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Executive Summary

The City of Edmonton created Building Great Neighbourhoods (BGN) to deliver the Neighbourhood Renewal program and utilize 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 Garneau Urban Design Analysis Background Report has been produced with input from the community to confirm project team findings and add their local knowledge and perspectives. With this report the City has advanced with the community through a number of key steps identified in the Neighbourhood Renewal process: **Background Info & Analysis**, and **Building a Project Vision**.

This report is a summary of our findings to the end of these phases and represents a broad overview of the existing and historical physical and social context of the Garneau neighbourhood. The findings from this report will be used in subsequent phases to **Explore Options and Tradeoffs** of design options, and following with development of **Draft Designs** based on selected options for Garneau.

Background Info & Analysis utilizes desktop studies, site visits, and information gathering and analysis to understand the unique context of a neighbourhood. Initial findings are shared with the community for confirmation and refinement, and their valuable local knowledge is sought.

Building a Project Vision uses surveys and workshops to engage the community and understand what they value and prioritize, and a vision statement is drafted. This information becomes useful later in the process when evaluating project opportunities.



Introduction

BGN Program and the Neighbourhood

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.

Urban Design Analysis

The purpose of the background phase of Urban Design Analysis, is to gain a comprehensive understanding of neighbourhood context; including but not limited to social demographics, biophysical assets such as parks and green space, existing transportation networks and active transportation infrastructure, existing policies and guidelines with influence on the neighbourhood, existing urban form and land use, and so on.

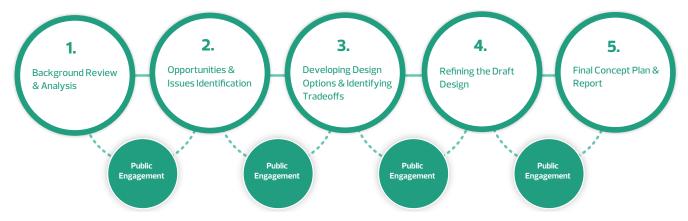
Undertaking a thorough inventory and analysis of existing and surrounding context is an important step in the renewal planning, as it allows the project team and citizens build a comprehensive understanding of a given neighbourhood. The project team of staff and consultants are adept at gathering and interpreting technical information for the public, while citizens with their feet on the ground daily in Garneau bring invaluable local knowledge not captured in neighbourhood mapping exercises or desktop studies.

Once the thorough process of background information gathering has been undertaken, the community can begin analysing and cross referencing maps and data to interpret findings. This becomes very useful in the next step in the process: *identifying issues and opportunities*. Most opportunities or solutions to issues come with trade-offs. For example, adding a bike lane to a narrow street may be accompanied by a need to remove some existing mature trees or parking. Comprehensive background analysis equips the group with knowledge around the location of existing trees, types and widths of roadways, and the location of existing bike lanes in adjacent neighbourhoods. With a multifaceted understanding of such information, the group can better weigh its decisions among a number of competing perspectives.

The team is then able to evaluate any opportunity against its tradeoffs, and against the vision and principles developed for the neighbourhood. This facilitates decision making that is geared toward maximizing functional and aesthetic improvements, while minimizing any negative impacts.

Policy & Standards Review

Project Approach & Process



For detailed review of all relevant policies from the following documents, refer to policy analysis section in Appendix A

Relevant Land Use Policies & Planning Studies

- + Garneau Area Redevelopment Plan (2010)
- + Strathcona Area Redevelopment Plan (2015)
- + 109 Street Area Redevelopment Plan
- McKernan Belgravia Station Area Redevelopment Plan (2014)
- University of Alberta, Long Range Development Plan (LRDP)
- University of Alberta, 89
 Avenue Students Boulevard

Relevant Transportation Policies & Projects

- The Way We Move: Transportation Master Plan (2009)
- The Way We Move: Shifting Edmonton's Transportation Mode (2014)
- + Community Traffic Management Policy (2017)
- + The City of Edmonton Bylaw 5590: Traffic Bylaw (2015)
- Active Transportation Policy (2009)
- Garneau / McKernan Community Traffic Management Bylaw / Study (1990s)

Parallel Projects

- + Saskatchewan Drive Rehabilitation & Shared Pathway Widening
- Envision 109: Streetscape
 Design Vision (Draft)

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)
- Southside Core
 Neighbourhoods Bike Network
 (2018)

Design Standards & Guidelines

- + Winter City Design Guidelines
- Complete Streets Design and Construction Standards
- + Crime Prevention Through Environmental Design
- + Access Design Guide 2017
- Gender Based Analysis Plus (GBA+) (2017)

Neighbourhood Background Information



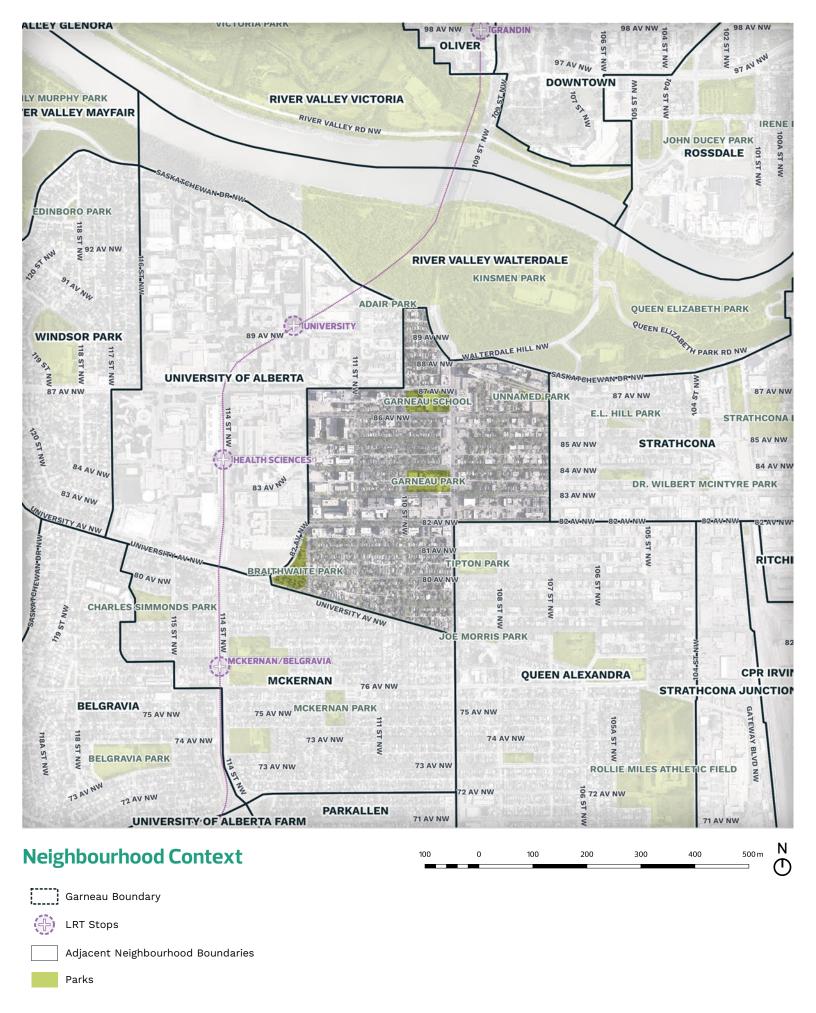




Neighbourhood Context

Garneau is a central historic neighbourhood in Edmonton, uniquely situated within walking or biking distance to the City's most popular destination areas including Strathcona & Whyte Avenue, the University of Alberta, the River Valley, the Government District, Oliver, and Downtown.

It shares immediate neighbourhood boundaries with other residential neighbourhoods including McKernan, Queen Alexandra, and Strathcona, and is also nearby to Downtown and University area neighbourhoods. With its proximity to three LRT stations and numerous bus routes, Garneau is reasonably well serviced by public transportation. Garneau is also directly next to significant public institutions: The University of Alberta Hospital, the Jubilee Auditorium, and University of Alberta main (North) campus.









History

Garneau is one of the oldest neighbourhoods in the City of Edmonton, having first been part of the City of Strathcona until amalgamation of the two Cities into Edmonton in 1912. Garneau is named after one of its first colonial inhabitants, Laurent Garneau who settled here with his wife and family in 1874.

Owing to its age and historic affluence as a neighbourhood, Garneau has a relatively high number of properties that are recognized as having value as heritage resources. Areas of Garneau with higher concentrations of heritage assets than others may help indicate more attractive walking streets, or call attention to opportunities for street enhancements such as heritage interpretation, the location of seating nodes and plazas, or special paving and furnishings that compliment historic areas of the neighbourhood.

- 1 Thomas Swan Residence
- 2 Lorne Hutt Sr. Residence
- 3 Kenneth Hawkings Residence
- 4 William M. Stewart Residence
- 5 Barclay Residence
- 6 William J.S. Dawson Residence
- 7 Matas Residence
- 8 Residence
- 9 Russell F. Clarke Residence
- 10 Wm. Whitehead Residence
- 11 Alex MacDonald Residence
- 12 John Wallace Residence
- 13 John Robinson Residence
- 14 Rev. Potter Residence
- 15 Orlando Muckleston Residence
- 16 William Wensel Residence
- 17 Reginald Sheppard Residence
- 18 William Altor
- 19 John McKernan Residence
- 20 Judge Athelstan Bissett Residence

- 21 Albert M. Knight Residence
- 22 Preston Giffen Residence
- 23 J.J. McKenzie Residence
- 24 William Buster Residence
- 25 Robert Brett Residence
- 25 Robert Brett Residence
- 26 William Dewar McDougall Residence 46 John Lowther Residence
- 27 St. Joseph's Hospital
- 28 St. John's Institute
- 29 Boulevard and Median Elms #2
- 30 Douglas Manor
- 31 J.M. Kinnear Residence
- 32 Nightingale Nursing Home
- 33 Klyft Residence
- 34 James Alton Residence
- 35 Mary Butterworth
- 36 George Parsons Residence
- 37 Garneau Tennis Courts
- Joseph A. Monaghan ResidenceDouglas Telfer Residence
- 40 Thornton Graham Residence

- 41 Sarah McLellan Residence
- 42 Emery Residence
- 43 McNaught Residence
- 44 Sam McCoppen Residence
- 45 Oliver S. Longman Residence
- 47 Joseph H. Johnston Residence
- 48 Elmer Luck Residence
- 49 University Grocery
- 50 Robert Molloy Residence
- 51 Stuart Residence
- 52 James Millar Residence
- 53 Boulevard American Elms
- 54 George Edward Residence
- 55 Fred Johnson Residence
- 56 R.W. McKinnell Residence
- 57 Noble Building
- 58 Enock L. Loveseth Residence
- 59 John Lyons Residence
- 60 Garneau Light Standard

- 61 Garneau School
- 62 Garneau Theatre
- 63 Gordon L. Gould Residence
- 64 G.E. Heber Smith
- 65 McBeath Residence
- 66 Prevey/Gainer Residence
- 67 Cecil S. Burgess Residence
- 68 Dr. Percy R. Talbot Residence
- 69 MacGibbon Residence



Historic Resources





Neighbourhood Boundary



Parks



Heritage Resource Building

Heritage Resources

- Municipal Historic Resource
- Inventory of Historic Resources







Land Use and Built-Form

The neighbourhood features an eclectic mix of land uses and development types.

A number of multifamily low-rise and high-rise developments are dispersed throughout the neighbourhood, located primarily along arterial roads including 82 (Whyte) Avenue, 112 Street, 87 Avenue, and Saskatchewan Drive.

Similarly, Garneau has a high number of commercial and retail land uses concentrated on arterials of 109 Street and 82 (Whyte) Avenue, generally indicative of the locations of the historic streetcar line that serviced the neighbourhood into the mid-twentieth century.

Garneau is generally street-oriented in nature, with emphasis on its avenues as most buildings are fronted towards them. Flanking development is present primarily on the streets including 111, 110, 108, and 107 Streets. There are few front driveways or garage accesses at house frontages which benefit street character and quality.

Main Street Overlay

Garneau contains multiple areas in which the Main Streets Overlay applies.

