City of Edmonton | 132 Avenue Renewal
Urban Design Analysis

Edmonton

Acknowledgments

This Urban Design Analysis has been completed by the consultant team of Scheffer Andrew Ltd., groundcubed, and Y Station.

Scheffer Andrew Ltd. lead the consultant team and provided engineering analysis and design.

groundcubed provided urban corridor analysis and streetscape design.

Y Station lead the public engagement opportunities to gather input and liaise with stakeholders and the general public.

Sincere thanks goes to key members of the City of Edmonton's Building Great Neighbourhoods branch, who provided a wealth of experience and knowledge to this project.

Scheffer Andrew Ltd.
Planners & Engineers

groundcubed
landscape architects

y station

TABLE OF CONTENTS

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1   INTRODUCTION

1.1 Guiding Principles

The 132 Avenue Renewal is a City of Edmonton project identified under the Building Great Neighbourhoods (BGN) branch to re-envision and reconstruct the roadway. BGN is committed to building great neighbourhoods by investing in public infrastructure within communities, to enhance their livability and longevity.

132 Avenue is a collector road that fulfills a function for all surrounding neighbourhoods. Collector roadways connect residents and local roads to major arterial roads of the city. Small neighbourhood businesses form hubs of activity along collector roadways and connect people to other community gathering places such as schools, churches, community leagues and recreational facilities.

1.2 About Neighbourhood Renewal

The 132 Avenue Renewal is located between 127 Street and Fort Road. Updates to street infrastructure will consider the surrounding neighbourhoods and commuters' needs and desires.

The renewal will improve how people walk, bike, drive, and gather around 132 Avenue. Renewal will include a variety of improvements and changes, which could include pavement renewal/replacement, road reconfiguration, construction of missing sidewalk links and/or bike facilities, replacement of street lights, sidewalks, and curbs/gutters, drainage improvements, and more.

1.3 Urban Design Analysis Purpose

The purpose of the Urban Design Analysis (UDA) is to guide and support the 132 Avenue Renewal project process. The UDA accomplishes this by providing background information, site context, neighbourhood statistics, City policies and guidelines, and current and future City plans in the area. Additionally, this document analyzes the existing urban environment to inform design options, to further support and define the final design.

1.4 How To Use This Report

The UDA is an information tool and a guide to understanding the analysis and vision for 132 Avenue. This document is an in-depth urban analysis divided into seven main sections:

1. Introduction
2. Background and Context
3. Vision
4. Design Options
5. Draft Design
6. Final Design
7. Next Steps

This UDA is published in sections that correspond to significant milestones throughout the project.

Each section provides pertinent information to guide the public through the project process. Each section of the report informs the succeeding section to deliver a comprehensive, well-informed final design for the renewal of 132 Avenue.

1.5   Project Approach and Process

132 Avenue Renewal is a multifaceted project intersecting nine neighbourhoods. The approach and process for this project is depicted by the Road Map to Building Great Neighbourhoods.

The BGN Road Map illustrates four phases: Concept Phase, Design Phase, Build Phase, and Operate Phase. The first two phases, Concept Phase and Design Phase, are a partnership between the City and a multi-disciplinary consultant team. Design decisions throughout the project are informed by public input, technical requirements, and City policies.

Road Map to
Building Great Neighbourhoods

Exploring Opportunities

Building a Project Vision Together

Starting the Conversation

Exploring Options and Tradeoffs

Creating a Design for Your Neighbourhood

Community Feedback on Draft Design

Updating Design Using Input

Street Light Expression of Interest

Community Feedback on Final Design

Cost Sharing Opportunities

Completing Construction Drawings

Preparing for Construction

Construction on Your Streets

Celebrate with Us

LEGEND

Public Engagement and Communications Opportunities

Concept Phase

Design Phase

Build Phase

Operate Phase

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2   BACKGROUND AND CONTEXT

2.1   Project Area

The 132 Avenue Renewal project is located along a 7.3 km collector roadway located north of Yellowhead Trail in north Edmonton. It is situated between 137 Avenue to the north and 127 Avenue to the south. The study area includes approximately 400m north and 400m south from 132 Avenue, between 127 Street and Fort Road. The map below illustrates the approximate study area.

Additionally, the study area includes the influence area of nine neighbourhoods: Kensington, Calder, Rosslyn, Lauderdale, Glengarry, Killarney, Delwood, Balwin, and Belvedere. The influence area is included in our analysis, which impacts the design options and final design.

Each neighbourhood is bounded by major arterial roads and the 132 Avenue collector road.

Calder and Killarney, included in our influence area, are currently undergoing Neighbourhood Renewal. Further, the Glengarry District Park and Queen Elizabeth School Park are undergoing Park Renewal. All of these renewal projects border 132 Avenue. For more information, see section 2.4 and section 2.6 of this report.
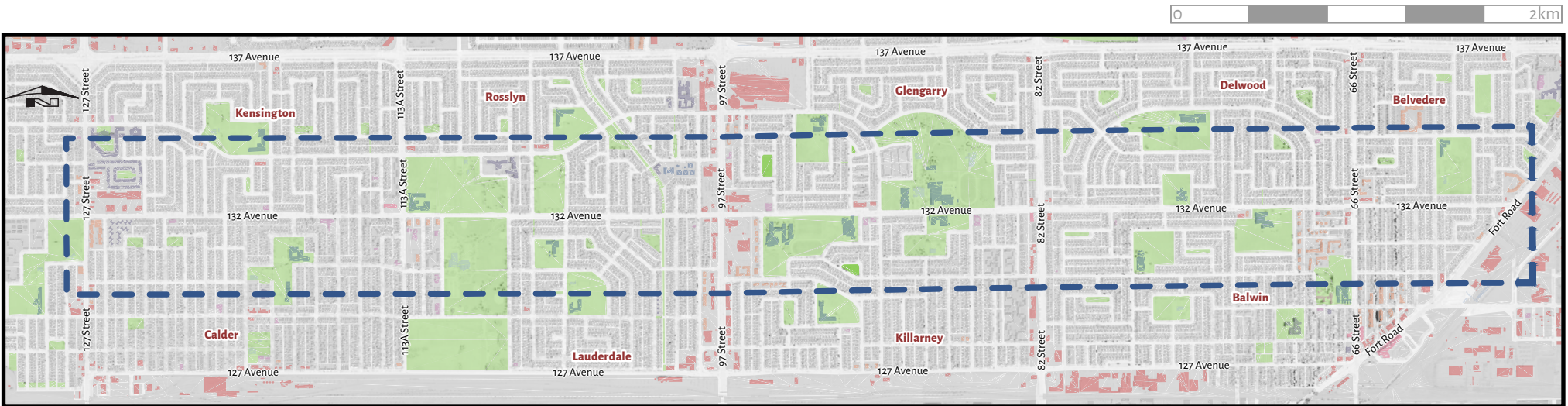
2.2 132 Avenue Context

The nine neighbourhoods that abut 132 Avenue have a long and colourful history dating back to pre-WWI—deeply rooted in the industries established at the beginning of the 20th century. Small municipalities were growing throughout the 132 Avenue area in the 1900's. With the introduction of the Canadian Northern Railway, Grand Trunk Pacific Railway, Swift Company Packing Plants, Stockyards, and Hudson's Bay Company, working-class families settled in the area. They began to open bakeries, general stores, and other amenities, which established a sense of community and place. For example, the Belvedere and Balwin areas were known as "Packingtown" and the Village of North Edmonton. Calder was previously known as the Elm Park Subdivision and the Village of Calder.

By 1913, the City of Edmonton had annexed much of this area. This industrial history has shaped the current urban form throughout this area. 132 Avenue and the nine neighbourhoods around 132 Avenue are bounded by industrial areas, commercial zones, and a network of arterial roadways.

Although this area of the city has been experiencing development for well over 100 years, much of the development for these residential neighbourhoods occurred in three major stages: pre-WWI, post-WWII, and the latter portion of the 20th century. A considerable amount of residential development for these neighbourhoods happened from the 1950's to the 1960's. By the 1980's, most of these communities had been fully built out.

Currently, 132 Avenue is lined primarily with private residences ranging from single-detached homes to medium density residential complexes. However, the study area has many unique features that contribute to the avenue. These include school park sites, community leagues, public parks, commercial centers, places of worship, and heritage homes. The varied uses along 132 Avenue have created a mosaic very indicative of Edmonton streets of this era. This mosaic provides a steady rhythm of community destinations along the 7.3km roadway.

2.3 132 Avenue Area Statistics

Data was collected from the 2016 Census neighbourhood profiles and has been compiled into one catchment to represent all nine neighbourhoods. Data was also collected from the Edmonton Public School Board and the Edmonton Catholic School Board for enrollment numbers and student attendance areas. Some Census and School Board statistical information is also broken down per neighbourhood in the following sections.

Overall, the age demographic for all nine neighbourhoods is evenly distributed. However, in comparison to the averages of Edmonton's age distribution, the percentages of residents over the age of 70 + are higher for all nine neighbourhoods.

More than half of the population of the nine neighbourhoods live in single detached houses (54%), comparable, yet slightly higher than the city average of 49%. The other housing types in the area include apartments and condos (22%), duplex and fourplex (14%), row houses (7%), and institution and collective residences (3%). There are fewer apartments and condos on average than City-wide in these neighbourhoods, but more duplex and fourplex dwelling types.

Commuting, for the nine neighbourhoods, is primarily by people driving (80%), which is comparable to the city's average (77%). Only 6% of all residents that commute by driving are as a passenger. About 14% of residents in these nine neighbourhoods use public transit to commute to work. Killarney and Belvedere are the two neighbourhoods with the highest percentage of people using public transit (20% and 18%, respectively). Other modes of transportation, including biking and walking, account for the remaining 6%.

Within the nine neighbourhoods there are 20 schools, 13 of which are Edmonton Public Schools, 6 are Edmonton Catholic Schools, and one is part of the Greater North Central Francophone Education Region No. 2.

There are 5,365 students enrolled in the Edmonton Public Schools in these neighbourhoods. Edmonton Catholic Schools have a total of 3,980 students enrolled in these neighbourhoods. There are 410 students enrolled in the

Greater North Central Francophone Education Region No. 2 at Ecole Pere-Lacombe.

The number of schools and students enrolled within the influence area of 132 Avenue is noteworthy. The number of students indicates possible impacts on the collector roadway, as there is an influx of students walking and cycling, school buses, and personal vehicles during before and after school time periods.

The diversity of school programs within both school systems is also noteworthy. The variety of programs include Arabic Bilingual, Cree Language and Culture, Mandarin Bilingual, French Immersion, and Francophone. These programs attract a diverse population from all areas of the city.

For 132 Avenue renewal, it is essential to consider neighbourhood statistics. This information provides the project team insight on design opportunities. These opportunities include:

- Improving accessibility and mobility along the roadway for all demographics.
- Maintaining public transit and improving accessibility to public transit for all neighbourhooods.
- Providing a safe and protected experience for people who walk, bike, and wheel.
- Supporting the student and school population along 132 Avenue. This incorporates safe and protected pick-up and drop-off zones, sidewalks, and bike facilities to improve connections throughout all neighbourhoods.
- Providing safe pedestrian crosswalks for all demographics.
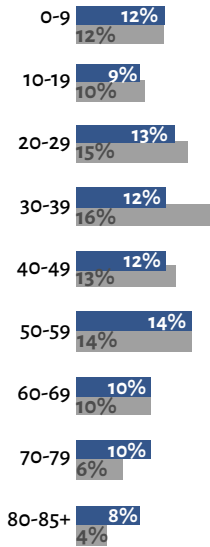
33,402

899,447
Pop. of Edmonton

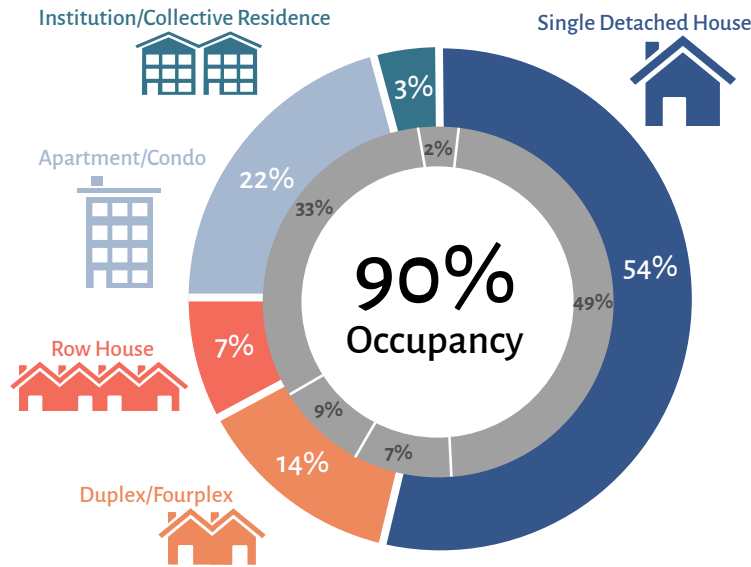Kensington, Calder, Rosslyn, Lauderdale, Glengarry, Killarney, Delwood, Balwin and Belvedere

City of Edmonton Statistics are represented by: %

AGE RANGE
76% reported

Range	%	
0-9	12%	12%
10-19	9%	10%
20-29	13%	15%
30-39	12%	16%
40-49	12%	13%
50-59	14%	14%
60-69	10%	10%
70-79	10%	6%
80-85+	8%	4%

BUILDING TYPE

Institution/Collective Residence

Single Detached House

Apartment/Condo 22% 33%

3% 2%

90% Occupancy

54% 49%

Row House 7% 9% 7%

Duplex/Fourplex 14%

COMMUTE
76% reported

Other 3% 2%
Bike 1% 1%
Walk 3%
Public Trasit 5%
14% 14%
Auto as Passenger 6% 5%
Auto as Driver 74% 72%

STUDENTS

4,675 Kindergarten - Gr.6	1,780 Gr.7 - Gr.9	3,300 Gr.10 - Gr.12

SCHOOLS

12 Elementary Schools	3 K-9 Schools	3 Junior High Schools	2 High Schools

HOME OWNERSHIP
76% reported

OWNED	57%	RENTED	43%
	63%		37%

LENGTH OF RESIDENCE
61% reported

5 yrs or more	56%	3-5 yrs 14%	1-3 yrs 18%	Less than 1 yr 12%
	53%	14%	20%	13%
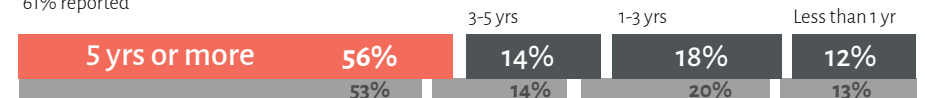
EMPLOYMENT STATUS
57% reported   * excluding population under 18

	%	
Not Working	8%	5%
Retired	27%	18%
Unemployed	10%	7%
Employed 30+ hrs	44%	55%
Employed 0-30 hrs	8%	9%
Post Secondary Student	3%	6%
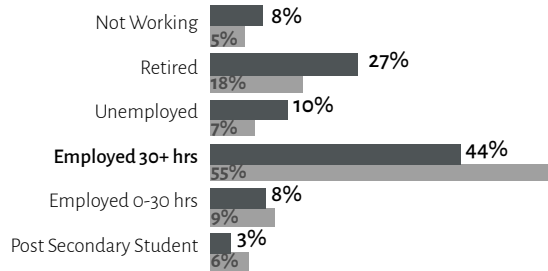
HOUSEHOLD INCOME
46% reported

	%	
$200, 000 or more	1%	5%
$150,000 - $200,000	3%	8%
$125,000 - $150,000	4%	8%
$100,000 - $125,000	9%	12%
$60,000 - $100,000	24%	26%
$30,000 - $60,000	30%	25%
Less than 30,000	29%	16%

EDUCATION
61% reported

	%	
University Degree Above Bachelor Degree	4%	12%
Bachelor's Degree	7%	20%
University and College Certificate or Diploma	21%	23%
Registered Apprenticeship and Trades Certificate	10%	7%
High School Diploma or Equivalent	41%	31%
No Certificate, Diploma or Degree	17%	7%

Other 4%
Bike 1%
Walk 4%
Public Transit 9%
Auto as Passenger 6%
Auto as Driver 76%

3,849

Institution/Collective Residence 3%
Single Detached House 60%
Apartment/Condo 22%
Row House 2%
Duplex/Fourplex 13%

93%
Occupancy

2.3.1   Kensington

History

The neighbourhood of Kensington was annexed to be part of Edmonton in 1913. However, because of WWI and slow urban growth, Kensington was not replotted or subdivided for development until 1950. At this time, the Kensington community league was established. After 1960 there was little to no development until the mid-1990s when the neighbourhood saw a drastic increase in development. Kensington was fully built out by 2000.

Development

Kensington is bounded by 127 Street, 137 Avenue, 113A Street, and 132 Avenue. The neighbourhood street pattern is a modified grid.

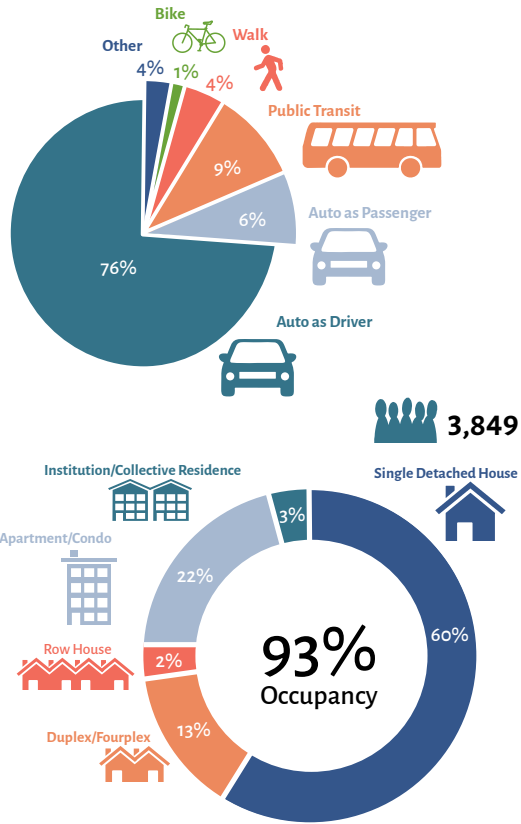The main commercial zones are along 127 Street and 113A Street, located at the two southern corners of the neighbourhood fronting 132 Avenue. Kensington has a large central park that includes a community league and school. Small pocket parks are distributed throughout the neighbourhood.

Demographics

According to Census data collected from 2016, Kensington is comprised of 60% single detached houses, which is higher than the City of Edmonton's average (49%). Apartments/condos make up 22%, duplex/fourplex 13%, institution/collective residence 3%, and row houses 2%.

82% of the population drive to work, including 6% as passengers. 9% use public transit, 4% walk, 1% bike, and 4% use other types of transportation to get to work.

Schools ●

Kensington School - Edmonton Public Schools
- 350 students enrolled for 2020-2021 school year
- Kindergarten to grade 9
- Programs: Regular Elementary, Logos Christian, and Special Education
- Attendance area: Kensington, Carlisle, and southern portion of Baranow
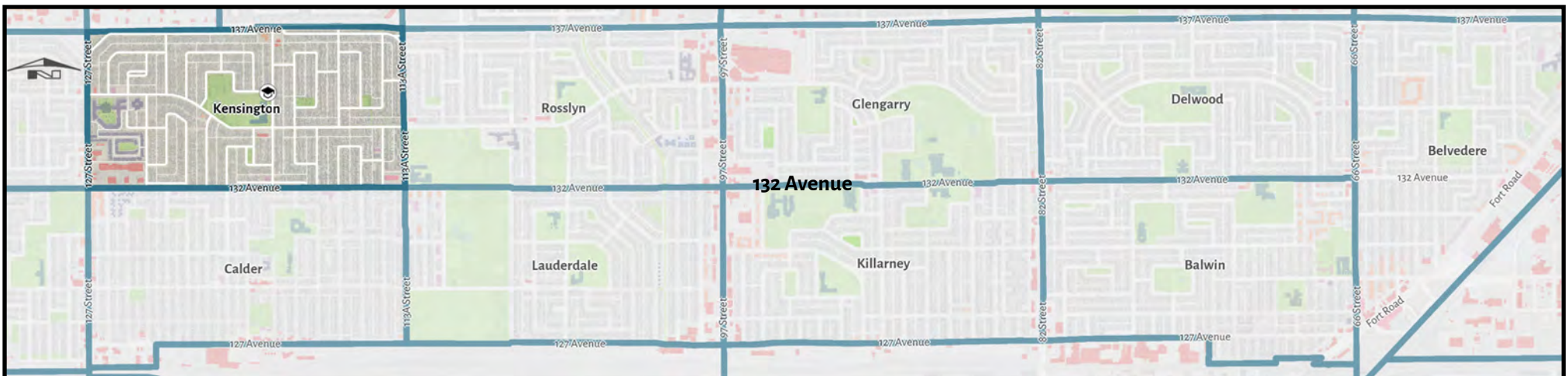
2.3.2 Calder

History

Calder is one of the oldest neighbourhoods along 132 Avenue with a history that dates back to the beginning of the 20th century. The early growth resulted from the Grand Trunk Pacific Railway and the Hudson's Bay Company Reserve. The Grand Trunk Pacific Railway was established in 1909, which was located south of the neighbourhood. In 1910, employees began to settle in the area, which spurred development. The area was known as the Village of Calder until it became part of Edmonton in 1917. The next stage of suburban growth did not happen until the late 1940s, when Edmonton's population doubled. Generally, the newer structures are in the north and the older historic buildings are in the southwest.

Development

The neighbourhood of Calder is bounded by 127 Street, 127 Avenue, 113A Street, and 132 Avenue, with a modified grid street pattern. Similar to many neighbourhoods, Calder's schools, community league, and main park facility are centrally located. There are seven religious facilities in Calder. Commercial properties are generally along the community boundaries or along collector roads.

Demographics

According to 2016 Census data, Calder is 59% single detached houses, 13% Apartments/condos, 23% duplex/fourplex, 3% institution/collective residence, and 2% row houses.

79% of the population drive to work, including 6% as passengers. 14% use public transit, 4% walk, 1% bike, and 4% use other types of transportation to get to work.

Schools 🎓

Calder Elementary School - Edmonton Public Schools
- 270 students enrolled for 2020-2021 school year
- Kindergarten to grade 6
- Programs: Regular Elementary and Arabic Bilingual
- Attendance area: Calder and a portion of the Yellowhead Corridor

St. Edmund Catholic School - Edmonton Catholic Schools
- 800 students enrolled for 2020-2021 school year
- Kindergarten to grade 9
- Programs: International Baccalaureate and Sports Academy
- Attendance area: Kensington, Rosslyn, Calder, Lauderdale, and a portion of the Yellowhead Corridor

Other 3% · Bike 1% · Walk 4% · Public Trasit 14% · Auto as Passenger 6% · Auto as Driver 73%

4,004

85% Occupancy

Single Detached House 59% · Institution/Collective Residence 3% · Apartment/Condo 13% · Duplex/Fourplex 23% · Row House 2%

132 Avenue

2% Other

1% Bike

2% Walk

11% Public Transit

6% Auto as Passenger

78% Auto as Driver

2,975

94% Occupancy

Institution/Collective Residence **16%**

Apartment/Condo **6%**

Row House **5%**

Duplex/Fourplex **9%**

Single Detached House **64%**

2.3.3 Rosslyn

History

Rosslyn was annexed as a neighbourhood of Edmonton in 1913, but was not developed until after WWII. As Edmonton's population doubled post WWII, Rosslyn was subdivided for residential and commercial development in the late 1950s and was developed through the 1960s.

Development

Rosslyn is bounded by 113A Street, 137 Avenue, 97 Street, and 132 Avenue, and has a modified grid street pattern.

97 Street is a major commercial zone that creates a distinct boundary along the east edge of the neighbourhood. There are two parks and one school along 132 Avenue. A shared pathway along an old railway right-of-way crosses 132 Avenue and connects south to Lauderdale.

Demographics

According to Census data collected from 2016, Kensington is comprised of 64% single detached houses, which is higher than the City of Edmonton percentage (49%). Apartments/condos make up 6%, duplex/fourplex 9%, institution/collective residence 16%, and row houses 5%.

84% of the population drive to work, including 6% as passengers. 11% use public transit, 2% walk, 1% bike, and 2% use other types of transportation to get to work.
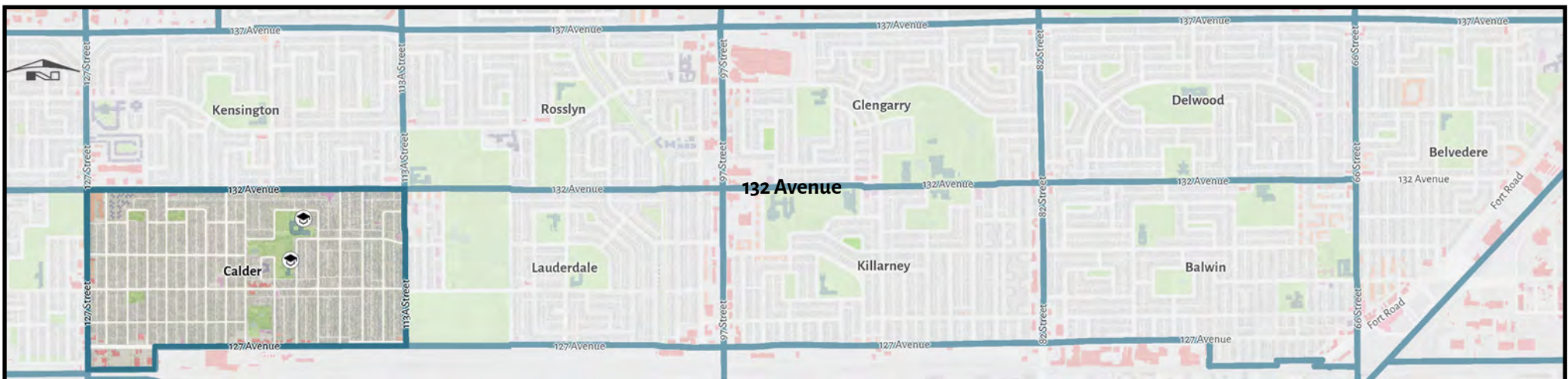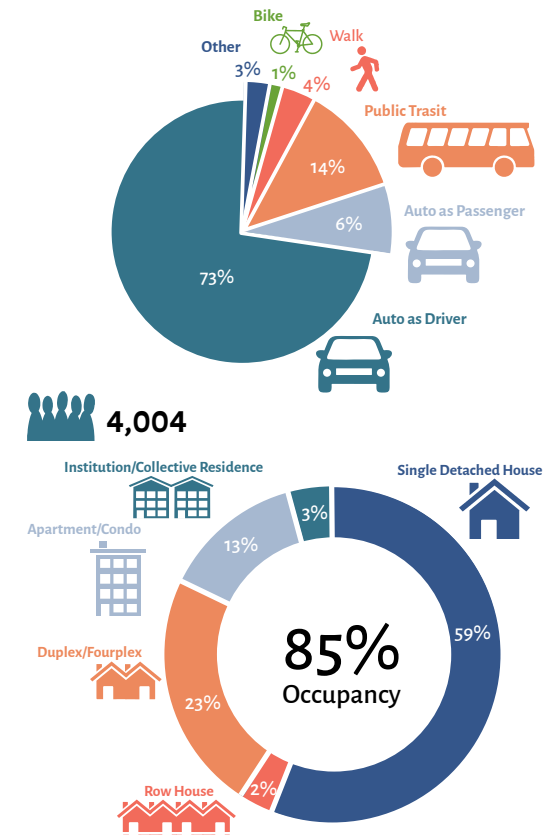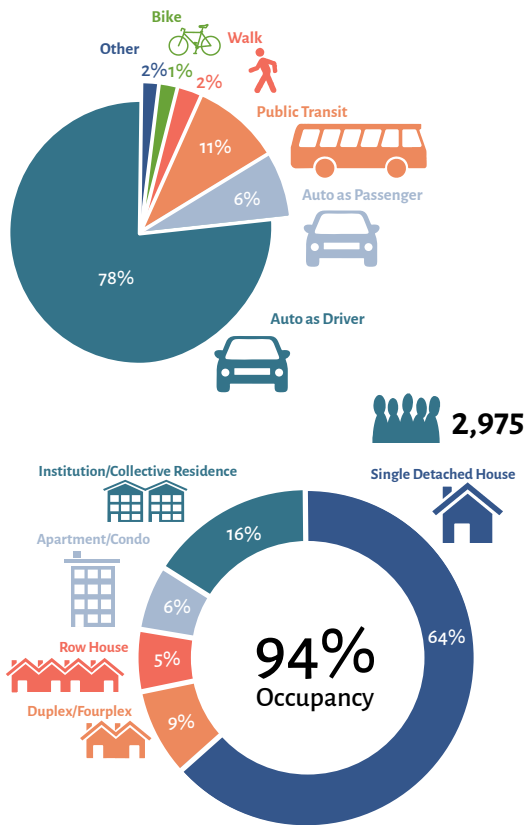
Schools

Rosslyn School - Edmonton Public Schools
- 440 students enrolled for 2020-2021 school year
- Grade 7 to grade 9
- Programs: Regular Junior High, Mandarin Bilingual, Pre-Advanced Placement, and Special Education
- Attendance area: Dunluce, Caernarvon, Carlisle, Baranow, Kensington, Calder, Athlone, Wellington, and portions of Rosslyn and Lauderdale (west of the shared pathway)

Scott Robertson School - Edmonton Public Schools
- 270 students enrolled for 2020-2021 school year
- Kindergarten to grade 6
- Programs: Regular Elementary, Pre-Kindergarten and Special Education
- Attendance area: Rosslyn
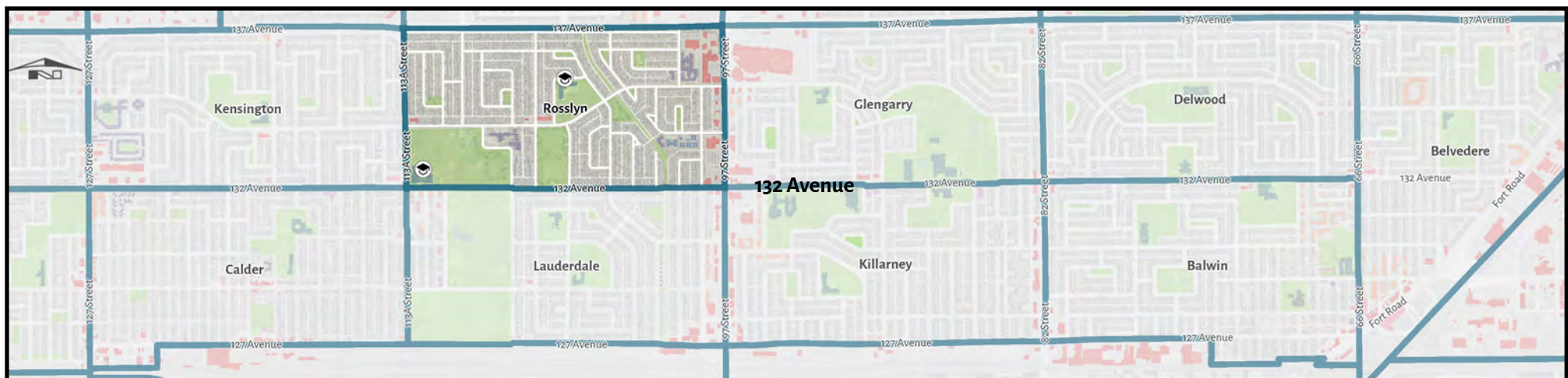
132 Avenue

2.3.4 Lauderdale

History

Lauderdale was named after James Lauder, who was a farmer in the area who opened a bakery in 1885. Similarly to other neighbourhoods along 132 Avenue, Lauderdale's suburban development occurred in the 1950s and 1960s.

The western portion of the neighbourhood was undeveloped park space until the late 20th century when the City established the Grand Trunk Fitness and Leisure Centre.

Development

Lauderdale is bounded by 113A Street, 127 Ave, 97 Street, and 132 Avenue. The streets consists of a modified grid pattern.

There are a variety of sports fields in the Grand Trunk District Park, and an off-leash dog park located in the neighbourhood's southwest. A large portion of the Lauderdale neighbourhood consists of its many park systems, which provide outdoor amenities for many surrounding schools and neighbourhoods.

Additionally, 97 Street and 127 Avenue are distinct commercial and industrial boundaries.

Demographics

According to Census data collected from 2016, Lauderdale is comprised of 51% single detached houses. Apartments/condos make up 17%, duplex/fourplex 21%, and row houses 11%.

80% of the population drive to work, including 5% as passengers. 14% use public transit, 2% walk, 1% bike, and 3% use other types of transportation to get to work.

Schools 🎓

Lauderdale School - Edmonton Public Schools
- 170 students enrolled for 2020-2021 school year
- Kindergarten to grade 6
- Programs: Regular Elementary and Pre-Kindergarten
- Attendance area: Lauderdale and a portion of the Yellowhead Corridor

École Père-Lacombe - The Greater North Central Francophone Education Region No. 2
- 410 students enrolled for 2020-2021 school year
- Kindergarten to grade 6
- Programs: Francophone and Catholic Religious Education
- Attendance area: No attendance area defined

Bike 1%
Other 3%
Walk 2%
Public Trasit 14%
Auto as Passenger 5%
Auto as Driver 75%

2,909

Apartment/Condo 17%
Single Detached House 51%
Row House 11%
Duplex/Fourplex 21%
91% Occupancy

Other 3%
Bike 1%
Walk 3%
Public Transit 12%
Auto as Passenger 5%
Auto as Driver 76%

3,009

Apartment/Condo 17%
Single Detached House 54%
Row House 21%
Duplex/Fourplex 8%

95% Occupancy

2.3.5 Glengarry

History

The neighbourhood of Glengarry dates back to the early 1910's. The original land for Glengarry included the subdivisions of Sunalta and Nameyo Park. Glengarry, like other surrounding neighbourhoods, experienced a boom of development in the 1960's. Later in the 1980s more suburban growth began and Glengarry was fully built out.

Development

Bounded by 97 Street, 137 Avenue, 82 Street, and 132 Avenue, the street grid is a modified grid pattern with curvilinear streets adjacent to Glengarry Park. As a result, the schools, community league, and main parks are located in the center of the community. The main commercial zones are to the west, as 97 Street is a large commercial zone. Northgate Centre is located in the north-western corner of the neighbourhood.

Demographics

According to Census data collected from 2016, Glengarry is comprised of 54% single detached houses, which is higher than the City of Edmonton average (49%). Apartments/condos make up 17%, duplex/fourplex 8%, and row houses 21%.

81% of the population drive to work, including 5% as passengers. 12% use public transit, 3% walk, 1% bike, and 3% use other types of transportation to get to work.
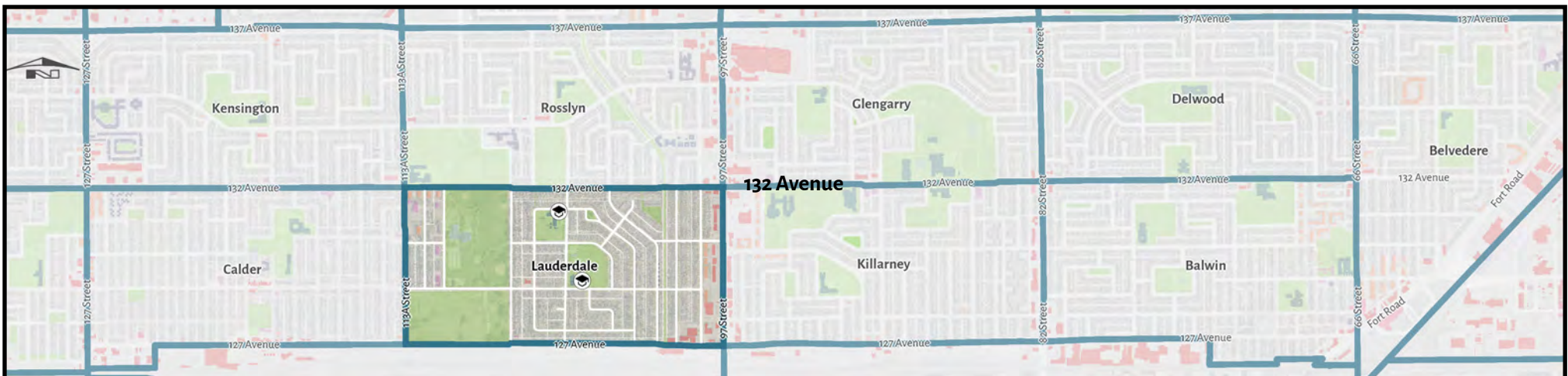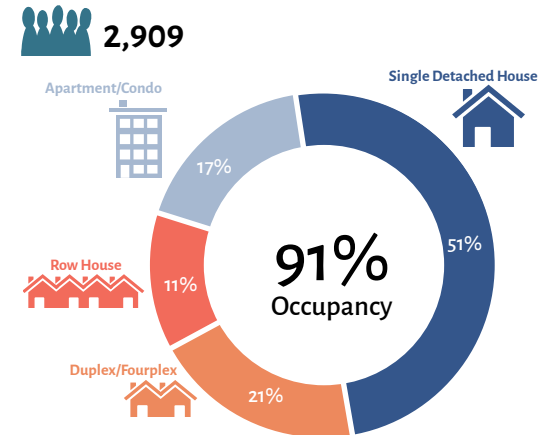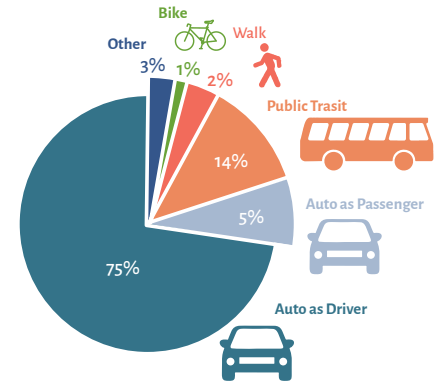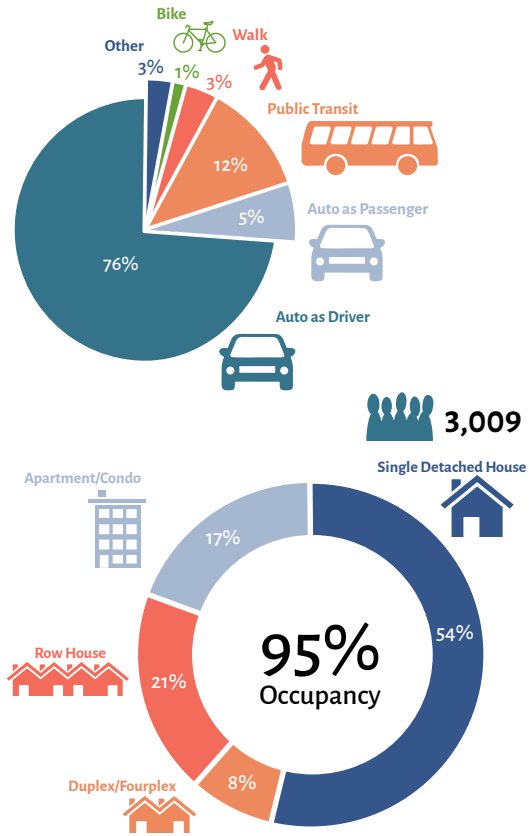
Schools

Glengarry School - Edmonton Public Schools
- 650 students enrolled for 2020-2021 school year
- Kindergarten to grade 6
- Programs: Arabic Bilingual
- Attendance area: No attendance area defined

St. Cecilia Junior High School - Edmonton Catholic Schools
- 410 students enrolled for 2020-2021 school year
- Grade 7 to grade 9
- Programs: Regular Junior High and French Immersion
- Attendance area: Rosslyn, Lauderdale, Glen¬garry, Killarney, Delwood, Balwin, and Belvedere

Archbishop O'Leary High School - Edmonton Catholic Schools
- 1,900 students enrolled for 2020-2021 school year
- Grade 10 to grade 12
- Programs: Regular and specialized programs
- Attendance area: All neighbourhoods north of Yellowhead Trail, east of St. Albert Trail, and west of the North Saskatchewan River
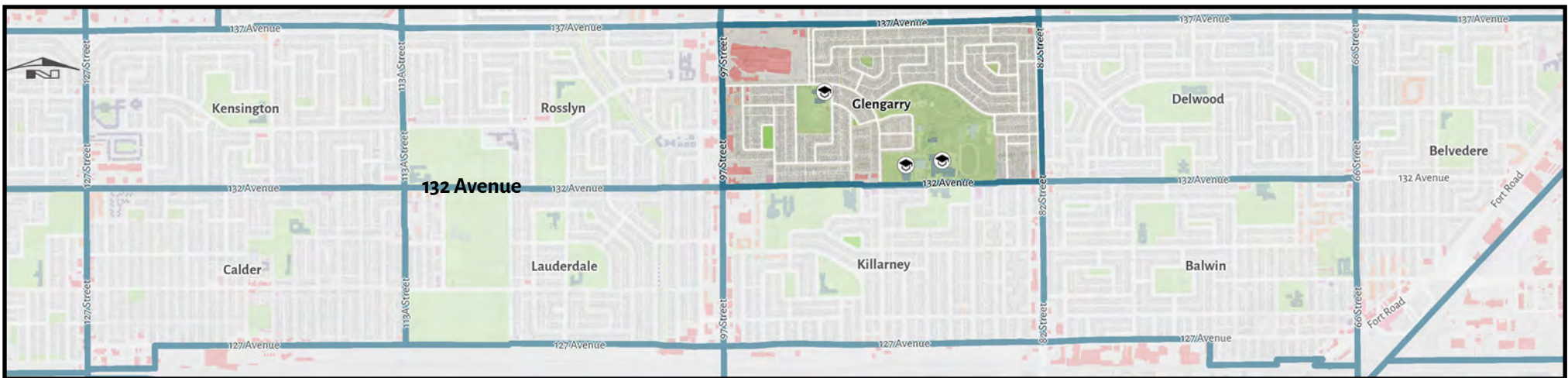
2.3.6 Killarney

History

The Killarney neighbourhood became part of Edmonton in 1913. Lands adjacent to 97 Street were subdivided as early as 1911. The remainder was subdivided in the late 1950s and the bulk of Killarney's development took place shortly thereafter.

Development

The street pattern reflects the era of development and is similar to surrounding neighbourhoods, which is a modified grid. The community is bounded by 97 Street, 127 Avenue, 82 Street, and 132 Avenue.

97 Street and 82 Street are both major commercial zones that stretch the entire length of the neighbourhood. Large parks and athletic sports fields are centered around the schools, community league, and places of worship.

Demographics

According to Census data collected from 2016, Killarney is comprised of 39% single detached houses, which is lower than the City of Edmonton average (49%). Apartments/condos make up 23%, duplex/fourplex 23%, and row houses 15%.

74% of the population drive to work, including 9% as passengers. 20% use public transit, 2% walk, 1% bike, and 3% use other types of transportation to get to work.

