Glendale, Rosscarrock, Westgate

Community Redevelopment Design Concept

EMC Planning Group

EXECUTIVE SUMMARY

Glendale, Westgate, and Rosscarrock are established neighbourhoods with a long history in Calgary, and they are facing pressures to evolve as Calgary grows. Current economic, environmental, socio-economic, and political conditions in Calgary and Alberta require communities to adapt and change. Such pressures will have physical and social effects. The communities partnered with the Federation of Calgary Communities and were chosen partner with the Master of Planning program at the Faculty of Environmental Design at the University of Calgary. The Senior Planning students partnered with the community to create a comprehensive plan.

EMC Planning Group has worked with your neighbourhoods to establish an Area Redevelopment Plan to guide long-term planning and development. The plan will help guide these future developments and pressures the community is experiencing. A strategic plan has been created to through analysis and design guidelines that meets EMC's three guiding principles:

- Community growth and development
- Quality community and environment
- Active and connected living

These three principles help the Area Redevelopment Plan meet all needs and wants of the residents of Glendale, Rosscarrock and Westgate.

The process began by strategic analysis of the community. This was done by researching census data, GIS databases, on-site visits and several other approaches. The analysis findings were first showcased to the community in a workshop where residents could also give their input on both the positives and the areas where change is necessary within the three communities. Compiling both the resident's feedback and our analysis, we were set for the final stage, which was the design phase. The accumulation of all this data and adding our own professional opinions, this final plan was created. The plan was showcased at the community open house, with positive feedback and support from the community.

The team committed to this project includes three planners and designers guided by an expert in community planning and design. Our team brings a strong skillset in housing development, transportation and connectivity, recreation and amenities, and developing smart communities for our futures.

We aim to provide responsive and innovative strategies for potential redevelopment and revitalization within the three communities. This framework will exist within the City of Calgary's legal context and will be an important tool for the three communities and community associations to use to express their opinions of future proposed changes. We believe this plan will help contribute to creating three complete communities that are vibrant activity centres for Calgarians while maintaining a strong sense of community for residents.

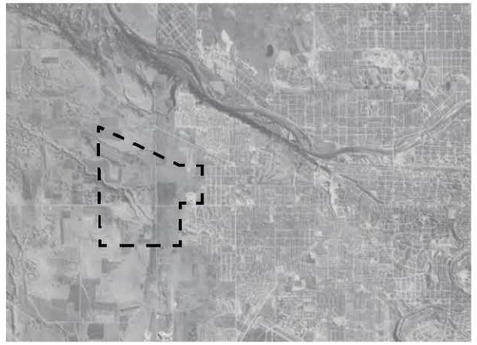
CONTENTS

INTRODUCTION

INTRODUCTION

2.1 PROJECT INTENT

The project was an academic process with real world implications. Students at the University of Calgary worked closely with the communities of Glendale, Rosscarrock, and Westgate to develop an Area Redevelopment Plan (ARP); this plan is intended to be used by the community to guide long-term planning and development. Our team, EMC Planning Group, worked with the community steering committee, community members, the City of Calgary, the Calgary Federation of Communities, and local stakeholders over a 12 week period to determine the community's vision, provide preliminary concepts, and produce final redevelopment designs, policy, and implementation strategies. The redevelopment strategy provides direction for redevelopment regarding land use planning, urban design, multi-modal transportation, and community placemaking opportunities. The intent of this report is summarize all the work completed over the 12 week period into a comprehensive document which the community can reference and draw from as they plan to grow.



FROM THEN

1957 - all three neighbourhoods recently annexed.

2019 - neighbourhoods in transition

TO NOW

MOVING FORWARD

2.2 TEAM

EMC Planning Group is a collaborative studio of student planners and instructors from the University of Calgary Faculty of Environmental Design. Our team specializes in analysis and research to inform strategic design decisions. A core component of our practice is ongoing public engagement. We work closely with our clients and conduct extensive research to form a holistic understanding of our client's objectives and the major factors influencing design.

Robyn Erhardt will lead the public realm and open space connectivity scopes of the project. Robyn brings experience with planning new communities founded on physical and mental health primarily focused on creating an active and inclusive public environment and lifestyle. Robyn's experience includes urban investigation and analysis using Geographic Information System (GIS). This allows accurate data to be used to draw conclusions and make informed recommendations.

Ishan Maggo will lead the transportation and connectivity strategies. He will be responsible for working with the team to translate ideas into implementable strategies. He has experience working as a transportation planner and will use this knowledge to develop an integrated strategy that meets the community's needs. Ishan has experience working with clients, stakeholders and transportation engineers on integrated teams.

Tyler Caswell will lead the housing development strategy. He has experience with development strategies for market and affordable housing projects in established neighbourhoods. Tyler also brings experience with public engagement and will lead our team in developing materials that encourage community involvement.

2.3 STAKEHOLDERS

The stakeholders were a critical component of this project from the outset to help our team understand the communities and context for development strategies. Each stakeholder provided valuable insight into different elements of the community, all of which contributed to our team's ability to create a visions that reflects the nuances and needs of each group. EMC engaged with the community in three different settings to understand their needs, develop ideas, and present design recommendations. The following represent major stakeholders we worked with throughout the process:

- Community members (public at large)
- Community Associations: Glendale, Rosscarrock and Westgate
- Federation of Calgary Communities
- The City of Calgary: Planning and Neighbourhood Services
- Developers involved in the area
- Local Business owners

2.4 LEGAL FRAMEWORK

Working within the Calgary context provides us with several existing plans and regulations to guide our design and implementation strategies. Our Area Redevelopment Plan will adhere to the Calgary Municipal Development Plan and Calgary Transportation Plan. Other plans, such as the Land Use By-Laws and Westbrook Village ARP will inform our process; however, we have suggested new policies and/or amendments to reflect the long-term vision of the community.

Calgary MDP & CTP
These statutory documents provided the foundation for the design and implementation strategies including growth strategies, land-use opportunities, infrastructure development, open space and park plans, and transportation policies.

Transit Oriented Development Guidelines, Westbrook Village ARP,
As non-statutory documents, we used these documents as a framework for design strategies to inform our design concepts and ensure our proposals integrate within the larger context of Calgary-west. However, this Area Redevelopment Plan suggests alternative strategies for transportation to and through the area in order to create a safer, well-connected community that meets the neighbourhoods goals.

Calgary Complete Streets Guide, Main-streets Initiative
The complete streets guide and Main-streets Initiative provided a solid baseline of street design that our team was able to build upon. EMC followed the Complete Streets Guide in many instances but we also suggested amendments specific to the needs of the community. The amendments aim to enhance pedestrian safety, promote active transportation, and improve connectivity into and through the community.

INTRODUCTION

2.5 PROJECT UNDERSTANDING

Glendale, Rosscarrock, and Westgate (GRW) represent three established neighbourhoods with histories dating back to Calgary's suburban expansion of the 1950s when they were developed as auto-oriented suburbs. This legacy is evident today in the major transportation corridors that surround the site: with Bow Trail to the north, Sarcee Trail to the West, and 37th Street to the East these communities are well-served for auto-oriented transportation. The Blue Line LRT provides connection to Calgary's downtown and other activity centres in the West. The neighbourhoods are near Edworthy Park and the Bow River north providing opportunity for enhanced connectivity with Calgary's regional trail system.

Glendale, Rosscarrock, and Westgate have been experiencing changes in demographics, building typologies, infrastructure needs, and redevelopment pressures as Calgary evolves. The communities have experienced moderate decline in population since 2014 and are facing redevelopment pressures in the form of new residential opportunities and commercial pressures.

The MDP aims to balance new development and redevelopment in existing communities (50% and 50%); under this framework the GRW community has the opportunity to explore redevelopment strategies that align with the city's goals for growth and the neighbourhoods' long-term vision. EMC has worked with the community and stakeholders over the past 12 weeks to understand how members' needs are currently met and to identify redevelopment strategies that meet the community's needs as they continue to grow.

EMC's design strategy provides a framework to integrate diverse land uses with a multi-modal transportation system, and open space network to support holistic community growth and development.

Based on our preliminary investigation, we identified three priorities to guide the continued investigation and engagement with the community:

1. Community Growth & Development
- Diversity of People and Uses
- Quality Design for All Ages
- Enhance Neighbourhood Activity Centres
- Commercial Diversity
- Residential Options

2. Quality Community Environment
- Activate Pocket Parks
- Enhance Recreation Amenities
- Maintain Environment Health
- Improve Urban realm
- Design for Amenities for All Ages

3. Active & Connected Living
- Quality & Convenient Transit
- Safe Roads Near Schools
- Connected Pedestrian Realm
- Improve Connection into/out of Community
- Enhance Pedestrian Paths and Crossings
- Safe & Connected Bike Paths & Lanes

Challenges and Opportunities

One of the major challenges influencing the community is pressure for more and new development including infill's, secondary suites, multi-family developments, mixed-use developments, and commercial development. We understand the neighbourhoods have rejected development proposals over 5 storeys located in the residential areas and would prefer to see the density in the Westbrook Village area. EMC's redevelopment design strategy proposes a maximum of 6 storeys adjacent to the 45th street LRT station and a maximum of 4 storeys adjacent to residential development. This strategy aims to capitalize on the economic potential of LRT station and TOD opportunities while respecting the community's desires.

The Westbrook Transit Station provides a valuable amenity and connects the neighbourhoods to the broader Calgary context. The redevelopment strategy evaluated the potential impacts, benefits, and concerns for Transit Oriented Development in this area, but does not provide recommendations for development since Matco has detailed plans for the area. EMC agrees with the community that major TOD should occur in this area as it provides an opportunity to densify and diversify the community without altering the core character of the residential areas. A TOD could stimulate economic development by bringing people, business, and investment to the area. It will provide opportunity for people to live, work, and play in their communities, in alignment with Calgary's complete communities goals.

Between 2011 and 2016 Rosscarrock experienced 8% increase in immigrant population and has a higher number of rental and multi-family building typologies. Together these suggest a more transient population with diverse interests and needs. As a result, our design strategy aims to connect people to each other and to amenities in order to welcome new members and enhance the established sense of community. The design strategy will also address housing typologies and diversity to guide development which suits the character of the neighbourhoods and addresses current and future demographics.

With a median age between 25 (Rosscarrock) and 39 (Glendale and Westgate) the neighbourhoods feature a young demographic and have on average 10% of the population over 65. This diverse age range spurs the need for diverse and well-distributed amenities. In 2016, the percent of families with children was 40.1 on average across the neighbourhoods, indicating a continued need for schools, activity centres, childcare solutions, and nearby recreation opportunities. In addition, the high senior population will require nearby amenities such as groceries, accessible transportation, and community health services. Strategies have addressed diversity, density, and distribution to provide new amenities for all ages.

Based on our preliminary research, we learned that the community noted that traffic flow, the pedestrian realm, and bicycle connections require attention. The community is well-served by major transportation corridors to the North and East, and is well-connected by the Blue line LRT. However, intra-neighbourhood connectivity could be improved for all modes of transportation. Design strategies address an enhanced pedestrian network and urban realm, improved traffic flow opportunities, transit connections to the LRT, and revised cycle lanes and connections that seamlessly integrate with traffic flows.

The community has significant green space and parks to serve schools and the general recreation. These areas could be made more accessible to the broader community be connecting the green spaces to each other through a network of pedestrian/bike paths. The design strategy provides solutions for improved connectivity within and to adjacent amenities as well as opportunities for enhancing and activation existing parks and open space amenities.

2.6 HISTORY OF REGION AND SITE

Pre-European Contact-1900

Following the melting of the Laurentide Ice Sheets, First Nations tribes traveled over the land bridge from Asia, eventually settling across North America. The area that is today known as Calgary was first settled by the Bearspaw First Nations. These are the nations known as Chiniki First Nations, Blood Tribe, Pikani Nations, Siksika Nation, Tsuut'ina Nations and Westley First Nation inhabited the lands surrounding of what later became Calgary.

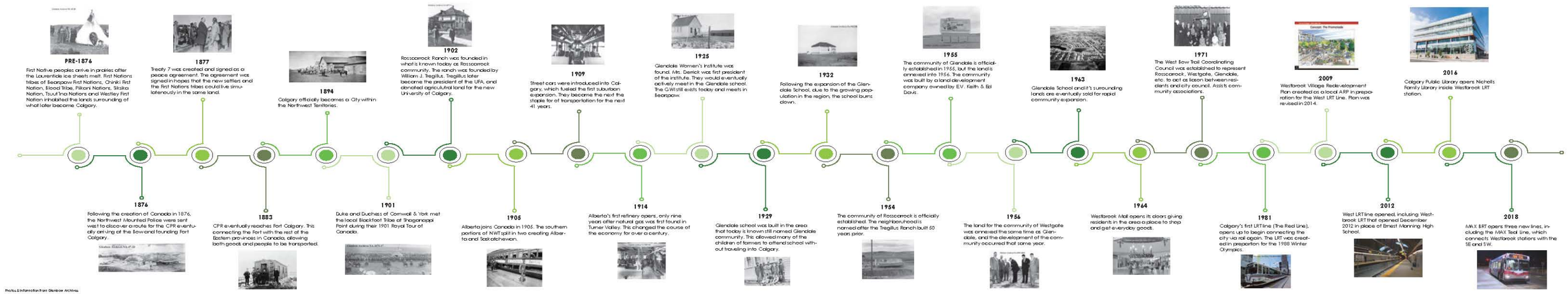
Having this connection the population began to expand, with Calgary officially becoming a city in 1894 within the Northwest Territories.

1901-1950

Following the founding of The City of Calgary, The Duke and Duchess of Cambridge & York came to the area on their 1901 Royal Tour of Canada. On their tour West, they stopped at Shaganappi Point, which is today in the GRW general area, to meet the local Blackfoot Tribe. Following this the city began to grow including the surrounding like the current GRW area West of the city. In 1902 Rosscarrock Ranch was founded by William J. Tregillus. He later became one of the first presidents of the United Farmers of Alberta (UFA). In addition he later donated land, which was used as the site for the first college in Calgary. Around this time in 1905, Alberta decided to join Canada alongside Saskatchewan, breaking off from the Northwest Territories. In 1909, Calgary followed in the same suit as the Eastern provinces and adopted a street car. This allowed Calgary to have suburban expansion, which spread the city out from the core. The economy changed in this region in 1914, with the discovery of natural gas in The Turner Valley, and the first refinery opened up shortly after. The GRW area was quickly growing as a ranching community. As many of the men manned the farms, the women created the Glendale Women's Institute as a support group in the area, which still exists today. The amount of families moving into the area led to the creation of the Glendale School in 1929 for the children of these families, eventually having to be expanded just 3 years later in 1932.