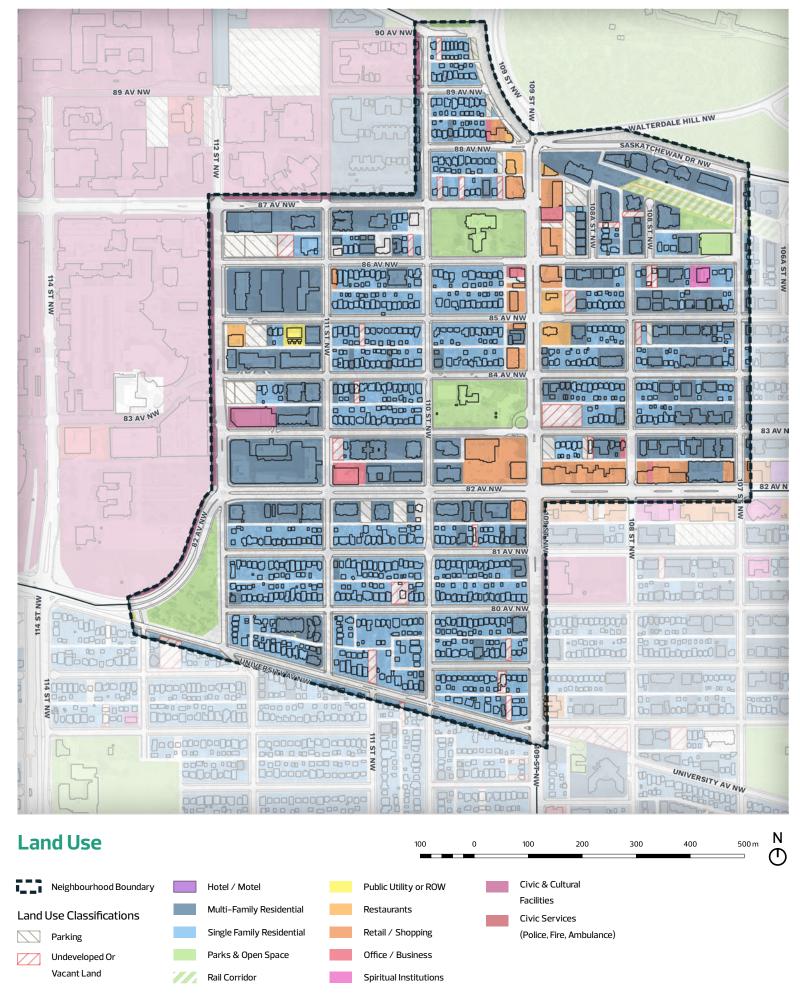
The purpose of the Overlay is to:

"Encourage and strengthen the pedestrian-oriented character of commercial areas located in proximity to residential and transit-oriented areas, by providing visual interest, transparent storefront displays, and amenities for pedestrians"

The main streets overlay in Garneau mainly applies to arterial roads including 112 Street, parts of Whyte Avenue, and 109 Street. Consequently, these areas are generally out of scope for neighbourhood renewal.

Project Considerations

+ The Main Streets Overlay is a good indicator for popular commercial / retail destinations in the neighbourhood, and could be used to inform key walking corridors, or special areas that deserve additional furnishing such as seating, or bike racks



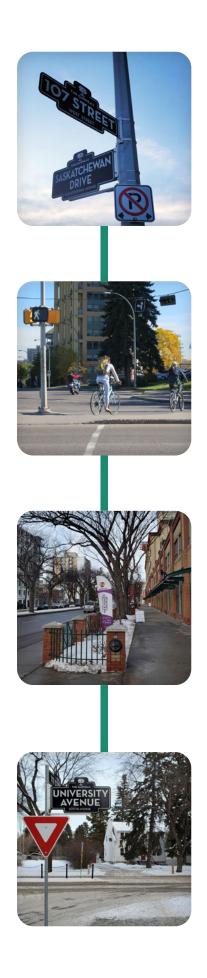
Study Area

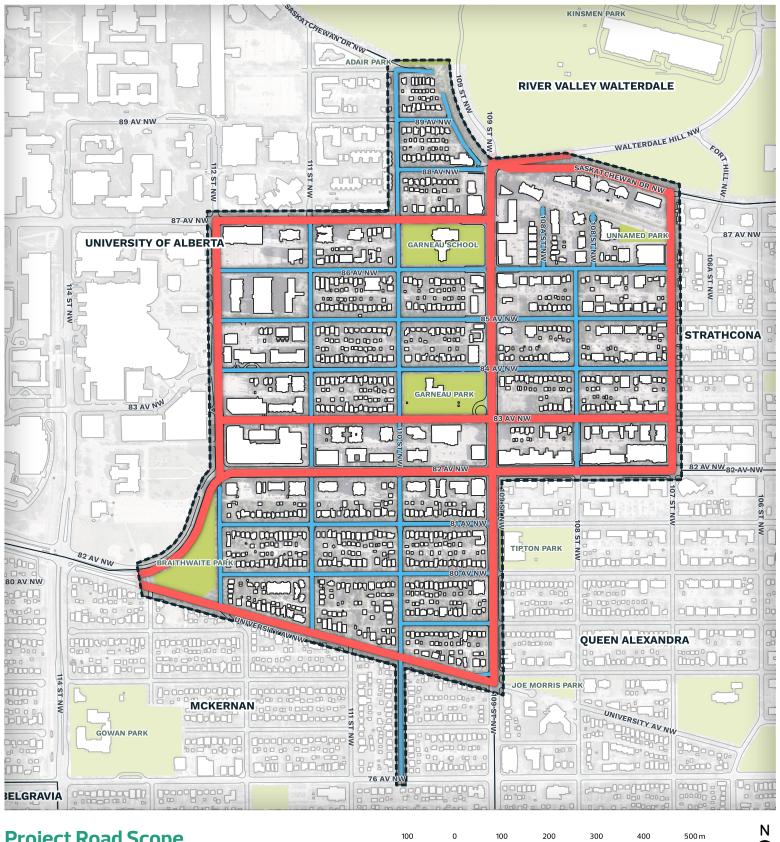
Garneau's northern boundaries are Saskatchewan Drive, the rail corridor leading from under 109 Street towards the High Level Bridge, 90 Avenue, and 87 Avenue. Its eastern boundaries include 107 Street, 82 (Whyte) Avenue, and 109 Street between 82 and University Avenues. Its southern boundary is University Avenue between 109 Street and 113 Street. Garneau's western edges include 82 Avenue as it curves around Braithwaite Park, and 112 Street between 87 Avenue and 82 Avenue.

Scope

The scope of neighbourhood renewal typically includes all local and collector roads, but does not include arterial roadways or alleys. There are separate renewal programs for arterials and alleys. As in some cases in other parts of the City where developments only have access off of an alley, exceptions are made to include them in neighbourhood renewal scope. There are no such alleys within the boundary of Garneau where this applies.

Although McKernan recently underwent its neighbourhood renewal, The Southside Bike Network was approved in spring of 2019, and includes a bike lane on 110 Street from Saskatchewan Drive to 76 Avenue. Therefore, the scope of Garneau's renewal has been extended south of its boundary through McKernan to connect the proposed bike lane with 76 Avenue.





Project Road Scope

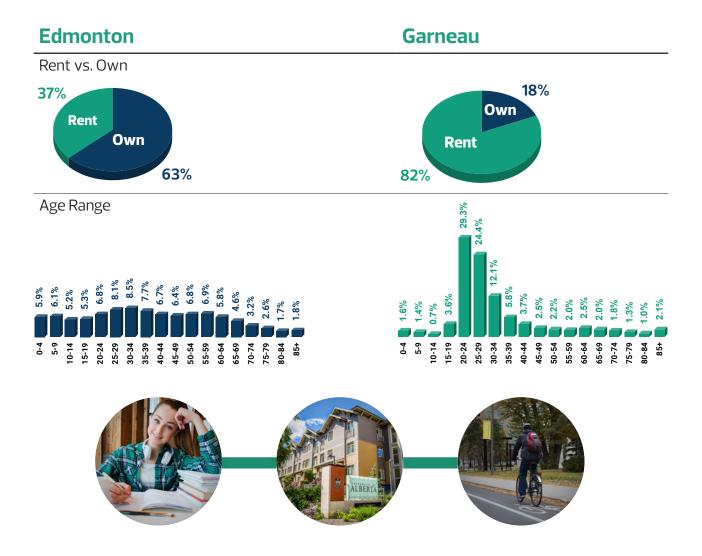
Road Scope Boundary

Renewal Scope

Roads - in scope

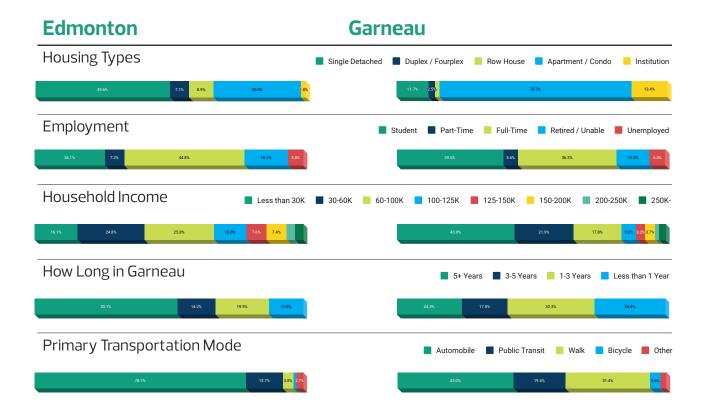
Roads - not in scope

Demographics



As of 2016, Garneau had a total population of 9,970 residents. Garneau's demographic makeup appears to be heavily influenced by its proximity to the University of Alberta Campus and Hospital. The numbers reflect a significantly higher percentage of younger people who rent, as would be expected in a university dominated community.

Over 60% of the neighbourhood is in the range of 20–35 years old, compared to the City average for this age range of 23%. 82% of the neighbourhood rents as opposed to owning housing, compared with 36% for the City average. Similarly, only 24% of Garneau residents have lived in the neighbourhood for longer than 5 years, compared with 50% for the City at large. Over 70% of Garneau residents live in apartments or condos, as compared to 32% for the City at large.



Over half of Garneau residents get around primarily by walking, biking, or public transit; when compared to only 19% for the City at large. Only 43% of Garneau residents cite the automobile as their primary transportation mode, when compared to 79% across the City.

Garneau also has a significantly higher percentage of residents living institutionally (ie. care facilities) at 13%, as compared to 2% for the City at large, reflective of nearby access to medical care at the University Hospital.

Garneau's central location, its proximity to the University and other destinations, its younger age range, and the range of nearby transportation options all support a much higher than average rates of active transportation when compared with City averages.

- + A higher proportion of people who walk, bike, and take public transit as their primary transportation mode, suggests that bike and enhanced walking facilities will be well used and supported
- + Key walking and routes should be identified and considered for further enhancement such as widening beyond the existing standard width, and the addition of Tactile Warning Surface Indicators (TWSI)

Neighbourhood Analysis

Land Ownership and Development Opportunities

Public Lands

City of Edmonton land holdings within Garneau are confined to the public right-of-way and parks parcels; including and limited to Adair Park, Garneau (City Arts) Park, Braithwaite Park, and an unnamed triangular park located at the north end of 107 Street.

Adair Park is located outside of the neighbourhood boundary, but is a City owned parcel adjacent University lands that would not be covered under any other neighbourhood renewal scope and is therefore included. Also just outside of Garneau, there are a number of City owned land parcels primarily made up of park facilities, including Tipton Park & Arena, and Joe Morris Park.

A historical rail corridor cuts a diagonal through the northeasternmost part of Garneau as it connects to the High Level Bridge through a tunnel structure below 109 Street. During Strathcona's Neighbourhood Renewal, a shared-use path was designed and is slated to be constructed along this corridor from Gateway Boulevard to 106 Street. An opportunity exists to continue this pathway along the rail corridor to bring people who walk and bike closer to the High Level Bridge, and to connections into the River Valley.

Within Garneau (City Arts) Park a former bus

turnaround exists at the northwest corner of the 83 Avenue and 109 Street intersection – currently used for parking – has been identified as a redevelopment opportunity. The land is currently zoned as park, and future project phases will consider it for design options. Opportunities for enhancements and improvements also exist within Adair Park, Braithwaite Park and the unnamed triangular park.