Schools

Killarney Junior High School - Edmonton Public Schools
- 470 students enrolled for 2020-2021 school year
- Grade 7 to grade 9
- Programs: Regular Junior High and Arabic Bilingual
- Attendance area: Glengarry, Killarney, Rosslyn, & Lauderdale

Queen Elizabeth School - Edmonton Public Schools
- 1,400 students enrolled for 2020-2021 school year
- Grade 10 to grade 12
- Programs: Regular and specialized programs
- Attendance area: NW neighbourhoods within the boundary of 127 Street and 82 Street

St. Matthew Elementary School - Edmonton Catholic Schools
- 460 students enrolled for 2020-2021 school year
- Kindergarten to Grade 6
- Programs: Regular Elementary and Ukrainian Bilingual
- Attendance area: Rosslyn, Lauderdale, Glengarry, & Killarney

Mee-Yah-Noh School - Edmonton Public Schools
- 255 students enrolled for 2020-2021 school year
- Kindergarten to Grade 6
- Programs: Regular Elementary and Special Education
- Attendance area: Glengarry and Killarney

Other 3% · Bike 1% · Walk 2% · Public Transit 20% · Auto as Passenger 9% · Auto as Driver 65%

4,352

89% Occupancy

Apartment/Condo 23% · Single Detached House 39% · Duplex/Fourplex 23% · Row House 15%

Bike 2% — Walk 2% — Other 2% — Public Transit 13% — Auto as Passenger 5% — Auto as Driver 77%

3,313

95% Occupancy

Apartment/Condo 3% — Single Detached House 88% — Duplex/Fourplex 7% — Row House 2%
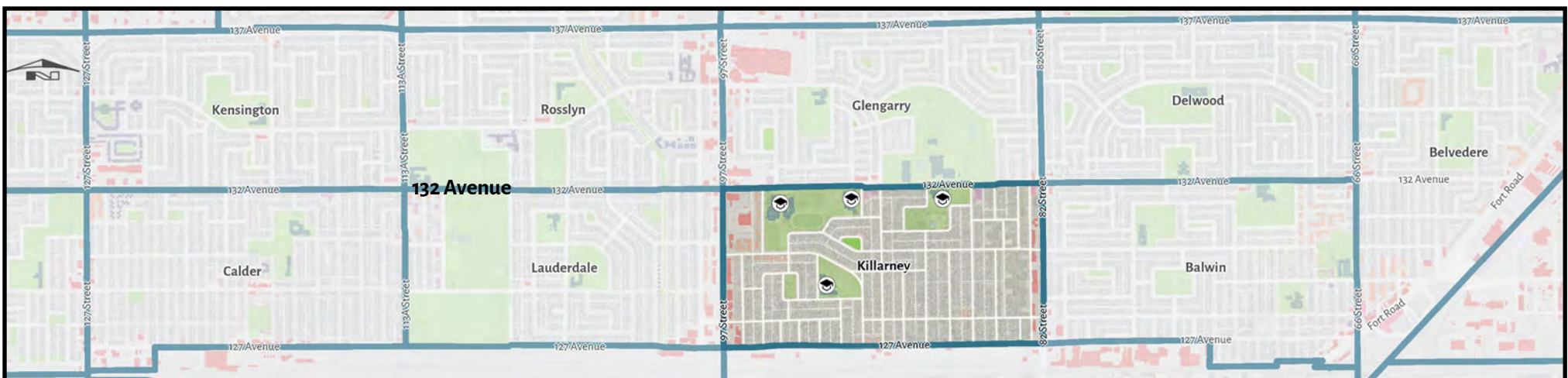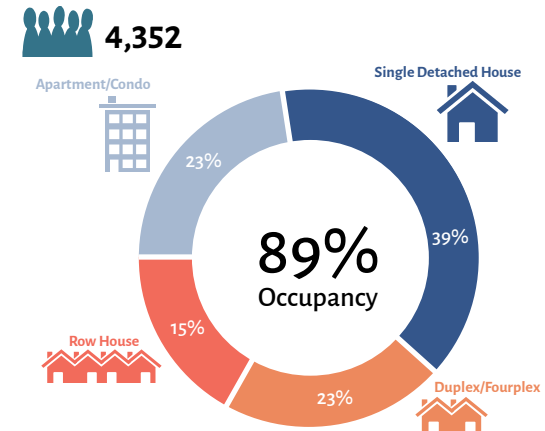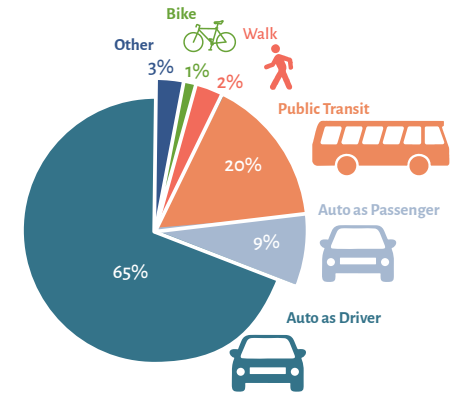
2.3.7 Delwood

History

The neighbourhood of Delwood replaced the original early 1900s subdivisions of Industrial Centre, Queen's Park, and East Delton. The neighbourhood was further developed in the 1960's, with a modified grid street pattern. 132 Avenue borders Delwood to the south, 137 Avenue to the north, 66 Street to the east, and 82 Street to the west.

Development

As a result of the 1960s modified grid street pattern, Delwood contains multiple pocket parks and two central park facilities related to the neighbourhood schools and community league. There are various housing types throughout Delwood, including low-rise apartments, rowhouses, and single family houses.

Demographics

According to the 2016 Census, 88% of the housing types are single detached houses, which is higher than the City of Edmonton average (49%). Apartments/condos make up 3%, duplex/fourplex 7%, and row houses 2%.
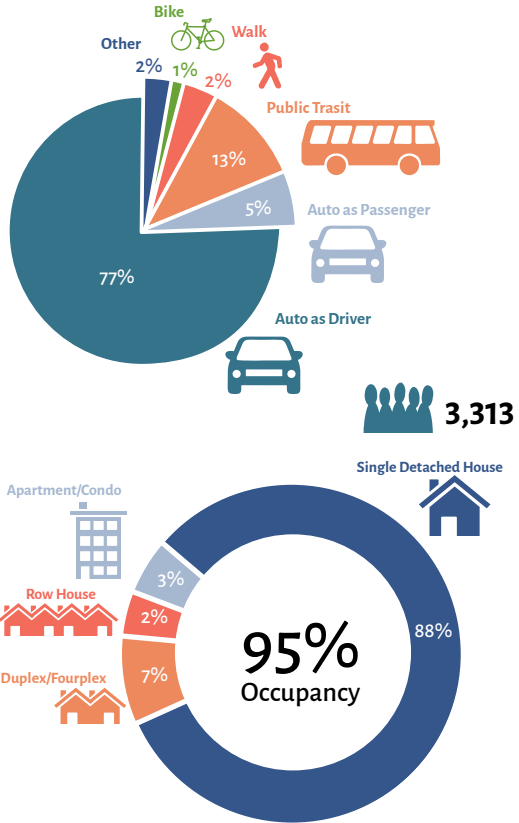
82% of the population drive to work, including 5% as passengers. 13% use public transit, 2% walk, 1% bike, and 2% use other types of transportation to get to work.

Schools

St. Vladimir Catholic Elementary School - Edmonton Catholic Schools
- 155 students enrolled for 2020-2021 school year
- Kindergarten to Grade 6
- Programs: Regular Elementary and 100 Voices Pre-Kindergarten
- Attendance area: Portions of Balwin and Delwood from 70th Street west

Delwood School - Edmonton Public Schools
- 335 students enrolled for 2020-2021 school year
- Kindergarten to Grade 6
- Programs: Regular Elementary and French Immersion
- Attendance area: Delwood and Brintnell
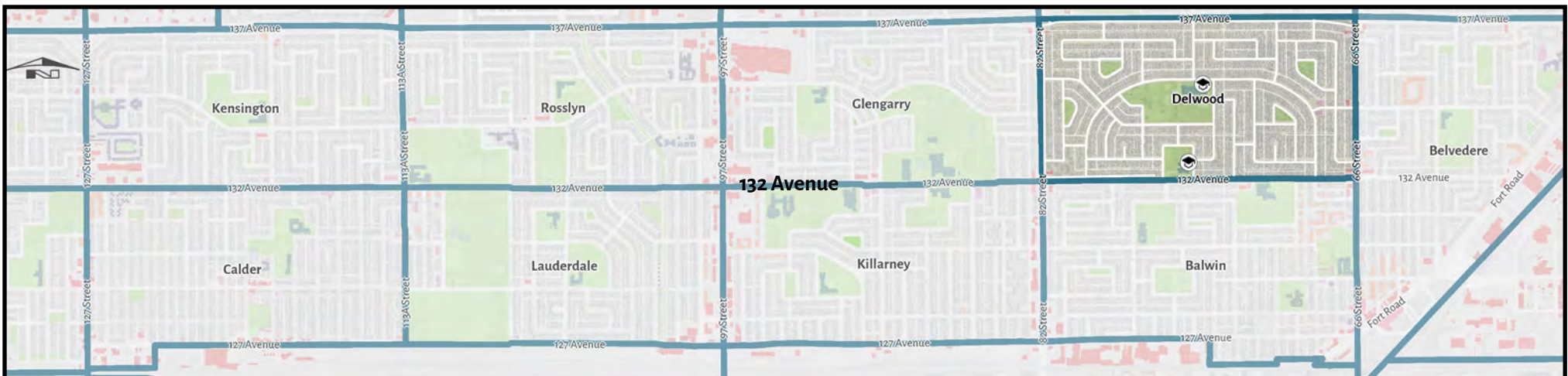
2.3.8　Balwin

History

Balwain was known as Packingtown at the beginning of the 20th century. The meatpacking plants nearby employed many of the neighbourhood families. The eastern portion of the neighbourhood was subdivided pre-WWI, and the western part was subdivided in the late 1950s. As a result, the street pattern is a modified grid. The neighbourhood is bounded by 82 Street, 127 Avenue, 66 Street, and 132 Avenue.

Development

The neighbourhood has multiple pocket parks and five large park facilities related to the neighbourhood schools, community league, and the Balwin Assisted Living residence. Commercial zones are at the neighbourhood edges.

Demographics

According to the 2016 Census, 59% of the housing types are single detached houses, which is higher than the City of Edmonton average (49%). Apartments/condos make up 23%, duplex/fourplex 12%, and row houses 6%.

79% of the population drive to work, including 4% as passengers. 14% use public transit, 3% walk, 1% bike, and 3% use other types of transportation to get to work.

Schools

Balwin School - Edmonton Public Schools
- 390 students enrolled for 2020-2021 school year
- Kindergarten to Grade 9
- Programs: Regular Elementary and Special Education
- Attendance area: Balwin, Brintnell, Delwood, Belvedere, and Yellowhead Corridor East neighbourhoods

Princeton Elementary School - Edmonton Public Schools
- 145 students enrolled for 2020-2021 school year
- Kindergarten to Grade 6
- Programs: Regular Elementary and Special Education
- Attendance area: Western portion of Balwin

St. Francis of Assisi Elementary School - Edmonton Catholic Schools
- 255 students enrolled for 2020-2021 school year
- Kindergarten to Grade 6
- Programs: Nehiyaw Pimatisiwin Cree Language and Culture Program, Full Day Kindergarten, Small Group Learning, and English Language Learning
- Attendance area: Balwin

Bike 1% · Other 3% · Walk 3% · Public Transit 14% · Auto as Passenger 4% · Auto as Driver 75%

3,822

Single Detached House 59% · Apartment/Condo 23% · Row House 6% · Duplex/Fourplex 12% · **87% Occupancy**

132 Avenue

2.3.9 Belvedere

History

Portions of the Belvedere were originally part of the village of North Edmonton, which was annexed to Edmonton in 1910. The Swift Company Packing Plant opened in 1908, south of Fort Road, which encouraged development in the area. Fort Road was a critical connector between Edmonton and Fort Saskatchewan. As Fort Road began to develop, residential subdivision started slowly. Most of the residential development occurred in the 1950s and 1960s. Belvedere was on the outskirts of Edmonton until 1964 when the Town of Beverly was annexed.

The Fort Road commercial district has many historic buildings and businesses that, throughout the 20th century, opened and closed, leaving a trace of its industrial history. For example, the Canadian Packers Plant was built in 1936 and was closed in 1984, then demolished in 1995, but the smokestack still stands today.

Development

The neighbourhood is bounded by 66 Street, 137 Avenue, and Fort Road, creating a triangle formation at the end, with 132 Avenue dividing the neighbourhood. The street pattern is consequently a modified grid pattern both south and north of 132 Avenue.

Demographics

According to the 2016 Census, 34% of the housing types are single detached houses, which is lower than the City of Edmonton average (49%). Apartments/condos make up 49%, duplex/fourplex 7%, institution/collective residence 6%, and row houses 4%.

74% of the population drive to work, including 5% as passengers. 18% use public transit, 4% walk, and 3% use other types of transportation to get to work.
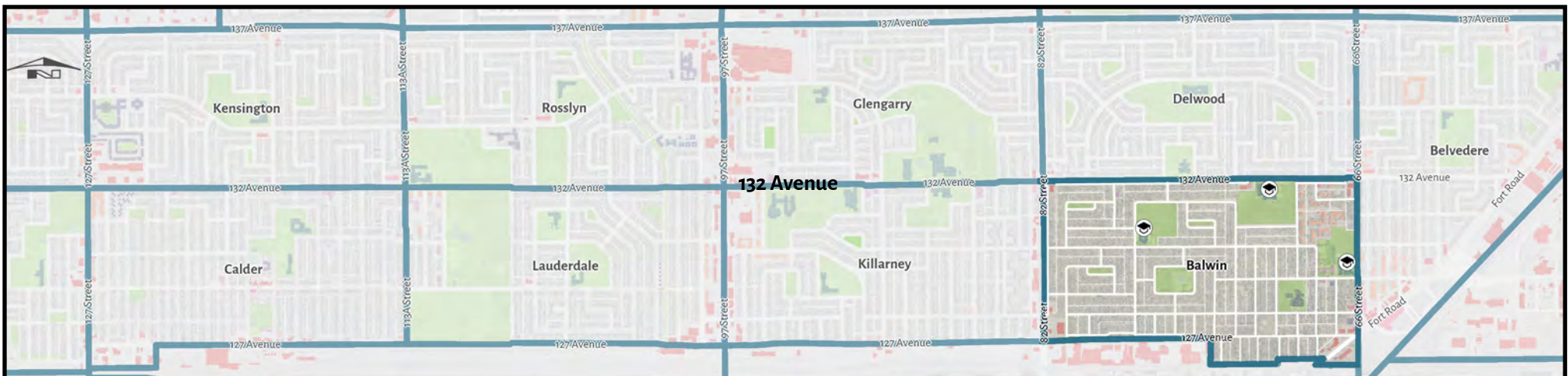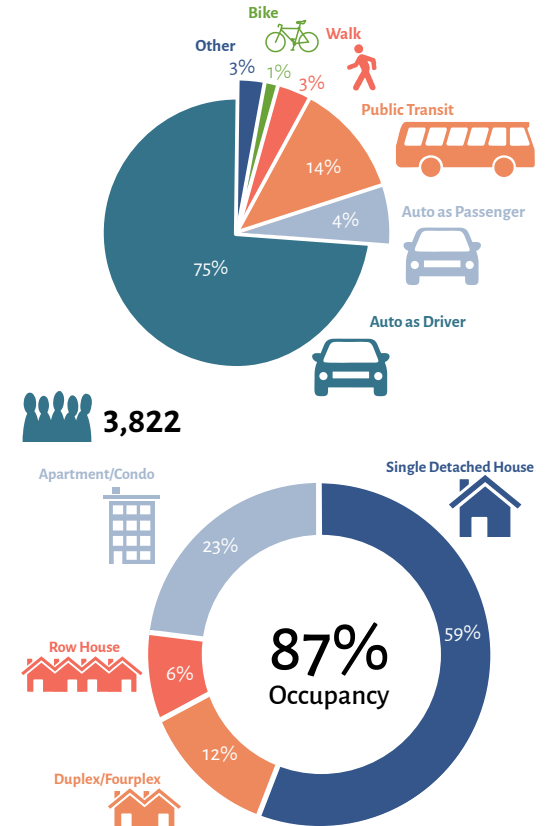
Schools

Belvedere School - Edmonton Public Schools
- 220 students enrolled for 2020-2021 school year
- Kindergarten to Grade 6
- Programs: Regular Elementary
- Attendance area: Belvedere north of 129 Avenue, Cy Becker, and the northern section of McConachie
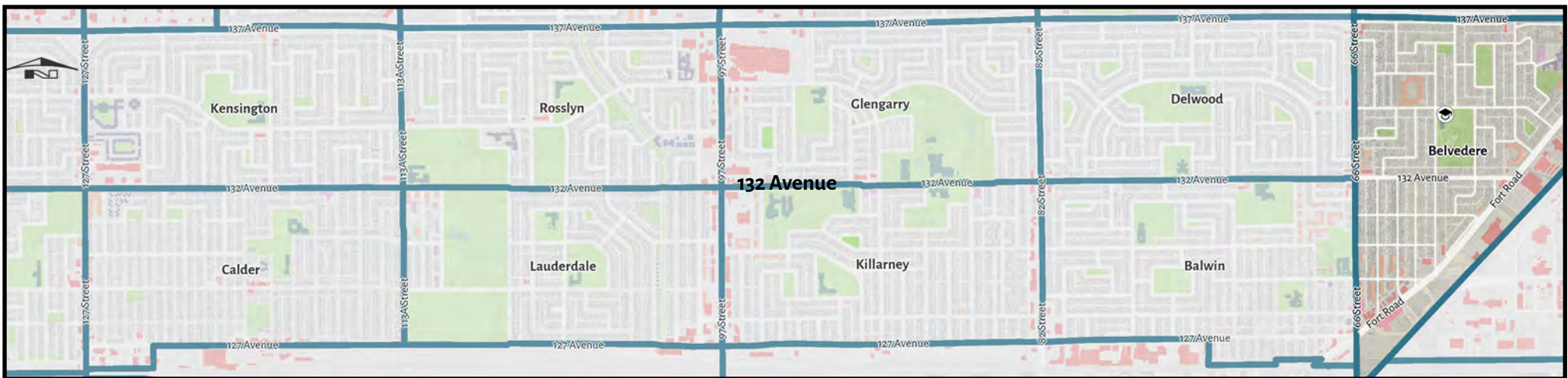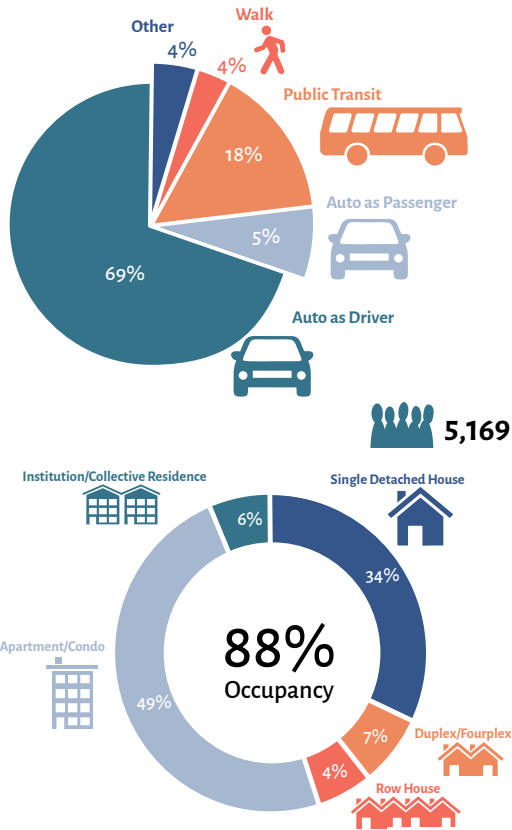
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2.4 Policy and Standards Review

The following City of Edmonton standards, policies, and programs provide guidance for 132 Avenue renewal. As every neighbourhood is unique, the project team considers these standards, policies and programs, the perspectives of residents and stakeholders, who live, work, and play along 132 Avenue, and technical aspects such as roadway and sidewalk standards, conflicts with utilities, site conditions, vegetation and aesthetics to make project decisions.

2.4.1 General City Guidelines and Standards

2.4.1.1 Connect Edmonton

Connect Edmonton is an overarching strategy put forward by the City of Edmonton to unify and connect all Edmontonians. The strategic plan for Connect Edmonton is to engage through workshops, small group discussions, public engagement sessions, social media, and surveys from now until 2028 to establish the true vision and future for 2050. The plan is an invitation to focus on how to implement the four main goals: Healthy City, Urban Places, Regional Prosperity and Climate Resilience. These goals show how the people of Edmonton can collaborate, act, and set transformational change that will positively impact the city.

2.4.1.2 City Plan

As Edmonton is continuously growing and evolving, an overriding plan must be in place to guide this growth to ensure the benefits of what we currently enjoy are enhanced, while providing opportunities for Edmonton in the future. The City Plan centers around the public realm and how we move around the city, focusing on connectivity, growth, and community to build a city for two million people, within the current city boundary. The recently adopted City Plan combines several plans and documents such as The Way We Move, The Way We Grow, The Municipal Development Plan (MDP), and the Transportation Master Plan (TMP), by incorporating their principles into one comprehensive plan to successfully move forward. Combining the MDP and TMP into one comprehensive plan, allows for a coordinated effort between internal City of Edmonton departments and neighbouring municipalities to undertake future planning of land use, growth patterns, and transportation systems.

In the structure of the City Plan there are five "Big City Moves" - Greener as We Grow, A Rebuildable City, A Community of Communities, Inclusive and Comprehensive, and Catalyze and Converge - each of these initiatives are opportunities to transform the city. 132 Avenue Renewal designs can make an impact in planting more trees, implementing stormwater management practices, and encourage active transportation with multi-modal applications to achieve the 15-minute district. The theory behind the 15-minute district is to create small towns in our big city, where people can meet many of their daily needs locally.

2.4.1.3 Winter Design Guidelines

Being the northernmost city in North America with a population of over one million, the people of Edmonton live with sub-zero temperatures and short periods of daylight for a good portion of the year. To improve the safety, useability, and aesthetics of streetscapes in the city during the winter months, the City of Edmonton adopted The Winter Design Guidelines in 2016. The guidelines outline design strategies to facilitate vibrant street life during the winter months. These approaches aim to:

- Incorporate design strategies to block wind, particularly prevailing winds, and downdrafts.
- Maximize exposure to sunshine through orientation and design.
- Use colour to enliven the winterscape.
- Create visual interest with light, while being mindful of intensity, spread, contrast, and colour.
- Design and provide infrastructure that supports desired winter life and improves comfort and access in cold weather.

These five main principles can be applied in all contexts and all scales. For the 132 Avenue Renewal these design strategies have the potential to ensure a vibrant design throughout the winter and shoulder seasons.

2.4.1.4 Edmonton Zoning Bylaw 12800

Main Streets Overlay

The focus for the Main Streets Overlay is to support high quality, pedestrian-oriented development along Edmonton's main streets. 132 Avenue intersects with numerous main street overlay segments, which are along the intersecting arterial roads of 127 Street, 113A Street, 97 Street, and 82 Street. Since the renewal of 132 Avenue will overlap each of these commercial areas, the project team will consider ways to enhance the pedestrian realm.

Fort Road Major Commercial Corridor Overlay

Fort Road, located on the East end of the 132 Avenue corridor, is designated as a Major Commercial Corridor. The purpose for designating the Fort Road Corridor as a Major Commercial Corridor overlay, is to ensure all development along the corridor follows certain guidelines, which attempt to create architecturally pleasing and pedestrian oriented spaces.

2.4.2 Accessibility City Guidelines

2.4.2.1 Access Design Guide

The purpose of the Access Design Guide is to promote accessibility in all public spaces. It guides the development and implementation of infrastructure projects to be designed in an inclusive way for all ages and abilities. The Access Design Guide provides planning and design guidelines for exterior and interior spaces. This project will be following the guidelines of the exterior guide, which includes general public open space, park amenities, vehicular access, and exterior paths of travel. When applying these guidelines to street renewal, close attention must be paid to signage, street crossings, curb ramps, street furniture locations, and the traveled way.

2.4.3 Transportation City Guidelines and Standards

2.4.3.1 Complete Streets Design and Construction Standards

The streets of Edmonton serve many purposes, conveying people who walk, bike, and drive, and provide circulation for city life. Streets and their pedestrian zones make up the largest amount of public realm within a city. How they correlate with their connecting buildings and adjacent uses is vital to a dynamic and diverse city. Adopted by the City of Edmonton in 2018, the Complete Streets Design and Construction Standards have outlined a comprehensive way of looking at and designing streetscapes.

The Complete Streets Design and Construction Standards main objectives are inclusive of all forms of transportation to create a network of streets that are safe, comfortable, and convenient for everyone, regardless of age or ability. This holistic approach to street design requires looking at the balance between safety, functionality, aesthetics, and sustainability of the street. When considering a street for renewal, the City looks closely at the current condition and functionality of the corridor, then looks for ways to enhance the street to facilitate multi-modal transportation and achievement of the desired goals.

The following Complete Streets Design and Construction Standards' elements state how streets can be more than a corridor, they can be a destination – a place where we can enjoy the journey from point A to B:

- Complete streets form a network of streets, transit routes, and off-street pathways that together accommodate all users and allow for efficient and high-quality travel experiences.
- The transportation network provides travel options for users of all ages and abilities that are safe, universally designed, context sensitive, and operable in all seasons (including winter).
- Streets are adaptable by accommodating the needs of the present and future.
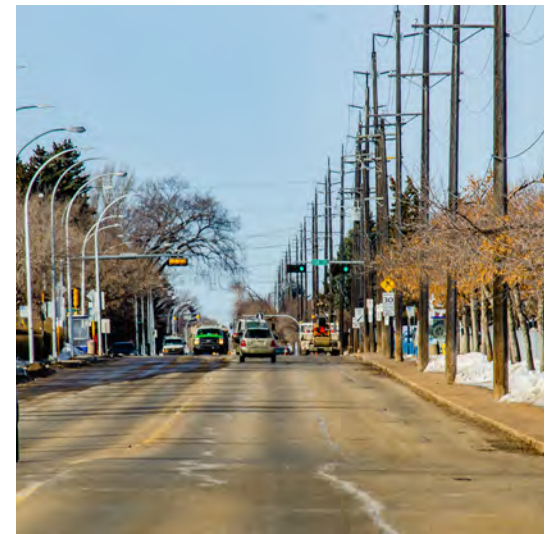
- Streets contribute to the environmental sustainability and resiliency of the city.
- Planning and design considers both direct and indirect costs, as well as the value of the public right of way and the adjacent real estate.
- Streets are vibrant and attractive places in all seasons to contribute to an improved quality of life .

2.4.3.2   Active Transportation Policy

With the increase of alternative transportation in Edmonton, to support the rise in active and alternative transportation, the City of Edmonton adopted the Active Transportation Policy in 2009. The goal of the policy is to facilitate and maximize opportunities throughout the city for any form of human-powered transportation. The policy supports this initiative by enhancing infrastructure, raising awareness, educating about transportation systems, enacting bylaws, and sharing responsibility for infrastructure. This policy ensures that in redesigning 132 Avenue, the project team will optimize and increase opportunities for people who walk, wheel, and cycle to be inclusive of all demographics.

2.4.3.3   Safe Mobility Strategy

The Safe Mobility Strategy has the main objective of achieving Vision Zero in Edmonton. Endorsing safe and liveable streets in Edmonton is the principal function of this initiative. The City of Edmonton will shape the Safe Mobility Strategy with a combination of input from the public, technical data, and academic research.

The City of Edmonton has a long-term goal of reaching zero fatalities or serious injuries caused by traffic collisions. As part of the City's Road and Safety Strategy, Edmonton adopted Vision Zero, becoming the first major city in Canada to do so. Dedicated to improving road safety for everyone, regardless of the mode of transport, Vision Zero uses engineering, enforcement, evaluation, education, and engagement to assist in achieving this initiative.

2.4.3.4   Bike Plan

The City of Edmonton is committed to implement a bike network to provide alternative modes of transportation. Creating an extensive bike network throughout the city will support and encourage an increase in active transport. Published in 2020, the Bike Plan is a revised and updated version of the 2009 Bicycle Transportation Plan. The primary goal of the Bike Plan is to encourage biking in Edmonton as a viable choice of travel, no matter age, ability, or season.

132 Avenue is designated as a Future Neighbourhood Route. Implementation of a continuous bike facility is a priority for this project.

2.4.4   Low Impact Development (LID)

2.4.4.1   EPCOR Standards

EPCOR Design and Construction Standards (EPCOR Standards), Vol. 3, Aug. 2020, will be applied to the 132 Avenue renewal, including development of Low Impact Development (LID) facilities that are may be proposed within 132 Avenue.

EPCOR Standards govern the planning, design, and construction of new and retrofit wastewater and stormwater infrastructure projects in the City of Edmonton. EPCOR Standards also include specific LID standards that govern the development of LID facilities such as bioretention gardens, bioretention basins, box planters, and soil cells that are owned and operated by EPCOR.

2.4.4.2   Other LID Guidelines

In addition to the governing LID standards contained in the EPCOR Standards, the City of Edmonton maintains a set of resource documents that inform the LID planning, design, construction, and maintenance processes. These include:
- LID Best Management Practices Design Guide, Ed 1.1 (2014)
- LID Construction, Inspection & Maintenance Guide, Ed. 1.0 (2016)
- LID Construction, Inspection & Maintenance Field Handbook, Ed. 1.0 (2016)

The 132 Avenue renewal will include development of LID facilities through careful application of the EPCOR Standards and the City of Edmonton LID guide documents described above. Through this application of standards and guides, LID facilities within 132 Avenue will help attenuate the stormwater runoff and improve quality runoff before it is released downstream. Implementation of LID facilities is also intended to reduce the risk of surface water flooding and property damage in some areas. Other benefits of implementing LID facilities in the 132 Avenue renewal include inherent creation of natural areas that will offer visual amenities and greater biodiversity, thus offsetting the urban roadway environment dominated by hard surfaces and urban heat island effect.

2.4.5   City Projects

2.4.5.1   Residential Speed Project

Edmonton City Council has approved Bylaw 19283 in June 2020, to reduce all residential and collector speed limits to 40 km/hr. This change will reduce the default unposted speed limits in Edmonton from 50km/hr to 40km/hr. Changes are expected to take effect summer 2021.

132 Avenue is currently a noted exception to the 40km/h speed limits, and it will remain at 50km/h until it is reconstructed with 132 Avenue renewal to a 40km/h design speed.

2.4.5.2   Metro Line North LRT

Edmonton's Light Rail Transit (LRT) is a large investment in the future of the City. LRT expansion will help reduce travel times as traditional vehicle congestion increases with the growth of the City. The Metro Line is the first expansion from the original LRT line, the Capital Line. Currently, the Metro Line connects downtown Edmonton to the Northern Alberta Institute of Technology (NAIT). The future extension of the Metro Line will connect to St. Albert, passing through several key activity centres in North Edmonton. As the Metro Line moves North towards St. Albert, the City will add new transit hubs. The connectivity between the surrounding communities to these transit hubs is critical to be able to provide residents with a sustainable, efficient, and reliable transit system.

The future extension of the Metro Line is proposed to pass straight north along 113A Street. According to the concept plans, there is a proposed stop/station at the intersection of 132 Avenue and 113A Street. This future impact is important to consider when redesigning 132 Avenue.

2.4.5.3   Adjacent Neighbourhood Renewal

The Neighbourhood Renewal Program is in place to rehabilitate roads, replace street lights, curbs and gutters, repair sidewalks, and connect missing sidewalk links where possible. Other opportunities exist to improve parks and public spaces, depending on the needs of the neighbourhood. In the context of the 132 Avenue Renewal, Killarney and Calder are two neighbourhoods currently undergoing neighbourhood renewal. Coordination between project teams for these projects will be required.

Calder Neighbourhood Renewal

Calder neighbourhood will undergo Neighbourhood Renewal from 2021 to 2023. Calder public engagement feedback will be reviewed and considered as part of the 132 Avenue planning & design process.

Killarney Neighbourhood Renewal

Killarney neighbourhood will undergo Neighbourhood Renewal from 2021 to 2023. Killarney public engagement feedback will be reviewed and considered as part of the 132 Avenue planning & design process.
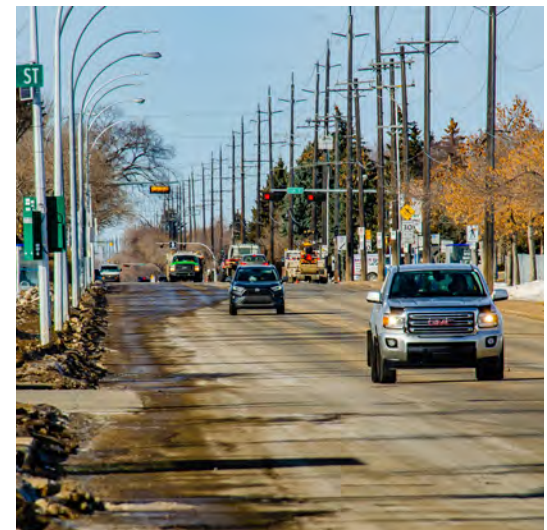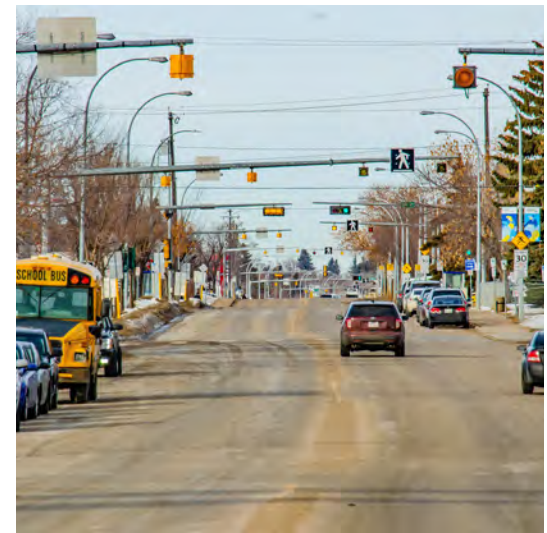
2.4.5.4   Park Plans and Renewal

Queen Elizabeth School Park Master Plan

As a District Park located in the Killarney neighbourhood, Queen Elizabeth School Park has a completed Master Plan and Concept Plan. Further implementation of the design is dependent on available funding. The project team will need to consider how this project will interface with the design of the 132 Avenue Renewal.

Glengarry District Park Renewal

The Glengarry District Park is being renewed with construction starting in 2021. This park is within the study area for 132 Avenue. The project team will need to consider how this project will interface with the design of the 132 Avenue Renewal.

2.4.5.5   Balwin & Belvedere Neighbourhood Revitalization

The communities of Balwin and Belvedere have been identified for Neighbourhood Revitalization. Neighbourhood Revitalization is a program which uses community development to identify strengths and assets of the neighbourhood. This program relies on the important and unique perspective of each community member. The City of Edmonton engaged with the community members of Balwin and Belvedere in 2018-2019 to identify future opportunities.

Some opportunities identified included increased park lighting, safer walking and cycling routes, and safer pedestrian crossings at roadways. The 132 Avenue renewal will consider these ideas through design.

2.4.5.6   Corner Store Program

The Corner Store program is a grant program to provide financial support to neighbourhood commercial nodes and properties that provide commercial services to the local community. This program is designed to revitalize and invest in existing local businesses. There are three types of grants: an Exterior Corner Store Grant, an Interior Corner Store Grant, and a Small Business Support Grant.

The Exterior Corner Store Program, which is most applicable for 132 Avenue Renewal, has several design outcomes, including:
- Improvements contribute to a lively pedestrian experience.
- Improvements support the business(es), building, and neighbourhood.
- Improvements are focused on people, not cars.
- Improvements address all four seasons.
- Improvements support accessibility.
- Improvements contribute to safe streets.

Properties with off-street front parking lots must improve the connection to increase safety for pedestrians between the building and sidewalk.

2.4.6   Other Supporting Documents

These supporting documents are publications and non-City standards that the project team will refer to as supplemental material to the City resources. Each supporting document provides a different perspective to streetscape design and offers further design solutions and inspiration for 132 Avenue Renewal.

2.4.6.1   NACTO Guidelines

National Association of City Transportation Officials (NACTO) has developed a series of publications looking at designing cities from a global perspective. Designing Streets for Kids is a guide to develop designs that focus on pedestrians first, and more specifically, the importance of designing for kids. The focus is the individual requirements set forward to create safe, healthy, comfortable, and accessible cities for all users.

2.4.6.2 NACTO Urban Street Stormwater Guide

The Urban Street Stormwater Guide is a guide to visualize the possibilities of designing streets that are resilient. These global perspectives turn our outlook to creative solutions and practices to develop multi-functional streets while protecting our natural resources.

2.4.6.3 CROW Design Manual for Bicycle Traffic

The CROW Design Manual for Bicycle Traffic is published in The Netherlands and is regarded as one of the most comprehensive bicycle facility design manuals in the world. It is based on decades of practical knowledge and observed operation and design of bicycle facilities in The Netherlands. This resource provides a wide range of bicycle facilities and outlines when different facilitates may be desired, while providing guidelines for design dimensions and other considerations.

2.4.6.4 Crime Prevention Through Environmental Design (CPTED)

Crime Prevention Through Environmental Design (CPTED), provides design principles to apply when designing urban infrastructure. These include natural surveillance, access control, territorial reinforcement, and space management. CPTED principles will be considered in the design of 132 Avenue renewal by improving sightlines through appropriate planting design, providing safe pedestrian connections and surfaces and implementing traffic calming measures to reduce vehicular speeds.

2.5 Complete Streets Analysis

Within the Complete Streets Design and Construction Standards there are four main points and one over-arching question used to guide the analysis.

Link and/or Place – Streets can function not just as a link between places, but as a social space with an important relationship with the places where people live, work, and play. They can be designed to enable commercial activities and social interaction, and form an integral part of the ecosystem that supports environmental and ecological sustainability and biodiversity. They can also have distinct aesthetics and a range of users, which attracts more users and creates a street character that transforms the street into a Place and a destination in its own right. When one utilizes streets as both Links to get us around, and Places where we can spend time, this public space becomes more valuable to a city's residents and businesses.

Safety – The City of Edmonton has always strived to consider the safety of all users as the highest priority in the street design process. However, ongoing changes to Edmonton's transportation system, including increased mode shift to public transportation and demand for multi-modal options, has in recent years required a more holistic approach to designing and operating an increasingly complex transportation system. Furthermore, to increase safety, greater emphasis must be placed on a proactive and strategic process in the design and operation of Edmonton streets.

Universal Design – Social inclusion underscores Universal Design, which addresses the barriers faced by people with disabilities, older people, children, and other populations that in the past may have been overlooked in the design process. In so doing, streets are designed for the movement of all people at various stages of life and regardless of ability.

Winter – When a street is designed with winter in mind, it will be comfortable in all seasons. Winter city design also means designing facilities with consideration to the maintenance and operations that occur due to the impacts of snow accumulation and snow clearing.

Modal Priority – Modal Priority is a term that refers to the hierarchy of transportation modes (such as walking and wheeling, cycling, transit, driving, and goods movement) that a street is designed for depending on the street type.

> *"The goal of complete streets is to create a network of streets that are safe, welcoming, attractive, comfortable and functional for all users in all seasons - that support and enhance the unique characteristic of the neighbourhoods and districts they serve."*

Winter

Safety

Universal Design

Place

Modal Priority

Link
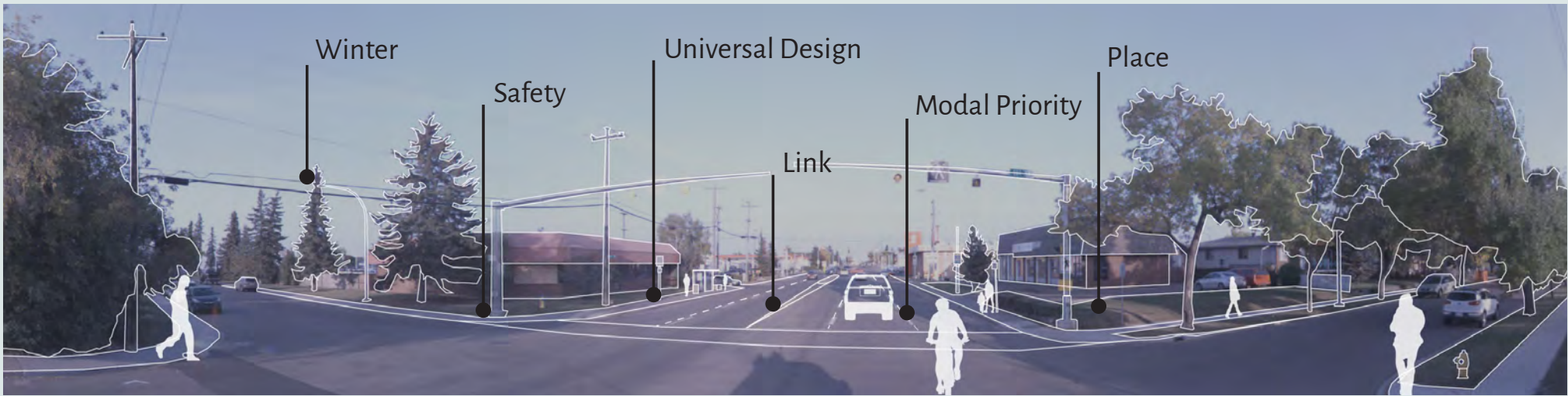
2.5.1 Existing Conditions

The following five cross-sections illustrate specific locations along 132 Avenue, representative of the range of existing conditions along the collector roadway.

Traveling down 132 Avenue, the cross-sections frequently change. There are 40 different street conditions with variations in road widths, service roads, boulevards, sidewalks, medians, and parking zones - which makes redesign complex and site-specific context important.

In many instances, the roadway is in poor condition and no longer meets City standards. While analyzing these inconsistencies and existing street conditions, the project team has identified specific challenges and observations through the lens of the Complete Streets Design and Construction Standards. Each challenge and observation identifies street amenities that are below standard with limited accessibility for people who walk, bike, and wheel along 132 Avenue.

A. Existing Condition – 132 Avenue between 124 Street and 123 Street

Challenges and Observations

- The modal priority is driving.
- People walk on service roads where sidewalks are missing.
- Streetlight poles obstruct sidewalks.
- Sidewalks narrower than standard width results in limited connectivity, safety, and mobility.
- People biking share the roadway with people driving.
- Trees have been trimmed into Y-shapes to accommodate power lines.

Context Map

Single detached homes with back lanes front two-way service road

Missing sidewalk

Parking along service road

Power lines along treed boulevard

Four driving lanes wider than standard

Street lights on sidewalk that is narrower than standard width

Single detached home with back lane access

North

South

B. Existing Condition – 132 Avenue the Intersection at 109 Street

Challenges and Observations
- The modal priority is driving.
- Obstructed and missing sidewalk results in limited connectivity, safety, and mobility.
- No buffer space between people walking and vehicles.
- People biking share the roadway with people driving.
- There are no lane markings designating parking or driving lanes, which results in driver confusion.
- Desired paths created by human foot traffic cause erosion of landscaped right-of-way.
- Wide driving lanes encourage faster driving speeds.

Context Map

Rosslyn Park

Street lights obstructing sidewalk

Unmarked driving lanes wider than standard

Underused parking lanes are sometimes used as driving lanes

Grand Trunk Park
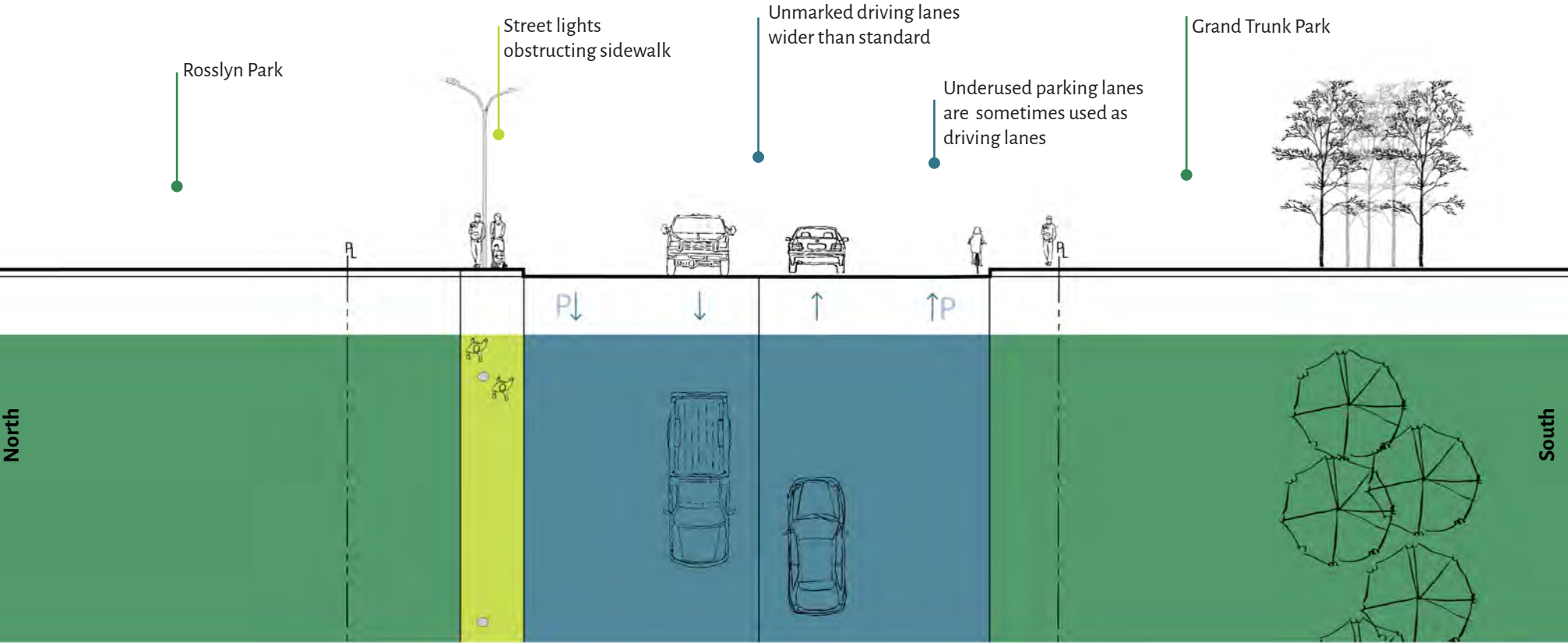
C. Existing Condition – 132 Avenue between 85 Street and 83 Street

Challenges and Observations

- The modal priority is driving.
- Missing sidewalk results in limited access and mobility. People have to walk on the service road or grass.
- Grassed boulevards require maintenance and provide little amenity or ecological value.
- People biking share the roadway with people driving.
- Parking lane acts as buffer between people walking and driving.
- Poor access to bus stop.