1951-Present

With the completion of WW2, suburban expansion occurred across North America. Cheap and affordable mortgages in new suburban areas was rapidy occurring due to the expansion of automobile technologies and highway networks. This led to the creation of Rosscarrock in 1954, taking the name from William Tregillus' ranch. Just one year after Glendale was established, and the land was annexed by Calgary in 1956. The land was developed by E.V. Keith and Ed Davis, taking the name from the previous ranching community in the area. Due to the expansion of Glendale, the original Glendale School was sold and redeveloped in residential housing. 1956 was also the year Westgate was founded in the same annexation into Calgary. Following the post-WW2 planning as seen across North America, Westbrook Mall was founded in 1964 for the residents in the area. Malls created a new type of shopping, as was quickly the focal point in the community. 1971 saw the creation of the West Bow Trail Coordinating Council to act as a voice for residents within City Council. The area didn't see any major changes until the announcement of the LRT in 2012, which led to the creation of the 2009 Westbrook Village Redevelopment Plan. This area has yet to seen the development of the transit oriented development, but due to the proximity to Downtown, this area is set to see major change in the next 20 years.



Photos & Information from Glenbow Archives

INTRODUCTION

2.7 CONTEXT & SITE OVERVIEW

Glendale, Rosscarrock, and Westgate are located in the west of Calgary where they are well-connected to regional attractions as well important city and community amenities. Regional attractions apply to the entire City, but as a community on the west side of Calgary, the Rocky Mountains are easily visible and entice the outdoor adventurer. Banff is only 134km or hour and a half drive and Canmore and Cochrane are even close with equally great amenities for a day trip.

Calgary is continuing to grow in population and in size and is becoming a regional metropolitan city that needs to integrate with neighbouring cities. In light of the new Calgary Metropolitan Region Board and required Inter-municipal Development Plans, Calgary has the opportunity to develop regional connections with our neighbours. This impacts the GRW community and plans for local and regional multi-modal connectivity.

The community is only six kilometres from Calgary's downtown and is accessible by LRT, bike paths, and single occupant vehicles. This is an important amenity for many residents and convenient, safe connectivity is crucial. We heard from residents that downtown serves as a major employment centre but also as a destination for some seniors in the area who find it easier to take the LRT downtown for errands or social visits than to bus or drive to closer amenities. This connection with downtown needs to be maintained and enhanced.

Other important amenities include the Glenmore Reservoir and regional trail system, Shouldice Athletic Park, Edworthy Park, and Shaganappi Golf course. These amenities provide the community with several options for recreation and socialization, and these connections are an important part of the design strategy and connectivity for the community.

The community is comprised of three neighbourhoods totaling 709 acres. The total population for the community is 9,500 and has seen an increase in the past two years. The community has 57.2m² green space per person on average and has direct access to Bow Trail, Sarcee Trail, 37th Street and 17th Avenue. It is well-connected and well-served in terms of amenities. These elements establish a strong foundation from which to build on as the community grows and evolves within the Calgary region.

BANFF
134 KM

AIRDRIE
40 KM

AIRPORT

22KM

DOWNTOWN

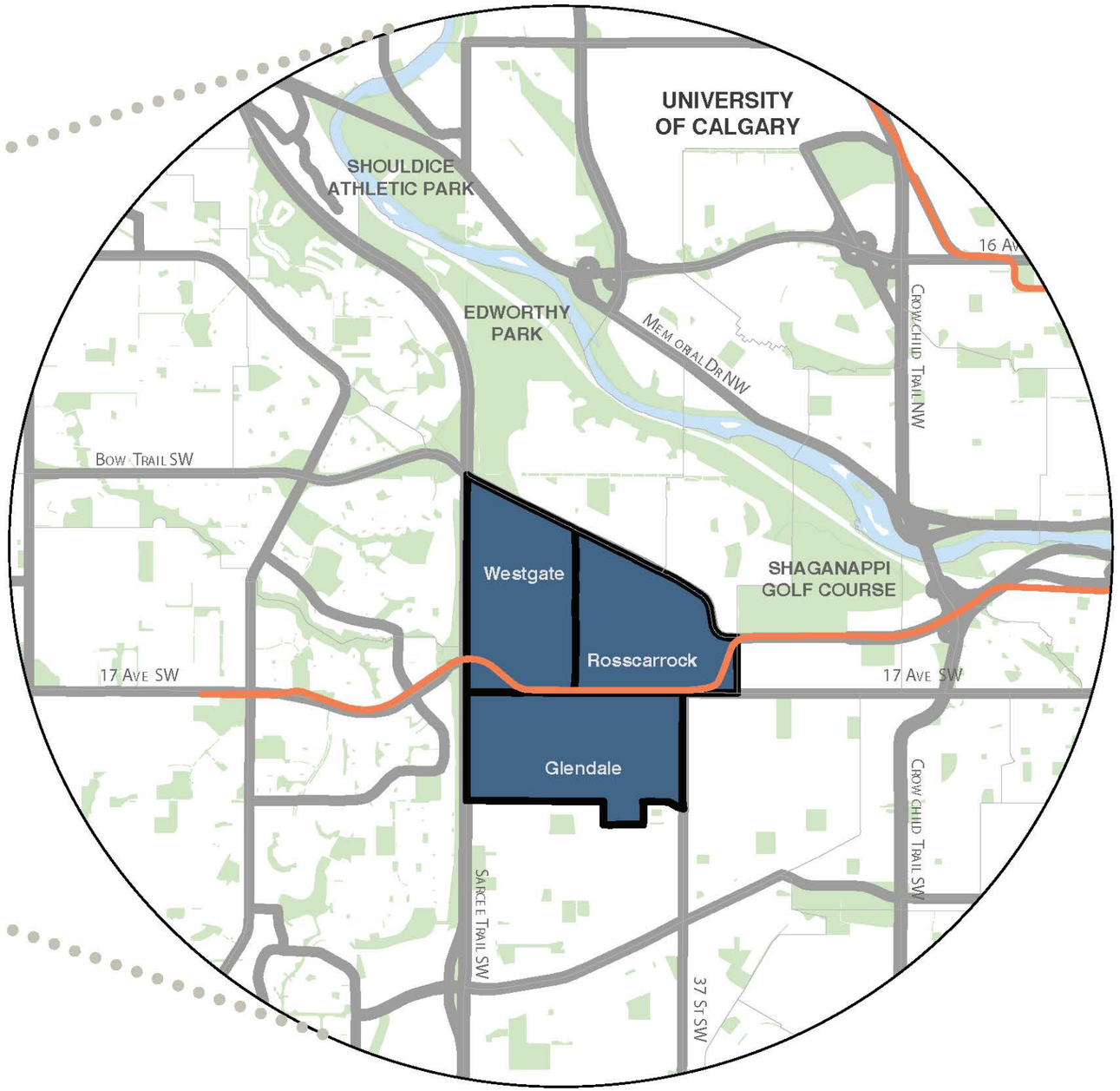
6KM

COCHRANE
34 KM

CHESTERMERE
30 KM

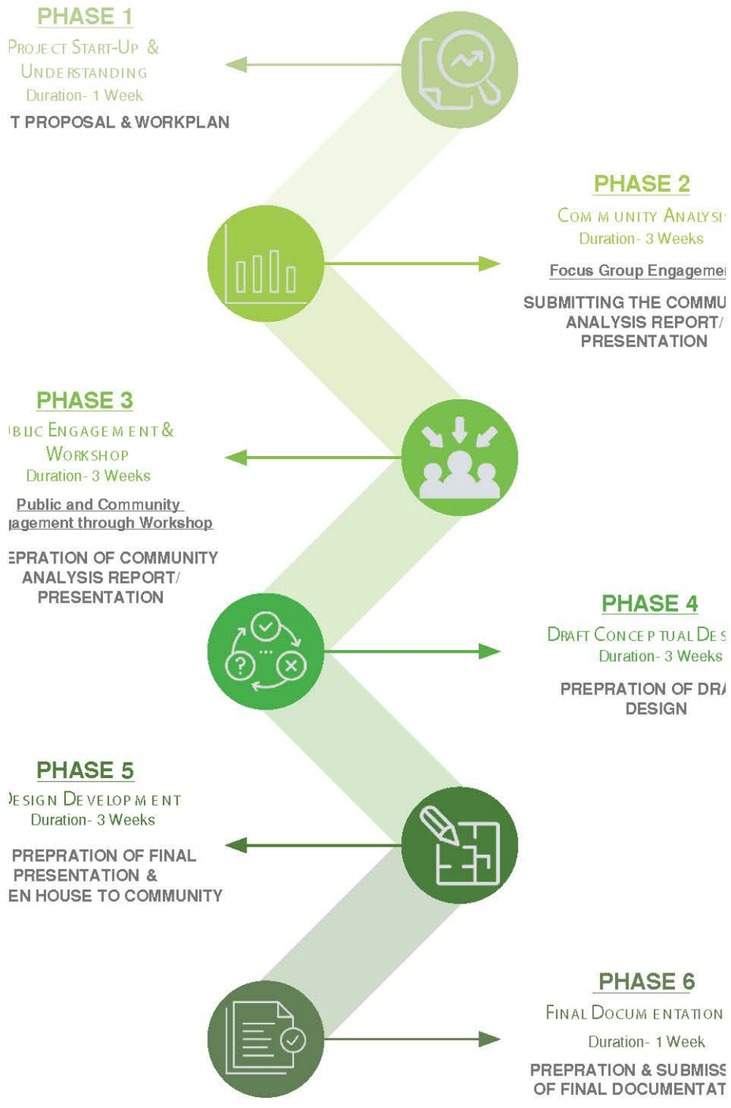
OKOTOKS
42 KM

EDMONTON
304 KM


UNIVERSITY
OF CALGARY
SHOULDICE
ATHLETIC PARK
EDWORTHY
PARK
MEMORIAL DR NW
CROWCHILD TRAIL NW
16 AV
BOW TRAIL SW
Westgate
Rosscarrock
Glendale
SHAGANAPPI
GOLF COURSE
17 AVE SW
17 AVE SW
SARCEE TRAIL SW
37 ST SW
CROWCHILD TRAIL SW

INTRODUCTION

2.8 APPROACH & METHODOLOGY



Phase 1 Project Start-up & Understanding

Start: Jan 11, 2019 Complete: Jan 18, 2019
Duration: 1 week

During this phase we will perform a site-walk through to develop an understanding of key goals, vision, and opportunities. At this phase we will review the legal framework, gather background information, conduct research, and develop base maps to support our understanding and the subsequent iterative design process. The phase will include:

- Review Legal Framework
- Context Study and Research
- Base-Mapping and Data Collection
- Define Scope of Work & Methodology
- **Submit the Proposal & Work plan**

Phase 2 Analysis - Physical & Socio-Economic

Start: Jan 18, 2019 Complete: Feb 8, 2019
Duration: 3 weeks

This phase will involve in depth analysis and research into each neighbourhood, beginning with a community-led site visit and tour. This stage will provide us with the detailed background information and in-depth understanding of the existing features, opportunities for development, potential constraints, and the stakeholder vision. The process will align our work plan with the goals of the community to guide a holistic and cohesive project.

- Community-Led Site Visit & Tour
- Focus Group Engagement
- Community evolution and historic time line
- Identify Issues, Opportunities, and Constraints
- Infrastructure Analysis
- Environmental Analysis
- Land-use and Functional Analysis
- Open Space/Park System Inventory and Analysis
- Traffic and Transportation Analysis
- Housing and Building Typology
- Public realm and walkability Analysis
- Socio-Economic Analysis
- Updating Base-Maps/Data
- Update Scope and Methodology as required
- **Community Analysis Report/Presentation**

Phase 3 Public Engagement & Workshop

Start: Feb 11, 2019 Complete: Mar 2, 2018
Duration: 3 weeks

Once we have compiled our initial findings, we will host an interactive workshop with the community to review our findings and gain a better understanding of the community members' vision, design goals, and potential strategies for redevelopment. The workshop will utilize a model of the neighbourhoods to facilitate discussion of key issues, opportunities, and constraints. We will work with the community to gather ideas and develop a framework that will guide community development in the next evolution of the neighbourhoods. This stage will include:

- Develop Physical Model
- Prepare Graphic Presentation of Analysis
- Prepare Major Topics of Conversation
- **Physical Model Complete**
- Workshop Preparation Meeting
- **Workshop**
- Review of Analysis and Workshop with Community Members
- Discuss Issues, Opportunities, and Constraints with Community
- Compile Major Outcomes from Workshop

Phase 3 Concept Design

Start: March 4, 2019 Complete: March 22, 2019
Duration: 2.5 weeks

We will compile the major outcomes from the workshop into key findings that will guide the concept design. This stage will turn ideas into draft concept design solutions to address the major concerns of the community. We will develop a comprehensive concept design which will culminate in the submission of a draft design report that reflects our findings and the community's major concerns.

- Review Major Outcomes from Workshop
- Review Policy and Legal Processes
- Precedent Review
- Land-use and Density Strategies
- Housing Typologies Options
- Commercial Development/Redevelopment Strategies
- Open Space Connectivity & Design Strategies
- Pedestrian/Vehicular/Bike Circulation Strategy & Design
- School/Community Accessibility & Connectivity
- **Submit Draft Design**

Phase 5 Design Development

Start: March 25, 2019 Complete: April 13, 2019
Duration: 3 weeks

Following submission of the draft design, we will review our framework with the supervisor and discuss strategies for moving forward with detailed design. Through this stage we will develop the final design strategy for Neighbourhood Redevelopment Strategy and implementation. We will present the final strategies to a panel of critical reviews and to the community at an open house.

