

# 2 BANK STREET TODAY

The CDP study area is the portion of Bank Street that is bounded by two bridges: Billings Bridge and Bank Street South Bridge. Billings Bridge is at the northern end of the CDP area and crosses the Rideau River. Bank Street South Bridge is at the south end of the CDP area and crosses the CN rail line and Sawmill Creek. The length of the study area is 3.2 km and the total land area is 101 hectares.

This chapter describes the existing conditions of the Bank Street CDP study area as well as the potential opportunities and constraints. Chapter 2 also summarizes the key city policies that are important to formulate this Plan.



## 2.1 PLANNING AND ENVIRONMENTAL CONTEXT

### 2.1.1 OFFICIAL PLAN

The City of Ottawa Official Plan (OP) (2003) designates this portion of Bank Street as 'Arterial Mainstreet' and the Billings Bridge Plaza area as 'Mixed-Use Centre'. For both areas the OP establishes minimum density targets.

The Residential Land Strategy for Ottawa (2009), states that the 2006 density of the entire Bank Street Arterial Mainstreet corridor (which is approximately 6.0 km long and extends from Riverside Drive to Queensdale Avenue) is 79 people and jobs per hectare (ha). Later in 2009, the Official Plan Amendment (OPA) 76 approved a minimum density target for the same area of 120 people and jobs per hectare post-2031. This is a minimum increase in density of 52% over more than 25 years. According to the Residential Land Strategy, the minimum density target was established for Bank Street because it is a designated transit corridor.

For the Billings Bridge Mixed Use Centre, the Residential Land Strategy states that the 2006 density is 130 people and jobs per hectare. In OPA 76, the approved minimum target density for this area is 160 people and jobs per hectare for 2031. This is a minimum increase in density of 23% over 25 years. The minimum density target was established for this area in light of the Billings Bridge transit station, which abuts the Shopping Centre.

Urban Design Policies

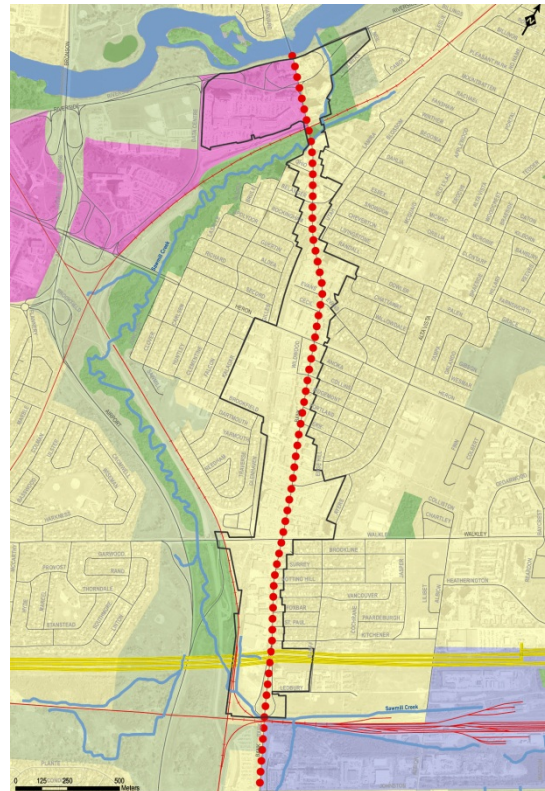
Lands that are designated ‘Arterial Mainstreet’ and ‘Mixed Use Centre’ are ‘Design Priority Areas’. According to the City’s Official Plan, Design Priority Areas (DPAs) are areas to direct growth, to protect and enhance the character and sustainability of affected communities, and to provide a focus for coordinating urban design efforts and enhancements. Capital and private sector development projects within DPAs are subject to review by the Urban Design Review Panel during the consultation stage of development applications. As Bank Street is an ‘Arterial Mainstreet’, the Urban Design Guidelines for Developments along Arterial Mainstreets (2006) are also heavily referenced and applied.

2.1.2 TRANSPORTATION, CYCLING, AND PEDESTRIAN PLANS

The Transportation Master Plan (2008) strongly supports the use of sustainable transportation and sets goals to increase the city-wide peak hour transit, cycling, and pedestrian modal shares. The Bank Street corridor is a good candidate for sustainable transportation due to its proximity to rapid transit and its direct connections to the downtown.

Within the study area, the TMP does not propose to widen Bank Street or any of the major arterial roads that intersect Bank Street. However, the TMP does propose to widen the Airport Parkway, from the airport to Brookfield Road, which may reduce some through traffic on Bank Street.

Figure 2.1 | Official Plan Designations of Study Area



Legend | Légende

CDP Study Area Secteur à l'étude pour l	Urban Natural Features Caractéristiques naturelles urbaines
Rideau River Rivière Rideau	Mixed Use Centre Centre polyvalent
Sawmill Creek Ruisseau Sawmill	Employment Area Secteur d'emploi
General Urban Area Secteur urbain général	Arterial Mainstreet Artère principale
Major Open Space Espace vert d'important	Railway Chemin de fer
	Transmission Lines Lignes de transport d'énergie

When examining the most recent, available modal shares data from the 2005 National Capital Region Origin-Destination Survey, the Bank Street study area is lower than the City’s average for some modes of transportation, but higher than the City’s average in other modes. For example, Table 2.1 shows that the study area has less people walking and cycling than the City average but has more people using public transit during the AM peak time than the City average. Regarding automobile usage, there are more people using cars in the study area during the PM peak period than during the AM peak period for both the study area and the City average.