Private Lands

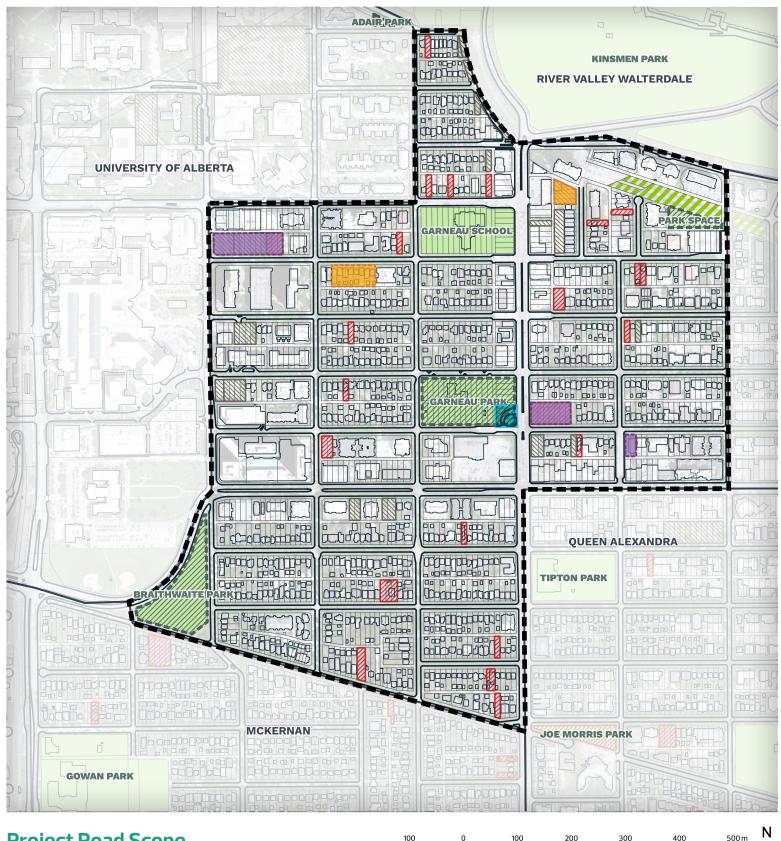
Developments Under Review

+ As of September 2019 there are currently three significant private development applications under review. A 28 storey high density residential tower is proposed along 86 Avenue between 110 and 111 Streets, and a 50 unit four storey apartment building with ground floor commercial use is proposed at 79 Avenue and 109 Street. A tower is proposed on the west side of the street toward the north end of 108a Street.

Approved Developments

- + As of September 2019, three significant development proposals have been approved for rezoning. Recently approved is an addition of a 6 storey building to an existing property with a heritage building known as Douglas Manor, located at 107 Street and 83 Avenue. Two towers have been approved on an existing surface parking lot at 86 Avenue and 112 Street. Lastly, the former site of the Knox Metropolitan Church has been approved for a mixed use building of up to 9 storeys.
- + The Neighbourhood Renewal team examines opportunities for streetscape integration and enhancements that align with public and private development proposals.

- + Identification of City owned properties emphasizes opportunities for changes outside of the public rightof-way
- + Identification of private development areas of change and potential opportunities to align public improvements



Project Road Scope

City Owned Properties Land Use Garneau City Owned Properties Parking Bus Turnaround Undeveloped /

Proposed Developments

Approved Proposed

Project Area

Parks & Open Space Rail Corridor

Commercial Nodes and Community Destinations

Garneau has a wide variety of institutional, commercial & retail, natural & recreational, and cultural destinations.

Commercial/Retail

Garneau is a city-wide destination for shopping and dining. 109 Street and 82 (Whyte) Avenue are classified as main streets, and are prominent retail and commercial spines, owing to their status as historic streetcar arterials that tended to influence these patterns of development.

The Old Strathcona Business Association supports and promotes local businesses within a defined geographic area. The boundary of the BIA extends into Garneau along Whyte Avenue approximately $\frac{1}{2}$ block west of 109 Street, north along 109 Street to 83 Avenue, and south along 109 Street to the alley.







Spiritual & Institutional

Garneau features spiritual resources including Islamic Centre University at 86 Avenue and 107 Street, and the Edmonton Interfaith Education Centre at 84 Avenue and 112 Street. The former Knox Metropolitan Church used to be located at 83 Avenue and 109 Street. Garneau School is the only public school (K–6) within Garneau.







Cultural and Recreational

City Arts Centre is a City owned facility located in the middle of Garneau Park, featuring tennis courts, beach volleyball courts, a children's playground, and indoor facilities with arts programming and spaces to book community events. The Granite Curling Club is located at 107 Street and 106 Avenue. The curling club currently leases space from the City for parking on the adjacent lands zoned as park space. The Metro Cinema (or the historic Garneau Theatre) is generally recognized City-wide for its unique programming.







Nearby Nodes and Destinations

Garneau is bordered on three sides by significant Citywide and regional destinations, and is an emerging restaurant and retail destination itself. West Garneau is in close proximity to the University of Alberta with a list of assets too large to list, but includes the University Hospital, the Jubilee Auditorium, a number of theatres and lecture halls and associated programming; and campus parks, recreation, and fitness facilities on campus, etc. East Garneau is adjacent to the Strathcona Neighbourhood, including its myriad of restaurant and retail destinations along Whyte Avenue, and several festivals and gathering spaces including the Fringe Festival, Artwalk, The Old Strathcona Farmers' Market, for example.

Immediately north of Garneau is the City's River Valley. The valley's steep bank and heavy vegetation limit non-vehicle access to certain abilities, and dense vegetation and stair locations limit access points from Garneau. Nearby in the River Valley, Garneau residents have access to significant parks and recreation in The Kinsmen Recreation Centre and Queen Elizabeth Park.

- + Its amenities within and nearby make Garneau a great neighbourhood for access to cultural, health, education, retail, and natural amenities. Consequently, Garneau has a regional draw and its facilities and infrastructure face a lot of additional demand from citizens visiting from other parts of the City. Its roads, sidewalks, bike facilities, and parking areas are all used by nonresidents driving, walking, biking, and parking in and around Garneau. With major links to downtown (109 St) and southside destination areas (Whyte Ave, 87 Ave) Garneau is as much a neighbourhood traveled through as it is visited for its own destinations.
- + Key commercial and destination areas should be considered for an enhanced level of pedestrian enhancement to accommodate the level of demand and enhance the prominence of the area as a pedestrian precinct.
- Seek a balance between Garneau as a local and regional destination. Preserve and enhance pedestrian character through traffic calming means and public space enhancements.

Built Form and Character Areas

Owing to its status as one of the City's oldest Neighbourhoods, Garneau's built form strengths include a diverse range of architectural styles that evolved through many eras, with a high number of buildings and properties recognized for heritage value.



There are some existing heritage style pedestrian lights dispersed through the neighbourhood that contribute to the character of Garneau's streetscape.

Primarily oriented toward its interior and away from arterial roads, Garneau has a lot of small–scale, fine grained patterns of housing. There is no unique style or era that best reflects Garneau and its character is best described eclectic. The diversity of the area makes it interesting to walk around.

Oriented to its arterial roadways are many larger scale multi-family tower and mid-rise developments. Several of these were built in the mid to late twentieth century, with repetitive facades that lack articulation or subtle architectural patterns and details. Consequently, some residents



perceive these as imposing structures that are out of scale and character with other parts of the neighbourhood.

Owing to its location and proximity to the University, Garneau continues to experience development pressures for more high-rise and mid-rise multifamily buildings. Some of these developments are proposed toward the interior of Garneau, and suggest consolidating several small scale lots to build a single larger mid-rise or tower format building. Some Garneau residents have expressed concern for the loss of further small-scale. fine grained and richly detailed patterns of development.

Garneau has some Citywide heritage landmarks and destinations including its Metro Cinema (historic Garneau Theatre).

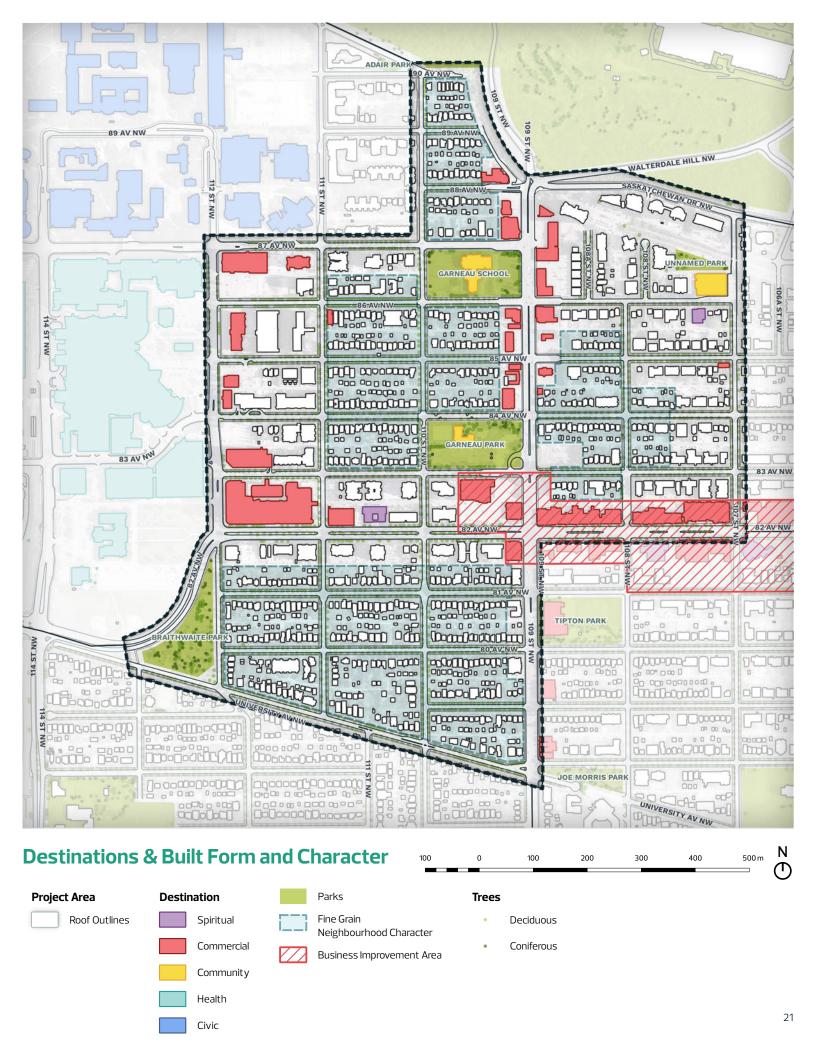


Other notable buildings with a charactered presence include the modest but statured Noble Building located at 86 Avenue and 109 Street, the Garneau School, and many others.

109 Street is classified as a Main Street by the City, defined as: "the cultural, social and economic centre of a city. They are attractive and vibrant people places." However, 109 Street is also an arterial roadway and generally out of scope for Neighbourhood Renewal. Envision 109 is a concurrent project underway that has identified opportunities to improve the streetscape and pedestrian interface of 109 Street, and makes recommendations for improvements to avenues that abut 109, and improvements to some existing parks and open space assets that are in Neighbourhood Renewal scope.

Project Considerations

+ Align other initiatives such as primary walking routes, with areas deemed to have high character attractiveness.



Open Space Network

Garneau is fortunately situated with direct access at its edge to the wider Edmonton River Valley.

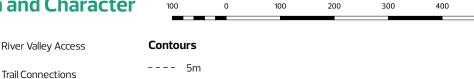
For people who walk and bike, the primary direct entries to the formal trail system are west of 109 Street on the northern edge, yet people who drive and bike can also travel Walterdale Hill or Saskatchewan Drive or other paths leading from there to get into the valley.

In general terms the City's Green Network Strategy "Breathe" identifies Garneau as relatively underserved in terms of parks and open space, when compared with City averages that measure total park area against its total population. Breathe also identifies that provisioning new parks in central neighbourhoods is challenging due to land ownership. Consequently, demand on existing parks and open space is projected to grow whereas opportunities to provide new park space will be limited. Therefore, opportunities to expand and enhance park space are important where available.





