

STRATHCONA DESIGN ANALYSIS REPORT



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EXECUTIVE SUMMARY

The City of Edmonton created Building Great Neighbourhoods (BGN) to deliver the Neighbourhood Renewal program, and renewal as an opportunity to increase vibrancy and sustainability of communities. BGN takes a holistic and integrated approach to make changes beyond infrastructure improvements, working in partnership with neighbourhoods to develop a vision of renewal that considers the unique context of neighbourhoods alongside technical requirements. Understanding the needs and values of citizens, and using their input allows BGN to enhance neighbourhoods and make better decisions regarding infrastructure renewal.

The outcomes of listening to diverse perspectives of the neighbourhood; in consideration with the City policies and programs, technical requirements, and constraints and opportunities are captured in the Urban Design Analysis Report.

The Strathcona Urban Design Analysis has been produced in collaboration with the community through a series of engagement events. The engagement started by developing a set of vision and guiding

principles for the neighbourhood, along with gathering of local neighbourhood knowledge, attitudes and preferences, issues and opportunities. These were further developed and refined through online surveys, a community design workshop, and interactive open houses. Feedback was then classified generally into associated themes to emerge as a framework for project analysis. The themes included: Connectivity, Cycling, Transportation, and Parks and Open Spaces.

Connectivity reflects elements such as missing neighbourhood sidewalks, a desire for improved crosswalks, increased pedestrian safety, and improved accessibility for all ages and abilities throughout the neighbourhood. Cycling focussed on the vision and desire for an all ages bicycle network in Strathcona. Transportation encompasses issues such as traffic shortcutting, speeding, vehicle access to properties, and parking. The Parks & Open Space theme includes a inventory of neighbourhood green spaces and their general condition and functions.

Collaboration with the community informed the development of options and recommendations for

site specific improvements within each theme. City policies and programs, technical considerations and constraints, and public feedback were all factored into the development of the concepts. The concepts were further refined through public engagement to arrive at a final urban design concept. The recommended urban design concept will inform the neighbourhood renewal design.

Ultimately, the realization of community prioritized concepts is dependent on the availability of neighbourhood renewal funding. Community enhancements unable to be included within neighbourhood renewal efforts may be championed by other city programs and departments. The urban design analysis is intended to serve as a holistic community vision to inform both neighbourhood renewal and future city processes to improve the quality of life of residents.

INTRODUCTION



INTRODUCTION

Background

Strathcona is a mature neighbourhood and one of Edmonton's earliest established neighbourhoods. Attention to the neighbourhood regarding the condition of sidewalks, streets, and infrastructure is needed. Neighbourhood renewal reconstruction for Strathcona is scheduled from 2019 to 2021.

Study Area

The project area for the Strathcona neighbourhood renewal is bounded by 82nd Avenue (Whyte) to the south, generally the top-of-bank of the Mill Creek Ravine to the east, generally Saskatchewan Drive and top-of-bank to the north, and 107 Street to the west. The project area also includes areas north of Saskatchewan Drive on 91 and 90 Ave (Skunk Hollow), and the private properties east and west of Scona Road between 92nd Ave and the James McDonald Bridge. See attached figure for further reference.

Excluded from the scope of renewal are all arterial roads within the project boundary including Saskatchewan Drive, Whyte Avenue, 106 Street, 104 Street, Gateway Boulevard, 99 Street, and Scona Road. Additional exclusions include 83 Avenue and areas around End of Steel Park and the Strathcona Farmers Market. 83 Avenue was recently reconstructed in conjunction with its separated bike facility. The Farmer's Market area and End of Steel Park are part of the parallel project called Plan Whyte, that will study and make recommendations for future development of these areas.

History of Strathcona

Strathcona is one of Edmonton's oldest communities. Situated on the south side of the North Saskatchewan River, it was the north terminus of the early railroad and overland trail routes to Calgary and points beyond, and was located at the mid point of the principal eastwest roadway, Whyte Avenue. Development began in the 1880s at the intersections of the CPR tracks and Whyte Avenue and spread in a circular pattern from there. The centre consisted primarily of commercial and government buildings, with railroad related industries to the south. Residential development occurred mainly north of Whyte Avenue.

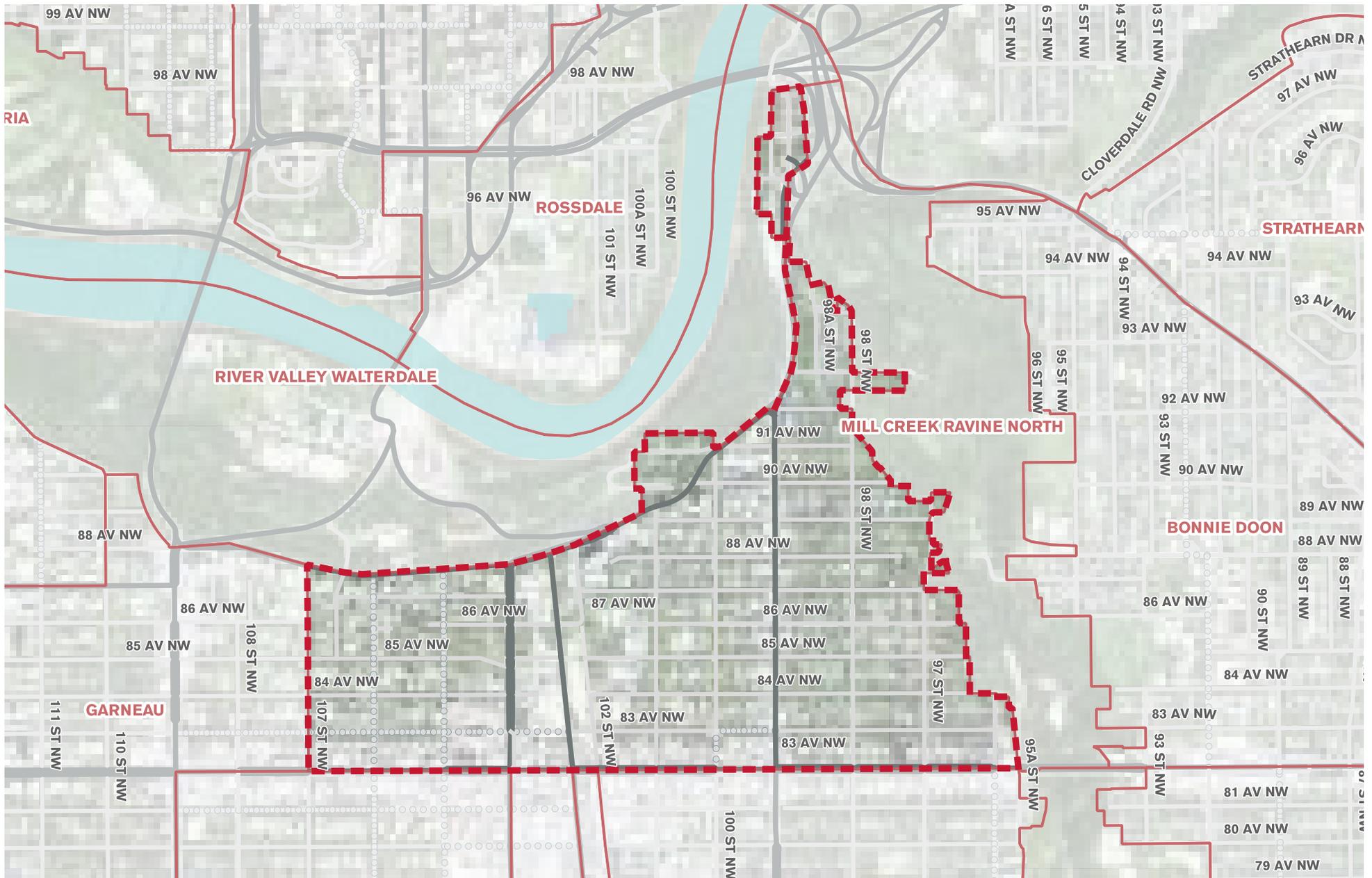
In 1891, the area east of 99 Street was annexed and subdivided for residential uses. The creation of the University of Alberta at the western end of Whyte Avenue added another dimension to Strathcona's character and prominence. With its status as the centre for government, commerce, culture, and transportation south of the river, Strathcona was also the place of choice for the prestigious homes of business and community leaders. The economic booms of 1913 to 1915 and 1946 to 1950 saw the construction of over half the current housing stock, including the grand homes of the wealthy and influential and more modest dwellings of workers, merchants and professionals.

Businesses grew to the south along the Calgary Trail and CPR corridors, and east and west along Whyte Avenue. In the 1960s the character of the neighbourhood began to change. The area west of 99 Street was rezoned to allow walk up apartments, which were until then limited to sites on Whyte Avenue and on 99 Street north of 89 Avenue.

The economic boom of the 1970s was marked by considerable apartment development, with the bulk of apartment construction taking place between 99 and 101 Streets. Conversely, with the shift of government and commerce to Edmonton's Downtown, the decline of the importance of rail transport and related enterprises, Strathcona's business community experienced a period of some recession. The Old Strathcona and Scona East Plans which took effect in the early and mid 1980s attempted to re-establish portions of the neighbourhood for single family housing, and revitalize the area's commercial core.



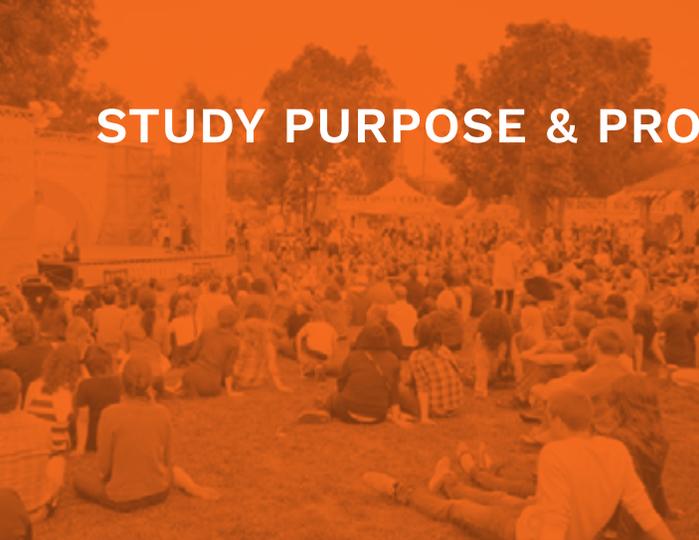
FIGURE - STUDY AREA



LEGEND

 Strathcona Boundary

STUDY PURPOSE & PROCESS



STUDY PURPOSE & PROCESS

Building Great Neighbourhoods (BGN) Program and Mandate

In time, all neighbourhoods grow old. The City of Edmonton created Building Great Neighbourhoods not only to refresh aging neighbourhood infrastructure, but to use renewal as an opportunity to increase vibrancy and sustainability in the neighbourhood. The Branch takes a holistic and integrated City of Edmonton approach to make changes beyond infrastructure improvements, working in partnership with neighbourhoods to develop a vision of the renewed state that considers the unique context of a neighbourhood alongside the necessary City of Edmonton renewal requirements.

Through listening to the multiple, diverse and/or complex voices within a neighbourhood BGN considers the values of the neighbourhood when coordinating renewal efforts. Project teams look for opportunities to enhance livability, investigate funding options and programs and leverage funding with other departments to coordinate projects and construction in a timely efficient manner.

Through collaboration with the community, cost-effective and long term strategic approaches to renew and rebuild infrastructure within mature neighbourhoods and along collector roadways are identified. Work within the scope of the Neighbourhood Renewal Program involves above and below ground infrastructure such as:

- Roadway reconstruction to meet current City of Edmonton Design and Construction Standards, Complete Streets Guidelines and Transportation Association of Canada standards where feasible.
- Sidewalk replacements;
- Construction of missing sidewalk links where feasible;
- Streetlight replacement;
- Pathway/park lighting installation;
- Tree planting within park and along streets;
- Updating public park recreational facilities;
- Curb and gutter replacements;
- Construction of curb ramps at intersections; and

This infrastructure funding opportunities involves the collaboration and coordination with other City programs such as:

- Drainage Neighbourhood Renewal
- Flood Mitigation
- Neighbourhood Renewal
- Great Neighbourhoods Capital Program
- Community Traffic Management (CTMP)
- Neighbourhood Park Development Plan (NPDP)
- Active Transportation
- Residential Parking Program (Parking Management)
- Traffic Safety
- Edmonton Transit Accessibility and Amenities
- Forestry (Tree Replacement)

STUDY PURPOSE & PROCESS

Urban Design Analysis and Public Engagement

In order to deliver a holistic and integrated scope of work that maximizes the full potential for strong and sustainable neighbourhoods, extensive public engagement and the development of an Urban Design Report was implemented in 2017. The Urban Design Analysis looks at the urban environment, its functionality, connectivity, aesthetics and the urban experience of the neighbourhood, and suggests improvements which will ultimately inform neighbourhood renewal initiatives. An extensive public engagement process was used to develop and refine the recommendations of this UDA. Public engagement efforts included an ideas workshop, open houses, and surveys.

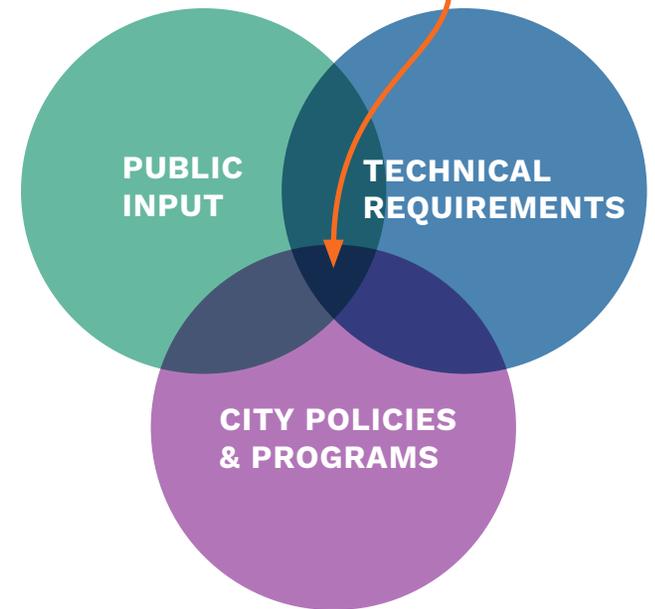
Study Process

The Strathcona Design Analysis is part of the Concept Phase set out in the BGN Charter of Public Engagement.

The key steps in the Concept Phase are:

- Sharing information about BGN with the community;
- Establishing a neighbourhood vision;
- Seeking community advice for physical improvements that enhance livability and public realm;
- Analyzing neighbourhood urban design features to identify strengths and opportunities for renewal; and
- Developing a Concept Design identifying priority projects that respond to the opportunities.
- Urban design concepts recommended within this UDA will inform the design of engineering preliminary plans.

Project Decisions



STUDY PURPOSE & PROCESS

Relevant Land Use Policies & Planning Studies

Strathcona Area Redevelopment Plan (2015)
Light Horse Park Redevelopment Plan (2016)
Garneau Area Redevelopment Plan (2010)
Mature Neighbourhoods Overlay

Parallel Projects

Saskatchewan Drive and Duggan Bridge Upgrading
Scona Road and 99 Street Right Turn Modifications
Plan Whyte
Centre LRT
New station for Edmonton Streetcar (Edmonton Radial Railway Society)

Relevant Transportation Policies & Projects

Community Traffic Management Policy (2017)
The City of Edmonton Bylaw 5590: Traffic Bylaw (2015)
The Way We Move: Shifting Edmonton's Transportation Mode (2014)
Active Transportation Policy (2009)
The Way We Move: Transportation Master Plan (2009)
PED CONNECTIONS: A Strategy for Sidewalk Infrastructure in Edmonton (2008)
Pedestrian and Cycling Master Plans

- Cycle Edmonton: Bicycle Transportation Plan Summary Report (2009)
- 83 Avenue (Strathcona) Bike Route
- City of Edmonton – Trails, Paths and Routes Advisory Committee Vision & Values (2011)
- South Side Bicycle Grid (2018)
- Vision Zero

Design Standards & Guidelines

Winter City Design Guidelines
Complete Streets Design and Construction Standards
Crime Prevention Through Environmental Design
Access Design Guide 2017

PUBLIC ENGAGEMENT PROCESS



PUBLIC ENGAGEMENT PROCESS

On Behalf of the corporation, the BGN Branch leads the process of integrating and leveraging a scope of work that maximizes the full potential for strong and sustainable neighbourhoods. The BGN Branch is at the heart of aligning and advancing multi-faceted neighbourhood renewal efforts.

Engagement Principles

At the start of Strathcona Neighbourhood Renewal project, the team developed a set of public engagement principles specific to the project and as outlined in the Strathcona Neighbourhood Renewal Public Engagement Plan (January - September 2018). Those principles include:

A SHARED RESPONSIBILITY

Engagement of people in an authentic way contributes to robust solutions to challenging issues and encourages participation that supports democratic decision making.

RELATIONSHIP-BUILDING AND PERSPECTIVE SEEKING

Meaningful engagement values various and local perspectives and community experiences; it recognizes that respect and equitable processes foster trust and stronger relationships.

PROACTIVE, TIMELY, AND TRANSPARENT

People have enough time and notice to engage early in the process which enables considered input and impact on decision making, and clearly communicates how input will be assessed and used during engagement and reported on afterwards

INCLUSIVE AND ACCESSIBLE

Engagement planning and delivery is inclusive and accessible to best serve our City by encouraging two-way conversations and strategies that reach diverse communities and ensure people feel heard and know their input is valued. Innovative and continuously improving - As Edmonton grows and evolves, we aspire to co-create and embrace new and better engagement processes, tools and tactics based on a sound approach to evaluating success.