Table 2.1 also shows the TMP's future targets for city-wide modal shares.

Table 2.1 | Existing Modal Shares of Study Area and Existing and Future City-wide Modal Shares during Peak Period

MODE OF TRANSPORTATION	STUDY AREA		CITY-WIDE	
	AM Peak (existing)	PM Peak (existing)	AM Peak (existing)	AM Peak (future per TMP)
	Pedestrian	7%	6%	9%
Cycling	1%	2%	2%	3%
Transit	29%	20%	21%	26%
Automobile	63%	72%	68%	62%
Total	100%	100%	100%	100%

The TMP proposes to improve the city-wide cycling modal share from 1.7% to 2.9% by 2031. To help achieve this, the Ottawa Cycling Plan (2008) proposes new bicycle lanes along Bank Street throughout the entire study area.

The Ottawa Pedestrian Plan (2009) proposes to improve the city-wide peak hour walking modal share from 9.3% to 10% by 2031. Refer to 'Schedule 7a: Alta Vista' of the Pedestrian Plan for the key considerations for network improvements, which encompasses the CDP area. Achieving pedestrian improvements in the Alta Vista area is deemed a high priority in the Pedestrian Plan.

### 2.1.3 OTTAWA GREENSPACE MASTER PLAN

In order to ensure an adequate supply of greenspace throughout the City's urban area, the Greenspace Master Plan (2006) seeks to use CDPs as a means to identify greenspace opportunities in

new and redeveloping neighbourhoods and propose strategies and links to the Urban Greenspace Network. The Master Plan has a parks space target of 2 hectares per 1,000 population or 8 to 10% of developable area.

### 2.1.4 COMPREHENSIVE ZONING BY-LAW

The study area is predominantly zoned Arterial Mainstreet (AM) in the City of Ottawa Comprehensive Zoning By-law. The AM zone allows for a broad range of uses including retail, commercial services, offices, residential, and institutional uses within mixed-use buildings or side by side in separate buildings. More specifically, much of the AM zoning is Arterial Mainstreet Subzone 1 (AM1), which allows for a maximum of 50% of the permitted floor space index (i.e., the maximum possible floor area that can be built on the site) to be used for non-residential uses in order to encourage mixed-use development.

The Mixed-Use Centre (MC) zone, where Billings Bridge Plaza is located, accommodates a wide range of transit supportive uses. Billings Bridge Plaza is zoned as MC[1341]F(1.0)H(25), which is an exception zone permitting a maximum floor space index (FSI) of 1.0 and a maximum height of 25 metres.

Also within the study area are parcels of General Mixed-Use (GM), Development Reserve (DR), General Industrial (IG), Parks and Open Space (O1), Hydro Corridor Subzone (O1P), Environmental Protection (EP), Residential 4th Density (R4B) and Residential 5th Density (R5C). These zones permit a wide range of uses, from parks and open space, to light industrial uses and mid- to high-rise apartment housing.



### 2.1.5 ENVIRONMENTAL FEATURES

The Rideau River is located to the north of the study area and Sawmill Creek is located to the west of the study area, running along the Transitway. The Creek crosses the study area near the Transitway overpass and also near the CN rail line, located to the south of Walkley Road. Figure 2.2 shows the greenspace and natural features of the area.

The majority of the study area is outside the 100-year floodplain of the Rideau River, with the exception of a small area along the Rideau River and Sawmill Creek.

Steep slopes (measured as slopes exceeding 8%) are found in two areas. One is along Bank Street near the Transitway overpass and Sawmill Creek and the other is found at the southern extremity of the study area near the bridge over the CN rail line.

Although slopes in other areas are not necessarily considered a natural hazard, there is a notable topographical change between lands east of Bank Street, which are periodically higher in many parts of the study area, versus lands to the west.

There are also notable grade changes west of Bank Street, particularly between Heron and Walkley, along the edge of the former rail line that used to go through the area. Historically these grade differences have affected the formation of land parcels.

The study area is located within a portion of the physiographic region known as the Ottawa Valley Clay Plains. Known sensitive marine clay soils exist to the south end of the study area and are subject to Council-adopted policy that may influence new tree plantings near buildings to low-water demand plantings.