Destinations & Built Form and Character



1m



Neighbourhood Boundary



Parks



Undeveloped Or Vacant Land



Parks & Open Space



Rail Corridor

Trees

- Deciduous
- Coniferous

Ν

500 m







River Valley Amenities, Kinsmen & Queen Elizabeth Parks

Naturalized open space is available to many Garneau residents in abundance. For more programmed sports, playground, and recreational activities the adjacent Kinsmen Park is in close proximity of about 400–600m walking distance for those with full mobility. Access to the valley has challenges with all ages accessibility and safety for some, due to steep slopes, stairways, or perceived safety concerns, as heavy vegetation creates dark and secluded areas.

Garneau contains a number of more traditional parks and open spaces for both passive and active recreation.

Braithwaite Park

Passive green space is found within Garneau at Braithwaite Park, and its main features include mature vegetation and limited seating spots such as picnic tables and benches. Current park activities are more oriented toward examples such relaxing, frisbee throwing, and strolling with pets. There is an existing monument on site and in the name of Dr. Braithwaite, though it is currently in a vandalized and poor condition. The monument area is heavily secluded by a significant hedge and planting, noted as not beneficial from a Crime Prevention Through Environmental Design (CPTED) perspective.

Garneau (City Arts) Park

On the more active side, Garneau Park is formally programmed toward specific activities such as tennis, volleyball, and a children's playground. Toward the east end of Garneau Park, there is a small seating plaza at the corner of 84 Avenue and 109 Street. Nearby is a disused bus turnaround that has been identified in Envision 109 and Garneau Renewal as on opportunity for re-purposing as additional open space.



Unnamed Wedge Shaped Park

A fourth park space exists in Garneau that has no name and is unknown to many Garneau residents as one of its park spaces, owing to its location and condition. The park is a triangular shaped parcel adjacent to 107 Street and the rail corridor, but has many worn gravel surfaces due to multiple utilitarian uses. The overlooked space has been leased in the past to the Granite Curling Club for off-street parking facilities, and has also been used recently as a construction lay-down area. There is a small playground on its western edge oriented generally to toddler aged children. An opportunity exists to redesign this area as a true park space for Garneau.

Other Parks and Open Space Considerations

The Garneau ARP's policies included a redevelopment levy which was intended to establish a new park east of 109 Street. During review, the project team inquired and learned that this levy was discontinued, and only ever collected approximately 30,000 dollars. If possible, the team will examine the use of these funds toward redevelopment and improvement of an existing park within Garneau. In keeping with the spirit and intent of the ARP for a park east of 109 Street, the triangular park space could be in alignment for allocation of these funds.

The Garneau School grounds also serve as a green space for the entire neighbourhood, though it is under the jurisdiction and direction of the school board. Due to this, there would be challenges with making significant changes to this space during renewal as its not within the City's scope or jurisdiction. There is an existing community type of garden at the intersection of 111 Street and 83 Avenue. However, it is understood to be privately owned and operated and not subject to the City's jurisdiction.

Winter City

From the point of view of the Winter City policies, there are few cold season activities such as skating within Garneau. At this time, there are not any known winter patios provided by the many commercial retail establishments in the neighbourhood.

- + Garneau is underserved by parks and opportunities to add or enhance existing space should be prioritized
- + Garneau provides a minimal amount of winter activities in its existing open space assets
- + The abundance of open space in the river valley is not universally accessible, and should not downplay the significance that enhancing its neighbourhood parks can play in providing spaces for everyone
- + Re-purpose the bus turnaround at City Arts to accommodate more park space and uses
- + Investigate the redevelopment levy and attribute funds to Garneau Park enhancements if available
- + Redesign the relatively unknown wedge shaped park and give it a neighbourhood name

Public Transit Network

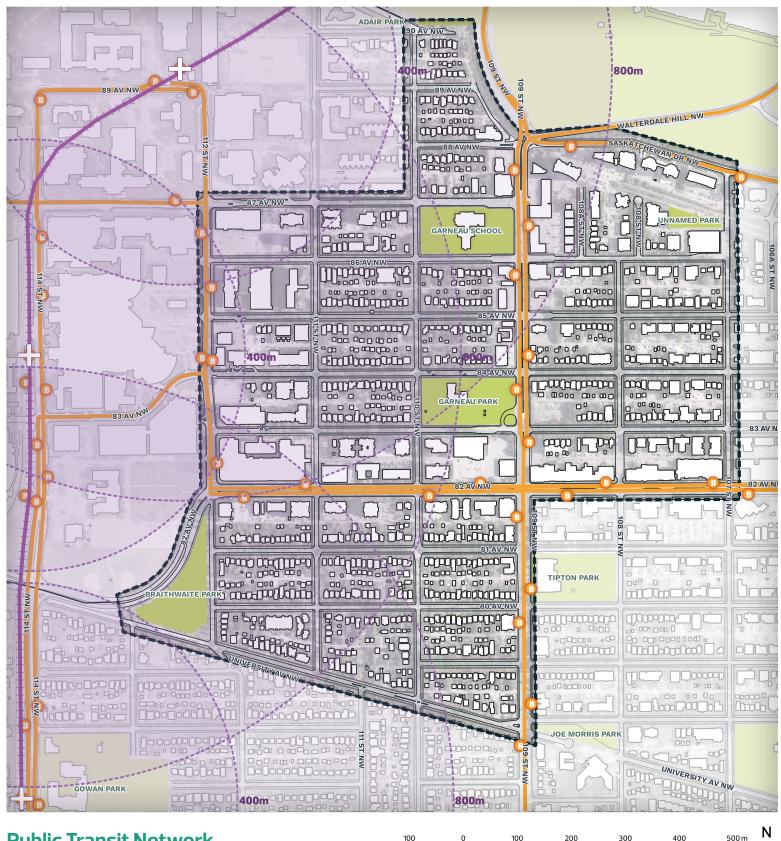
Garneau is well served by public transit with multiple bus routes, and is within walking distance of three LRT Stations.

109 Street, 82 Avenue, and 112 Street are the primary bus corridors that both divide and provide transit service to Garneau. At the north end of Garneau the primary bus corridor of 109 Street branches off into secondary corridors that connect 109 with the High Level Bridge, Walterdale Hill, and Saskatchewan Drive. Currently there are approximately 25 bus stops within and at the edges of Garneau, served by six bus routes. A City-wide Bus Network Redesign is currently underway. As of November 2019 the draft of the Redesign appears to maintain the use of existing bus corridors, while reducing the number of routes from six to four, and increasing the frequency of buses down 109 Street.

The west side of Garneau is particularly well served by LRT, falling within an 800m (10 minute) walking radius of three stations: McKernan / Belgravia, Health Sciences, and University.



- + As of December 2019, it appears that the bus network through Garneau will be affected little by the new Bus Network Redesign recently ratified by City Council. This will be subject to further review neighbourhood re-design is implemented
- + Garneau has great access to public transit and relies on it to a greater degree than the City at large. Opportunities to enhance public space at transit stops, and to facilitate and improve walking connectivity to and from stops should be explored as urban design concepts progress
- Further info is needed for school bus routes, ETS bus routes that serve the school
- Bus drop-off at Garneau school is not currently ideal and would benefit from design enhancements



Public Transit Network

LRT Stops & 400m-800m Neighbourhood Boundary 5 Minute Walk Circles **Bus Routes**

LRT Track

Bus Stops

Pedestrian Connectivity

The majority of the Garneau neighbourhood consists of boulevard sidewalks at approximately 95%, and curbside walk at approximately 5%. Several roadways only have a sidewalk on a single side of the road resulting in poor pedestrian connectivity in some areas. The missing sidewalks are primarily oriented north–south on 112 Street, 111 Street and 110 Street. Where some of these sidewalks are absent – with emphasis on 110 Street – some residents have taken it upon themselves to implement pedestrian walkways in shale and other materials. These connections can prove challenging to navigate by the mobility or visually impaired, and may not be functional in the winter.

Garneau residents have also noted that alleys serve as informal walking routes, with emphasis on those that run parallel and adjacent to 109 Street. Several residents noted 109 Street as unpleasant to walk along due to high traffic volumes and narrow sidewalks along particular segments. Consequently, several residents noted a preference for walking quieter alleys near to 109.

Pedestrian & Bike Activated Signalized Crossings

Along the arterial roadways there are a few pedestrian activated signalized crossings, as well as bike activated crossings. These pedestrian activated signalized crossings exist on 109 Street at 85 Avenue, 84 Avenue, 80 Avenue, and University Avenue. In addition, pedestrian activated signalized crossings exist on 82 (Whyte) Avenue at 110 Street, and 107 Street. Signalized bike activated crossings exist on 109 Street at 83 Avenue, and on 82 Avenue at 111 Street. There is also a pedestrian activated amber flasher that exists on 108 Street and 82 Avenue. Similarly there are flashers on 112 Street at 85 Avenue and 86 Avenue. Lastly there are yellow pedestrian flashers on 87 Avenue at 110 Street.

Full Traffic Signals

In addition to pedestrian and bike activated signalized crossings, a number of full traffic signals with pedestrian crossing phases exist on 82 (Whyte) Avenue at 112 and 109 Streets, on 87 Avenue at 111 and 109 Streets, on 84 Avenue at 112 Street, and at the intersection of Saskatchewan Drive and 109 Street.

Key Pedestrian Corridors

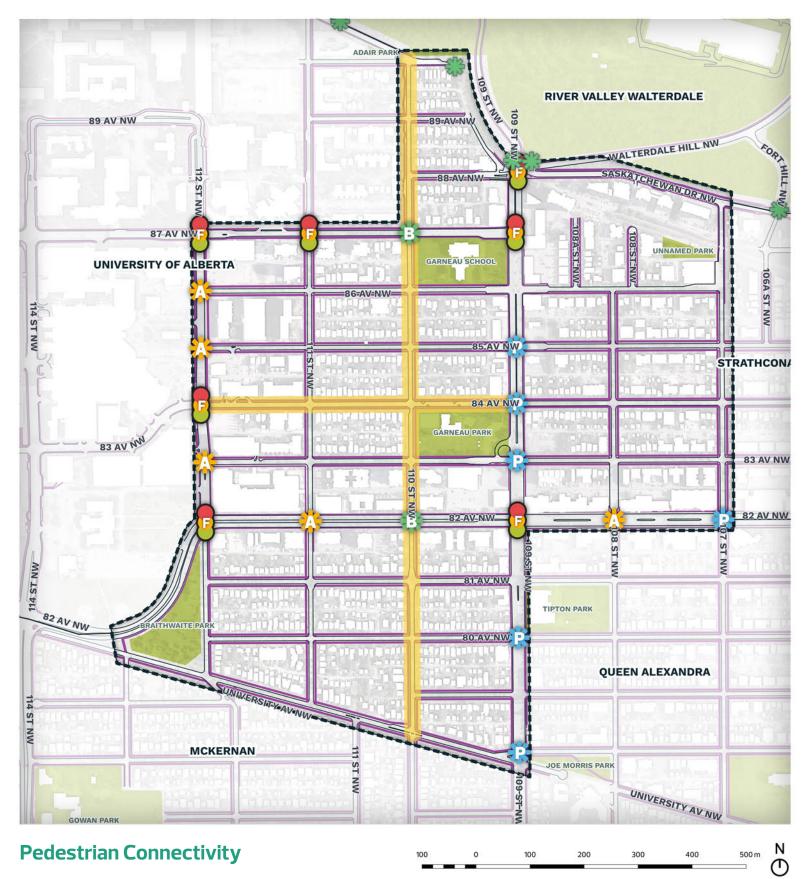
An important pedestrian corridor within the Garneau neighbourhood exists on 86 Avenue because of Garneau School. Consequently, an opportunity is noted to upgrade the sidewalk at this location to a wider standard. 90 Avenue is another location that would similarly benefit due to high bike and pedestrian volumes between the University, High Level Bridge, and River Valley.







- + There are missing sidewalks with emphasis on sections of 110 Street that should be considered through the development of options for feasibility
- + Areas that are more street-oriented may be considered for wider sidewalks that enhance walking as a preferred transportation mode
- + That key pedestrian corridors are identified and explored for wider sidewalks





Neighbourhood Boundary



Parks



Roof Outlines

Intersections



Amber Flasher



Bike Activated Signal



Full Signal



Ped Activated Signal

Curb Lines & Sidewalks



Existing Sidewalks



Primary Walking Routes

Vehicular Network

Driving and Traffic Safety

Arterial roadways are at Garneau's edges. 82 (Whyte) and 87 Avenues divide the neighbourhood running east/west, and 109 Street divides the neighbourhood into what is commonly referred to as east or west Garneau. Some residents express an aversion to walking along 109 Street due to its high traffic volumes and relatively narrow sidewalks next to the roadway. Consequently, 109 Street is a significant barrier that divides the neighbourhood into what is commonly referred to as east and west Garneau.