- Meet with Supervisor to discuss moving forward with Design
- Review and Develop Final Design Strategies:
- Land-use and Density Strategies
- Housing Typologies Options
- Commercial Development/Redevelopment Strategies
- Open Space Connectivity & Design Strategies
- Pedestrian/Vehicular/Bike Circulation Strategy & Design
- School/Community Accessibility & Connectivity
- Develop Phasing Strategy
- Develop Renderings/Visuals
- Peer/Supervisor Reviews
- Prepare Final Presentation & Documentation
- **Final Presentation**
- **Open House to Community**

Phase 6 Final Documentation

Start: April 13, 2019 Complete: April 18, 2019
Duration: 5 days

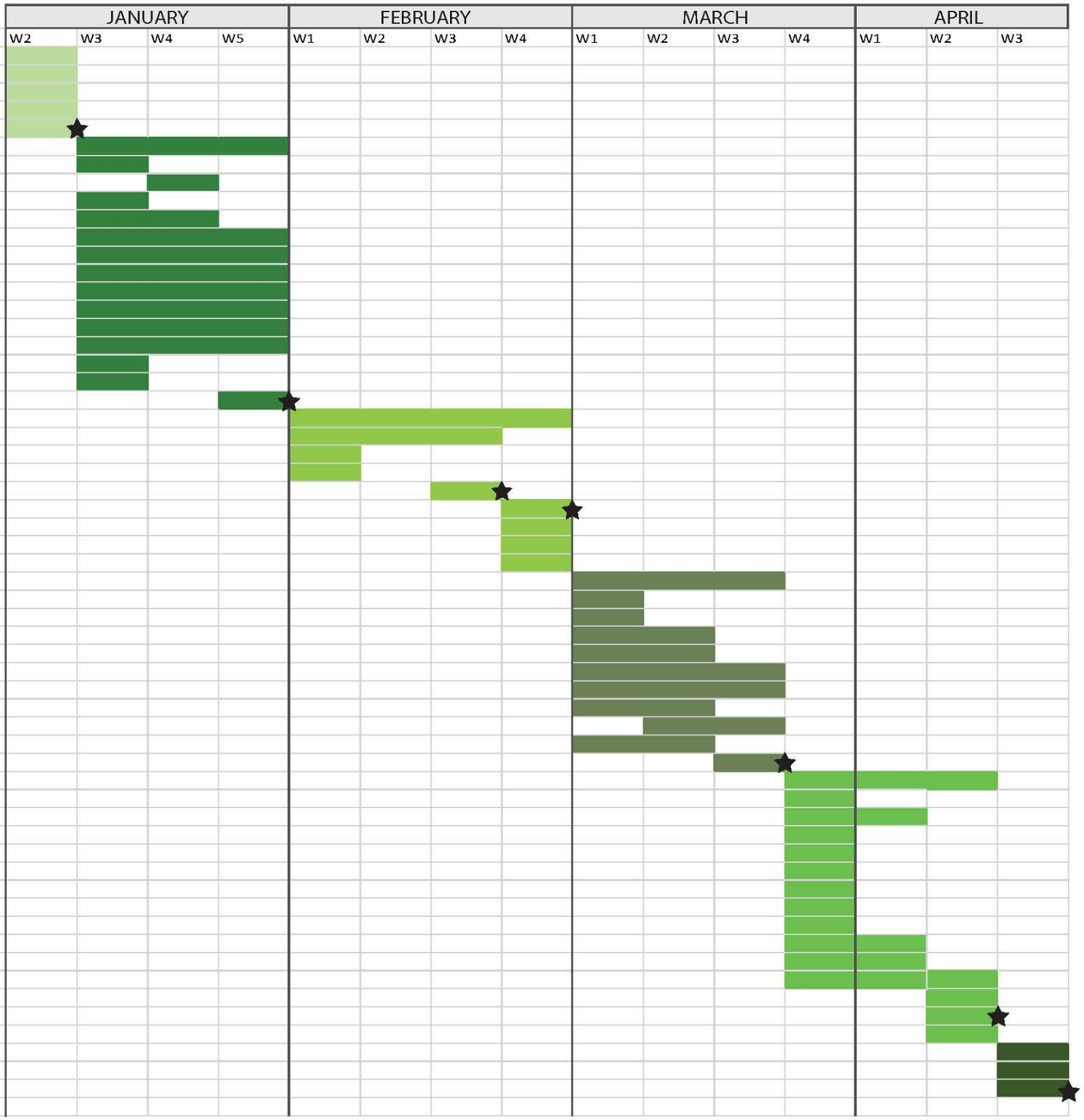
At this stage we will compile a comprehensive report that addresses detailed concepts, guidelines, and recommendations for the major issues identified through research and public engagement. The final document will be a tool for the neighbourhoods to guide potential development.

- Review & Amendments
- Prepare & Submit Final Documentation

INTRODUCTION

2.9 WORK PLAN & SCHEDULE

Activity		Weeks	Timeline
Phase I:	**Project Start-Up & Undertsanding**	1	Jan 11th - Jan 18th
	Context Study and Research		
	Base-Mapping and Data Collec☒on		
	Define Scope of Work & Methodology		
	Submit the Proposal & Workplan		
Phase 2:	**Community Analysis**	3	Jan 18th - Feb 8th
	Community-Led Site Visit & Tour		
	Focus Group Engagement		
	Community Evolution and Historic Timeline		
	Identify Issues, Opportunities, and Constraints		
	Infrastructure Analysis		
	Environmental Analysis		
	Open Space/Park System Inventory Analysis		
	Traffic and Transportation Analysis		
	Housing and Building Typology		
	Public Realm and Walkability Analysis		
	Socio-Economic Analysis		
	Updating Base-Maps/Data		
	Update Scope and Methodology as required		
	Community Analysis Report/Presentation		
Phase 3:	**Public Engagement & Workshop**	4	Feb 8th - March 2nd
	Develop Physical Model		
	Prepare Graphic Presentation of Analysis		
	Prepare Major Topics of Conversation		
	Physical Model Due		
	Workshop Preparation Meeting		
	Review of Analysis and Workshop with Community Members		
	Discuss Issues, Opportunities and Constraints with Community		
	Compile Major Outcomes from Workshop		
Phase 4:	**Draft Conceptual Design**	3	Mar 4th - Mar 22
	Review Major Outcomes from Workshop		
	Review Policy and Legal Processes		
	Precedent Review		
	Land-Use and Density Strategies		
	Housing Typologies and Options		
	Commercial Development/Redevelopment Strategies		
	Open Space Connectivity & Design Strategies		
	Pedestrian/Vehicular/Bike Circulation Strategy & Design		
	School/Community Accessibility & Design		
	Submit Draft Design		
Phase 5:	**Design Development**	3	Mar 25 - Apr 13
	Meet with Supervisor to discuss moving forward with design		
	Review and Develop Final Design Strategies		
	Land-Use and Density Strategies		
	Housing Typologies and Options		
	Commercial Development/Redevelopment Strategies		
	Open Space Connectivity & Design Strategies		
	Pedestrian/Vehicular/Bike Circulation Strategy & Design		
	School/Community Accessibility & Design		
	Develop Phasing Strategy		
	Develop Renderings/Visuals		
	Peer/Supervisor Reviews		
	Prepare Final Presentation & Documentation		
	Final Presentation		
	Open House to Community		
Phase 6:	**Final Documentation**	1	April 13-18
	Review & Amendments		
	Prepare & Submit Final Documentation		



★ = Project Milestones

Project Timeline: January 11th, 2019 - April 18th, 2019

ANALYSIS

ANALYSIS

3.1 ENVIRONMENTAL SYSTEMS ANALYSIS

3.1.1 DRAINAGE PATTERNS

An environmental analysis was a crucial first step in developing an understanding of the physical elements affecting the site and how our team could leverage and protect these resources within our design. Calgary is situated in a dry prairie area, so we began by examining water flow and opportunities for storm-water management.

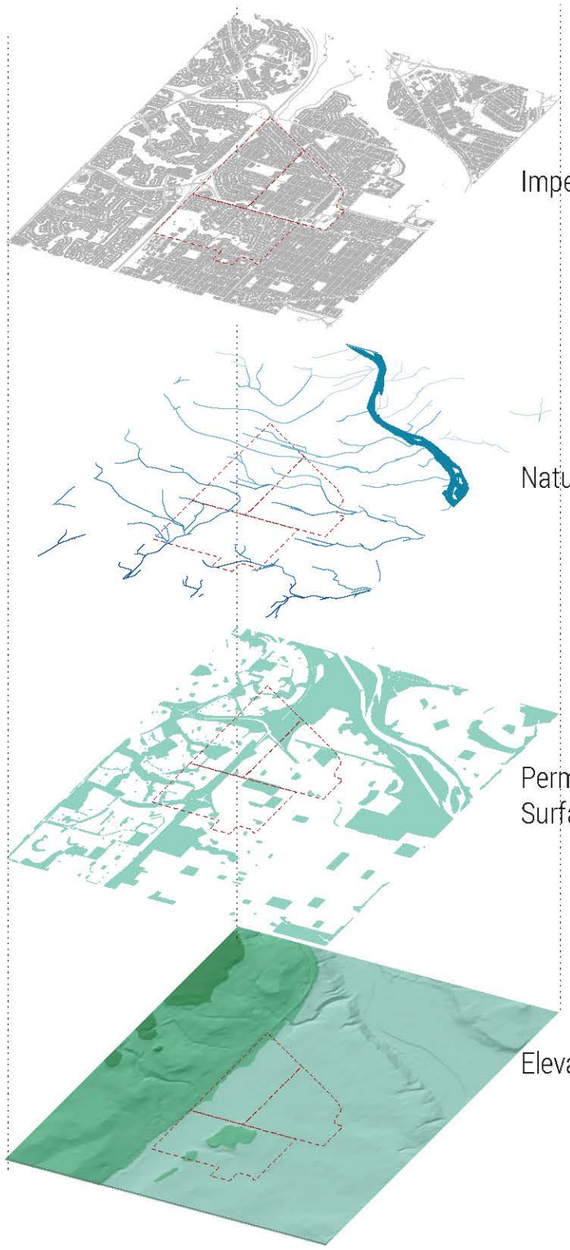
The following details EMC's observations and opportunities for the drainage, system, parks and open spaces, and the urban forest.

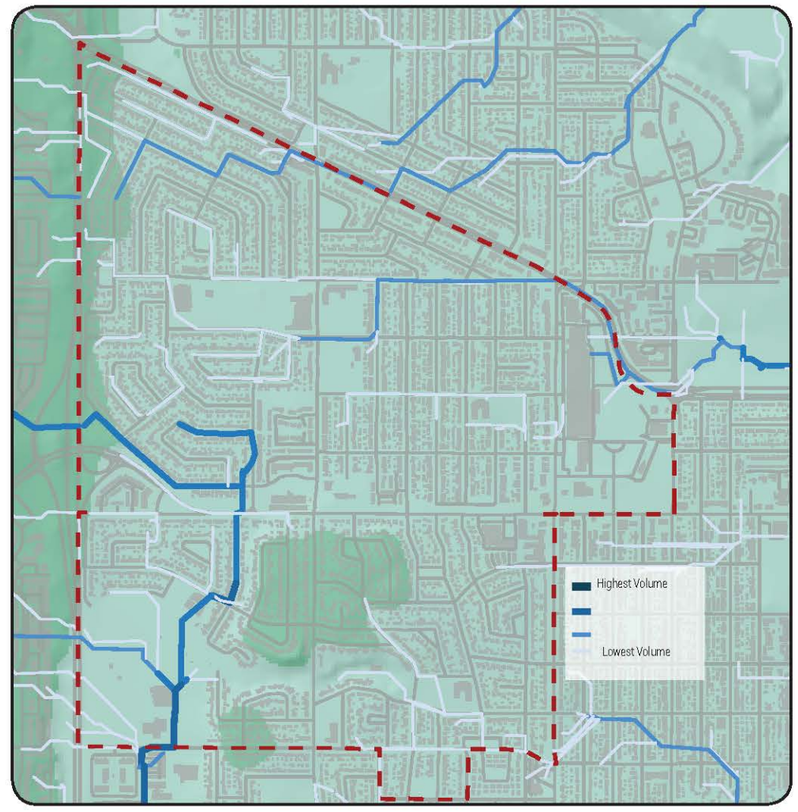
Observations

- Water flow through the community is mostly west to east, from higher elevation to lower elevation approaching the Bow River.
- Two parks in the area provide green infrastructure to absorb some of the water.
- Impermeable surfaces have drastically changed the water flow through the community and leads to pooling along roadways and residential streets.

Opportunities

- The green spaces can be redeveloped to include storm-water management features such as bioswales and dry ponds.
- Vegetation buffers can be included along major roads to absorb water and reduce pooling on sidewalks.





ANALYSIS

3.1 ENVIRONMENTAL SYSTEMS ANALYSIS

3.1.2 PARKS & OPEN SPACES

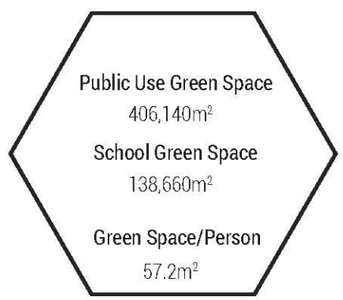
The parks and open space system contributes to the environmental, social, and economic health of a community. Parks and open spaces provide important habitat, drainage, and environmental regulations; they promote active living, bring people together, and provide psychological recovery; and they act as important attractions for developers and investors helping to stimulate development. The analysis stage began with an inventory of spaces, identifying how these are and can be used, and learning the community's vision for how these areas can be enhanced. Currently, the community has five different types of parks and open spaces from landmark to small pocket parks, all of which contribute to the diversity of opportunities for residents.

