	1194	4	4776	45%	1.8	Mixed-Use			3.00	2865			1.00	836					33		30	35	86	
1.2	536	1	536		0.2	Mixed-Use			1.00	429									3			5	13	
0	753	1	753	28%		Open Space											753							Patio + Greenspace
0	698	1	698	26%		Open Space												698						
1.1	2636	3	7908	21%	0.6	Mixed-Use			2.50	5272			0.50	923					53		33	64	159	
1.2	1942	2	3883		0.3	Mixed-Use			2.00	3107									22			37	94	
1.3	722	20	14433		1.2	Mixed-Use			20.00	11547									83			139	348	
2.1	1759	3	5278	14%	0.4	Mixed-Use			2.00	2815			1.00	1232					41		44	34	85	
2.2	1291	6	7746		0.6	Mixed-Use			6.00	6197									45			75	187	
2.3	604	15	9056		0.7	Mixed-Use			15.00	7245									52			87	218	
3.1	1471	3	4413	12%	0.4	Residential			3.00	3530									26			43	106	
3.2	1037	3	3110		0.3	Residential			3.00	2488									18			30	75	
3.3	696	14	9739		0.8	Residential			14.00	7791									56			94	235	
0	1308	1	1308	11%		Open Space											1308							
0	5872	1	5872	47%		Open Space												5872						
1.1	2358	3	7075	29%	0.9	Mixed-Use			2.25	4245			0.75	1238					51		44	51	128	
1.2	1511	2	3021		0.4	Mixed-Use			2.00	2417									17			29	73	
1.3	1328	1	1328		0.2	Mixed-Use			1.00	1063									8			13	32	
1.4	692	1	692		0.1	Mixed-Use			1.00	553									4			7	17	
0	178	1	178			Open Space											178							Rooftop Park
2.1	2355	3	7065	29%	0.9	Mixed-Use			2.25	4239			0.75	1236					51		44	51	128	
2.2	2154	2	4309		0.5	Mixed-Use			2.00	3447									25			42	104	
2.3	1790	1	1790		0.2	Mixed-Use			1.00	1432									10			17	43	
2.4	1041	1	1041		0.1	Mixed-Use			1.00	833									6			10	25	
0	329	1	329	4%		Open Space											329							Patio
0	760	1	760	9%		Open Space											760							
0	2700	1	2700	33%		Open Space												2700						
1.1	1353	3	4060	15%	0.4	Residential			3.00	3248									23			39	98	
1.2	1040	2	2081		0.2	Residential			2.00	1665									12			20	50	
2.1	1513	3	4540	16%	0.5	Mixed-Use			2.66	3220			0.33	350					26		12	39	97	
2.2	1175	2	2351		0.3	Mixed-Use			2.00	1880									14			23	57	
2.3	689	1	689		0.1	Mixed-Use			1.00	551									4			7	17	
3.1	2623	3	7869	29%	0.9	Residential			3.00	6295									46			76	190	
3.2	2124	1	2124		0.2	Residential			1.00	1699									12			20	51	
3.3	1905	1	1905		0.2	Residential			1.00	1524									11			18	46	
3.4	1170	1	1170		0.1	Residential			1.00	936									7			11	28	
0	805	1	805	9%		Open Space											805							
0	2879	1	2879	31%		Open Space												2879						
1.1	5190	3	15569	36%	1.1	Mixed-Use			2.00	8304			1.00	3633					129		130	100	250	
1.2	4524	3	13572		0.9	Mixed-Use			3.00	10857									78			131	327	
1.3	1961	3	5882		0.4	Mixed-Use			3.00	4705									34			57	142	

Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
1.4	694	19	13183		0.9	Mixed-Use			19.00	10546									76			127	318	
2.1	1830	3	5490	13%	0.4	Residential			3.00	4392									32			53	132	
2.2	1023	3	3068		0.2	Residential			3.00	2455									18			30	74	
2.3	784	19	14888		1.0	Residential			19.00	11911									86			144	359	
3.1	1125	3	3374	8%	0.2	Residential			3.00	2700									20			33	81	
3.2	756	20	15124		1.1	Residential			20.00	12099									87			146	364	
0	952	1	952	7%		Open Space											262							
0	6044	1	6044	42%		Open Space												4288						
1.1	1966	3	5898	38%	1.1	Residential			3.00	4718									34			57	142	
1.2	1708	1	1708		0.3	Residential			1.00	1366									10			16	41	
1.3	1579	1	1579		0.3	Residential			1.00	1263									9			15	38	
1.4	1458	1	1458		0.3	Residential			1.00	1166									8			14	35	
1.5	623	1	623		0.1	Residential			1.00	499									4			6	15	
0	1280	1	1280	25%		Open Space											1280							
0	1921	1	1921	37%		Open Space												1921						
1.1	2591	3	7774	52%	1.6	Residential			3.00	6219									45			75	187	
1.2	2084	3	6251		1.3	Residential			3.00	5000									36			60	151	
1.3	823	1	823		0.2	Residential			1.00	658									5			8	20	
0	1894	1	1894	38%		Open Space												1894						
0	468		0	9%		Open Space																		
1.1	1282	6	7694	61%	3.7	Residential			6.00	6155									44			74	185	
0	819	1	819	39%		Open Space												819						
1.1	977	5	4884	9%	0.5	Residential			5.00	3907									28			47	118	
2.1	2469	3	7406	23%	0.7	Residential			3.00	5925									43			71	178	
2.2	1229	15	18428		1.7	Residential			15.00	14742									107			178	444	
0	3368	1	3368	32%		Open Space											3368							
0	3757	1	3757	36%		Open Space												3757						
1.1	3804	1	3804	15%	0.1	Mixed-Use			2.00	6086			1.00	2663					93		95	73	183	
1.2	2236	5	11179		0.4	Mixed-Use			5.00	8943									65			108	269	
1.3	1824	12	21892		0.9	Mixed-Use			12.00	17513									127			211	528	
1.4	531	3	1592		0.1	Mixed-Use			3.00	1274									9			15	38	
0	867	1	867	3%		Open Space											867							
0	14038	1	14038	55%		Open Space												14038						
			1304901					**5,732**		**823,740**		**3,860**		**52,137**		**1,647**	**51,144**	**148,663**	**7,058**	**198**	**1,862**	**9,925**	**24811**	

Table E-2: Proposed Building Inventory and Density—Business-As-Usual Model

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Instituitional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)
Net Precinct Totals	**Gross Block Area**	**Gross Building Footprint**	**Gross Floor Area**	**Office Area (m^2)**	**Residential Area (m^2)**	**Institutional Area (m^2)**	**Commercial Area (m^2)**	**Art/Cultural Area (m^2)**	**Recreation Area (m^2)**	**Open Space Area (m^2)**	**Parking Spaces**	**Potential Office Jobs**	**Potential Commercial Jobs**	**Employees per Hectare**	**Dwelling Units**	**Potential Residents**	**Total Net Area (m^2)**
Residential Area A	53166	11995	134162	0	76,466	0	3,918	0	14,624	23,223	996	0	140	26	921	2,303	118,231
Residential Area B	37287	20094	186487	0	134,497	0	1,965	0	4,346	13,081	996	0	70	19	1,620	4,051	153,890
Residential Area C	25642	3804	53372	0	33,817	0	2,663	0	867	14,038	294	0	95	37	407	1,019	51,384
Downtown Area	97981	43118	441249	3,179	271,003	0	30,219	0	14,303	39,254	2,575	110	1,079	121	3,265	8,163	357,958
Cultural Hub Area	14015	6422	54734	0	36,547	0	836	1,647	3,180	4,802	306	0	30	21	440	1,101	47,011
Older Adults Area	30188	11966	79314	2,552	39,056	3,860	3,925	0	5,050	12,662	457	88	140	76	471	1,176	67,106
Activator Area	76503	38850	355583	0	232,355	0	8,611	0	8,774	41,603	1,828	0	308	40	2,799	6,999	291,344
Totals	**334,782**	**136,249**	**1,304,901**	**5,732**	**823,740**	**3,860**	**52,137**	**1,647**	**51,144**	**148,663**	**7,451**	**198**	**1,862**		**9,925**	**24,811**	**1,086,924**
Percentage				1.71%	246.05%	1.15%	15.57%	0.49%	15.28%	44.41%	2.23%	0.06%	0.56%		2.96%	7.41%	

Table E-3: Proposed Building Inventory and Density—Business-As-Usual Model FSI and Block Coverage

FSI & Block Coverage Per Block		
Block	FSI	Block Coverage
Column1	Column2	Column3
A	3	45%
B	2	31%
C	1	9%
D	2	38%
E	3	36%
F	2	26%
G	4	47%
H	4	41%
I	4	66%
J	6	73%
K	5	36%
L	4	41%
M	3	50%
N	6	62%
O	3	62%
P	7	65%
Q	4	56%
R	6	51%
S	5	52%
T	2	38%
U	1	16%
V	3	44%
W	3	51%
X	3	57%
Y	3	58%
Z	2	39%
AA	3	44%
AB	5	53%
AC	3	42%
AD	6	48%
AE	3	64%
AF	2	45%
AG	5	47%
AH	3	58%
AI	3	60%
AJ	6	57%
AK	2	38%
AL	3	52%
AM	4	61%
AN	3	33%
AO	2	15%