Building Great Neighbourhood Public Engagement Charter is also aligned with the Building Great Neighbourhood Business Model Principles.

BGN BUSINESS MODEL PRINCIPLE	PUBLIC ENGAGEMENT OUTCOMES
Integration is the path to the greatest return on investment	Coordinating public engagement activities and processes reduces citizen fatigue and will result in a holistic plan that the community can be proud of and see themselves in.
Building Great Neighbourhoods is built on the complexity of reconciling multiple interests	Public engagement brings to the surface the interests of all stakeholders at the beginning of the project.
We energize and mobilize community participation	Citizens will identify how they want to be involved, have the capacity to participate and mobilize others in their community, and influence decisions identified during public engagement.
We invest in comprehensive, upfront program development	Public engagement planning and execution early in the project supports decision making and scope clarity throughout the project. It provides the time required to incorporate community needs through integration and alignment with other departments.
We build the trust and confidence of citizens	Engagement with the public earlier in the project will result in deeper more meaningful discussions and stronger relationships with communities.

PUBLIC ENGAGEMENT PROCESS

Our Concept Design engagement process began in January 2018 and included:

- Working Committee Meetings
- One community workshop
- Three public engagement events
- Three public surveys
- Stakeholder meetings
- Tailored group meetings
- Pop-up community engagement

Working Committee Meetings

Strathcona Working Committee is a partnership between representatives from the City of Edmonton Building Great Neighbourhoods branch, and residents of Strathcona. The Strathcona Working Committee helped develop a Public Engagement and Communications Plan to energize and mobilize community participation. The Committee also helped draft a set of Vision and Principles; these were shared and refined by the wider neighbourhood through feedback received from the initial survey and early public engagement activities.

PUBLIC ENGAGEMENT SPECTRUM

What is the appropriate role for the public? Can we aspire to more influence and commitment?



PUBLIC ENGAGEMENT PROCESS

Phase 1 - Visioning and Local Knowledge Gathering

SURVEY - VISIONING AND INFORMATION GATHERING (FEBRUARY)

Purpose:

- To share project information and gather local knowledge and understanding about Strathcona, and its residents, to inform the development of concept design options
- To develop a Vision and Guiding Principles for the project

Who did we hear from: 384 respondents

What we asked:

- What do you love about Strathcona?
- Identify areas that need improvement
- How do you use the neighbourhood (drive, bike, walk, live and play)

WORKSHOP - OPTIONS AND IDEAS (MARCH)

Purpose:

- To share and gather feedback on the draft Vision
- To share what we heard from previous public engagement
- To share early drafts of design options to build upon

Who came: 44 participants

What we gathered input on:

- Feedback on the proposed design options and the draft project Vision and Guiding Principles
- Workshop ideas to build upon the design options focussing on:
 - Traffic/Shortcutting/Parking
 - Open Spaces/Parks
 - Bike Routes/Facilities
 - Pedestrian Connectivity/Missing Links

Phase 2 - Concept Design Options and Trade-Offs

PUBLIC ENGAGEMENT EVENT (APRIL) AND SURVEY (APRIL-MAY)

Purpose:

- To share and gather feedback on the design options and possible trade-offs
- To share and gather feedback on the draft project Vision and Principles

Who we heard from: 218 attendees; hundreds of comments provided on maps, 221 survey respondents

What we gathered input on:

Feedback on design options for:

- Bike Routes and Facilities
- Sidewalks and Crossings
- Parks & Open Spaces
- Confirmation of draft Vision and Guiding Principles
- Trade-off preferences for bike routes and sidewalks when space is limited
- Preferences for bike routes locations and facility types
- Locations most in need of traffic calming
- Pedestrian crossings most in need of improvements
- Comfort level with various types of traffic calming measures



PUBLIC ENGAGEMENT PROCESS

Phase 3 - Draft Concept Design

PUBLIC ENGAGEMENT EVENT (JUNE) AND SURVEY (JUNE-JULY)

Purpose: To share and gather feedback on the:

- Draft project Vision and Guiding Principles
- Draft Concept Design
- 30km/hr design speed Council Motion
- Bike facility options and trade-offs

Who we heard from: 273 attendees, hundreds of comments provided on maps, 311 survey responses

What we gathered input on:

- Proposed elements and their impact on the neighbourhood:
 - Traffic calming measures
 - 30 km/h design speed Council Motion
 - New parklet on 98 Street
 - Improvements to Fred A. Morie Park
- Advantages and disadvantages of proposed bike facility options for each new bike route
- Whether or not the measures proposed for pedestrian crossings will increase pedestrian safety
- Level of support for 30 km/h design speed, 30 km/h posted speed or 50 km/h posted speed, following the City Council motion
- How well the Vision and Guiding Principles are reflected in draft Concept Design

BIKE LANE RESIDENT MEETING AND SURVEY (JULY)

Purpose:

- To understand concerns of residents living on or adjacent to the bike route locations
- To share and gather feedback on bike facility options and trade-offs
- Who we heard from: 56 attendees, 43 survey responses

What we gathered input on:

- Proposed bike lanes in general
- Advantages and disadvantages of the proposed bike facility options for each new bike route

POP-UP COMMUNITY ENGAGEMENT (JUNE-AUGUST)

Purpose:

- To share project details by bringing information and conversation directly to where the people are
- To interact with the community, answer questions and listen to local knowledge
- Who we heard from: 5 locations, 100+ one-on-one conversations

What we asked:

- What are the impacts, positive and negative, of the overall draft concept design
- Do you have questions about the renewal and this stage of the project

PUBLIC ENGAGEMENT PROCESS

Process & Publication of Interim Findings

Interim findings were reported back at the subsequent public engagement event and also in the newsletters / bulletins.

List of Stakeholders

Residents of the Strathcona community are the primary stakeholders in this engagement process. Other stakeholders that have been identified as playing key roles in the preparation of the urban design analysis and concept plan for the Strathcona Neighbourhood Renewal include land and business owners, and key groups and organizations.

STAKEHOLDER	AREAS OF INTEREST
Neighbourhood Residents	Neighbourhood access Safety Shortcutting Traffic Congestion Cycle and walking paths / connectivity Neighbourhood beautification Bicycle accommodation
Strathcona Community League	Safety of all roadway users (with a goal for a Vision Zero community) Neighbourhood access Construction Detours Construction Noise Construction Impacts
Business Owners / Operators (Old Strathcona Business Association)	Property Impacts Business Access Business Visibility Construction Impacts / Timeline
Commercial Property Owners	Property Impacts Property Access Property / Business Visibility Construction Impacts / Timeline
Other (Paths for People)	Safety Bicycle Conenctivity Traffic Congestions

What We Heard - Key Themes

BIKE ROUTES AND FACILITIES

- More east/west cycle connections are desired (preferred locations in order of preference are: 87 Avenue, 86 Avenue and 89 Avenue)
- More north/south cycle connections are desired (preferred locations in order of preference are: 100 Street, 98 Street and 97 Street)
- Protected bike facilities are the preferred infrastructure followed by bike boulevards. If a trade-off for space is required preference given to making roads one-way over removing on-street parking or boulevard trees.
- Residents living on/adjacent to bike routes (most specifically along 87 Avenue) are concerned about the removal of parking and accessibility impacts getting to and from their properties.
- Concern that Edmonton is a winter city, with few cyclists in the winter months.
- Concerns over the impact of calcium chloride (used to keep the bike lanes clear of snow) having a negative impact on boulevard trees

PARKS AND OPEN SPACES

- More green gathering spaces/ parks are desired (specifically east of 99 Street) Consider resident access and traffic flow impacts if closing streets to add green space
- Improvements are desired at several existing parks/ green spaces including:
 - W. C. Tubby Bateman Park
 - Fred A. Morie Park
 - Railway corridor
 - Parking lot between 102 Street and Gateway Boulevard
- A desire for amenities such as fitness areas, community gardens, dog off-leash space, gazebos
- Park maintenance needs improvement
- Trees are highly valued. Protect and add where possible.

TRAFFIC CALMING MEASURES / DRIVING CONDITIONS/TRAFFIC MANAGEMENT

- Desire for traffic calming measures. Input indicates comfort with the addition of many traffic calming measures including: raised crosswalks, mini roundabouts, curb extensions, one-way roads, and raised medians. Locations of high concern are 97 Street, 98 Street, 99 Street, 100 Street, and 101 Street.
- Strong support for a neighbourhood wide reduction of speed limit to 30 km/h.
- Desire to see a reduction in neighbourhood shortcutting.
- Drivers desire easier access onto and off of arterials.
- Drivers need to be given consideration in the design. Residents need to drive to and from their homes.
- Road surfaces are in poor condition; potholes and rough, uneven surfaces
- Desire for additional traffic control signs (stop, yield)
- Concerns for traffic being directed to next road as a result of one way roads, road closures or traffic calming.
- 97 Street is in poor condition from 87 Avenue north to the alley

EVALUATION OF EXISTING SITE CONDITIONS

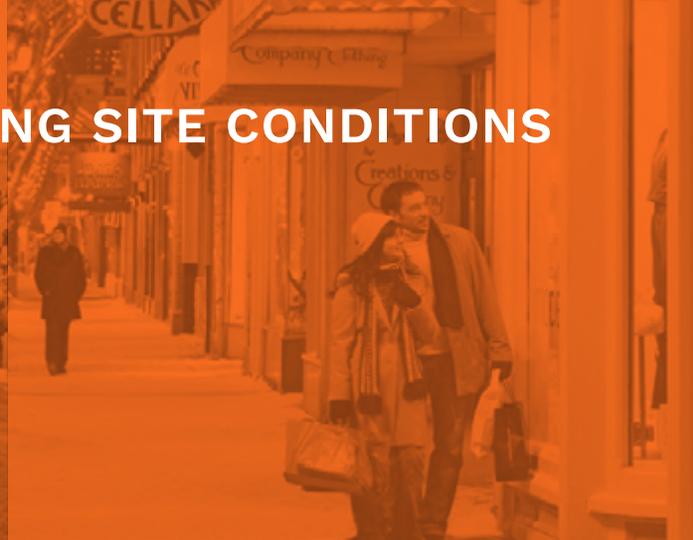
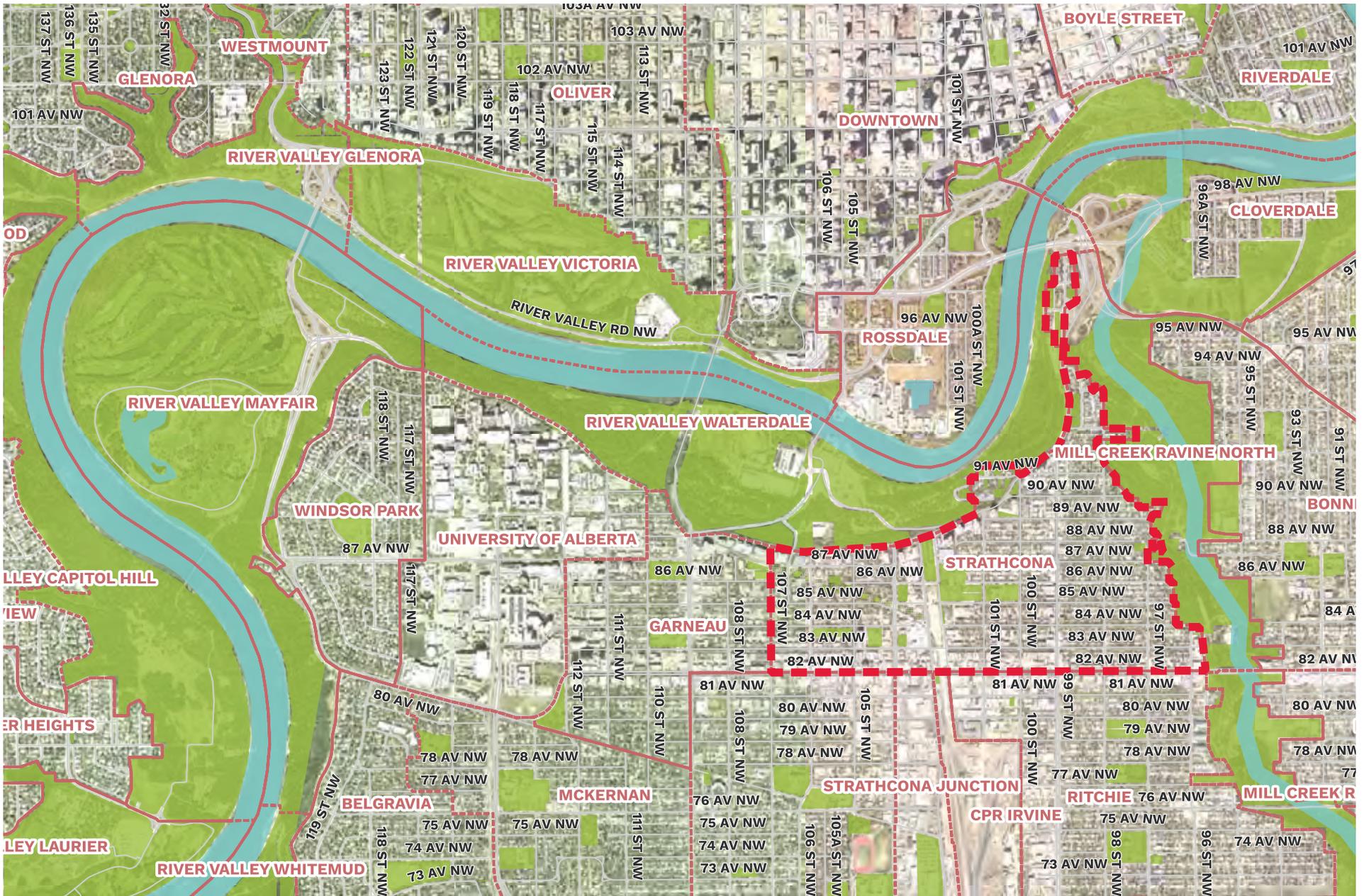


FIGURE - NEIGHBOURHOOD CONTEXT



LEGEND

 STRATHCONA BOUNDARY

 PARKS & OPEN SPACE

Demographic Context

Ages

The 2016 census counted just under 9000 residents living in Strathcona. Of survey respondents, Strathcona citizens aged 20-40 represent the biggest population segment at 48%, compared to 31% City wide. People aged 40-60 follow at 16%, inline with the City average. Children and teenagers living in Strathcona are well below the City average at 11% compared to 22%.

Transportation Modes

Among survey respondents, data shows that Strathcona uses automobiles far less than the City at large as their main mode of transportation. Slightly over half of the neighbourhood uses a private automobile, compared to the City average of almost 80% of Edmontonians that drive. Strathcona has slightly higher than average public transit use, and significantly higher percentages of citizens who walk or cycle.

Dwelling Ownership & Types

Approximately twice as many Strathcona residents rent versus own their residence when compared to the City at large.

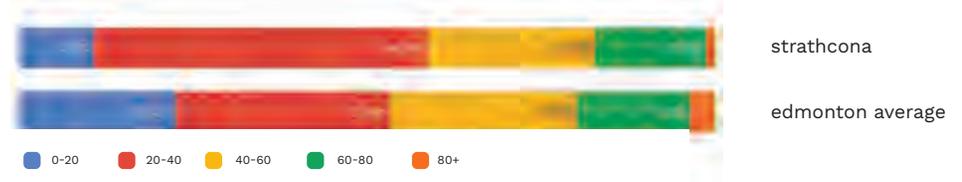
An overwhelming majority of Strathcona households are in multi-family structures, encompassing approximately 75% of survey respondents. Roughly 25% of Strathcona households are in single detached homes, significantly less when compared to 49% for the City average.

Household Diversity

Residents of Strathcona are as likely as the City on average to speak a language other than English. About 47% of Strathcona households speak English only, matching that of the City at large. The array of other languages spoken in the neighbourhood are similarly reflective of the City averages.

Household incomes are generally inline with the proportions seen for the City on average. Strathcona has marginally more high income households in the ranges of \$125,000 - 200,000. Strathcona also marginally more residents in the lowest income range of \$30,000 and under.