Context Map

Row houses with off-street parking lots flank service road

Standard width sidewalk

Parking

Boulevard with no trees

Four driving lanes wider than standard, with median

Boulevard with no trees.

Two-way service road

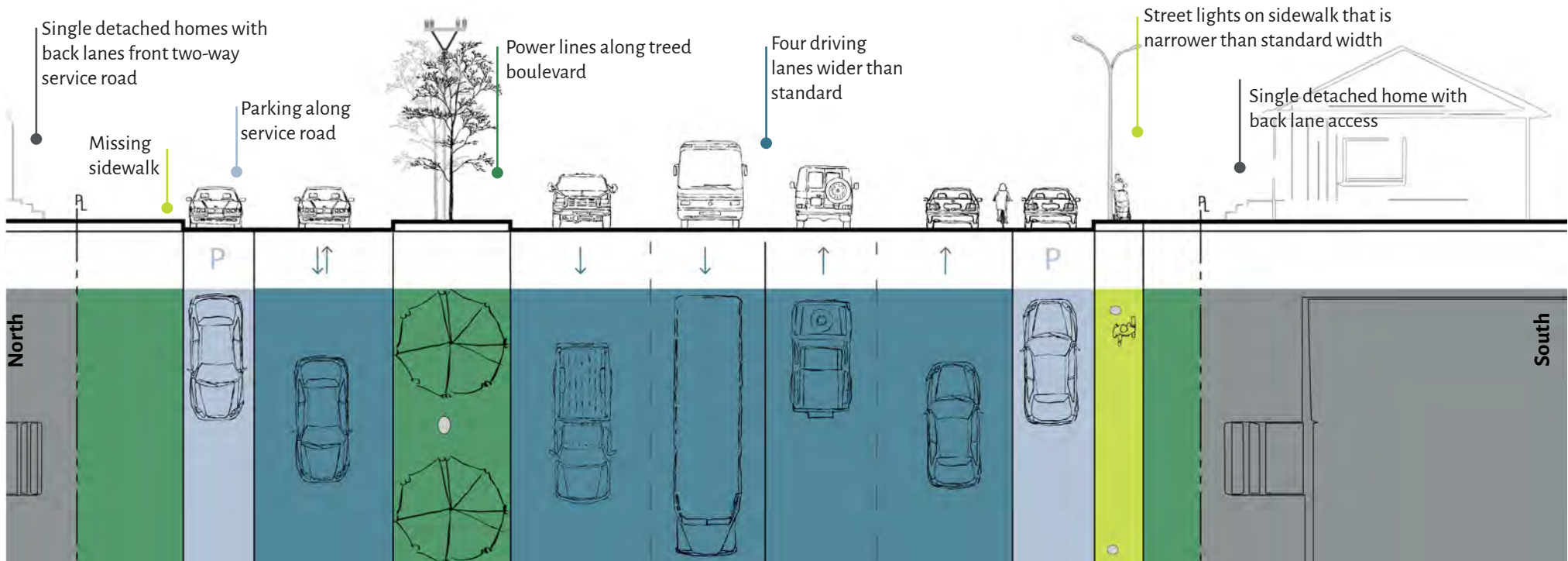Buildings flank roadway with front door access off service road

North

South

D. Existing Condition – 132 Avenue between 79 Street and 76 Street

Challenges and Observations

- The modal priority is driving.
- Below standard width of sidewalk results in limited access, safety, and mobility.
- Parking lane acts as buffer for people walking.
- People biking share the roadway with people driving.
- Narrow treed boulevards contain low soil volume and are subject to salt and chemicals from snow removal.
- Wide lanes encourage faster driving speeds.

Context Map

Single detached home with back lanes fronting service road

Sidewalk narrower than standard width

Treed boulevard

Four driving lanes wider than standard

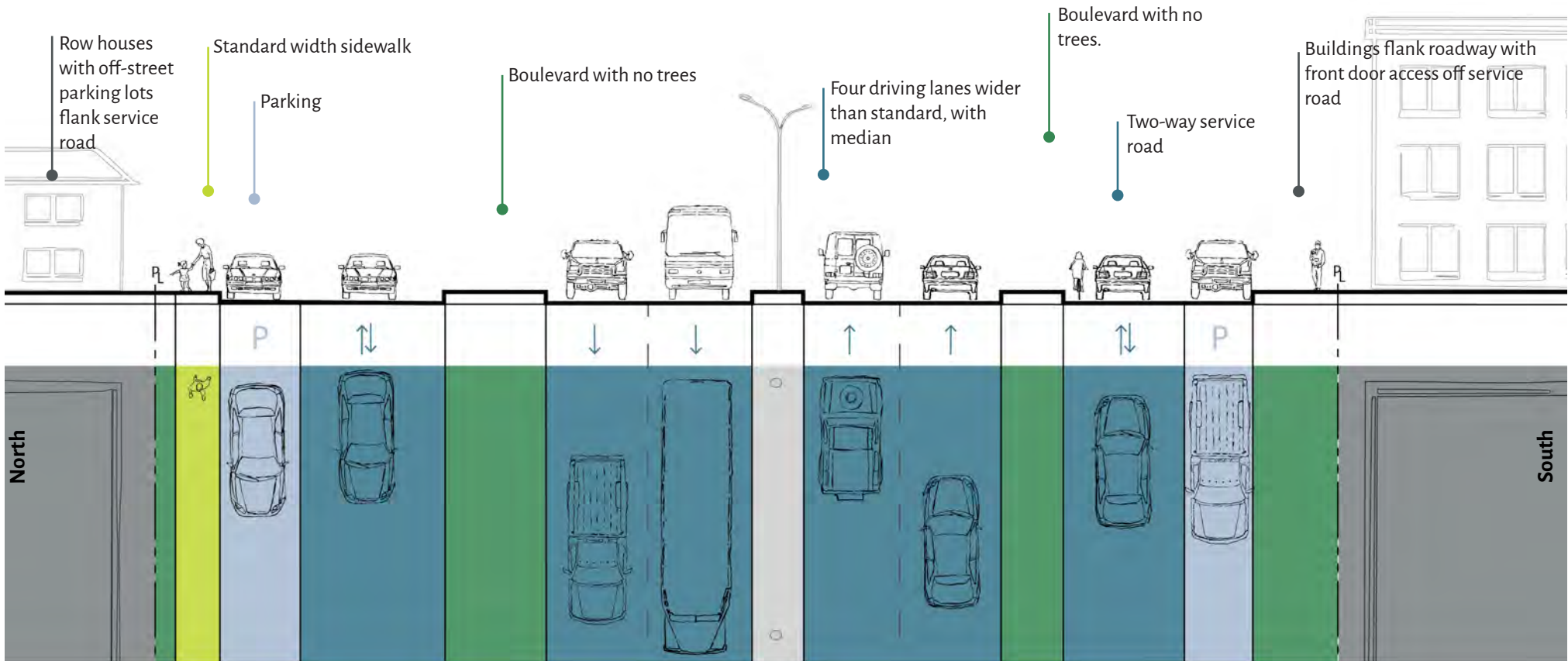Treed boulevard

Two-way service road

Parking along service roads
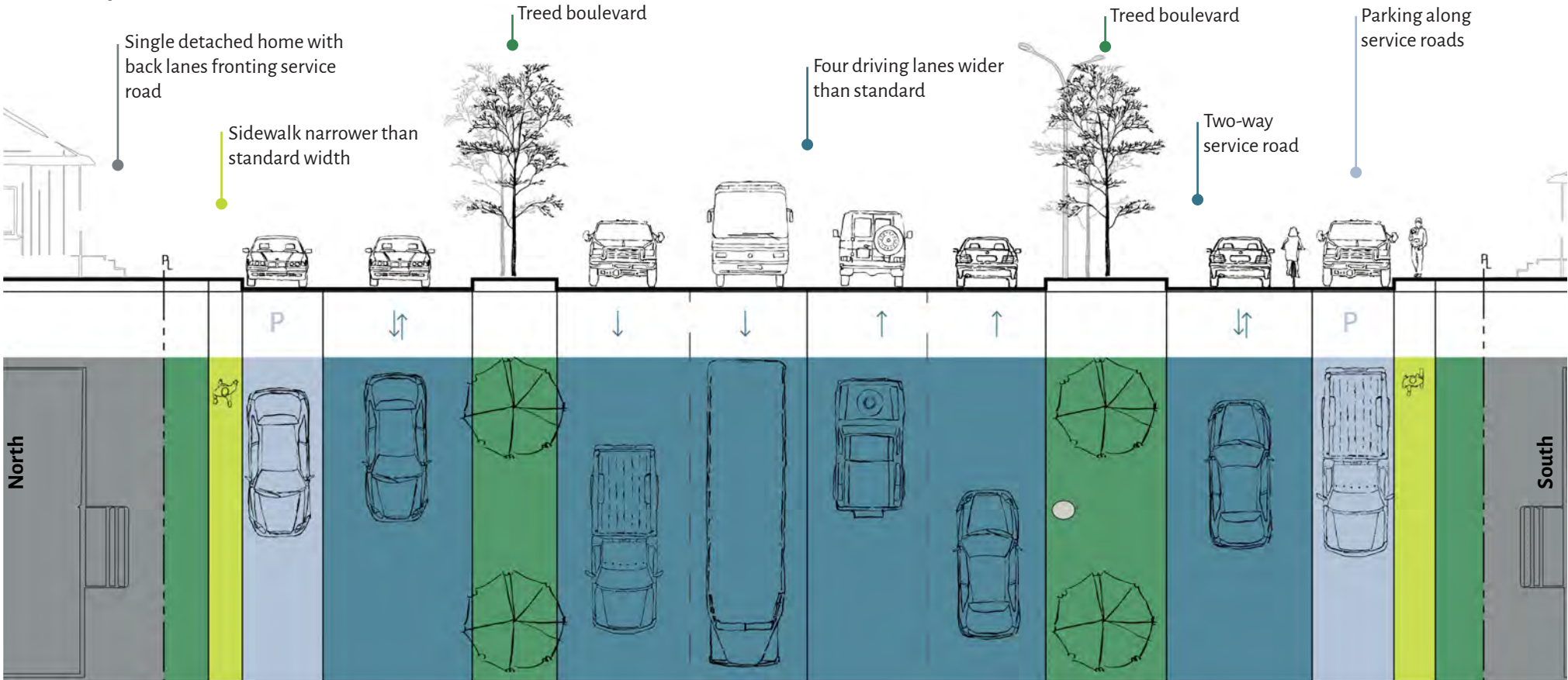
E. Existing Condition – 132 Avenue between 72 Street and 69 Street

Challenges and Observations

- The modal priority is driving.
- Underused parking lane used for school pick-up and drop-off.
- No buffer space between people walking and vehicles, results in limited safety.
- Obstructions on sidewalk results in limited mobility and safety issues.
- People biking share the roadway with people driving.
- Wide driving lanes encourage faster driving speeds.

Context Map

Single detached home with back lane fronting 132 Avenue

Obstructed sidewalk

Underused parking lane

Two driving lanes wider than standard

Parking lane used primarily during school drop-off & pickk-up

Obstructed sidewalk

Balwin School fronting roadway
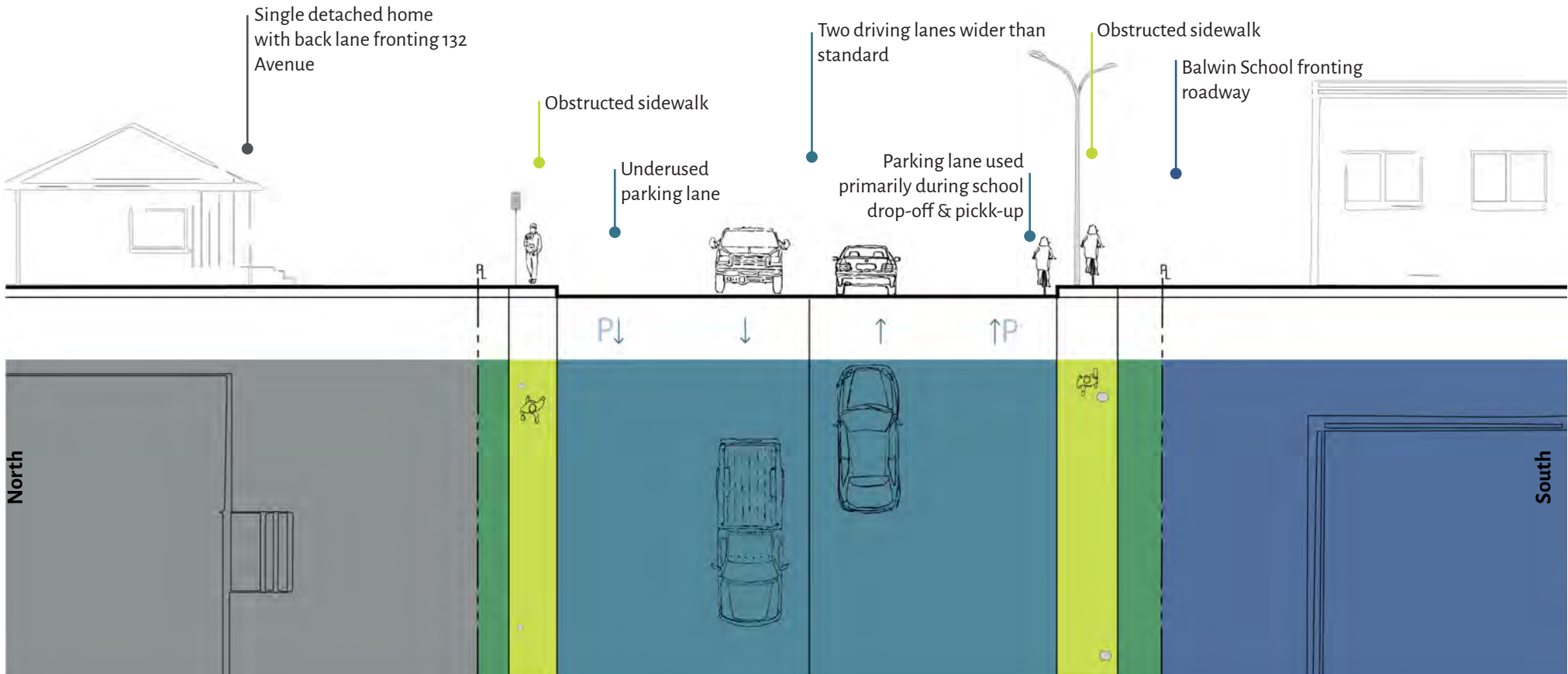
North

South

2.6 Land Use, Ownership, and Development Opportunities

The 132 Avenue corridor is predominantly residential neighbourhoods separated by main north-south arterial roads. There are a number of commercial sites, schools, parks, and religious assemblies, and health/seniors' residences.

2.6.1 Renewal, Revitalization, & Redevelopment Plans

Calder and Killarney are currently undergoing Neighbourhood Renewal. Park Renewal projects along the corridor include Glengarry District Park and Queen Elizabeth School Park.

The Belvedere and Balwin communities have worked with the City to develop a strategy for improvement. These communities have a Neighbourhood Revitalization program.

The Belvedere Station Area Redevelopment Plan (Transit ARP) has been established to promote efficient operation of LRT, automobile, and pedestrian traffic. The ARP also notes a desire to preserve the scale and character of the major portions of existing neighbourhoods by minimizing the adverse impacts of additional traffic and development.

These current plans and projects are highlighted on the maps in this section.

2.6.2 Future Development

Undeveloped land and vacant lots have been identified throughout the nine neighbourhoods as potential future development opportunities.

2.6.3 Commercial

Larger commercial properties are located along 132 Avenue near 127 Street and 97 Street. Smaller community commercial properties are located periodically along 132 Avenue. Neighbourhood commercial developments may be able to take advantage of the Corner Stores Grant Program to enhance their exterior and public realm surrounding the commercial sites.

2.6.4 Historic sites

Historic buildings are identified along the corridor and are concentrated in the Calder, Balwin, and Belvedere neighbourhoods. In Edmonton, historic buildings are categorized within the Inventory and Register categories. In the Inventory category, buildings are not legally protected but merit conservation. Buildings that are in the Register category are legally protected from demolition or inappropriate alteration under City Policy C450B.

The only three buildings in the 132 Avenue corridor that are included in the Register are located in Calder. Two are

Legend

- Undeveloped / Vacant Land
- Transit ARP
- Park Renewal
- Neighourhood Renewal
- Neighbourhood Revitalization
- ★ Historical Building
- Neighbourhood Commercial

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
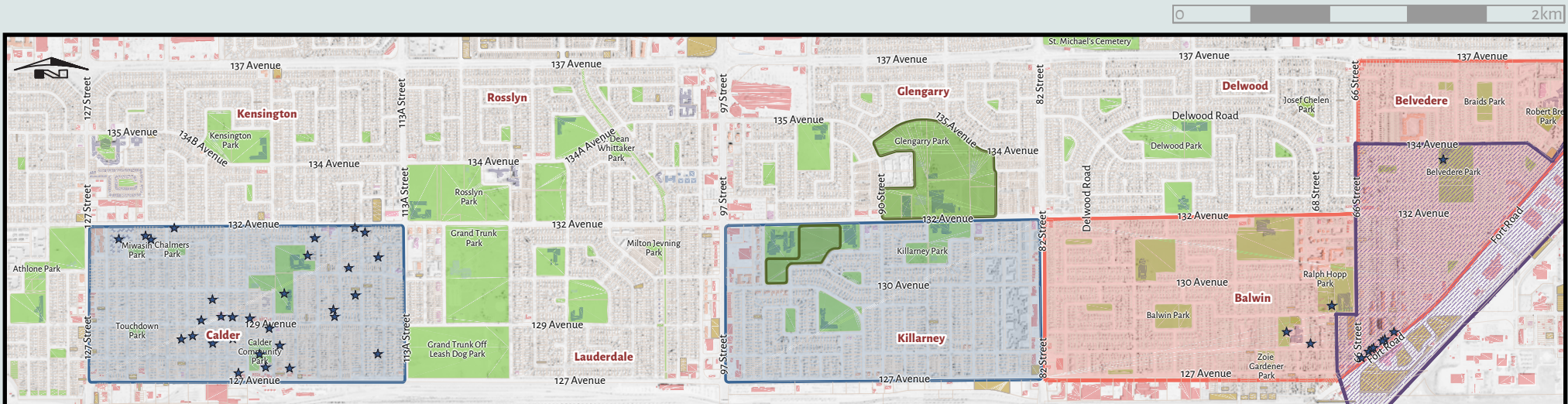
immediately south of 132 Avenue on 115 Street, and the third is at the Calder Community League near 127 Avenue. 132 Avenue renewal will need to ensure these historic buildings are not affected.

2.6.A   127 Street to 113A Street

The land use in this segment is predominantly residential with single family residences mainly fronting 132 Avenue or the service roads. There is a narrow boulevard between 132 Avenue and the north service road between about 118 Street and 120 Street.

Other residential forms include mid-rise apartments (the Terrace Garden Estates) and seniors housing (Shepherd's Care Kensington Village and Lions Kensington Court).

There are two commercial areas in this segment. Both sites likely draw customers who take transit, drive, and walk.

- Large commercial centre on the north side of the corridor between 124 Street and 127 Street.
- A mixed-use development at the corner of 113A Street and 132 Avenue that contains neighbourhood commercial properties.

There are several properties with designated historical status along this segment. Some of these sites may need additional consideration during design and construction. Historic buildings near 132 Avenue in the Register include:

- Coates Residence
- Frederick S. Jones Residence

Other buildings along 132 Avenue included in the Inventory:

- Chalmers United Church
- Kensington Court Seniors Home

The Calder neighbourhood is under Neighbourhood Renewal and construction will begin in 2021.
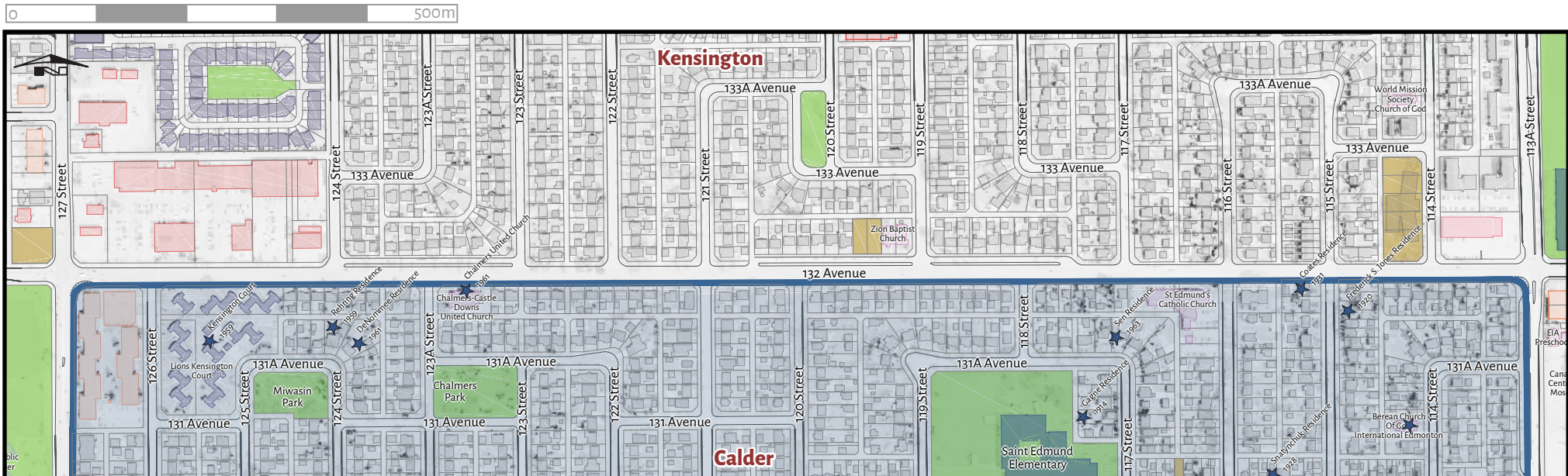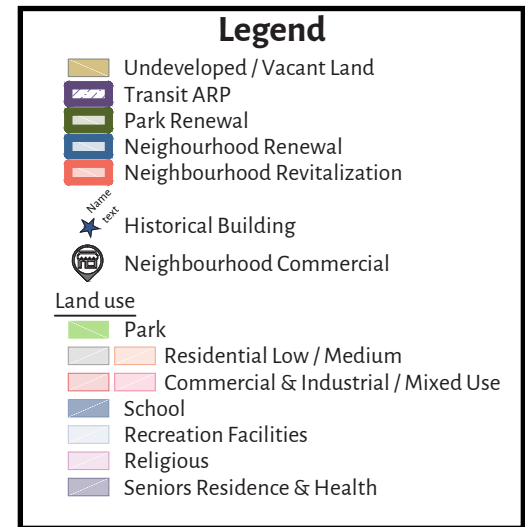
2.6.B   113A Street to 97 Street

This segment of the 132 Avenue corridor includes the Rosslyn and Lauderdale neighbourhoods. Both neighbourhoods have recently completed Neighbourhood Renewal: Rosslyn in 2016, and Lauderdale in 2017.

Land use patterns along this segment include large open green spaces along 132 Avenue in the west and primarily residential in the east. Major green spaces are connected to Rosslyn Junior High School and the Grand Trunk Fitness Centre. There is also a community green space above Epcor's Rosslyn Reservoir.

Most residences front 132 Avenue or the north and south service roads and include a mix of single-family and multi-family residential uses. There is a narrow boulevard between 132 Avenue and the south service road between 109 Street and 102A Street.

A large commercial zone runs north-south along 97 Street, and there are commercial properties along 132 Avenue between 101 Street and 97 Street.

There are no historic sites along this section of the corridor.

Legend

- Undeveloped / Vacant Land
- Transit ARP
- Park Renewal
- Neighourhood Renewal
- Neighbourhood Revitalization
- ★ Historical Building
- Neighbourhood Commercial

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
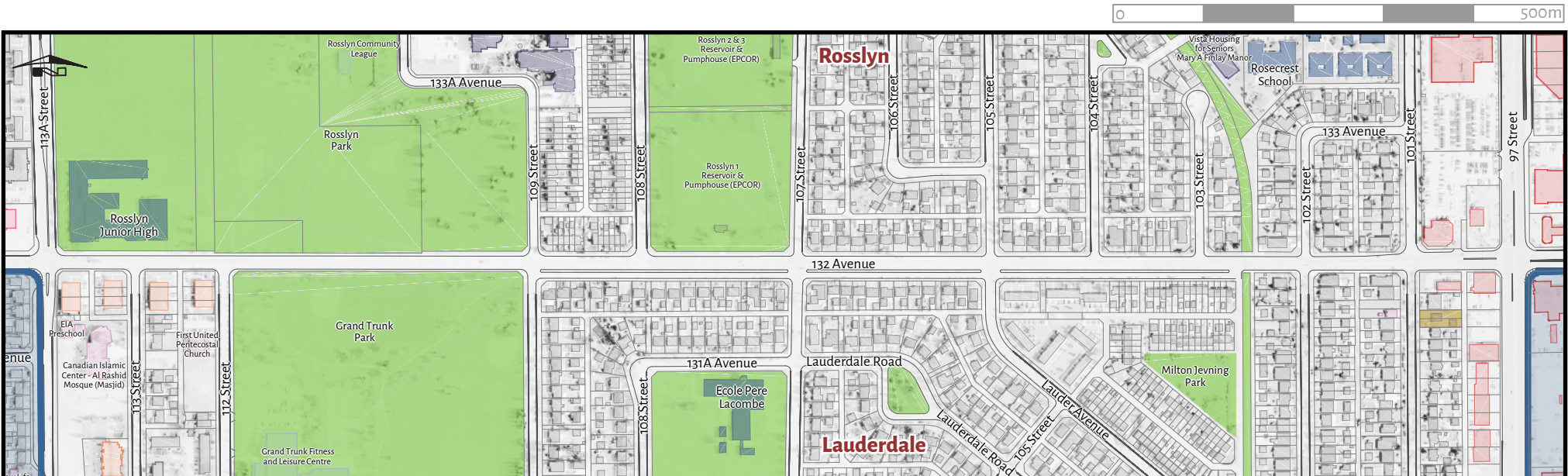
2.6.C 97 Street to 82 Street

This segment of the 132 Avenue corridor includes the Glengarry and Killarney neighbourhoods.

The land uses in this segment provides a mix of commercial, residential, and park space. These two neighbourhoods have a large amount of green space along 132 Avenue relative to the rest of the corridor due to the five schools that front 132 Avenue.

There are narrow boulevards between 132 Avenue and the north service road between 95 Street and 91 Street. There are narrow boulevards between 132 Avenue and service roads on both the north and south sides between about 86 Street and 83 Street.

There is a significant commercial corridor along 97 Street, and although these properties front 132 Avenue the main entrances to these sites are along 97 Street.

A smaller commercial zone is located near 82 Street.

There is a small neighbourhood commercial area between 90 Street and 91 Street that has a parking lot in front that is partially within the 132 Avenue road right-of-way. This unique situation will need to be considered through design.

There are no historic sites along this segment of the corridor.

The Killarney neighbourhood is under Neighbourhood Renewal and construction is scheduled to begin in 2022.

Queen Elizabeth School Park and the Glengarry District Park are both under park renewal – they currently have masterplans and concepts created.

Legend

- Undeveloped / Vacant Land
- Transit ARP
- Park Renewal
- Neighbourhood Renewal
- Neighbourhood Revitalization
- Historical Building
- Neighbourhood Commercial

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
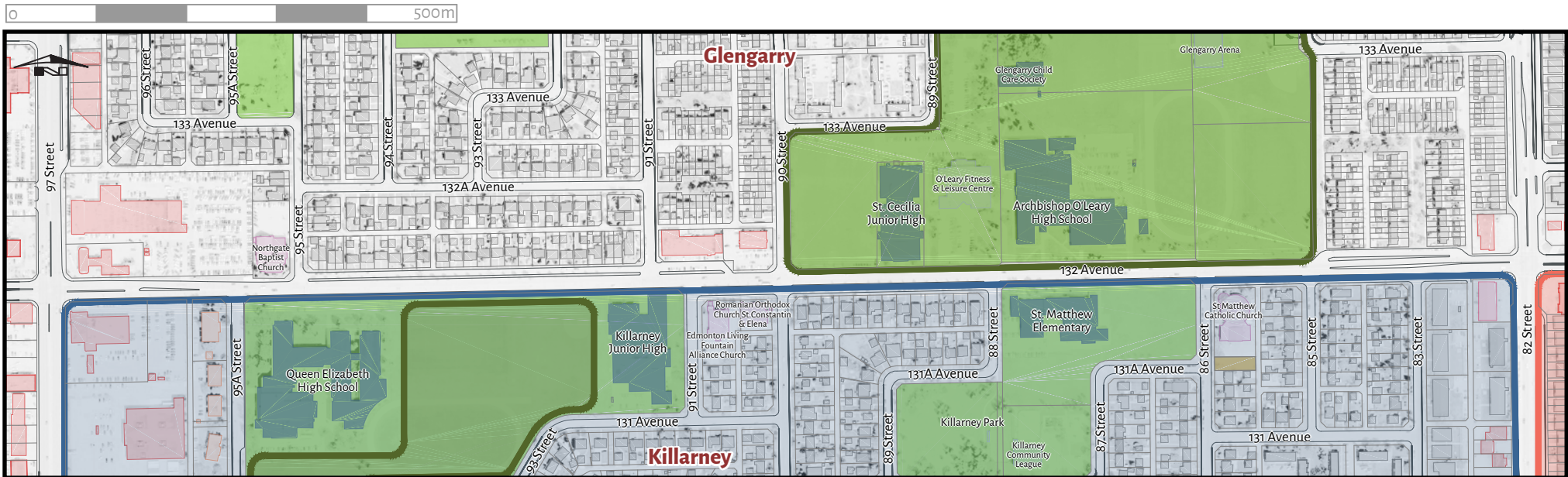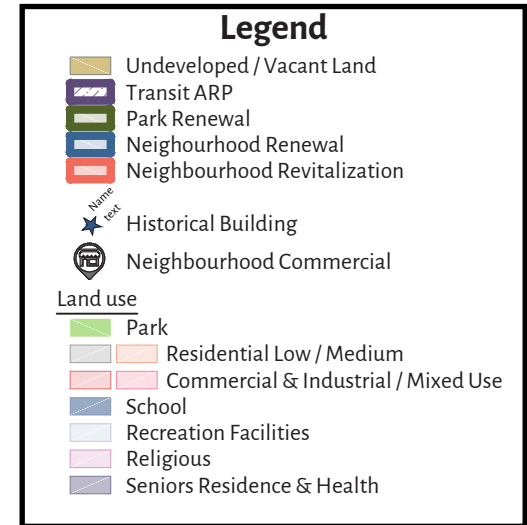
2.6.D   82 Street to 66 Street

Delwood and Balwin are the two neighbourhoods in this segment along the 132 Avenue corridor.

Most residences in this segment front 132 Avenue. There are small boulevards between 132 Avenue and the north service road, located between 82 Street and 76 Street, and between 74 Street and 72 Street. There are small boulevards between 132 Avenue and the south service road between 82 Street and 72 Street, and between 69 Street and west of 66 Street.

There are multiple mid-rise apartments along the east side of Balwin and the west side of Delwood. A majority of other properties fronting 132 Avenue are single family houses.

There are two schools (St. Vladimir Elementary and Balwin Junior High) with neighbouring parks.

The commercial zones in this segment include small neighbourhood commercial developments and corner stores located at 82 Street, 66 Street, and one west of Balwin School near 72 Street.

There are no historic sites along this segment of the corridor.

The Balwin neighbourhood has an active Revitalization Strategy. The goal of this strategy is to improve the livability of residents in the neighbourhood through community-led programs and services.

As part of the Balwin and Belvedere Neighbourhood Revitalization Strategy, a number of priorities were identified for capital investment. A few specific examples that correlate with the scope of 132 Avenue renewal include:

- Improved safety at busy intersections for people walking and wheeling.
- Development of more bike facilities and shared pathways.
- Additional lighting in green spaces.

Legend

- Undeveloped / Vacant Land
- Transit ARP
- Park Renewal
- Neighbourhood Renewal
- Neighbourhood Revitalization

- Historical Building
- Neighbourhood Commercial

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.6.E   66 Street to Fort Road

The Belvedere neighbourhood is at the east end of the 132 Avenue corridor. It's bounded by 66 Street and Fort Road.

Land use in Belvedere is predominantly residential; there is a mix of fronting and flanking lots along this segment. There are no service roads in this segment of the 132 Avenue corridor.

This segment of 132 Avenue, from 66 Street to Fort Road, is part of the Belevedere Station Transit Area Redevelopment Plan.

Belvedere Park, which includes a community hall, is located a half-block north of 132 Avenue between 60 Street and 62 Street.

There are some commercial properties on 132 Avenue at 66 Street and at Fort Road. These two properties are located within the Fort Road Business Improvement Area.

There are no historic sites along this segment of the corridor.

As part of the Balwin and Belvedere Neighbourhood Revitalization Strategy, a number of priorities were identified for capital investment. A few specific examples that correlate with the scope of 132 Avenue renewal include:
- Lighting enhancements in Belvedere Park and adjacent to the community league building.
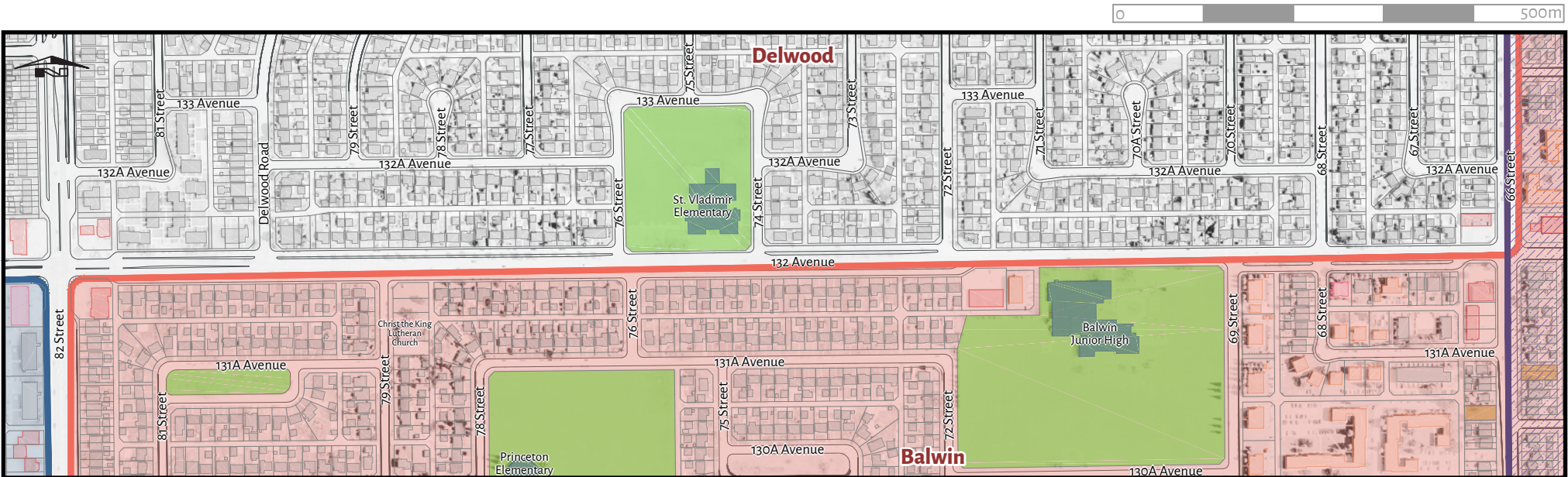- Improved safety at busy intersections for people walking and wheeling.
- Development of more bike facilities and shared pathways.
- Additional lighting in green spaces.

Legend
- Undeveloped / Vacant Land
- Transit ARP
- Park Renewal
- Neighourhood Renewal
- Neighbourhood Revitalization
- Historical Building
- Neighbourhood Commercial

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
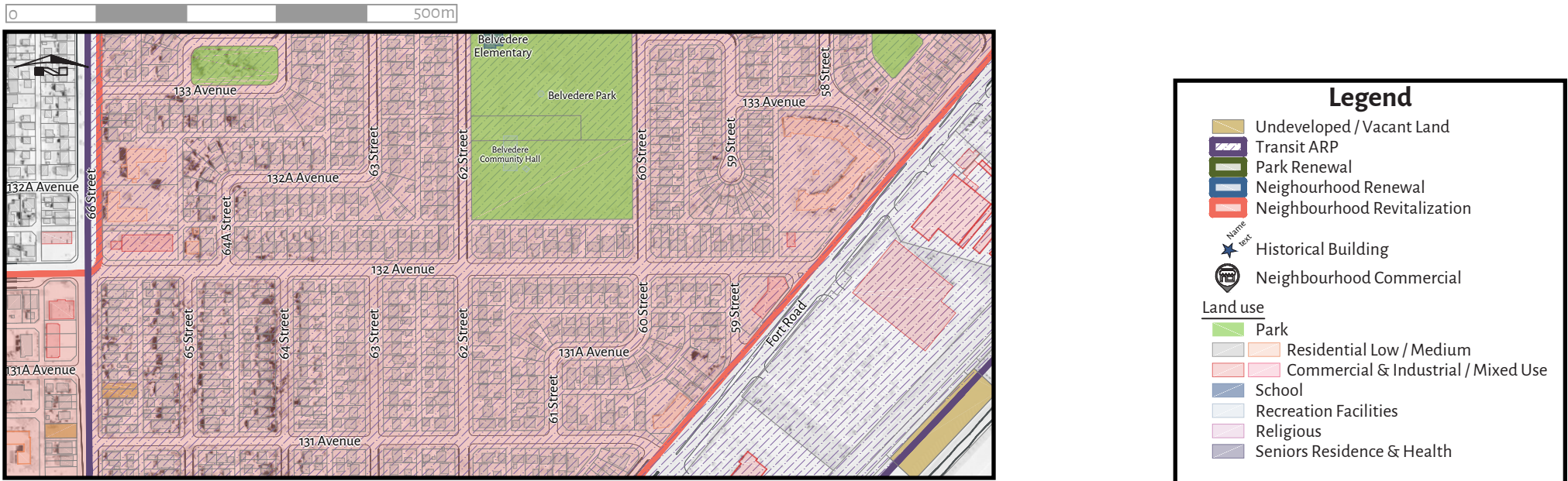
2.7 Commercial Nodes and Community Destinations

Each of the nine neighbourhoods along the 132 Avenue corridor have many community destinations, including schools, parks, churches, community league halls, playgrounds, leisure centres and commercial retail destinations. Most of these destinations draw from nearby communities, though some may draw people from outside the adjacent communities.

Edmonton Public Library's Calder Branch is located just west of the Calder community but likely draws patrons from the 132 Avenue corridor.

2.7.1 Schools

There are many schools in the neighbourhoods along the 132 Avenue corridor. Generally, the elementary and junior high schools draw students from the surrounding communities, while the high schools draw from larger catchments across the City.

2.7.2 Religious Assemblies

There are several religious assemblies along the 132 Avenue corridor which are detailed in the following sections.

2.7.3 Commercial Nodes

Main commercial and retail destinations are located near 132 Avenue along the major arterial roads. The 97 Street arterial corridor has multiple large-scale destination businesses that typically draw people from across the city. Other commercial areas, including several small community commercial nodes located along 132 Avenue, typically draw customers from the adjacent communities. South of 127 Street, the Yellowhead corridor commercial is typically more industrial in nature.

Mixed-use properties include ground-floor commercial space with residential properties on upper floors.

2.7.4 Community Leagues

Each neighbourhood has a community league building, but none directly front 132 Avenue. Residents may travel from 132 Avenue to access the recreational and social programming offered at these community hubs.

2.7.5 Recreation Centres

There are three City of Edmonton recreation centres near the 132 Avenue corridor:
- Grand Trunk Fitness and Leisure Centre (pool, fitness centre, meeting rooms, and kitchen facilities, arena)
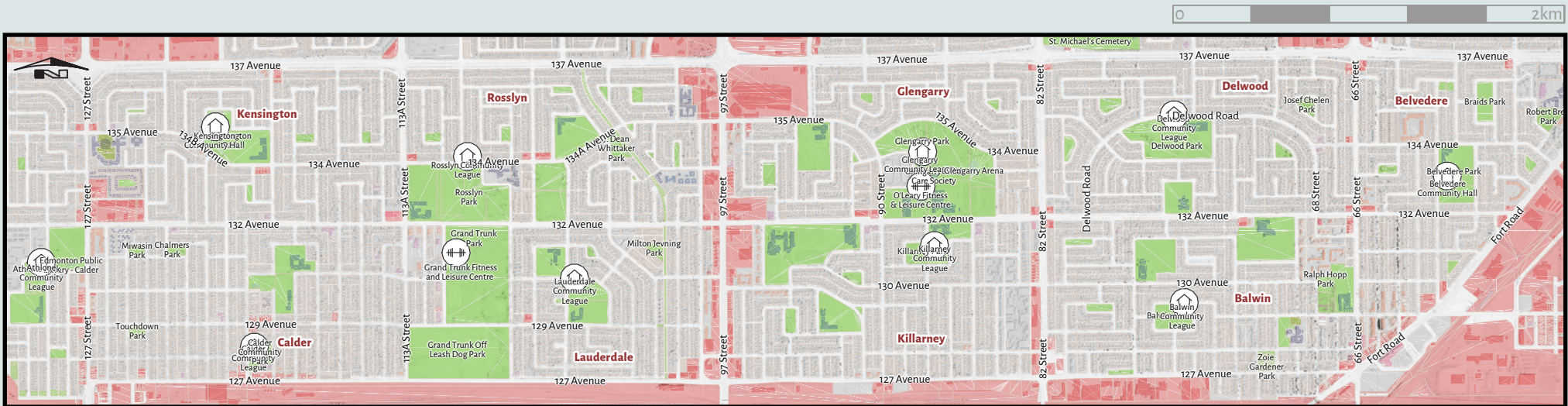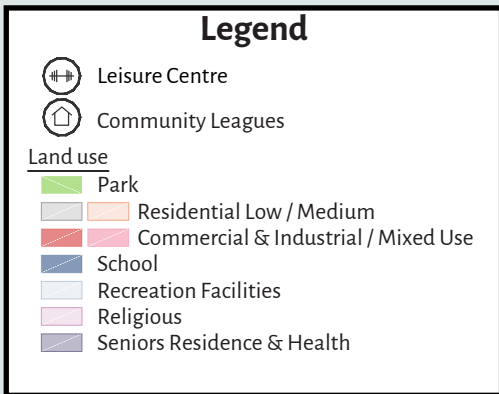
Legend

⊕ Leisure Centre

⌂ Community Leagues

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

- O'Leary Fitness and Leisure Centre (pool, fitness centre, meeting rooms, and kitchen facilities)
- Glengarry Arena (indoor arena)

2.7.6 Seniors Centres

There are three seniors centres near the 132 Avenue corridor:
- Edmonton Indigenous Seniors Centre (134 Avenue at 101 Street)
- Northwest Edmonton Seniors Society (120 Street at 129 Avenue)
- Northgate Lions Seniors Centre (139 Avenue at 75 Street

2.7.A 127 Street to 113A Street

Community destinations in Kensington and Calder are mainly schools, parks, religious facilities, and commercial areas. These areas are important to the communities and delineate where the neighbourhood amenities are located.