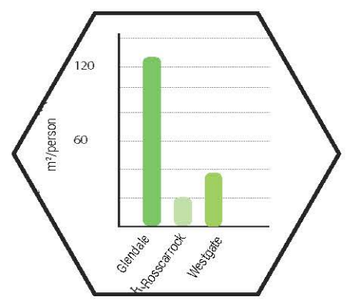
Observations

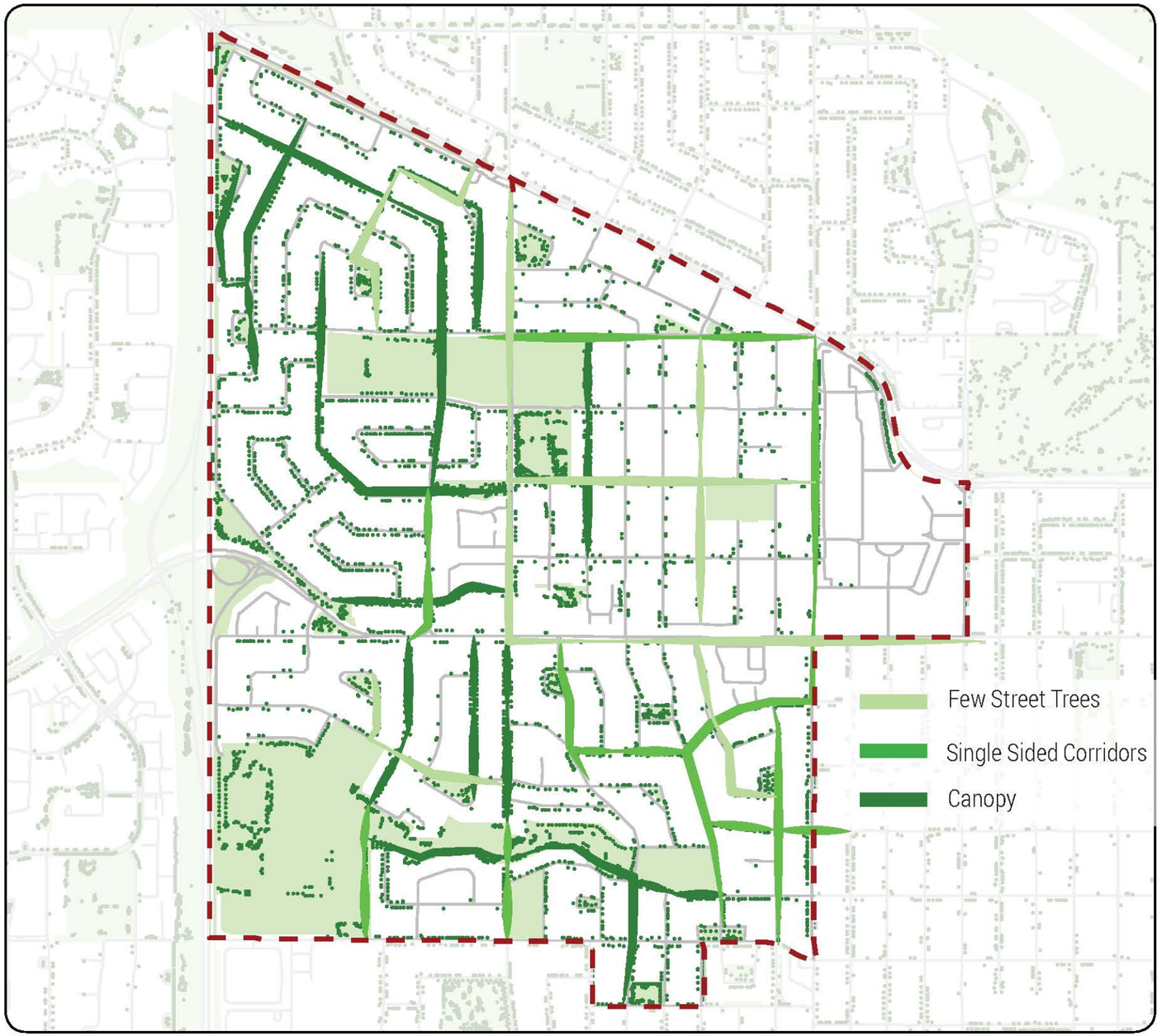
- Overall, the community has significant green space per person at 57.2m^2 (5 x the recommended amount).
- The community has several small pocket parks (undesignated green space)
- Rosscarrock has the least amount of green space and urban forest
- The community has adequate pedestrian connections through the site and connecting to nearby amenities.

Opportunities

- The pocket parks could be better programmed to increase use and provide a more diverse recreational experience.
- Parks and other green infrastructure could be added to Rosscarrock
- The pocket parks could be better connected through bike and pedestrian infra structure.
- The catwalk system could be easily improved for pedestrian ease and safety
- Underutilized lots could be re-purposed for community gathering space
- The wide roads in the old neighbourhoods could accommodate bike lanes, green infrastructure, and wider sidewalks.







3.1.3 URBAN FOREST ANALYSIS

Through GIS analysis our team examined the City of Calgary street trees to determine the density of trees in each area. This allowed us to determine what areas required enhancement. In addition to the environmental and health benefits of an urban forest, we learned that the trees contributed to a strong sense of place for community members.

Observations

- Rosscarrock has significantly fewer streets with mature canopies
- Westgate and Glendale feature extensive network of streets with full canopies.
- Natural trails also have good street trees
- The Westbrook area has zero urban forest or green space

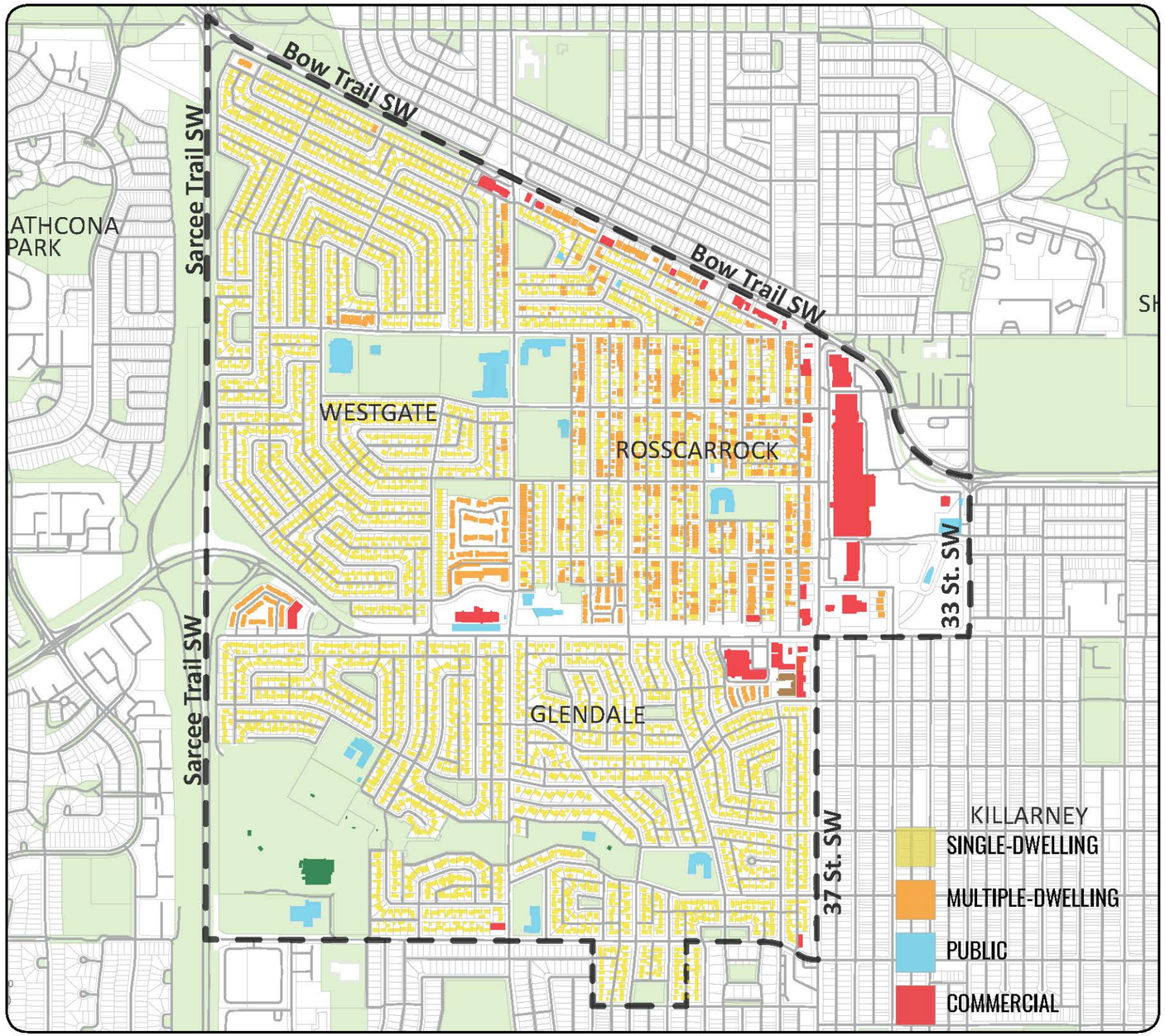
Opportunities

- Trees can be planted through the City of Calgary Parks department, especially in Rosscarrock, to enhance the public realm.
- Long-term plans for Westbrook should include a strategy for creating a green and inviting public realm.

Warwick Drive in Westgate features excellent mature street trees which creates a welcoming and distinct street-scape that encourages pedestrian use.

ANALYSIS

3.2 LAND-USE AND DENSIFICATION



3.2.1 CURRENT LAND USE

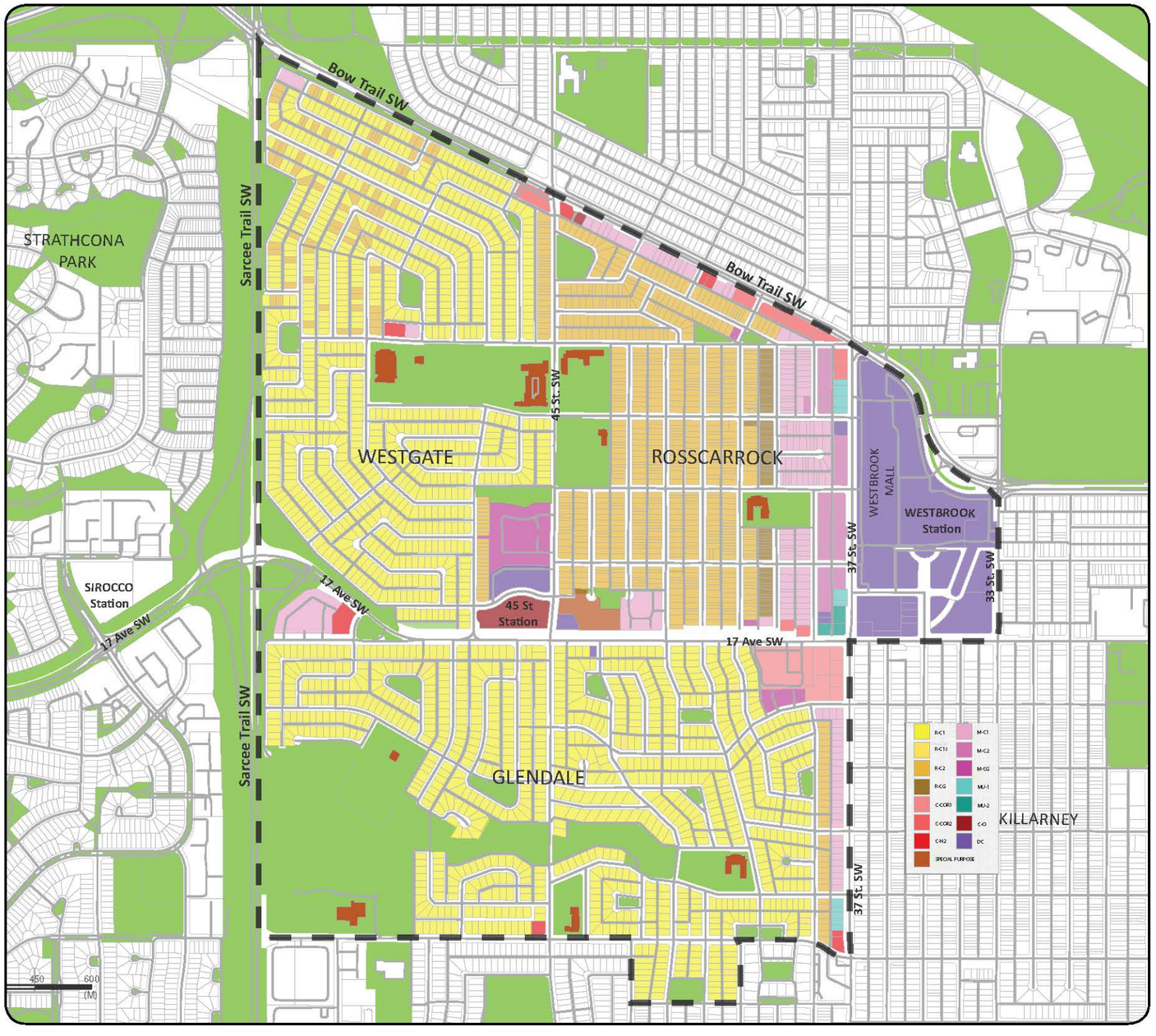
This map shows the current land uses in Glendale, Rosscarrock, and Westgate (GRW) communities. The process to which this was done, was by looking at Google Maps and Street View to determine see what the current land-use is. This is different than the zoning maps, because it shows whats currently on the ground today. The yellow and the orange show the difference in single-dwelling residences to multi-family residences. This shows the difference between the three communities. Glendale and Westgate are almost all single-family homes, while Rosscarrock has a even divide between single family and multi-dwelling sites. This is different than what the current zoning map shows, meaning the change is still occurring and it hasn't been finished yet.

Observations

- Single-family homes make up almost the entirety of Glendale and Westgate, with a few pockets towards edges and corners.
- Rosscarrock has pockets of multi-family residential and single-family homes scared throughout. There are some large concentrations along Bow Trail and 37th street NW.
- Commercial is located mainly towards in the Eastern edges of the communities, with some pockets on the corners.

Opportunities

- Large pockets of single-family homes near both 45th street station and Westbrook Mall station.
- Areas that border main commuter roads are single-family homes and border higher-density development on other side.
- Excellent access to both public transportation and roads into downtown, Calgary West and South.
- High percentage of green space and good connections into surrounding parks and green space, including Edworthy Park and Bow River trails.
- High number of both public and private schools, that offer several language options.
- A small number of vacant lots and underutilized parks scattered throughout the communities.



3.2.2 CURRENT ZONING

In comparison to the land-use, the current zoning shows that GRW is able to be developed with higher density than what is currently on the ground. The procedure to create this map was done by compiling three land-use bylaw maps from The City of Calgary. The land-use codes add more context to the previous 'Current Land Use' map and show heights and size of the multi-residential buildings.

Observations

- The previous map showed the existing land-uses, and the current zoning is similar in both Westgate and Glendale.
- Westgate does have some spot zoning throughout the NW corner.
- Rosscarrock is made up of entirely RC-2, with pockets of higher density gradually getting more dense towards Westbrook Mall.
- Westbrook Mall is entirely a Direct Control site, which is owned by Matco Development.