Age of Residents



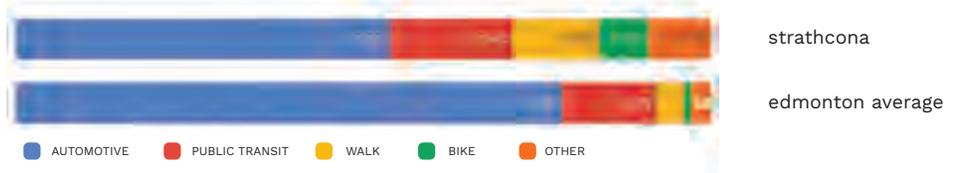
Rent or Own



Housing Types



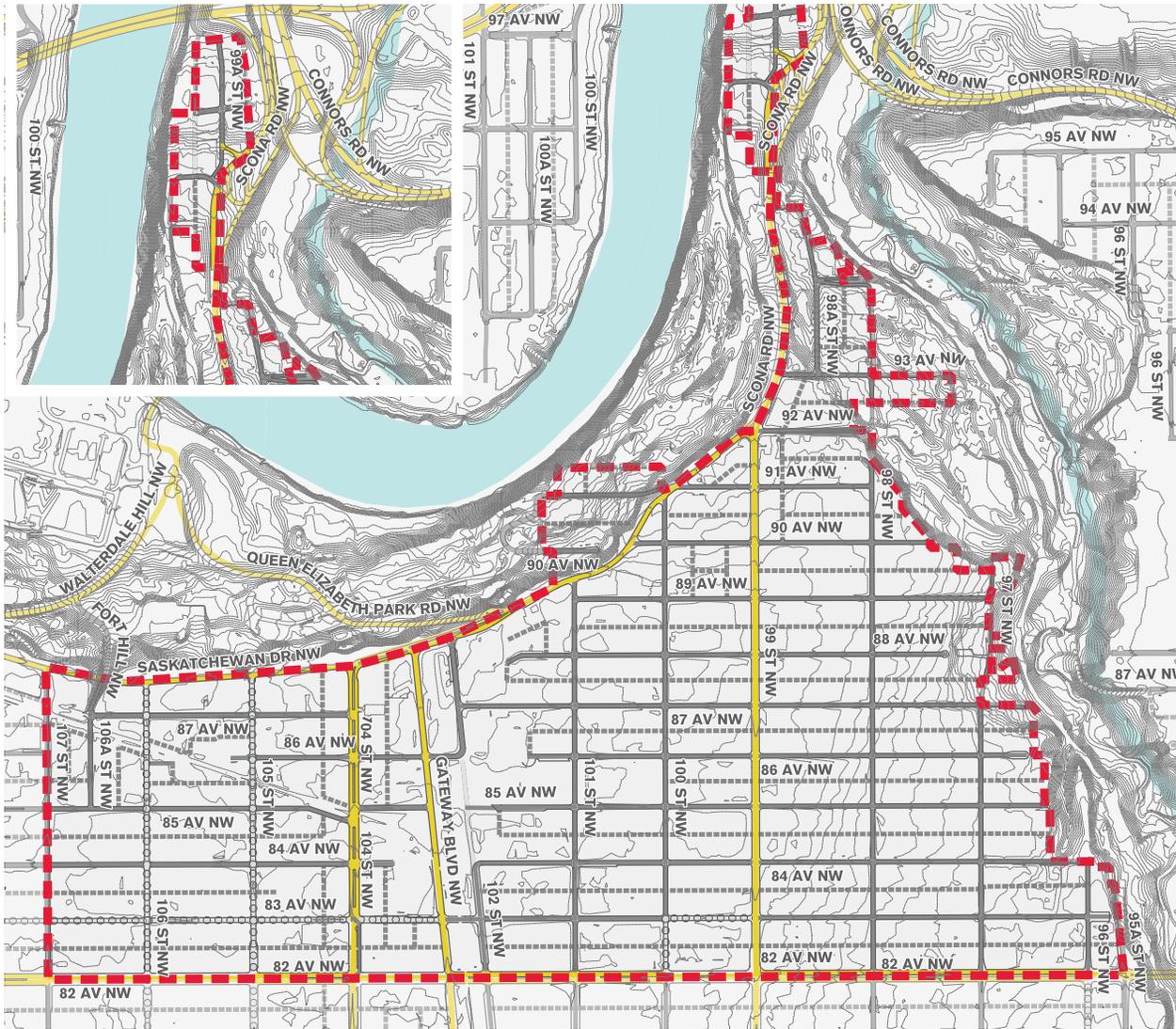
Primary Transportation Mode



Household Income



FIGURE - EXISTING ROAD NETWORK



LEGEND

- STRATHCONA BOUNDARY
- ARTERIAL
- COLLECTOR
- LOCAL
- ALLEYS

Road Network

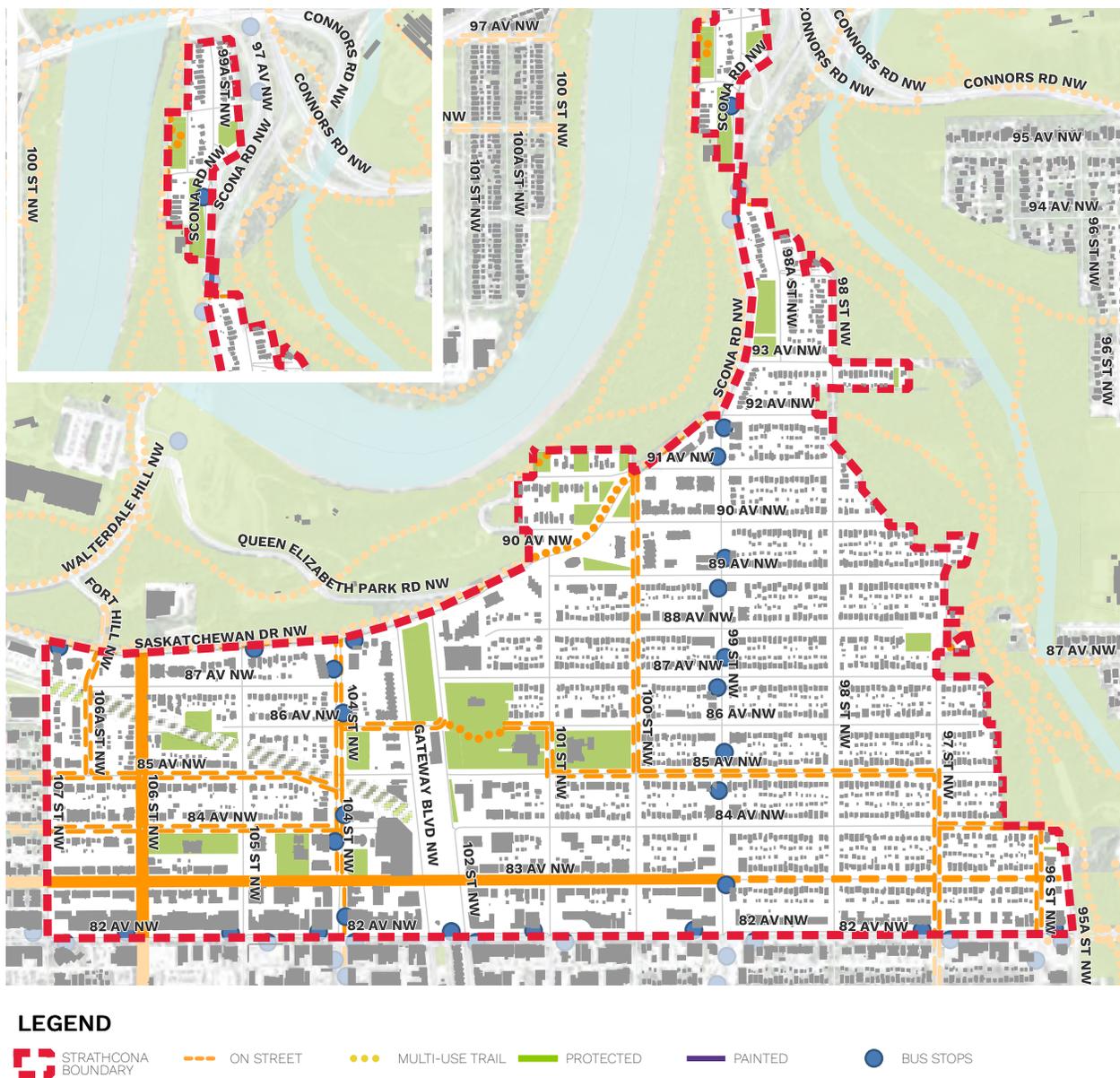
The road network in Strathcona is essentially a grid pattern with some discontinuity in the east-west orientation, due to the north-south arterial roads, but also due to the abandoned rail line and the active streetcar tracks to downtown in the west portion of the neighbourhood.

Arterial roadways within the neighbourhood include 82 Avenue at the south boundary, Saskatchewan Drive & Scona Road at the north, and 99th Street, Gateway Boulevard and 104 Street bisecting the neighbourhood north/south. 99th Street and 82 Avenue are designated 24 hour truck routes. The arterials are intended to accommodate commuting traffic through the neighbourhood as well as goods movement. The remainder of the streets in the neighbourhood are considered local residential roadway and are 8-9m wide although some unique roadways exist at 6m width. The west portion of the neighbourhood is dominated by one-way roadways. Local residential roadways provide access to adjacent lands and service neighbourhood travel.

Most of Strathcona has rear alleys for alternative access and garbage pick-up, however due to the age of the houses within the neighbourhood not all homes have rear detached garages or parking pads accessed from the alley. The majority of the local residential streets in Strathcona have on-street parking on one side of the roadway. Parking is non-restricted, so can be occupied by non-residents especially during festivals or weekends.

Most roadway longitudinal gradients are flat to gentle, although the area known as Skunk Hollow (west of Saskatchewan Drive at 91 Avenue), and the areas both east and west of Scona Road, north of 92 Avenue and into the river valley have steep longitudinal gradients.

FIGURE - EXISTING ACTIVE TRANSPORTATION NETWORK



Active Transportation

Public Transportation

All transit routes within Strathcona are generally along arterials with the exception of route 70 which travels on 100 Street from 82 Avenue to 83 Avenue. A short section of bus service also runs on 85th Avenue between 100 and 99 Street.

Existing Bike Facilities

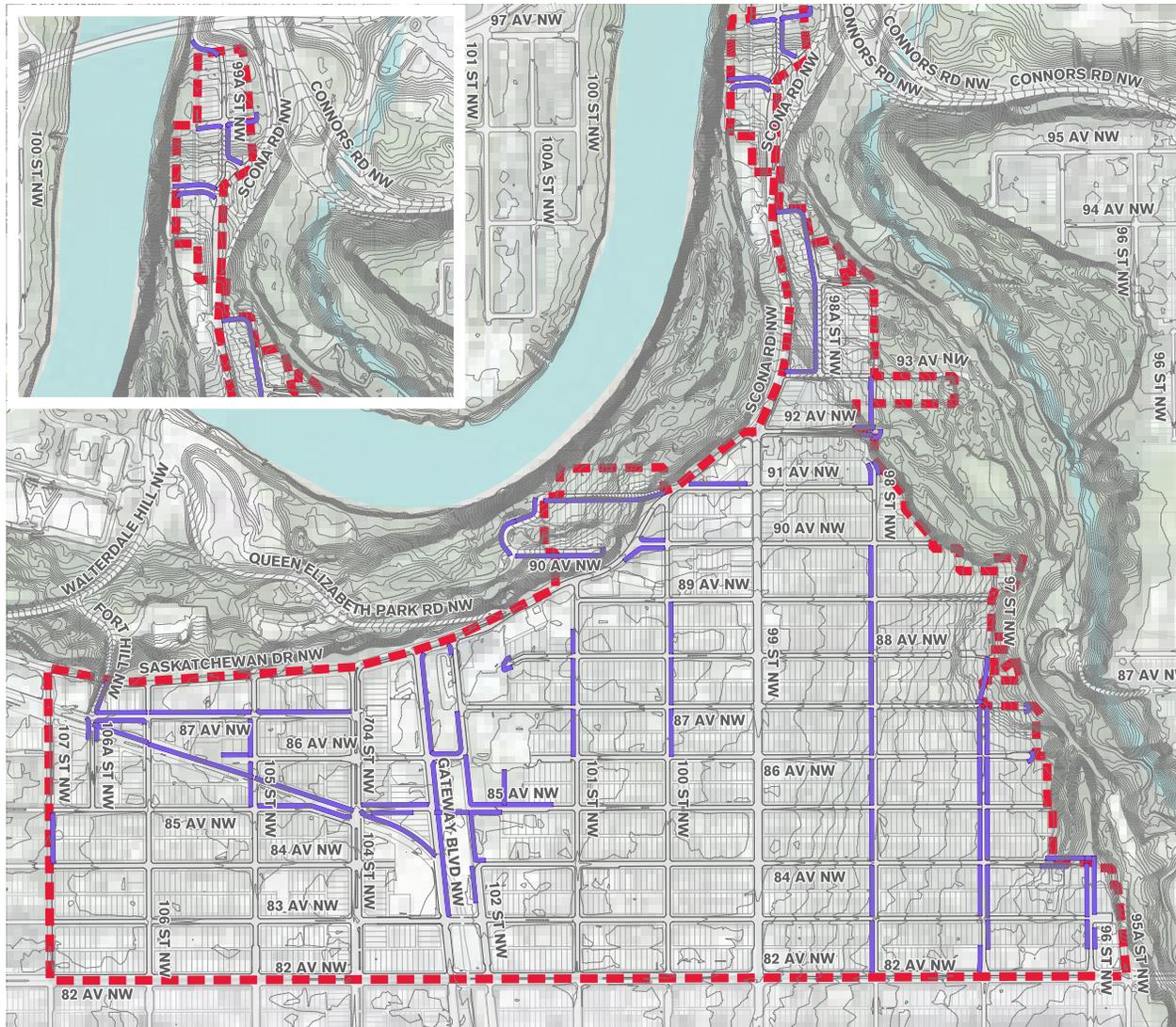
83 Avenue through Strathcona neighbourhood has been designated as a bike route, and consists of one-way and two-way protected bike facilities between 111 Street and 99 Street, and a painted one-way bike lane east of 99 Street to Mill Creek ravine. Further extension of this bike route west to 109th Street has occurred and is continuing to be constructed further west.

106 Street through Strathcona is a designated bike route with one-way protected bike facilities on each side of the road.

Bike routes that are identified as "shared roadways" (bikes sharing the roadway with cars) are:

- 97 Street from 82 Avenue to 85 Avenue
- 85 Avenue from 97 Street to 101 Street
- 84 Avenue from 104 Street to 107 Street
- 85 Avenue from 104 Street to 107 Street
- 106a Street from 85 Avenue to north of Saskatchewan Drive
- 100 Street from 85 Avenue to Saskatchewan Drive
- 84 Avenue from 96 Street to 97 Street
- 96 Street from 82 Avenue to 84 Avenue
- 86 Avenue from 101 Street to 104 Street
- 104 Street from 82 Avenue to Saskatchewan Drive

FIGURE - MISSING SIDEWALK CONNECTIONS



LEGEND

 STRATHCONA BOUNDARY  MISSING SIDEWALKS

Pedestrian Connectivity

Boulevard sidewalks exist through approximately 60% of the neighbourhood with monowalk existing for approximately 20%. Numerous roadways only have sidewalk on one side and pedestrian connectivity is lacking in some areas of the neighbourhood.

Signalized pedestrian crossings exist on 99 Street at 91 Avenue, 89 Avenue, 87 Avenue, 85 Avenue, and 83 Avenue. Residents expressed frustration at long wait times to cross 99 Street at these locations.

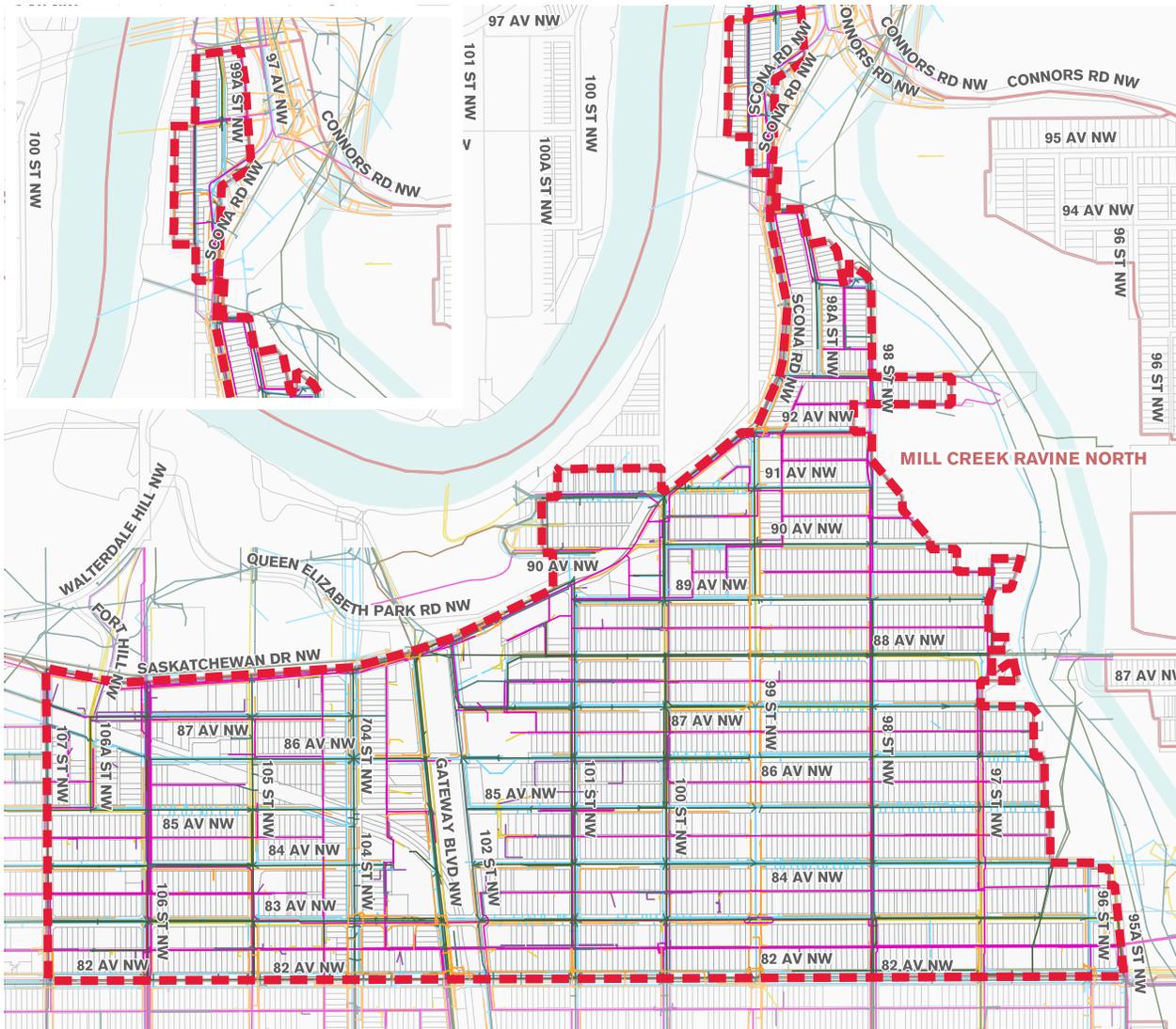
Signalized pedestrian crossings are also present at Gateway Boulevard and 83 Avenue and 104 Street and 83 Avenue.