St. Edmund Elementary School is located in Calder, south of 131A Avenue, and does not directly abut 132 Avenue.

There are no parks directly along 132 Avenue in this segment.

There are two commercial areas along this segment of 132 Avenue.

Kensington Centre is a larger retail shopping centre with multiple stores in multiple buildings, and likely draws customers from the adjacent community as well as those further away. Businesses include:
- grocery store
- restaurants/bars/fast food
- bingo hall
- daycare
- liquor store
- bank
- vehicle fueling
- convenience store

The other commercial area is within a mixed use building at 113A Street that has commercial on the ground floor with residential units on the second floor. This development is more pedestrian-oriented though it does have a large parking lot directly in front of the building. Stores include:
- grocery/convenience store
- butcher
- salon
- auto repair

There are three religious assemblies along this section of 132 Avenue, which include
- Chalmers-Castle Downs United Church
- Zion Baptist Church of Kensington
- St. Edmund Parish Catholic Church

Legend

- Leisure Centre
- Community Leagues

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
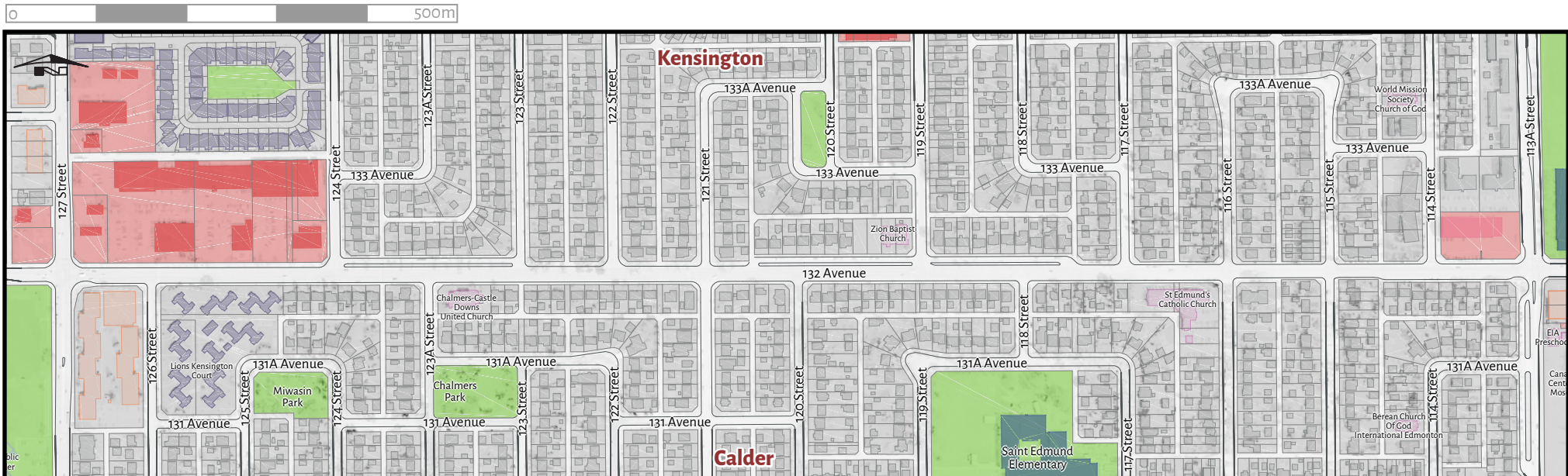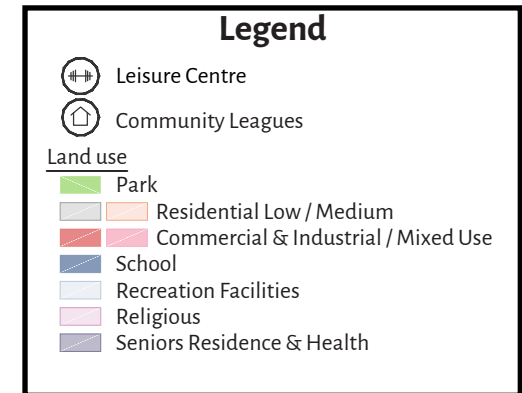
2.7.B 113A Street to 97 Street

The community destinations in Rosslyn and Lauderdale directly on 132 Avenue include:

- Rosslyn Junior High School
- Rosslyn Park
- Grand Trunk Leisure Centre and Park

The above community destinations likely draw people from both the neighbouring communities and from across the City, particularly for programming at the larger park sites.

Ecole Pere Lacombe is located in Lauderdale south of 131A Avenue and does not directly abut 132 Avenue.

There are two religious assemblies in this area:

- Canadian Islamic Centre – Al Rashid Mosque
- First United Pentecostal Church

There is a significant commercial corridor along the 97 Street arterial. These commercial sites are generally car-oriented and have large parking lots fronting 97 Street. These commercial sites likely draw customers from the adjacent neighbourhoods and across Edmonton. Near 132 Avenue, the commercial sites include:

- tire sales and repair
- bank
- coffee shop
- automobile sales

Legend

- Leisure Centre
- Community Leagues

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
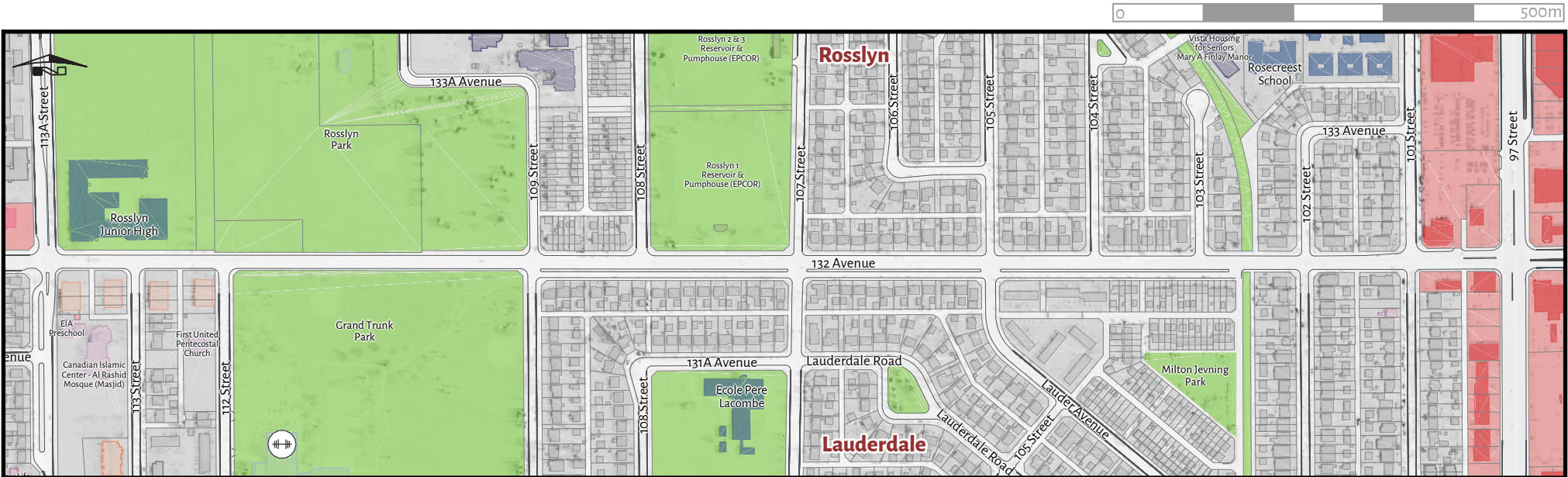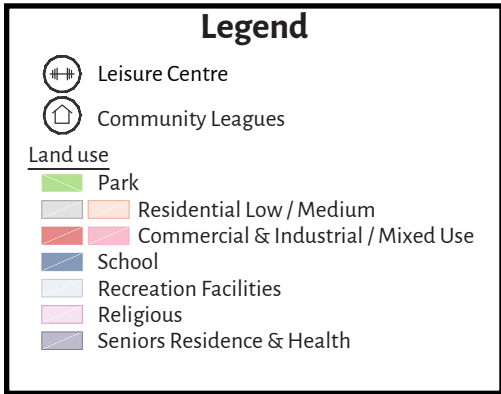
2.7.C   97 Street to 82 Street

The communities of Glengarry and Killarney have multiple schools directly along 132 Avenue. The elementary schools likely draw most students from nearby communities, while the junior high and high schools likely draw students from across north Edmonton. Schools directly on 132 Avenue include:

- Queen Elizabeth High School
- Killarney Junior High School
- St. Cecilia Junior High School
- Archbishop O'Leary High School
- St. Matthew Elementary School

The City of Edmonton's O'Leary Fitness and Leisure Centre is located near 88 Street. This facility likely draws patrons from across north Edmonton.

Glengarry Arena is located just north of 132 Avenue, and Killarney Community League is just south of 132 Avenue.

Religious assemblies along this segment include:

- Northgate Baptist Church
- Edmonton Living Fountain Alliance Church
- Romanian Orthodox Church Saints Constantin & Elena

- St. Matthew Catholic Church

There is significant commercial development along 97 Street. Businesses along 132 Avenue near 97 Street include:

- two automobile dealerships
- vehicle fueling and convenience store

A smaller community commercial area is located between 90 Street and 91 Street. There are many small stores, including:

- grocery/convenience store
- bakery
- butcher
- dentist
- pharmacy
- restaurant/bar
- clothing/fashion
- insurance

There is a small commercial area near 82 Street which includes:

- convenience store
- liquor
- fast food
- salon

Legend

- Leisure Centre
- Community Leagues

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

Legend

- ⊕ Leisure Centre
- ⌂ Community Leagues

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.7.D   82 Street to 66 Street

There are two schools in Delwood and Balwin that are directly on 132 Avenue. These include:
- St. Vladimir Elementary
- Balwin Junior High

There are small school fields/parks located directly adjacent to 132 Avenue along this segment, next to the two schools. It's likely the above destinations typically draw people from the surrounding communities because they are smaller community facilities.

The only religious assembly near 132 Avenue along this segment is Christ the King Lutheran Church.

There are small commercial developments near 82 Street that include:
- vehicle fueling and convenience store
- fast food
- salon
- chiropractor
- flower store

There are also small commercial developments near 66 Street that include:
- grocery and butcher
- pharmacy
- medical clinic
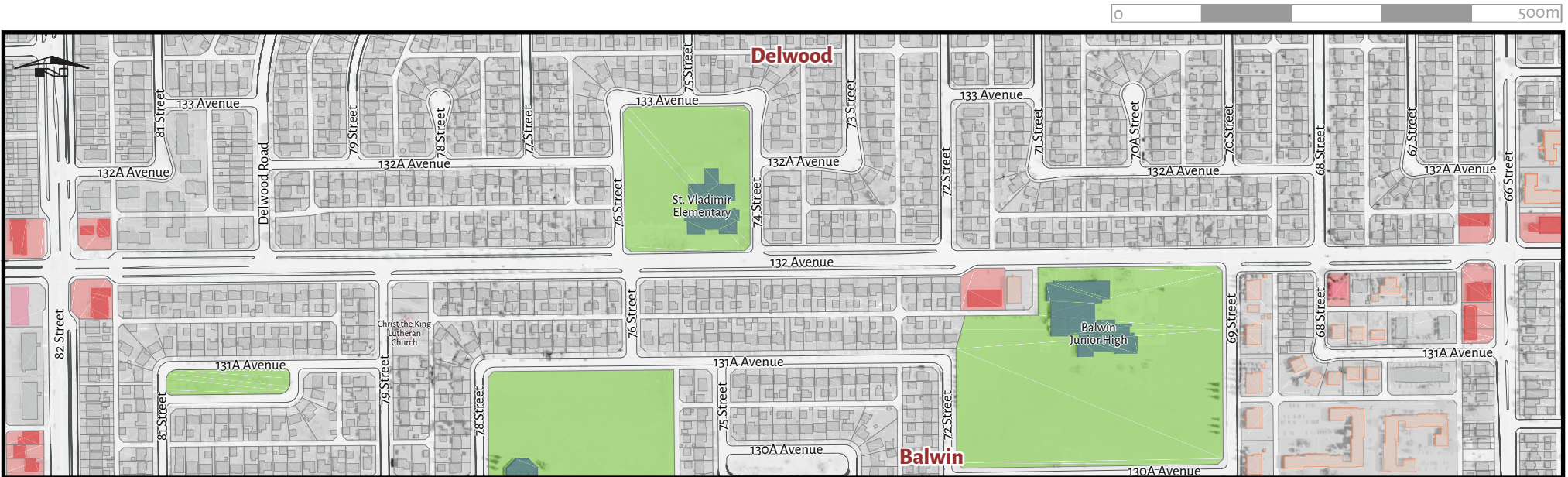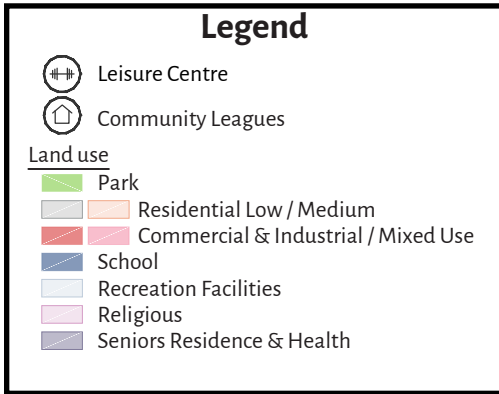
2.7.E 66 Street to Fort Road

There are no schools in Belvedere that are directly on 132 Avenue.

There are no parks and open spaces, or religious assemblies directly along 132 Avenue in this segment. However, the Belvedere Community League and park is located just north of 132 Avenue between 62 Street and 60 Street.

There are small commercial developments near 66 Street . It appears that this property has undergone some building and facade improvements recently. This site currently includes:
- vehicle fueling and convenience store
- fast food
- vacant commercial space

There are also small commercial developments near Fort Road that include:
- automobile sales
- vacant commercial space
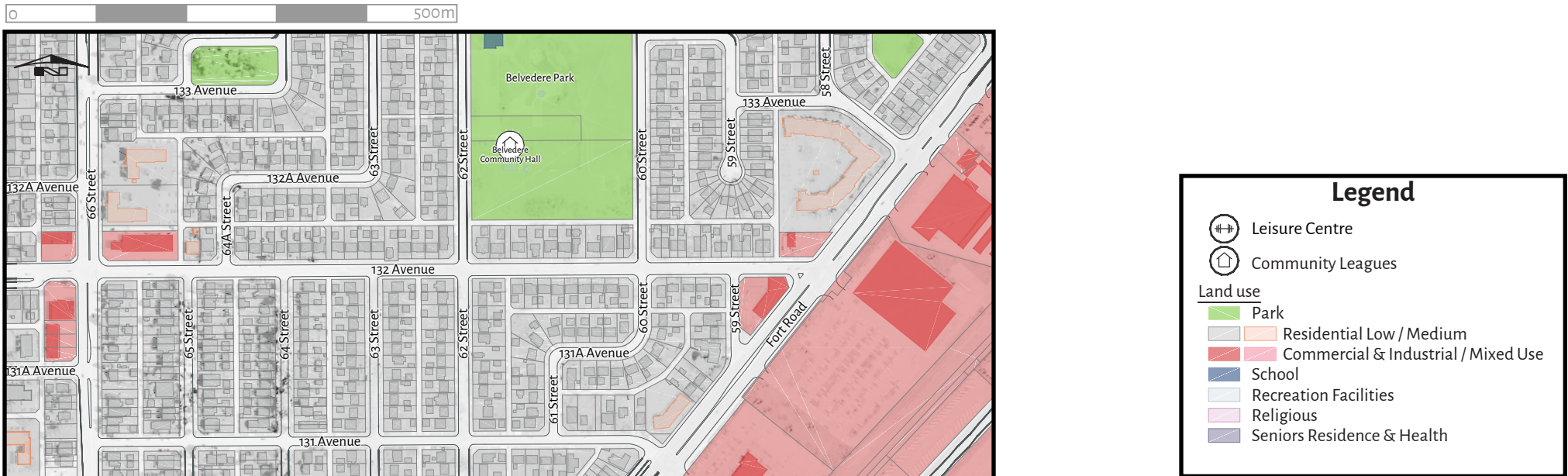
2.8 Open Space Network

The open space maps delineate park types and their location within each community along the 132 Avenue corridor.

2.8.1 Parks and Open Spaces

There are several parks that front directly onto 132 Avenue. Parks are classified by the City of Edmonton as follows:

- District Park – designed to meet the needs of multiple communities. They are often more specialized and provide multi-functional amenities.
- Community Park – the basic unit of the park system. These are more frequent within each neighbourhood and often located near community leagues and schools.
- Pocket Park – small local parks that serve nearby residents, and may contain limited amenities (playground, benches) or function only as open spaces.
- Corridor – linear spaces with pathways that provide access between neighbourhoods and/or connect two or more parks together.
- School Site – land directly associated with schools that include the building envelope, school facilities such as playgrounds, fields, and green space.

- Green Infrastructure – built structures that are designed to provide green and open spaces (such as Epcor's Rossdale Reservoir).

2.8.2 Shared Pathways

The shared pathway network along the 132 Avenue corridor is limited. Grand Trunk District Park has a simple shared pathway system through the park.

Near 102 Street there is a shared pathway along an old railway right-of-way that provides a connection across 132 Avenue and connects between 127 Avenue and 137 Avenue. This connection is the one location in the study area that is classified as an open space Corridor.

2.8.3 Neighbourhood Connectivity

All nine neighbourhoods have a modified grid street pattern and have many small pocket parks, some which are in the road right-of-way. The pocket parks provide open green space for the community, however, they have limited amenities.

The interconnected street network generally provides good connections for community members to walk, wheel, and cycle to nearby neighbourhood amenities. However, there are locations where the modified grid interrupts direct routes.

Legend

Symbol	Description
——	Sidewalk
——	Shared Pathway
•	Tree
⬡	Sports Field
Ⓗ	Playground

Type of Park
- Green Infrastructure
- School Site
- Community
- Pocket
- District
- Corridor

Land use
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
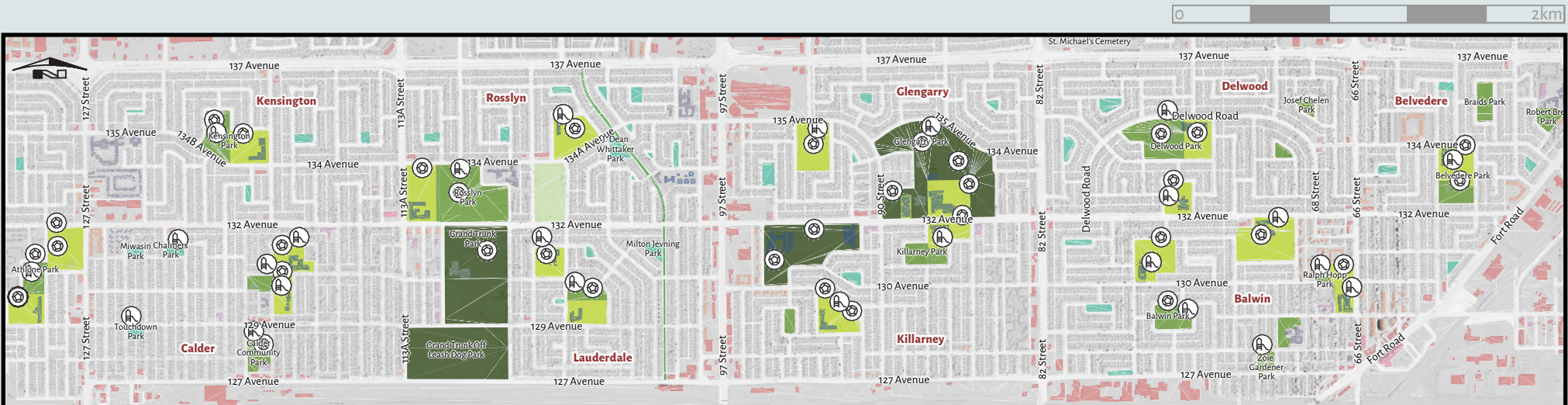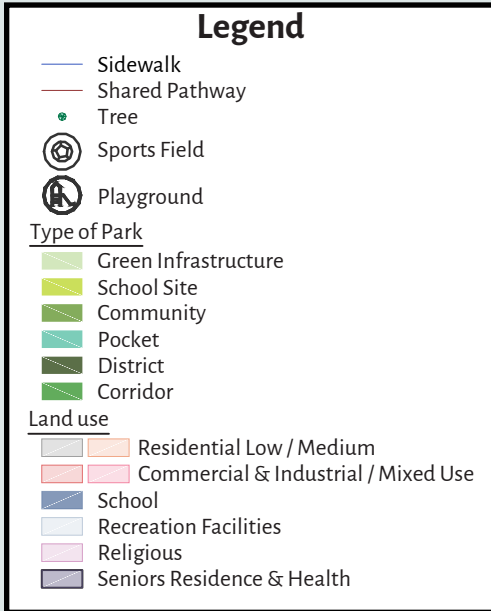
2.8.4 Street Trees

There are a number of street trees along 132 Avenue, and along some of the adjacent streets – particularly in Calder, Lauderdale, and Belvedere. Street trees are typically located in the boulevards and the roadway medians, and along adjacent streets. Tree locations are shown on the detailed maps in this section.

2.8.A 127 Street to 113A Street

There are no parks that directly front 132 Avenue in Kensington and Calder. Many of the pocket parks and community park systems are located internal to the neighbourhoods, and there are a few small green spaces and parks within a block or two north and south of 132 Avenue.

Saint Edmund Elementary is located just one block south of 132 Avenue at 118 Street and includes a neighbourhood playground and sports fields.

Chalmers Park is also located south of 131A Avenue and includes a playground.

There are a number of street trees along this segment. Most are located between 117 Street and 127 Street on the north side of 132 Avenue, either in a median between 132 Avenue and a service road, or adjacent to a boulevard walk.

Legend

- Sidewalk
- Shared Pathway
- Tree
- Sports Field
- Playground

Type of Park
- Green Infrastructure
- School Site
- Community
- Pocket
- District
- Corridor

Land use
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
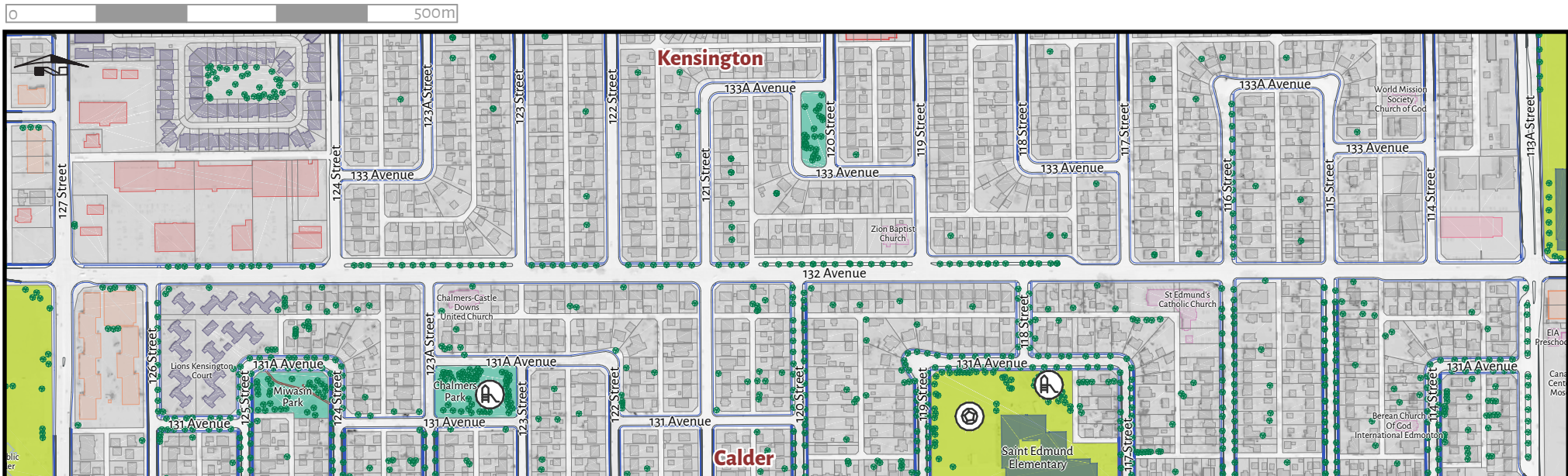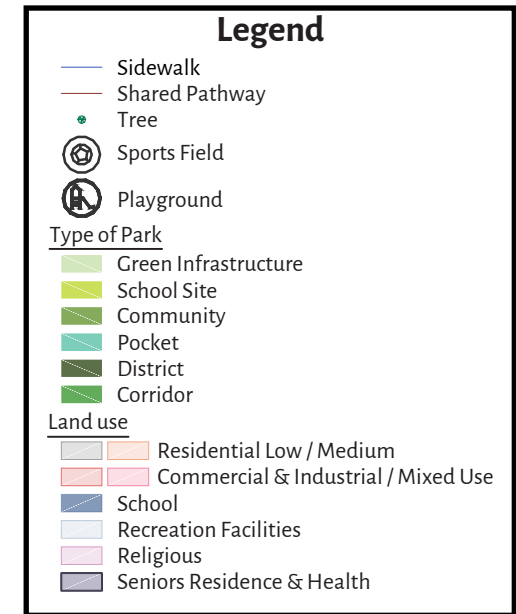
2.8.B 113A Street to 97 Street

There are several park spaces in this segment of 132 Avenue.

School Parks:
- Rosslyn Junior High School
- Ecole Pere Lacombe

Community Parks:
- Rosslyn Park (includes community league hall, playground, spray park, and outdoor hockey rink)

Destination Parks:
- Grand Trunk Park (a destination park next to the Grand Trunk Fitness and Leisure Centre with multiple sports fields and shared pathways)

In addition to the above noted parks, the Rosslyn Reservoir & Pumphouse offers community greenspace between 107 Street and 108 Street.

There is a concrete shared pathway that provides a connection north-south across 132 Avenue that runs along an old railway right-of-way from 127 Avenue to 137 Avenue.

There are a number of street trees along this segment, including along Grand Trunk Park and Rosslyn Park. A

significant number of trees are located in the median between 132 Avenue and the south service road between 102 Street and 109 Street.

Legend

Sidewalk	
Shared Pathway	
Tree	
Sports Field	
Playground	

Type of Park
- Green Infrastructure
- School Site
- Community
- Pocket
- District
- Corridor

Land use
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
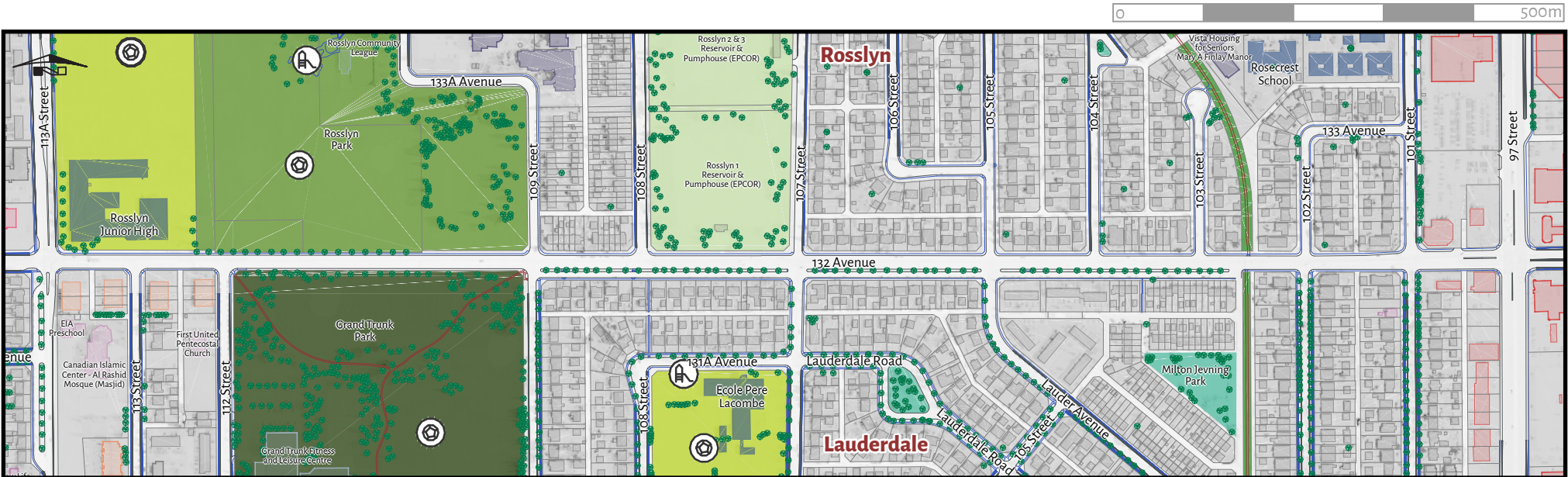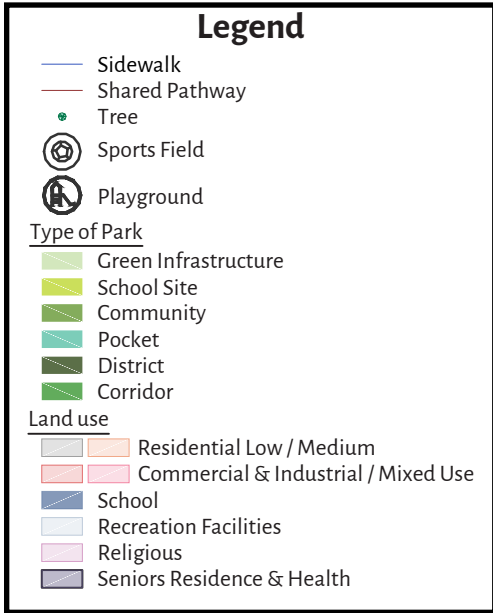
2.8.C   97 Street to 82 Street

There are many open spaces and parks along this segment of 132 Avenue.

School Parks:
- Killarney Junior High School
- St. Cecilia Junior High School
- Archbishop O'Leary High School
- St. Matthew Elementary

Community Parks:
- Killarney Park (includes Killarney Community League)

Destination Parks:
- Queen Elizabeth High School
- Glengarry Park (a destination park that includes the O'Leary Fitness & Leisure Centre, Glengarry arena, playground, sports fields, and spray park—next to to Archbishop O'Leary High School and St. Cecilia Junior High)

The street trees along 132 Avenue are concentrated around the service roads and the park systems. Street trees are absent at both ends towards the arterial roads and commercial areas near 97 Street and 82 Street.

Legend

──	Sidewalk
──	Shared Pathway
•	Tree
⊚	Sports Field
Ⓐ	Playground

Type of Park
- Green Infrastructure
- School Site
- Community
- Pocket
- District
- Corridor

Land use
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
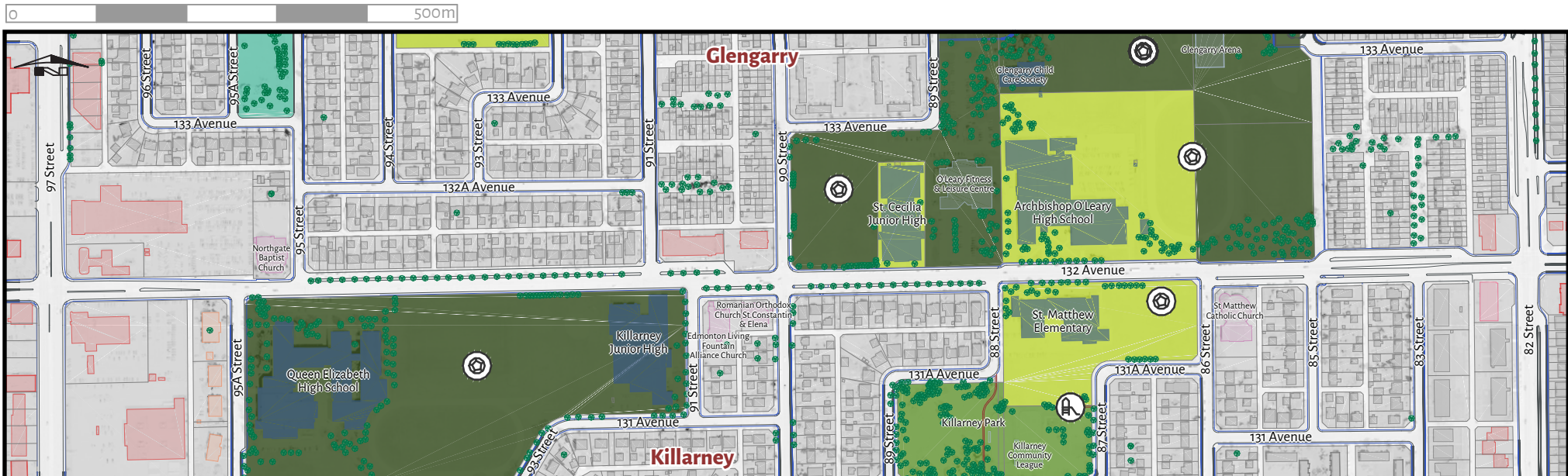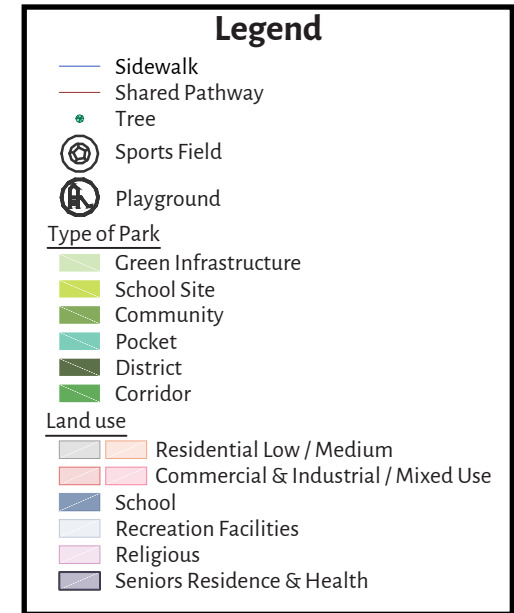
2.8.D 82 Street to 66 Street

There are limited open spaces and parks along this segment of 132 Avenue.

School Parks:
- St. Vladimir Elementary
- Balwin Junior High
- Princeton Elementary

The street trees along 132 Avenue are concentrated around the service roads and the park systems. Street trees are absent at both ends towards the arterial roads and commercial areas near 82 Street and 66 Street.

There are some additional parks and open spaces in Balwin within a couple blocks of 132 Avenue.

There is a walkway along a public utility right-of-way across from Balwin Junior High. This provides a shortcut for people walking, wheeling, or on bikes between 132 Avenue and 132A Avenue in Delwood.

Legend

——	Sidewalk
——	Shared Pathway
•	Tree
⊚	Sports Field
Ⓐ	Playground

Type of Park
- Green Infrastructure
- School Site
- Community
- Pocket
- District
- Corridor

Land use
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
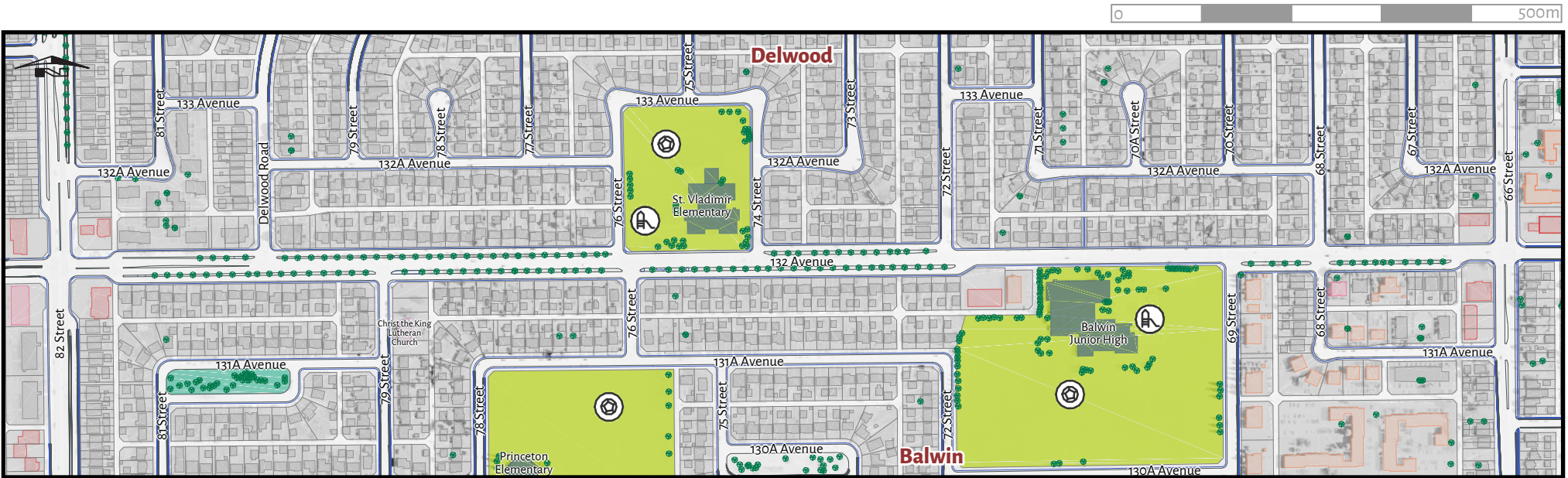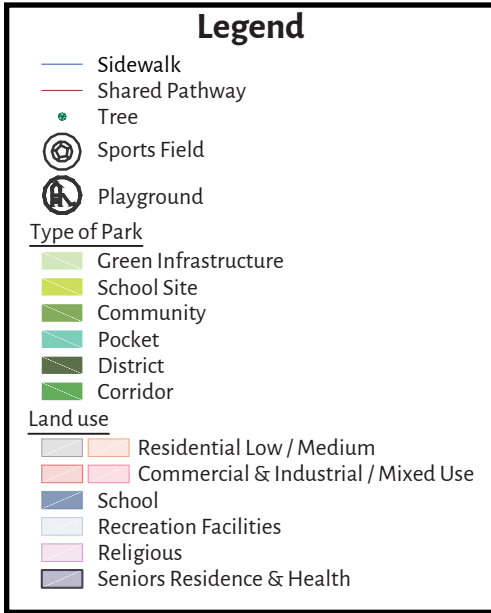
2.8.E   66 Street to Fort Road

There are no open spaces or parks directly along this segment of 132 Avenue. However, Belvedere Park is located a half block north of 132 Avenue between 62 Street and 60 Street. This park likely draws community members across 132 Avenue from the south portion of the neighbourhood.

There are no public street trees along 132 Avenue in this segment. There are some on private property along 132 Avenue. There are several streets with street trees south of 132 Avenue.

As part of the Balwin and Belvedere Neighbourhood Revitalization Strategy, a number of priorities were identified for capital investment. A few specific examples that correlate with the scope of 132 Avenue renewal include:
- Lighting enhancements in Belvedere Park and adjacent to the community league building.
- Improved safety at busy intersections for people walking and wheeling.
- Development of more bike facilities and shared pathways.
- Additional lighting in green spaces.

Legend

——	Sidewalk
——	Shared Pathway
•	Tree
⬡	Sports Field
Ⓐ	Playground

Type of Park
- Green Infrastructure
- School Site
- Community
- Pocket
- District
- Corridor

Land use
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
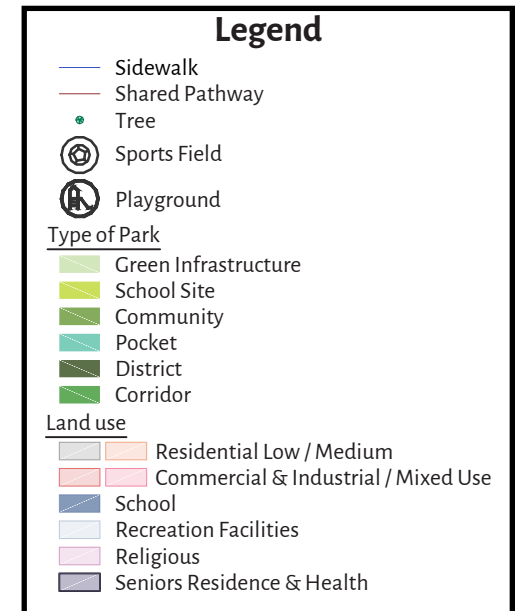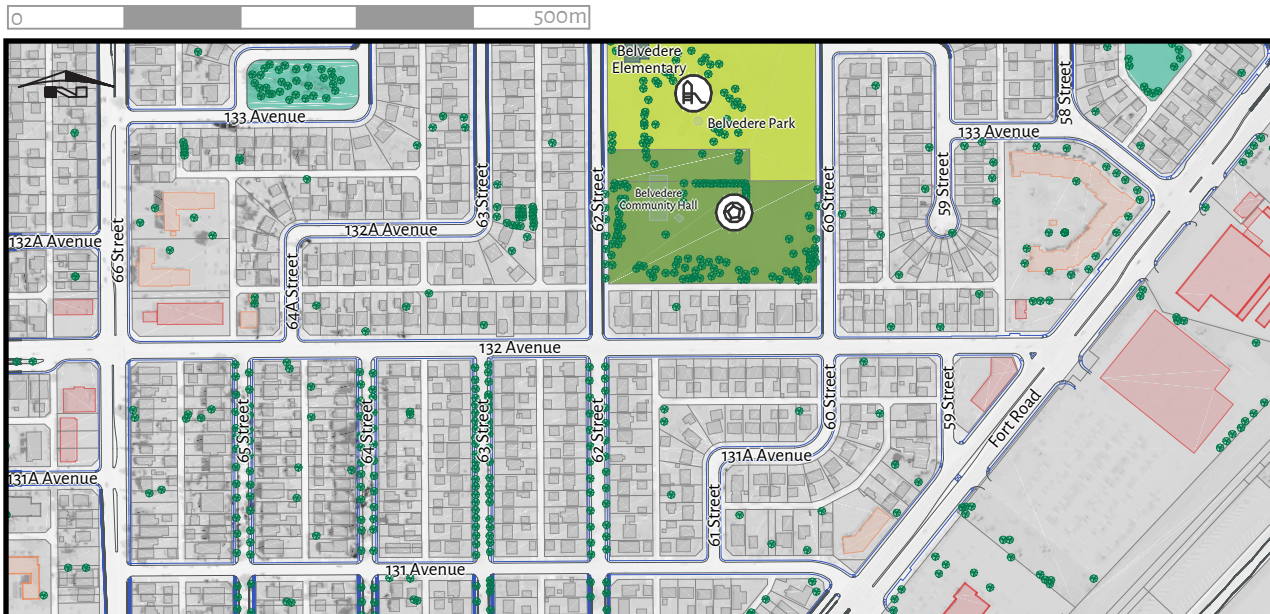
2.9 Mobility Network – Walking and Wheeling

This section identifies existing infrastructure important to users who walk, wheel, and stroll along and near the 132 Avenue corridor. Sidewalks, shared pathways, and crosswalks are highlighted in the maps. Bus stops are shown on the detailed maps but not on the overall map for readability.

2.9.1 Intersection Controls

In general, fully signalized intersections are located at arterial roads, and other crossing locations utilize a variety of other treatments. Pedestrians are generally permitted to cross at any intersection along 132 Avenue. Unmarked crossings are not identified on these maps, however three additional crossing treatments are shown:

- Marked crosswalks (most common) consist of roadside signage for drivers and painted lines on the asphalt across the road.
- Pedestrian activated amber flashers (which also includes Rapid Flashing Beacons [RFBs]) have flashing amber lights in addition to signage for drivers. These lights flash after a button is pushed by a pedestrian.

- Pedestrian activated signals have a full red-amber-green signal for drivers on 132 Avenue, but not for the cross-street. These signals only change to red for drivers on 132 Avenue after a button is pushed by a pedestrian.

2.9.2 Sidewalks and Shared Pathways

Sidewalks and shared pathways are illustrated on the following maps. There are several areas along 132 Avenue that do not have sidewalks on both sides of the road. Sidewalk widths are not indicated on these maps, but they range from about 0.75m (very narrow) to over 2m wide.

2.9.3 Walk Score

For this next series of maps, we have included a walk score. The walk score is a number between 0 and 100 generated based on a multi-factor analysis by walkscore.com. The scoring system analyzes the walkability within a neighbourhood to local amenities and services. A score is generated for pedestrian friendliness by analyzing population density and road metrics such as block length and intersection density. These score ranges indicate neighbourhood walkability:

- Less than 50 – area is car dependent.
- 50-69 – area is somewhat walkable.
- 70 or higher – area is very walkable.