Opportunities

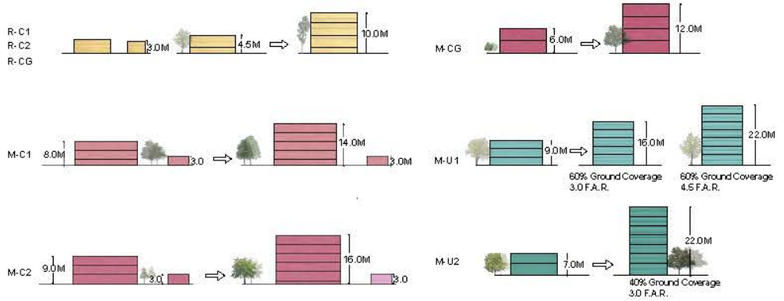
- There is a lot of potential around 45th street station. Mostly single family homes now.
- Westbrook Mall area is already rezoned for higher density, but currently sits largely undeveloped and is yet to live up to potential.
- 37th street was rezoned as part of the Main Street land use and policy changes. Most of the lots are yet to be redeveloped.
- Commercial zoned lots around edges and corners of sites, however many of the businesses don't offer walkable amenities for community members.
- Mixed-use land zoning, will bring commercial and residential options, however now there is very limited mixed-use developments in the community.
- Single-family zoning along edges can be rezoned to be slightly higher density to allow redevelopment along busier roads, which will in turn create investment in safer and more connected streets.

ANALYSIS

3.2 LAND-USE AND DENSIFICATION

3.2.3 BUILDING & LAND USE HEIGHTS

Building heights, size and density very between each land-use designation within the City of Calgary. The land-use bylaw numbers were found from Land Use District/Zones designations, while site identification was found from Land-Use bylaw maps. The GRW community has a number of different designations, which helps make the area a unique mature neighbourhood.



RC-1: Single-Detached Dwelling

Building Heights: 10m (8.6m + 1.5m of additions)
Parcel Coverage: 45%
Minimum Setback: 3.0m
Side Setback: 1.2m

RC-1s: Secondary/Backyard Suite

Building Heights: Backyard suites currently don't have height restrictions, just need to be transitional from neighbouring buildings (10m)
Parcel Coverage: No set number, just discretionary uses within building.
Minimum Setbacks: No numbers, discretionary uses.

RC-2: Two Dwelling District

Building Heights: 10m
Parcel Coverage: 50%
Minimum Setbacks: Front- 2m, Side- 1.2m, Back- 7.5m
Parcel Depth: 22m

MC-1: Multi-Residential: Low Profile

Building Heights: 14m
Minimum Setbacks: Front- 3m, Back- 1.2m
Density: 148 units per hectare

MC-2: Multi-Residential: Medium Profile

Building Heights: 16m
Max Floor Area Ratio: 2.5
Minimum Setbacks: Front- 3.0m, Back- 1.2m
Density: Set by each parcel.

MC-G: Town Housing

Building Heights: 12m
Minimum Setbacks: Front- 3m, Back- 1.2m
Density: 111 units per hectare

MU-1

Building Heights: 22m (in Rosscarrock) + 16m (in Glendale)
Minimum Parking: 0.75 stalls per unit, 0.1 visitor per unit
Minimum Setback: Balconies- 4.0m
Floor Area Ratio: 3.0m

MU-2

Building Heights: 46m
Minimum Setback: Back- 6.0m, Side- 3.0m,
Floor Area Ratio: 3.0

3.2.4 DENSITY

The 'Current Land Use' map shows how each of the three communities differ in terms of density and land-use. To calculate dwellings per hectare (d/h), the allowable d/h for each land-use was looked up. After calculating the total dwellings, it was then divided by the total area in hectare of each of the communities. In order to get the net density, which is a more accurate number, the green space, open space, schools, commercial and roads were removed. Finally, the potential density was calculated by looking at the zoning map and calculating the potential if the community was built up to meet the current zoning.

Glendale

Gross Density: 7.91 d/h
Net Density: 17.26 d/h
Potential Density: 21.71 d/h

Westgate

Gross Density: 11.23 d/h
Net Density: 22.30 d/h
Potential Density: 30.24 d/h

Rosscarrock

Gross Density: 13.71 d/h
Net Density: 36.10 d/h
Potential Density: 75.70 d/h

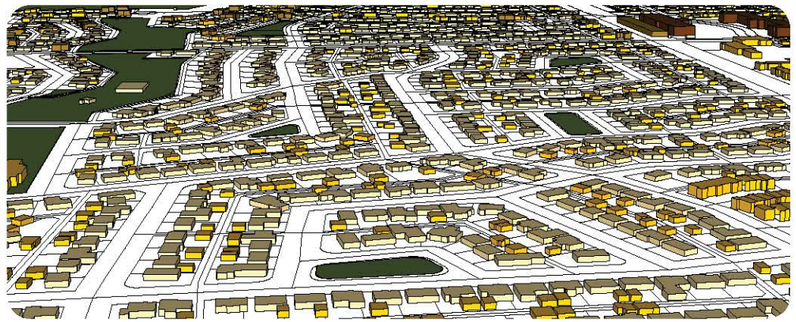
Comparing these results to the current land-use, the results are as expected with Glendale being the least dense, and the Rosscarrock being the most. One thing to note is how much potential growth Rosscarrock has, more than doubling it's current density per hectares. This increase will make Rosscarrock a medium-density neighbourhood, however Glendale and Westgate are still very low density. These areas can still densify to make them similar to the central neighbourhoods average.

3.2.5 FUTURE DENSITY & LAND USE CHANGES

Although GRW seems to be growing at a slow pace, and much of Westgate and Rosscarrock remains RC-1 land-use designation, the three communities are experiencing some density. RC-1s designation allows either a secondary suite or backyard suite within an RC-1 parcel. This land-use change is hard to be approved in Glendale, but slightly easier in Westgate and easiest in Rosscarrock. Adding secondary suites in specific locations will allow the area to intensify, and young professionals, older adults and many of the children will be able to live in the neighbourhood. On the map above, the blue parcels shows the registered secondary suites in GRW. There aren't many registered suites, however there are several illegal suites. Allowing more secondary suites, will ensure that all of these suites are safe and reliable and up to code.

The current zoning in the neighbourhood is not set-in-stone, and each parcel has the ability to be rezoned to a different designation. The red parcels on the map show the current rezoning applications. These applications can be anything from a new mixed-use building, to the addition of a backyard suite. Looking at this map, you see there is desire to redevelop the area. The majority of these changes are occurring in close proximity to major roads such as 17th ave and 37th street. Developing in these areas will have the least impact on the community character, and will still offer places to live for many residents wanting to stay in the neighbourhood. In addition, new commercial options will allow residents to be able to walk to grab some of their everyday goods, rather than having to drive to other communities in the area. Densification is slowly happening in these three communities, that is why EMC Planning Group has dedicated time and effort to create a plan for safe and smart growth for the future of the area.

3.2.6 3D MODELING



The GRW was developed in the 1960s. Since the creation of the suburb, there has been very slow growth and development. Although, this area is still considered to be in a central location and is connected to Downtown with an LRT, the neighbourhood still has much of the characteristics is had in its early years. The 3D model above was created to show how the current community looks from an aerial view. The model highlights that even though densification is slowly happening, that the heights are still respected throughout the communities. There are some exception, but almost all of these 4+ storey buildings are located along the edges of the communities along commuter roads. This 3D model was used to help make the physical model that was on display at the workshop and open house. The physical model allows residents to look and view their model and to better understand where the changes will occur and what is currently on the ground now.

ANALYSIS

3.3 DEMOGRAPHICS

Glendale, Rosscarrock, and Westgate represent a diverse subset of Calgary's population, owing mostly to the variety of people in Rosscarrock. With this diversity, our team had the opportunity to plan for a diversity of activities, ages, and opportunities.

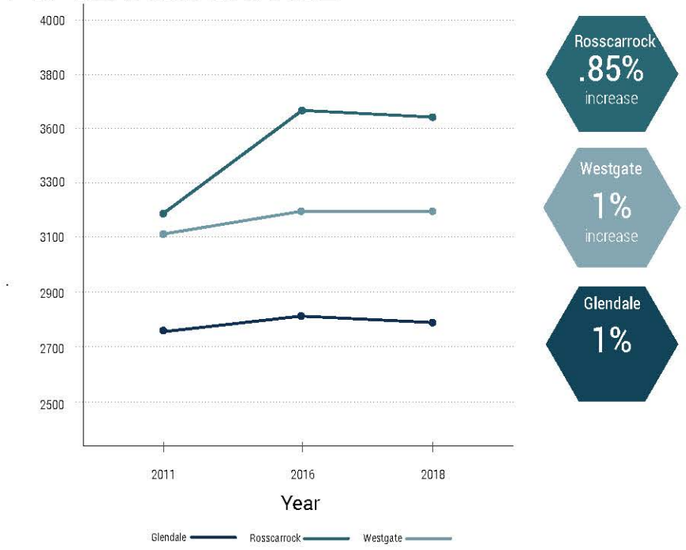
Observations

- All 3 communities experienced population growth from 2011 to 2016, however, in the last two years (1026-2018) all three experienced stagnant populations.
- The number of dwellings in all three communities has increased with the most significant increase occurring in Rosscarrock.
- The communities have a fairly young average population (39 in 2016)
- The communities also support a high percentage of households with children and a significant senior population (35% of households).
- Rosscarrock sees the highest number of immigrants, consistently higher than the City of Calgary average.
- All three communities rely heavily on single-occupant vehicle trips

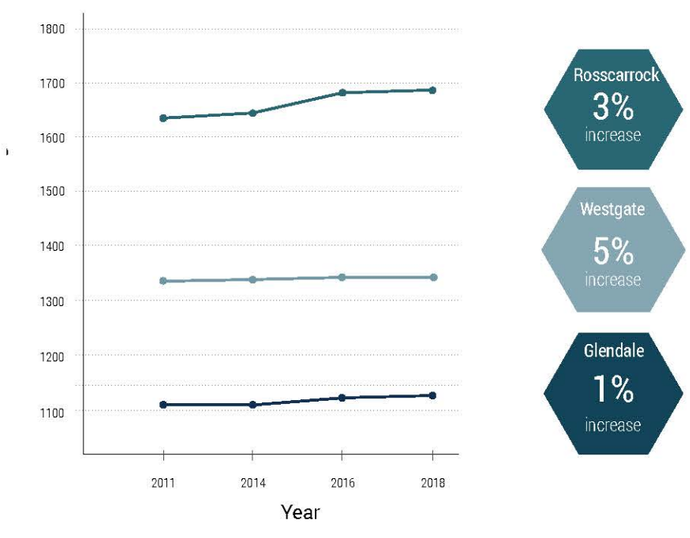
Opportunities

- Provide a diversity of housing options to support the diverse population
- Enhance open space system and public spaces to provide recreation for seniors and children near their homes.
- Improve public and active transportation infrastructure to encourage more trips by modes other than the single occupant vehicle.
- Increase commercial and mixed-use development in the area to stimulate economic growth and spur community development.

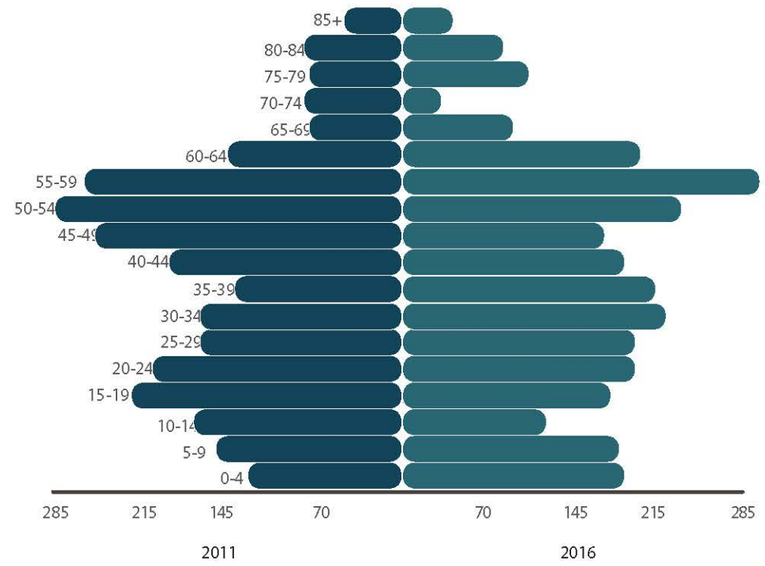
POPULATION CHANGE



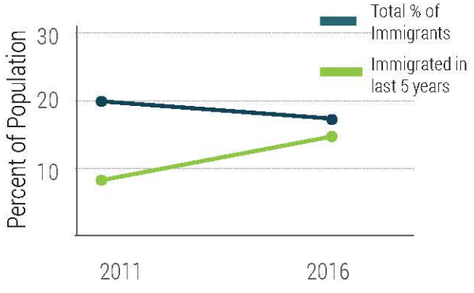
NUMBER OF DWELLINGS



GLENDALE DEMOGRAPHICS



Immigration



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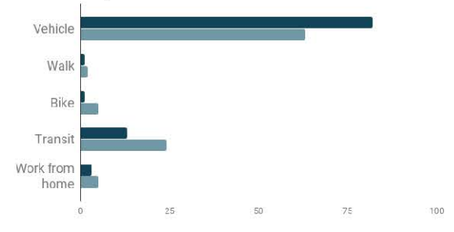
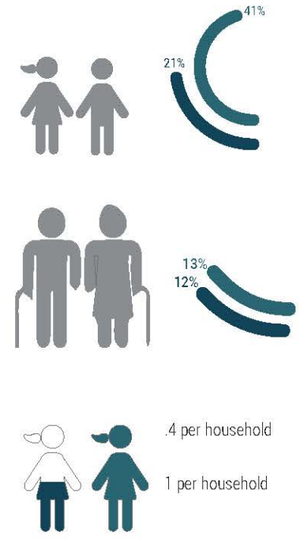
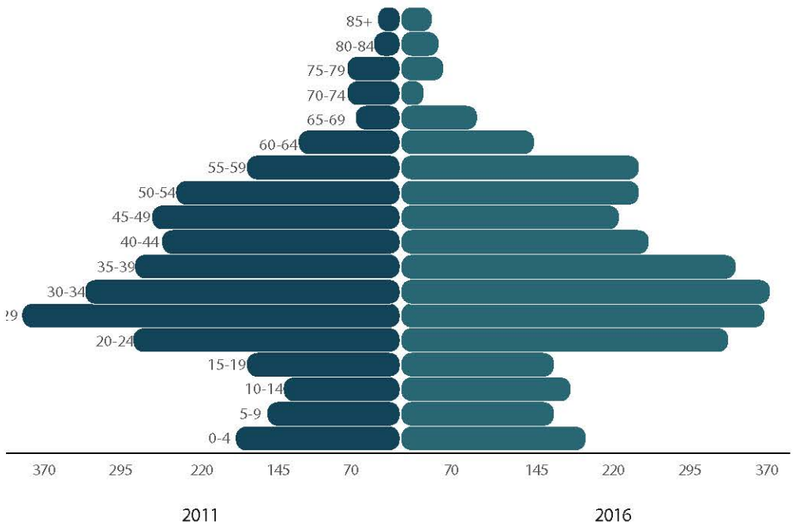