## 2.2 BUILT FORM AND LAND USE

### 2.2.1 PUBLIC LAND OWNERSHIP

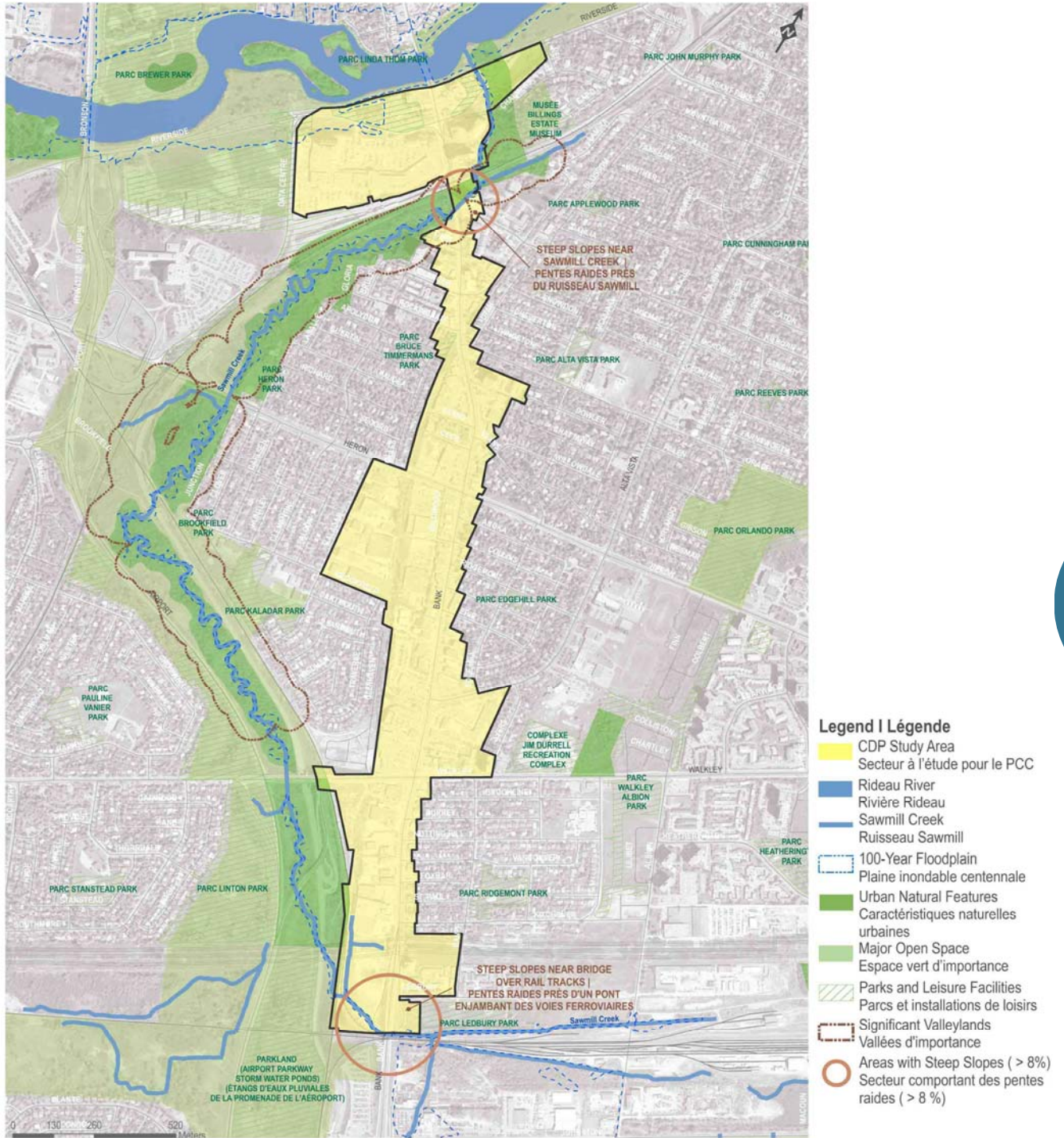
There are minimal public lands within the study area when compared to the amount of public lands in the surrounding area.

The National Capital Commission (NCC) lands exist within and adjacent to the study area. The northern limit of the study area is bounded by the Rideau River, which is part of the NCC's recreational network of multi-use pathways. Southeast of the study area, treed NCC lands form the western limits of Ledbury Park. There are other federal lands primarily to the west of the site, notably at the RA Centre.

Municipal lands are throughout the surrounding area, and include the community centres and recreational facilities that serve the local communities. Figure 2.3 shows the public land ownership within and around the study area.



Figure 2.2 | Greenspace and Natural Features of the CDP and Surrounding Area



### 2.2.2 BUILT FORM

The CDP portion of Bank Street was generally developed post-1945 and its current building form is reminiscent of building development from the 1970s. The buildings range in age with some being in their original condition and recent developments being large box commercial buildings at the south end of the study area.

The built form of the study area can be generally characterized by larger lots with larger buildings along the west side of Bank Street, with a fine grained building pattern and smaller lots on the east side. Generally, the parking is provided on-site and found to the front and/or side of buildings. Refer to Figure 2.3 for the building footprints in the study area. Infill and intensification has already happened in an area west of Bank Street between Ohio Street and Rockingham Avenue.

Properties abutting Bank Street within the study area are primarily used for commercial purposes, with some residential and limited industrial uses.

There are five heritage properties within or near the study area, with one being Billings Estate Museum, a designated heritage property. The other four properties are identified as having heritage value but not formally designated heritage properties. Two of these properties are on Bank Street between Heron Road and Alta Vista Drive and the remaining two properties are on Walkley Road.