Maximized Zoning Model

Table E-4: Proposed Building Inventory and Density—Maximized Zoning Model

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
Residential Area A	A	13350	1.1	850	6	5099	6%	0.4	Mixed-Use			5.00	3400			1.00	595					32		21	41	102	
Residential Area A	A	13350	2.1	941	6	5648	7%	0.4	Mixed-Use			5.00	3765			1.00	659					36		24	45	113	
Residential Area A	A	13350	3.1	1959	1	1959	15%	0.1	Mixed-Use			0.25	392			0.75	1029					19		37	5	12	
Residential Area A	A	13350	3.2	1844	5	9218		0.7	Mixed-Use			5.00	7375									53			89	222	
Residential Area A	A	13350	3.3	1048	6	6286		0.5	Mixed-Use			6.00	5028									36			61	151	
Residential Area A	A	13350	4.1	862	6	5172	6%	0.4	Residential			6.00	4138									30			50	125	
Residential Area A	A	13350	5.1	1411	6	8466	11%	0.6	Residential			6.00	6773									49			82	204	
Residential Area A	A	13350	0	7362	1	7362	55%		Open Space												7326						
Residential Area A	B	14248	2.1	1012	1	1012	7%	0.1	Mixed-Use							1.00	709					10		25			
Residential Area A	B	14248	2.2	911	5	4555		0.3	Mixed-Use			5.00	3644									26			44	110	
Residential Area A	B	14248	3.1	1161	6	6966	8%	0.5	Residential			6.00	5572									40			67	168	
Residential Area A	B	14248	4.1	1070	6	6421	8%	0.5	Residential			6.00	5137									37			62	155	
Residential Area A	B	14248	0	6384	1	6384	45%		Open Space											6384							
Residential Area A	B	14248	0	4620	1	4620	32%		Open Space												4620						
Residential Area A	C	19841	0	4630	1	4630	23%		Open Space												4630						Urban Forest
Residential Area A	C	19841	0	15210	1	15210	77%		Open Space											15010							Urban Forest
Residential Area A	D	9230	1.1	3110	1	3110	34%	0.3	Mixed-Use			0.75	1866			0.25	544					20		19	22	56	
Residential Area A	D	9230	1.2	3014	4	12057		1.3	Mixed-Use			4.00	9645									70			116	291	
Residential Area A	D	9230	1.3	1358	1	1358		0.1	Mixed-Use			1.00	1086									8			13	33	
Residential Area A	D	9230	0	6047	1	6047	66%		Open Space												6047						
Downtown Area	E	12388	1.1	717	20	14333	6%	1.2	Residential			20.00	11466									83			138	345	
Downtown Area	E	12388	2.1	3734	1	3734	30%	0.3	Mixed-Use			0.25	747			0.75	1960					41		70	9	22	
Downtown Area	E	12388	2.2	3346	5	16729		1.4	Mixed-Use			5.00	13383									97			161	403	
Downtown Area	E	12388	0	7937	1	7937	64%		Open Space												7937						
Downtown Area	F	15065	1.1	1032	1	1032	7%	0.1	Mixed-Use			0.25	206			0.75	542					8		19	2	6	
Downtown Area	F	15065	1.2	906	5	4529		0.3	Mixed-Use			5.00	3623									26			44	109	
Downtown Area	F	15065	2.1	826	1	826	5%	0.1	Mixed-Use							1.00	578					8		21			
Downtown Area	F	15065	2.2	757	5	3784		0.3	Mixed-Use			5.00	3027									22			36	91	
Downtown Area	F	15065	3.1	2070	1	2070	14%	0.1	Mixed-Use			0.50	828			0.50	724					16		26	10	25	
Downtown Area	F	15065	3.2	1893	5	9465		0.6	Mixed-Use			5.00	7572									55			91	228	
Downtown Area	F	15065	3.3	1616	2	3233		0.2	Mixed-Use			2.00	2586									19			31	78	
Downtown Area	F	15065	4.1	1035	1	1035	7%	0.1	Mixed-Use							1.00	724					10		26			
Downtown Area	F	15065	4.2	920	5	4598		0.3	Mixed-Use			5.00	3679									27			44	111	
Downtown Area	F	15065	5.1	1035	1	1035	7%	0.1	Mixed-Use							1.00	724					10		26			
Downtown Area	F	15065	5.2	920	5	4599		0.3	Mixed-Use			5.00	3679									27			44	111	
Downtown Area	F	15065	0	6745	1	6745	45%		Open Space												7339						
Downtown Area	F	15065	0	2323	1	2323	15%		Open Space											2323							
Downtown Area	G	18409	1.1	3336	1	3336	18%	0.2	Mixed-Use			0.40	1067			0.60	1401					32		50	13	32	
Downtown Area	G	18409	1.2	3042	5	15210		0.8	Mixed-Use			5.00	12168									88			147	367	
Downtown Area	G	18409	1.3	717	14	10033		0.5	Mixed-Use			14.00	8026									58			97	242	
Downtown Area	G	18409	2.1	3791	1	3791	21%	0.2	Mixed-Use			0.10	303			0.90	2389					46		85	4	9	
Downtown Area	G	18409	2.2	3665	5	18327		1.0	Mixed-Use			5.00	14662									106			177	442	
Downtown Area	G	18409	2.3	2152	2	4305		0.2	Mixed-Use			2.00	3444									25			41	104	
Downtown Area	G	18409	2.4	615	28	17230		0.9	Mixed-Use			28.00	13784									100			166	415	
Downtown Area	G	18409	3.1	1445	3	4334	8%	0.2	Mixed-Use			3.00	3467									25			42	104	
Downtown Area	G	18409	3.2	1324	3	3973		0.2	Mixed-Use			3.00	3178									23			38	96	
Downtown Area	G	18409	0	5850	1	5850	32%		Open Space												5850						
Downtown Area	G	18409	0	4029	1	4029	22%		Open Space											4021							
Downtown Area	H	16550	1.1	1376	1	1376	8%	0.1	Mixed-Use			1.00	1100			1.00	963					23		34	13	33	
Downtown Area	H	16550	1.2	1239	5	6194		0.4	Mixed-Use			5.00	4955									36			60	149	

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)
Downtown Area	H	16550	1.3	717	14	10033		0.6	Mixed-Use			14.00	8026									58			97
Downtown Area	H	16550	2.1	3360	1	3360	20%	0.2	Mixed-Use			1.00	2688			1.00	2352					62		84	32
Downtown Area	H	16550	2.2	3080	5	15402		0.9	Mixed-Use			5.00	12321									89			148
Downtown Area	H	16550	2.3	717	24	17200		1.0	Mixed-Use			24.00	13760									99			166
Downtown Area	H	16550	3.1	902	6	5413	5%	0.3	Mixed-Use																
Downtown Area	H	16550	4.1	1212	1	1212	7%	0.1	Mixed-Use							1.00	848					13		30	
Downtown Area	H	16550	4.2	1124	5	5619		0.3	Mixed-Use			5.00	4495									32			54
Downtown Area	H	16550	4.3	1032	2	2064		0.1	Mixed-Use			2.00	1651									12			20
Downtown Area	H	16550	0	6545	1	6545	40%		Open Space												6545				
Downtown Area	H	16550	0	3155	1	3155	19%		Open Space											3155					
Downtown Area	I	10233	1.1	6758	1	6758	66%	0.7	Mixed-Use							1.00	4731					91		169	
Downtown Area	I	10233	1.2	6637	1	6637		0.6	Mixed-Use	0.20	929					0.80	3717					89	32	133	
Downtown Area	I	10233	1.3	6371	2	12743		1.2	Mixed-Use			2.00	10194									74			123
Downtown Area	I	10233	1.4	2105	2	4210		0.4	Mixed-Use			2.00	3368									24			41
Downtown Area	I	10233	1.5	615	34	20923		2.0	Mixed-Use			34.00	16738									121			202
Downtown Area	J	12399	1.1	9068	1	9068	73%	0.7	Mixed-Use			1.00	5078			1.00	1904					71		68	61
Downtown Area	J	12399	1.2	8912	2	17825		1.4	Mixed-Use	2.00	1872	2.00	2852			2.00	8110					216	65	290	34
Downtown Area	J	12399	1.3	5406	2	10812		0.9	Mixed-Use	1.00	378	2.00	7785									64	13		94
Downtown Area	J	12399	1.4	717	25	17916		1.4	Mixed-Use			25.00	14333									104			173
Downtown Area	J	12399	1.5	615	35	21538		1.7	Mixed-Use			35.00	17230									125			208
Downtown Area	J	12399	0	3367	1	3367	27%		Open Space												3367				
Residential Area B	L	3916	1.1	1621	1	1621	41%	0.4	Residential			1.00	1297									9			16
Residential Area B	L	3916	1.2	1462	2	2924		0.7	Residential			2.00	2339									17			28
Residential Area B	L	3916	1.3	1177	2	2354		0.6	Residential			2.00	1883									14			23
Residential Area B	L	3916	1.4	619	15	9290		2.4	Residential			15.00	7432									54			90
Residential Area B	L	3916	0	2002	1	2002	51%		Open Space												2002				
Residential Area B	L	3916	0	294	1	294	8%		Open Space											294					
Residential Area B	M	4212	1.1	1026	3	3077	24%	0.7	Mixed-Use			2.50	2051			0.50	359					18		13	25
Residential Area B	M	4212	1.2	729	3	2188		0.5	Mixed-Use			3.00	1750									13			21
Residential Area B	M	4212	2.1	1062	3	3185	25%	0.8	Mixed-Use			2.75	2336			0.25	186					17		7	28
Residential Area B	M	4212	2.2	714	4	2857		0.7	Mixed-Use			4.00	2286									17			28
Residential Area B	M	4212	0	1353	1	1353	32%		Open Space												1353				
Residential Area B	M	4212	0	768	1	768	18%		Open Space											768					
Residential Area B	N	3720	1.1	2324	3	6971	62%	1.9	Residential			3.00	5577									40			67
Residential Area B	N	3720	1.2	1503	2	3006		0.8	Residential			2.00	2405									17			29
Residential Area B	N	3720	1.3	1207	3	3621		1.0	Residential			3.00	2897									21			35
Residential Area B	N	3720	1.4	565	17	9611		2.6	Residential			17.00	7689									56			93
Residential Area B	N	3720	0	1182	1	1182	32%		Open Space												1182				
Residential Area B	N	3720	0	214	1	214	6%		Open Space											214					
Residential Area B	O	4008	1.1	1028	3	3083	26%	0.8	Residential			3.00	2466									18			30
Residential Area B	O	4008	1.2	677	3	2030		0.5	Residential			3.00	1624									12			20
Residential Area B	O	4008	2.1	1438	3	4313	36%	1.1	Residential			3.00	3450									25			42
Residential Area B	O	4008	2.2	1116	3	3349		0.8	Residential			3.00	2679									19			32
Residential Area B	O	4008	0	334	1	334	8%		Open Space											334					
Residential Area B	O	4008	0	1208	1	1208	30%		Open Space												1208				
Residential Area B	P	2765	1.1	1786	3	5357	65%	1.9	Residential			3.00	4286									31			52
Residential Area B	P	2765	1.2	904	3	2712		1.0	Residential			3.00	2170									16			26
Residential Area B	P	2765	1.3	575	24	13796		5.0	Residential			24.00	11037									80			133
Residential Area B	P	2765	0	208	1	208			Open Space											208					
Residential Area B	P	2765	0	1008	1	1008	36%		Open Space												1008				
Residential Area B	Q	4262	1.1	1034	3	3102	24%	0.7	Residential			3.00	2482									18			30
Residential Area B	Q	4262	1.2	814	5	4070		1.0	Residential			5.00	3256									24			39
Residential Area B	Q	4262	2.1	1359	3	4076	32%	1.0	Mixed-Use			2.50	2717			0.50	475					25		17	33
Residential Area B	Q	4262	2.2	1056	3	3167		0.7	Mixed-Use			3.00	2533									18			31
Residential Area B	Q	4262	2.3	566	1	566		0.1	Mixed-Use			1.00	452									3			5
Residential Area B	Q	4262	0	496		0	12%		Open Space											496					
Residential Area B	Q	4262	0	1374		0	32%		Open Space												1374				
Residential Area B	R	4463	1.1	2286	3	6857	51%	1.5	Residential			3.00	5485									40			66
Residential Area B	R	4463	1.2	1825	4	7301		1.6	Residential			4.00	5841									42			70