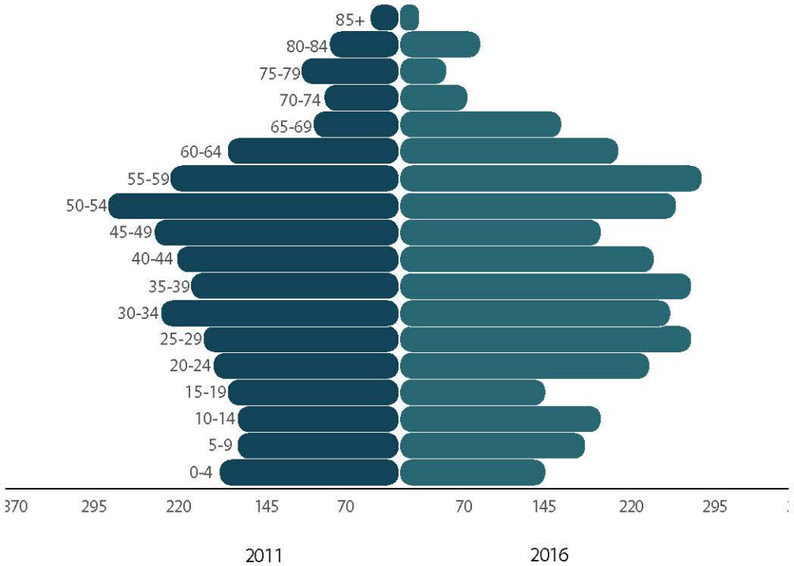
Children & Seniors



ROSSCARROCK DEMOGRAPHICS

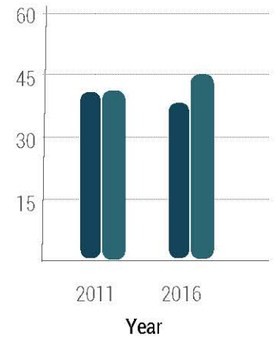


WESTGATE DEMOGRAPHICS

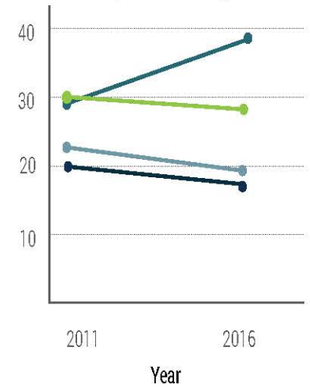


COMMUNITY SUMMARY

Average Age Groups



Average Immigration



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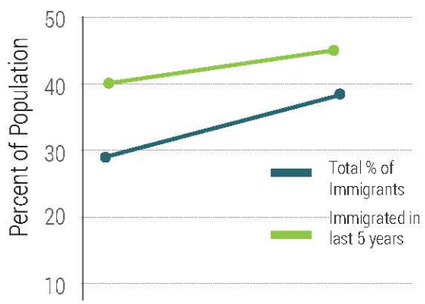
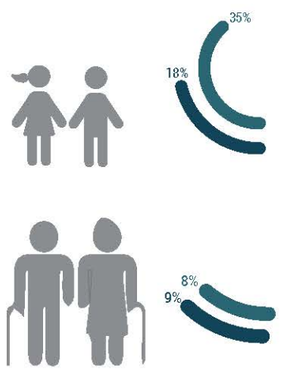


Children & Seniors



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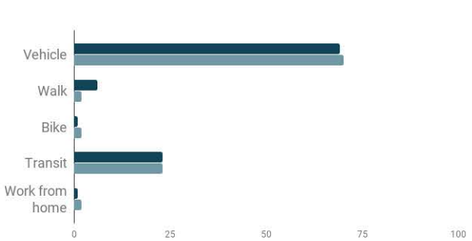
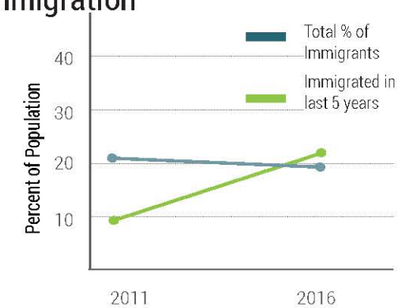
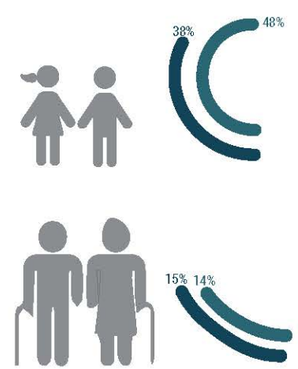


Immigration



Children & Seniors



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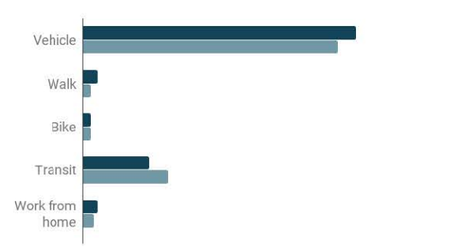
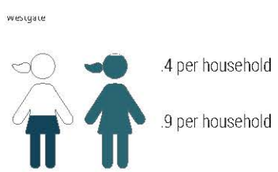




ANALYSIS

3.3 DEMOGRAPHICS

Income Statistics

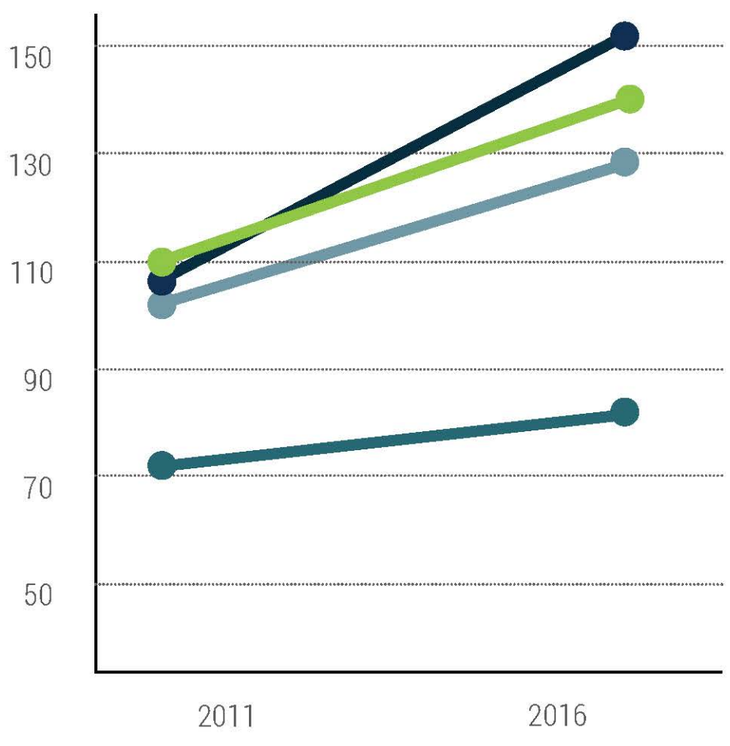
Observations

- Glendale has the highest average income and the increase in average household income has increased the most significantly of the three communities.
- Average Household Income in Rosscarrock is roughly half of that of Glendale, and 60,000 lower than the City of Calgary average.

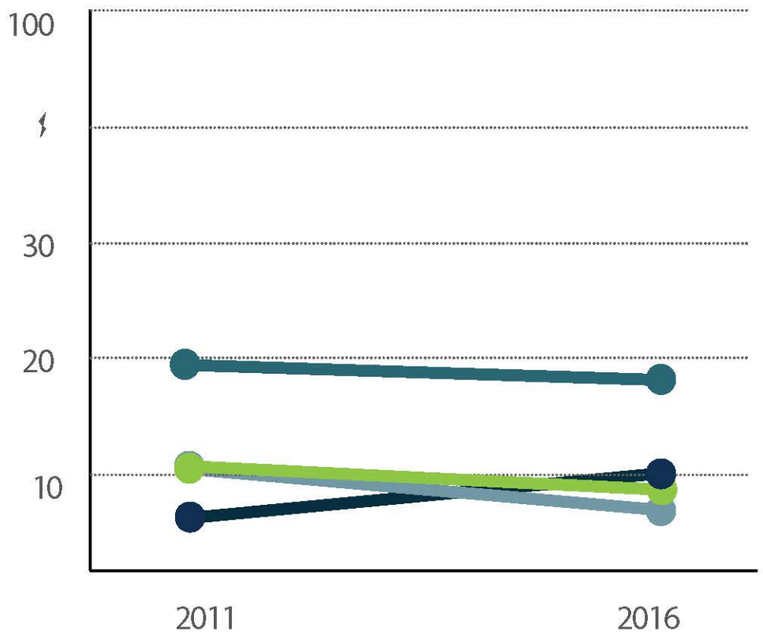
Opportunities

- Diversify housing options in all three communities to support to the diverse populations and incomes.
- Enhance commercial and mixed-use opportunities to capitalize on local spending

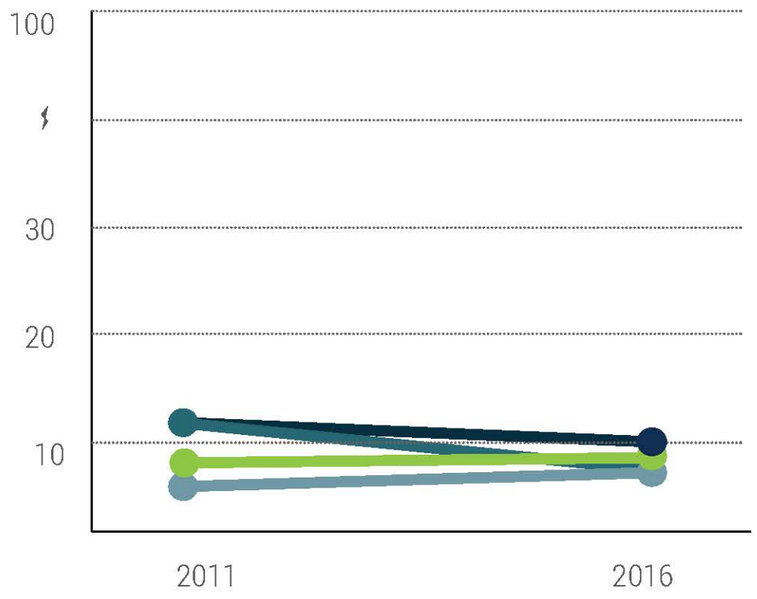
Household Income



Low-Income Percent



Low Income Seniors



House Price and Typology Distribution

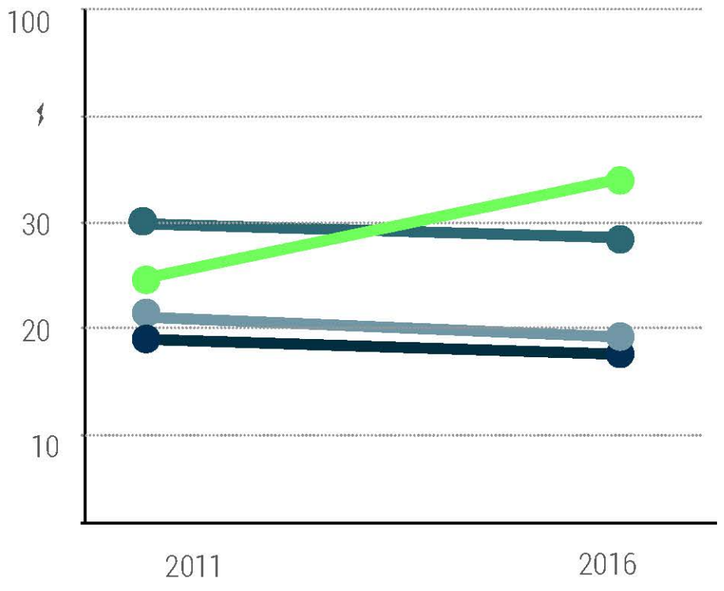
Observations

- Glendale has the highest home prices overall (average, longest and highest).
- Westgate has a similarly high highest house price but has the biggest range of prices from below $450, 000 to over $1 million.
- Rosscarrock and Westgate have similar average house prices, but Rosscarrock has a significantly lower lowest house price, indicating the variety of housing types in the area.