Yellow pedestrian warning flashers exist on Gateway Boulevard at Tommy Banks Way.

Generally, residents expressed a desire for improved pedestrian crossing safety of the arterial roads within Strathcona and across Saskatchewan Drive to the shared use pathway on the north side.

Within the neighbourhood, residents felt that parking close to the intersections reduced pedestrian visibility to motorists and that curb extensions or restricting parking near intersections would improve pedestrian safety.

FIGURE - EXISTING MAIN UTILITY ALIGNMENTS



LEGEND

- STRATHCONA BOUNDARY
- COMBINED
- GAS
- SANITARY
- STORM
- TRAFFIC SIGNALS
- WATER
- TELECOMMUNICATIONS
- DRAINAGE
- POWER
- STREETLIGHTING

Infrastructure

WATER

Water service and fire protection is provided by water mains within the road right-of-way. Condition assessment, repairs or rehabilitation of the existing water network will be undertaken by EPCOR Water prior to renewal. Some valves and hydrants may require vertical adjustment during reconstruction.

DRAINAGE (STORM)

The majority of storm sewers are combined (with sanitary) sewers. These are vulnerable to flooding and back-up during rainfall events. Sewer separation is a long term strategy for the City of Edmonton, and is typically achieved by construction of new systems. During renewal, most of the catchbasins will be adjusted with new leads and catchbasins installed where required

SANITARY SEWERS

The majority of existing sanitary sewers are combined sewers. Condition assessment of the existing sewers, and any repairs or rehabilitation will be completed by EPCOR Drainage prior to the renewal.

POWER, GAS, TELUS, COMMUNICATIONS, PIPELINES

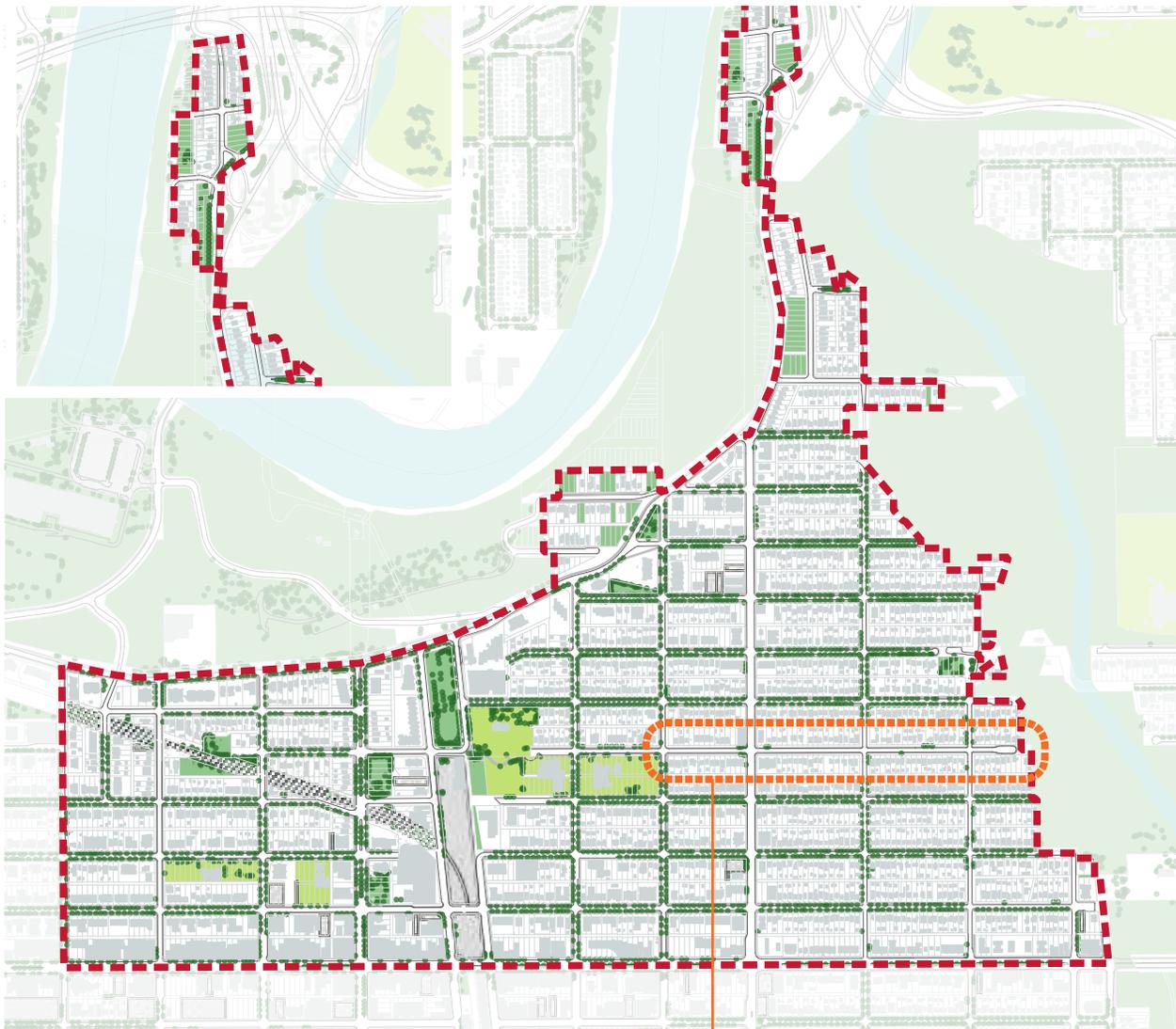
Any modifications to the shallow utilities will be completed by the owner of the facility prior to the road construction. Potential conflicts will be identified during preliminary design.

LIGHTING

As part of the neighbourhood renewal all streetlighting will be replaced by EPCOR Technologies. During this replacement process, there will be opportunity for the current lighting levels to be reviewed and any improvements necessary to meet Transportation Association of Canada (TAC) recommendations can be undertaken. Lighting at intersections should be reviewed to ensure criteria for increased visibility in crosswalks (vertical illuminance) leading to improved safety is met.

Additionally, as part of the renewal, residents can opt for decorative street lighting through local improvement.

FIGURE - EXISTING TREES



LEGEND

- PARKS
- SCHOOL & CHILDCARE FACILITIES
- RIVER VALLEY / RAVINES
- COMMUNITY & RECREATION FACILITIES
- RAIL CORRIDOR
- TREES

**86TH AVENUE
MISSING STREET TREES**

Vegetation

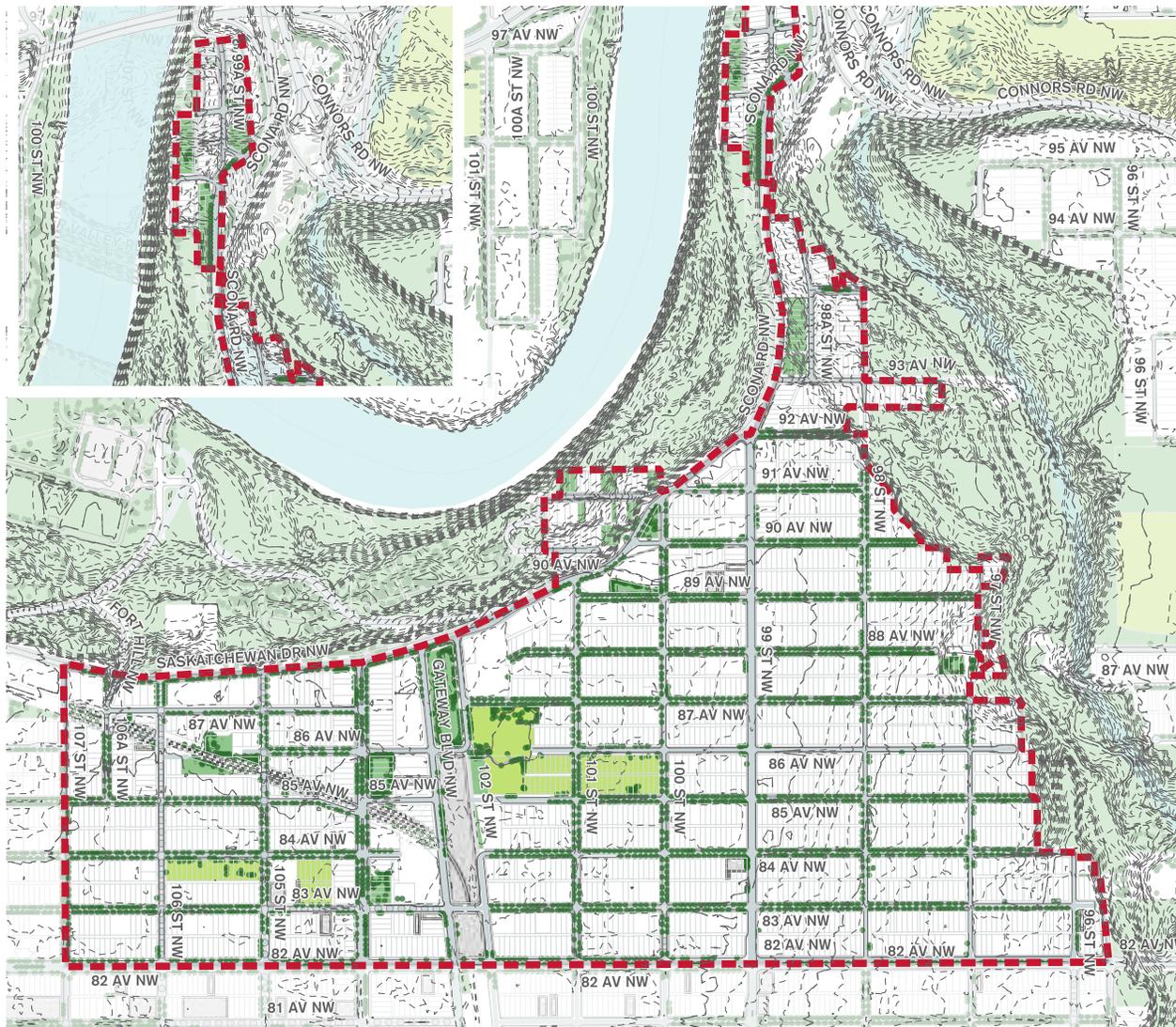
Street Trees

As one of the oldest settled areas of Edmonton, Strathcona is endowed with one of the City's best inventories of mature street trees. During discovery and inventory phases of the project it was noted that street trees are generally absent on 86th Avenue between 100th Street and its eastern edge.

There are other streets and areas within the neighbourhood generally absent of street trees; however, many of them are subject to various constraints.

106 Street, Gateway Boulevard, and 99 Street are classified as arterial roads and are not in the scope of neighbourhood renewal. Technical constraints such as buried or overhead utilities limit where trees can be planted without conflicts.

FIGURE - EXISTING PARKS & OPEN SPACE



LEGEND

PARKS & OPEN SPACE

- PARKING
- PARKS
- RIVER VALLEY / RAVINES
- RAIL CORRIDOR
- SCHOOL & CHILDCARE FACILITIES

Parks & Open Space

Strathcona is fortunately situated with access to the Mill Creek Ravine and the wider Edmonton River Valley. The north, east, and west edges of the neighbourhood formed by its boundary at the top-of-bank provide numerous entry points to a seemingly limitless network of trails and paths connecting to other park spaces. Naturalized open space is available to many Strathcona residents in abundance; and for more programmed sports, playground, and recreational activities the adjacent Kinsmen Park is also in close proximity. However, access to the valley has challenges of all ages accessibility and safety for some. Steep slopes and stairways serve as barriers. Others cite safety as reason they don't access the river or ravine system more frequently. It is perceived by some that the Mill Creek Ravine contains unsavoury elements and is also not lit in the evenings.

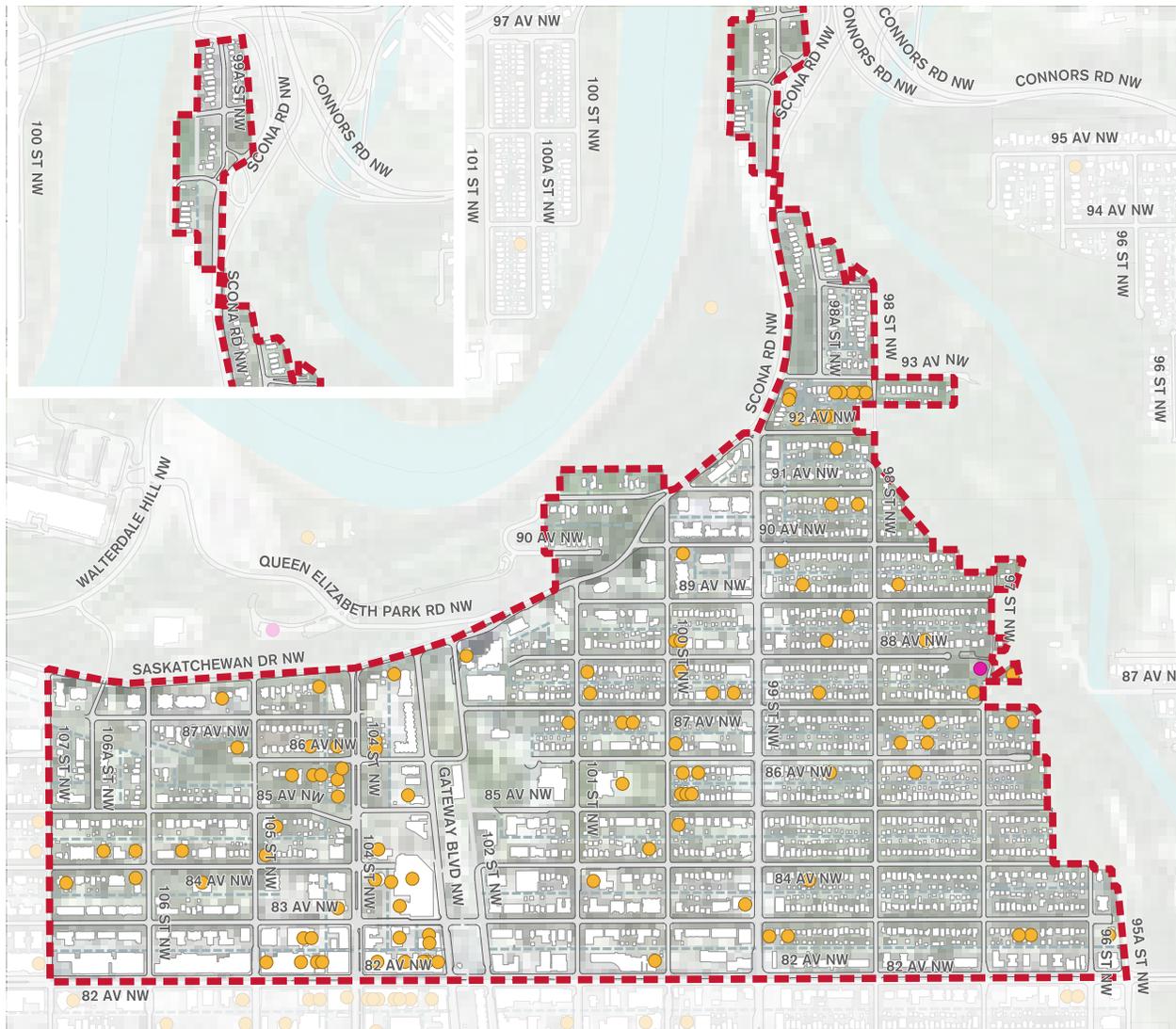
More locally contained within the neighbourhood, Strathcona contains a number of more traditional parks and open spaces for both passive and active recreation. WC "Tubby" Bateman Park, Strathcona Park, and King Edward School are some of the few with playground equipment for younger ages.

Sports activities such as soccer, skating, ice hockey and ball hockey are accommodated at Old Strathcona Park, King Edward School, and Old Scona Academic.

Iron Horse Park, Wilbert McIntyre, and End of Steel Park are some of Strathcona's more passive, less programmed open spaces, but serve important functions in accommodating functions of many of the neighbourhood festivals.

The Strathcona Rail Community Garden is the neighbourhood's only community garden, situated across the rail tracks from E.L. Smith Park east of 105th Street. The rail corridor accommodating the Radial Railway Society's streetcar functions as an unofficial piece of the neighbourhood's green space network. The City is not the owner of the corridor, and therefore making improvements is subject to further review.

FIGURE - PUBLIC ART & HERITAGE RESOURCES



LEGEND

- HISTORIC RESOURCES
- PUBLIC ART

PUBLIC ART & HERITAGE RESOURCES

Strathcona is one of the oldest parts of Edmonton particularly with respect to urban settlement. Development began in the 1880s at the intersections of the CPR tracks and Whyte Avenue and spread in a circular pattern from there. Consequently, Strathcona is endowed with what is likely considered the highest concentration of heritage and character properties in the City. Collectively, there are over 100 properties in Strathcona on a City recognized list of heritage assets. Of those, 23 are protected as either a municipal or provincial heritage resource.

Strathcona also contains 'The Old Strathcona Provincial Heritage Area', an area recognized by provincial legislation for its heritage, character, and significance in early settlement and development of Alberta. Both the City and the Province influence development in this area with design guidelines that preserve and enhance existing heritage and character. An area based direct control provision (DC1 zoning) is in place as the primary measure of control over private development in this area.

Destinations

Strathcona as a unique neighbourhood one of few in the City to boast local, regional, national, and international destination area serving locals, neighbours, and tourists alike. Strathcona contains numerous destinations that appeal universally across these geographic locations and scales, as well as local amenities used primarily by residents.