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
Downtown Area	H	16550	1.3	717	14	10033		0.6	Mixed-Use			14.00	8026									58			97	242	
Downtown Area	H	16550	2.1	3360	1	3360	20%	0.2	Mixed-Use			1.00	2688			1.00	2352					62		84	32	81	
Downtown Area	H	16550	2.2	3080	5	15402		0.9	Mixed-Use			5.00	12321									89			148	371	
Downtown Area	H	16550	2.3	717	24	17200		1.0	Mixed-Use			24.00	13760									99			166	414	
Downtown Area	H	16550	3.1	902	6	5413	5%	0.3	Mixed-Use																		Parking Garage
Downtown Area	H	16550	4.1	1212	1	1212	7%	0.1	Mixed-Use							1.00	848					13		30			
Downtown Area	H	16550	4.2	1124	5	5619		0.3	Mixed-Use			5.00	4495									32			54	135	
Downtown Area	H	16550	4.3	1032	2	2064		0.1	Mixed-Use			2.00	1651									12			20	50	
Downtown Area	H	16550	0	6545	1	6545	40%		Open Space												6545						
Downtown Area	H	16550	0	3155	1	3155	19%		Open Space											3155							
Downtown Area	I	10233	1.1	6758	1	6758	66%	0.7	Mixed-Use							1.00	4731					91		169			
Downtown Area	I	10233	1.2	6637	1	6637		0.6	Mixed-Use	0.20	929					0.80	3717					89	32	133			
Downtown Area	I	10233	1.3	6371	2	12743		1.2	Mixed-Use			2.00	10194									74			123	307	
Downtown Area	I	10233	1.4	2105	2	4210		0.4	Mixed-Use			2.00	3368									24			41	101	
Downtown Area	I	10233	1.5	615	34	20923		2.0	Mixed-Use			34.00	16738									121			202	504	
Downtown Area	J	12399	1.1	9068	1	9068	73%	0.7	Mixed-Use			1.00	5078			1.00	1904					71		68	61	153	
Downtown Area	J	12399	1.2	8912	2	17825		1.4	Mixed-Use	2.00	1872	2.00	2852			2.00	8110					216	65	290	34	86	
Downtown Area	J	12399	1.3	5406	2	10812		0.9	Mixed-Use	1.00	378	2.00	7785									64	13		94	234	
Downtown Area	J	12399	1.4	717	25	17916		1.4	Mixed-Use			25.00	14333									104			173	432	
Downtown Area	J	12399	1.5	615	35	21538		1.7	Mixed-Use			35.00	17230									125			208	519	
Downtown Area	J	12399	0	3367	1	3367	27%		Open Space												3367						
Residential Area B	L	3916	1.1	1621	1	1621	41%	0.4	Residential			1.00	1297									9			16	39	
Residential Area B	L	3916	1.2	1462	2	2924		0.7	Residential			2.00	2339									17			28	70	
Residential Area B	L	3916	1.3	1177	2	2354		0.6	Residential			2.00	1883									14			23	57	
Residential Area B	L	3916	1.4	619	15	9290		2.4	Residential			15.00	7432									54			90	224	
Residential Area B	L	3916	0	2002	1	2002	51%		Open Space												2002						
Residential Area B	L	3916	0	294	1	294	8%		Open Space											294							
Residential Area B	M	4212	1.1	1026	3	3077	24%	0.7	Mixed-Use			2.50	2051			0.50	359					18		13	25	62	
Residential Area B	M	4212	1.2	729	3	2188		0.5	Mixed-Use			3.00	1750									13			21	53	
Residential Area B	M	4212	2.1	1062	3	3185	25%	0.8	Mixed-Use			2.75	2336			0.25	186					17		7	28	70	
Residential Area B	M	4212	2.2	714	4	2857		0.7	Mixed-Use			4.00	2286									17			28	69	
Residential Area B	M	4212	0	1353	1	1353	32%		Open Space												1353						
Residential Area B	M	4212	0	768	1	768	18%		Open Space											768							
Residential Area B	N	3720	1.1	2324	3	6971	62%	1.9	Residential			3.00	5577									40			67	168	
Residential Area B	N	3720	1.2	1503	2	3006		0.8	Residential			2.00	2405									17			29	72	
Residential Area B	N	3720	1.3	1207	3	3621		1.0	Residential			3.00	2897									21			35	87	
Residential Area B	N	3720	1.4	565	17	9611		2.6	Residential			17.00	7689									56			93	232	
Residential Area B	N	3720	0	1182	1	1182	32%		Open Space												1182						
Residential Area B	N	3720	0	214	1	214	6%		Open Space											214							
Residential Area B	O	4008	1.1	1028	3	3083	26%	0.8	Residential			3.00	2466									18			30	74	
Residential Area B	O	4008	1.2	677	3	2030		0.5	Residential			3.00	1624									12			20	49	
Residential Area B	O	4008	2.1	1438	3	4313	36%	1.1	Residential			3.00	3450									25			42	104	
Residential Area B	O	4008	2.2	1116	3	3349		0.8	Residential			3.00	2679									19			32	81	
Residential Area B	O	4008	0	334	1	334	8%		Open Space											334							
Residential Area B	O	4008	0	1208	1	1208	30%		Open Space												1208						
Residential Area B	P	2765	1.1	1786	3	5357	65%	1.9	Residential			3.00	4286									31			52	129	
Residential Area B	P	2765	1.2	904	3	2712		1.0	Residential			3.00	2170									16			26	65	
Residential Area B	P	2765	1.3	575	24	13796		5.0	Residential			24.00	11037									80			133	332	
Residential Area B	P	2765	0	208	1	208			Open Space											208							
Residential Area B	P	2765	0	1008	1	1008	36%		Open Space												1008						
Residential Area B	Q	4262	1.1	1034	3	3102	24%	0.7	Residential			3.00	2482									18			30	75	
Residential Area B	Q	4262	1.2	814	5	4070		1.0	Residential			5.00	3256									24			39	98	
Residential Area B	Q	4262	2.1	1359	3	4076	32%	1.0	Mixed-Use			2.50	2717			0.50	475					26		17	33	82	
Residential Area B	Q	4262	2.2	1056	3	3167		0.7	Mixed-Use			3.00	2533									18			31	76	
Residential Area B	Q	4262	2.3	566	1	566		0.1	Mixed-Use			1.00	452									3			5	14	
Residential Area B	Q	4262	0	496		0	12%		Open Space											496							
Residential Area B	Q	4262	0	1374		0	32%		Open Space												1374						
Residential Area B	R	4463	1.1	2286	3	6857	51%	1.5	Residential			3.00	5485									40			66	165	
Residential Area B	R	4463	1.2	1825	4	7301		1.6	Residential			4.00	5841									42			70	176	

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (#dwelling units)	Number of Residents	Notes
Residential Area B	R	4463	1	818	19	15538		3.5	Residential			19.00	12431									90			150	374	
Residential Area B	R	4463	0	1196	1	1196	27%		Open Space											1196							
Residential Area B	R	4463	0	982	1	982	22%		Open Space												982						
Residential Area B	S	9941	1.1	2433	3	7299	24%	0.7	Residential			3.00	5839									42			70	176	
Residential Area B	S	9941	1.2	1805	3	5414		0.5	Residential			3.00	4331									31			52	130	
Residential Area B	S	9941	1.3	1218	3	3653		0.4	Residential			3.00	2922									21			35	88	
Residential Area B	S	9941	1.4	555	13	7209		0.7	Residential			13.00	5767									42			69	174	
Residential Area B	S	9941	2.1	2701	3	8102	27%	0.8	Mixed-Use			2.50	5401			0.50	945					54		34	65	163	
Residential Area B	S	9941	2.2	2059	3	6177		0.6	Mixed-Use			3.00	4941									36			60	149	
Residential Area B	S	9941	2.3	739	3	2217		0.2	Mixed-Use			3.00	1774									13			21	53	
Residential Area B	S	9941	2.4	584	17	9923		1.0	Mixed-Use			17.00	7938									57			96	239	
Residential Area B	S	9941	0	836	1	836	8%		Open Space											836							
Residential Area B	S	9941	0	3972	1	3972	40%		Open Space												3972						
Older Adults Area	T	5103	1.1	1150	3	3449	23%	0.7	Institutional					3.00	2415							44					
Older Adults Area	T	5103	1.2	688	3	2065		0.4	Institutional					3.00	1446							25					
Older Adults Area	T	5103	2.1	773	3	2318	15%	0.5	Commercial	3.00	1622											32	56				
Older Adults Area	T	5103	2.2	664	2	1328		0.3	Commercial	2.00	930											19	32				
Older Adults Area	T	5103	0	940	1	940	18%		Open Space											940							
Older Adults Area	T	5103	0	2241	1	2241	44%		Open Space												2241						
Older Adults Area	U	5369	1.1	844	3	2531	16%	0.5	Mixed-Use			2.50	1688			0.50	295					14		11	20	51	
Older Adults Area	U	5369	1.2	535	3	1606		0.3	Mixed-Use			3.00	1285									9			15	39	
Older Adults Area	U	5369	0	434	1	434	8%		Open Space											434							
Older Adults Area	U	5369	0	2814	1	2814	52%		Open Space												2814						
Older Adults Area	V	3572	1.1	1584	6	9502	44%	2.7	Residential			6.00	7602									55			92	229	
Older Adults Area	V	3572	1.2	834	1	834		0.2	Residential			1.00	668									5			8	20	
Older Adults Area	V	3572	0	885		0	25%		Open Space											885							
Older Adults Area	V	3572	0	1104		0	31%		Open Space												1104						
Older Adults Area	W	1993	1.1	1010	5	5048	51%	2.5	Residential			5.00	4038									29			49	122	
Older Adults Area	W	1993	0	283	1	283	14%		Open Space											281							
Older Adults Area	W	1993	0	700	1	700	35%		Open Space												700						
Older Adults Area	X	2599	1.1	1486	3	4457	57%	1.7	Mixed-Use			2.50	2971			0.50	520					28		19	36	89	
Older Adults Area	X	2599	1.2	1178	3	3533		1.4	Mixed-Use			3.00	2826									20			34	85	
Older Adults Area	X	2599	0	1113	1	1113	43%		Open Space												1113						
Older Adults Area	Y	2634	1.1	1535	3	4606	58%	1.7	Mixed-Use			2.25	2764			0.75	806					32		29	33	83	
Older Adults Area	Y	2634	1.2	1346	2	2691		1.0	Mixed-Use			2.00	2153									16			26	65	
Older Adults Area	Y	2634	1.3	473	1	473		0.2	Mixed-Use											473							Patio
Older Adults Area	Y	2634	0	1098	1	1098	42%		Open Space												1098						
Older Adults Area	Z	6229	1.1	992	3	2976	16%	0.5	Mixed-Use			2.00	1587			1.00	694					21		25	19	48	
Older Adults Area	Z	6229	1.2	851	1	851		0.1	Mixed-Use			1.00	681									5			8	21	
Older Adults Area	Z	6229	1.3	297	1	297		0.0	Mixed-Use											297							Patio
Older Adults Area	Z	6229	2.1	1414	3	4242	23%	0.7	Mixed-Use			2.00	2263			1.00	990					32		35	27	68	
Older Adults Area	Z	6229	2.2	971	4	3883		0.6	Mixed-Use			4.00	3106									22			37	94	
Older Adults Area	Z	6229	0	1740	1	1740	28%		Open Space											1740							
Older Adults Area	Z	6229	0	2083	1	2083	33%		Open Space												2083						
Older Adults Area	AA	2689	1.1	1180	6	7077	44%	2.6	Mixed-Use			5.25	4954			0.75	619					44		22	60	149	
Older Adults Area	AA	2689	1.2	590	1	590		0.2	Mixed-Use			1.00	472									3			6	14	
Older Adults Area	AA	2689	0	1509	1	1509	56%		Open Space												1509						
Cultural Hub Area	AB	3955	1.1	2091	3	6274	53%	1.6	Residential			3.00	5019									36			60	151	
Cultural Hub Area	AB	3955	1.2	1545	3	4636		1.2	Residential			3.00	3709									27			45	112	
Cultural Hub Area	AB	3955	1.3	389	1	389		0.1	Residential											389							Rooftop Park
Cultural Hub Area	AB	3955	1.4	699	16	11186		2.8	Residential			16.00	8949									65			108	270	
Cultural Hub Area	AB	3955	0	238	1	238	6%		Open Space											238							
Cultural Hub Area	AB	3955	0	1626	1	1626	41%		Open Space												1626						
Cultural Hub Area	AC	7414	1.1	3137	3	9411	42%	1.3	Mixed-Use			2.25	5646					0.75	1647			70			68	170	
Cultural Hub Area	AC	7414	1.2	2173	7	15208		2.1	Mixed-Use			7.00	12166									88			147	366	
Cultural Hub Area	AC	7414	0	1800	1	1800	24%		Open Space											1800							
Cultural Hub Area	AC	7414	0	2477		0	33%		Open Space												2477						
Activator Area	AD	5092	1.1	2438	3	7315	48%	1.4	Residential			3.00	5852									42			71	176	
Activator Area	AD	5092	1.2	2042	2	4084		0.8	Residential			2.00	3267									24			39	98	
Activator Area	AD	5092	1.3	1896	4	7586		1.5	Residential			4.00	6069									44			73	183	
Activator Area	AD	5092	1.4	695	26	18072		3.5	Residential			26.00	14458									105			174	435	
Activator Area	AD	5092	0	485	1	485	10%		Open Space											485							
Activator Area	AD	5092	0	2169	1	2169	43%		Open Space												2169						