Building at 1663 Bank Street identified with heritage value but is not formally designated (Google Maps, 2011)

The tallest buildings found in the study area are on the east side of Bank Street near the Transitway. There is one seven-storey, mixed-use office and commercial building, and three high-rise apartment buildings that are approximately 17 and 21 storeys high. Across the street is Billings Bridge Plaza, a two-storey regional shopping centre with an adjoining 12-storey office building.

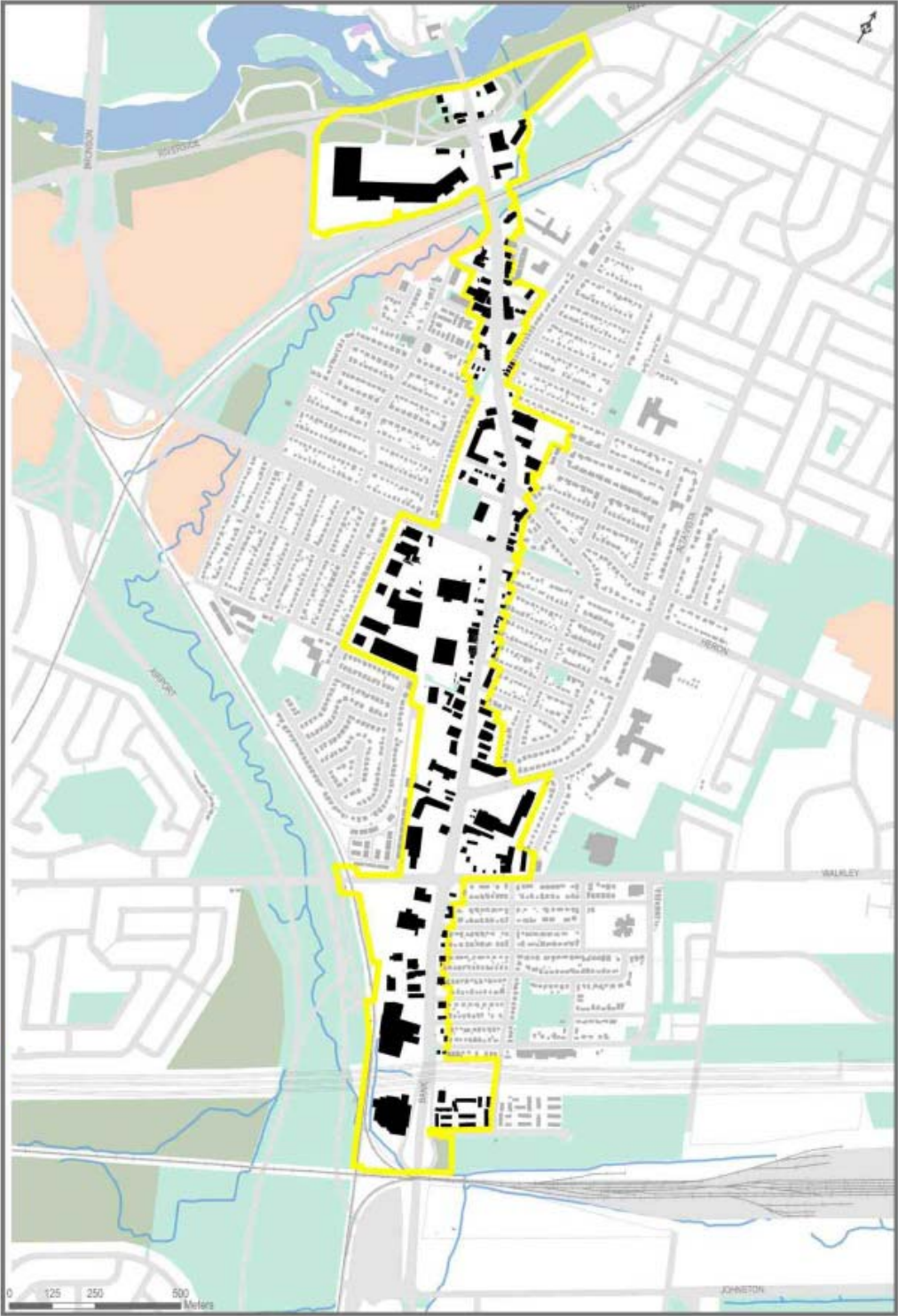
### 2.2.3 LAND USE

The land uses along Bank Street in the study area are predominantly commercial, functioning at both a community and regional level. There is also office uses located throughout the corridor. Industrial uses are found predominantly in the Kaladar area.

Residential land uses are primarily found in the northern portion of the study area, in the form of apartment buildings. Single-detached, townhouses, and row houses are found in pockets throughout the study area. Residential communities (e.g., Billings Bridge, Alta Visa, Ridgemont, and Ledbury Park) surround the study area with a mix of low and medium density housing types.



Figure 2.3 | Public Land Ownership and Building Footprint Map



- Legend | Légende**
- CDP Study Area 
  - Secteur à l'étude pour le PCC
  - Federal Ownership 
  - Propriété du gouvernement fédéral
  - NCC Ownership 
  - Propriété de la CCN
  - Municipal Ownership 
  - Propriété de la municipalité



1975 Aerial (Source: National Air Photo Library)

There is little evidence of mixed uses within individual buildings or development blocks in the study area. The commercial and office uses are generally grouped together. Residential uses are concentrated in apartments or row houses located to the north and south of the study area and in the surrounding communities. These residential communities are not located along the Bank Street corridor. There is minimal vacant land throughout the study area.