109 Street and 82 Avenue are also designated 24 hour truck routes. Arterial roadways service commuting traffic as well as goods movement through the neighbourhood. The remainder of the streets in the neighbourhood are local residential roadways, excepting the portion of 83 Avenue east of 109 Street, that is the only noted collector road within the neighbourhood boundary, though it does not feel fundamentally different than most other local non-arterial roads.

Garneau is dominated by one–way roadways primarily as a traffic calming measure. Local residential roadways are intended to service neighbourhood travel. Owing to many commuter routes, nearby public institutions, and a high concentration of retail / commercial destinations, residents have cited traffic shortcutting and parking availability as transportation issues. Outside of a select number of traffic-calmed streets at speeds of 30 km/hr, all local Garneau roads will soon have speeds of 40 km/hr with new City-wide changes recently made by Council in June of 2020. Arterial roads will primarily remain 50 km/hr, with the exception of portiions of Whyte Avenue due to its status as a significant pedestrian street.

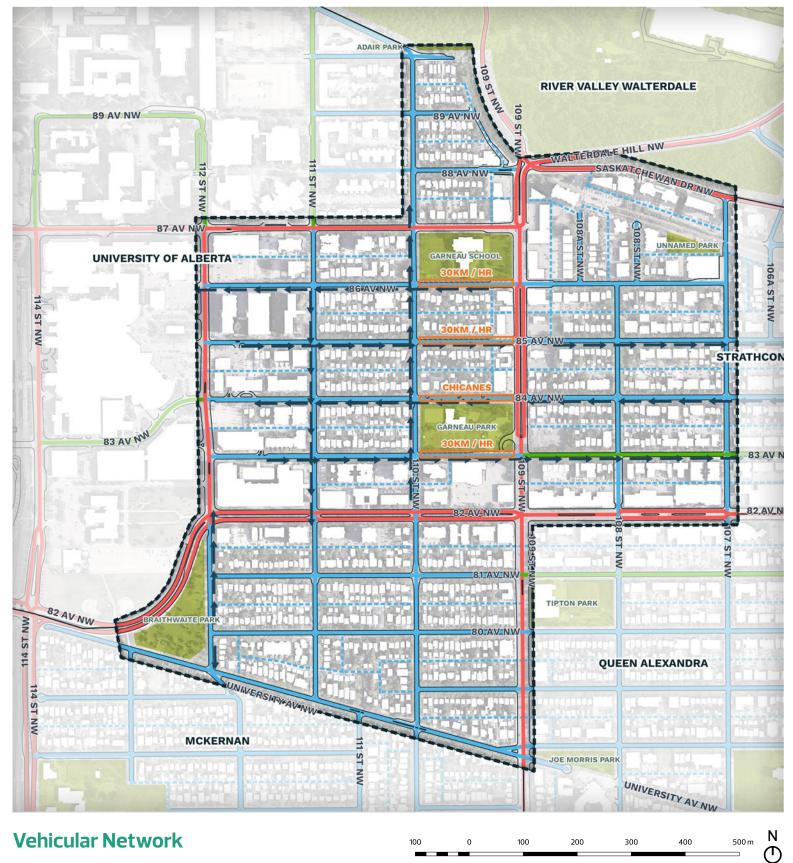












Neighbourhood Boundary Transportation Network Local Traffic Calming Speed & Shortcutting One-Way Street Alley

Traffic Calming Measures

Within the neighbourhood there are a number of traffic calming measures in place. One way streets serve as a deterrent to traffic shortcutting, and are therefore classified as traffic calming measures. Along 84 Avenue between 109 Street and 110 Street there are chicanes. The intersection of 84 Avenue and 110 Street features a curb extension. Along 107 Street – the eastern boundary of Garneau – there are curb extensions under construction as part of Strathcona Neighbourhood Renewal. At Garneau's southern boundary a median down the middle of University Avenue impedes north–south travel and number of turn movements at 110 and 111 Streets. Traffic calming measures such as these are intended to reduce shortcutting and speeding the neighbourhood reported as issues. Traffic control signage such as stop signs and yield signs perform a complimentary role with traffic calming measures, as they require vehicles to stop or slow down at intersections. Where speeding issues are noted traffic control signage changes such as changing an intersection from a 2-way yield or stop to 4-way control may be considered, in addition to traffic calming measures.

Service & Access

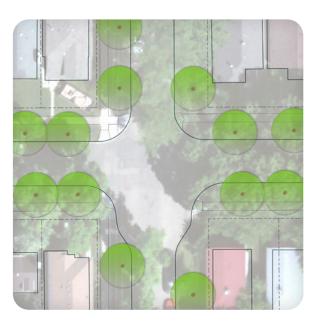
Throughout the Garneau neighbourhood there are rear alleys for alternative access and garbage pick-up. The majority of local residential streets have on-street parking on one side of the roadway. Parking is non-restricted east of 109 Street within the neighbourhood. In contrast, parking has varying restrictions west of 109 Street due to the parking demand of the hospital and of the University. Typical daytime only parking restrictions are not effective here due to round-the-clock shift work of the University hospital.

Unique Intersections

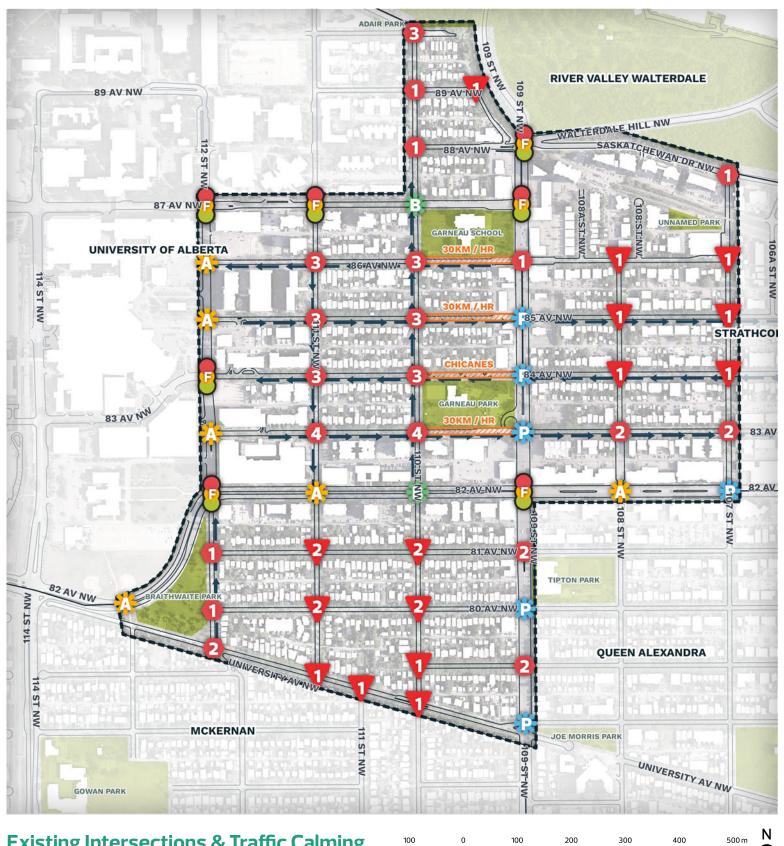
There are two oversized intersections with unique geometry along 81 Avenue at 110 and 111 Streets. These may provide an opportunity to explore traffic calming or curb realignment. The 110 Street and 90 Avenue intersection is also unique with non-standard geometry that is wider than functionally necessary. Saskatchewan Drive terminates at a dead-end just east of this intersection. Although marked, local residents cite a high number of people driving through this intersection to pursue non-existent connections east along Saskatchewan Drive, only to be confronted by the dead-end and the need to turn around. Opportunities exist to optimize this intersection functionally and spatially.



110 Street and 81 Avenue



111 Street and 81 Avenue



Existing Intersections & Traffic Calming

Ped Activated Signal 1Way Stop



Traffic Calming

Speed &

Shortcutting

One Way Streets

Neighbourhood Boundary

Intersections



Amber Flasher



Bike Activated Signal



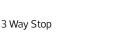
Full Signal







1Way Yield





2 Way Yield



2 Way Stop

Existing Bike Facilities

83 Avenue through Garneau neighbourhood has been designated and constructed as a protected bike facility, consisting of one-way eastbound vehicular traffic and two-way protected bike facilities between 111 Street and 106 Street. Painted (on street) contraflow bike lanes exist along:

- + 110 Street between 83 Avenue and Saskatchewan Drive
- + 111 Street between 83 Avenue and 87 Avenue
- + 112 Street between 82 Avenue and University Avenue
- + 88 Avenue between 110 Street and 109 Street

Designated shared-use paths exist on the north side of Saskatchewan Drive leading to and from the high level bridge and river valley.



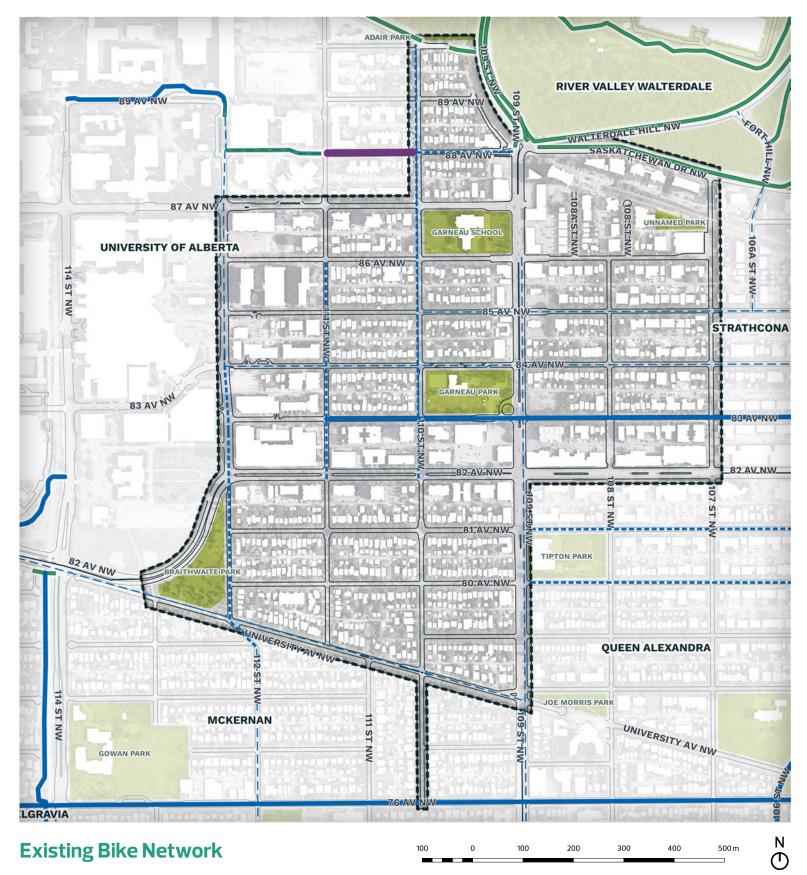








- + Bike route locations within Garneau have been decided by City Council approval of The Southside Bike Network. Facility types should be investigated through public engagement and technical analysis, to decide which type is suitable along the routes designated, and to mitigate any tradeoffs
- + The City does not have planning jurisdiction over the lands owned by the University of Alberta to its west. Planning coordination should occur between the University and the City to align objectives
- + Garneau School's catchment includes McKernan and Queen Alexandra. Safe and protected bike routes that connect to the school are strongly supported by policies for 'all ages and abilities' bike routes. As a high traffic neighbourhood with cited speed and shortcutting issues, proposed routes and types should prioritize children's ability to safely bike to school.



Renewal Scope Boundary Off-Street Shared Use Path

Southside Bike Grid

Proposed Protected Bike Lane

Existing Painted Bike Lane

Existing Protected Bike Lane

— — Shared Roadway

Shared Space

Complete Streets Analysis

Garneau is a neighbourhood of primarily residential uses of mixed housing types including single family residential homes, highrise towers, and medium scale townhouses and apartments.