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
Activator Area	AE	4520	1.1	2913	2	5826	64%	1.3	Commercial												5826						Parking Garage
Activator Area	AE	4520	1.2	1968	4	7870		1.7	Commercial												7870						
Activator Area	AE	4520	0	1607	1	1607			Open Space												1607						
Cultural Hub Area	AF	2646	1.1	1194	4	4776	45%	1.8	Mixed-Use			3.00	2865			1.00	836					33		30	35	86	
Cultural Hub Area	AF	2646	1.2	536	1	536		0.2	Mixed-Use			1.00	429									3			5	13	
Cultural Hub Area	AF	2646	0	753	1	753	28%		Open Space											753							Patio + Greenspace
Cultural Hub Area	AF	2646	0	698	1	698	26%		Open Space												698						
Activator Area	AG	12436	1.1	2636	3	7908	21%	0.6	Mixed-Use			2.50	5272			0.50	923					53		33	64	159	
Activator Area	AG	12436	1.2	1942	2	3883		0.3	Mixed-Use			2.00	3107									22			37	94	
Activator Area	AG	12436	1.3	722	35	25258		2.0	Mixed-Use			35.00	20206									146			243	609	
Activator Area	AG	12436	2.1	1759	3	5278	14%	0.4	Mixed-Use			2.00	2815			1.00	1232					41		44	34	85	
Activator Area	AG	12436	2.2	1291	6	7746		0.6	Mixed-Use			6.00	6197									45			75	187	
Activator Area	AG	12436	2.3	604	26	15696		1.3	Mixed-Use			26.00	12557									91			151	378	
Activator Area	AG	12436	3.1	1471	3	4413	12%	0.4	Residential			3.00	3530									26			43	106	
Activator Area	AG	12436	3.2	1037	3	3110		0.3	Residential			3.00	2488									18			30	75	
Activator Area	AG	12436	3.3	696	20	13912		1.1	Residential			20.00	11130									80			134	335	
Activator Area	AG	12436	0	1308	1	1308	11%		Open Space											1308							
Activator Area	AG	12436	0	5872	1	5872	47%		Open Space												5872						
Activator Area	AH	8174	1.1	2358	3	7075	29%	0.9	Mixed-Use			2.25	4245			0.75	1238					51		44	51	128	
Activator Area	AH	8174	1.2	1511	2	3021		0.4	Mixed-Use			2.00	2417									17			29	73	
Activator Area	AH	8174	1.3	1328	1	1328		0.2	Mixed-Use			1.00	1063									8			13	32	
Activator Area	AH	8174	1.4	692	1	692		0.1	Mixed-Use			1.00	553									4			7	17	
Activator Area	AH	8174	0	178	1	178	2%		Open Space											178							Rooftop Park
Activator Area	AH	8174	2.1	2355	3	7065	29%	0.9	Mixed-Use			2.25	4239			0.75	1236					51		44	51	128	
Activator Area	AH	8174	2.2	2154	2	4309		0.5	Mixed-Use			2.00	3447									25			42	104	
Activator Area	AH	8174	2.3	1790	1	1790		0.2	Mixed-Use			1.00	1432									10			17	43	
Activator Area	AH	8174	2.4	1041	1	1041		0.1	Mixed-Use			1.00	833									6			10	25	
Activator Area	AH	8174	0	329	1	329	4%		Open Space											329							Patio
Activator Area	AH	8174	0	760	1	760	9%		Open Space											760							
Activator Area	AH	8174	0	2700	1	2700	33%		Open Space												2700						
Activator Area	AI	9174	1.1	1353	3	4060	15%	0.4	Residential			3.00	3248									23			39	98	
Activator Area	AI	9174	1.2	1040	2	2081		0.2	Residential			2.00	1665									12			20	50	
Activator Area	AI	9174	2.1	1513	3	4540	16%	0.5	Mixed-Use			2.66	3220			0.33	350					26		12	39	97	
Activator Area	AI	9174	2.2	1175	2	2351		0.3	Mixed-Use			2.00	1880									14			23	57	
Activator Area	AI	9174	2.3	689	1	689		0.1	Mixed-Use			1.00	551									4			7	17	
Activator Area	AI	9174	3.1	2623	3	7869	29%	0.9	Residential			3.00	6295									46			76	190	
Activator Area	AI	9174	3.2	2124	1	2124		0.2	Residential			1.00	1699									12			20	51	
Activator Area	AI	9174	3.3	1905	1	1905		0.2	Residential			1.00	1524									11			18	46	
Activator Area	AI	9174	3.4	1170	1	1170		0.1	Residential			1.00	936									7			11	28	
Activator Area	AI	9174	0	805	1	805	9%		Open Space											805							
Activator Area	AI	9174	0	2879	1	2879	31%		Open Space												2879						
Activator Area	AK	5166	1.1	1966	3	5898	38%	1.1	Residential			3.00	4718									34			57	142	
Activator Area	AK	5166	1.2	1708	1	1708		0.3	Residential			1.00	1366									10			16	41	
Activator Area	AK	5166	1.3	1579	1	1579		0.3	Residential			1.00	1263									9			15	38	
Activator Area	AK	5166	1.4	1458	1	1458		0.3	Residential			1.00	1166									8			14	35	
Activator Area	AK	5166	1.5	623	1	623		0.1	Residential			1.00	499									4			6	15	
Activator Area	AK	5166	0	1280	1	1280	25%		Open Space											1280							
Activator Area	AK	5166	0	1921	1	1921	37%		Open Space												1921						
Activator Area	AL	4953	1.1	2591	3	7774	52%	1.6	Residential			3.00	6219									45			75	187	
Activator Area	AL	4953	1.2	2084	3	6251		1.3	Residential			3.00	5000									36			60	151	
Activator Area	AL	4953	1.3	823	1	823		0.2	Residential			1.00	658									5			8	20	
Activator Area	AL	4953	0	1894	1	1894	38%		Open Space												1894						
Activator Area	AL	4953	0	468		0	9%		Open Space																		
Activator Area	AM	2102	1.1	1282	6	7694	61%	3.7	Residential			6.00	6155									44			74	185	
Activator Area	AM	2102	0	819	1	819	39%		Open Space												819						
Activator Area	AN	10571	1.1	977	5	4884	9%	0.5	Residential			5.00	3907									28			47	118	
Activator Area	AN	10571	2.1	2469	3	7406	23%	0.7	Residential			3.00	5925									43			71	178	
Activator Area	AN	10571	2.2	1229	19	23342		2.2	Residential			19.00	18673									135			225	562	
Activator Area	AN	10571	0	3368	1	3368	32%		Open Space											3368							
Activator Area	AN	10571	0	3757	1	3757	36%		Open Space												3757						

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Institutional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)	Art/Culture Storeys	Net Arts/Culture Area (m^2)	Net Recreation Area (m^2)	Net Open Space (m^2)	Parking	Office (#workers)	Commercial (#workers)	Residential (# dwelling units)	Number of Residents	Notes
Residential Area C	AO	25642	1.1	3804	1	3804	15%	0.1	Mixed-Use			2.00	6086			1.00	2663					93		95	73	183	
Residential Area C	AO	25642	1.2	2236	5	11179		0.4	Mixed-Use			5.00	8943									65			108	269	
Residential Area C	AO	25642	1.3	1824	12	21892		0.9	Mixed-Use			12.00	17513									127			211	528	
Residential Area C	AO	25642	1.4	531	3	1592		0.1	Mixed-Use			3.00	1274									9			15	38	
Residential Area C	AO	25642	0	867	1	867	3%		Open Space											867							
Residential Area C	AO	25642	0	14038	1	14038	55%		Open Space												14038						
LRT Park Cap	AJK	46568	0	36348	1	36348	78%		Open Space											36348							
LRT Park Cap	AJK	46568	0	10220	1	10220	22%		Open Space												10220						
TOTAL						1234365					5,732		740,460		3,860		49,570		1,647	89,197	145,781	6,409	198	1,770	8,921	22,303	