Legend

——	Sidewalk
——	Shared Pathway

Intersection Control

- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal
- Bus Stop

Land use

- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
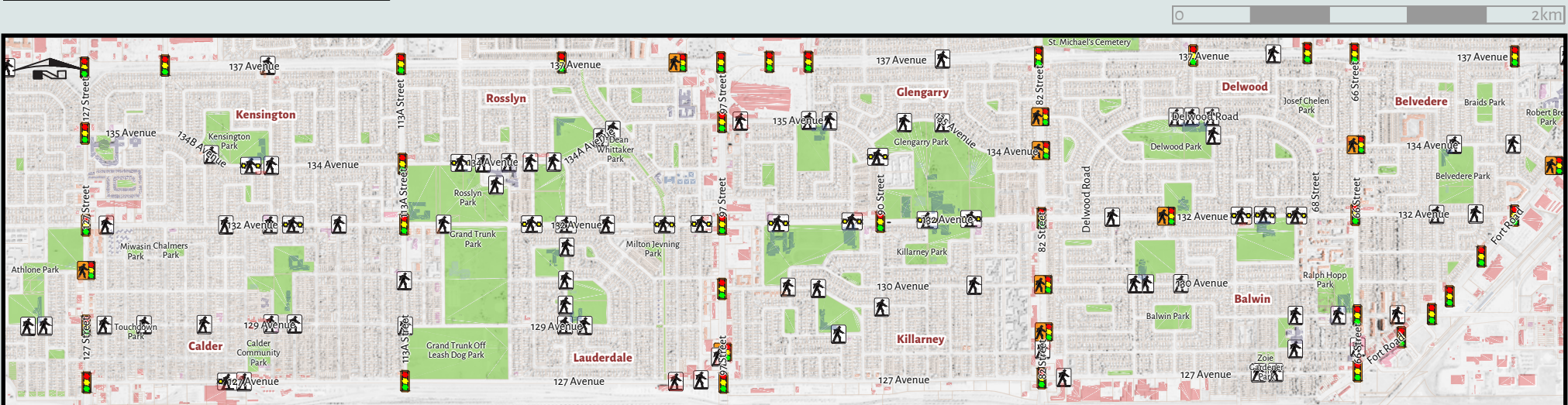
2.9.A 127 Street to 113A Street

Sidewalks are provided throughout the communities in this segment, however there are a few missing sidewalk links along the service roads on the north side of 132 Avenue. In some instances, we found that the sidewalks in this segment were narrow compared to other areas.

Fully signalized intersections are located at:

- 127 Street
- 113A Street

Pedestrian activated amber flashers are located at:

- 118 Street (connected to St. Edmund Elementary located south of 132 Avenue)

Marked Crosswalks are located at:

- 126 Street
- 121 Street
- 119 Street
- 116 Street

The following locations were identified where there are missing sidewalk links:

- 119 Street to 121 Street (north side of 132 Avenue)
- 123 Street to 124 Street (north side of 132 Avenue)

There may be larger volumes of vulnerable pedestrians crossing 132 Avenue at 126 street near the seniors residence, and at 118 Street as a route to the nearby school.

As part of the Calder Neighbourhood Renewal, 126 Street, 120 Street, and 118 Street have been identified as primary walking corridors in that neighbourhood.

The walk scores for the two adjacent communities are low/moderate. This is a reflection of long walking distances to community destinations, and may reflect poor connectivity, and poor sidewalk/shared pathway connections and quality.

- Kensington: 42
- Calder: 33

Legend

- Sidewalk
- Shared Pathway

Intersection Control

- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal
- Bus Stop

Land use

- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

Legend

- —— Sidewalk
- —— Shared Pathway

Intersection Control

- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal
- Bus Stop

Land use

- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.9.B   113A Street to 97 Street

Sidewalks are provided throughout the communities in this segment however there is a missing link along Grand Trunk Park. In some instances, we found that the sidewalks in this segment were narrow.

Power poles are located along the north side of 132 Avenue in this segment, and most are located in the middle of the sidewalks, which decreases the functionality of the north sidewalk.

There are two mid-block pedestrian connections south of 132 Avenue near 108 Street amd 104 Street in public rights-of-way.

Fully signalized intersections:

- 113A Street
- 97 Street

Pedestrian activated amber flashers:

- 108 Street
- 107 Street
- 102A Street (provides crossing for the north-south shared pathway)
- 101 Street

Marked Crosswalks:

- 112 Street
- 105 Street

The following location was identified where there are missing sidewalk links:

- South side of 132 Avenue along Grand Trunk Park between 109 Street and 112 Street

There may be larger volumes of vulnerable pedestrians crossing 132 Avenue from 113A Street to 109 Street near the junior high school and large park fields.

The walk scores for the two adjacent communities are moderate. This is a reflection of moderate walking distances to community destinations, and may reflect poor connectivity, and poor sidewalk/shared pathway connections and quality.

- Rosslyn: 51
- Lauderdale: 48
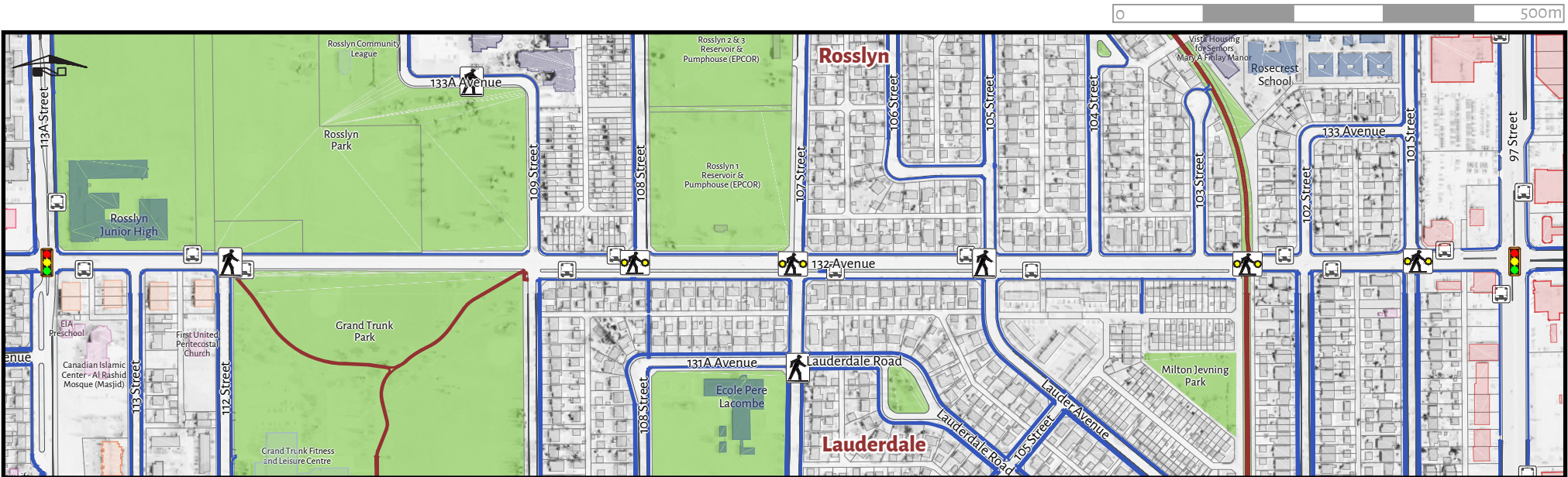
2.9.C 97 Street to 82 Street

Sidewalks are provided throughout the communities in this segment however there are two areas in this segment where there are missing sidewalks along 132 Avenue. In some instances, we found that the sidewalks in this segment were narrow.

Fully signalized intersections:
- 97 Street
- 90 Street
- 82 Street

Pedestrian activated amber flashers:
- 95 Street
- 91 Street
- 88 Street
- 86 Street

The following locations were identified where there are no sidewalks along 132 Avenue:
- North side of 132 Avenue from 90 Street and 95 Street
- South side of 132 Avenue from 82 Street to 86 Street

There are likely larger volumes of vulnerable pedestrians along most of this segment of 132 Avenue because of the multiple schools and parks directly adjacent to the roadway.

The walk scores for the two adjacent communities are moderate. This is a reflection of moderate walking distances to community destinations, and may reflect poor connectivity, and poor sidewalk/shared pathway connections and quality. Glengarry and Killarney have a significant number of parks and open spaces, multiple schools, and some commercial properties within walking distances.
- Glengarry: 57
- Killarney: 58
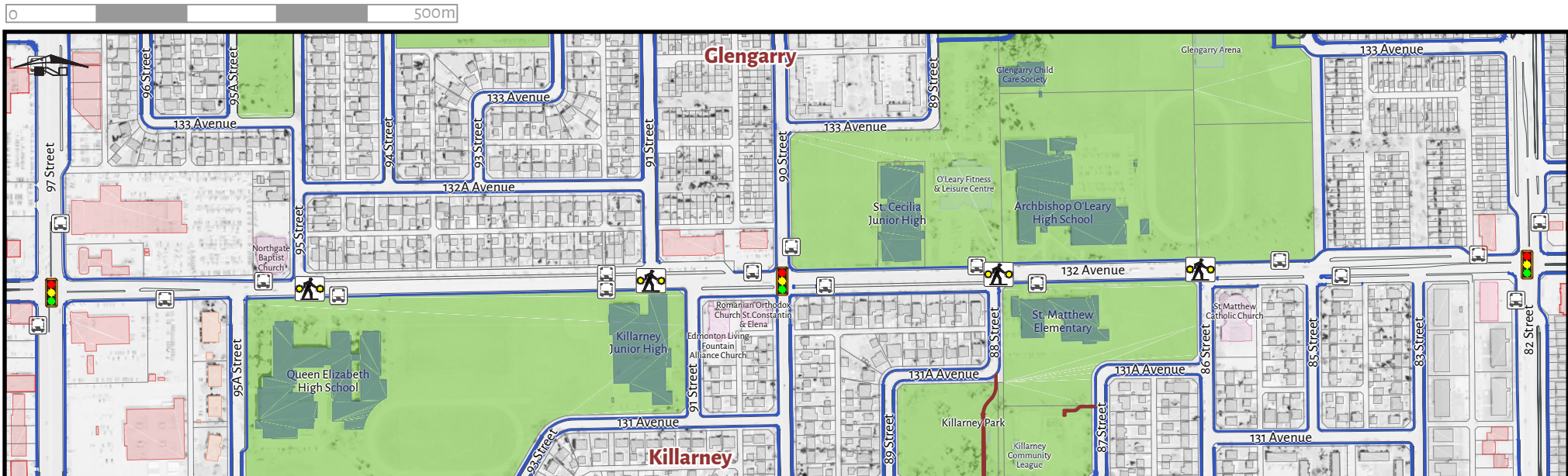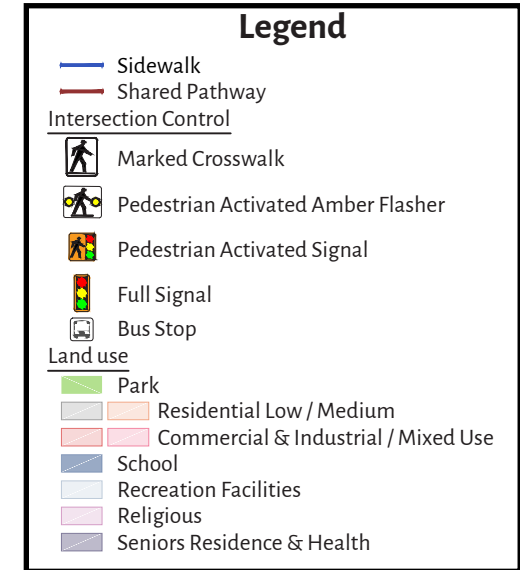
2.9.D 82 Street to 66 Street

Sidewalks are provided throughout the communities in this segment. There are sidewalks on both sides of 132 Avenue along this segment, though the sidewalks are narrow in some places.

There is a sidewalk connection north of Balwin Junior High that connects between 132 Avenue and 132A Avenue through a public right-of-way.

Fully signalized intersections:

- 82 Street
- 66 Street

Pedestrian activated signal

- 76 Street

Pedestrian activated amber flashers:

- Near 72 Street
- Mid-block between 72 Street and 69 Street (at Balwin Junior High)
- 69 Street

Marked Crosswalks:

- 79 Street

There may be larger volumes of vulnerable pedestrians crossing 132 Avenue at the two schools: near St. Vladamir Elementary between 76 Street and 74 Street, and near Balwin Junior High between 72 Street and 69 Street.

The walk scores for the two adjacent communities are moderate. This is a reflection of moderate walking distances to community destinations, and may reflect poor connectivity, and poor sidewalk/shared pathway connections and quality. Delwood and Balwin have a significant number of parks and open spaces.

- Delwood: 57
- Balwin: 60

Legend

	Sidewalk
	Shared Pathway

Intersection Control

- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal
- Bus Stop

Land use

- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
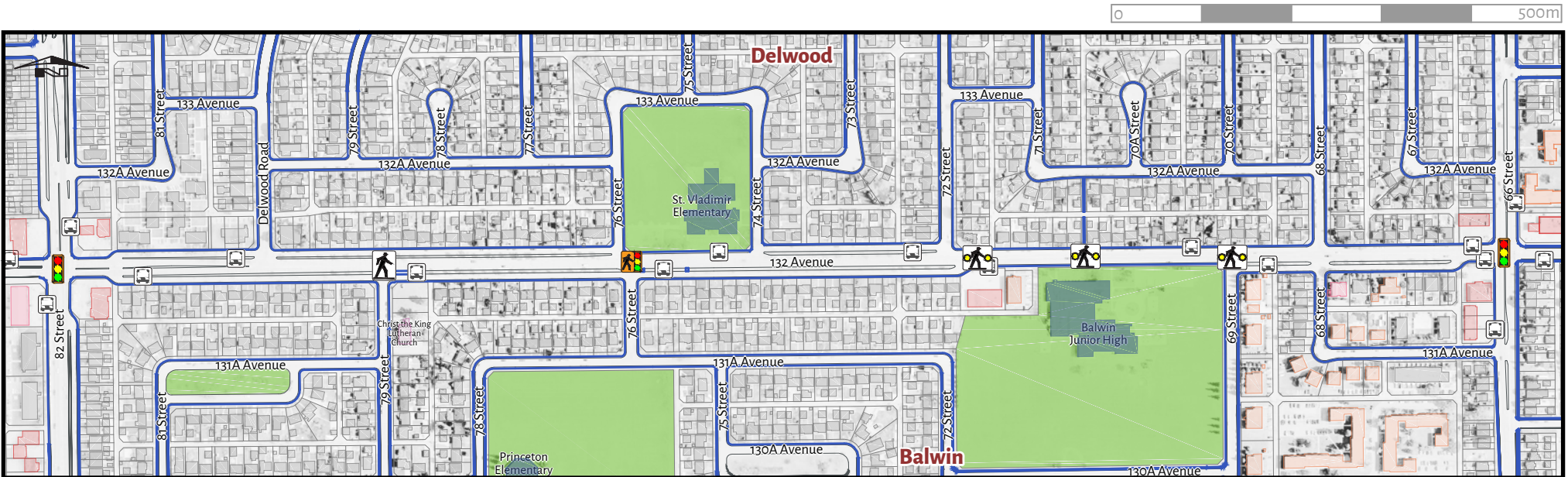
2.9.E 66 Street to Fort Road

Sidewalks are provided throughout Belvedere along both sides of 132 Avenue, though the sidewalks are narrow in some places.

Fully signalized intersections:
- 66 Street
- Fort Road

Marked Crosswalks:
- 62 Street
- 60 Street

There may be larger volumes of vulnerable pedestrians crossing 132 Avenue at 62 Street as a route to the nearby school and park site.

The walk score for the Belvedere community is moderate. This is a reflection of moderate walking distances to community destinations, and may reflect poor connectivity, and poor sidewalk/shared pathway connections and quality. There are several parks and open spaces in the community.
- Belvedere: 63
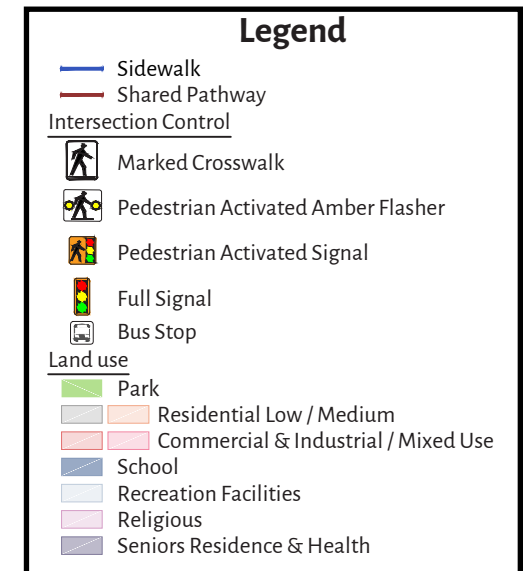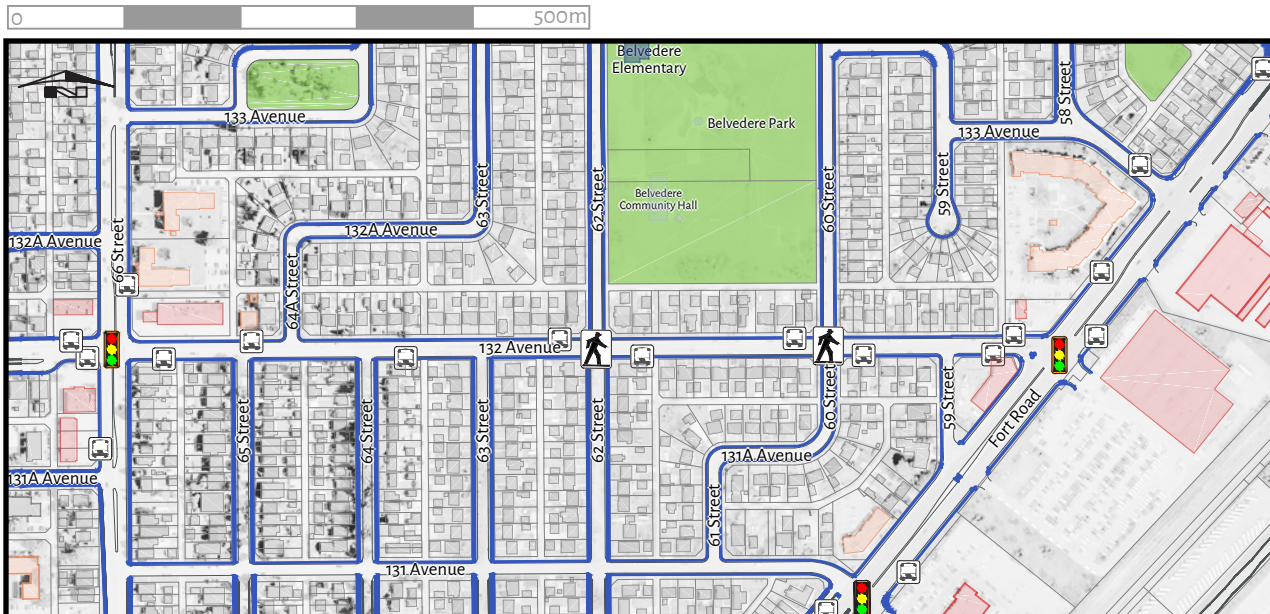
2.10 Mobility Network – Cycling

This mapset illustrates the overall cycling mobility network including existing and planned bicycle facilities.

2.10.1 Cycling Heatmap

A cycling usage heatmap is illustrated for the communities along 132 Avenue. This heatmap was adapted from Strava's Global Heatmap, which highlights routes by people on bikes that were recorded and uploaded to Strava, a global fitness tracking and social media platform.

It's important to note that people cycling need to use a GPS bike computer or smartphone app to record their rides, and therefore some demographics may be underrepresented in this data – particularly children and lower income individuals. So, the heat maps represent people who make a point of using technology to track their rides. However, this is the best information available at the moment showing relative cycling usage, so it has been included for discussion.

Cycling usage is presented in a heatmap style, which shows relative usage compared with other roads in this area, and does not have a direct correlation with a specific number of bicycle trips each day. Rather it is meant to represent where people currently cycle in these neighbourhoods. Data is not available to provide an indication if people are cycling on the sidewalk instead of sharing the roadway with vehicles.

2.10.2 Existing and Planned/Future Bike Routes

The Edmonton Bike Plan has identified existing and planned/future bike infrastructure across the City. These are shown with various blue and green linetypes on the map set.

132 Avenue has been identified in the City's Bike Plan as a bike route.

The City's Complete Streets Design Standards denote bike facility types based on a variety of factors including average daily vehicle trips on the road. 132 Avenue falls into the category of "Posted speed up to 50km/h with over 6000 vehicles per day" which requires at minimum a protected bike lane to safely and effectively accommodate people on bikes.

2.10.3 Bike Score

For each neighbourhood, we have included a bike score. The bike score is a number between 0 and 100 generated by walkscore.com based on a multi-factor analysis measuring whether an area is good for biking. The score system analyzes bike infrastructure (lanes, shared pathways, etc.), hills, destinations, road connectivity and the number of

Legend

Current Cycling Usage

High — Low

Bike Facilities
- Existing Shared Path
- Future Bicycle Facilities
- Planned Protected Bike Lane
- Existing Shared Road Higher Traffic
- Existing Shared Road Lower Traffic
- Planned Shared Bike Lane

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

biker commuters within a neighbourhood. These score ranges indicate easy of biking in a neighbourhood:

- 0-50 – somewhat bikeable – minimal bike infrastructure
- 50-69 – bikeable – some bike infrastructure
- 70-89 – very bikable – biking is convenienet for most trips
- 90-100 – extremely bikable – daily errands possible by bike

2.10.A   127 Street to 113A Street

The only existing bike facility in this segment is the high traffic shared road along 113A Street. Future and planned facilities are along 127 Street, 113A Street (upgraded) and 132 Avenue.

As part of neighbourhood renewal in Calder, a shared pathway will be constructed along 129 Avenue.

The heatmaps reveal higher cycling use along:

- 127 Street
- 123A Street
- 119 Street
- 113A Street
- 132 Avenue

From the heatmap information, it appears that Strava users prefer to cycle on 132 Avenue compared to other parallel routes in Kensington and Calder. This could be due to a number of factors including the directness of 132 Avenue and the limited number of required stops along the corridor.

This area is relatively flat, but lacks any dedicated bike infrastructure. Therefore, the bike scores are very low:

- Kensington: 21
- Calder: 30

Legend

Current Cycling Usage

High   Low

Bike Facilities

- Existing Shared Path
- Future Bicycle Facilities
- Planned Protected Bike Lane
- Existing Shared Road Higher Traffic
- Existing Shared Road Lower Traffic
- Planned Shared Bike Lane

Land use

- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.10.B 113A Street to 97 Street

Existing bike facilities in the area include the street level shared lane along 113A Street, and along the north-south shared pathway west of 102 Street.

Future and planned facilities include upgrades along 113A Street, and on 97 Street, and 132 Avenue.
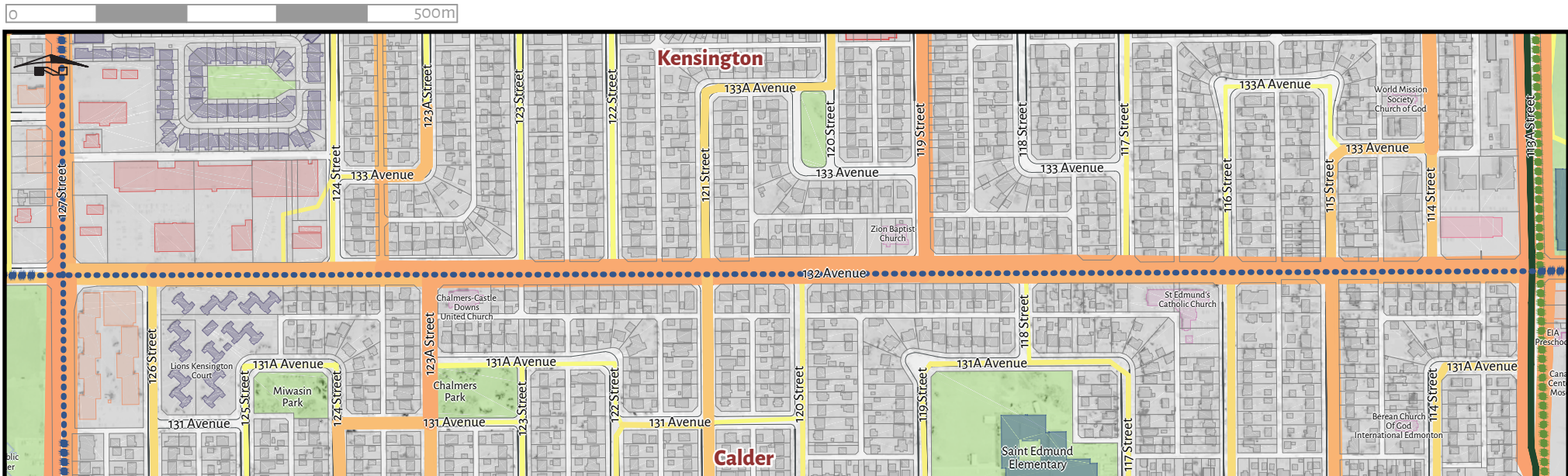
The heat maps reveal higher cycling use along:

- 113A Street
- 112 Street
- 109 Street
- 101 Street
- 97 Street
- 132 Avenue

From the heatmap information, it appears that Strava users prefer to cycle on 132 Avenue compared to other parallel routes in Rosslyn and Lauderdale. This could be due to a number of factors including the directness of 132 Avenue and the limited number of required stops along the corridor. Although it appears that 97 Street is a significant route for people on bikes, the parallel 101 Street also appears to have a higher volume of cycling use. This may be because it is a nearby parallel route where cyclists feel more comfort riding, but can also be accessed with minimal detouring.

Although this area is relatively flat and has numerous desirable community destinations, the only bicycle infrastructure is along the old railway right-of-way near 102 Street. Therefore, bike scores for these neighbourhoods are very low.:

- Rosslyn: 30
- Lauderdale: 32

2.10.C 97 Street to 82 Street

There is an existing shared lane bike facility along 82 Street immediately north and south of 132 Avenue on the high volume arterial road. North of 132 Avenue, the shared lanes transition back to service roads. South of 132 Avenue the northbound bike route utilizes a service road, but the southbound bike route consists of a shared lane that continues to 127 Avenue.

Future and planned facilities are identified along 97 Street and 132 Avenue.

The heat maps reveal higher cycling use along:
- 97 Street
- 90 Street
- 88 Street and near Archbishop O'Leary School
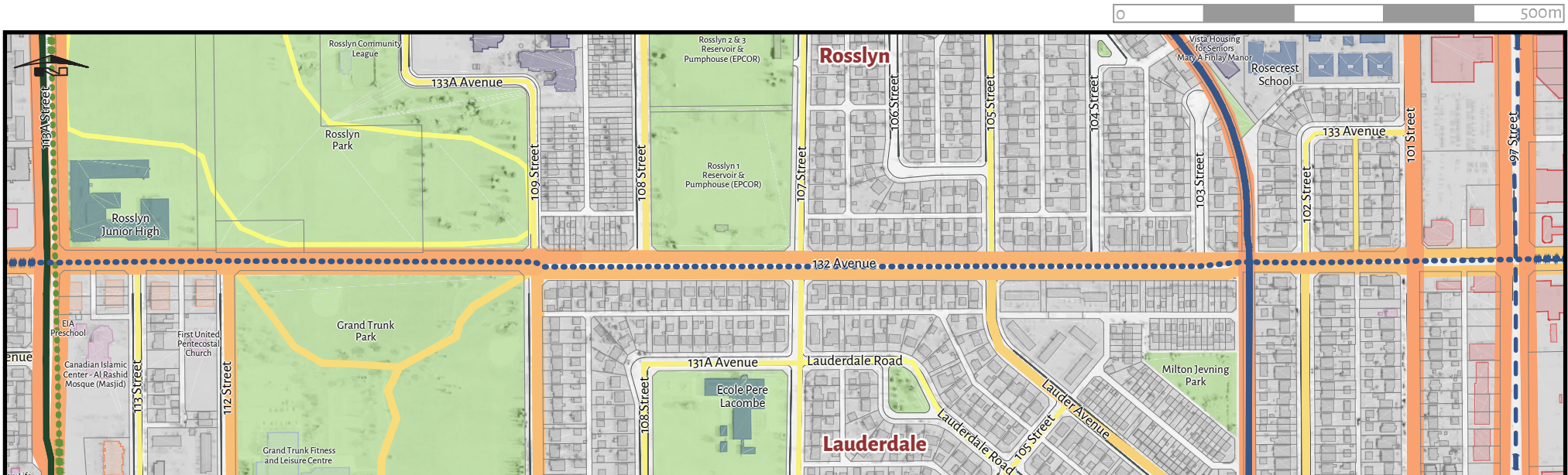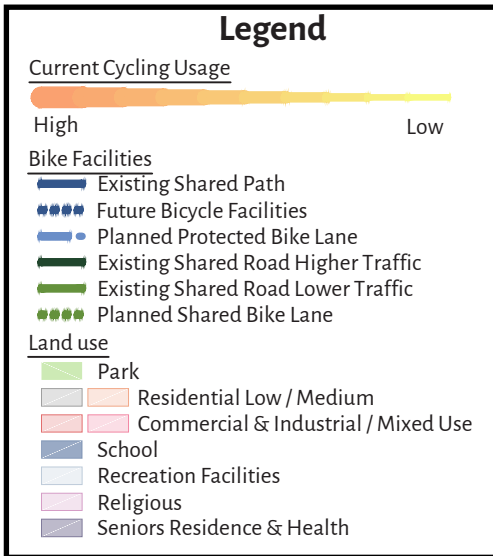- 86 Street
- 85 Street
- 82 Street
- 132 Avenue

From the heatmap information, it appears that Strava users prefer to cycle on 132 Avenue compared to other parallel routes in Glengarry and Killarney. This could be due to a number of factors including the directness of 132 Avenue and the limited number of required stops along the corridor. Cycling usage appears to be highest between 88 Street and 82 Street.

Killarney neighbourhood renewal designs have identified bike routes that will be constructed as part of neighbourhood renewal in the next few years. These include a shared pathway on 90 Street from 127 Avenue to 132 Avenue, and a shared road on 128 Avenue from 97 Street to 82 Street.

Although this area is relatively flat and has numerous desirable community destinations, there is currently no all ages/all abilities bicycle infrastructure in these communities. Therefore, bike scores for these neighbourhoods are very low.
- Glengarry: 32
- Killarney: 41
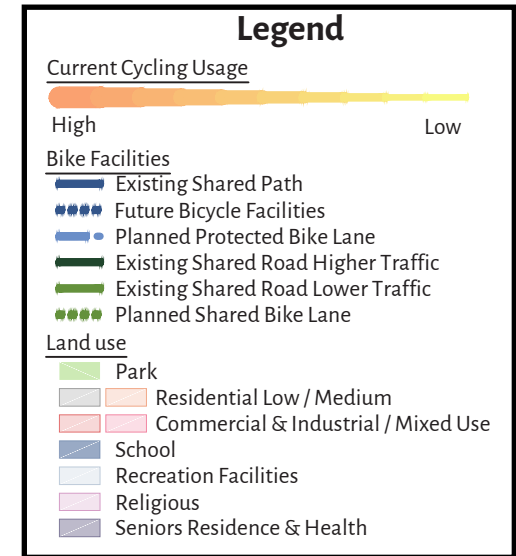
2.10.D 82 Street to 66 Street

There is an existing shared lane bike facility along 82 Street immediately north adn south of 132 Avenue on the high volume arterial road. North of 132 Avenue, the shared lanes transition back to service roads. South of 132 Avenue the northbound bike route utilizes a service road, but the southbound bike route consists of a shared lane on this high-volume arterial. There is also an existing signed on-street bike facility on 76 Street near 132 Avenue.

Future and planned bike facilities are identified along 66 Street and 132 Avenue.

The heat maps reveal higher cycling use along:

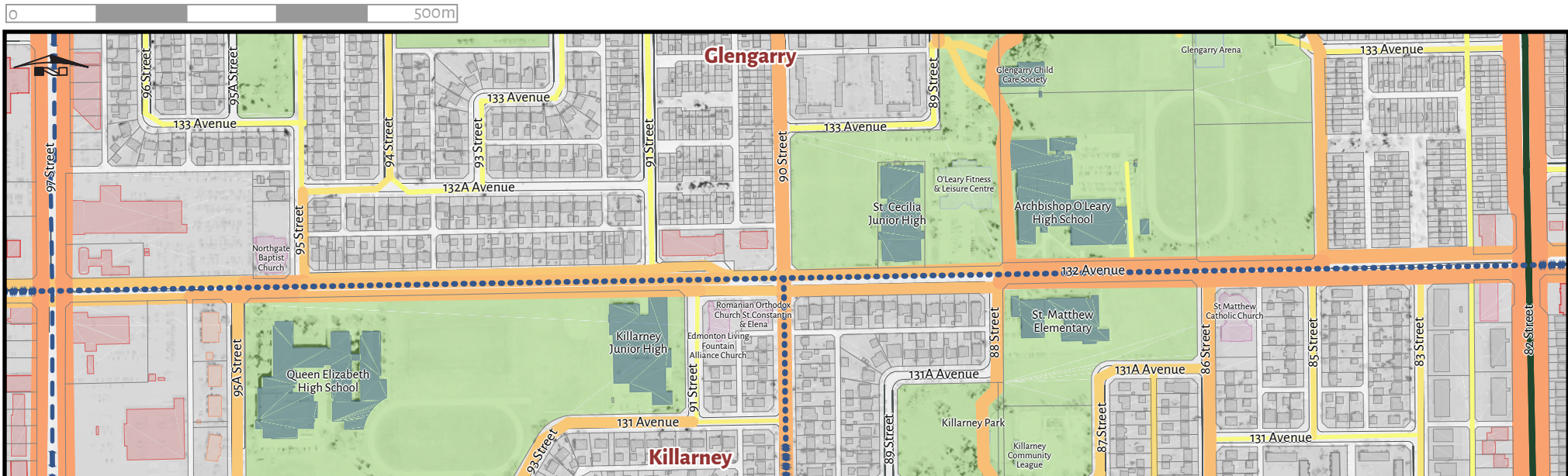- 82 Street
- Delwood Road
- 79 Street
- 69 Street
- 66 Street
- 132 Avenue

From the heatmap information, it appears that Strava users prefer to cycle on 132 Avenue compared to other parallel routes in Kensington and Calder. This could be due to a number of factors including the directness of 132 Avenue and the limited number of required stops along the corridor. Where service roads are present for extended lengths, it appears that people on bikes are more likely to choose to ride on the service roads than on the main driving lanes, but this does not seem to affect the number of people cycling along the corridor.

Although this area is relatively flat and has numerous desirable community destinations, there is currently no all ages/all abilities bicycle infrastructure in these communities. Therefore, bike scores for these neighbourhoods are very low.

- Delwood: 37
- Balwin: 38
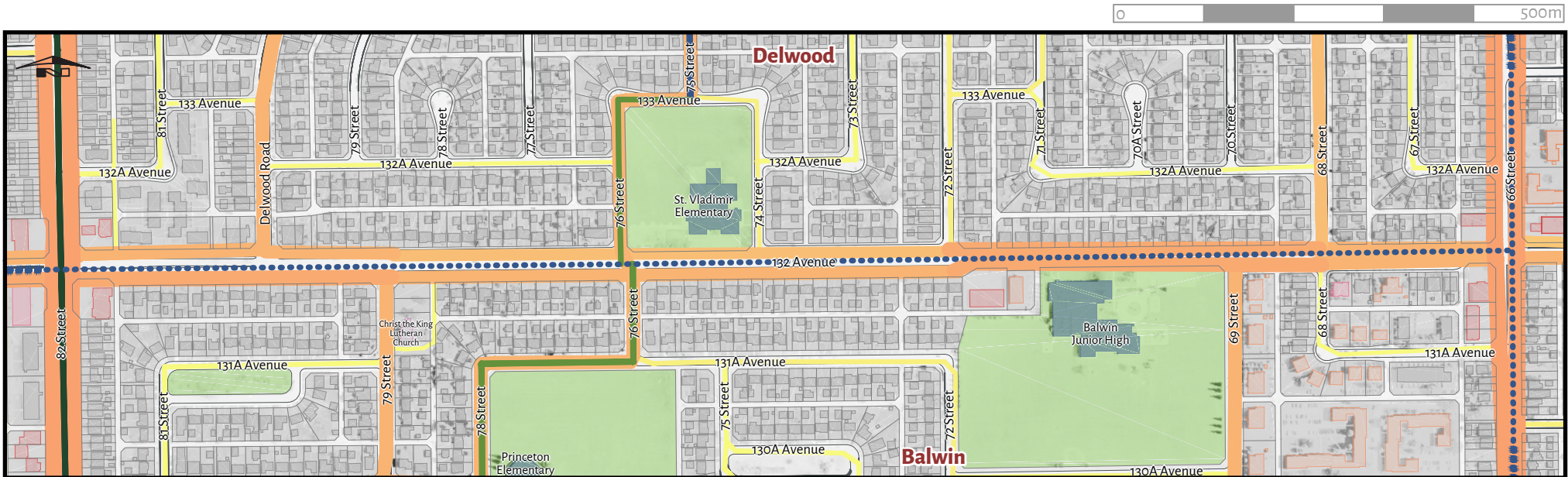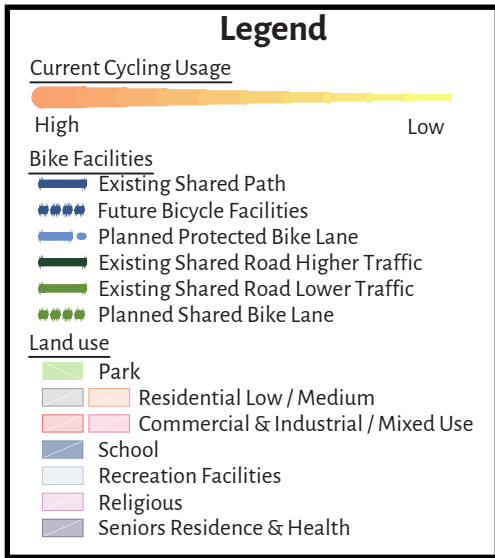
2.10.E 66 Street to Fort Road

There are no existing bike facilities along this segment of 132 Avenue.

Future and planned routes are identified along 66 Street and Fort Road. Although the rest of the 132 Avenue corridor is identified as a future bike route, this short segment is not. Additional investigation should consider if the future 132 Avenue bike route should extend to the future Fort Road bike route.

The heat map shows higher cycling use along:

● 66 Street
● 62 Street
● Fort Road

From the heatmap information, it appears that Strava users prefer to cycle on 132 Avenue compared to other parallel routes in Belvedere. This could be due to a number of factors including the directness of 132 Avenue and the limited number of required stops along the corridor. Cycling usage appears to be highest between 62 Street and 82 Street. 62 Street appears to be a major north-south route, which may

be in part because it connects to the Belvedere Transit Centre (and LRT).

Although this area is relatively flat and has reasonable community connectivity, there is no bicycle infrastructure. Therefore, the bike score for this neighbourhood is very low.

● Belvedere: 35

Legend

Current Cycling Usage

High ———————————————— Low

Bike Facilities
- Existing Shared Path
- Future Bicycle Facilities
- Planned Protected Bike Lane
- Existing Shared Road Higher Traffic
- Existing Shared Road Lower Traffic
- Planned Shared Bike Lane

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

Legend

ETS Routes & School Buses

— Community
— Crosstown
— Frequent
— Local
— Rapid
— School
🚌🚌 Bus Stop with / without Shelter
▬▬ School Loading Zones

Future Metro LRT (Concept Only)

▬ ▬ LRT
🚉 Station

Land use

Park
Residential Low / Medium
Commercial & Industrial / Mixed Use
School
Recreation Facilities
Religious
Seniors Residence & Health

2.11 Mobility Network – Transit & School Buses

The Edmonton Transit System (ETS) network changed in April 2021. As 132 Avenue renewal will take place after the changes, we have considered only the new bus network.

2.11.1 Bus Stops

Existing bus stops are shown on the detailed maps in this section, with different colours for stops with shelters and without shelters. Bus stop locations are subject to change or alteration based on bus route changes or recommendations as part of the 132 Avenue Renewal.

2.11.2 Bus Routes

ETS has identified six route types that will be part of the 2021 bus network, and are described below.

Frequent – Routes will have buses that come every 15 minutes or better, at most times of the day and most days of the week.

Rapid – Routes, which are express routes, have limited stops that quickly connect suburbs with downtown destinations.

Crosstown – Routes will connect key destinations without going through downtown.

Local – Routes will connect neighbourhoods to local destinations and other routes.

Community – Routes will connect seniors' residences with nearby services.

School – Routes will service K-12 schools before and after school hours.

2.11.3 Transit Centres

There are no transit centres along the 132 Avenue corridor. The closest transit centres are:
- Belvedere LRT Station and Transit Centre
- Northgate Transit Centre

2.11.4 Future North LRT

The City of Edmonton has current plans to expand the LRT network. The METRO LRT Line is planned to extend north through the 132 Avenue Study area along 113A Street.

2.11.5 ETS & Yellow School Bus Services

Schools along the 132 Avenue corridor are serviced by a combination of yellow school buses and Edmonton Transit Service school routes. Typically, yellow school buses serve elementary schools and some junior high schools. ETS school routes generally serve junior high and high schools.
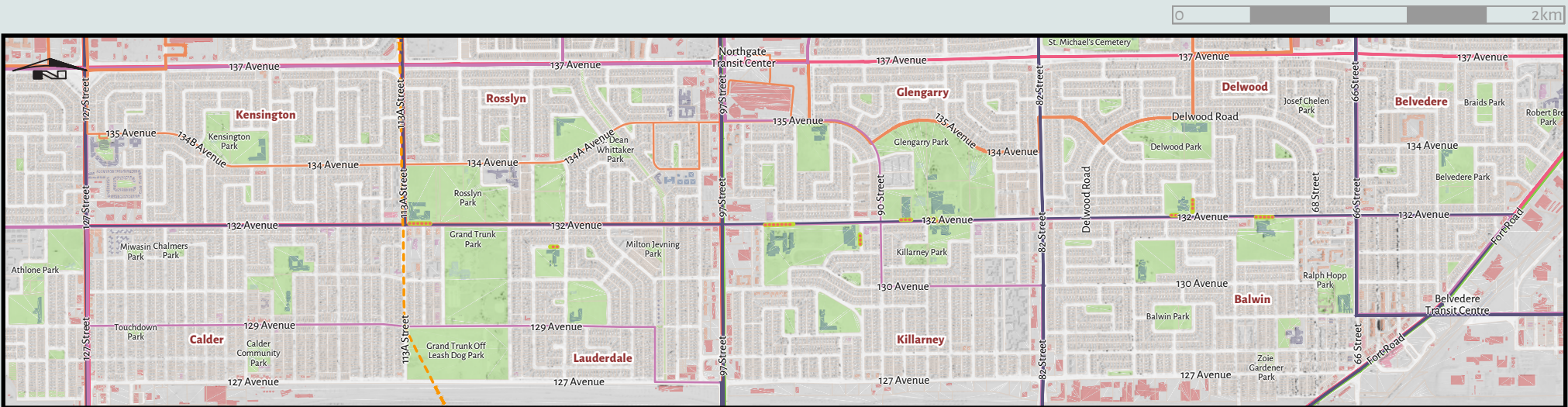
2.11.6 School Bus Loading Zones

Yellow school bus operations are less predictable, and can change depending on where students live or are picked up or dropped off. However, we have identified designated school bus loading zones at schools near the 132 Avenue corridor.

In these locations, we expect yellow school buses to occupy these zones during before school drop-off and after school pick-up. We also expect that these zones would be used periodically during school hours to accommodate field trips that utilize bus travel.

2.11.A 127 Street to 113A Street

ETS bus service runs along the entire length of this segment, and includes Crosstown, Local, and School routes. 127 Street is a significant transit corridor and has Crosstown, Local, Community, and School routes. 113A Street has Local, Community, and School routes, north of 132 Avenue.

There are a number of bus stops along 132 Avenue separated by about 200m-300m, and several have shelters.

The Metro LRT Line north extension is planned to be constructed along 113A Street through the study area, though there is no timeline for construction. Knowing the future location of the 113A Street LRT station, a typical 800m design radius will be considered around the future station during the 132 Avenue renewal design.