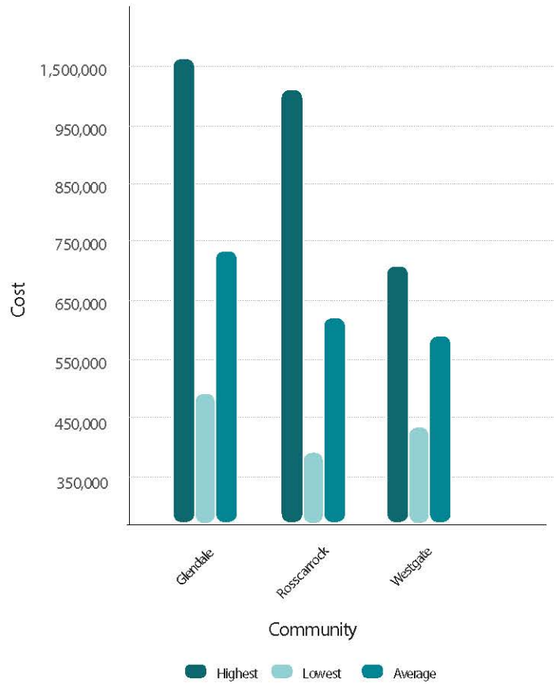
Opportunities

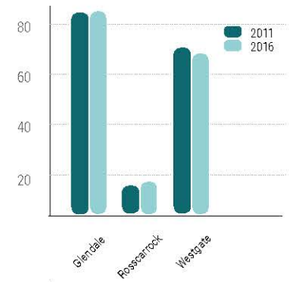
- All three communities can support a more diverse housing typology
- Improve affordable housing options

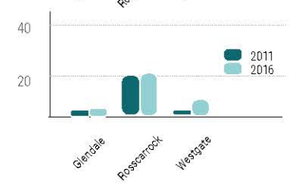
Percent Spending 30% on Housing

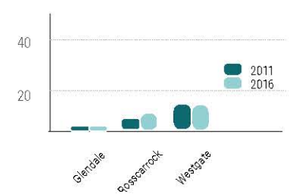


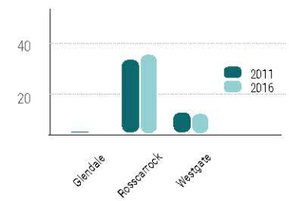
Average House Price

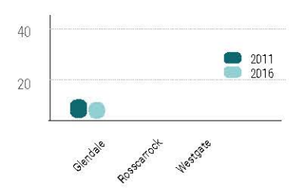


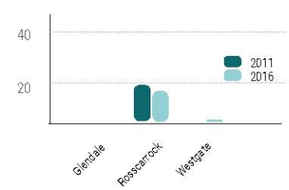






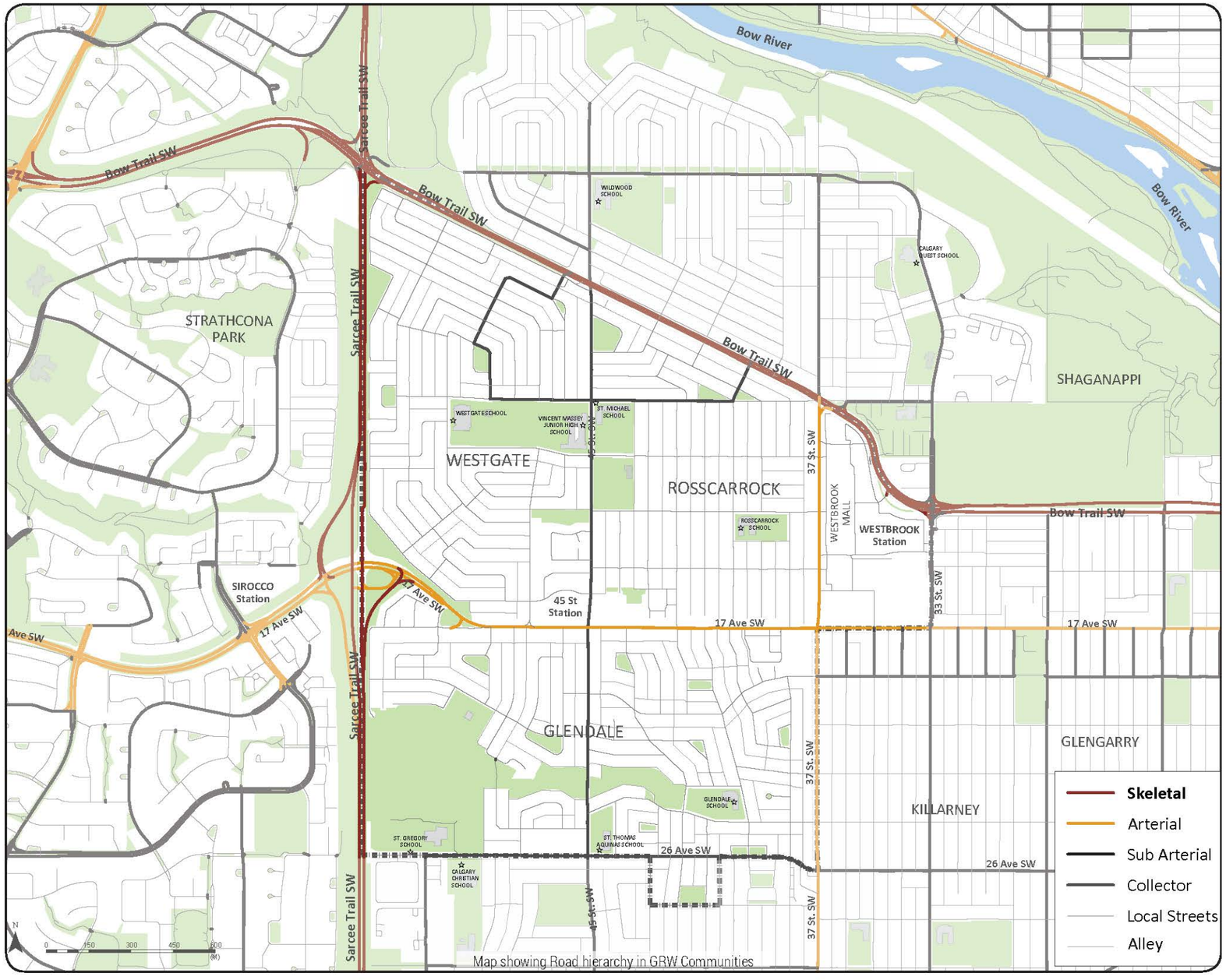






ANALYSIS

3.4 MOBILITY AND CONNECTIVITY



Map showing Road hierarchy in GRW Communities

3.4.1 ROAD HIERARCHY

"Roads are grouped according to the type of service they provide. The classification of roads supports in establishing road design features, land use planning policy, traffic density, mobility, safety and access requirements. A balance of all road types is needed to achieve mobility for all users." (City of Calgary, 2011)

The map, on the left shows the hierarchy of roads within the communities of Glendale, Rosscarrock and Westgate. Hierarchy analysis was done to measure the connectivity of the communities and to mark out the major stretches, where future development or densification may be possible.

Observations

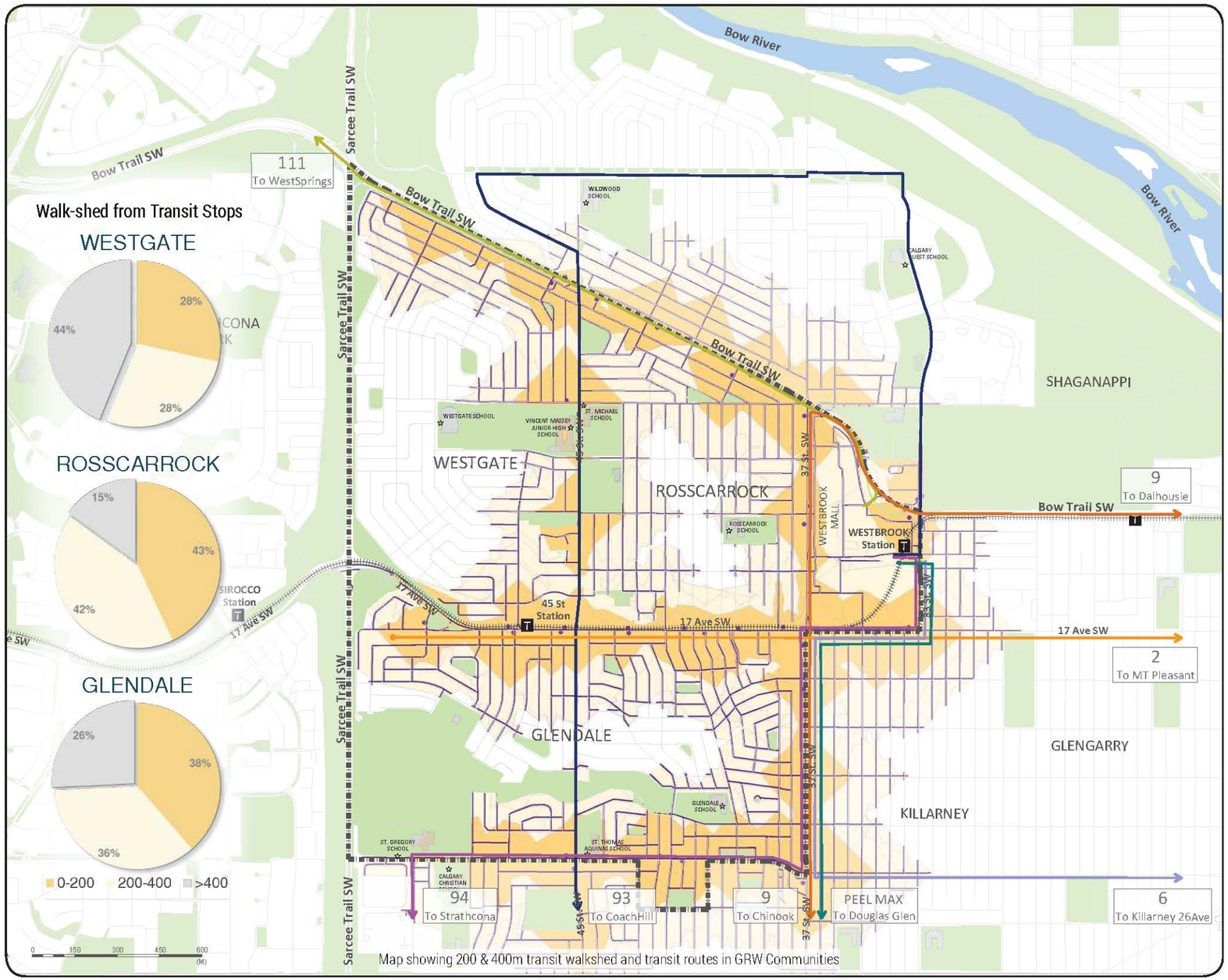
- GRW communities are well connected, with a 95.3 km of road length and 52.89 km per km² of road density.
- Site has 3.1 intersections per hectare of intersection density including alley and 2.1 intersections per hectare excluding alley, more intersection density depicts the degree of walkability.
- Site is well connected with Bow Trail and Sarcee Trail serving as skeletal and 17 Ave and 37 St serving as arterial.
- Site has 6 schools, and most of them are on the sub arterials.
- Site is being served by C-Train with 45th St Station and Westbrook station within site.

Opportunities

- With high road density and intersection density, there is an opportunity to increase walk score of the communities and make it more pedestrian friendly.
- Opportunity or densification and intensification along major skeletal and arterial roads.
- Opportunity to create more walkable streets and safe pedestrian crossings cross stretches near schools.
- Site has major potential for transit oriented development near major C-Train station and Bus Stops, 45th St Station and Westbrook Mall.

95.3 KM
ROAD LENGTH

52.89 km/km²
ROAD DENSITY



Map showing 200 & 400m transit walkshed and transit routes in GRW Communities

3.4.2 PUBLIC TRANSIT WALKSHED

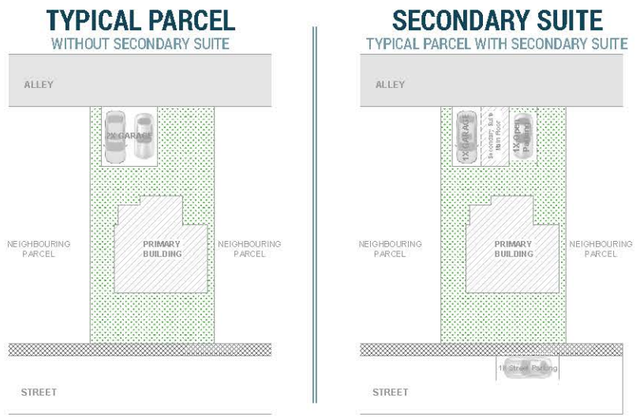
The transit walkshed is defined as the distance people will walk to a transit stop. 400m of walkshed from Bus stops and 600m walkshed from a C-Train station was laid in the GRW communities to find out the area's that are being under serviced.

Observations

- GRW Communities are being served by 8 bus routes and blue line of Calgary LRT.
- West part of westgate community doesn't fall under 400m walkshed area from a transit stop which accounts for 44% of area.
- 15% and 26% area of Rosscarrock and Glendale communities respectively are not being served by Public Transit within a 400m walkshed.

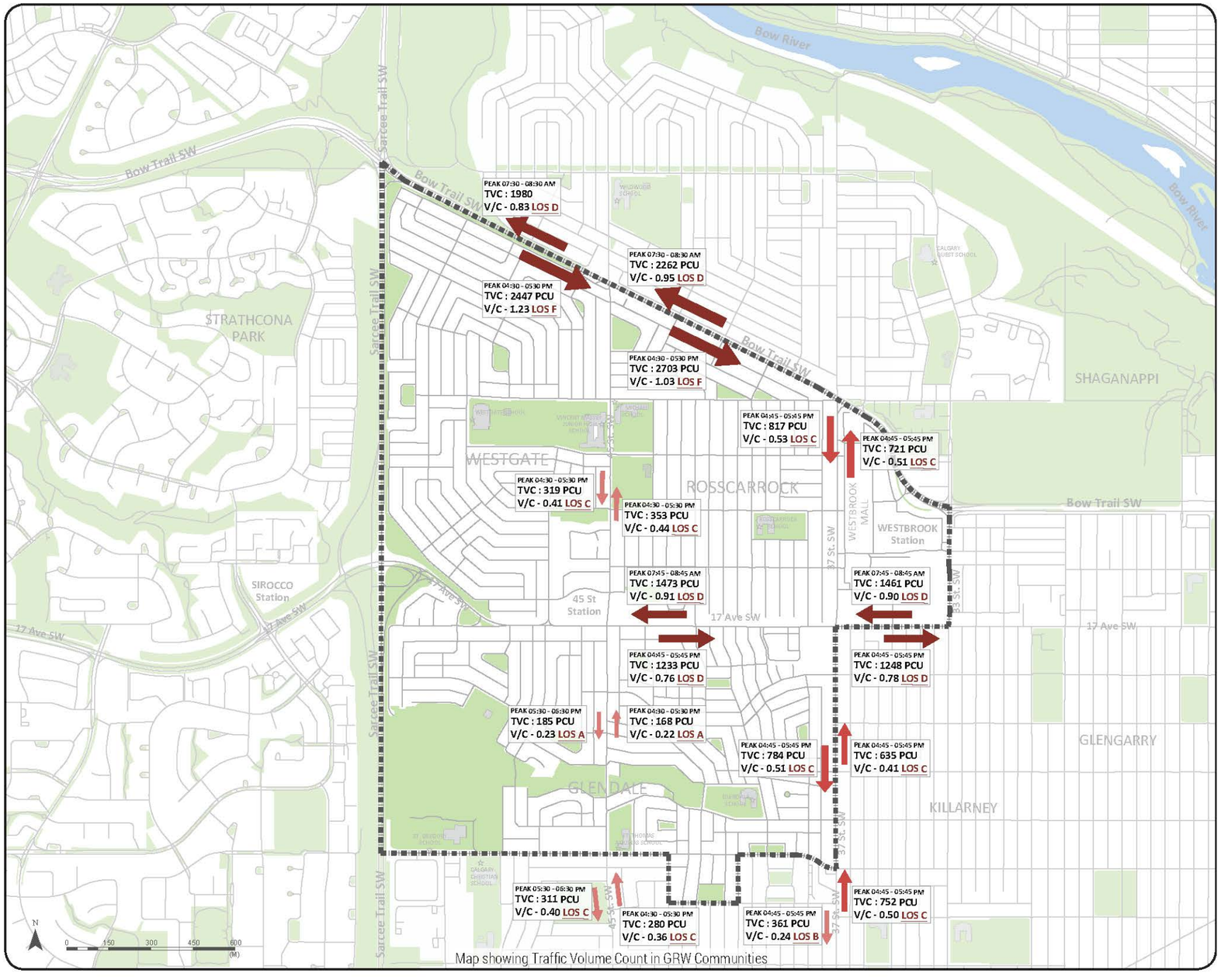
Opportunities

- 242 parcels are within 600m of walkshed area, from 45 St Station and can be retrofitted for an additional secondary suite.
- Opportunity for enhancing the existing Transit routes to increase catchment area.