Table E-5: Proposed Building Inventory and Density—Maximized Zoning Model

Precinct	Block	Block Area (m^2)	Building	Building Footprint (m^2)	Total Storeys	Gross Floor Area (m^2)	Block Coverage	Floor Space Index (FSI)	Land Use	Office Storeys	Net Office Area (m^2)	Residential Storeys	Net Residential Area (m^2)	Institutional Storeys	Net Instituitional Area (m^2)	Commercial Storeys	Net Commercial Area (m^2)
Net Precinct Totals	**Gross Block Area**	**Gross Building Footprint Area**	**Gross Floor Area**	**Office Area (m^2)**	**Residential Area (m^2)**	**Institutional Area (m^2)**	**Commercial Area (m^2)**	**Art/Cultural Area (m^2)**	**Recreation Area (m^2)**	**Open Space Area (m^2)**	**Parking Spaces**	**Potential Office Jobs**	**Potential Commercial Jobs**	**Employees per Hectare**	**Dwelling Units**	**Potential Residents**	**Total Net Area (m^2)**
Residential Area A	56668	9034	121581	0	57,822	0	3,535	0	21,394	22,624	1,048	0	126	22	697	1,742	105,375
Residential Area B	37287	20094	195571	0	141,764	0	1,965	0	4,346	13,081	1,048	0	70	19	1,708	4,270	161,157
Residential Area C	25642	3804	53372	0	33,817	0	2,663	0	867	14,038	294	0	95	37	407	1,019	51,384
Downtown Area	85043	38414	387792	3,179	237,472	0	31,668	0	9,500	31,038	2,354	110	1,131	146	2,861	7,153	312,857
Cultural Hub Area	14015	6422	57530	0	38,784	0	836	1,647	3,180	4,802	322	0	30	21	467	1,168	49,248
Older Adults Area	30188	11966	79314	2,552	39,056	3,860	3,925	0	5,050	12,662	457	88	140	76	471	1,176	67,106
Activator Area	62187	30706	292636	0	191,746	0	4,978	0	8,512	37,315	1,466	0	178	29	2,310	5,775	242,551
LRT Park Cap	46568		46568	0	0	0	0	0	36,348	10,220	0	0	0	0	0	0	46,568
Totals	**311,030**	**120,439**	**1,234,365**	**5,732**	**740,460**	**3,860**	**49,570**	**1,647**	**52,849**	**135,561**	**6,988**	**198**	**1,770**		**8,921**	**22,303**	**989,679**
Percentage				1.84%	238.07%	1.24%	15.94%	0.53%	16.99%	43.58%	2.25%	0.06%	0.57%		2.87%	7.17%	

Table E-6: Proposed Building Inventory and Density—Maximized Zoning Model FSI and Block Coverage

FSI & Block Coverage Per Block		
Block	FSI	Block Coverage
A	3	45%
B	1	23%
C	0	0%
D	2	34%
E	3	36%
F	2	40%
G	4	47%
H	4	41%
I	5	66%
J	6	73%
K	0	0%
L	4	41%
M	3	50%
N	6	62%
O	3	62%
P	8	65%
Q	4	56%
R	7	51%
S	5	52%
T	2	38%
U	1	16%
V	3	44%
W	3	51%
X	3	57%
Y	3	58%
Z	2	39%
AA	3	44%
AB	6	53%
AC	3	42%