Much of Garneau is street-oriented with respect to the public-private relationship between buildings and the street, with entrances and windows that face out onto the street and help to enliven the public realm.

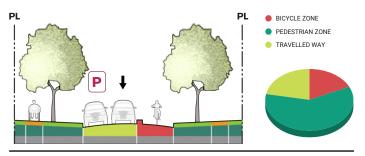
Parts of Garneau are less street-oriented primarily along the flanking (short side) of blocks where housing and development do not face the streets that they are adjacent to. 110 Street & 84 Avenue were identified by the public as primary walking corridors. In other instances such as with towers that were built with less street orientation, and several at-grade parking lots create noticeable gaps in areas with otherwise good street orientation.

Project Considerations

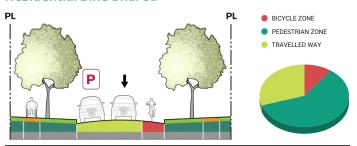
+ Garneau represents a good balance of transportation modes and overall has a good street interface. Flanking development on 110 & 111 Streets suggest that they are good candidates for the north / south bike route and would have less conflicts as compared to a street fronting the bike lane

Mixed Use Vehicle Arterial PEDESTRIAN ZONE TRAVELLED WAY

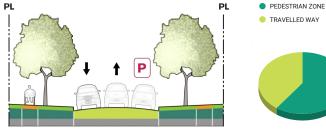
Residential Bike Dedicated



Residential Bike Shared

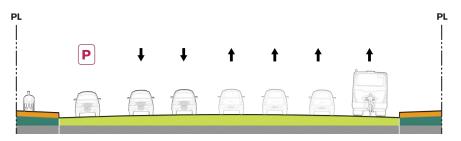


Local Residential

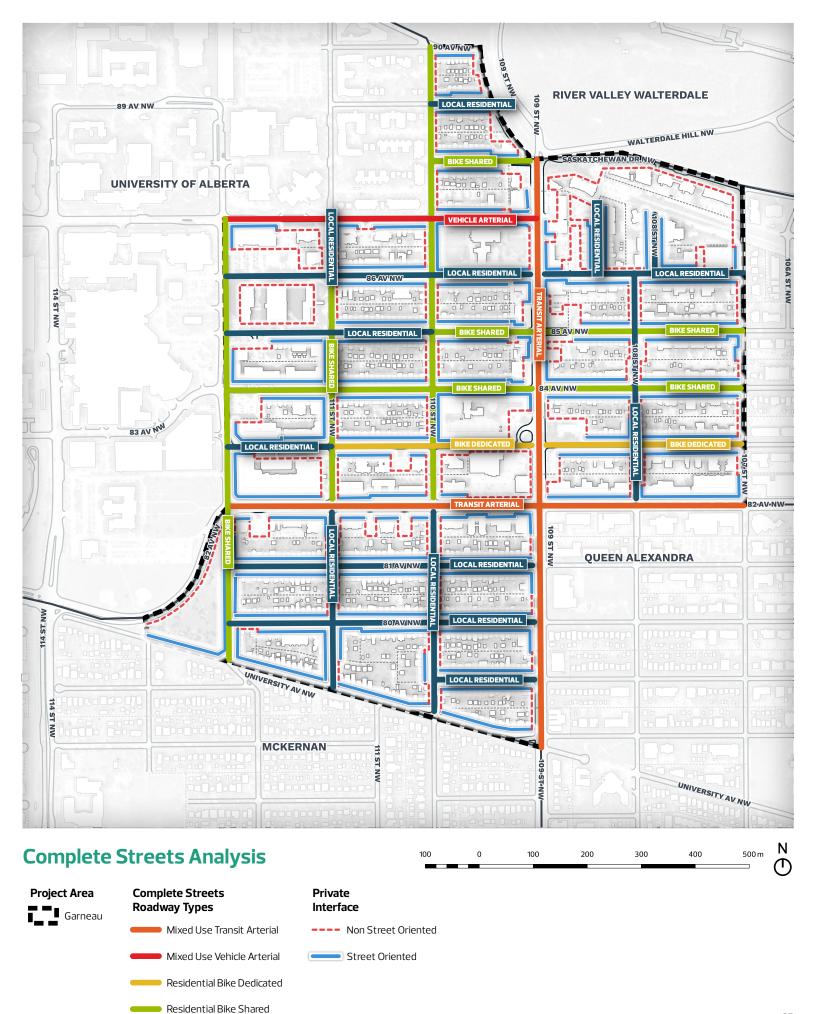


TRAVELLED WAY

Mixed Use Transit Arterial







Local Residential

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 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 through its private partner EPCOR Drainage, and is typically achieved by construction of new systems. During renewal, most of the catch basins will be adjusted with new leads and catch basins installed where required. As a City partner responsible for its drainage infrastructure, EPCOR Drainage is responsible for analysis and potential construction of Low Impact Development (LID) facilities in coordination with Garneau Neighbourhood Renewal. See further in the section following on **Low Impact Development**.

Sanitary Sewers

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

Lighting

As part of the neighbourhood renewal all streetlighting will be replaced. During this replacement process, there will be an 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.

Project Considerations

- + There is a high pressure gas line alignment down University Avenue that must be carefully considered with any road reconstruction in the area
- + Utility locations if required are examined and coordinated with opportunities at the **Options & Tradeoffs** project stage if warranted
- + There are some existing character pedestrian light fixtures along 84 Avenue that should be explored for refurbishment or replacement as the project advances design stages
- + Utilities examination is an important step to identify where constraints exists, ie. for planting trees and roadway changes



Low Impact Development

EPCOR Drainage is responsible for analysis and potential construction of Low Impact Development (LID) facilities in coordination with Garneau Neighbourhood Renewal. Traditional drainage infrastructure channels stormwater runoff to pipes that carry the water away. Low Impact Development takes a different approach of holding some stormwater using bio–swales, green roofs, rain gardens, and structural soil cells to capture stormwater and pre–treat water close to its source.

Stormwater Modelling

in 2016 EPCOR released preliminary maps showing modelled surcharge and surface ponding depths, as part of its *City-wide flood mitigation strategy*. The modelling exercise analysed what the performance of City's drainage system would look like, in the event that the City was hit with the storm of the century. As the model graphically shows in the figure following, Garneau showed several areas under water and that the underground drainage infrastructure was overwhelmed.

EPCOR in partnership with the City of Edmonton have began implementing Low Impact Development facilities as a means to ease the demand placed on our existing underground drainage infrastructure. Rain gardens, bioswales, soil cells and box planters can be used to channel and store water. These measures are used to release water more slowly into underground system, and to store water in the soil that suitably chosen plants will uptake.

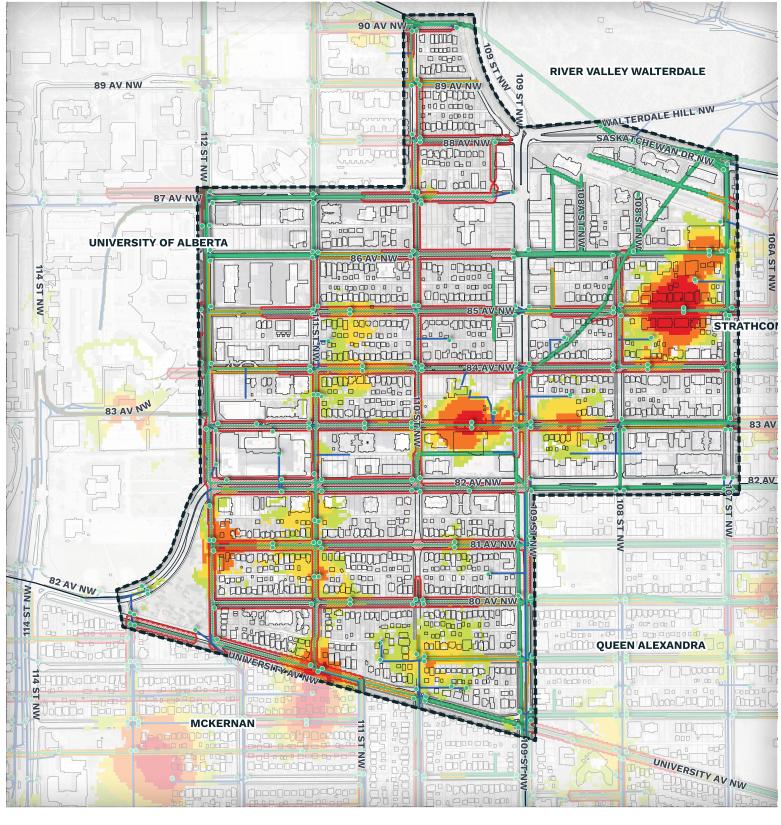






Project Considerations

+ The potential for Low Impact Development should be explored early in the process so that it aligns with any other opportunities that are advanced to design. This also allows for more public engagement that will gauge support for the aesthetic and utility that Low Impact Developments can provide



1.5 To 2.5m Below Ground

< 1.5m Below Ground

EPCOR Stormwater Modelling

Project Boundary

1–100 Flood Model
Surface Ponding

1–100 Flood Model
Surcharge Depths

 3 Surcharge Depths
 3 Surcharge Depths
 3 Surcharge Depths
 4 Surcharge Depths

0.35 - 0.5m

0.5m - 0.75m

> 0.75m

Drainage System

Catch Basins

Storm

---- Combined

—— Sanitary

itary

200

300

500 m

Streetlighting

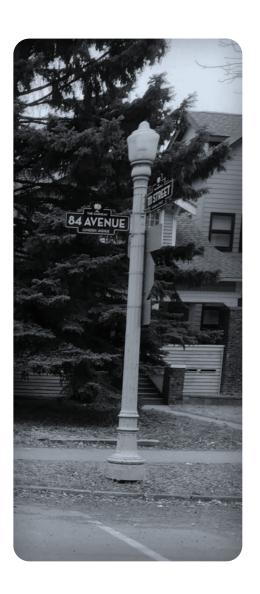
Streetlighting within Garneau is primarily City standard poles and roadway lighting. There are a few decorative pedestrian lights that appear to be limited to a few blocks of 84 Avenue west of 109 Street.

Streetlighting Enhancements

Through the Neighbourhood Renewal Program, BGN offers an option for neighbourhoods to upgrade from standard galvanized street lights to decorative street lights, with optional features including colour, pole styles and pole arm types. As the project progresses through the design stages, the community will have chance to decide on adding it as a local improvement. Any lighting improvements are subject to further evaluation and review under the Streetlighting Renewal Policy and Local Improvement Policy.

Existing Pedestrian Lights

There are a very limited number of decorative pedestrian lights on 84 Avenue west of 109 Street. Conveniently, these are located on what was identified as one of the key Garneau walking routes. If funding is available and it is technically supported, it is an opportunity to develop pedestrian lighting along key walking routes.



Project Considerations

- + Policies within the Garneau Area Redevelopment Plan promote the development of pedestrian level streetlighting
- + Existing policies and funding constraints: existing light pole rehabilitation or replacement is typically covered, whereas adding new poles is costly and has not been typical for renewals



Existing Streetlighting

500 m 100 0 100 200 300 400



Neighbourhood Boundary



Streetlights (Alleys not Shown)



Primary Walking Routes

SWOC Analysis

SWOC analysis is a strategic planning method used to research and evaluate the existing context of the neighbourhood. This helps the project team in making informed decisions throughout the project process and opportunities are evaluated. SWOC analysis is used to determine the **strengths**, **weaknesses**, **opportunities**, and **challenges** with respect to the existing context of Garneau.