ETS school routes run along 132 Avenue within this segment, but because there are no adjacent schools these routes may not stop along this corridor except to provide transfer opportunities.

There are no school bus loading zones in this segment of the corridor.

Legend

ETS Routes & School Buses
- Community
- Crosstown
- Frequent
- Local
- Rapid
- School
- Bus Stop with / without Shelter
- School Loading Zones

Future Metro LRT (Concept Only)
- LRT
- Station

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

Legend

ETS Routes & School Buses
- Community
- Crosstown
- Frequent
- Local
- Rapid
- School
- Bus Stop with / without Shelter
- School Loading Zones

Future Metro LRT (Concept Only)
- LRT
- Station

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.11.B 113A Street to 97 Street

ETS bus service operates along the entire length of this segment, and includes Crosstown, Local, and School routes. The Crosstown Route terminates at 97 Street and travels both north and south from there.

These same routes also travel on 113A Street north of 132 Avenue.

97 Street is a significant transit corridor, which includes Frequent, School, and Community Routes. Because of this, focused consideration will be provided for people who walk to transit facilities on 97 Street during 132 Avenue renewal.

There are a number of bus stops along 132 Avenue, each separated by 200m-450m, and several have shelters.

The Metro LRT Line north extension is planned to be constructed along 113A Street through the study area, though there is no timeline for construction. Knowing the future location of the 113A Street LRT station, a typical 800m design radius will be considered around the future station during the 132 Avenue renewal design.

Rosslyn Junior High School is located on 132 Avenue east of 113A Street. Ecole Père-Lacombe Elementary is located about one block south of 132 Avenue at 107 Street.

ETS school routes run along 132 Avenue within this segment, north on 113 Street, and both north and south on 97 Street. These routes may not stop along this corridor except near Rosslyn Junior High or to provide transfer opportunities.

The ETS stop for northbound buses on 113A Street at Rosslyn Junior High is signed at 80m long which may indicate this is a significant pick-up and/or transfer point.

There is a school bus loading zone on the north side of 132 Avenue at Rosslyn Junior High School. Consideration will need to be given to ensure school buses will have sufficient room circulate from 132 Avenue to and from the loading zone.
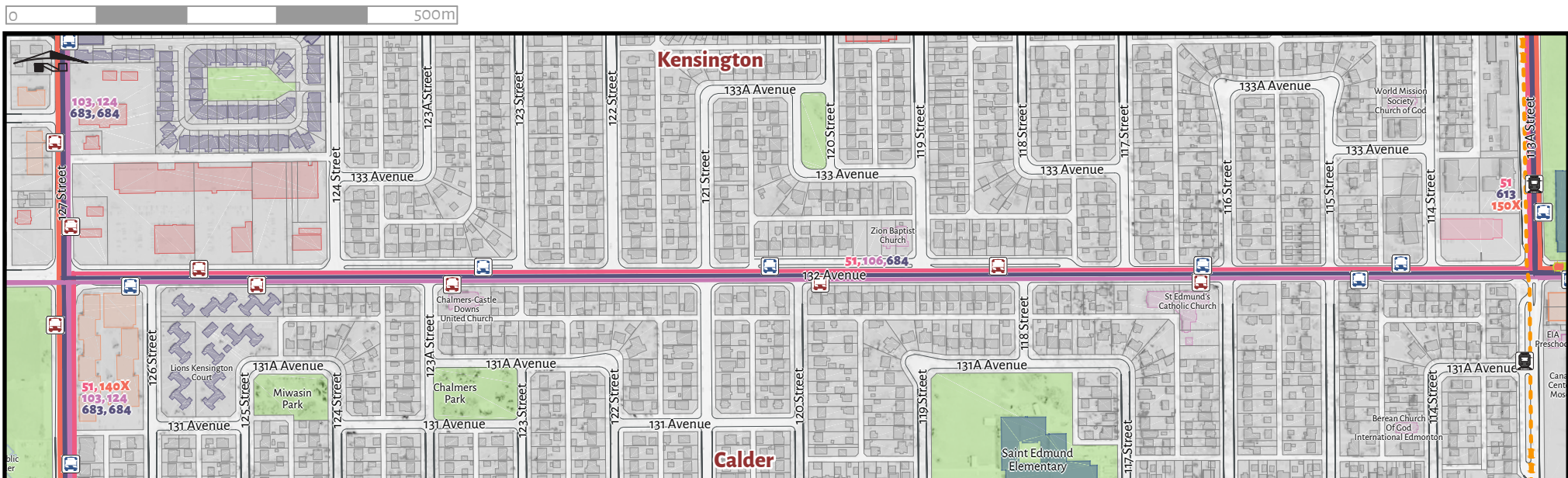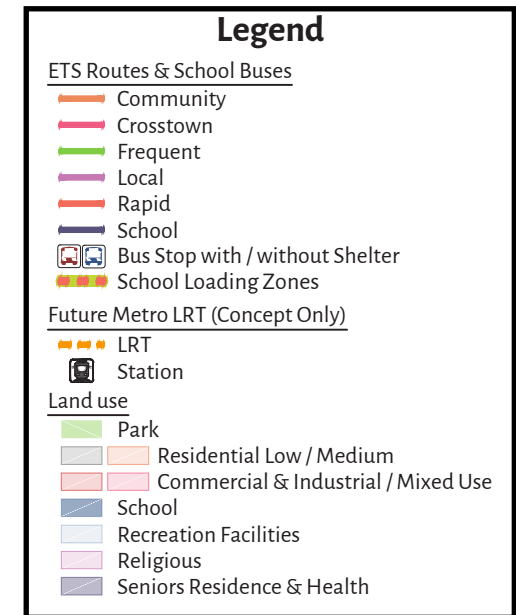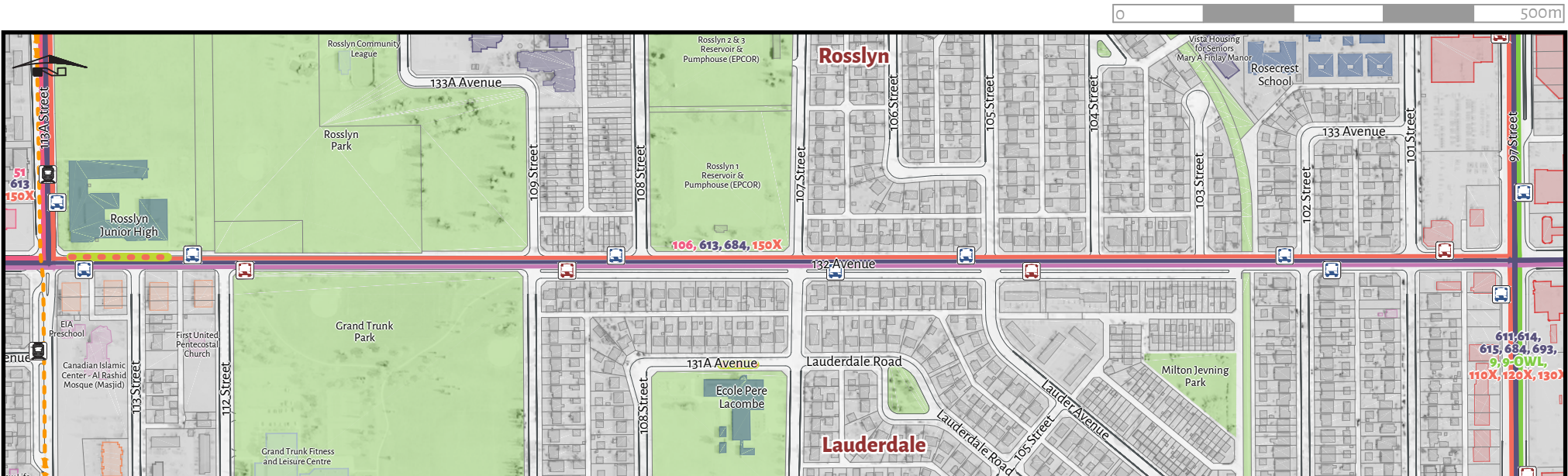
2.11.C   97 Street to 82 Street

ETS bus service operates along the entire length of this segment, and includes a Local, and School route.

97 Street is a significant transit corridor, which includes Frequent, School, and Community Routes. Because of this, focused consideration will be provided for people who walk to transit facilities on 97 Street during 132 Avenue renewal.

90 Street has a local route that travel both north and south across 132 Avenue.

82 Street only has ETS School Route service.

There are a number of bus stops along 132 Avenue, about 200m-400m apart, and several have shelters.

Northgate Transit Centre is located east of 97 Street along 137 Avenue, approximately 900m north of the 132 Avenue corridor.

There are several schools on 132 Avenue along this segment.

ETS school routes run along 132 Avenue within this segment, and both north and south on 97 Street and 82 Street. These routes typically only stop near schools or to provide transfer opportunities.

There are multiple loading zones in this segment of the corridor adjacent to the numerous schools.

Bus loading zones on the north side of 132 Avenue are located near:
- St. Cecilia Junior High School
- Archbishop O'leary High School

Bus loading zones on the south side of 132 Avenue are located near:
- Queen Elizabeth High School
- St. Matthew Elementary

There is also a bus loading zone on 91 Street south of 132 Avenue near Killarney Junior High.

Legend

ETS Routes & School Buses
- Community
- Crosstown
- Frequent
- Local
- Rapid
- School
- Bus Stop with / without Shelter
- School Loading Zones

Future Metro LRT (Concept Only)
- LRT
- Station

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
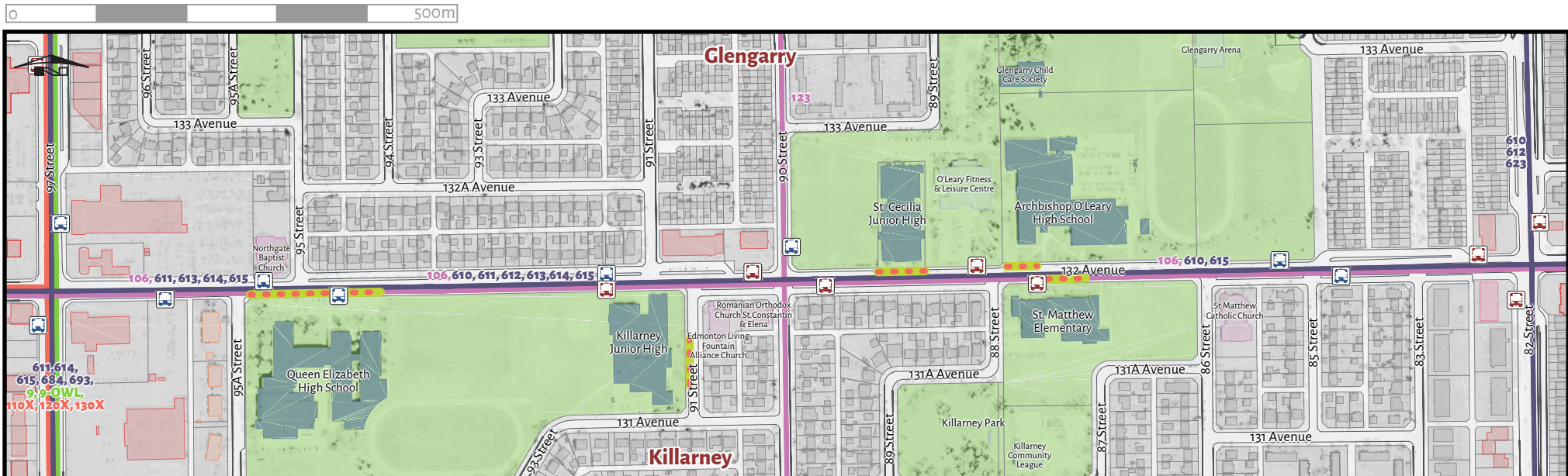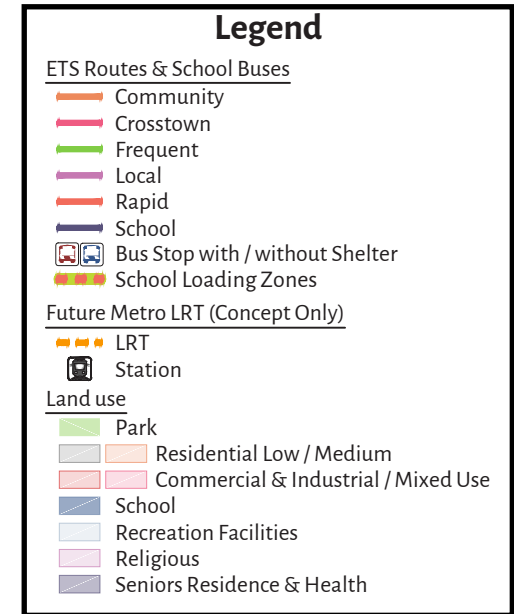
2.11.D   82 Street to 66 Street

ETS bus service operates along the entire length of this segment, and includes Local and School routes.

82 Street has ETS School Route service.

66 Street has Local and School routes.

There are a number of bus stops along 132 Avenue, about 200m-550m apart, and several have shelters.

There are two schools on 132 Avenue along this segment, they include:
- St. Vladimir Elementary
- Balwin Junior High

ETS school routes run along 132 Avenue within this segment, and both north and south on 82 Street and 66 Street. These routes typically only stop near schools or to provide transfer opportunities.

There is a bus loading zone on the south side of 132 Avenue near Balwin Junior High. There is also a bus loading zone on 74 Street north of 132 Avenue near St. Vladimir Elementary.

Legend

ETS Routes & School Buses
- Community
- Crosstown
- Frequent
- Local
- Rapid
- School
- Bus Stop with / without Shelter
- School Loading Zones

Future Metro LRT (Concept Only)
- LRT
- Station

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
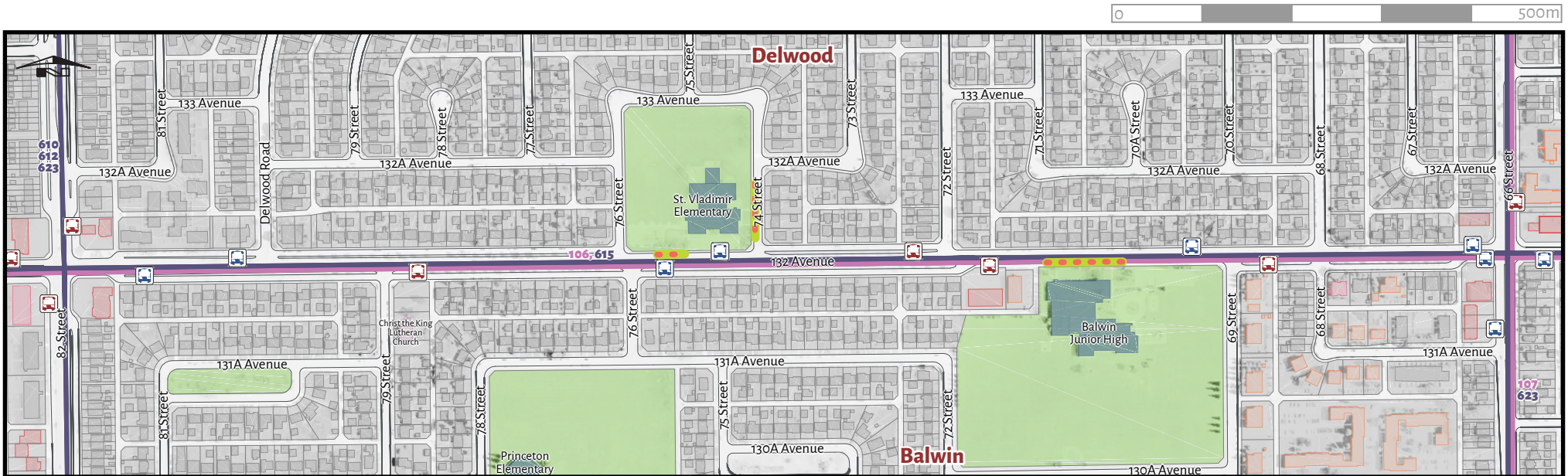
2.11.E 66 Street to Fort Road

ETS bus service operates along the entire length of this segment, and includes Local and School routes.

66 Street has Local and School routes.

Fort Road is a significant transit corridor and will have Frequent, Crosstown, Local, and School Routes. Belvedere LRT Station is located on Fort Road and 129 Avenue, approximately 500m south of the 132 Avenue corridor. Because of this, focused consideration will be provided for people who walk to transit facilities on Fort Road during 132 Avenue renewal.

There are a number of bus stops along 132 Avenue, about 200m-300m apart, and several have shelters.

There are no schools adjacent or near 132 Avenue in this segment.

ETS school routes run along 132 Avenue within this segment, both north and south on 66 Street, and south on Fort Road. It's likely that these routes typically only stop at locations to provide transfer opportunities.

There are no school bus loading zones along this segment.

Legend

ETS Routes & School Buses
- Community
- Crosstown
- Frequent
- Local
- Rapid
- School
- Bus Stop with / without Shelter
- School Loading Zones

Future Metro LRT (Concept Only)
- LRT
- Station

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.12 Mobility Network – Driving

This section presents an overview of the existing road types and traffic volumes along the project area.

2.12.1 Road Classification

The City of Edmonton classifies roadways into three categories: arterial, collector, and local.

Arterial roads are the highest volume roadways and provide opportunities for passenger and commercial vehicles to travel longer distances at higher speeds. Arterial roads are illustrated in red on this map set.

Arterial roads near the project area include:

- 137 Avenue
- 127 Avenue
- 127 Street
- 113A Street
- 97 Street
- 82 Street
- 66 Street
- Fort Road

Collector roads are moderate capacity corridors which balance traffic flow with local access. Collector roads typically function to convey traffic from local roads to arterial roads. Sometimes, short trips may be made almost exclusively on collector roads. Collector roads are illustrated in purple on this map set.

132 Avenue is a unique collector road for a number of reasons. It forms the boundary of eight neighbourhoods rather than crossing through them as is typical for most collectors. It is wide enough in most sections for four lanes but with parking it generally operates as one lane in each direction. However, there are parallel service roads in places that make this collector road look like an arterial with two driving lanes in each direction. It also provides a through route from Fort Road to 127 Street, much like an arterial.

Local roads are low volume roads which typically function to provide access to local properties. Local roads are illustrated in green on this map set.

There are multiple local roads that intersect with 132 Avenue within the project area.

2.12.2 Traffic Volumes

Total daily traffic volumes are illustrated on select roads, where available from the City's traffic count database. These are estimates based on traffic counts over the past ten years. The City of Edmonton regularly conducts traffic counts throughout the City to understand how traffic patterns evolve over time. Within these neighbourhoods, traffic volumes have been relatively consistent for more than 10 years. This also indicates that traffic volumes are expected

to remain similar in the future, unless drastic redevelopment occurs along the corridor, which is not anticipated.

132 Avenue has relatively consistent volumes along the corridor, generally carrying around 8,000 to 9,000 vehicles per day. The volumes increase up to about 10,000 vehicles per day near 97 Street, and are lowest near Fort Road (4,000 to 6,000 vehicles per day).

Collector roads in Edmonton typically carry 5,000 to 10,000 vehicles per day with one driving lane in each direction. Arterial roads typically carry more than 20,000 vehicles per day.

The measured volumes along the 132 Avenue corridor are consistent with what is expected along a significant collector road with one lane in each direction, and volumes are comparable to other significant collector roads in the City.

2.12.3   Intersection Controls

This map set illustrates signalized intersections - both full signals, and ones which are activated only by pedestrian push buttons.

2.12.A   127 Street to 113A Street

132 Avenue conveys about 8,500 vehicles per day along this segment. As noted previously, these volumes are expected to remain consistent in the future.

132 Avenue intersects with two arterial roads along this segment:
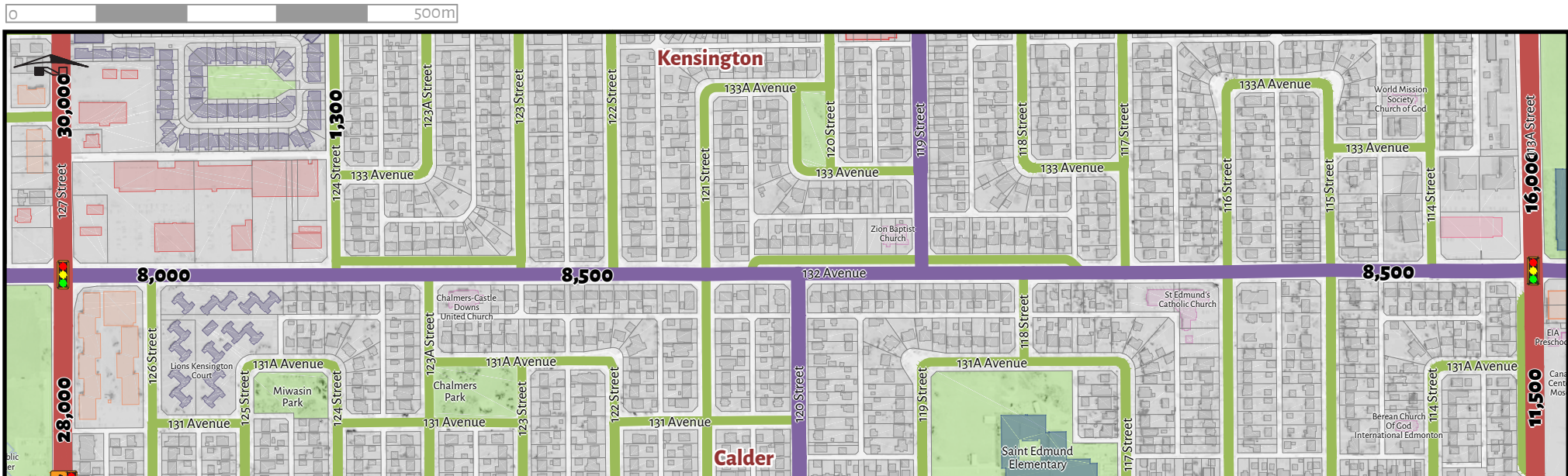
- 127 Street
- 113A Street

Two collector roads intersect the corridor:

- 120 Street (to the south)
- 119 Street (to the north)

There are numerous local roads and a few alleys that intersect 132 Avenue. There are service roads on the north side of 132 Avenue:

- between 124 Street and 123 Street
- between east of 121 Street and east of 118 Street

There are fully signalized intersections at both arterial roads (127 Street and 113A Street).

Legend

5,000 Estimated Daily Traffic Volume

Road Type
- Arterial
- Collector
- Local

Intersection Control
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.12.B 113A Street to 97 Street

132 Avenue conveys about 9,000 vehicles per day along this segment, though the volumes increase to about 10,500 just west of 97 Street. As noted previously, these volumes are expected to remain consistent in the future.

132 Avenue intersects with two arterial roads along this segment:
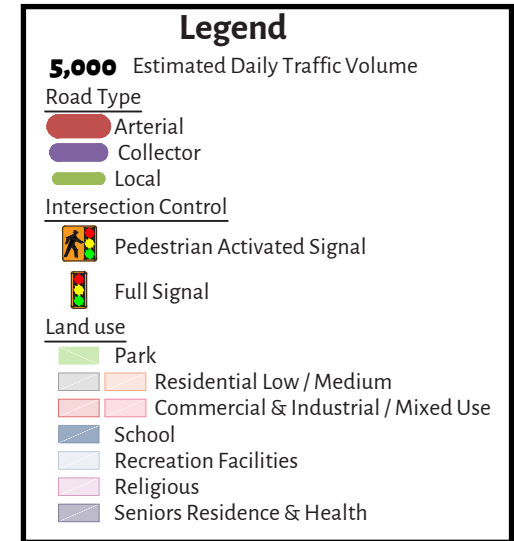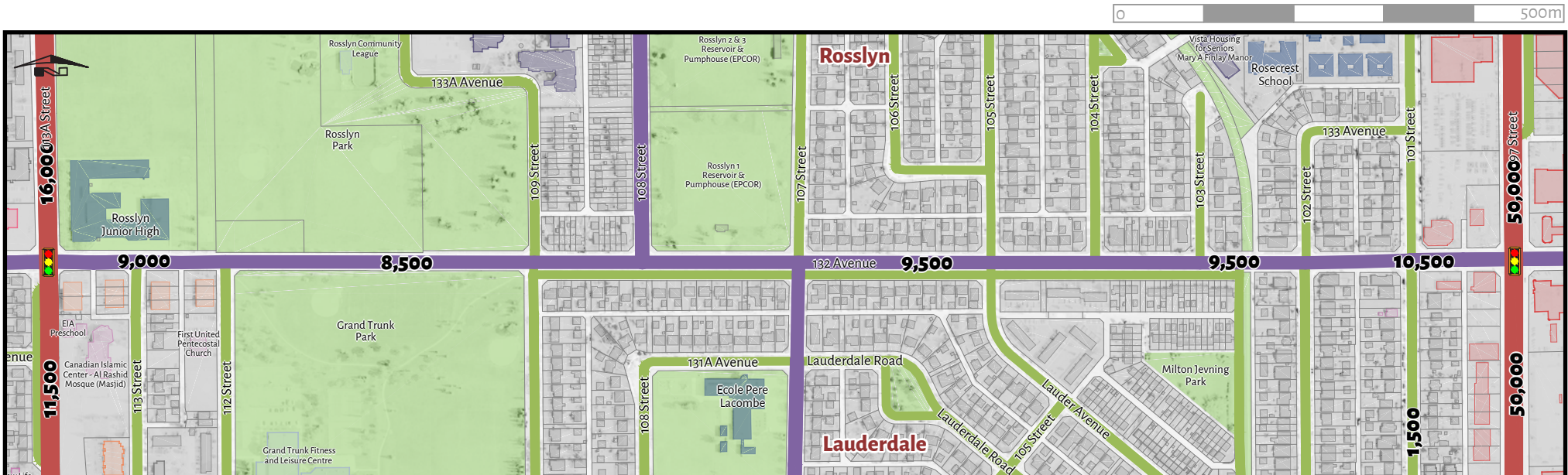
- 113A Street
- 97 Street

Two collector roads intersect the corridor:

- 108 Street (to the north)
- 107 Street (to the south)

There are numerous local roads and a few alleys that intersect 132 Avenue. There is a service road on the south side of 132 Avenue:

- between 109 Street and 102A Street

There are fully signalized intersections at both arterial roads (113A Street and 97 Street).

Legend

5,000 Estimated Daily Traffic Volume

Road Type
- Arterial
- Collector
- Local

Intersection Control
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.12.C   97 Street to 82 Street

132 Avenue conveys about 8,500 vehicles per day along this segment, though the volumes increase to about 10,000 just west of 82 Street. As noted previously, these volumes are expected to remain consistent in the future. 132 Avenue intersects with two arterial roads along this segment:
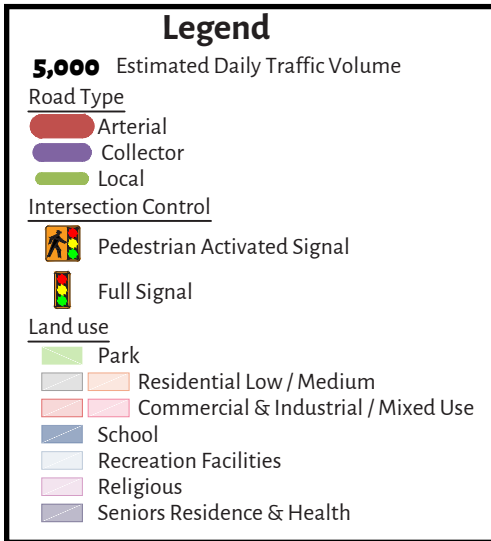
- 97 Street
- 82 Street

One collector roads intersect the corridor:

- 90 Street (to both the north and south)

There are numerous local roads and a few alleys that intersect 132 Avenue. There are some service roads along 132 Avenue in this segment:

- between 95 Street and east of 91 Street (north side)
- between 91 Street and 88 Street (south side)
- between 86 Street and east of 83 Street (south side)
- between 85 Street and east of 83 Street (north side)

There are fully signalized intersections at both arterial roads (97 Street and 82 Street), and at the 90 Street collector road.

2.12.D 82 Street to 66 Street

132 Avenue conveys about 8,000 vehicles per day along this segment, though the volumes increase to about 9,000 just east of 82 Street. As noted previously, these volumes are expected to remain consistent in the future.

132 Avenue intersects with two arterial roads along this segment:
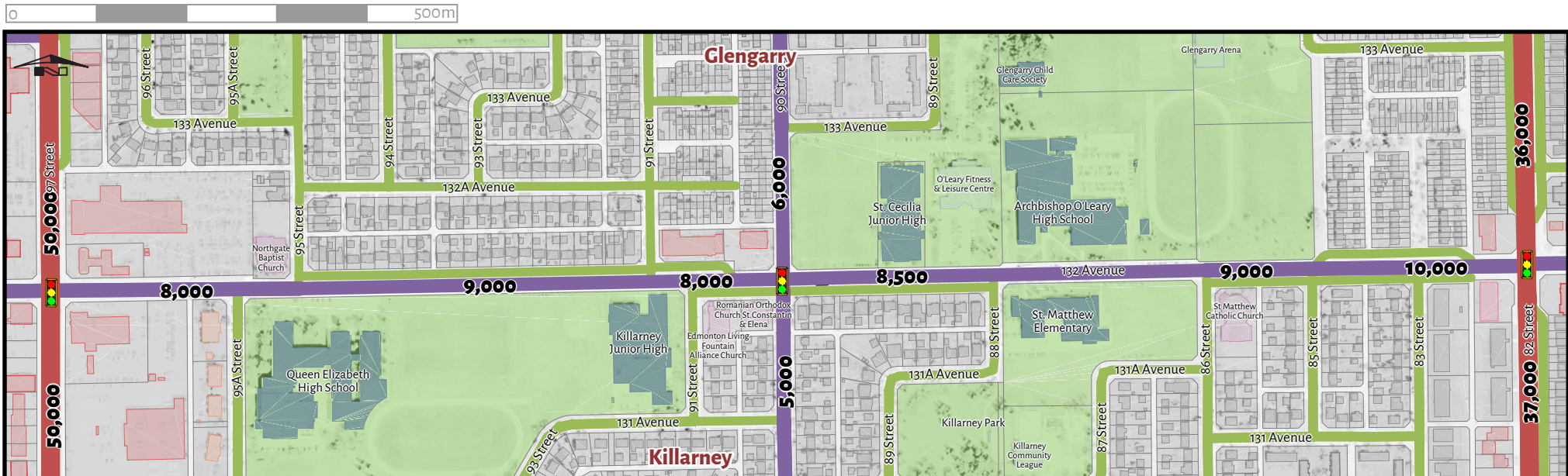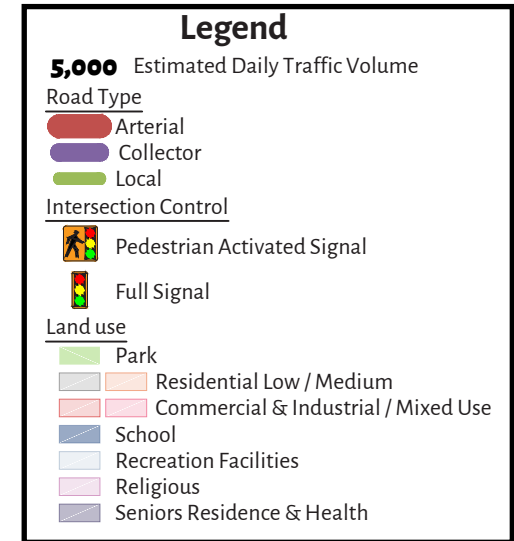
- 82 Street
- 66 Street

Two collector roads intersect the corridor:

- Delwood Road (to the north)
- 68 Street (to the north)

There are numerous local roads and a few alleys that intersect 132 Avenue. There are some service roads along 132 Avenue in this segment:

- between east of 82 Street and 72 Street (both north side and south side)
- between 69 Street and west of 66 Street (south side)

There are fully signalized intersections at both arterial roads (82 Street and 66 Street). There is a pedestrian actuated signal on 132 Avenue at 76 Street near St. Vladimir Elementary School.

Legend

5,000 Estimated Daily Traffic Volume

Road Type
- Arterial
- Collector
- Local

Intersection Control
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.12.E   66 Street to Fort Road

132 Avenue conveys about 6,000 vehicles per day along this segment near 66 Street, and about 4,000 vehicles per day near Fort Road. These volumes are within the range of typical collector road volumes. As noted previously, these volumes are expected to remain consistent in the future.

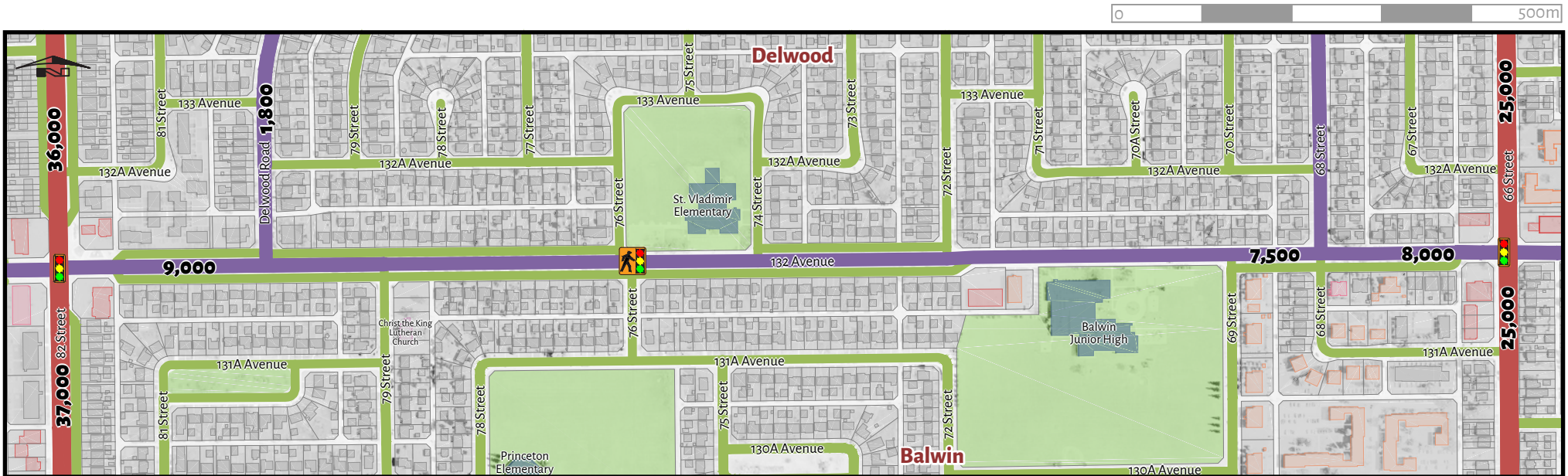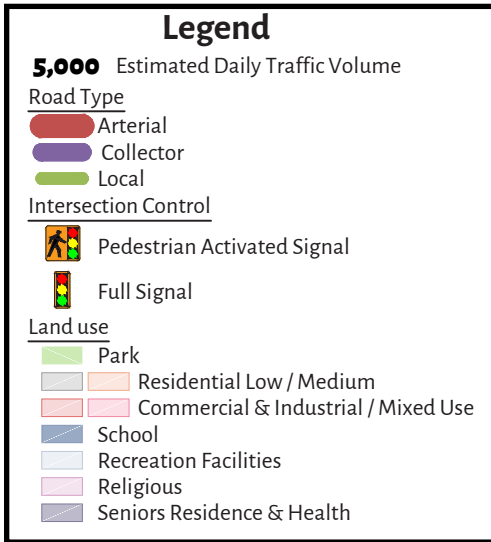132 Avenue intersects with two arterial roads along this segment:

- 66 Street
- Fort Road

There are no intersecting collector roads on 132 Avenue in this segment:

There are several local roads and a few alleys that intersect 132 Avenue. There are no service roads on 132 Avenue within this segment.

There are fully signalized intersections at both arterial roads (66 Street and Fort Road).

Legend

5,000 Estimated Daily Traffic Volume

Road Type
- Arterial
- Collector
- Local

Intersection Control
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
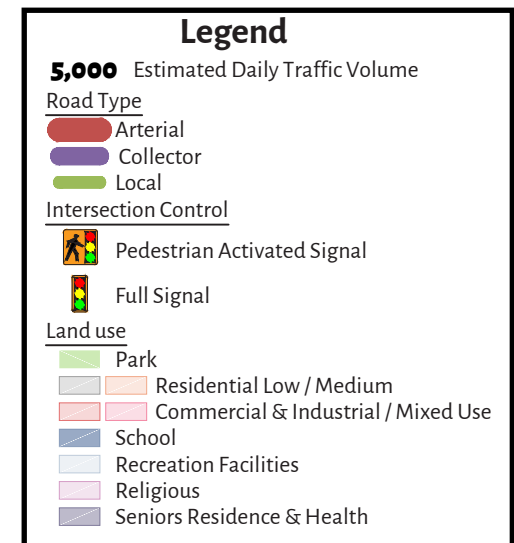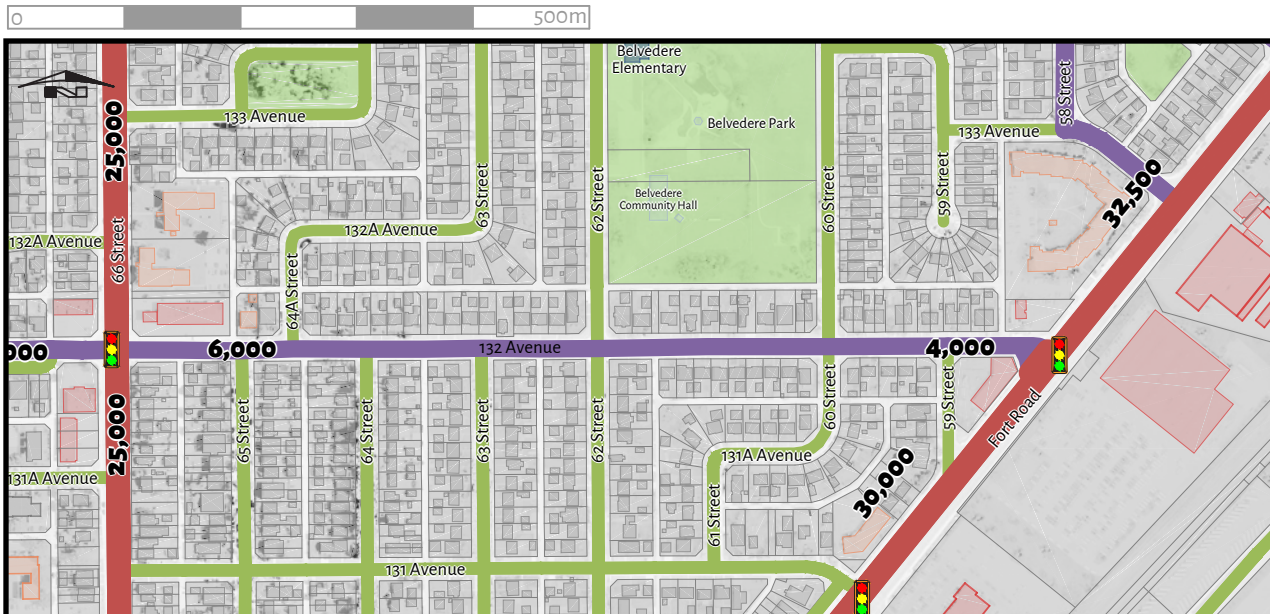
2.13 Mobility Network – Parking

On-street parking is permitted along most of the 132 Avenue corridor. In some locations, on-street parking occurs directly on the main roadway. When there is a service road, parking is generally permitted on the adjacent service road but not on the main roadway.

Although parking is permitted along most of the corridor, there is varying utilization of parking areas, mostly dependent on adjacent land use and development configurations. For instance, single family residential lots facing 132 Avenue typically have higher parking utilization than those lots that face side streets (flanking lots). However, it is also important to note that almost all properties along 132 Avenue have functional alleys behind the properties, both north and south of 132 Avenue. There are very few driveways and garages that front directly onto 132 Avenue or the adjacent service roads.

Near parks and open spaces, parking utilization tends to be more occasional, depending on use of sports fields and during other events.

A brief description of the parking types is provided below. Parking locations and utilization are only shown for the 132 Avenue corridor, including the adjacent service roads, on this map set. Parking is permitted along 132 Avenue near most intersecting local and collector roads. However, parking is generally not permitted on 132 Avenue near arterial roads.

Observed parking utilization is shown in this section. Parking utilization been based on the adjacent land use and urban form, and from limited observations along the corridor.
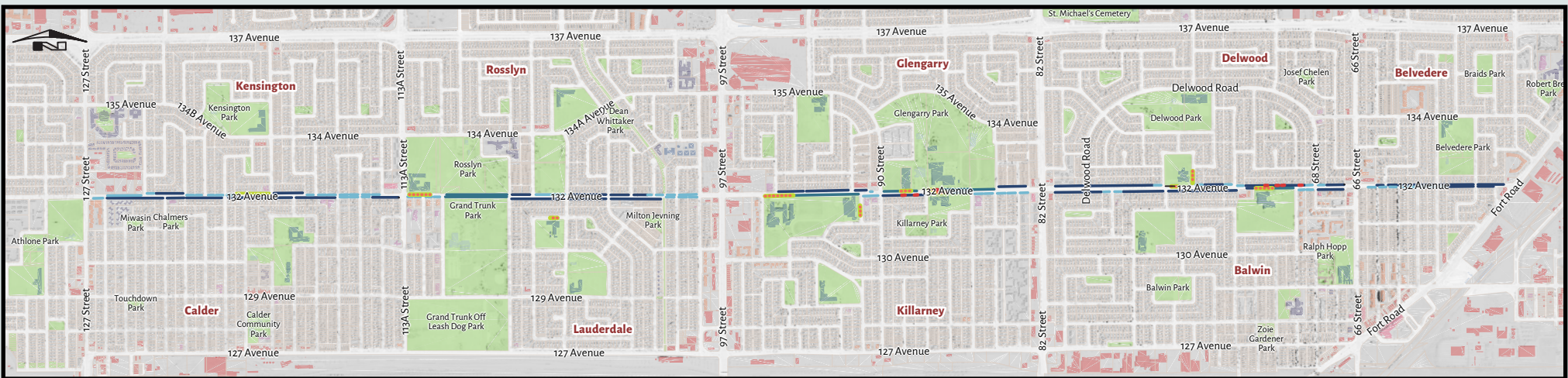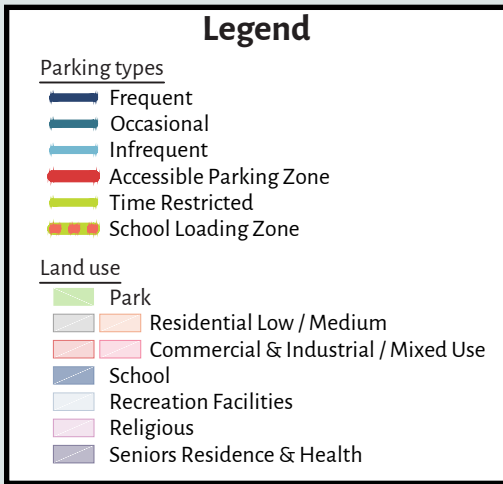
Locations of accessible parking zones, time restricted parking zones, and bus loading zones are defined by signage along the corridor, and are enforceable by City bylaw officers.

Frequent – Parking utilization is generally high where housing directly fronts 132 Avenue or adjacent service roads. These areas are illustrated in dark blue on the map set.

Occasional – Parking utilization is often sporadic and less predictable along 132 Avenue when adjacent to parks and open spaces. Utilization is highly dependent on organized sports and other events. These areas are illustrated in medium blue on the map set.

Infrequent – Parking utilization is generally low where housing flanks 132 Avenue (side yards face 132 Avenue). These areas are illustrated in light blue on the map set.

Accessible Parking Zone – There are several small accessible parking zones along 132 Avenue. These zones are created by application from the adjacent landowner

Legend

Parking types
- Frequent
- Occasional
- Infrequent
- Accessible Parking Zone
- Time Restricted
- School Loading Zone

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

and restrict parking within these zones to vehicles with a disabled parking tag. Accessible parking zones can change over time depending on current residents of adjacent properties – residents can apply to the City to have these zones designated or removed from the street in front of their homes. These zones are illustrated in red on the map set.

Time Restricted – there is one location along the 132 Avenue corridor with a 2 hour parking limit. This is illustrated in yellow on the map set.