APPENDIX F – RENDERINGS & ROAD PAMPHLET

Renderings



Figure F-1: Rendering proposed MP development of the ASA

Roads Pamphlet

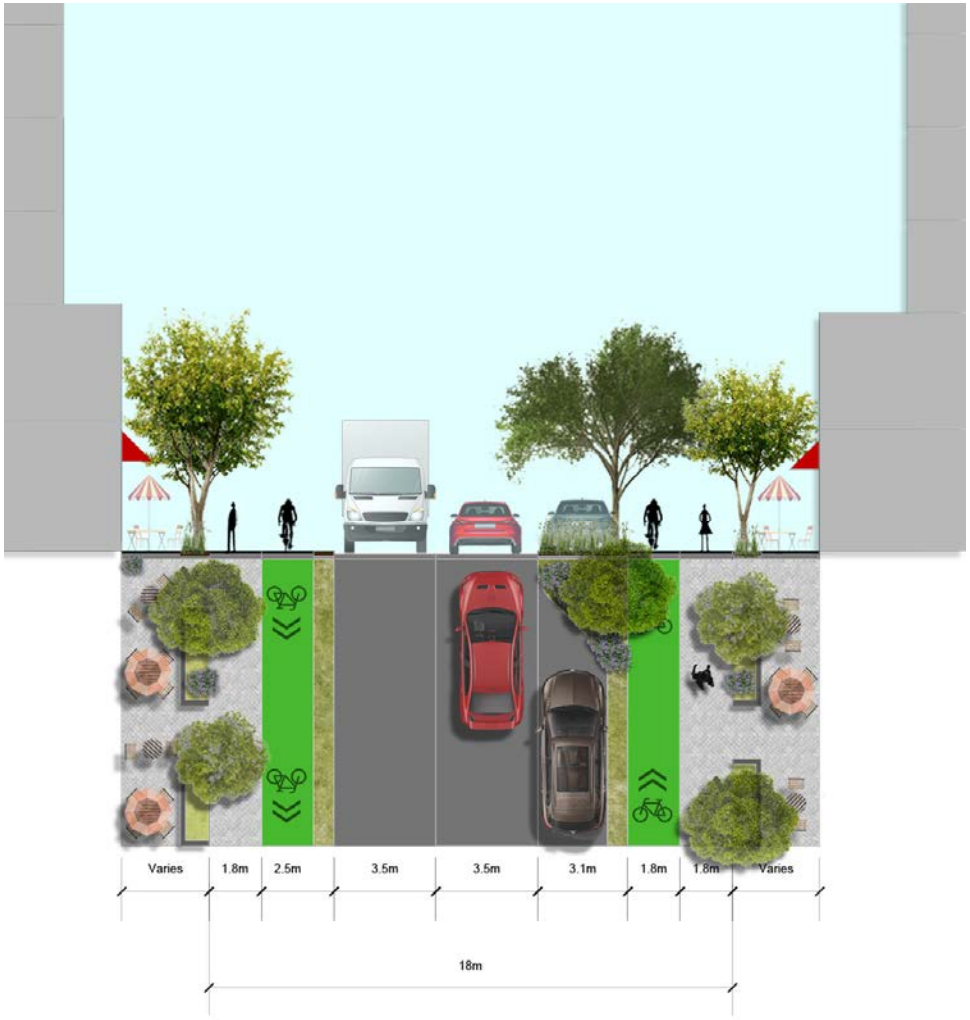


Figure F-16: Proposed cross-section for a local street

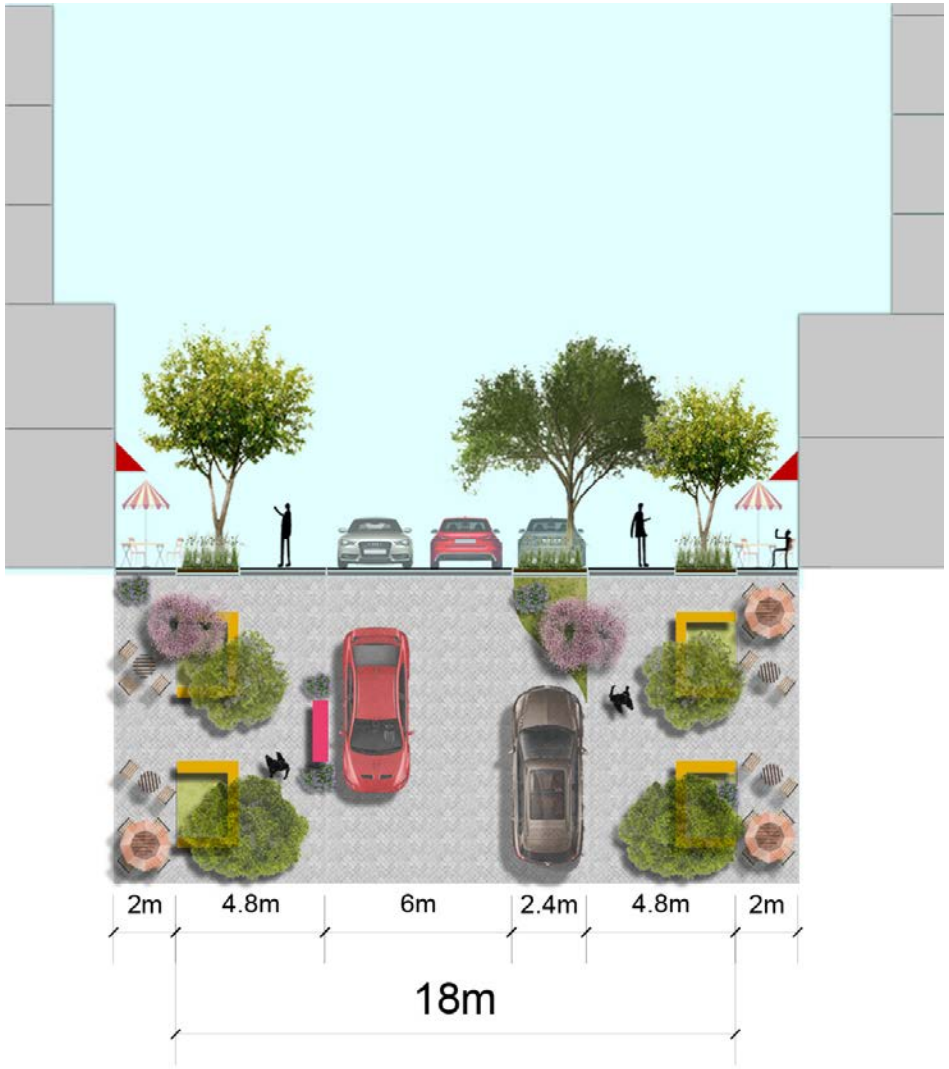


Figure F-17: Proposed cross-section for a main street

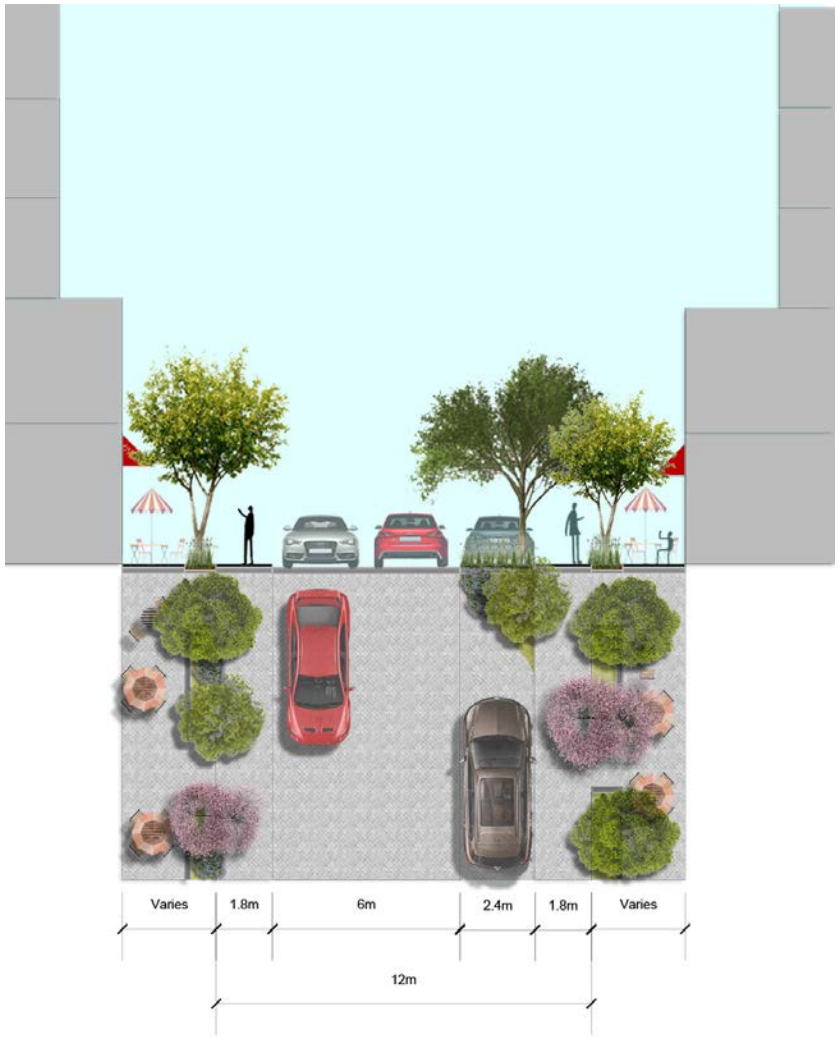


Figure F-18: Proposed cross-section for a private drive

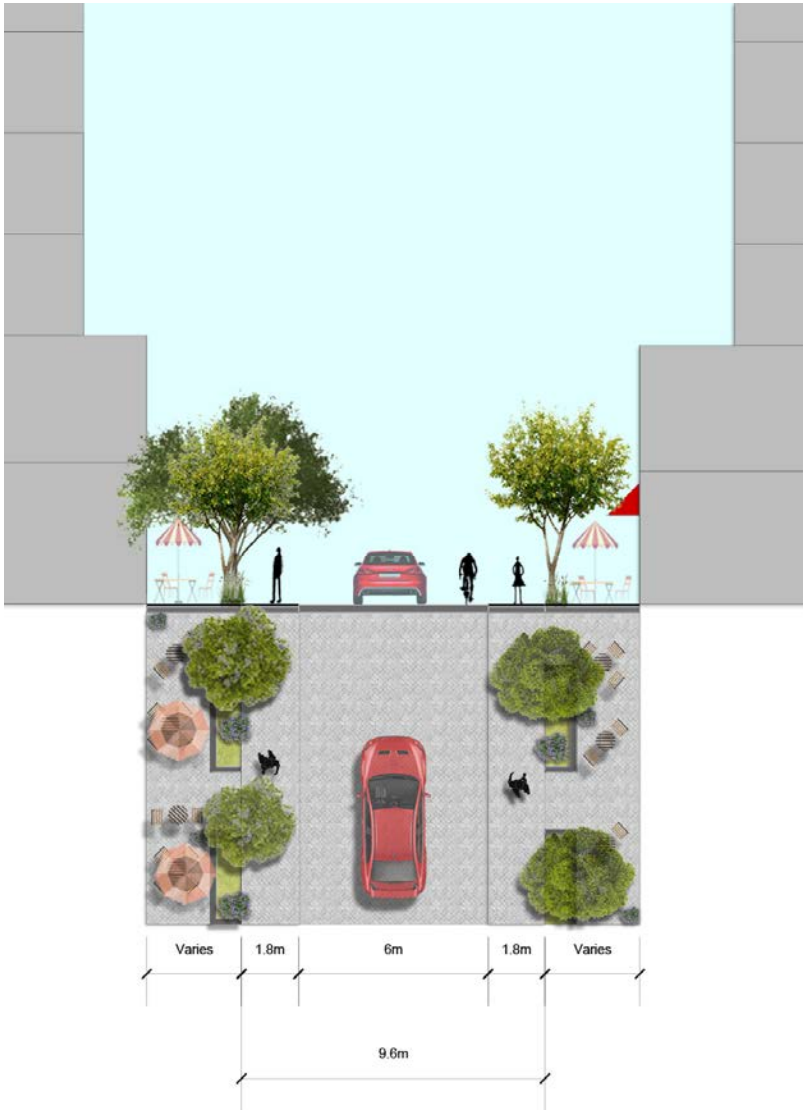


Figure F-19: Proposed cross-section for a private woonerf

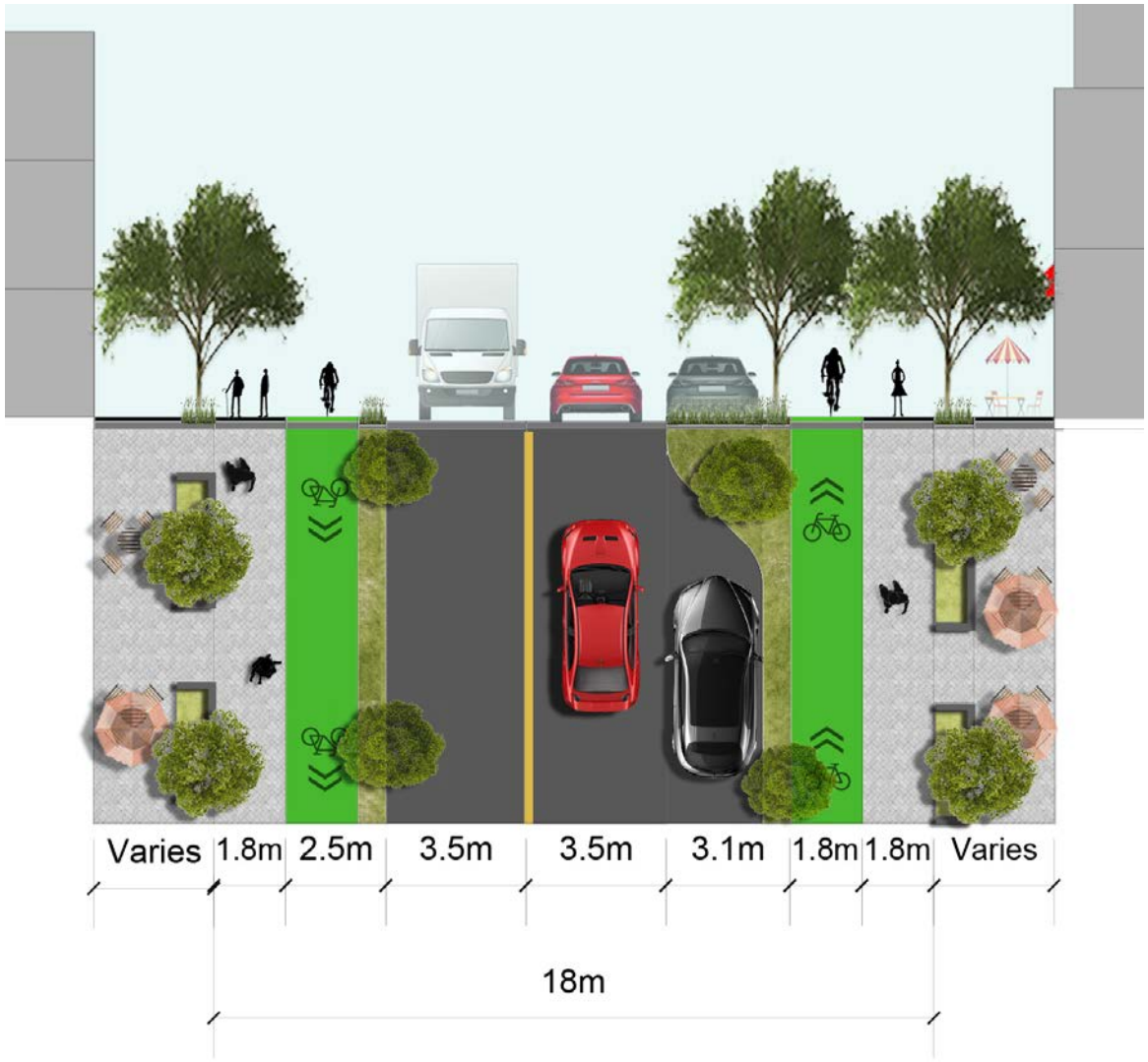


Figure F-20: Proposed new cross-section for a Centrepoint Drive



Figure F-21: Proposed new cross-section for a Tallwood Drive



Figure F-22: Proposed new cross-section for a Baseline Road with Bus Rapid Transit