Strengths

- + Situated centrally in Edmonton, nearby to downtown and the University of Alberta.
- High connectivity through the neighbourhood with a consistent pre-war street grid
- Narrow road right-of-way and on street parking helps deter speeding
- A very walkable and bikeable neighbourhood with stronger than average walking and biking modeshare of its residents
- Proximity to River Valley, Kinsmen and Queen Elizabeth Parks provides excellent access to parks and natural space
- The neighbourhood contains an amazing inventory of mature boulevard trees
- The existing density and mix of uses contribute to the community's walkability, economic and social diversity
- The community is in easy active transportation range of numerous destinations including Downtown, River Valley, Whyte Avenue, University of Alberta, etc.
- The area is within easy reach walking, biking, or public transportation to the University campus and hospital
- + The neighbourhood is within easy walking range of three LRT Stations, and multiple bus routes on Whyte Avenue and 109 Street
- There are many community amenities both within and nearby to the neighbourhood, with lots of choices to eat and shop
- Rich neighbourhood history including a relatively large inventory of historic resources, some of which are protected
- + A strong sense of community identity as many families express having lived a long time in the neighbourhood or returned after an absence

Weaknesses

- + Traffic commuting pressures to and through the neighbourhood. With a well connected street grid it is easy for commuters to shortcut through Garneau when main arterial roads are congested
- While near to the ravine and river valley, the steep slopes and stairways can be barriers for people with mobility challenges
- + There is little in the way of functional park space east of 109 Street. The existing triangular park space on this side along the rail corridor is not really known or treated as a park, and is in poor condition due to its current use as a parking area, and past use as a construction laydown area
- + A number of streets have missing sidewalk connections
- Residents described unsafe feelings as a pedestrian along 109 Street with the sidewalk next to the road, and that they feel there is too much traffic to be a pleasant street to walk on
- + Lack of wayfinding throughout the neighbourhood to key destinations
- + A highly desirable neighbourhood that leads to development pressures with high rates of change and loss of character reported by community residents
- Missing bike paths which could connect nodes such as parks, schools, transit, and commercial areas, within the neighbourhood and to nearby neighbourhoods
- + Traffic shortcutting at several streets

Opportunities

- Provide an all ages and abilities north south bike connection through the neighbourhood connecting Saskatchewan Drive to 76 Avenue (on 110 Street)
- + Continue connection of 83 Avenue bike facility from 111 Street to 112 Street
- + Improved biking connections to and through the neighbourhood
- An existing unused bus turnaround exists at 83 Avenue and 109 Street. An opportunity to expand it into additional park or plaza space by City Arts Park
- To increase and improve lighting throughout the neighbourhood, and to improve neighbourhood aesthetics with decorative lighting elements
- + To incorporate traffic calming techniques that slow traffic and deter shortcutting through
- + Opportunity to redesign the poorly used triangular shaped park off of 107 Street
- + Opportunities to collaborate with developments that are moving forward in the neighbourhood, to leverage greater improvements to public space
- + Provide missing sidewalk connections
- + Add wayfinding
- Provide on-street elements that contribute to the history / character, such as special paving in key areas areas or celebrated entries
- + Continue connection of 83 Avenue bike facility from 111 Street to 112 Street
- + Some opportunities may not be 100% suitable or feasible within the renewal budget or schedule, but there is an opportunity to explore and document support for ideas that Garneau residents may want to lead in the future. The City does not typically lead the creation of community gardens for example; it is a community led initiative

Constraints

- + 109 Street, 87 Avenue, and Whyte Avenue are all arterial roads that divide Garneau. These roads are out of scope, and little improvements will be done in these areas
- Alleys are not included as part of the renewal scope and changes or rehabilitation to them are not included
- + Budget restrictions will limit the scope of what can be done during renewal
- Mature trees, and on-street parking may limit implementation or the width of missing sidewalks
- The relatively narrow 20m road right-of-way and mature trees limit some opportunities that would require tree removal. For example, some streets with missing sidewalks do not have the space to add them without trees removed

Appendix: City Policies and Programs

Relevant Land Use Policies & Planning Studies	Project Alignment
Garneau Area Redevelopment Plan (2010)	
Policy Number: G.6 – Recreation, Budget and Schedule Priorities	The levy has been identified with a balance of
The priority of future recreational development and improvements in Garneau be as follows:	approximately \$30,000 and the team is investigating the allocation of these funds to
 Priority 1: To develop a park facility in the northern portion of Sub- Area 2 in a staged approach using redevelopment levy funds in part for acquisition of part of the required land. 	park enhancements east of 109 Street
+ Priority 2: Improve landscaping along commercial strips.	
+ Priority 3: To extend the existing bikeway system in Garneau.	
Policy Number: G.7 – Recreation, Landscaping	Aligns with the Vision developed by the project
Existing vegetation and mature trees and trees located on boulevards	team and community
shall be preserved and-maintained unless the development officer is advised by the parks and recreation department to the contrary.	
advised by the parks and recreation department to the contrary.	
Policy Number: G.8 – Recreation, Redevelopment Levy	+ Levy has not raised enough to afford any private lands
Monies raised through the redevelopment levy will be employed solely	to allord ally private larius
for the purchase of land for park and open space recreational facilities.	
No monies collected through the levy will be allocated for schools as	
there is no need expected beyond existing facilities.	
Policy Number: G.9 – Recreation, Redevelopment Levy	Levy has not raised enough to afford any private lands
Monies collected under a redevelopment levy for Garneau will be spent on the basis of the following guidelines.	
Monies collected after adoption of this bylaw will be used first for purchase of properties for a major park facility which will:	
+ be approximately 1.5 acres.	
+ be located in the northern portion of sub-area 2.	
+ provide for both active and passive recreational pursuits.	
Should monies collected in the first five years after adoption of this bylaw fall short of those necessary to meet policy item g.9(i) above, any remaining shortages will be supplemented through general revenues.	

Relevant Land Use Policies & Planning Studies	Project Alignment
Policy Number: G.13 – Transportation, Traffic Management	+ In Alignment
Roadway designations in Garneau as follows:	
 Arterials: 112 Street, 109 Street, Saskatchewan Drive, 87 Avenue, 82 Avenue. 	
+ All other roadways will be designated as local roadways, some with traffic management measures, such as one way streets forced turns and curb extensions.	
Policy Number: G.15 – Transportation, Traffic Management	+ In Alignment
The city will undertake to reduce through traffic on local roadways in Garneau by means of:	
Redesignation of one and two-way traffic routes.	
+ Forced turns and landscaped barricades.	
+ Median closures.	
+ Curb extensions.	
Policy Number: G.16 - Transportation, Parking Management	+ In Alignment
On–street parking on residential streets in Garneau will have additional regulations and will include measures the city will undertake to reduce through traffic on local roadways in Garneau by means of:	
+ Time limit controls.	
+ IA residential parking sticker program.	
Policy Number: G.17 – Transportation, Bikeways	+ 112 Street is not renewal
To study the feasibility of and implement improvements to the bikeway system in Garneau with emphasis on the following locations:	 scope The project supports bike improvements at 90 Avenue
 The feasibility of shared pedway/bikeway along 112 Street that is separate from the roadway; 	
 Improvements to the pedestrian and bike circulation patterns at 90 Avenue and 109 Street. 	
Policy Number: G.18 – Transportation, Pedestrian Circulation	+ Generally in alignment
The city will develop pedestrian oriented facilities of a higher quality by:	
 Installing pedestrian level street lights in heavily treed areas. 	
+ Sidewalk improvements.	
+ Curb cuts at all intersections.	
Policy Number: 1.10 – Public Open Space and Recreation	+ In Alignment
The existing open spaces in public parks, school yards and public institutional and urban service sites within and immediately adjacent to sub-area 1 will retain their accessibility.	

Relevant Land Use Policies & Planning Studies	Project Alignment
Policy Number: 1.11 – Transportation, Pedestrian Circulation	+ In Alignment
Pedestrian access within sub-area 1 and between sub-areas 1 and 2 across the 109 Street corridor will be improved by the enhancement of pedestrian routes and crossings.	
Policy Number: 2.3 – Recreation, New Park Facility	+ In Alignment
A multi purpose park facility will be provided in this sub-area and will provide sufficient space for a combination of active and passive recreation.	
Policy Number: 4.1b – Transportation, Parking Management	Some parking may be reduced but parking is
Existing metered parking along the avenues will be retained (except in the peak hours) and additional short-term metered parking for commercial uses will be provided	planned for and retained
Policy Number: 4.1e – Urban Design, Streetscape Improvement Plan	+ Not in Scope
A comprehensive streetscape improvement plan be prepared for 109 Street between Whyte Avenue and the High Level Bridge that is based on the recommendations in the 109 Street corridor study (2008).	This is within the scope of Envision 109; however, where possible 109 improvements will be adopted as part of Garneau's renewal
Policy Number: 5.5 – Recreation, Streetscape Improvement Program	+ Not in Scope
A streetscape improvement program be developed along the east side of 112 Street from Whyte Avenue to 87 Avenue, to include the following components:	
 A landscaped pedestrian promenade along the existing pedestrian right-of-way. 	
+ Appropriate street furniture, lighting, sitting area, etc.	

Relevant Land Use Policies & Planning Studies	Project Alignment
Strathcona Area Redevelopment Plan (2015)	
Overlapping Policies Interim uses of the rail corridor right of way could include development of a pedestrian or bike path, passive recreation development, and uses which encourage public recreation and promotion of the Strathcona area. Should the right of way no longer be required for rail purposes, it may be developed for: + A permanent pedestrian bike way + Passive recreation space	 Bike connections are planned to align with those proposed along the rail corridor during Strathcona renewal Passive recreation space is considered right at the edge of the Strathcona Boundary north of the Granite Curling Club
109 Street Area Redevelopment Plan	
3.1.2.5 - Public seating Provided along the street particularly at key street corners, either within the public right-of-way or at a publicly accessible location at a private development. In addition to conventional benches, seating may also be provided along the ledges of planters and stairs. Movable chairs may also be made available to serve as seating for pedestrians.	Supported along 109 where curb extensions are feasible on avenues
3.1.2.6 Bike parking Provided in a manner that is easily identifiable and clearly visible, yet does not obstruct the flow of pedestrians.	Curb extensions at the avenues joining 109 Street are being explored and may provide bike parking on 109
3.1.2.8 - Angle parking on side streets Where roadway cross-section widths permit. This may include public Area Redevelopment Plan, 109 Street Corridor 20 seating and/or landscaping at the 109 Street end of the row of parking to enhance the pedestrian landscape. Developer-funded, side-street angle parking may also be considered in conjunction with adjacent redevelopment, outside of the streetscape improvement process.	 An option for angled parking on 84 Avenue is being explored for public support Angled parking is provided at 86 Avenue and will be preserved
3.1.2.10 – Connection with potential viewpoints	+ Supported
Overlooking the North Saskatchewan River Valley, including provision of appropriate and safe access to and across 109 Street	 Options are explored to make better connections to 109 Street Crossings of 109 Street are generally out of scope

Relevant Land Use Policies & Planning Studies Project Alignment + Support for this will be 3.1.2.11 - Garneau School explored through the project Upon negotiation with the Edmonton Public School Board, the City may process acquire a small easement along the eastern perimeter of the school Garneau school is a stakeholder site to allow for sidewalk widening and/or the establishment of a small public seating area at the corner of 87 Avenue and 109 Street. Access directly from the school site to adjacent residential areas should be maintained or enhanced, as deemed necessary. 3.2.3.20 - Public space + Viewpoints are not in scope as improving access across 109 Street is not in Along 109 Street will be improved to create an attractive, comfortable renewal scope walking environment that includes a series of spaces for rest and + The easement on Garneau social encounters at regular intervals, and that links them with School land is considered existing outdoor spaces and destination businesses, institutions and pending the support of recreational facilities. Enhancement of public spaces for rest and social **EPSB** encounters is encouraged at the following City owned locations, as + Improvements for opportunities arise: Garneau Park which address the 109 + Potential Viewpoints - Viewpoint sites found to the north of the streetscape are Plan boundary at the south end of the High Level Bridge may considered be developed in future as part of a series of existing or planned lookouts overlooking the North Saskatchewan River valley, subject to the direction of the River Valley ARP. Safe and appropriate access to viewpoints should be provided from 109 Street. + Garneau School – Upon negotiation with the Edmonton Public School Board, the City may acquire a small easement along the eastern perimeter of the school site to allow for sidewalk widening and/or the establishment of a small public seating area at the corner of 87 Avenue and 109 Street. Access directly from the school to adjacent residential areas should be maintained or enhanced. + Garneau Park – Should sufficient funds be allocated, and the former bus turnaround located at the southeast corner of 83 Avenue and 109 Street be re-purposed, this site, which may include nearby parking spaces, will be re-configured to accommodate landscaped public seating, similar to seating at the northeast corner of the park. University of Alberta, Long Range Development Plan (LRDP) North Campus 30 – Year Concept Plan The University of Alberta's Long Range Development Plan has been included in this analysis for better alignment of City efforts. The University has its own bike and transportation plans and it makes sense for the City to coordinate its efforts to align with the University