School Loading Zone – there are several locations near schools which restrict parking to buses during school hours. These are illustrated with yellow and red lines on the map set.
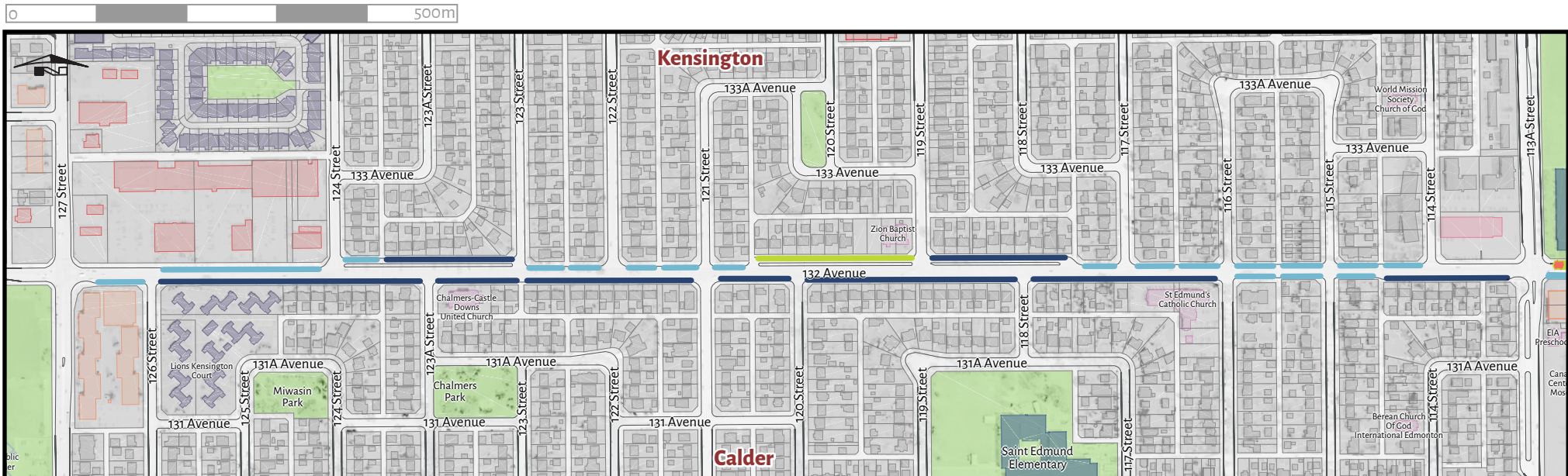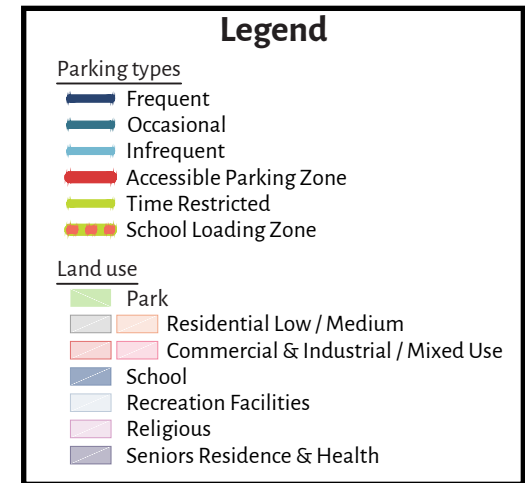
Parking is not permitted along 132 Avenue at locations that are not identified in the above classifications. Generally these are areas near bus stops or are near arterial roads.

2.13.A   127 Street to 113A Street

Street parking utilization along this segment varies due to variation in properties fronting or flanking 132 Avenue and the service roads.

There is a 2-hour parking time limit during weekdays on the service road between east of 121 Street and 119 Street. This is the only time-limited parking zone in the entire project area.

There is generally no street parking on the north side of 132 Avenue near the commercial sites east of 127 Street and west of 113A Street. However, these areas are not explicitly signed as no-parking zones.

Legend

Parking types
- Frequent
- Occasional
- Infrequent
- Accessible Parking Zone
- Time Restricted
- School Loading Zone

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.13.B   113A Street to 97 Street

Street parking along this segment is generally classified as frequent because most residential lots between 109 Street and 103 Street front 132 Avenue or the south service road.
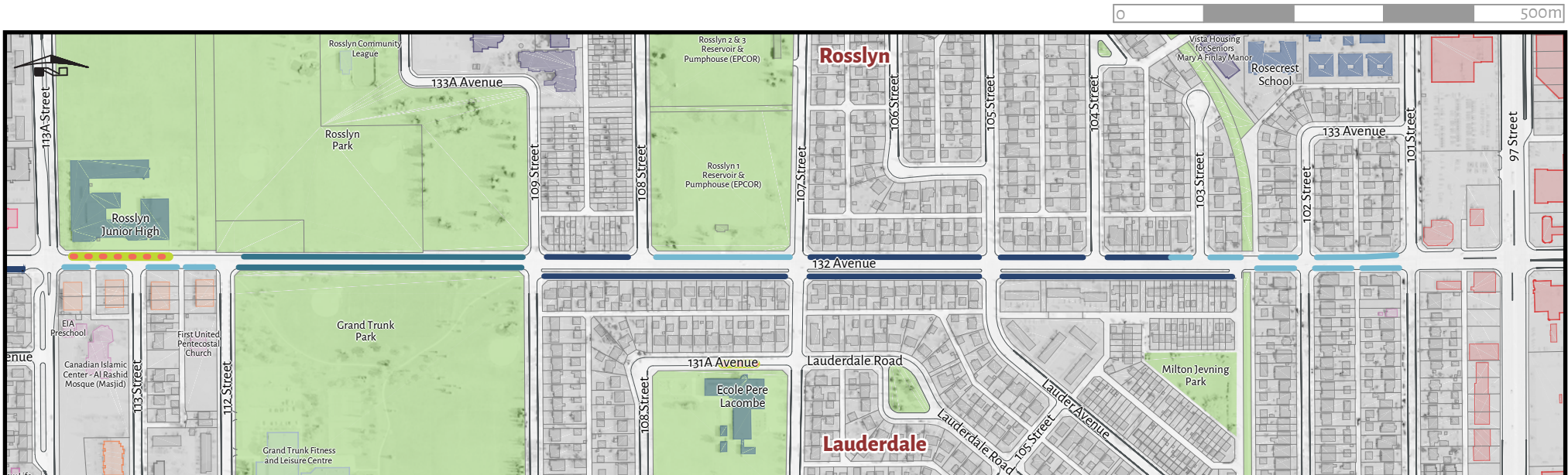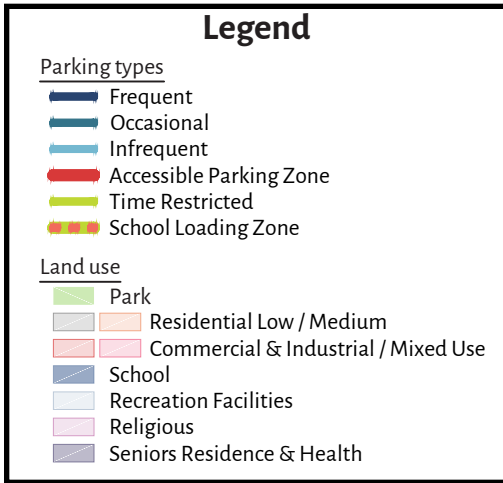
Street parking utilization is generally infrequent between 103 Street and 101 Street as these residential lots flank 132 Avenue. There is also infrequent parking on the south side of 132 Avenue between 113A Street and 112 Street for the same reason.

No parking is permitted between 101 Street and 97 Street, and it is signed.

Parking is permitted between 108 Street and 107 Street near the EPCOR Reservoir site; however, it appears drivers seldom park in this area.

Parking is permitted on both the north and south side of 132 Avenue between Rosslyn Park and Grand Trunk Park. This area sees occasional parking that is in high demand during organized sports or other events in these adjacent parks, but often has very low utilization outside of these times.

There is also a school bus loading zone on the north side of 132 Avenue between 113A Street and 112 Street near Rosslyn Junior High.

Legend

Parking types
▬ Frequent
▬ Occasional
▬ Infrequent
▬ Accessible Parking Zone
▬ Time Restricted
▬ School Loading Zone

Land use
⬛ Park
⬛ Residential Low / Medium
⬛ Commercial & Industrial / Mixed Use
⬛ School
⬛ Recreation Facilities
⬛ Religious
⬛ Seniors Residence & Health

2.13.C   97 Street to 82 Street

Street parking along this segment is a mix of types due to varying development along 132 Avenue.

There are areas with frequent parking utilization along most service roads, including:

- north service road from 95 Street to 91 Street
- south service road from 90 Street to 88 Street
- north service road from 85 Street to 83 Street

There are a few areas on service roads where there is infrequent parking due to adjacent lots being oriented to the streets (rather than 132 Avenue). These include:

- south service road between 91 Street and 90 Street
- south service road between 85 Street and 82 Street

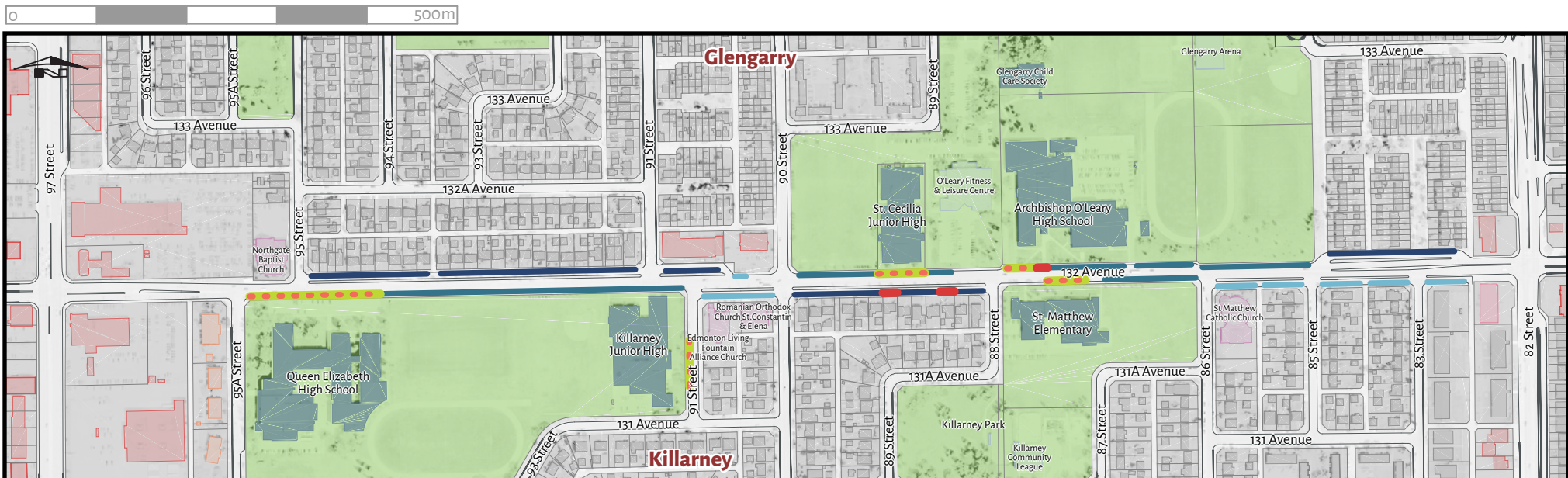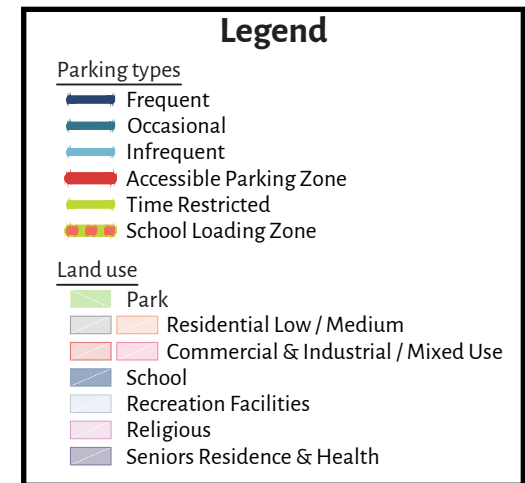No parking is permitted between 97 Street and 95A Street, and immediately west of 82 Street.

Parking is permitted next to most parks and open spaces, and is identified to have occasional utilization related to sports and event programing. Some of these locations may also be used occasionally during school hours for student drop-off/pick-up.

There is a small portion of service road in front of local businesses east of 91 Street that is integrated with the parking lot of these adjacent businesses. The service road was at one time painted to provide perpendicular parking on the service road. Although most of the paint has worn off, most drivers continue to park in that orientation along this short segment of service road. This area sees frequent parking utilization.

There are several bus loading zones, in front of most schools along this segment:

- Queen Elizabeth High School
- St. Cecilia Junior High
- Archbishop O'Leary High School
- St. Matthew Elementary

There are two accessible/disabled parking zones in front of residential properties west of 88 Street.

Legend

Parking types
- Frequent
- Occasional
- Infrequent
- Accessible Parking Zone
- Time Restricted
- School Loading Zone

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

Legend

Parking types

- ▬ Frequent
- ▬ Occasional
- ▬ Infrequent
- ▬ Accessible Parking Zone
- ▬ Time Restricted
- ▬ School Loading Zone

Land use

- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.13.D   82 Street to 66 Street

Much of this segment has service roads on both the north and south side of 132 Avenue. Most street parking along these service roads is classified as frequent, because most lots directly front the 132 Avenue service roads.

There are short segments where parking is identified as infrequent due to adjacent lots being oriented to the side streets (near 79 Street, 71 Street, and 68 Street).

No parking is permitted immediately adjacent to the major arterial intersections at 82 Street and 66 Street.

Parking is permitted near the school field east of Balwin Junior High. This location is used occasionally during school hours for student drop-off/pick-up, and occasionally on evening and weekends related to sports and event programming.

There are two school bus loading zones on 132 Avenue, in front of:

- St. Vladimir Elementary
- Balwin Junior High

There is also a school bus loading zone on 74 Street north of 132 Avenue.

There are four accessible/disabled parking zones in front of residential properties between 72 Street and 69 Street.
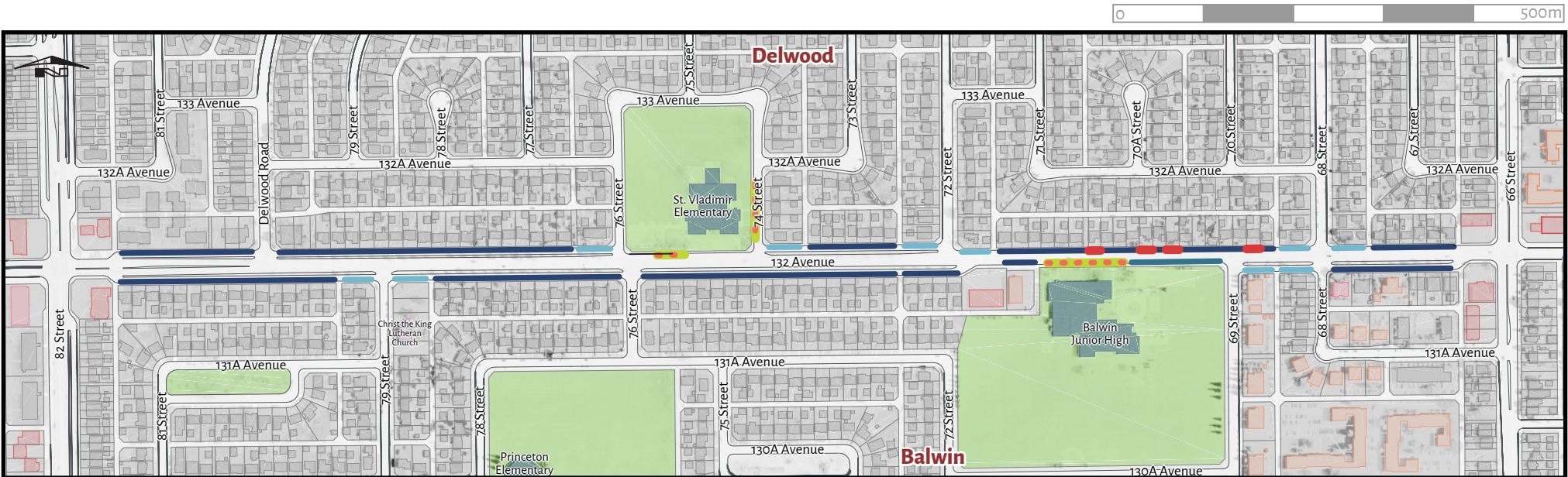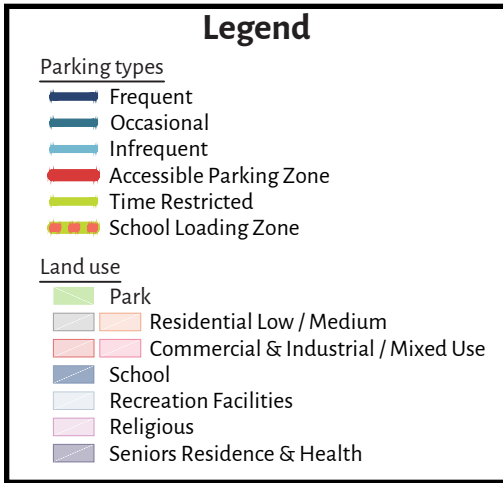
2.13.E 66 Street to Fort Road

Street parking along this segment is primarily classified as frequent. All of the residential properties on the north side directly front 132 Avenue. On the south side, properties east of 62 Street also directly front 132 Avenue.
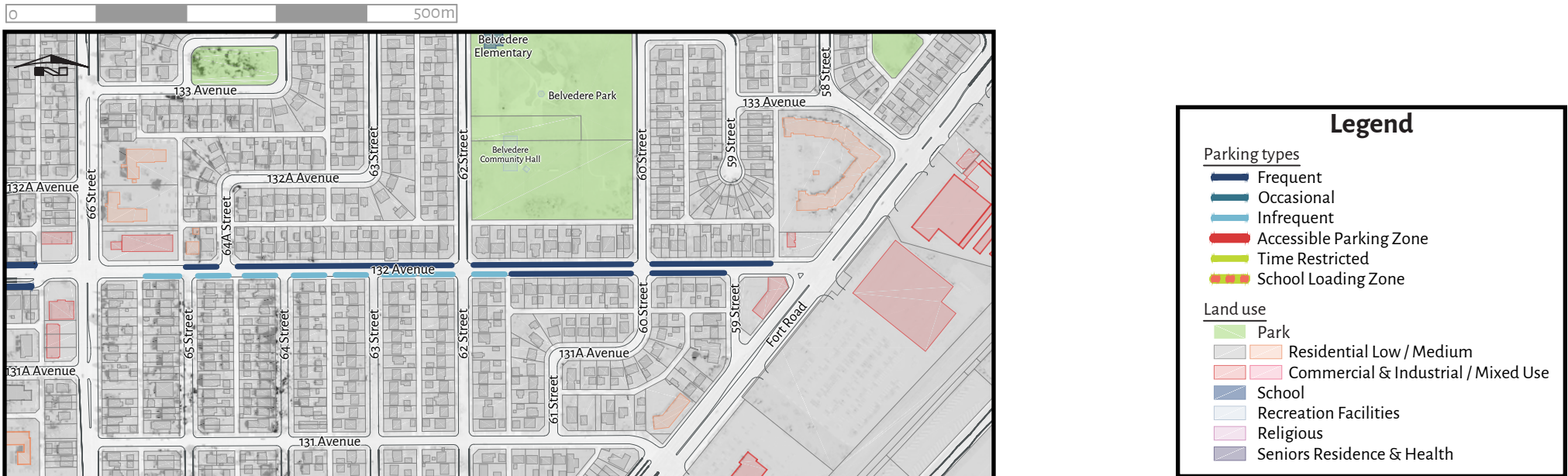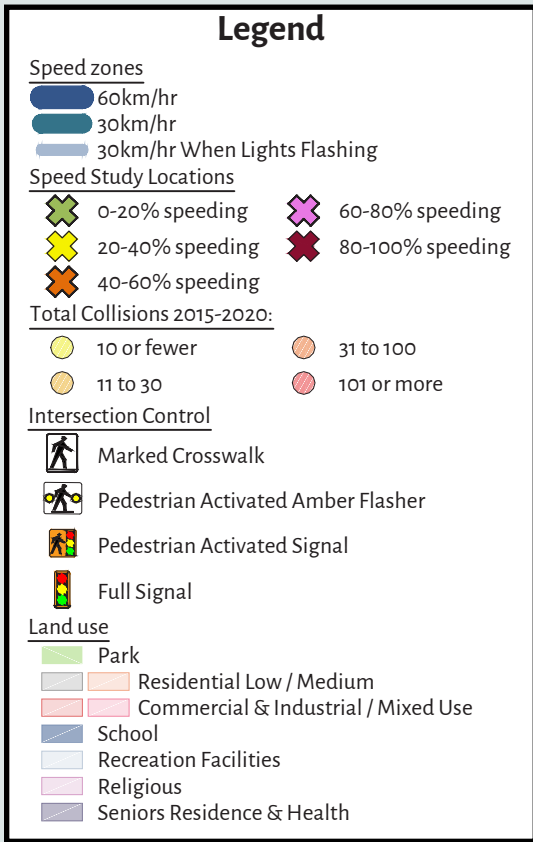
The remaining residential properties on the south side, west of 62 Street, flank 132 Avenue and therefore fewer people park along this section and it has therefore been classified as infrequent.

Parking is not permitted near the arterial road intersections of 66 Street and Fort Road.

There are no school bus loading zones, or any other special parking areas along this segment.

There is a residential street parking program in South Belvedere, from 131 Avenue to the south, to restrict street parking to local residents and guests. This was put in place by the City, in conjunction with the community, to minimize the number of drivers parking in this community and then transferring to transit at the Belvedere LRT Station. There are currently no plans to expand this residential parking program further north to 132 Avenue.

Legend

Parking types
- Frequent
- Occasional
- Infrequent
- Accessible Parking Zone
- Time Restricted
- School Loading Zone

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

Legend

Speed zones
- 60km/hr
- 30km/hr
- 30km/hr When Lights Flashing

Speed Study Locations
- 0-20% speeding
- 20-40% speeding
- 40-60% speeding
- 60-80% speeding
- 80-100% speeding

Total Collisions 2015-2020:
- 10 or fewer
- 11 to 30
- 31 to 100
- 101 or more

Intersection Control
- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.14 Mobility Network – Traffic Safety

The City of Edmonton has committed to providing safe public spaces for all citizens, which includes a commitment to safety for all roadway users.

The maps in this section focus on key indicators that provide an overview of relative safety along the 132 Avenue corridor.

2.14.1 Speed Limits

Posted road speeds are indicated for all roads posted at 60km/h, and for 30km/h speed zones. Standard 30km/h speed zones correspond to school and playground zones, and are in effect from 7:30am through 9:00pm. Near crosswalks with pedestrian actuated amber flashers, there are marked 30km/h zones in effect when the lights are activated.

All other roads not colour coded in these maps are unposted, which currently corresponds to a 50km/h speed limit. However, the City of Edmonton has recently approved a new road speed policy, and these unposted road speeds will be 40km/h, effective in 2021. 132 Avenue is an exception within the bylaw – it is to remain at 50km/h until this project (the 132 Avenue Renewal) is complete, and the corridor is reconstructed to the new 40km/h speed limit.

2.14.2 Speed Studies

The City of Edmonton periodically conducts speed studies along many roadways, and several have taken place along the 132 Avenue corridor in the past 10 years. Speed studies were typically completed over a one week period, at varying times of the year. Results from these speed studies are illustrated on these maps based on the observed percentage of vehicles driving over the speed limit during each study.

2.14.3 Collision Data

Traffic collision data was gathered along the 132 Avenue project corridor for the past five years. Collisions were reported based on the nearest intersection, and this information has been summarized on the maps and illustrated based on the total number at each intersection.

2.14.4 Intersection Controls

Intersection controls are also illustrated on this mapset. Marked crosswalks, pedestrian activated amber flashers and signals, and full signal intersections are denoted with appropriate symbols. All other intersections are either stop- or yield-controlled. All local road approaches to 132 Avenue are stop-controlled for northbound and southbound traffic.
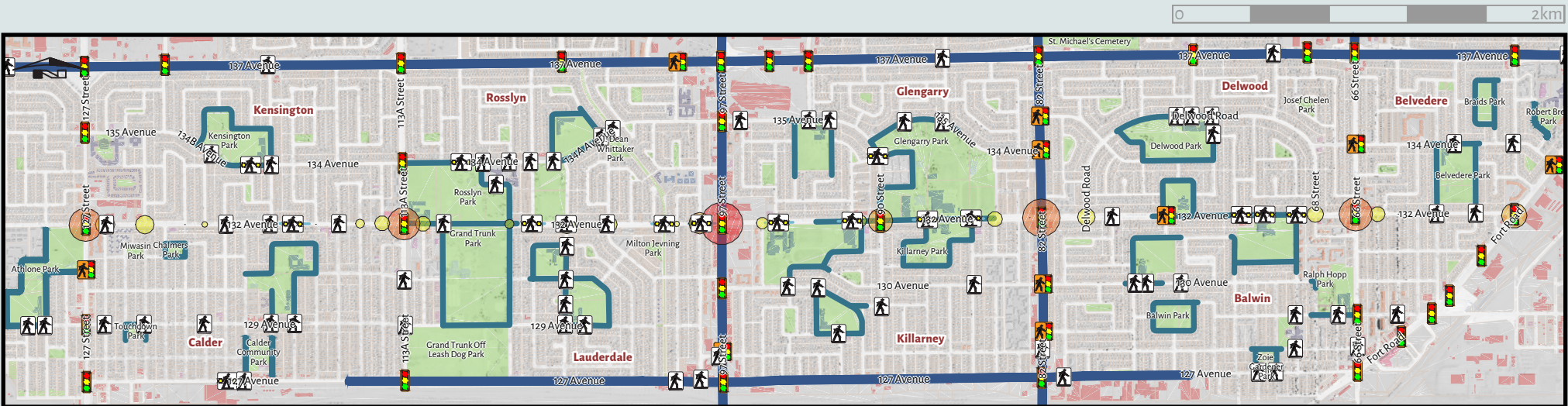
2.14.A 127 Street to 113A Street

132 Avenue is currently posted at 50km/h along this segment, except for a local 30km/h local zone in effect when pedestrians activate the crosswalk amber flashers at 118 Street.

There are several other marked crosswalks along this segment, at:

- 126 Street
- 121 Street
- 119 Street
- 116 Street

Full signals are provided at the arterial road intersections at 127 Street and 113A Street.

Several speed studies have been conducted along this segment, and they show that drivers consistently drive faster than the speed limit along this corridor. Most of these speed studies have observed more than 40% of drivers speeding over the posted 50km/h limit.

Collisions are most significant at the two arterial road intersections, though there are a few other locations where there have been several collisions, of particular note at:

- 126 Street
- 124 Street
- 114 Street
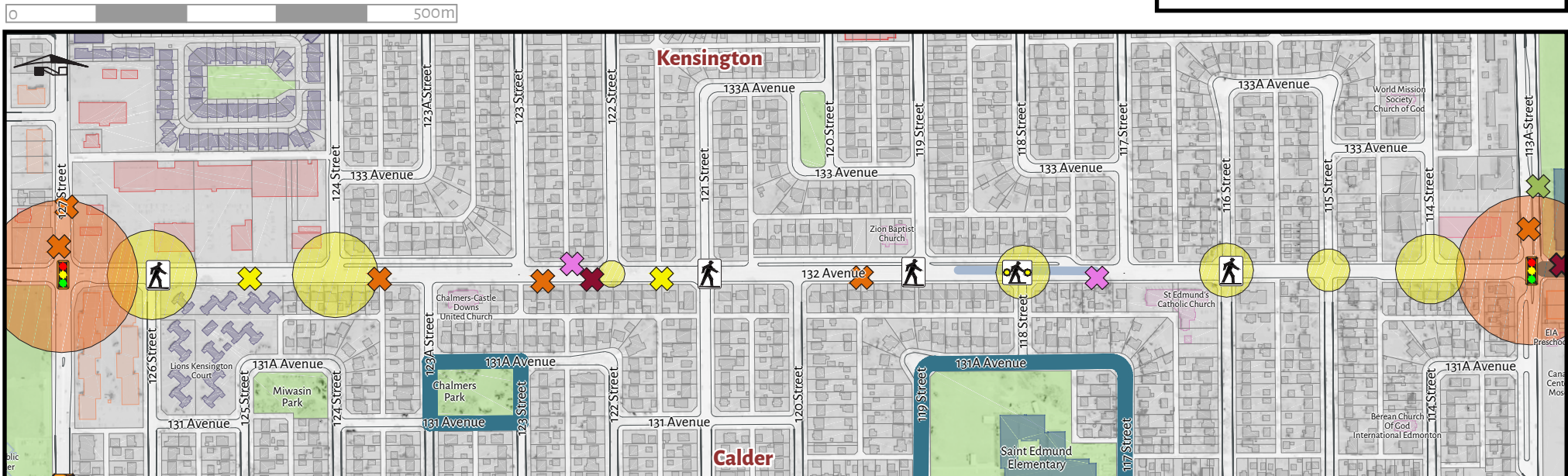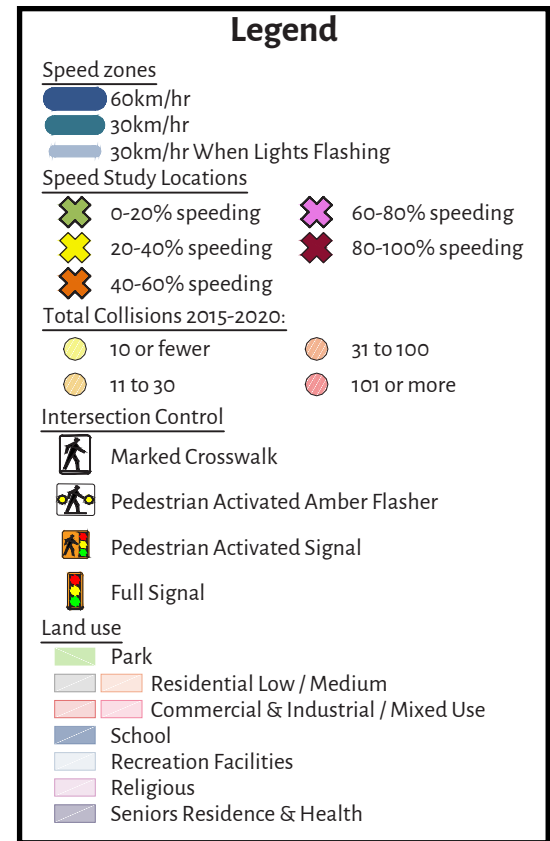
Legend

Speed zones
- 60km/hr
- 30km/hr
- 30km/hr When Lights Flashing

Speed Study Locations
- 0-20% speeding
- 20-40% speeding
- 40-60% speeding
- 60-80% speeding
- 80-100% speeding

Total Collisions 2015-2020:
- 10 or fewer
- 11 to 30
- 31 to 100
- 101 or more

Intersection Control
- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

Legend

Speed zones
- 60km/hr
- 30km/hr
- 30km/hr When Lights Flashing

Speed Study Locations
- ✖ 0-20% speeding
- ✖ 20-40% speeding
- ✖ 40-60% speeding
- ✖ 60-80% speeding
- ✖ 80-100% speeding

Total Collisions 2015-2020:
- 10 or fewer
- 11 to 30
- 31 to 100
- 101 or more

Intersection Control
- 🚶 Marked Crosswalk
- 🚸 Pedestrian Activated Amber Flasher
- 🚸 Pedestrian Activated Signal
- 🚦 Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.14.B 113A Street to 97 Street

132 Avenue is currently posted at 50km/h along this segment, but there is a significant length of 30km/h playground and school zone from 113A Street to 109 Street. There are also several local 30km/h zones associated with crosswalks with pedestrian activated amber flashers at:

- 108 Street
- 107 Street
- Shared pathway near 102 Street

There are two other marked crosswalks along this segment, at:
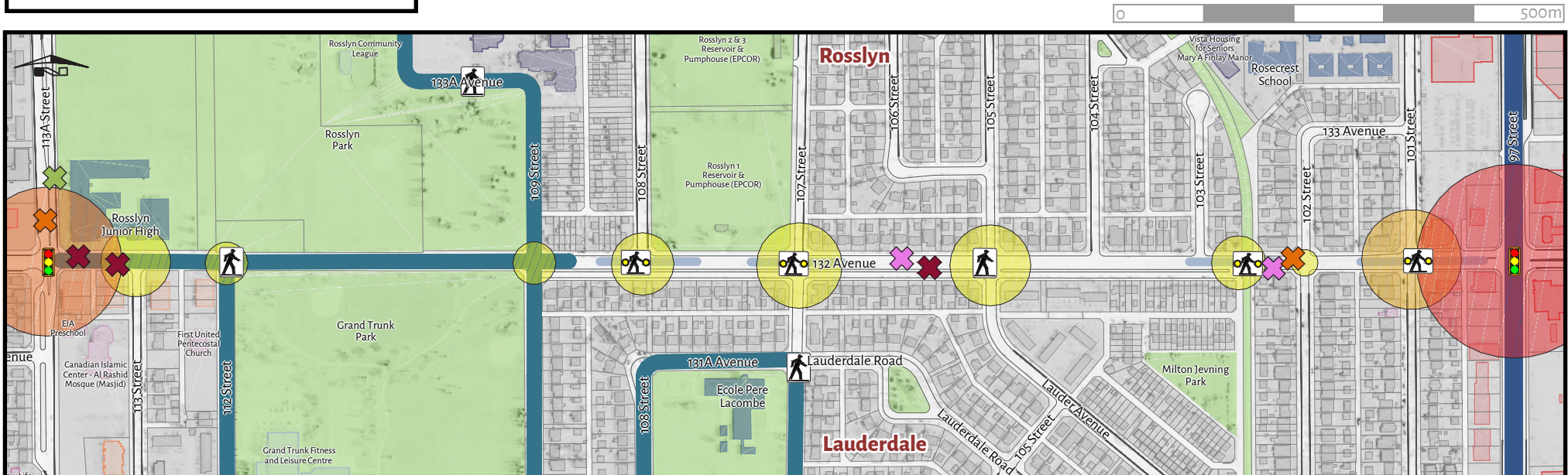
- 112 Street
- 105 Street

Full signals are provided at the arterial road intersections at 113A Street and 97 Street.

Only a few speed studies have been conducted along this segment, but they show a significant number of people drive faster than the posted limit. During these speed studies, the posted speed near 113A Street (by Rosslyn Junior High) was 30km/h and the studies identified over 80% of drivers exceeded the limit. The remainder of the speed studies

in this segment had a 50km/h posted limit, but still saw a majority of drivers exceeding the limit..

Collisions are most significant at the two arterial road intersections, though there are a few other locations where there have been several collisions, of particular note at:

- 113 Street
- 97 Street
- 105 Street
- 101 Street

2.14.C 97 Street to 82 Street

Most of this segment of 132 Avenue is posted as a 30km/h playground/school zone between east of 95 Street and 85 Street. The remaining areas are posted at 50km/h, with a local 30km/h zone associated with the crosswalk with pedestrian activated amber flashers at 95 Street.

In total, there are four pedestrian activated amber flashers along this segment, located at:

- 95 Street
- 91 Street
- 88 Street
- 86 Street

Full signals are provided at the arterial road intersections at 97 Street and 82 Street, and at the 90 Street collector road intersection.

Several speed studies have been conducted along this segment, however these were completed before the 30km/h playground/school zones were implemented. The speed studies reported a range of speed limit compliance, with generally more than 40% of drivers exceeding the posted speed limit which at that time was 50km/h.

Collisions are most significant at the two arterial road intersections, though there are a few other locations where there have been several collisions, of particular note at:

- 95 Street
- 91 Street
- 90 Street
- 88 Street
- 86 Street
- 85 Street

Legend

Speed zones
- 60km/hr
- 30km/hr
- 30km/hr When Lights Flashing

Speed Study Locations
- 0-20% speeding
- 20-40% speeding
- 40-60% speeding
- 60-80% speeding
- 80-100% speeding

Total Collisions 2015-2020:
- 10 or fewer
- 11 to 30
- 31 to 100
- 101 or more

Intersection Control
- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

Legend

Speed zones
- 60km/hr
- 30km/hr
- 30km/hr When Lights Flashing

Speed Study Locations
- 0-20% speeding
- 20-40% speeding
- 40-60% speeding
- 60-80% speeding
- 80-100% speeding

Total Collisions 2015-2020:
- 10 or fewer
- 11 to 30
- 31 to 100
- 101 or more

Intersection Control
- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.14.D   82 Street to 66 Street

132 Avenue is currently posted at 50km/h along this segment, but there is a significant length of 30km/h playground and school zone from 76 Street to 69 Street.

There are crosswalks with pedestrian activated amber flashers at:
- 72 Street
- east of 72 Street at Balwin Junior High
- 69 Street

There is one marked crosswalk along this segment, at 69 Street.

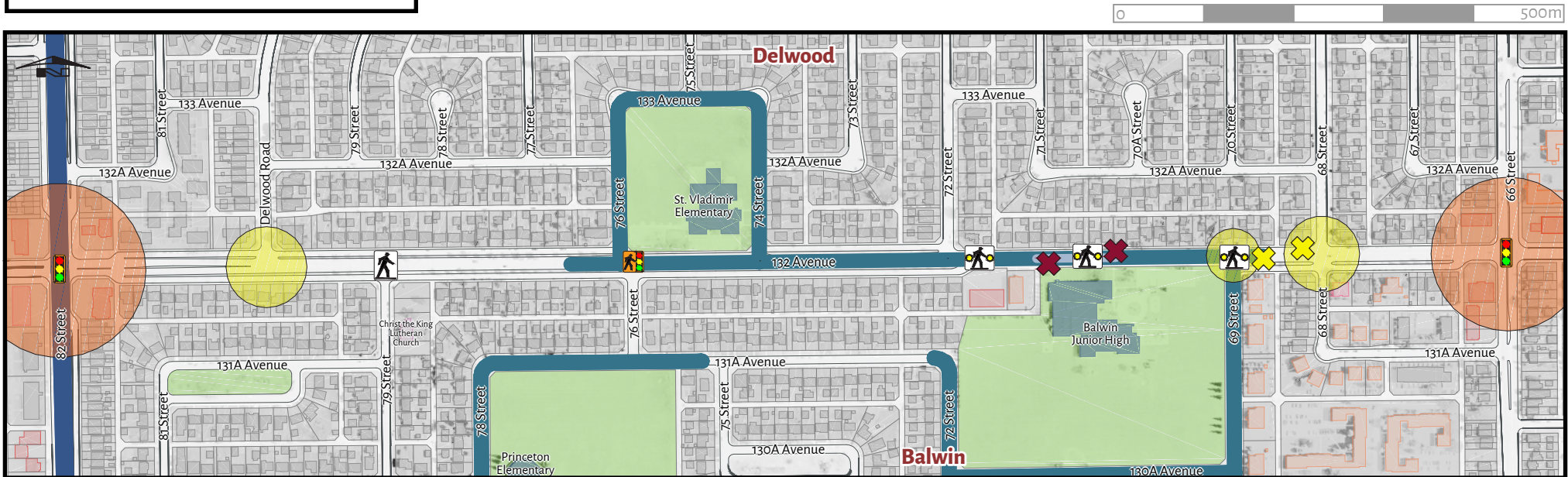There is also a pedestrian activated signal on 132 Avenue at 76 Street.

Full signals are provided at the arterial road intersections at 82 Street and 66 Street.

Only a few speed studies have been conducted along this segment. The two studies completed near Balwin School, with a 30km/h posted speed limit, saw more than 80% of drivers exceeding the posted limit. However, further east where the posted speed limit is 50km/h, less than 40% of drivers exceeded the posted limit.

Collisions are most significant at the two arterial road intersections, though there are a few other locations where there have been several collisions, of particular note at:
- Delwood Road
- 68 Street

2.14.E 66 Street to Fort Road

132 Avenue is currently posted at 50km/h along this segment.

There are two marked crosswalks along this segment, at:
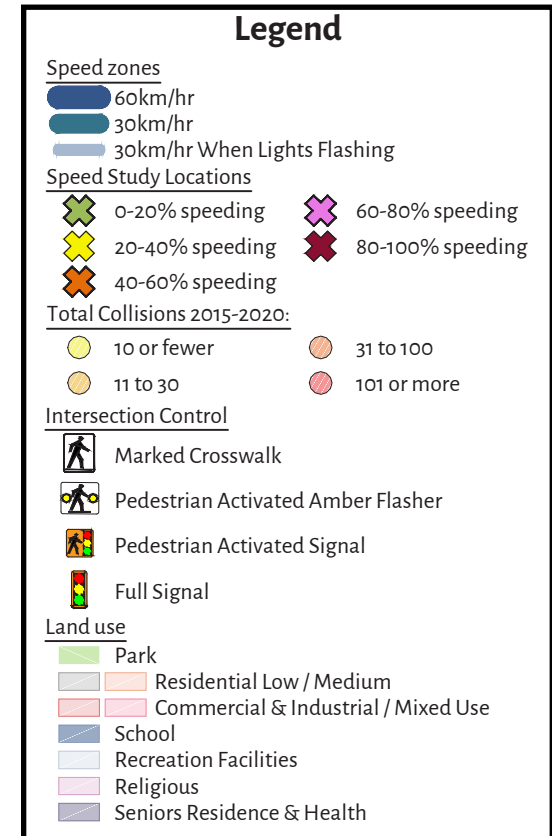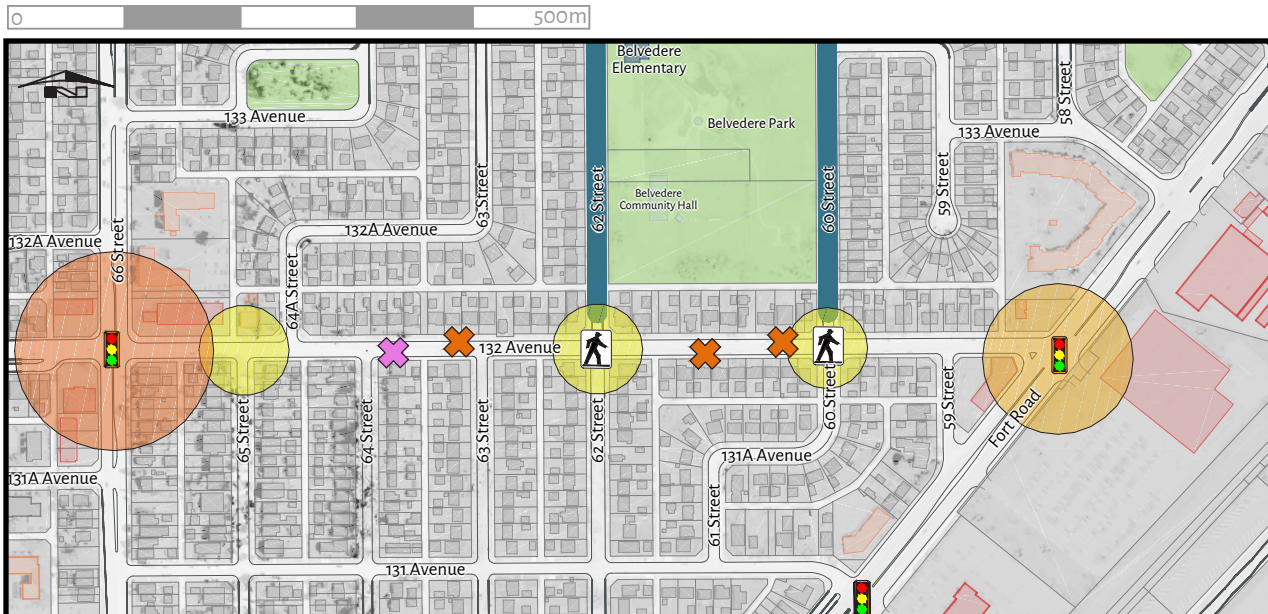
- 62 Street
- 60 Street

There is also a pedestrian activated signal on 132 Avenue at 76 Street.

Full signals are provided at the arterial road intersections at 82 Street and 66 Street.

A few speed studies have been conducted along this segment, which identified that over 40% of drivers exceeded the posted speed limit.