Universal Destinations:

FESTIVALS:

Ice on Whyte, Fringe Festival, Pride Festival, Improviganza, Year Round Theatre Venues, Artwalk, Sand Castles, and more.

YEAR ROUND NIGHTLIFE + ENTERTAINMENT:

Strathcona contains numerous music venues ranging from those more formal such as the Yardbird Suite, to small bars and taverns such as The Black Dog that feature live music. These types of venues are primarily concentrated on Whyte but also on parallel avenues and intersecting side streets such as 104th street, or 83rd Avenue near Gateway Boulevard.

COMMUNITY & CULTURAL ESTABLISHMENTS:

- | | |
|---|-----------------------|
| Strathcona Farmers Market | Cultural Facilities |
| The Edmonton Streetcar (Radial Railway Society) | Varscona Theatre |
| Edmonton River Valley Connection Points | The Art Barns |
| C&E Railway Museum | Westbury Theatre |
| Old Timer's Cabin | Walterdale Playhouse |
| | The Backstage Theatre |

Local Destinations

SCHOOL & PARK SITES

- King Edward School / Park
- Tubby Bateman Park
- Fred A. Morie Park
- Strathcona Rail Community Garden
- E.L. Hill Park
- End of Steel Park
- Light Horse Park

CHURCHES & SPIRITUAL SITES

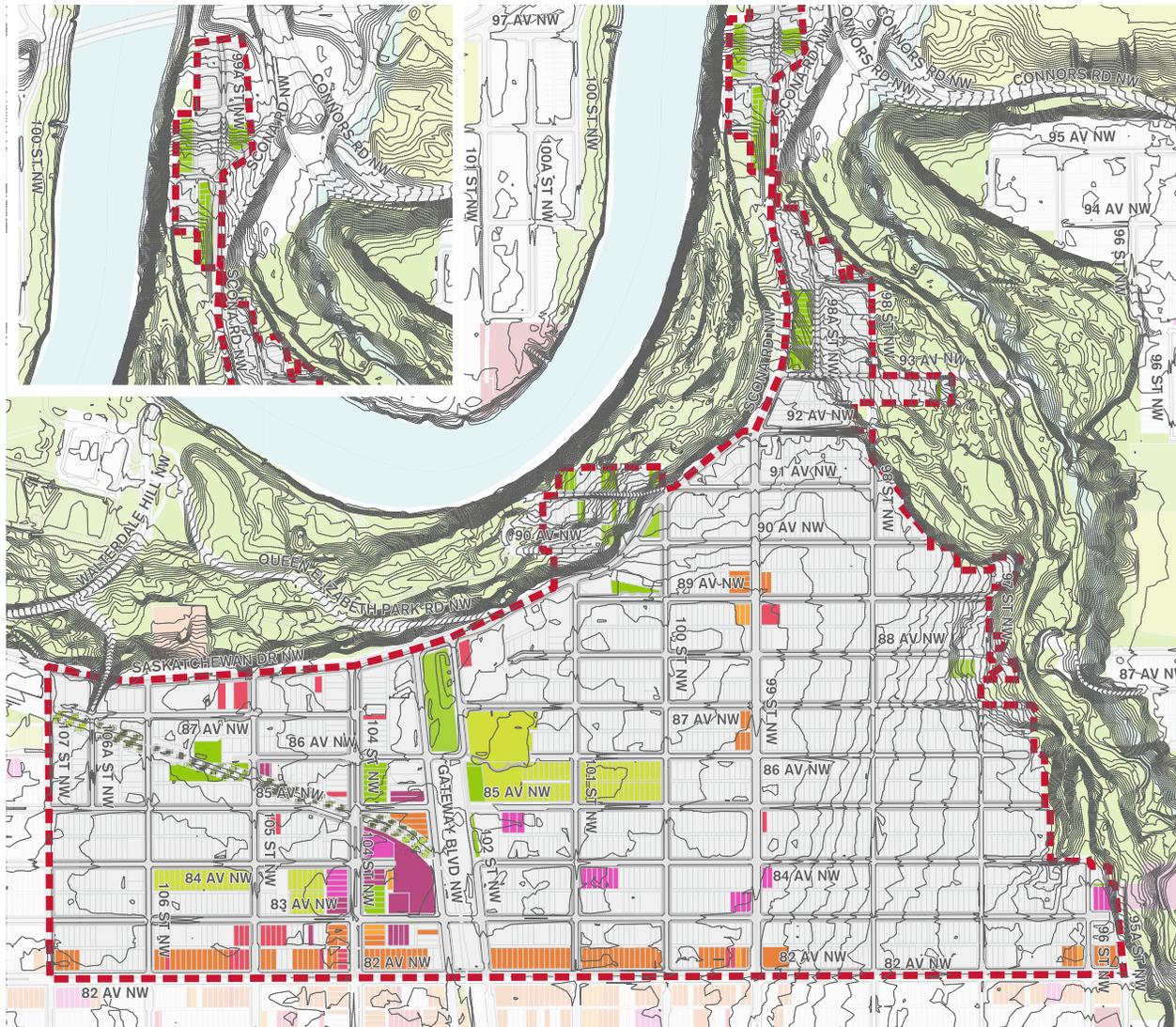
- Strathcona Baptist Church
- Knox Evangelical Free Church
- Church of God
- Holy Trinity Anglican Church
- Our Lady Queen of Poland Parish
- Moravian Church
- Grace Pentecostal Church

PUBLIC / CIVIC AMENITIES

- Edmonton Public Library Branch



FIGURE - DESTINATION AREAS



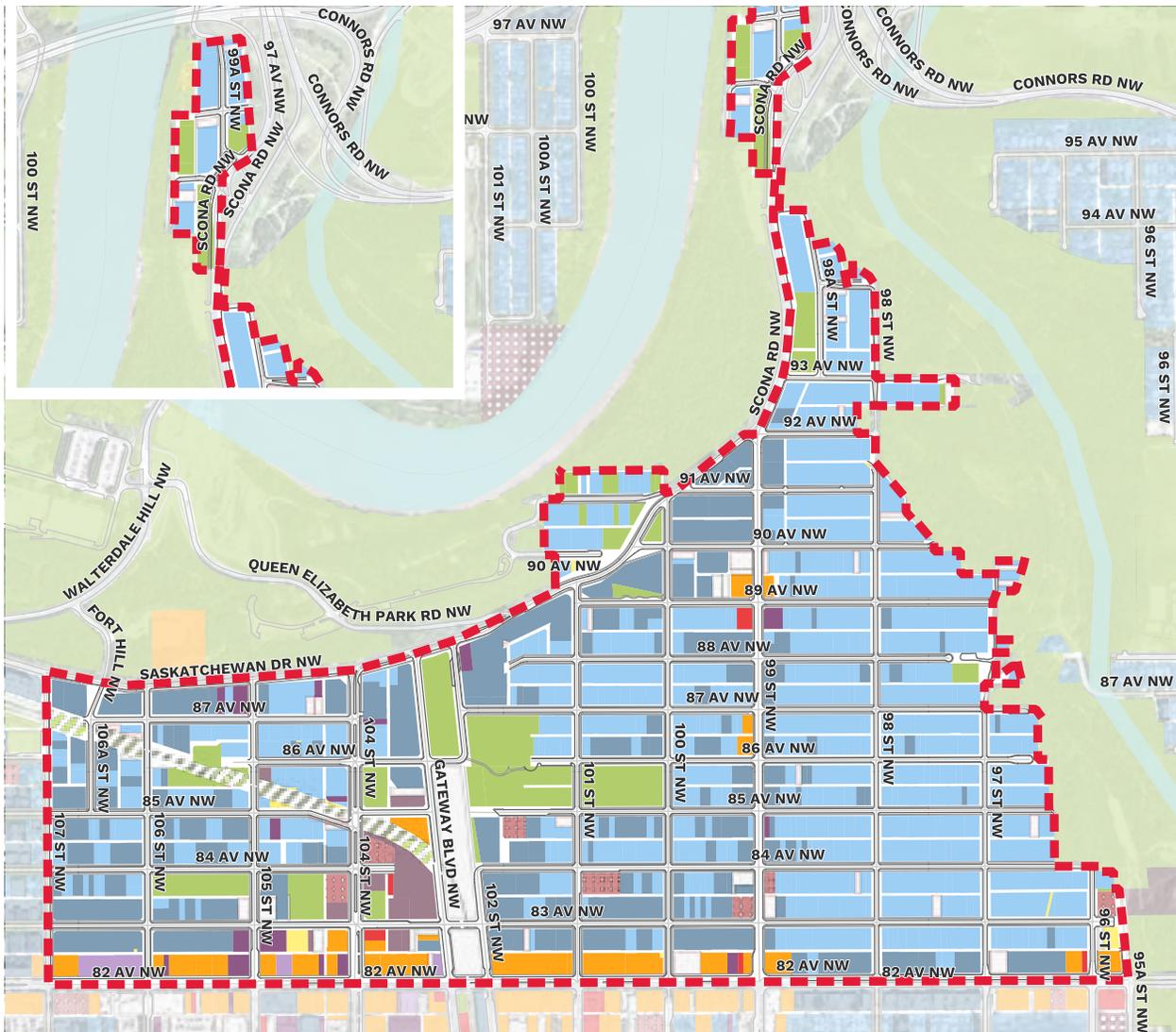
LEGEND

LAND USE	SCHOOL & CHILDCARE FACILITIES	OFFICE / BUSINESS
PARKS & OPEN SPACE	COMMUNITY SPORT & RECREATION FACILITIES	CHURCH'S & SPIRITUAL FACILITIES
RIVER VALLEY / RAVINES	RESTAURANTS	CIVIC & CULTURAL FACILITIES
RAIL CORRIDOR	RETAIL / SHOPPING	

Destination Areas

Strathcona destination areas primarily align with its land uses and form and character of its built form. Owing to a great mix of uses on its commercial avenues (primarily near Whyte); Strathcona boasts an excellent relationship between publicly and privately owned lands that make a great place for walking and window shopping.

FIGURE - EXISTING LAND USE CONTEXT



LEGEND

STORAGE	HOTEL / MOTEL	RAIL CORRIDOR	OFFICE / BUSINESS
RAIL TRANSPORTATION	MULTI-FAMILY RESIDENTIAL	PUBLIC UTILITY OR ROW	CHURCH'S & SPIRITUAL FACILITIES
PARKING	SINGLE FAMILY RESIDENTIAL	RESTAURANTS	CIVIC & CULTURAL FACILITIES
UNDEVELOPED OR VACANT LAND	PARKS & OPEN SPACE	RETAIL / SHOPPING	CIVIC SERVICES (POLICE, ETC.)

Public Realm & Land Use

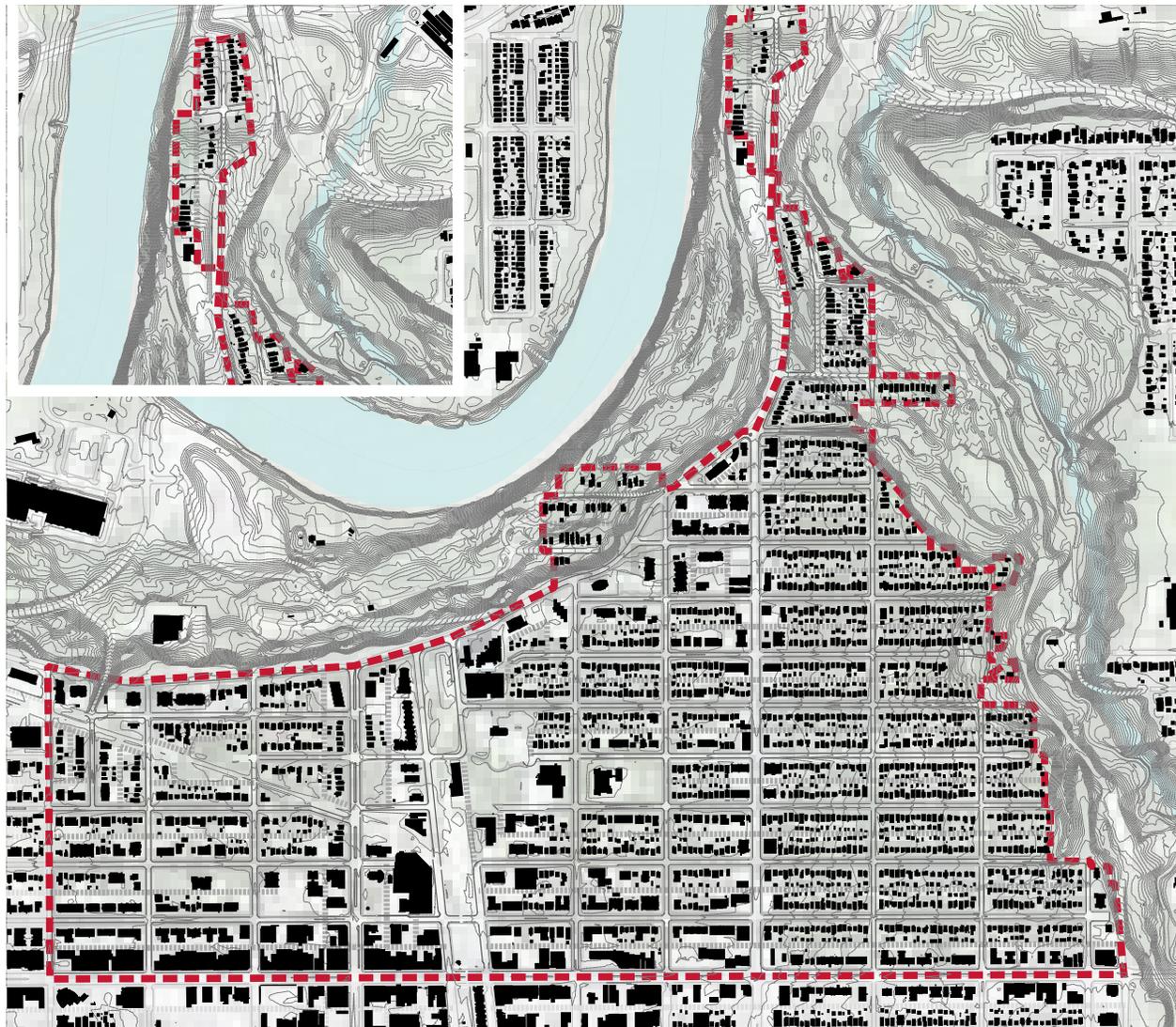
Public and Private

With particular emphasis on Strathcona's commercial & mixed use areas, its public spaces are enhanced by its relationship to private buildings. Indicative of the age Strathcona was primarily first developed, its commercial storefronts are located at or near their front and side property lines with little to no setbacks. This helped create a strong relationship between public pedestrian spaces (sidewalks, streets), and private commerce (retail building facades). Whyte Avenue boasts a consistent streetwall that is well articulated with narrow storefronts and varied architectural details. The result is a balance between consistent spatial form, and architectural variety and interest that makes it pleasant to walk.

Existing Land Use

Whyte Avenue also boasts its strong mix of commercial and residential land uses. It has a higher concentration of commercial and mixed uses, that are well supported by a relatively dense residential land use. The viability of commercial land uses are further supported by the area's draw as a regional and tourist destination.

FIGURE - BUILT FORM



LEGEND

-  STRATHCONA BOUNDARY
-  ROOF OUTLINES

Built Form

Now one of Edmonton's oldest Neighbourhoods, Strathcona used to be its own City before amalgamation in 1912. Its built form and heritage are some of its greatest features. Strathcona historically evolved to have fairly consistent building heights at 2-4 storeys, with building frontages with little or no setback from front and side property lines. Many commercial buildings featured retail at-grade with different uses above.

This helped create a strong relationship between public pedestrian spaces (sidewalks, streets), and private commerce (retail building facades). Whyte Avenue boasts a consistent streetwall that is well articulated with narrow storefronts and varied architectural details. The result is a balance between consistent spatial form, and architectural variety and interest that makes it pleasant to walk.



KEY OPPORTUNITIES & CONSTRAINTS



Strengths, Weaknesses, Opportunities, and Constraints (SWOC)

The Strengths / Weaknesses / Opportunities and Constraints (SWOC) analysis is a summary of findings during inventory and analysis of the neighbourhood, public engagement events, and meetings with the project team. The results are used to inform potential opportunities, and to identify limitations and tradeoffs required to implement certain opportunities. Overall, the SWOC analysis is used to identify priorities for the community, while understanding the impacts and tradeoffs of their outcomes.