#### 2.2.4 GREENSPACE

Limited natural vegetative open space and park features exist within the study area. The study area has the potential to provide primary, supporting, and contributing open space and leisure lands per the Greenspace Master Plan. The Master Plan indicates



2008 Aerial (Source: City of Ottawa)

that the study area surroundings have a balanced distribution of parks and other greenspace.

Generally, trees appear to be under environmental stress, though some mature trees exist within the study area. A tree canopy cover of approximately 28% exists across the entire city, with an ultimate target of 30%. The canopy cover within the study area is considerably less, estimated to be 10% to 15%.

The Alta Vista community has a high percentage of Ash trees, compared to the ratio of Ash trees in the rest of the city. Issues related to the invasive Emerald Ash Borer are an ongoing initiative in the area.



### 2.2.5 GROSS FLOOR AREA

To calculate and estimate the existing gross floor area (GFA) in the study area, the Project Team used the building footprints, City's land use data and number of storeys. The land uses in the study area were grouped into general categories to estimate GFA by land use type. Table 2.2 provides an overview of the existing GFA by land use.

*Table 2.2 | Existing GFA in Study Area by Land Use (based on City draft 2010 Land Uses)*

Existing GFA by Land Use	GFA Estimated (m <sup>2</sup> )	Percentage of total GFA
Residential	145,607	36.5%
Commercial	126,019	31.6%
Office	55,714	14.0%
Industrial	50,989	12.8%
Institutional	700	0.2%
Other Non-Residential	19,966	5.0%
<b>Total GFA</b>	<b>398,996</b>	<b>100%</b>

Residential land use has the highest percentage of GFA (36.5%), with a large percentage being from the high-rise apartment buildings found in selected locations within the study area. Commercial GFA was almost one-third of the total GFA.

The Comprehensive Zoning By-law is reasonably new and has not yet had the chance to fully affect built form in the study area. In most cases the maximum permitted floor space index (FSI) is 2.0; therefore, the maximum GFA that could be developed per site would be up to two times the property area. Since most of the properties have zoning that permits buildings that are up to approximately eight storeys (25m), it is reasonable to assume that the existing zoning for Arterial

Mainstreet would accommodate intensification targets as discussed in Section 2.1.1 and further in Chapter 3.

## 2.3 TRANSPORTATION AND INFRASTRUCTURE

### 2.3.1 EXISTING TRAFFIC LEVELS

The CDP portion of Bank Street is an arterial roadway providing an important connection to the downtown. The corridor represents one of three major north-south crossings in the urban area. Similarly, at the southern boundary of the study area, Bank Street represents one of few crossings of the Canadian National Rail (CNR) line. The limited number of crossings of the Rideau River and CNR limit the alternative transportation options in the area and make Bank Street as an important transportation link.

The existing cross-section of Bank Street is primarily a four-lane arterial with some wider sections to accommodate high traffic volumes and turning movements. As a major commercial corridor, Bank Street has many closely spaced entrances to business parking lots. To assist vehicles making left turns into and out of the businesses along Bank Street, the CDP proposes additional turn lanes in some locations.

Existing traffic operations in the study area were modeled and described by the volume-to-capacity ratios (V/C) and corresponding level of service (LOS). The City standard LOS for roads outside the downtown area is LOS 'D'. The City typically requires mitigation measures (e.g., additional lane capacity and/or adjustments to signal timing plans) when the volume-to-capacity ratio exceeds 0.90 (or

LOS 'E'). LOS 'E' reflects congested conditions when individual signal cycles frequently fail to service the vehicles that have arrived at the intersection. Meaning, not all queued vehicles get through the intersection on the green light phase. The overall intersection operations and individual movements are summarized in Table 2.3.

Table 2.3 | Existing Intersection Operations along Bank Street

Intersection	AM PEAK		PM PEAK	
	V/C	LOS	V/C	LOS
Riverside Drive North	0.9	D	0.94	E
Riverside Drive South	0.78	C	0.87	D
Transitway	0.40	A	0.51	A
Belanger Avenue	0.55	A	0.56	A
Randall Avenue	0.35	A	0.44	A
Heron Road	0.83	D	0.90	D
Erie Avenue	0.45	A	0.54	A
Alta Vista Drive	0.66	B	0.75	C
Walkley Road	0.83	D	0.96	E
Kitchener Avenue	0.44	A	0.85	D

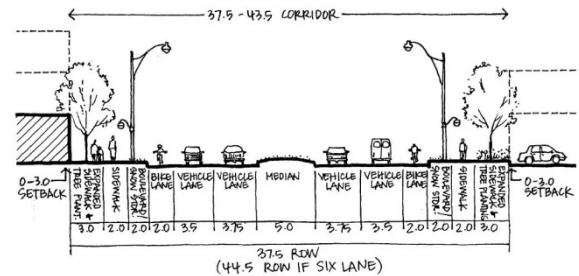
The intersections of Walkley Road, Heron Road, Riverside Drive South and Riverside Drive North are all approaching capacity during the peak hours. These intersections represent the major arterials through the study area and the capacity constraints suggest minimal growth in automobile traffic in the area can be accommodated under the existing road configurations and City standards.