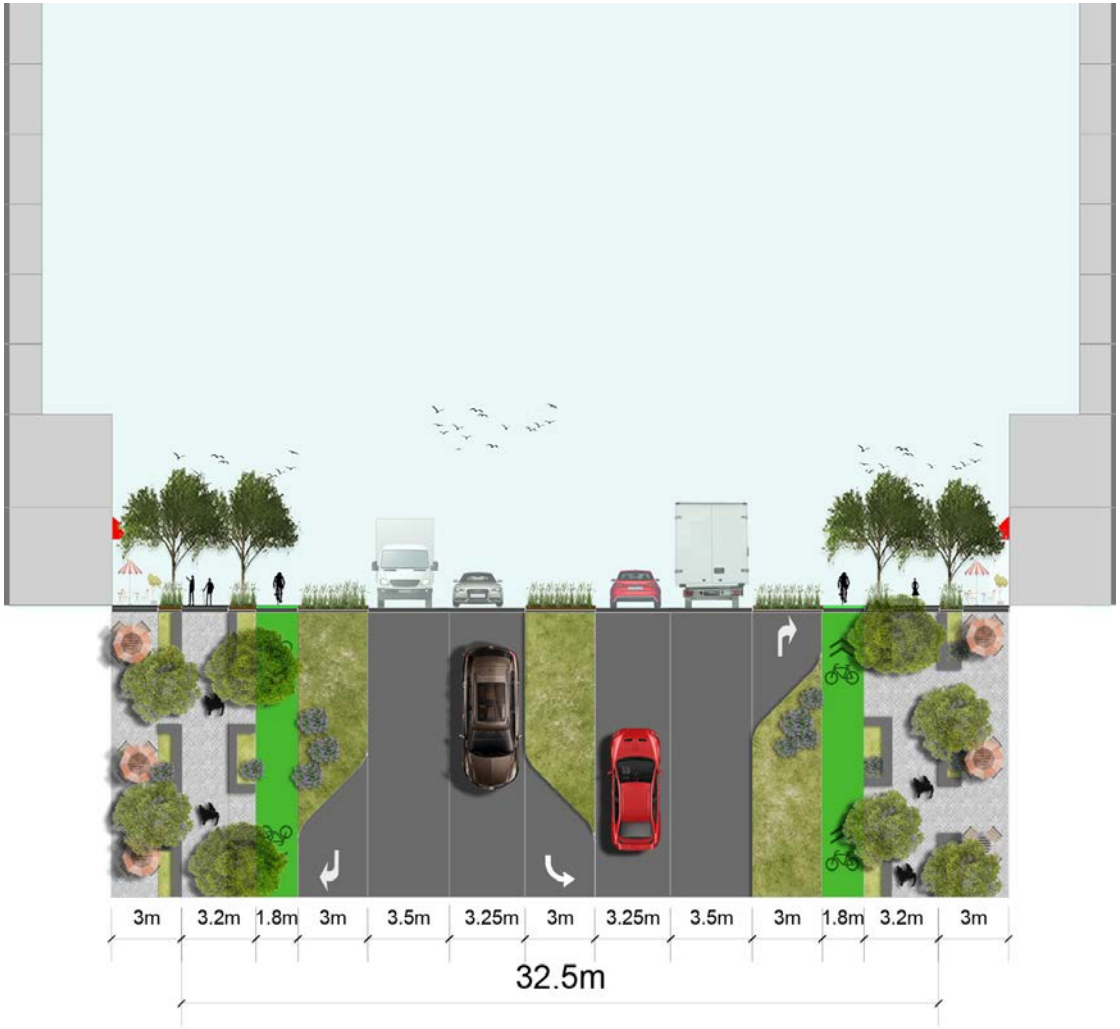


Figure F-23: Proposed new cross-section for a Baseline Road between Centrepoint Drive and Navaho Drive

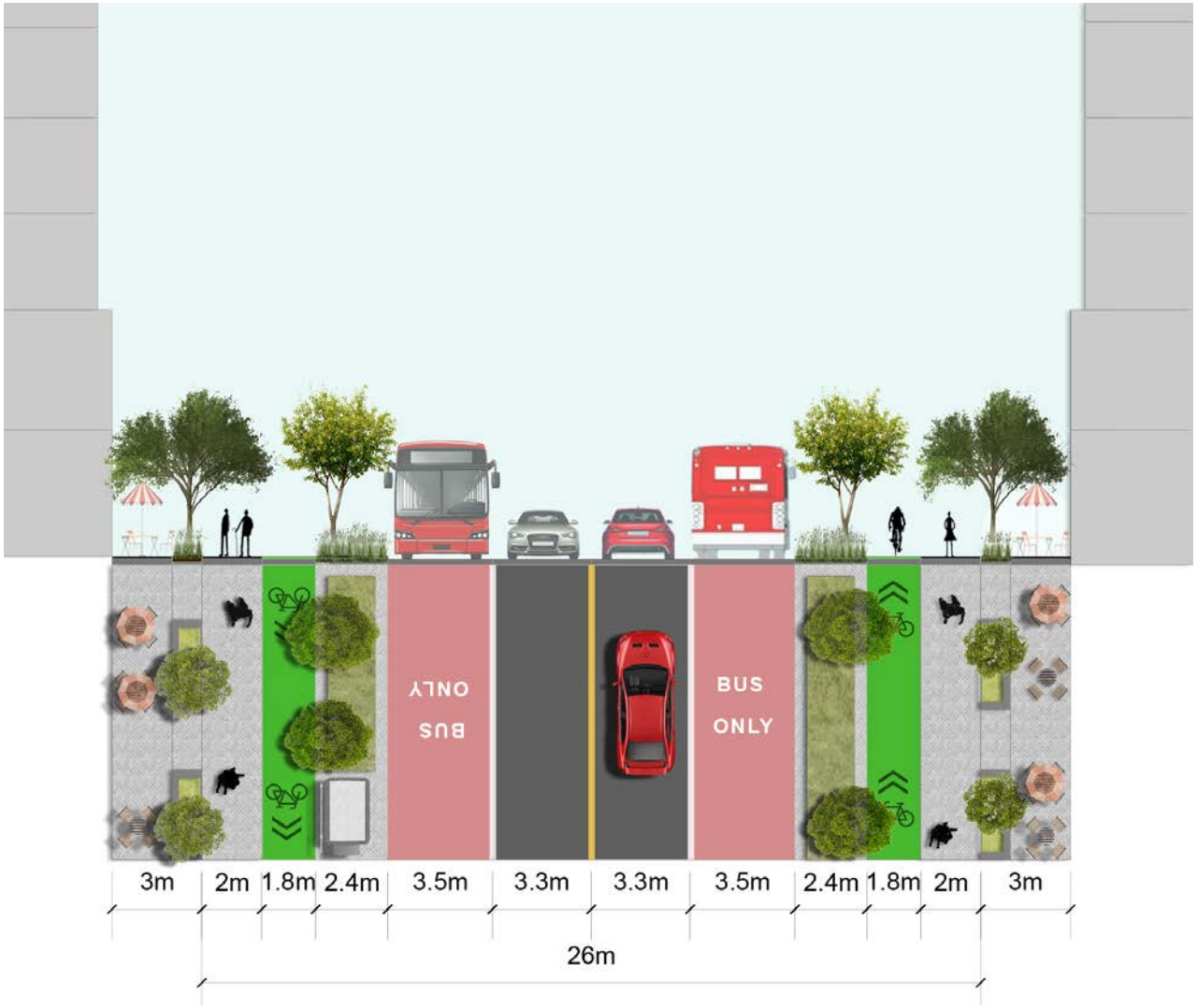
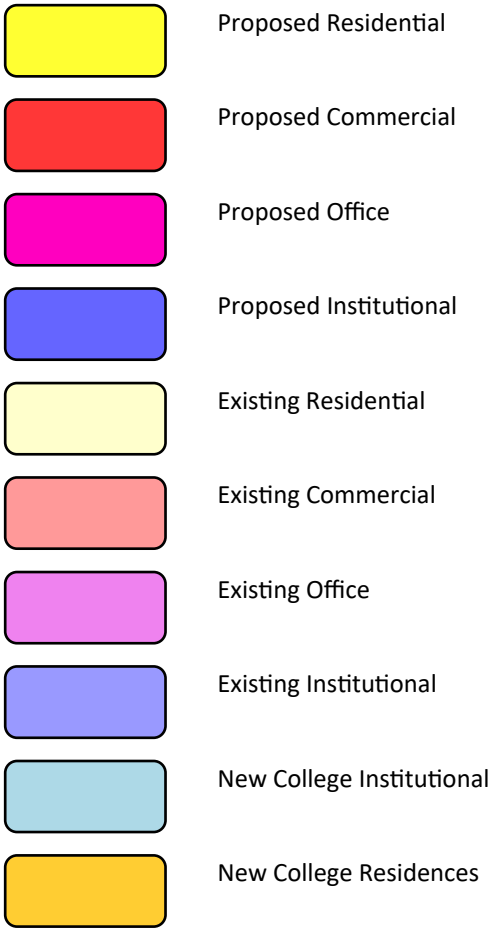


Figure F-24: Proposed new cross-section for a Nahavo Drive

APPENDIX G– BAU SHADOW STUDY

Figure G-1: Land Use Legend



Figures G-2a,b&c: Spring/Fall Equinox (March/September 21)

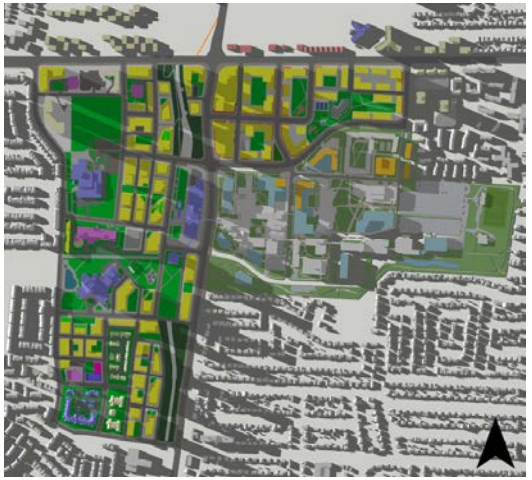
Shadow impact during the equinox is relatively minimal. Minor shadow is imposed on the areas north of Baseline Road. Park areas within the site are typically the last to lose sunlight.



9:00



12:00



17:00

Figures G-3a,b&c: Summer (June 21)

Shadow impact during the summer is minimal on all fronts within the times analyzed. Minor impacts only felt by Algonquin College and a small number of single-family homes directly east of Woodroffe Avenue past 5pm.



9:00



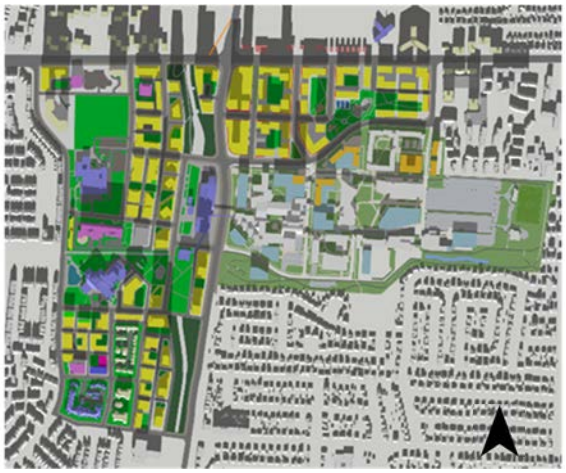
12:00



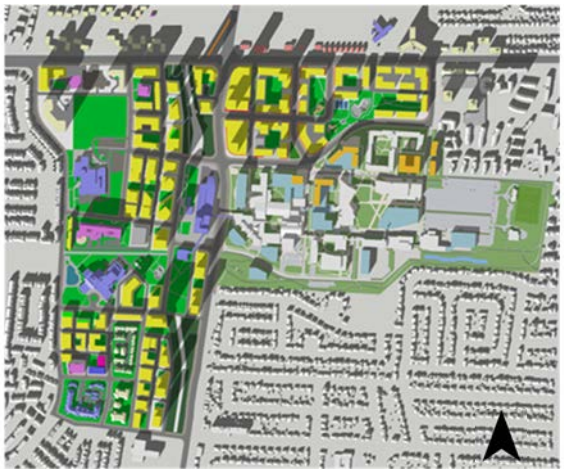
17:00

Figures G-4a,b&c: Winter (December 21)

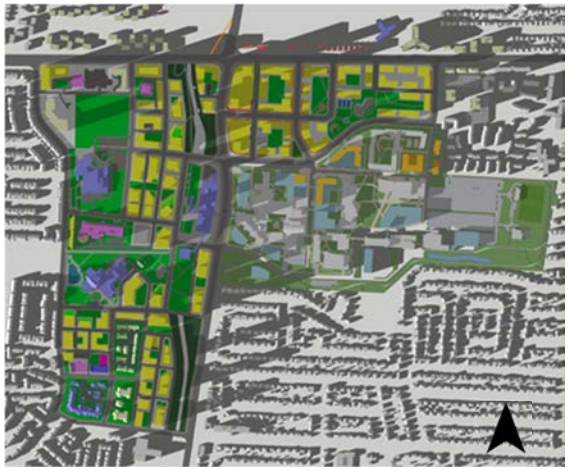
There is significant shadow during the winter for the times analyzed. However, most park areas continue to be either fully or majority lit for all evaluated hours.