STRENGTHS	WEAKNESSES
Situated centrally in Edmonton, nearby to downtown and the University of Alberta. The proximity supports public and active transportation	Traffic commuting pressures to and through the neighbourhood
High connectivity through the neighbourhood with a consistent pre-war street grid	As a neighbourhood with well connected street grid, it is easy for commuters to shortcut through the neighbourhood when main arterial roads experience congestion
Narrow road right-of-way and on street parking helps deter speeding	While proximate to the ravine and river valley, the steep slopes and stairways can be barriers for people with mobility challenges
A very walkable and bikeable neighbourhood reflected by stronger than average walking and cycling modes of its residents	The relatively narrow 20m road right-of-way throughout Strathcona, coupled together with its mature boulevard trees, limit some opportunities that would require removing boulevard trees, for example: some streets with missing sidewalk links would require tree removal in order to add sidewalks, or bike lanes
Proximity to Mill Creek and the river valley provides excellent access to parks and natural space	A number of parks and open spaces are underutilized and have equipment that is not functional or in disrepair
The neighbourhood contains one of the best inventory's of mature boulevard trees in the City	A number of streets have missing sidewalk connections
The existing density and mix of uses contribute to the community's walkability, economic and social diversity.	There is little in the way of parks or gathering space east of 99th Street
The community is in easy active transportation distance to numerous destinations including Downtown, the ravine and river valley, Whyte Avenue, University of Alberta, etc.	residents described unsafe pedestrian crossings on Whyte Avenue that have experienced fatalities
The area has multiple bus routes on Whyte Avenue, 99th Street, Saskatchewan Drive, and 109th Street a few blocks outside its western boundary.	Lack of wayfinding throughout the neighbourhood to key destinations
There are many community amenities including an Edmonton Public Library branch, numerous arts and culture events including the Varscona Theatre, and numerous other restaurants, and nightlife and entertainment venues.	A perception of homelessness, transience, crime and drug use in certain areas of the neighbourhood as well as the adjacent ravine
Rich neighbourhood history including a relatively large inventory of historic resources, many of which are protected.	A highly desirable neighbourhood that leads to development pressures with high rates of change and loss of character reported by community residents
	As a popular regional destination for festivals and events, Strathcona's becomes crowded at times (festivals and events) and leave its residents reporting there are a lack of parks and public space reserved for local gathering

Strengths, Weaknesses, Opportunities, and Constraints (SWOC)

OPPORTUNITIES	CONSTRAINTS
<p>Although arterials are not in scope in terms of physical changes, signal timing changes to optimize intersections for both pedestrian and vehicle movements are possible.</p>	<p>Arterial roadways including 99th Street, 104th Street, Gateway Boulevard, Whyte Avenue, and Scona Road are not within the renewal scope of work, and physical changes to these are not up for consideration.</p>
<p>The Radial Railway Society intends to extend its streetcar station all the way to Whyte Avenue. It is currently located behind the Farmer's Market building</p>	<p>Alleys are not included as part of the neighbourhood renewal scope and changes or rehabilitation to them are not included. However, Strathcona has some residents only have vehicle access to their properties via alleys. In these instances those alleys are included for reconstruction during the renewal.</p>
<p>To expand, enhance, and repair elements in existing park spaces</p>	<p>106th Street and 83rd Avenue have been more recently reconstructed as part of Edmonton's expanding bicycle network. Further physical changes to these roadways are not up for consideration.</p>
<p>Improved pedestrian connections: add missing sidewalk connections wherever possible</p>	<p>A parallel project to revise Saskatchewan Drive is currently underway. Although feedback collected during Strathcona engagement is shared with the Saskatchewan Drive team, physical changes are being driven primarily by the parameters and constraints discovered through its project process.</p>
<p>To increase and improve lighting throughout the neighbourhood, and to improve neighbourhood aesthetics with decorative lighting elements</p>	<p>Although the rail corridor is frequently considered by residents as part of the open space network, the property underlying it is not owned by the City. Potential changes that could occur here may be limited by this, and subject to review and negotiation with property owners.</p>
<p>Improved bicycle connections to and through the neighbourhood</p>	<p>Although the City owns the Strathcona Farmer's Market parking lot area, it is leased to the market and it will limit the changes that are made here.</p>
<p>Implementing wayfinding and signage to assist people with navigation through the neighbourhood</p>	<p>Plan Whyte happened in parallel with the concept for Strathcona renewal. Plan Whyte's recommendations included further study of the corridor formed by End of Steel Park, The Farmer's Market Parking Lot, and the other lands that form the north / south corridor between the river valley and Whyte Avenue. In addition, Plan Whyte looks at some of the festival oriented spaces around the Farmer's Market such as 84th Avenue. As Plan Whyte looks to make future recommendations for these areas, they will remain out of the scope of the neighbourhood renewal</p>
<p>Incorporating traffic calming techniques to slow traffic and shortcutting through the neighbourhood</p>	

URBAN DESIGN PRINCIPLES & OBJECTIVES



URBAN DESIGN PRINCIPLES & OBJECTIVES

The vision and guiding principles for the neighbourhood was prepared by Strathcona residents through the public engagement process. The purpose of the vision and principles is to guide and inform the design of the neighbourhood renewal within Strathcona.

Strathcona Vision

Strathcona is a welcoming, inclusive and vibrant neighbourhood designed to safely and conveniently connect a diverse mix of residents and visitors to the local businesses and services, festivals, parks, and public spaces in all seasons. Strathcona's design encourages walking and biking in the community.

Strathcona is known for its unique historic character and natural beauty, and the design will preserve these qualities. Strathcona enjoys safe, attractive and inviting public spaces that strengthen our sense of community.

URBAN DESIGN PRINCIPLES & DIRECTION
To prioritize cycle and pedestrian spaces, and connections to all neighbourhood amenities, following Vision Zero principles, while considering the needs of vehicle users.
To provide infrastructure, street crossings and public spaces that are accessible and safe for all ages and mobility levels, and in all seasons.
To enhance/establish public spaces and parks that provide opportunities for community gathering, recreation, resting spaces and public events.
To incorporate design elements that reflect, protect and preserve the neighbourhood's history and natural elements.
To design safe, user-friendly roadways and intersections that reduce vehicle speeds and discourage shortcutting.
To provide residents and visitors with convenient access to buildings on residential streets.

URBAN DESIGN ANALYSIS THEMES



Overall Concept Strategy



Connectivity

Considers pedestrian route improvements in context of popular neighbourhood desitination routes



Parks & Open Spaces

Recommends aesthetic & functional enhancements of the public realm including open spaces parks & streets



Bicycles

Prioritizes infrastructure additions & improvements that enhance cycling as a transportation choice



Transportation

Evaluates & recommends improvements to increase safety of all users while maintaining an efficient automobile netowrk

*The development of the concept strategy for the neighbourhood incorporated the four main themes of the neighbourhood; **connectivity, parks & open spaces, bicycles** and **transportation**. The neighbourhood infrastructure acts as a system, and implementation of a design concept in one location influences other areas of the neighbourhood and the overall infrastructure network operation. With a holistic approach the design concepts were evaluated for impact throughout the system and an integrated urban design concept strategy was developed.*

Connectivity



Sidewalk Connections

Due to the age of the infrastructure, many of the existing sidewalks are in poor conditions with cracks and heaving from tree roots. Neighbourhood renewal gives the opportunity to remove and replace existing sidewalks, add curb ramps at all intersections and improve connectivity throughout the neighbourhood by adding missing sidewalk connections. In addition to the project team review, Strathcona residents were asked to help identify missing linkages at the March workshop and April event.

When the residents were asked about trade-off considerations needed to make room for the missing sidewalks, the following in order of preference was heard:

1. Turn the street into one-way for cars, enabling a reduction in road width
2. Sidewalk on one side only
3. Remove on-street parking
4. Remove boulevard trees

The missing sidewalk connections identified within the neighbourhood were then reviewed for implementation based on:

- Impacts to trees (would the construction of the sidewalk require tree removal)
- Driveway crossings / pedestrian experience (multiple consecutive driveway crossings results in a “wavy” walk profile which is challenging for mobility impaired users. Additionally, where sidewalks cross driveways it introduces a potential conflict point between vehicles and pedestrians)
- Whether a sidewalk connection is present on the other side of the road
- Proximity to resident landscaping or houses
- Feasibility of construction (whether retaining walls will be required, slope steepness, etc.)
- Destination connectivity (connectivity to schools, Farmers Market)
- Cost/benefit of additional sidewalk
- Conflicts with other utilities (power poles, hydrants)

Residents clearly expressed a desire for pedestrian connectivity through the rail corridor and along Gateway Boulevard. An informal pathway already exists within the rail right-of-way. However, as the City does not own the rail corridor, the construction of this connection is recommended to be coordinated with Edmonton Radial Railway Society. Connectivity along Gateway should be coordinated with Plan Whyte.

A complete analysis of the sidewalk connections is included in Appendix X.



Cycling



Bicycle Routes & Facilities

The City of Edmonton Transportation Master Plan supports active transportation by integrating bicycles into the transportation system through the development of a comprehensive cycle route map and ensuring that the bicycle can be used as a safe and convenient travel option in the future. Through the surveys and engagement with the Strathcona neighbourhood, participants also expressed a desire for additional east / west and north / south cycle routes. From the feedback received the route selection in order of preference was:

NORTH / SOUTH CONNECTION	EAST / WEST CONNECTION	FACILITY TYPE PREFERRED
100 Street	87 Avenue	Protected Bike Facility
98 Street	86 Avenue	Bike Boulevard (bikes share road with cars)
97 Street	89 Avenue	Raised Bike Lane

When asked about trade-off considerations needed to make room for the bike facility, the following in order of preference was heard:

- Turn road into one-way for cars
- Remove on-street parking
- Remove boulevard trees

The preferred cycle facilities locations within the neighbourhood were then reviewed for implementation based on:

- Available space within the road right-of-way along with other design element requirements such as missing sidewalk connections
- Alignment with the City's recommended Southside Core Neighbourhoods Bike Network
- Connections to desired destinations and existing bike facilities
- Locations of existing signals to cross 99 Street
- Existing access to and from properties and public concerns over loss of parking. Routes were chosen to minimize conflicts
- Accessibility was another concern cited with respect to an additional barrier (continuous curb) as seen on other Edmonton separated downtown bike facilities. The project team is planning to address they advance to detailed design of the facilities as the type of separation and construction details have not been decided



Transportation



The road network is a system and all parts within it are interrelated and connected. Although specific road linkages and intersections can be evaluated in isolation, they must also be reviewed functionally within an overall network. Residents expressed concern over short-cutting and speeding within their neighbourhood, primarily as a safety concern. When arterials become busy during peak times and traffic congestion occurs, community traffic may shortcut through the neighbourhood. Residents also expressed frustration exiting their neighbourhood due to a lack of signals for left turns onto 99 Street and 82 Avenue. Overall, there was support for slower speeds and traffic calming throughout the neighbourhood.

Traffic Calming

Residents were asked about their level of comfort with various types of traffic calming measures and indicated they are most comfortable with:

- | | |
|----------------------|-----------------|
| Raised crosswalks | Curb extensions |
| Raised intersections | One-way roads |
| Mini roundabouts | Raised medians |

Pedestrian comfort, slowing vehicle traffic and cyclist comfort were identified as the three most important aspects.

30 Kilometer Design Speed

On April 24th 2018, a council motion was put forward such "That the Strathcona neighbourhood reconstruction be designed to a 30km/hr design speed standard, subject to support from the community". To understand community support for this motion, options (**seen right**) for implementation were considered and presented to the public.

The community generally has a high level of tolerance for traffic calming and supports slower speeds throughout the neighbourhood. Generally Option A was the most supported option at the June public event, however, implementation of Option A would be cost prohibitive and significantly negatively impact maintenance, emergency services, and parking. Delays to drivers within the community may lead to frustration and poor driving decisions.

Option C was most strongly opposed with residents citing a 50km/hr speed s too fast in terms of safety. The recommendation for implementation is Option B. Its locations and measures were determined through community input and project team review with the Traffic Safety Section at the City of Edmonton. Proposed measures are intended to work together to reduce speed and shortcutting over a large area. The measures work in conjunction with proposed cycle infrastructure as well.

There is currently ongoing consideration before council with respect to lowering the speed limit to 30km/hr City-wide on neighbourhood roads. If the City eventually lowers the City-wide speed limit to 30km/hr then Strathcona will not have to have a posted speed limit. If the City changes the default speed to something different than 30km/hr, or doesn't change its speed then Strathcona will have a posted speed limit of 30km/hr.

30km/hr Design Speed Options

OPTION A - DESIGN FOR 30KM/HR
Posted speed limit of 30km/hr
Traffic measures at every intersection in the neighbourhood
Additional traffic measures within each block (every 40-60m)
Traffic measures may include chicanes, speed humps, raised intersection medians, curb extensions, raised crosswalks, and raised intersections.

OPTION B: RECOMMENDED POSTED SPEED LIMIT TO 30KM/HR
Traffic calming measures implemented at several locations throughout neighbourhood
Speed limit is posted at 30km/hr

OPTION C - SPEED LIMIT REMAINS AT 50KM/HR
Traffic calming measures implemented at key locations throughout the neighbourhood
No change to posted speed limit.

Parks & Open Spaces



As previously mentioned, Strathcona has great access to open spaces due to its location next to the Mill Creek Ravine. However, a number of residents cited concerns of safety and access when discussing the ravine.

There was an expressed desire to see more age appropriate child-friendly play spaces more central to areas of the community. For parents of smaller children, additional playground equipment was commonly requested during public consultation. While playgrounds exist at Tubby Bateman and generally at some the schools, some parents noted (depending on where they lived) that arterial roadways were boundaries they didn't cross for play space access for their children.

Parents of teenage children also cited a desire to see more age appropriate spaces with emphasis on more active sport type activities. Basketball courts were cited multiple times as a desired addition to Strathcona.

The existing community garden was also seen as a positive neighbourhood asset, and good support for additional community gardens in the neighbourhood. Potential locations were explored and were not chosen because the process of establishing them through the City must be a community led initiative, such that there is a community group dedicated to organizing and maintaining them.

During the public consultation the small existing 'pocket park' named at the northwest corner of the 86th Avenue and 99th Street intersection was seen as a positive neighbourhood asset, and residents expressed a desire to see more small scale park nodes and gathering spaces.

Because of the desire to see new park & activity spaces, and an expressed lack of parks and gathering spaces east of 99th Street; the concept of two parklet additions has been explored and recommended along 98th Street. The parklets propose reducing some existing road vehicle area to create small park spaces along 98th Street. The parklets would partially or fully restrict vehicle access at two points along 98th Street, while maintaining full cycling and pedestrian access via a 4m shared use path.

The proposed locations are between 89th and 88th Avenue, and between 85th and 84th Avenue. The locations for the proposed parklets were chosen based on a number of factors including: partial support for the idea from some nearby residents, and how they worked together with other elements of the overall network concept. In the concept, park space is gained by reducing existing road space area.

Each of the proposed parklets would facilitate a multi-use pathway for bikes and pedestrians. Further uses of the park spaces like community gardens, passive seating and gathering space, or small scale play spaces have not yet been determined.

During public engagement, there were mixed perspectives when it came to support for the concept of parklets. The idea in earlier engagements gained general neighbourhood support. At the September 26th engagement, many residents affected by the proposed changes expressed opposition to parklets. The loss of 98th as a north-south vehicle connection for local residents was a significant concern. Due to neighbourhood feedback, different considerations for the parklets may be considered as the project moves to the next level of design detail. Concepts such as a shared street that allows local vehicles without completely restricting them may be considered.

FRED A. MORIE PARK

Fred Morie Park will gain some area primarily due to the closure of 100th Street where it intersects with Saskatchewan Drive. Various other improvements proposed include a new pathway through the park, a small seating plaza, and additional trees.

TUBBY BATEMAN PARK

A public washroom was proposed in an earlier concept for Tubby Bateman Park, but it wasn't well supported with public feedback. New benches and chairs and a new sidewalk to and from the park's southeast corner were well supported, and are recommended in the concept.

86TH AVENUE TREE PLANTING

During inventory and analysis mapping showed trees were curiously absent from 86th Avenue. New boulevard trees are proposed between 101st and 97th Streets.

Recommended Connectivity & Traffic Calming Changes



1. *New sidewalks proposed wherever they are possible and don't conflict generally with overhead power lines or boulevard trees*
2. *Curb ramps at all sidewalk / intersection connections to improve accessibility for all ages and abilities*
3. *22 intersections with curb extensions to shorten pedestrian crossing distance, reduce vehicle speeds and increase overall safety*
4. *8 intersections with raised crosswalks that slow vehicle traffic, improve awareness of the pedestrian crossing, and ease access for pedestrians with limited mobility.*
5. *2 new pedestrian actuated crossing signals across higher volume traffic arterials 104th Street and Gateway Boulevard*
6. *New signalized pedestrian crossing of Saskatchewan Drive at 90th Avenue*



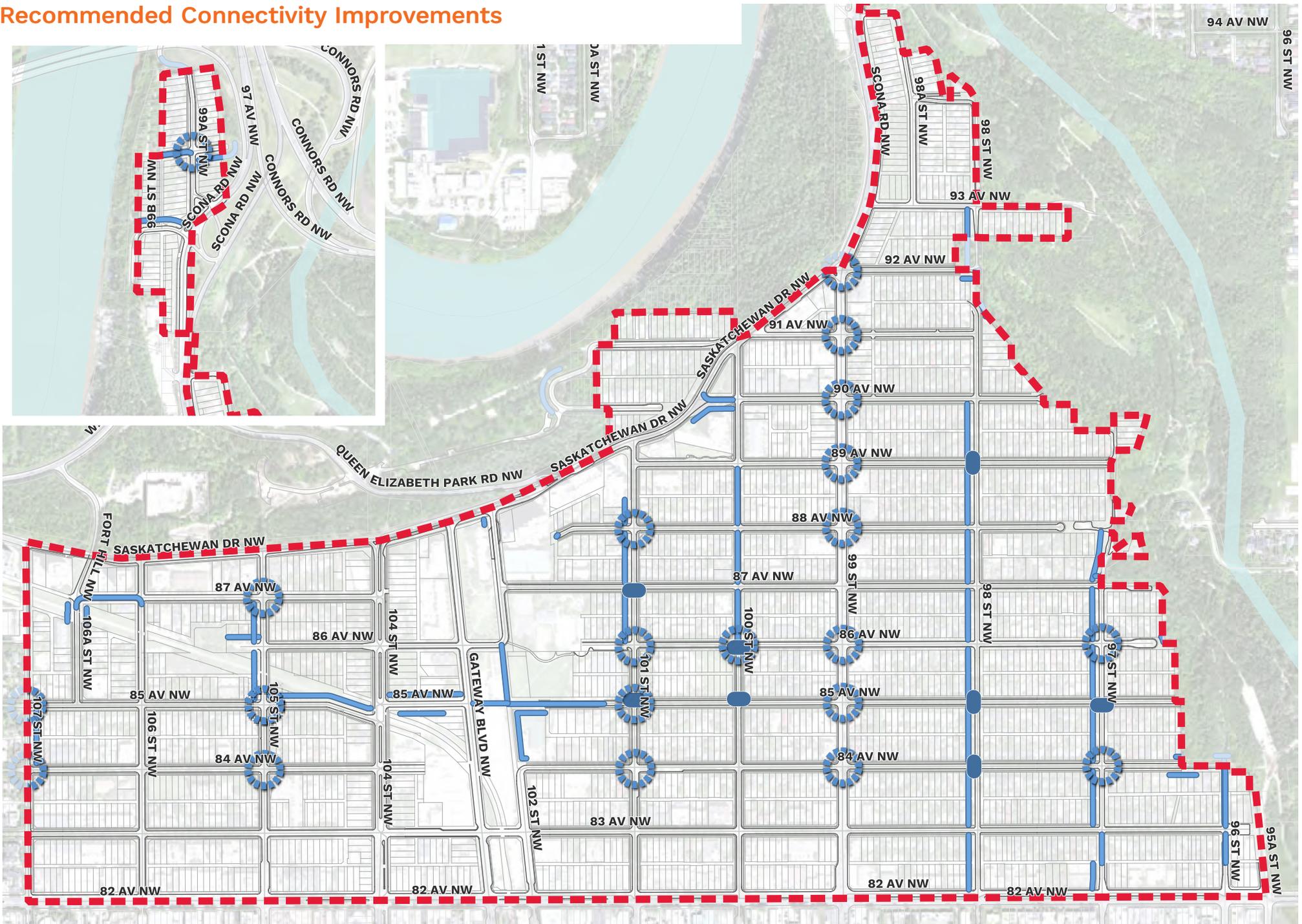
TO ADDRESS THE CONCERNS OF SPEEDING AND SHORTCUTTING:

- New road surfaces
- Traffic calming measures (such as curb extensions, raised crosswalks)
- Parking retained, where possible
- Operational traffic signs added (stop and yield signs)
- 30 km/h posted speed limit

TO IMPROVE PEDESTRIAN COMFORT AND CONNECTIVITY

- New sidewalk surfaces
- New sidewalks added where missing, when possible
- New standard street lights (potential to upgrade to decorative street lights)
- New curb ramps at all sidewalk / intersection connection to improve accessibility
- Crossing improvements (such as mid-block crossings, curb extensions, raised crosswalks)

Recommended Connectivity Improvements



Recommended Bicycle Changes



In conjunction with the South Side Bicycle Grid, new bike routes that include:

1. *protected facility in parallel with one-way traffic along 87th Avenue between 97th Street and Tommy Banks Way*
2. *Protected facility in parallel with one-way traffic running north / south along 100th Street between 83rd and 90th Avenues*
3. *Shared use path between Gateway Boulevard and 106th Street on 86 Avenue*
4. *Shared Roadway along 98th Street between 83rd and 94th Avenues*

Details of the New Bike Routes

87 AVENUE/TOMMY BANKS WAY/86 AVENUE

87 Avenue (97 Street to Tommy Banks Way) one-way protected bike lane eastbound, westbound bikes share road with vehicles, road changed to one-way car traffic westbound, parking on north side

Tommy Banks Way two-way protected bike lane, two-way car traffic, parking on one side

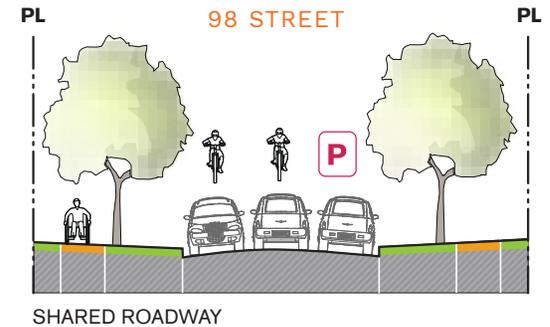
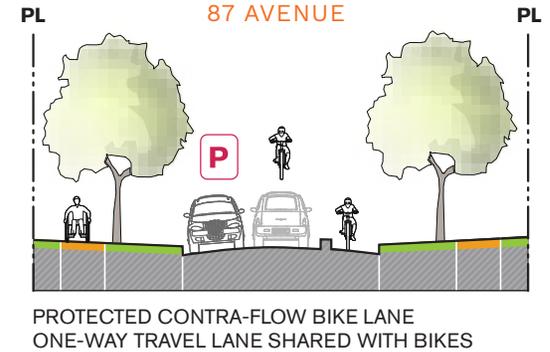
86 Avenue (Gateway Boulevard to 106 Street) shared use path on south side

100 STREET (83 AVENUE TO 90 AVENUE)

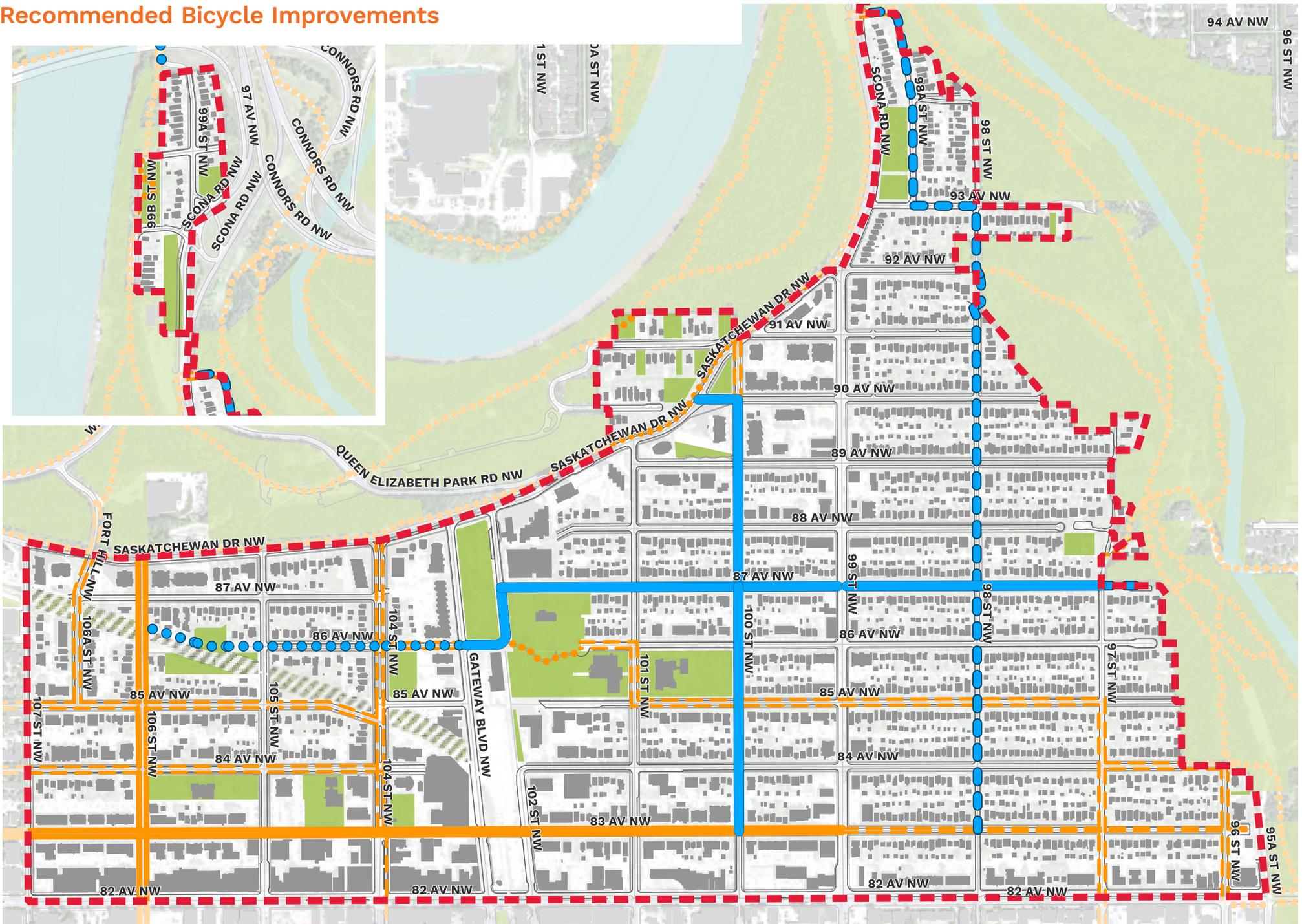
two-way protected bike lane road changed to one-way car traffic northbound

ONE ADDITIONAL BIKE ROUTE

98 Street (83 Avenue to 94 Avenue) - bike boulevard (paint on road, no space for protected facility). Two way car traffic and parking maintained



Recommended Bicycle Improvements



LEGEND

- PROPOSED SHARED ROAD
- PROPOSED PROTECTED
- PROPOSED MULTI-USE
- EXISTING PROTECTED
- - - EXISTING SHARED ROAD
- EXISTING MULTI-USE

Recommended Transportation Changes



Major transportation infrastructure changes that work with the overall network including additional bicycle facilities, intersection modifications for traffic calming, new pedestrian connections, and proposed new parklets include:

TRAFFIC PATTERN CHANGES

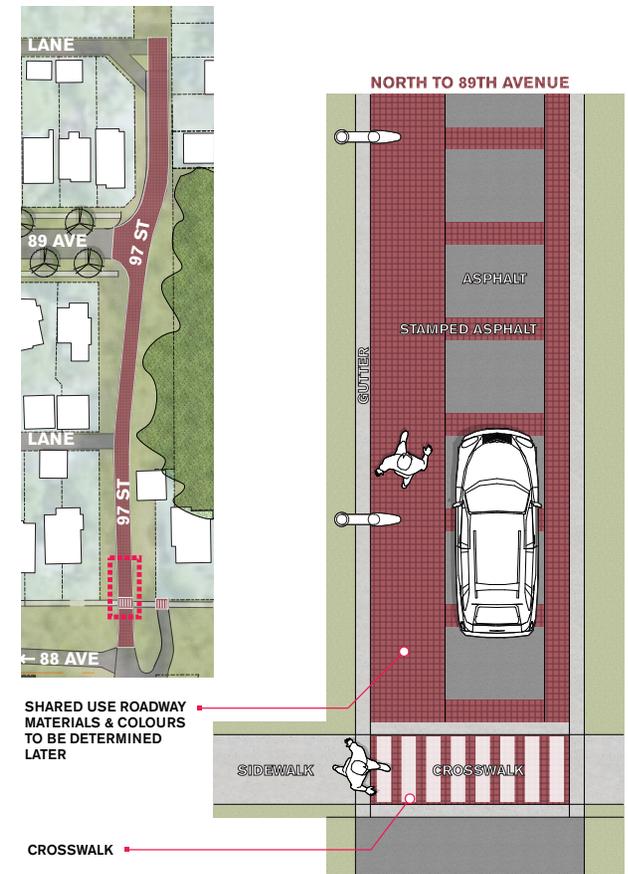
- Conversion of 87 Avenue to one-way westbound vehicular traffic between 97 Street and Tommy Banks Way. The conversion allows parking to be maintained on one side of the roadway while implementing a one-way eastbound protected bike facility.
- Conversion of 100 Street to one way northbound between 83 Avenue and 90 Avenue. The conversion of the street to one way permits the implementation of a protected two-way bike facility.
- Closure of the 100 Street intersection at Saskatchewan Drive to improve safety of the 91 Avenue intersection and the Saskatchewan Drive corridor in general.
- Realignment and improvements to the 90th Avenue intersection with Saskatchewan Drive, including pedestrian activated signalized crossing to improve pedestrian safety crossing.

The implementation of the two recommended parklets on 98 Street may result in some traffic being diverted to 97 Street. To preserve the low traffic volumes adjacent to Tubby Bateman Park, and maintain pedestrian and vulnerable park users safety, 97 Street north of the park is proposed to be maintained as a narrow shared roadway / laneway with the intent that only local residents accessing their homes will utilize this road.

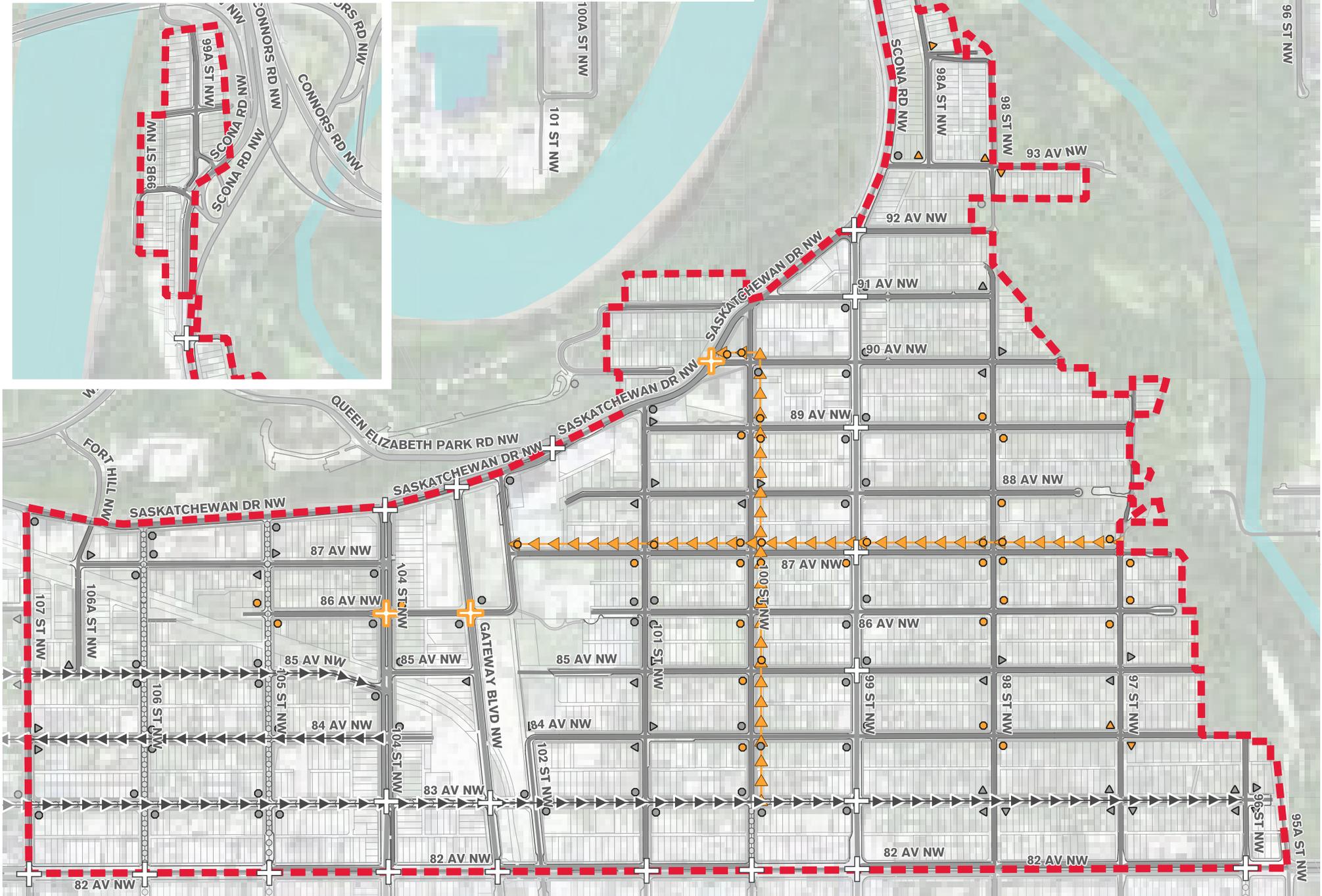
TRAFFIC SIGNAGE CHANGES

Traffic signage throughout the neighbourhood was reviewed and modified to align with the new neighbourhood concept.

- 38 new stop signs to assign right-of-way as appropriate. Pedestrians and cyclists were given priority at most intersections. Stop signs are not intended as speed control devices.
- 7 new yield signs to advise of right-of-way. Yield signs are not intended as speed control devices.