2.3.2 RIGHT-OF-WAY ALLOWANCE

The OP reserves a right-of-way of 37.5 metres for Bank Street within the study area. This reflects a

cross-section for a four-lane suburban commercial roadway with two bicycle lanes as described in the City of Ottawa Regional Road Corridor Design Guidelines (2000) and shown in Figure 2.4.

Figure 2.4 | Suburban Commercial Roadway Cross-section, City of Ottawa Regional Road Corridor Design Guidelines



The Bank Street road network is currently operating near capacity and the TMP does not propose to widen Bank Street. Table 2.4 provides approximations of the existing public right-of-way (ROW) widths along Bank Street, which vary throughout the corridor from 20 to 36 metres.

Table 2.4 | Public Right-of-Way Widths Along Bank Street (estimated)

From	To	ROW
Riverside N	Riverside S	20 – 30 m
Riverside S	Transitway	32 – 33 m
Transitway	Kilborn	30 – 35 m
Kilborn	Randall	30 m
Randall	Heron	25 – 36 m
Heron	Alta Vista	20 – 30 m
Alta Vista	Walkley	32 – 36 m
Walkley	Kitchener	22 – 24 m
Kitchener	South End	25 m

In comparing the existing property lines to the proposed 37.5 m ROW, it is evident that the

majority of the corridor does not currently have an adequate ROW, particularly in areas where there are small lot properties.

### 2.3.3 EXISTING TRANSIT NETWORK

The transit network in the study area includes both local transit routes as well as access to the rapid transit stations immediately west of the Bank Street; Billings Bridge and Walkley stations about the study area. Both the Transitway and O-Train Rapid Transit corridors run parallel to Bank Street near the study area and provide frequent and fast transit service towards downtown.

Greenboro Station, just outside the study area at the south-western edge, has a park and ride lot which accommodates 678 vehicles and typically fills up on weekdays by 8:00 am.

To increase transit ridership and meet the goals of the TMP, easy and improved access to the existing rapid transit corridors must be implemented.

### 2.3.4 EXISTING CYCLING NETWORK

The corridor is bounded by bicycle lanes on the north end of the study area near the Billings Bridge Shopping Centre and immediately south of the study area near the South Keys Shopping Centre. These cycling lanes are currently disconnected to each other and hinder any coherent bicycle linkage through the study area.

The Ottawa Cycling Plan proposes cycling lanes to be implemented along Bank Street through the entire study area. This would provide the missing cycling link and be a direct connection to and from the downtown and south end.

### 2.3.5 EXISTING PEDESTRIAN NETWORK

While the sidewalk space adequately services the pedestrian volumes along Bank Street, the

pedestrian environment in this area is poor. The large intersections at Heron Road and Walkley Road provide increased delay for pedestrian movements through the area. Furthermore, the sidewalks on Bank Street are either immediately adjacent to the vehicle travel lanes or occasionally separated by a narrow asphalt splash pad. The lack of landscaping and buffer area between the vehicles and pedestrians creates an unappealing pedestrian space.

In numerous locations, the sidewalk abuts paved parking pads. During the Project Team's site inspections, numerous examples were observed of cars partially parked over the sidewalk area. The sidewalk is also interrupted frequently by vehicle entrances so the visual distinction between the sidewalk and site access/parking is often poor.

In some areas there is a lack of sidewalk/roadside space to safely and comfortably accommodate pedestrians, cyclists and vehicles. For example, the sidewalk at the corners of Billings Bridge and Riverside Drive are often overcrowded with pedestrians and cyclists waiting to cross the street.

### 2.3.6 PUBLIC UTILITIES

The Preliminary Design Report for Bank Street Reconstruction (2008) reviewed the existing and future capacity infrastructure needs of the study area from Riverside Drive North to Walkley Road. It identified basement flooding at several locations along Bank Street including at Alta Vista Drive, Randall Avenue, and between the east and westbound lanes of Riverside Drive. Drainage and flooding complaints were also reported and the storm sewers have insufficient capacity to convey the 10-year storm.

Infrastructure improvements can resolve most of these issues and these improvements can be done



in conjunction with the Bank Street Reconstruction Project.

## 2.4 SOCIOECONOMIC CONTEXT

The study area is surrounded by established residential communities, whose residents use or could use the businesses and services within the corridor. The study area consists of portions of the following neighbourhoods: Billings Bridge (northwest), Alta Vista (northeast), Heron Park (southwest) and Ridgemont and Ledbury Park (southeast).

In 2006, the Ottawa Neighbourhood Study (ONS) undertook socioeconomic profiles of the Billings Bridge/Alta Vista area and Ledbury/Heron Gate/Ridgemont/Elmwood area which captures the study area and the immediate surrounding communities.

The ONS summarized the Billings Bridge/Alta Vista neighbourhood as an area with a number of strengths, such as a good linguistic mix, lower than average crime rates, and a population that is relatively engaged in the political process.