Collisions are most significant at the two arterial road intersections, though there are a few other locations where there have been several collisions, of particular note at:

- 65 Street
- 62 Street
- 60 Street

Legend

Speed zones
- 60km/hr
- 30km/hr
- 30km/hr When Lights Flashing

Speed Study Locations
- 0-20% speeding
- 20-40% speeding
- 40-60% speeding
- 60-80% speeding
- 80-100% speeding

Total Collisions 2015-2020:
- 10 or fewer
- 11 to 30
- 31 to 100
- 101 or more

Intersection Control
- Marked Crosswalk
- Pedestrian Activated Amber Flasher
- Pedestrian Activated Signal
- Full Signal

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.15 Mobility Network – Goods Movement

Commercial vehicles over 8000kg GVW and/or over 12.5m long must adhere to commercial truck routes within the City of Edmonton.

Edmonton's truck routes have three classifications:
- 24-hour truck routes
- dangerous goods routes
- restricted truck routes

Restricted truck routes allow large commercial vehicles from 7am to 10pm Monday through Saturday.

If the destination cannot be reached directly from a truck route, the driver is required to take the most direct and practical road from the nearest truck route.

Commercial truck routes are located along most arterial roads that cross the 132 Avenue corridor. 132 Avenue is not a designated truck route.
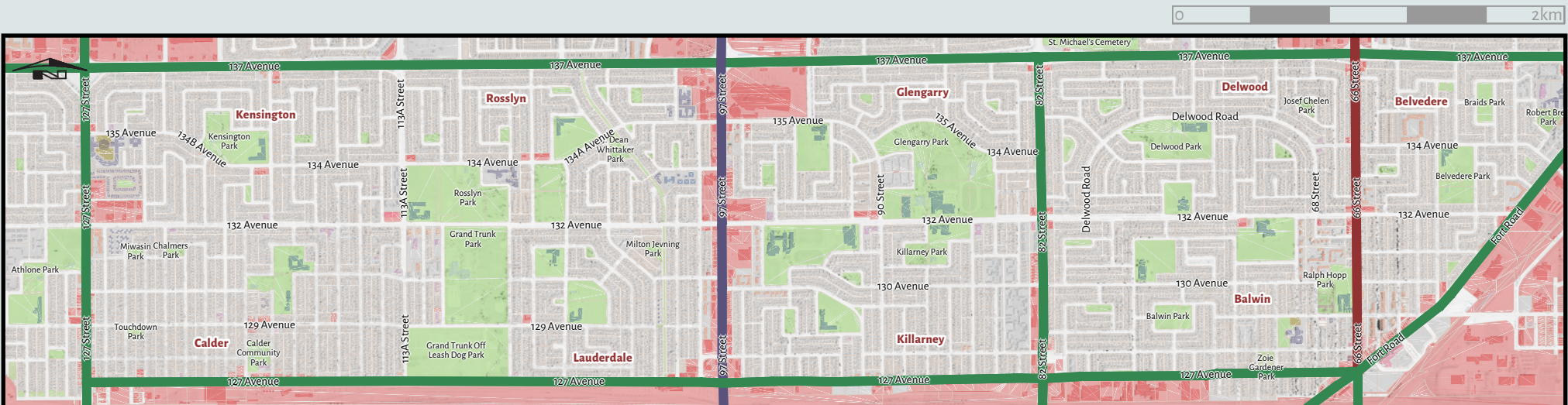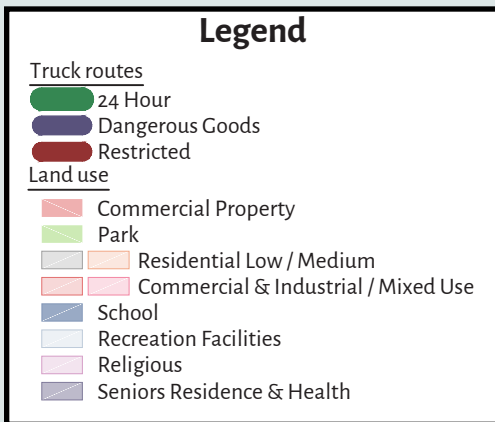
24-Hour Truck Routes include:
- 137 Avenue
- 127 Avenue
- 127 Street
- 82 Street
- Fort Road

66 Street is a Restricted Truck Route.

97 Street is a Dangerous Goods Route.

Commercial properties are highlighted on the map below. Because there are only a few commercial properties along 132 Avenue, it is likely that there are minimal large commercial trucks traveling along the corridor.

Legend

Truck routes
- 24 Hour
- Dangerous Goods
- Restricted

Land use
- Commercial Property
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

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2.16 Infrastructure/Utilities

The infrastructure and utilities in the area include power, communication lines, stormwater, sanitary, and combined sewer utilities. These include power poles, streetlights, powerlines, gas lines, telecommunications vaults and pedestals, telecommunications lines, watermains and hydrants, and catch basins.

There are no high pressure pipelines or high voltage transmission lines within the project area.

Generally, the power poles, power lines, gas lines, watermains, and sanitary sewers are located along the alleys. Streetlights, power lines, and stormwater sewers are typically along the roadways.

The sanitary, stormwater sewers and telecommunication utilities are also located along 132 Avenue. Streetlights, power poles and power lines are also located along the corridor.

In general, the infrastructure and utilities are those which are typically found along roadways in Edmonton, and are not anticipated to limit opportunities for the 132 Avenue Renewal project.

## Legend

Shallow Utilities
- Power Pole / Streetlights
- Power Line
- Gas Line
- Telecommunication Vault & Pedestals
- Telecommunications Line

Deep Utilities
- Watermain / Hydrants
- Sanitary Sewer
- Combined Sewer
- Storm Sewer
- Catch Basin

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
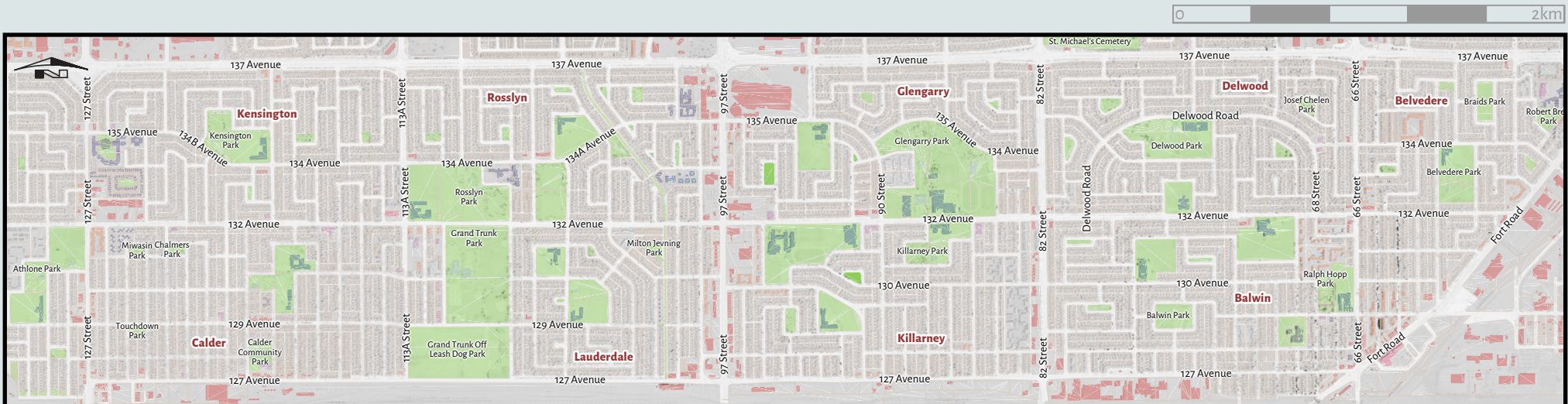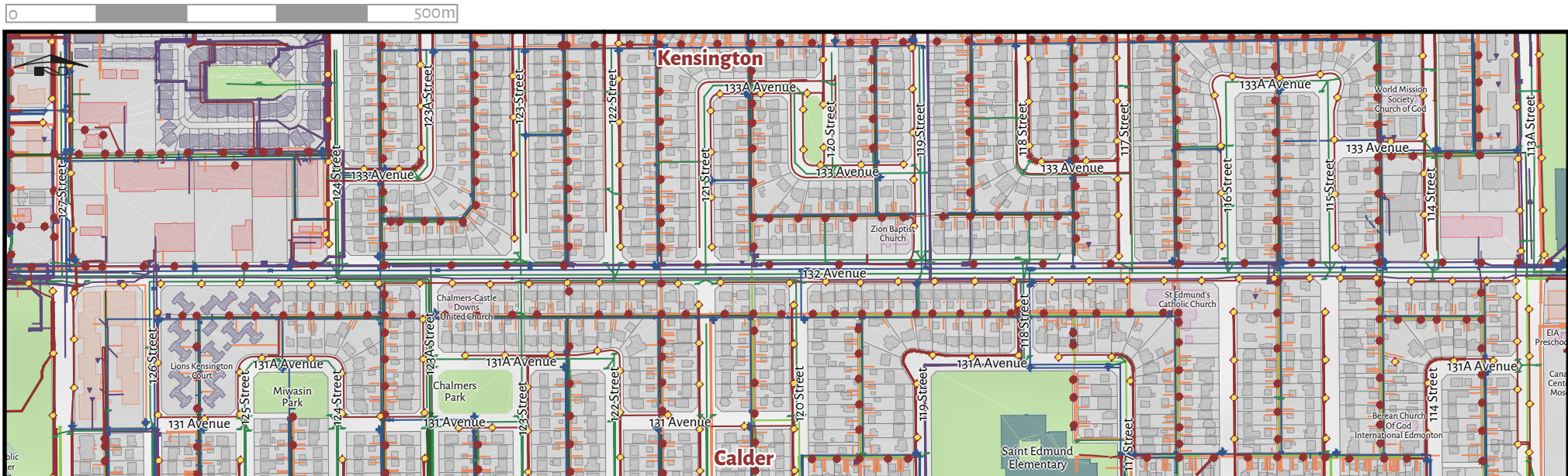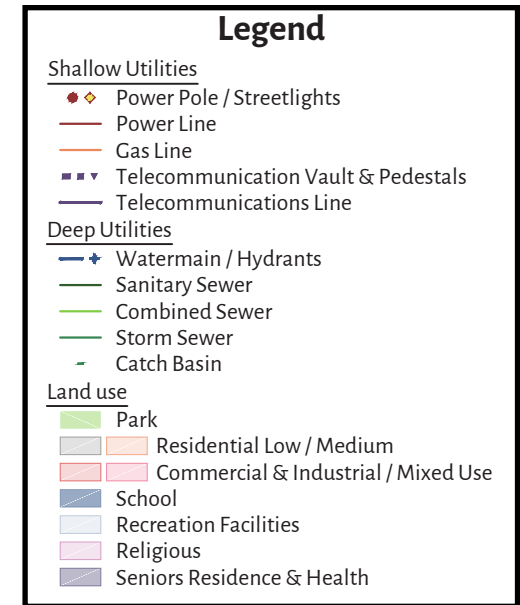
2.16.A 127 Street to 113A Street

Along this segment, power poles, power lines, gas lines, watermains, and sanitary sewers are generally located along the alleys.

Streetlights, power lines, and stormwater sewers are commonly along the roadways.

Sanitary, stormwater sewers, watermains, and telecommunications utilities are located along 132 Avenue.

Streetlights, power poles, and power lines are also located along the corridor. The power poles on the north side of 132 Avenue are situated in the middle of the sidewalk or in treed boulevards.

The streetlights on the south side of 132 Avenue are situated in the middle of the sidewalks or in the treed boulevards.

Legend

Shallow Utilities
- ● ● ◇ Power Pole / Streetlights
- —— Power Line
- —— Gas Line
- ■■▼ Telecommunication Vault & Pedestals
- —— Telecommunications Line

Deep Utilities
- ●—● Watermain / Hydrants
- —— Sanitary Sewer
- —— Combined Sewer
- —— Storm Sewer
- - Catch Basin

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
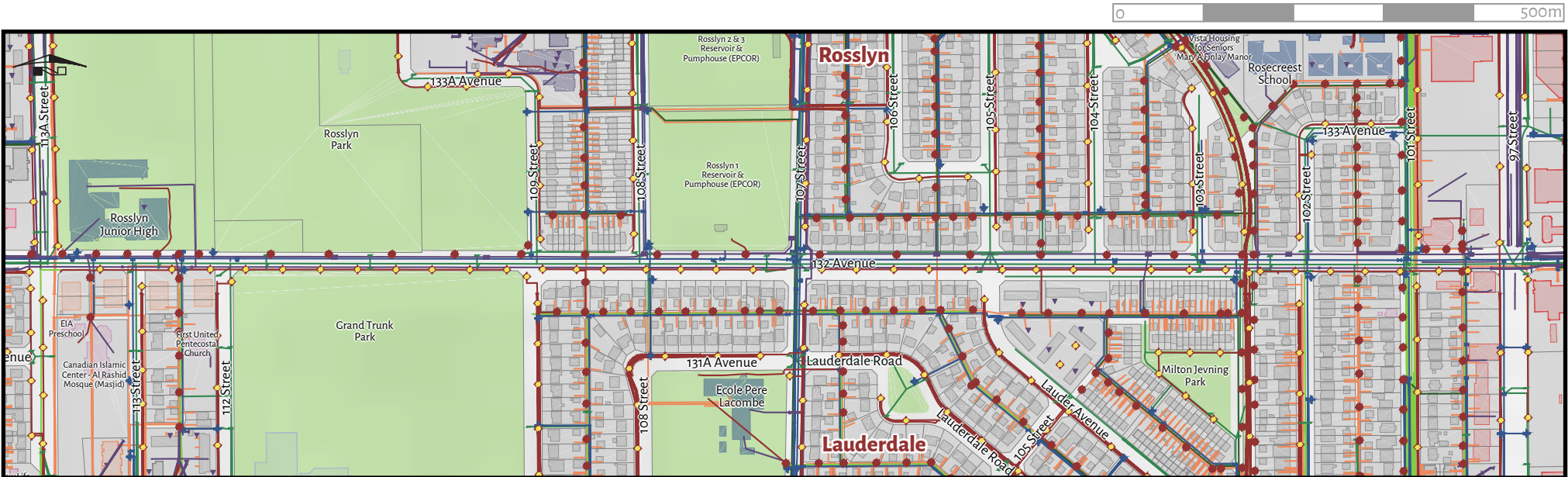- Seniors Residence & Health

Legend

Shallow Utilities
- Power Pole / Streetlights
- Power Line
- Gas Line
- Telecommunication Vault & Pedestals
- Telecommunications Line

Deep Utilities
- Watermain / Hydrants
- Sanitary Sewer
- Combined Sewer
- Storm Sewer
- Catch Basin

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.16.B 113A Street to 97 Street

Along this segment, power poles, power lines, gas lines, watermains, and sanitary sewers are generally located along the alleys.

Streetlights, power lines, and stormwater sewers are commonly along the roadways.

Sanitary, stormwater sewers, watermains, and telecommunications utilities are located along 132 Avenue.

Streetlights, power poles, and power lines are also located along the corridor. The power poles on the north side of 132 Avenue are situated in the middle of the sidewalk or in treed boulevards.

The streetlights on the south side of 132 Avenue are situated in the middle of the sidewalks or in the treed boulevards.
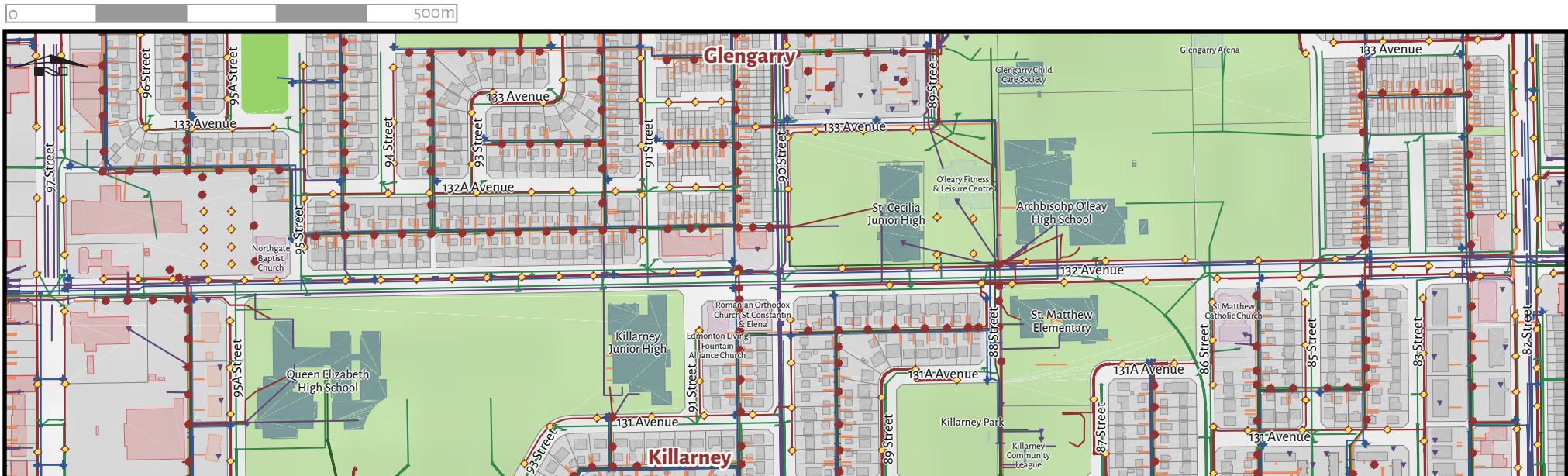
2.16.C 97 Street to 82 Street

Along this segment, power poles, power lines, gas lines, watermains, and sanitary sewers are generally located along the alleys.

Streetlights, power lines, and stormwater sewers are commonly along the roadways.

Sanitary, stormwater sewers, watermains, and telecommunications utilities are located along 132 Avenue.

Streetlights are located along the corridor, generally on the north side of 132 Avenue.

Legend

Shallow Utilities
- Power Pole / Streetlights
- Power Line
- Gas Line
- Telecommunication Vault & Pedestals
- Telecommunications Line

Deep Utilities
- Watermain / Hydrants
- Sanitary Sewer
- Combined Sewer
- Storm Sewer
- Catch Basin

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
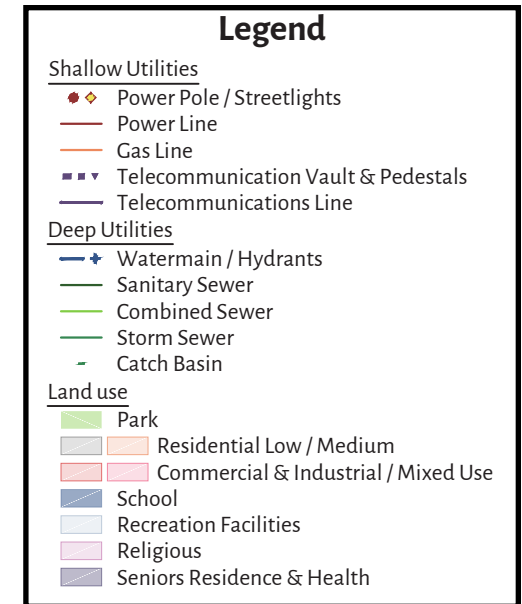- Recreation Facilities
- Religious
- Seniors Residence & Health

2.16.D 82 Street to 66 Street

Along this segment, power poles, power lines, gas lines, watermains, and sanitary sewers are generally located along the alleys.

Streetlights, power lines, and stormwater sewers are commonly along the roadways.

Sanitary, stormwater sewers, watermains, and telecommunications utilities are located along 132 Avenue.

Streetlights are located along the corridor, generally on the south side of 132 Avenue.

Legend

Shallow Utilities
- Power Pole / Streetlights
- Power Line
- Gas Line
- Telecommunication Vault & Pedestals
- Telecommunications Line

Deep Utilities
- Watermain / Hydrants
- Sanitary Sewer
- Combined Sewer
- Storm Sewer
- Catch Basin

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.16.E 66 Street to Fort Road

Along this segment, power poles, power lines, gas lines, watermains, and sanitary sewers are generally located along the alleys.

Streetlights, power lines, and stormwater sewers are commonly along the roadways.

Sanitary, stormwater sewers, watermains, and telecommunications utilities are located along 132 Avenue.

Streetlights are located along the corridor, generally on the south side of 132 Avenue.

Legend

Shallow Utilities
- Power Pole / Streetlights
- Power Line
- Gas Line
- Telecommunication Vault & Pedestals
- Telecommunications Line

Deep Utilities
- Watermain / Hydrants
- Sanitary Sewer
- Combined Sewer
- Storm Sewer
- Catch Basin

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health
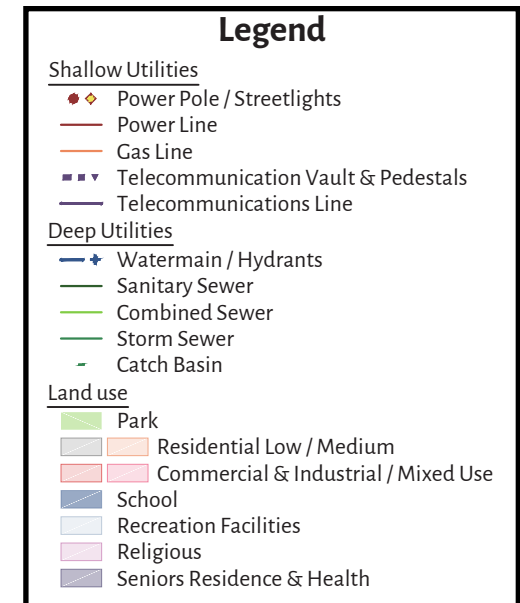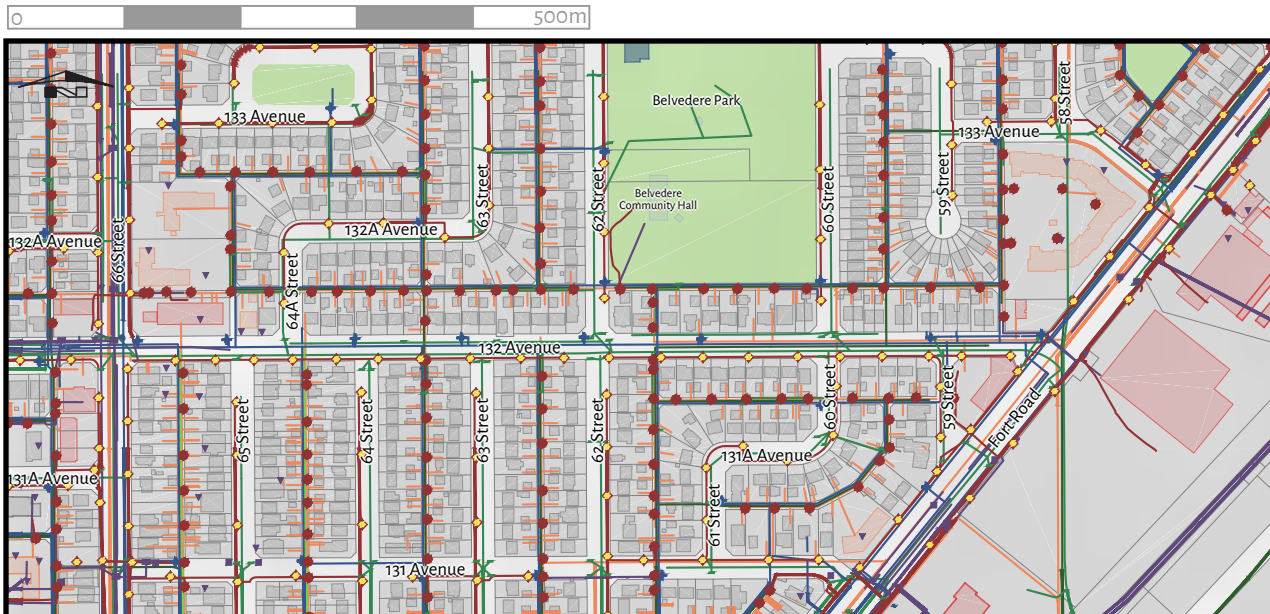
2.17 LID Opportunities & Drainage Overview

These maps illustrate the Low Impact Development (LID) opportunities along the 132 Avenue corridor.
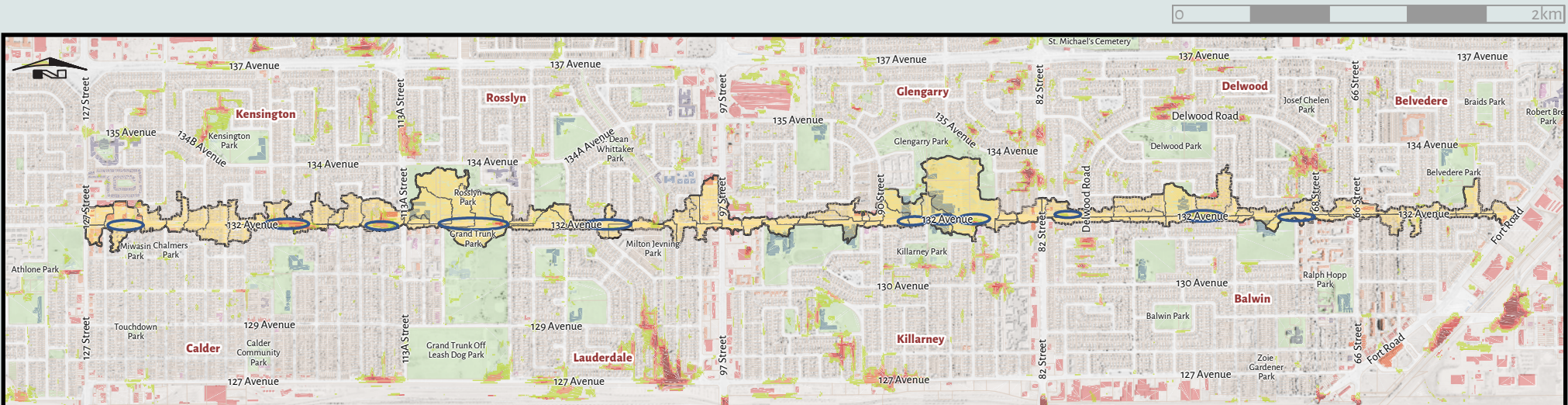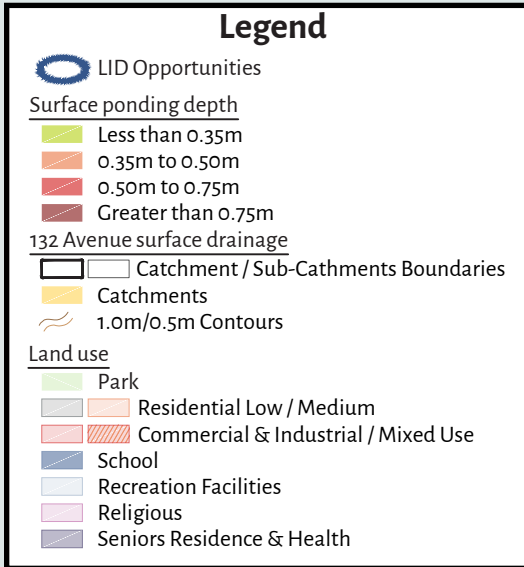
2.17.1 Flood Mapping

The City of Edmonton and EPCOR recently completed city-wide flood potential mapping. The potential surface ponding depths modelled in that recent study are shown on this map set, and illustrate where there is greatest risk for overland flooding during heavy rainfall events.

2.17.2 Stormwater Catchment Areas

Stormwater drainage catchment areas are also shown. The orange shaded areas illustrate all areas along the 132 Avenue corridor that drain into catchbasins and stormwater sewers along the 132 Avenue roadway. In considering LID opportunities, these catchment areas reflect the area of rainfall that could be captured.

2.17.3 LID Opportunities

LID opportunity areas are identified by large ovals, which have been selected based on previous studies and identification by EPCOR, consideration of catchment areas, and potential overland flood mapping. These areas will be investigated in further details in future phases of this project.

Legend

- LID Opportunities

Surface ponding depth
- Less than 0.35m
- 0.35m to 0.50m
- 0.50m to 0.75m
- Greater than 0.75m

132 Avenue surface drainage
- Catchment / Sub-Cathments Boundaries
- Catchments
- 1.0m/0.5m Contours

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.17.A 127 Street to 113A Street

The drainage and catchment boundaries vary in size along this segment of the corridor and the areas highlighted drain into 132 Avenue.

High depths of potential surface ponding are located between 119 Street and 117 Street and at the intersection of 114 Street and 132 Avenue.

There are two locations of potential high surface ponding identified to be further investigated for LID opportunities. A third location east of 126 Street that has a large catchment area has also been identified for further evaluation.
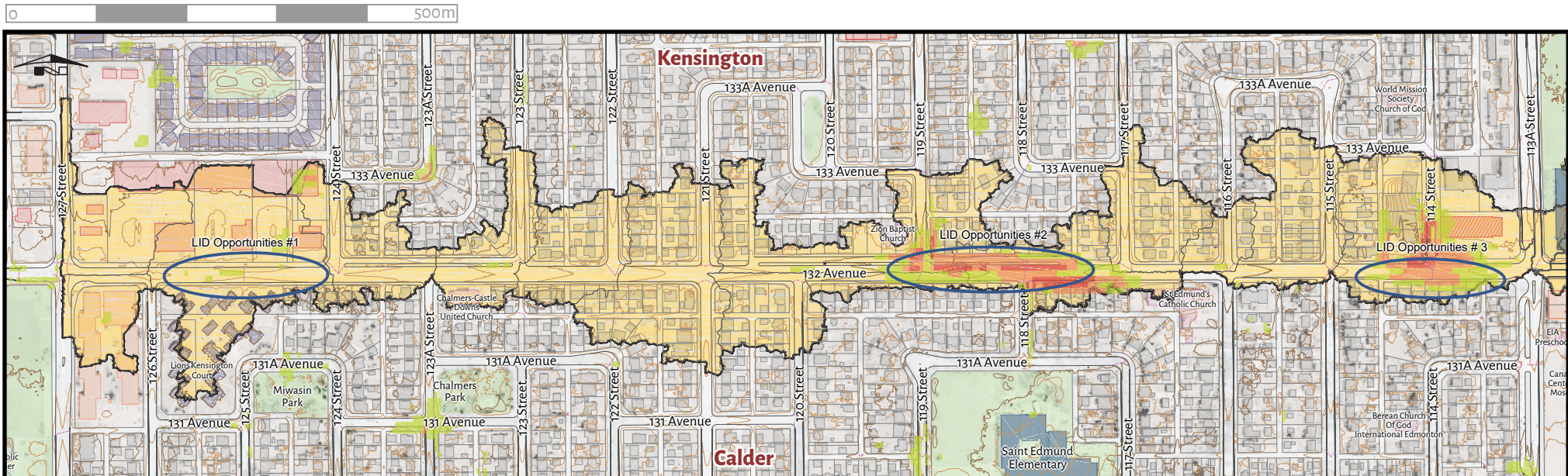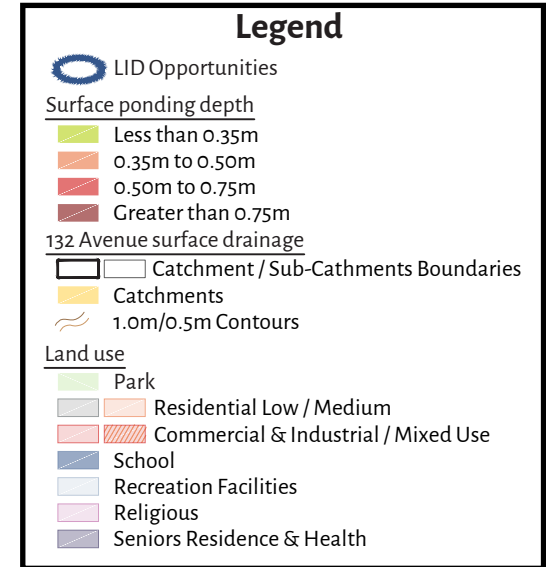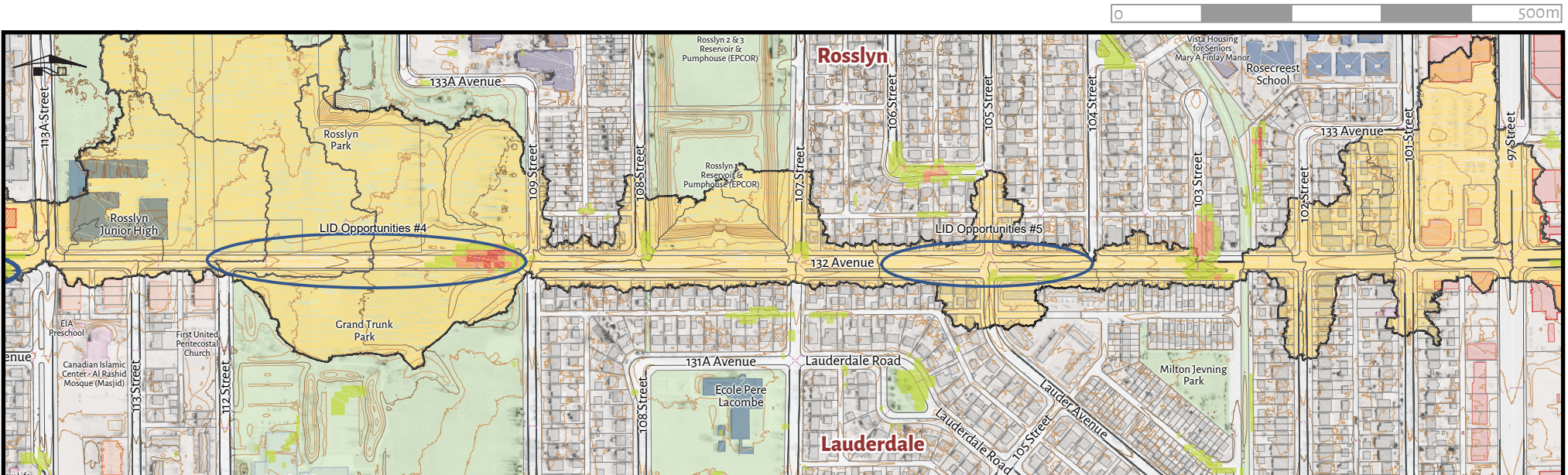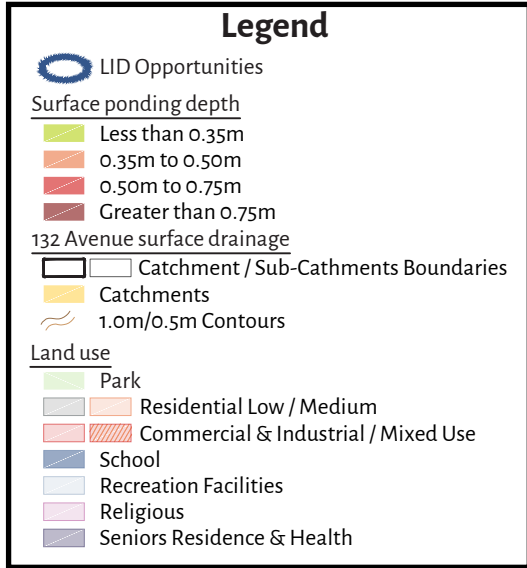
2.17.B 113A Street to 97 Street

Drainage and catchment areas vary in size in this segment. Rosslyn Park is a large catchment area that drains into 132 Avenue. Another larger catchment area is the commercial zone along 97 Street.

There are some areas identified as having high potential for surface ponding, near 109 Street and near 103 Street.

There are two LID opportunity areas along this segment of 132 Avenue, east of 112 Street and near 105 Street.

Legend

○ LID Opportunities

Surface ponding depth
- Less than 0.35m
- 0.35m to 0.50m
- 0.50m to 0.75m
- Greater than 0.75m

132 Avenue surface drainage
- Catchment / Sub-Cathments Boundaries
- Catchments
- 1.0m/0.5m Contours

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.17.C   97 Street to 82 Street

Drainage and catchment areas vary in size in this segment. Glengarry Park is another large catchment area that drains into 132 Avenue.

There is one significant area with potential surface ponding on the 132 Avenue south service road near 86 Street.

There are potential LID opportunities between 90 Street and 85 Street. These are broken into three segments roughly based on catchment boundaries, although further investigation will be required to determine if these opportunities should be linked or separate along this corridor.
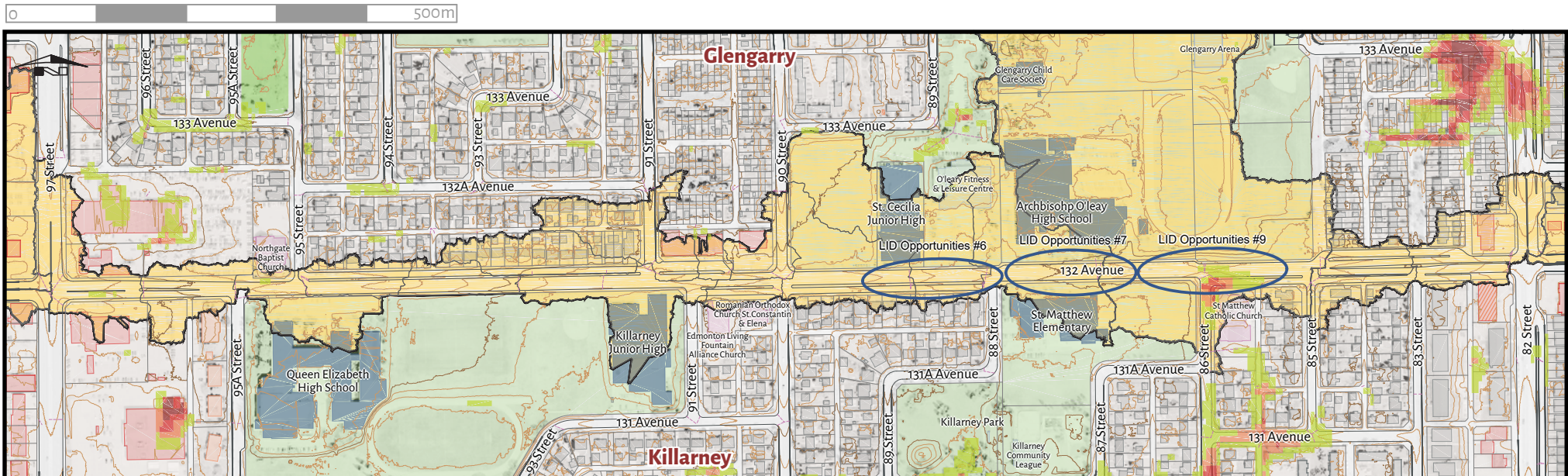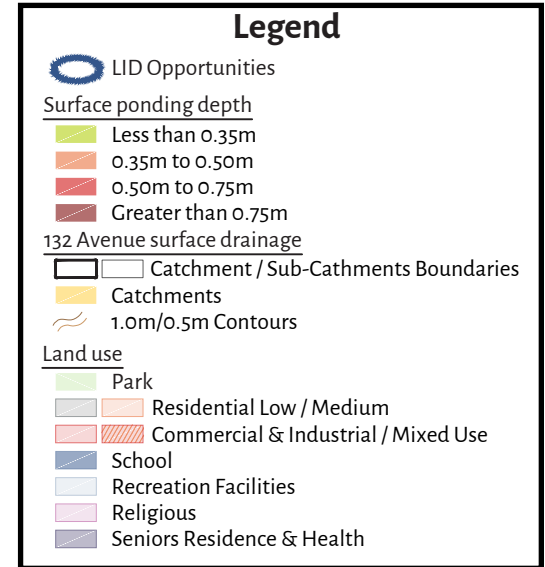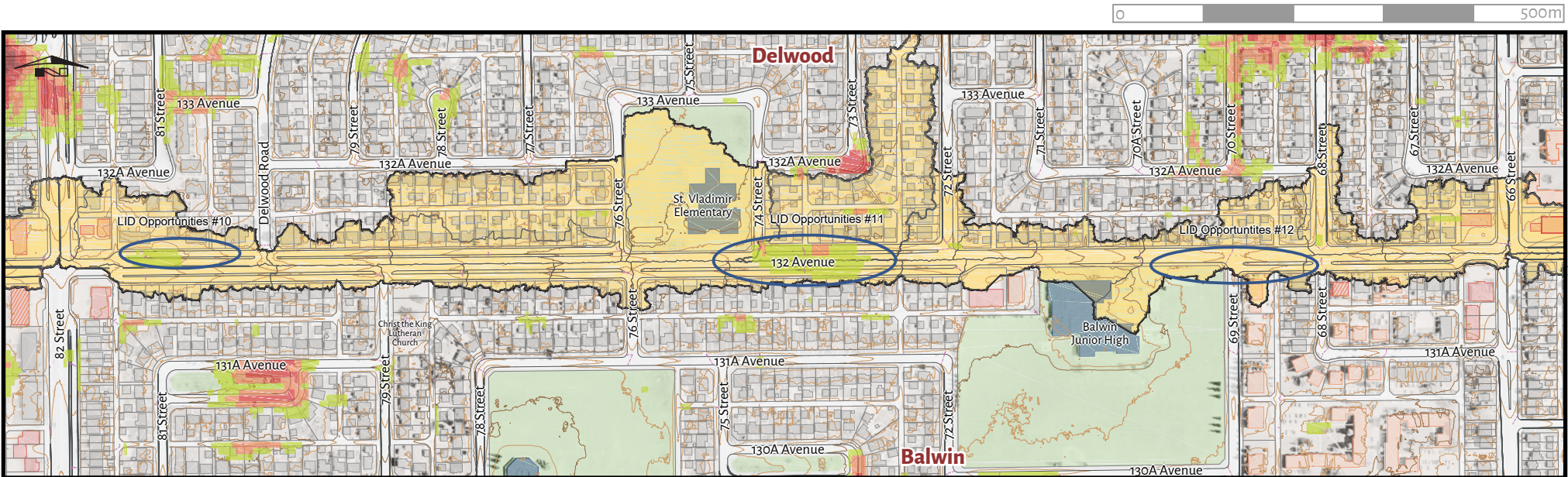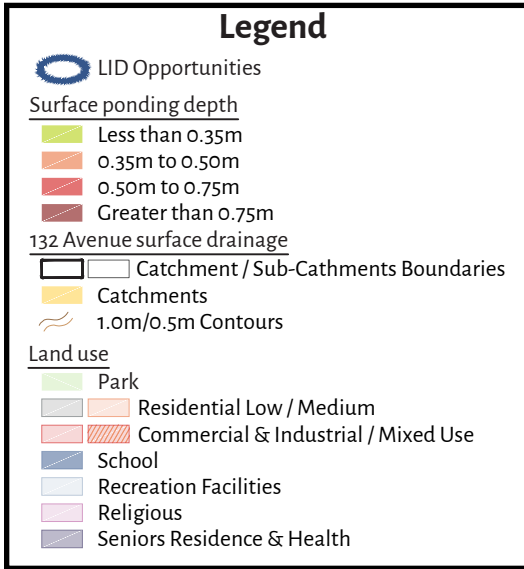
2.17.D   82 Street to 66 Street

Drainage and catchment areas vary in size in this segment. The sub-catchment area around St. Vladimir Elementary and along the alley behind 73 Street is a large catchment area for this segment of the corridor.

There are a few areas with moderate surface ponding potential along this segment.

There are three identified LID opportunities in this segment, two which correspond to high surface ponding potential. These are located west of Delwood Road, near 74 Street, and near 69 Street,

Legend

LID Opportunities

Surface ponding depth
- Less than 0.35m
- 0.35m to 0.50m
- 0.50m to 0.75m
- Greater than 0.75m

132 Avenue surface drainage
- Catchment / Sub-Cathments Boundaries
- Catchments
- 1.0m/0.5m Contours

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health

2.17.E 66 Street to Fort Road

Belvedere has smaller catchment and sub-catchment areas that drain into 132 Avenue.

There is minimal surface ponding potential along this segment.

Based on minimal surface ponding and a narrower road right-of-way on 132 Avenue in this segment, there are no LID opportunities currently identified. However, further analysis during the design phase will identify if there are some areas that may contribute to LID features being beneficial in this area.

Legend

LID Opportunities

Surface ponding depth
- Less than 0.35m
- 0.35m to 0.50m
- 0.50m to 0.75m
- Greater than 0.75m

132 Avenue surface drainage
- Catchment / Sub-Cathments Boundaries
- Catchments
- 1.0m/0.5m Contours

Land use
- Park
- Residential Low / Medium
- Commercial & Industrial / Mixed Use
- School
- Recreation Facilities
- Religious
- Seniors Residence & Health