10:00



12:00



15:00

Appendix H – Final Presentation Q&A and Feedback

Question: What is the rationale behind the site east of the high school being mid-rise?
Response: We wanted to keep the east area mid-rise to maintain an intimate neighbourhood feel. We thought that putting high density development next to the high school would seem out of place. Having these different building types allows for a natural transition between typologies. These mid-rise developments are also good for affordable housing units because they can be built using wood frame construction.

Question: You mentioned that the Loblaws will remain in operation while the new one is constructed. Will the new Loblaws be located beside the existing and be constructed while the existing remains in operation and move into it once it is complete?
Response: Yes, the new Loblaws will be built near the existing store, with construction happening while the current location remains operational. Once the new building is complete, the store will move into it. The new Loblaws will feature a mixed-use design and a more compact layout. By relocating to the corner of College Square, the grocery store will be conveniently closer to the O-train station and easily accessible by car. After Loblaws moves into the new location, the current site will be reimagined and redesigned for future use.

Question: Explain the changes made to the road network, and their intended purpose.
Response: Major changes: Navaho will become more open and made multi use; woonerfs will be introduced to help create a pedestrian feel; and vegetation and buffers will be introduced to Woodroffe Avenue and Baseline Road to create a pedestrian focus, allowing for uses at the street level, such as stores.

Question: Is the key focus to create streets that are pedestrian focused?
Response: Yes, this is one of our design goals. While visiting the ASA, all team members noticed how unwalkable and car-oriented the area was. We wanted to improve on the existing condition of the area to create a pleasant, pedestrian-centric environment in line with our goals for TOD.

Question: Was there any talk with City officials regarding how long this development will take, and what will be implemented to bring it into fruition?
Response: Yes, there were talks of how long this development may take, but we were not confident in creating a specific timeline. We acknowledged that a project like this would take many years, if not decades, so we outlined a phasing plan that could be implemented based on market conditions.

Question: What is happening with the future LRT line?
Response: Funding for the future stop south of the site (Tallwood Station) has not yet been secured, but the LRT engineering drawings have been reviewed and incorporated into the design. Sufficient land has been reserved for the LRT if it is expanded at a future date.

Question: Was there any consideration of shadowing between the realistic and unrealistic concepts? Will different densities have different impacts?
Response: Yes, shadowing was a key consideration in both the realistic and more ambitious design concepts. The placement of buildings was carefully planned to minimize shadow impact on surrounding areas. To achieve this, towers were staggered strategically on podiums with a minimum 2-metre step back to reduce the length and intensity of shadows. Density was intentionally concentrated along major streets, directing shadows toward larger corridors rather than into open greenspaces and public areas. Different building densities will have varying effects on shadowing, with higher-density structures likely casting longer shadows, while lower-density buildings will have a reduced impact. Ultimately, the design aims to strike a balance between density, sunlight access, and the functionality of open spaces.

Question: What do you think your design says about the future of Ottawa?
Response: Our vision for the Algonquin Station area is specific to the near area and cannot predict the future of the city. That being said, our underlying assumption is that Ottawa is going to grow, and we want to make sure the growth is done in a responsible and sustainable manner.

Question: Speak to how you created the study boundary. What is your vision for the narrow blocks on the north portion of the site?
Response: Our boundary was informed by the repealed secondary plan boundary and the area's Hub designation. We did not expand further because of the scope of this project. Several areas on the northern portion of the ASA were not redesigned but included in our boundary because we intent on retaining them for now, with policy recommendations to inform their future redevelopment.

Question: Explain the design of the College Square road network. It appears that you have created a lot of new roads north-south.
Response: The design of the new College Square road network builds on the existing driveways and signalized intersections surrounding the property. It focuses on preserving the continuity of Woodroffe and Baseline as major through routes by avoiding the introduction of additional signalized intersections and instead utilizing right-in right-out intersections. The aim was to create a well-organized street grid in an area that currently lacks structure. The main street is strategically designed to align with existing student walking patterns, integrating the two existing

signalized intersections to form a complete, pedestrian-friendly street. Positioned between these two intersections, the main street ensures safe and easy crossings for pedestrians traveling between the north and south sides of the ASA, while improving overall connectivity and traffic flow.

Question: On the cross section for Baseline, are there dedicated bus lanes?
Response: The cross-section for Baseline Road does not include a dedicated bus lane, as the Bus Rapid Transit (BRT) line follows Navaho Drive between Navaho and Centrepointe Roads. The proposed road section is a vision for the part of Baseline Road between Navaho Drive and Centrepointe Road, where the BRT does not operate. In this section, we have proposed an updated street design that utilizes the existing right-of-way to create a more pedestrian-friendly and multimodal environment. The design focuses on enhancing safety and comfort for all users by widening sidewalks, adding dedicated bike lanes, incorporating tree planting, and introducing other improvements to support pedestrians and cyclists. This approach preserves the existing four lanes of traffic while prioritizing alternative modes of transport.
Another cross-section is proposed for Baseline Road where the BRT runs through, and dedicated bus lanes have been proposed. The team was aware that dedicated bus lanes were something the city was looking for when reviewing the Transportation Committee Report 20, which proposed dedicated bus lanes across Baseline. However, the team noticed that the right-of-way along Baseline Road narrows to 30-32 metres between Centrepointe and Navaho, and since the BRT does not run along this portion, the team decided to maintain the existing right-of-way for the street. The section where the BRT line runs expands to 38-40 metres of right-of-way, making dedicated bus lanes more suitable in that area, as the wider right-of-way could be better utilized.

Question: Do you know how the BRT and LRT will connect and interface? Any thoughts on how to create connections and synergy?
Response: Within our proposal, the BRT will be brought down to the south O-train station entrance for greater connection between transportation modes. Within the city's existing plans, the BRT drops riders off on Navaho, expecting them to walk through the square to reach the northern station entrance.

Question: Algonquin has an existing park-n-ride. Any thought on how a park-n-ride could be included in the design?
Response: There are two above-ground parking structures proposed for the ASA. One is adjacent to Algonquin Station and 100 Centrepoint drive to service City of Ottawa vehicles and to provide parking for transit users, visitors to the area, and City of Ottawa staff. The second above-ground parking structure is located on the east side of the ASA adjacent to the new main street. This is to provide parking for visitors and employees of College Square and Algonquin College.
We believe the existing parking-n-ride makes sense for the site

for now but does not in the future – informing our decision to redevelop the area and instead concentrate parking in above-ground structures.

Question: Are parking structures above or below ground?
Response: The parking structures indicated in the phasing plan are above ground. However, underground parking is also a part of the vision for the ASA to accommodate future parking demand of both residents and visitors. These underground facilities are intended to support this demand while maintaining a more efficient use of above-ground space.
Many of the areas within this plan consist of large property parcels, which provide the opportunity to group parking garages for shared use across multiple buildings. This approach minimizes the need for extensive underground parking, allowing for more efficient use of space. By consolidating parking, underground facilities can be situated away from key corridors, such as active frontage streets and main streets, where large tree wells are essential for supporting tree canopies. This strategy helps maintain the aesthetic and environmental quality of these important areas while meeting the parking needs of the development.

Question: Can you explain how you imaging people moving between the east and the west side of Woodroffe? What will the pedestrian level be like?
Response: There are various ways for pedestrians to move east-west across Woodroffe, with many involving animated crosswalks that create circulation through the ASA. Enhanced pedestrian intersections will also be included along the greenways. Main crossing areas like Woodroffe & Baseline, and Woodroffe & Navaho will also have street crossing infrastructure like signals and protected intersections to ensure that pedestrians can cross safely. We hope that the redesign will ease pedestrian's fear of crossing streets and lead to a livelier and more vibrant pedestrian experience.

Question: How did you decide on the target density for the ASA?
Response: We did not set a specific density goal when designing our project; instead, we focused on defining our values and designing a community which exemplified those values. Sustainable growth and the provision of affordable housing were two values that helped us to select desired density.

Question: What proportion of affordable housing did you consider? What do you envision?
Response: The project team did not estimate specific targets for affordable housing ratios, as it was outside the scope of the project. However, through researching relevant case studies, we found that successful and feasible projects on municipal lands typically include 25% to 60% affordable housing. In the City of Ottawa's Official Plan, the target is 20%. Based on these findings, we would encourage the city to set ambitious targets within this range to ensure the development supports a diverse and inclusive community.

Question: How did you consider the student population of Algonquin college?
Response: Because Algonquin College is such a big part of the ASA, we considered the student population quite a lot. We were fortunate to be able to collaborate with Urban Strategies whose designs informed several of our choices. The position of our main street is literally and figuratively an extension of their vision. To benefit students, greenways and greenspaces are strategically placed to provide green connections to the college and proposed uses in areas near the college. Student housing is also included in our design in the form of affordable housing in several residential buildings. However, we recognize that Urban Strategies has already incorporated multiple new residences in their design. Ultimately, we want to support Algonquin College students by providing accessible and convenient shops and services.

Question: Residents have been asking about the skating rink and fountain by Ben Franklin place. Any strategies to bring people to the area and improve it?
Response: We do have a new mixed-use development close by, just north of the skating rink and fountain. There will also be a lot of new developments around the area, so we are hoping that the increased density will lead to an increase in the area's population. There will also be new greenspaces and green roofs that look onto the area, which could further increase popularity. There are no design interventions for the area specifically, however additional programming could be introduced to attract users.

Question: Where are the greenspaces coming from?
Response: Our proposal expands existing green spaces, while also changing existing parking and loading spaces in the ASA. The greenspaces are being converted from parking lots and other grey surfaces. Much of the ASA is made up of large parking lots and paved area and we wanted to introduce greenspace back into this area. We decided to put parks in key areas that we thought would be a good place for a park but would also be a good connection to other parks like Centrepointe or the NCC park.

Question: For case studies – is there a particular example for the redevelopment of the site that the City of Ottawa should really take inspiration from?
Response: We believe that the ASA could benefit from buildings with a unique mix of uses. One example is Sugar Wharf Condos, which mixes institutional and residential uses.

Appendix I – References

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