It notes that household income is close to the city average, but there are a relatively high number of families and seniors with incomes below the low income cut-off (LICO), which suggests pockets of poverty in a fairly affluent neighbourhood.

There is good access and availability of grocery and specialty stores and the short distances mean that walking is possible. The study notes a higher percentage of single parents and a high percentage of seniors who live alone.

The ONS summarized the Ledbury/Heron Gate/Ridgemont/Elmwood area as an extremely diverse neighbourhood. The incidence of poverty has increased which is reflected by the low individual and household incomes. Household income was less than half the city average. Families predominate in the area; however, the incidence of lone parent families is twice the city average. Unemployment as well as underemployment is a concern, particularly for youth. Generally, housing is row houses or high rise apartment rentals that are unaffordable for many households. It is important to note that the specialty food and grocery stores are generally more than a kilometre away from this neighbourhood centre.

From the community profiles, there is indication that there are populations (such as seniors and low-income groups), which would greatly benefit from having better access to retail and services on Bank Street as well as improved connectivity to transit and pedestrian and cycling linkages.

## 2.5 EXISTING CONDITIONS ANALYSIS

Bank Street acts as a spine connecting many areas and communities together. To assist in the analysis of the existing conditions, a character area map was developed to illustrate areas with similar land use features. A brief description of each character area is provided next and Figure 2.5 shows the character areas of the CDP.

The character area map was used as a guide to understand the existing context and in developing the plan's overall recommendations for the whole CDP area.

**Area 1: Billings Bridge Gateway**

- A distinct area created by the bounding conditions of the Transitway, its overpass above Bank Street, the rail line, and Sawmill Creek.
- Strongly associated with and related to the Rideau River.
- A transition point between Old Ottawa South and the Bank Street corridor to the south.
- Large parcels of land are relatively underdeveloped for the overall land area.

**Area 2: Sawmill Creek to Randall Avenue**

- Few mixed uses, an extension of the predominantly residential areas from both the east and west that meet at Bank Street.
- Has already had some considerable infill and intensification in the lands closer to Bank Street.
- Primarily non-residential uses: offices and professional services (as opposed to retail).

**Area 3: Alta Vista Mainstreet**

- A concentration of retail and professional service uses.
- Little mixed-use development.
- Sites are principally accessed from Bank Street.
- Buildings are closer to the road on the east side.

**Area 4: Kaladar Industrial Area**

- A legacy industrial area and includes lots on the west side of the former rail line (does not front onto Bank Street).
- Many of the buildings are used for small scale manufacturing and warehousing.
- Land use compatibility issues with adjacent residential areas.

- Not designated as an Employment Area (as defined by the Provincial Policy Statement) in the City's Official Plan.