Recommended Transportation Improvements



LEGEND

- EXISTING ONE-WAY ROAD
- PROPOSED ONE WAY ROAD
- PROPOSED SIGNAL
- EXISTING SIGNAL
- EXISTING SIGNS
- PROPOSED SIGNS

Recommended Parks & Open Space Changes

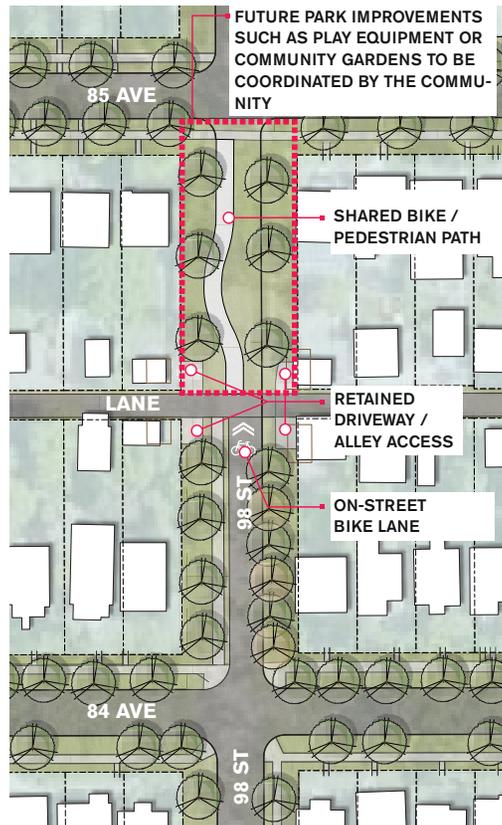
Public feedback, alignment with other initiatives, and technical considerations led to Parks & Open Space recommendations:

1. Add missing trees to 86th Avenue
2. Two potential Parklets (partial or full road closures) between 89th and 88th Avenue, and 85th and 84th Avenues
3. Park enhancements at Tubby Bateman Park
4. Expansion and Improvement of Fred A. Morie Park
5. Shared street country lane treatment on 97th Street



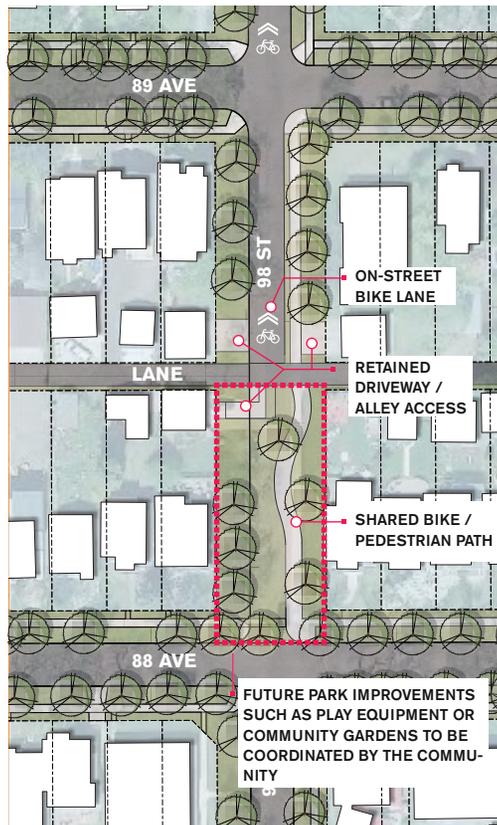
PROPOSED PARKLET B

2



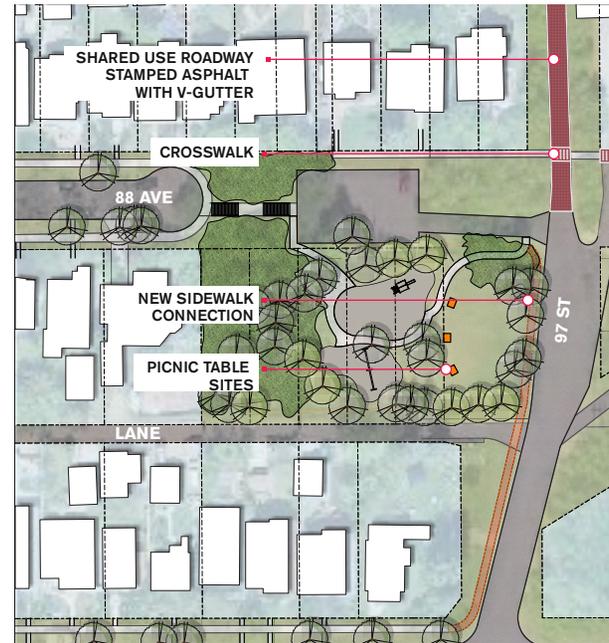
PROPOSED PARKLET A

2



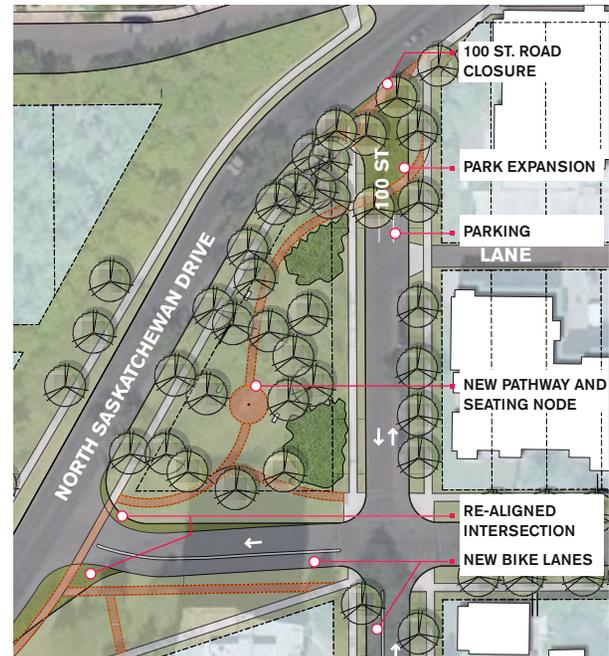
TUBBY BATEMAN PARK

3

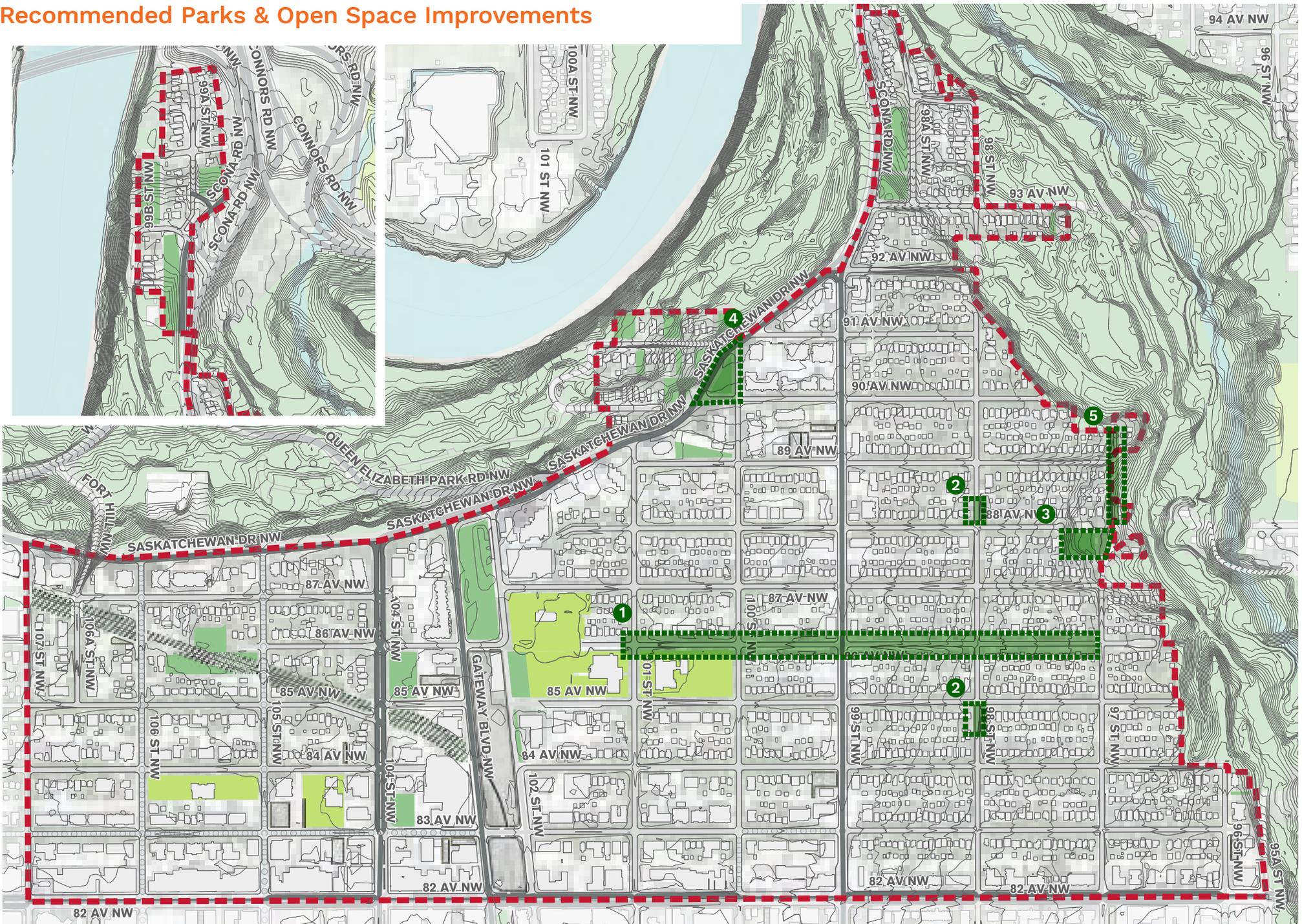


FRED A. MORIE PARK

4



Recommended Parks & Open Space Improvements



LEGEND

- PARKS
- RIVER VALLEY / RAVINES
- RAIL CORRIDOR
- COMMUNITY & RECREATION FACILITIES
- SCHOOL & CHILDCARE FACILITIES
- PARKING / STORAGE

IMPLEMENTATION



APPENDIX



CITY POLICIES & PROGRAMS

The Way We Move: Shifting Edmonton's Transportation Mode (2014)

Shifting Edmonton's transportation modes is one of the City's highest priorities and supported through the current corporate Strategic Goal, Shift Edmonton's Transportation Mode. Shifting transportation patterns to a greater share of transit and active modes will have a significant positive impact on the city as a whole. The mode shift supports:

- Edmonton's goal of transforming the urban form
- A transportation system that is accessible for all
- A transportation system that supports active and healthy lifestyles
- Reduced impacts to the natural environments
- Global attraction of business and talent to the City

The Way We Move: Transportation Master Plan (2009)

The Way We Move is about building a sustainable, 21st century city that will meet the needs of the diverse and growing urban and regional population. The seven Strategic Goals for the transportation system are:

TRANSPORTATION AND LAND USE INTEGRATION The transportation system and land use / urban design complement and support each other so that the use of transit and transportation infrastructure, including the use of transit, is optimized and supports best practices for land use.

ACCESS AND MOBILITY The transportation system is interconnected and integrated to allow people and goods to move efficiently throughout the city and to provide reasonable access with a variety of modes for people across demographic, geographic, socio-economic, and mobility spectrums.

TRANSPORTATION MODE SHIFT Public transportation and active transportation are the preferred choice for more people making it possible for the transportation system to move more people more efficiently in fewer vehicles.

SUSTAINABILITY. Transportation decisions reflect an integrated approach to environmental, financial, and social impacts thereby creating sustainable, livable communities that minimize the need for new infrastructure and increase quality of life.

HEALTH AND SAFETY The transportation system supports healthy, active lifestyles, and addresses user safety and security including access for emergency services, contributing to Edmonton's livability.

WELL-MAINTAINED INFRASTRUCTURE The transportation system is planned and developed so that the city is able to keep it in a good state of repair and future growth is accommodated in a fiscally responsible and sustainable manner.

City Policies & Programs

ECONOMIC VITALITY Efficient movement of goods, convenient mobility of the labour force, and access to a vibrant city centre are features of the transportation system that enhance the economic vitality and competitive advantage of Edmonton and the Region.

Active Transportation Policy (2009)

The purpose of the Active Transportation Policy is to optimize Edmontonian's opportunities to walk, roll, and cycle, regardless of age, ability or socio-economic status; to enhance the safety, inclusivity and diversity of our communities and to minimize the impact of transportation activities on Edmonton's ecosystem. The City supports all forms of active transportation by providing infrastructure, facilities, programs and initiatives to enhance accessibility, safety, security and convenience including sidewalks, curb ramps, shared pathways, marked bicycle and shared-use lane and end-of-trip facilities.

The City of Edmonton Bylaw 5590: Traffic Bylaw (2018)

The purpose of this bylaw is to regulate the use of roadways under the direction, control and management of the City and to regulate the parking of vehicles on such roadways as well as on privately owned property. Relevant sections include regulations regarding:

- parking adjacent to driveways, intersections, crosswalks and fire hydrants,
- establishment and use of parking places that are for exclusive use of persons with disabilities,
- objectionable motor vehicle noise,
- designation of car-share lanes or designated bus lanes
- Designation of truck routes or oversize load corridors

Community Traffic Management Policy C590

The City of Edmonton strives to mitigate the community impacts of the transportation system by managing the behaviour of traffic in residential communities. Community Traffic Management includes physical measures that minimize traffic shortcutting and speeding to enhance safety for residents and all road users. Community Traffic Management also includes initiatives that raise awareness and educate drivers about appropriate behaviour in residential communities.

1. The Community Traffic Management program will enhance safety and community liveability in accordance with Edmonton's Transportation Master Plan and Council's approved Road Safety Strategy ("Vision Zero").
2. Throughout the process to implement the Community Traffic Management program, the City will seek public input and honour local knowledge by aligning with Council's approved Public Engagement Policy and best practices in public engagement.

City Policies & Programs

3. Community prioritization within the Community Traffic Management program will be based on both quantitative and qualitative criteria that reflect the diversity of Edmonton's communities.
4. Whenever possible, implementation of the Community Traffic Management program will rely on a collaborative relationship with Neighbourhood Renewal to leverage the effectiveness of both programs.
5. The City will provide communities with support for initiatives to raise awareness about local traffic issues and safe driver behaviour as well as the options available for education to improve driver behaviour within residential communities.
6. The City acknowledges that a flexible approach to managing project scope and timelines is necessary to ensure that each community's unique traffic issues are recognized, assessed, and responded to in a manner that respects local context and community values.

Vision Zero

Vision Zero is the long-term goal of zero traffic fatalities and serious injuries. In 2015, City Council approved Edmonton's Road Safety Strategy 2016-2020, making Edmonton the first major Canadian City to officially adopt Vision Zero. Central to the approach is a shared accountability between road users and those that design, maintain and operate all parts of the road transportation system. A safe system acknowledges that we all make mistakes, but the road system should be designed so that when crashes do happen, deaths can be avoided and injuries minimized.

Pedestrian and Cycling Master Plans

In support of the City's Transportation Master Plan, supporting policies and plans have been developed regarding active transportation modes. The purpose of the plans is to review and establish a new strategic direction outlining principles and goals for bicycle transportation within the City of Edmonton by integrating bicycles into the transportation system through the development of a comprehensive cycle route map and ensuring that the bicycle can be used as a safe and convenient travel option in the future. These documents include:

- PED CONNECTIONS: A Strategy for Sidewalk Infrastructure in Edmonton (2009)
- Cycle Edmonton: Bicycle Transportation Plan Summary Report (2009)
- 83 Avenue (Strathcona) Bike Route
- City of Edmonton – Trails, Paths and Routes Advisory Committee Vision & Values (2011)
- South Side Bicycle Grid (2018)

City Policies & Programs

Complete Streets Design & Construction Standards

The document introduces the 'Design Domain' approach which allows flexibility in design through variance in street element design values based on the modal priorities and context of a specific corridor. Historically in Edmonton, transportation systems have been designed based on roadway classification and with the primary focus of accommodating motor vehicle connections to destinations. As the City grows and in keeping with the "Way We Move: Transportation Master Plan", the primary focus is now on the efficient movement of people, whether that is via public transportation, or active modes. A network of streets serving multiple modes has the potential to increase the overall capacity and efficiency of the transportation network and facilitate a shift towards a system that offers a wider range of viable transportation choices. The Complete Streets Design and Construction Standards provide context sensitive direction for the planning, design and construction of streets for users of all modes. As a result, within the transportation network, some streets will prioritize certain modes over others. As an example, a freeway will provide for high quality motor vehicle commuter traffic and goods movement whereas a street in a shopping district may place priority on a person walking, cycling or riding public transit.

Winter Design Guidelines

Winter is a key consideration when designing in Edmonton as Edmonton typically has over 150 days with temperatures below 9. The winter design guidelines are intended to facilitate leading-practice urban design solutions with a winter lens to transform Edmonton into a great year round city. Although the recommended implementation strategies are somewhat limited by the nature of neighbourhood renewal (eg. the street alignment within Strathcona is fixed north / south and east / west although a diagonal street orientation provides better year round sunlight) the guideline provides flexible guidance for the physical components of the public realms that support a positive quality of life for Edmontonians. Examples from the guidelines that could be considered in Strathcona are:

- Design wide sidewalks in pedestrian and transit priority areas to provide a clear, barrier-free pedestrian through zone. Adequate space for street cleaning and snow clearing equipment must be considered in the design.
- Give preference to boulevards over monowalks. Boulevards are an important snow-storage area, and result in reduced operational snow removal costs. They also act as a buffer to protect pedestrians from road spray.
- Ensure grading directs snowmelt towards roadways and away from buildings and pedestrian zones, to avoid slippery conditions during freeze-thaw cycles.
- Provide landscaped, permeable surface areas on or near roadways to provide a natural filter for snowmelt and heavy rainfall, reducing pressure on the drainage and water network. These landscaped features could also be used as design opportunities to introduce traffic calming to a street and to improve crosswalks on wide streets.
- Reduce automobile lane widths in Pedestrian, Transit and Bicycle Priority Areas. Narrow lanes result in less road surface to clear of snow during the winter, and extended sidewalks with shared-use paths accommodate a variety of active transportation modes. Consider how any reallocation of space or roadway redesign would

City Policies & Programs

best accommodate all modes safely in all weather conditions. Needs of municipal maintenance, operation and emergency vehicles must always be taken into account.

- Locate catch basins for surface runoff away from pedestrian crossings and bus stops. Pooled water at crosswalks may splash onto pedestrians from vehicles during warmer temperatures. During freeze-thaw cycles, freezing runoff water will create a slip-and-fall hazard .
- Provide mid-block crossings with curb extensions on long blocks to reduce long distances pedestrians must travel to reach their destinations. Curb extensions that minimize pedestrian crossing distances are recommended where curbside parking lanes exist.

COST ESTIMATES

Cost Estimate Summary

COST ELEMENT	COST
General Renewal	\$41,341,644.00
Bikes	\$1,629,712.00
Growth (Including Parks Improvements)	\$1,674,365.00
Traffic Calming	\$1,906,880.00
Total	\$46,552,601.00

For a more comprehensive cost breakdown see attachments following