Relevant Land Use Policies & Planning Studies	Project Alignment
6.1.2 Transportation Systems	Traffic changes on 111 Street are supported
+ A realignment and bi-directionality of 111 Street are proposed to better separate University traffic from residential traffic in Garneau.	
 4 Pedestrian and Bike Circulation Pedestrian and bicycling routes will be enhanced though and to campus. Existing pedestrian spines will be reinforced and extended and a hierarchy of pedestrian walkways will be developed over time to improve circulation and way finding. 	+ In alignment. Bike routes in Garneau have and will continue to consider linkages with University routes
+ 89 Avenue will continue to be the major east-west pedestrian linkage between 116 Street and 110 Street. It requires further design and upgrade to achieve this role. The north-south spines will be defined to University Avenue in the south and Saskatchewan Drive on the North	
+ As with the pedestrian walkways, bike paths will be developed on a hierarchy basis to accommodate through –campus, as well as intracampus circulation.	
 6.1.6 Community Linkages North Campus will be linked to community pedestrian and bike systems and therefore to the regional systems as well, e.g., the river valley system. 	Supported, the project team will explore and align the University's bike plan with the City's regional bike plan

Relevant Transportation Policies & Projects	Project Alignment
The Way We Move: Transportation Master Plan (2009)	
Transportation and Land Use Integration	+ In Alignment
An integrated approach to planning and developing the transportation system and land uses supports the creation of an efficient, sustainable, compact and vibrant city that maximizes the effectiveness of its investment in transportation infrastructure.	
Public Transportation as a Cornerstone	
A comprehensive public transportation system supports a sustainable, livable city where more people use transit as a preferred transportation choice.	
Encouragement of Active Transportation	
A walkable, cycle-friendly city supports the creation of a healthy, barrier-free, age-friendly and safe city where active modes are a preferred transportation choice.	
Manage the Transportation System More Effectively	
A comprehensive strategic approach to roads balances the objectives of the transportation system by focusing roadway expansions to improve the efficiency of goods, services and transit movements while using transportation operation, supply and demand management strategies to manage roadway congestion.	
Roadway improvements Focus on Efficient Goods Movement	
An efficient network for goods and services movements incorporates integrated multi-modal and regional approaches to support commercial transportation needs.	
Regional interface	
A comprehensive, coordinated and integrated transportation system supports regional mobility, accessibility and economic vitality.	
Well-Maintained and Managed infrastructure	
A holistic approach to infrastructure investments supports the fiscal sustainability of the transportation system by considering life-cycle costs, adhering to a service life based asset management program and providing a robust operational maintenance program to facilitate year round transportation.	
The Way We Move: Shifting Edmonton's Transportation Mode (2014)	

Relevant Transportation Policies & Projects	Project Alignment
The report provides the background information and data on the current state and trends related to transportation in Edmonton. Also provided are the associated impacts of maintaining the status quo and the benefits of achieving our vision.	+ In Alignment
Why do we need mode shift?	
This report highlights five reasons why shifting transportation patterns to a greater share of transit and active modes will have significant positive impact on the city as a whole. In short, we need mode shift because:	
 We support Edmonton's goal of transforming our urban form 	
 We need a transportation system that is accessible for all 	
 We want a transportation system that supports active and healthy lifestyles 	
 We want to reduce impacts to our natural environment 	
 We are in a global competition to attract business and talent to our City 	
Community Traffic Management Policy (2017)	
Policy Statement 1 The Community Traffic Management program will enhance safety and community live-ability in accordance with Edmonton's Transportation Master Plan and Council's approved Road Safety Strategy ("Vision Zero").	+ Supported
Policy Statement 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.	
Policy Statement 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.	
Policy Statement 4 Whenever possible, implementation of the Community Traffic Management program will rely on a collaborative relationship with	

Relevant Transportation Policies & Projects	Project Alignment
Policy Statement 1 Enhance accessibility, safety, security, and convenience through strategic improvement, expansion, and maintenance of the infrastructure and facilities that support Active Transportation, including sidewalks, curb ramps, shared pathways, marked bike and shared-use lanes, and end-of-trip facilities.	+ Supported
Policy Statement 4 Enact bylaws, policies, procedures, directives, strategic plans, processes, programs, and guidelines to support and encourage Active Transportation modes.	
Policy Statement 5 Share the responsibility for the provision of infrastructure, facilities, programs, and initiatives to support and encourage Active Transportation through collaboration, cooperation, and partnerships.	

Parallel Projects	Project Alignment
Saskatchewan Drive Rehabilitation & Shared Pathway Widening	
The City of Edmonton will be undertaking roadway rehabilitation and shared-use path widening along Saskatchewan Drive from 99 Street to 109 Street.	+ Supported
The project will include the following changes to Saskatchewan Drive and the shared-use path:	
+ Widened shared-use path and sidewalk	
+ Curb extensions at selected crossings	
+ Improved crossings	
Modification of cross streets in coordination with Strathcona Neighbourhood Renewal. Reduction of the lane width to align with new City standards	

Parallel Projects	Project Alignment
Envision 109: Streetscape Design Vision	
In 2015, the City, in response to recommendations outlined in the 109 Street Corridor Area Redevelopment Plan (2013), initiated the Envision 109 project to develop a streetscape design that would revitalize 109 Street from Saskatchewan Drive to 61 Avenue over the next 20+ years.	 Supported Garneau renewal is considering and will implement some of the measures defined in the 109 Streetscape Design Vision
The 109 Streetscape Design Vision report concludes the Strategy Phase of the project and identifies transformational opportunities for 109 Street to make it more walkable, improve aesthetics, promote environmentally sustainable development, and to support local businesses and provide connectivity options for all modes of transportation. It identifies long-term opportunities that require full road reconstruction to be feasible; and interim opportunities that can be implemented prior to road reconstruction within the existing curb alignment and road geometry, through city-initiated projects or private developments as they occur along 109 Street.	

Pedestrian and Cycling Master Plans	Project Alignment
Cycle Edmonton: Bike Transportation Plan Summary Report (2009)	
This report is an over arching vision for Edmonton and the region as a bike friendly city where more people cycle more often. This plan will soon be superseded by a document that is currently in draft, which the project team has reviewed and has been noted to be in alignment with draft plans for Garneau.	+ Supported
The Bicycle Transportation Plan Update will build on the successes of the City of Edmonton has already realized and will move forward with a plan with an end goal of more people cycling more often. An essential element of the Bicycle Transportation Plan Update is the implementation of the proposed network that will provide a year-round functional bike transportation network appealing to a broad range of users with cross city routes and neighbourhood level connections. The following areas are intended to further support and encourage cycling in Edmonton: + Coordinating planning, End-of-trip-facilities, Bicycles and public transit, construction accommodation, signage, maintenance,	

Pedestrian and Cycling Master Plans	Project Alignment
83 Avenue (Strathcona) Bike Route	
The City of Edmonton has completed a major bike route on the south side of Edmonton. This bike route is one part of a plan to provide citizens with transportation options. Good biking infrastructure is important for our communities because more people biking means less pollution and congestion, a greener city and healthier citizens. The Strathcona Bike Route connects the communities of Strathcona, Garneau and the University area, running from Mill Creek Ravine to 111 Street.	+ Supported
This route is high quality bike facility that has made biking more comfortable for all types of cyclists, from novice riders and families to experienced commuters. This roadway has been improved because it has a high number of cyclists, serves major destinations, and the City receives frequent requests for an enhanced bike route in this area.	
Southside Core Neighbourhoods Bike Network (2018)	
University Avenue	+ Supported
 University Avenue between 109 Street and Saskatchewan Drive is designated as a shared roadway bike route 	
112 Street	
 112 Street is a well established on-street bike route in the south- central sector of the city providing a connection between the neighbourhoods in the vicinity of 61 Avenue and 111 Street a direct connection to the University of Alberta. 	
Continued Designation of 111 Street as a Bike Route	
+ 111 Street is a designated bike route between 82 Avenue and 87 Avenue. It exists as a northbound contraflow bike lane and a southbound shared-use lane between 82 Avenue and 86 Avenue and northbound and southbound shared-use lanes between 86 Avenue and 87 Avenue. Due to the limited network connectivity outside of the Garneau neighbourhood, and as 112 Street and 110 Street would support bi-directional cycling in this area, it is recommended that 111 Street be removed from the bicycle network with implementation of 110 Street route as part of the Southside bike network.	
Saskatchewan Drive Shared-Use Path	
 While the Saskatchewan Drive shared-use path between 109 Street and Scona Road exists and forms a part of the network today, the shared-use path requires widening in order to better meet service standards for the current volume of activity 	

Design Standards & Guidelines	Project Alignment & Support
Winter City Design Guidelines	
2.2.1 – Sidewalks and Boulevards	+ Supported
 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. Use of monowalks must be justified	
+ 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 best accommodate all modes safely in all weather conditions. Needs of municipal maintenance, operation and emergency vehicles must always be taken into account.	
2.2.2 - Street Crossing	+ Supported, where possible.
+ 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 slipand-fall hazard.	Existing catch basin locations are already set in Garneau, and these opportunities are evaluated for feasibility based on coordination with existing infrastructure
 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. 	
+ Research, test and evaluate innovative street design features. For example, pedestrian platforms, that is raised street crossings, aligned curb cuts, and/or heated sidewalks and crosswalks are commonly found on pedestrian-oriented streets in other winter cities.	
2.2.3 Street Lighting	+ Supported, subject to coordination and
 Provide decorative, pedestrian-scaled lighting. Focus illumination towards the ground to reduce light pollution. Use fully shielded fixtures to eliminate glare 	evaluation through existing Streetlighting and Local Improvement policies and programs

Project Alignment & Support
+ Supported
+ Supported where feasible
+ Supported where feasible
Supported where feasible
+ Supported where feasible
+ Supported

Relevant Bylaws + Governing Processes	Project Alignment & Support
Residential Neighbourhood Street Lighting Renewal Policy	
Residential street light reconstruction has five main goals:	In alignment. The choice of decorative versus standard streetlights will be chosen through the local improvement process. See following section regarding this
 1. Replace deteriorated and inefficient residential street light systems; 	
 2. Reduce and minimize obtrusive light, light pollution and light trespass; 	
 3. Minimize disruptions impacts to adjacent residents by maintaining existing pole locations where possible; 	
 4. Maintain or reduce existing light levels where possible while ensuring pedestrian, cyclist or motorist safety; 	
 5. Ensure proper lighting where necessary to improve pedestrian, cyclist or motorist safety. 	
Residential Street Light Reconstruction Objectives:	
+ 1. To upgrade street light infrastructure so that it improves safety;	
 2. To upgrade street light infrastructure so that it provides efficient operation and minimizes 	
+ maintenance requirements;	
+ 3. To create residential street light infrastructure that minimizes greenhouse gas generation, light	
trespass and other environmental impacts;	
+ 4. To support mature neighbourhoods that are livable and adaptable.	

Relevant Bylaws + Governing Processes Project Alignment & Support Local Improvement A local improvement is a construction project that is completed near + In alignment. The local improvement process is in or adjacent to a property which is deemed to be more beneficial to the effect for neighbourhood area than the City as a whole. Local improvements are governed by the residents to approve Municipal Government Act (MGA). or petition against relevant neighbourhood In Edmonton the neighbourhood reconstruction process includes improvements a budget to replace the streetlights with a standard streetlight consisting of a galvanized pole with a LED luminaire. The opportunity for the standard streetlights to be replaced with decorative streetlights can be facilitated through a request for a local improvement. The City of Edmonton has developed an Expression of Interest (EOI) process that provides the City with enough confidence that the majority of property owners would like the improvement prior to moving forward with the decorative streetlight local improvement. As the City budgeted for the standard streetlights in the neighbourhood reconstruction, the property owners are only responsible for the incremental cost of the decorative streetlights through a local improvement tax. Under the MGA, property owners after they receive the formal local improvement notice with the estimated local improvement taxes

that City Council approves.

can petition against the local improvement during the 30 day petition period. If 50% plus one of the owners within a project petition against the local improvement during the formal petition period, the project will be defeated and will not be included in the local improvement bylaw