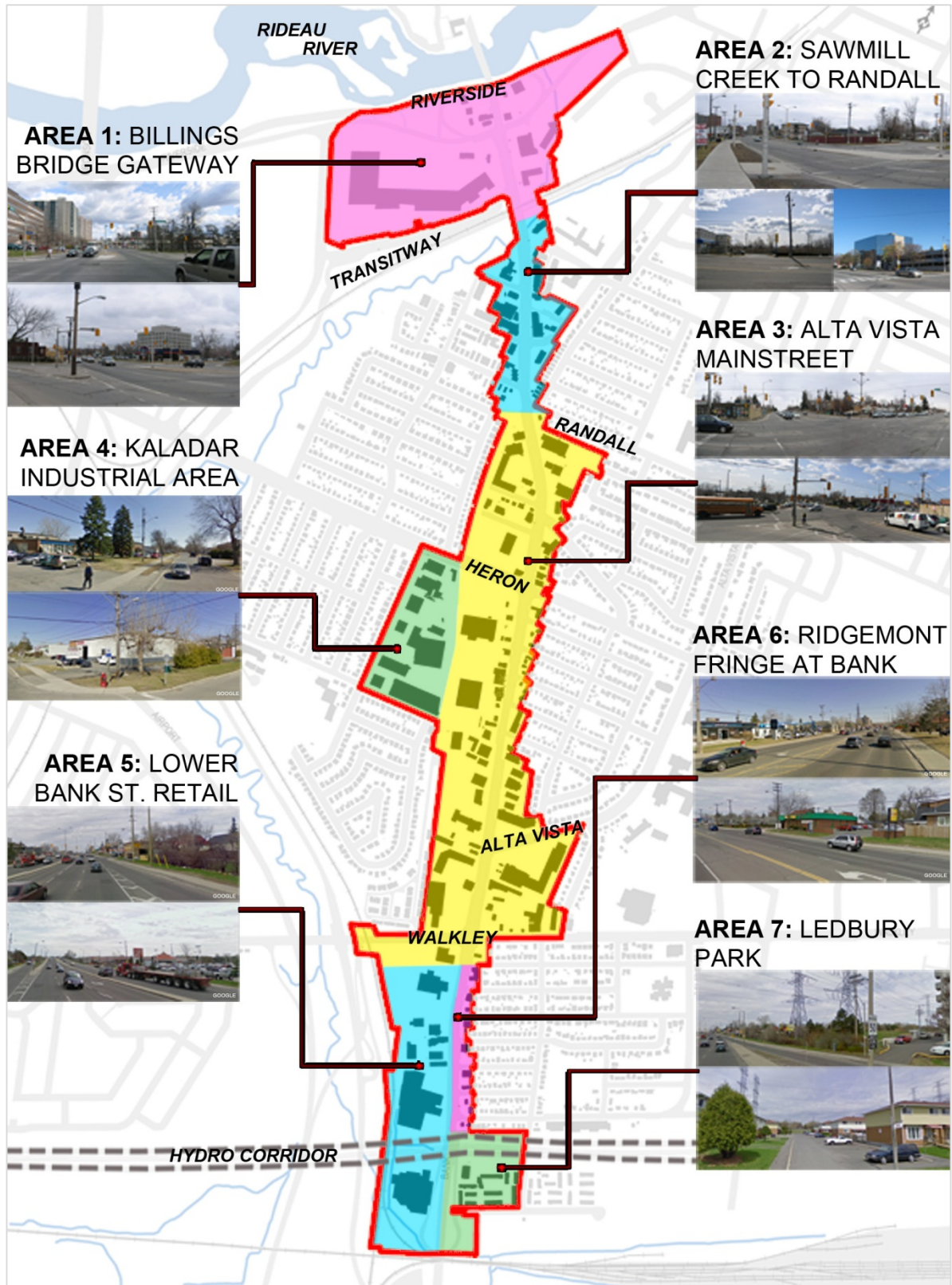
**Area 5: Lower Bank Street Retail**

- Has more contemporary auto-oriented retail and warehouse uses, distinct from the street related uses further north.
- Retail and restaurant activity is generally larger format, national names.
- Although sidewalks are complete and in good condition, the large distances between sites make it less desirable as a walking area.

**Area 6: Ridgemont Fringe at Bank Street**

- Where Ridgemont neighbourhood fronts onto Bank Street.
- Lots are generally small single-family residential size.
- Little or no evidence of mixed use, although some homeowners may operate professional services out of their dwellings.

Figure 2.5 | Character Areas of the CDP Study Area





### Area 7: Ledbury Park

- Medium density housing development that includes both Ottawa Community Housing and a townhouse condominium development.
- Physically separated from the Ridgemont neighbourhood by the hydro corridor and further isolated by the rail corridor to the south.
- Extension of the ramps from the Bank Street South Bridge crossing the rail corridor isolates it from Bank Street itself.
- Hosts a variety of district-level recreational uses and the City plans to add additional recreation to this area.
- No mixed-use development.

#### 2.5.1 STRENGTHS AND OPPORTUNITIES

The following is a list of strengths and opportunities found in the Bank Street CDP study area. They are characteristics and features that are recognized and highlighted in the CDP design process.

1. Accessible location as a destination and connection route to other areas of the City.
2. High traffic volumes to attract current and new customers.
3. Proximity to the rapid transit network and Billings Bridge and Walkley Transit Stations.;
4. Diversity and variety of businesses and services.
5. Ability to do daily errands (e.g., groceries and banking) and general services (e.g., medical and car repair) in the same area.
6. Availability of commercial, retail, and office employment opportunities.
7. Established residential neighbourhoods that are adjacent to the study area.
8. Proximity to Rideau River, NCC pathways and Billings Bridge to access Old Ottawa South.
9. Sawmill Creek as a natural feature along the western boundary of study area.
10. Policy support for proposed cycling lanes throughout study area.
11. Future infrastructure improvements (i.e., replacement and upgrade of water, sanitary, and storm sewers) are expected to meet increased capacity needs with intensification.

#### 2.5.2 ISSUES AND CONSTRAINTS

Issues and constraints of the study area have been identified and were further examined during the CDP design process for mitigation and lessening their impact to the study area.

1. High traffic area makes it difficult to cross Bank Street as a pedestrian as well as an unappealing cycling environment.
2. Concerns of the shared (5<sup>th</sup> lane) left turning lane.
3. City's standard for acceptable LOS for traffic operations is LOS 'D' for areas outside of the downtown. During peak hours, there are intersections along Bank Street that are recorded at LOS 'E' during the pm peak period.
4. Concern that future growth and intensification will attract more traffic to an area with existing traffic management issues.
5. Bank Street is one of the few north-south corridors, growth and intensification along the corridor may create a need for additional capacity on alternate north-south arterial roads in the area.
6. Public right-of-way varies in width throughout the study area.
7. Difficult to distinguish sidewalks from business asphalt driveways and parking lots.
8. Minimal to no pedestrian or cycling related-street furniture and no public gathering places.
9. Lack of greenspace and landscaping throughout majority of study area corridor.

10. Abrupt streetscape change and feel entering the study area when crossing the bridge from Old Ottawa South.
11. Conflict of pedestrian and cycling systems at Bank and Riverside Drive North intersection;
12. Lack of character area identity (not a recognizable destination).
13. Topographical changes near the Transitway and Bank Street as well as along Sawmill Creek. Steep slopes also found near the bridge over the rail lines to the south of the study area.
14. Basement flooding identified as a concern in several locations along Bank Street, including Alta Vista Drive, Randall Avenue, and near Riverside Drive.
15. Out-of-date and incompatible land uses between the study area and the Kaladar Industrial area.