ANALYSIS

3.4 MOBILITY AND CONNECTIVITY



Map showing Traffic Volume Count in GRW Communities

3.4.3 TRAFFIC VOLUME COUNT

Traffic Volume Data from the city of Calgary for 5 intersections: Bow trail & 45th St; Bow Trail and 37th St; 17th Ave & 45th St; 17th Ave & 37th St; and 26th Ave & 37th St. was analyzed to understand factors that form the basis of:

- Checking the efficiency/saturation of the road network by comparing current traffic volume with the calculated capacity or by identifying level of service
- Establishing the use of the road network by vehicles of different categories, traffic distribution, Passenger Car Unit (PCU)/vehicle value
- Need of median shifting, road widening, or need for signalized pedestrian crossing

Observations

- High traffic volume on Bow Trail, with Level of Service D for west bound traffic and Level of Service F for east bound traffic.
- Volume by Capacity ratio on 17th Ave and Bow trail is on its threshold level.
- 45th St, 37th St and 26th Ave are being served with a good Level of Service, C or less.
- High traffic volume on 17th Ave and Bow Trail, may be issue for pedestrian movement across these stretches.
- Signalized crossing on 45th St near schools is required, for a safe pedestrian movement
- Congestion issues on Bow Trail and 37 St intersection, because of high traffic volume.
- 45th St northbound traffic has high number of left turning vehicles on 45th St and 17th Ave intersection.

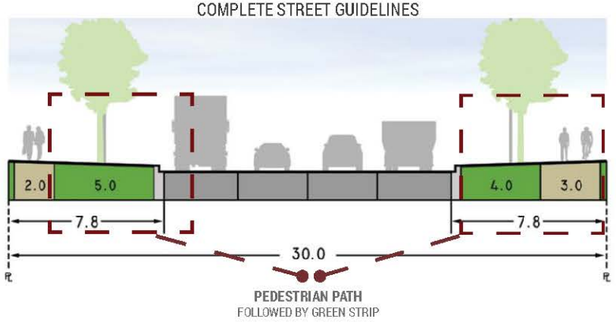
Opportunities

- Opportunity for cross-section improvement on Bow Trail, along with improvement in pedestrian crossings.
- Opportunity for cross-section improvement and improvement in pedestrian facilities on 17th Ave.
- Opportunity for improvement of pedestrian and biking infrastructure on 45th St, 37th St and 26th Ave.
- Need for safe pedestrian crossings on 45th St.
- Bow Trail and 45th St intersection improvement, for better pedestrian crossing.
- Opportunity for Bow trail and 37th St intersection improvement for ease of vehicular traffic flow along with safe pedestrian movement.
- 17th Ave and 45th St intersection improvement, for ease of vehicular traffic flow.

17 AVE SW

EXISTING CROSS-SECTION

COMPLETE STREET GUIDELINES

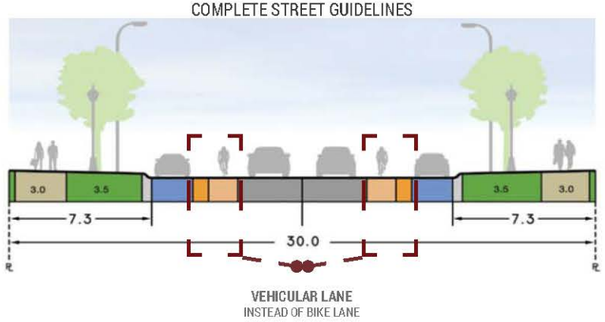


PEDESTRIAN PATH
FOLLOWED BY GREEN STRIP

37 ST SW

EXISTING CROSS-SECTION

COMPLETE STREET GUIDELINES

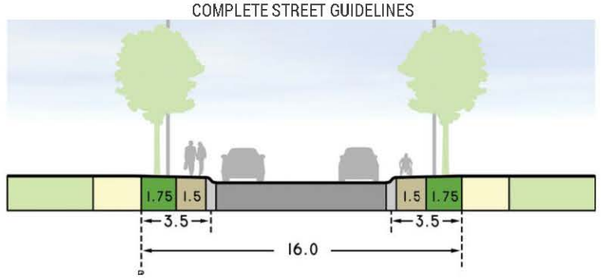


VEHICULAR LANE
INSTEAD OF BIKE LANE

45 ST SW

EXISTING CROSS-SECTION

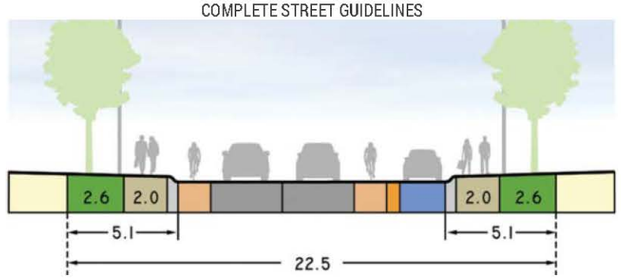
COMPLETE STREET GUIDELINES



26 AVE SW

EXISTING CROSS-SECTION

COMPLETE STREET GUIDELINES



3.4.4 CROSS-SECTION

Cross-section of all stretches was analyzed and compared with the complete street guidelines of city of Calgary. Complete Streets is a method to design streets that attempts to accommodate all transportation modes with walking, cycling & transit and driving. They support to create a more habitable neighbourhoods that inspire people to travel by foot, bicycle and transit. This can be achieved by improving pedestrian infrastructure along with improvement in accessibility for all road users. City of Calgary defines the following methods to achieve vision of complete streets.

- Refining accessibility and safety for all road users.
- Providing infrastructure for a variety of transportation choices.
- Providing aesthetically beautiful public spaces and streetscapes.
- Encourage economic well-being of both residents and businesses.

(Transportation Planning, Calgary 2011)

Cross-section analysis was done for 17 Ave, 26th Ave, 45th St & 37th St and was compared with complete street guidelines, to find out scope for improvement as per the complete street guidelines.

Observations

- At various points on 17th Ave, pedestrian path is right next to carriageway making it unsafe for pedestrians.
- 45th St is as per the complete street guidelines, pedestrian path on 45th St is right next to carriageway without any buffer for safety.
- Complete street guidelines suggest segregated bike paths for 30M ROW Arterial and sub-arterial, but there are shared bike-ways on 37st St.
- Complete street guidelines suggest segregated bike paths for 22.5M ROW collector, but there are shared bike-ways on 26st Ave.

Opportunities

- Opportunity for cross-sectional improvement on 17th Ave, by providing a green buffer after carriageway for safe pedestrian paths.
- Opportunity to improve cross-section on 37th St, by providing segregated bike path, as per complete street guidelines.
- 26th Ave can be improved by providing segregated bike paths and green buffer for safe pedestrian movement.
- 45th St can be improved by providing green buffer after carriageway for safe pedestrian movement.

ANALYSIS

3.4 MOBILITY AND CONNECTIVITY

3.4.5 INTERSECTION LOAD

An intersection is the area where two or more streets join or cross at-grade. Traffic Volume Count was analyzed on various intersections, along with the count of left turning and right turning vehicles on these intersections. Further, intersection load for these intersection was calculated. Intersections are a key feature of street design in various respects:

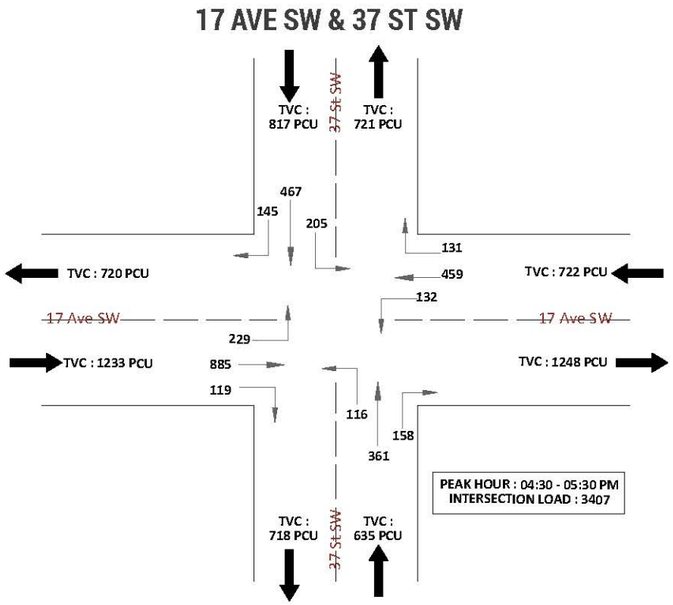
- Intersections are viewed as points of activity as the land near intersections often comprises of various travel destinations.
- Point of conflicting movements as pedestrian crossings & bicycle turning along with motor vehicle movements are usually intense at intersections.
- At intersections, movement of users is allocated by traffic control strategies and devices such as stop signs, yield signs, and traffic signals.
- In many cases, traffic control at intersections restricts the capacity of the intersecting streets, which can be defined as the total number of users that can be accommodated at an intersection in a given period of time.

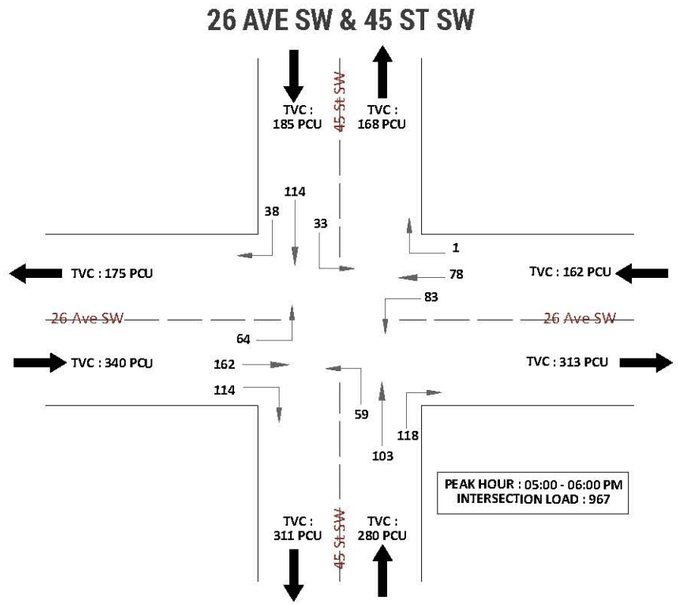
Observations

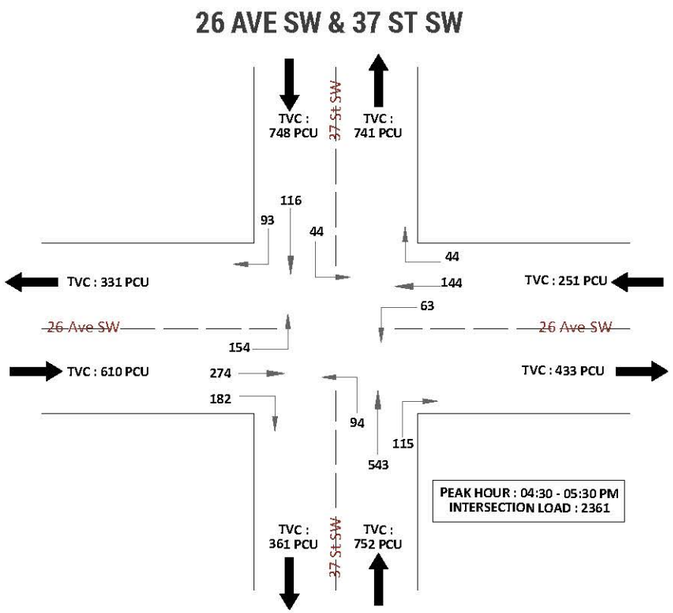
- High congestion on Bow Trail & 45th St intersection was observed, leading to issues in pedestrian crossing at intersection during peak hours.
- Bow Trail and 37th St intersection is a 5 arm intersection with 8th Ave accommodating inbound traffic only.
- High volume of left turning vehicles on 17th Ave and 45th St intersection during peak hour was observed.
- High Intersection load on Bow Trail and 37th St intersection, creating issue for pedestrian crossings.
- High Intersection load on 17th Ave and 45th St intersection, creating issue for pedestrian crossings.

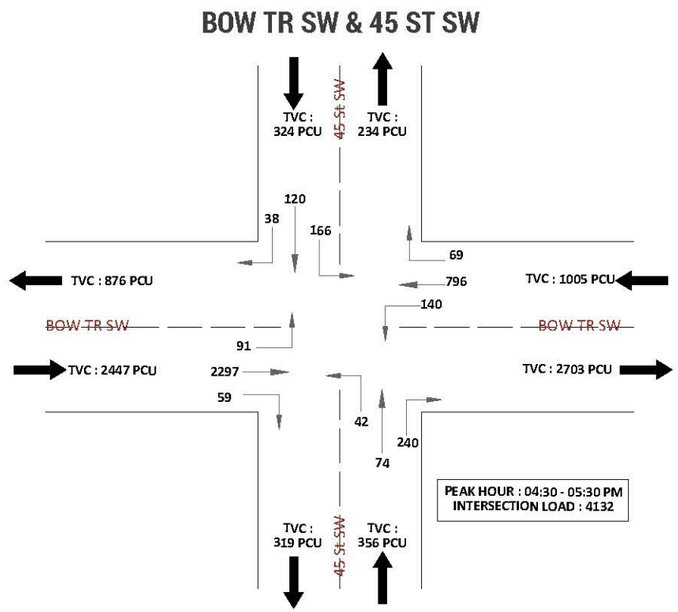
Opportunities

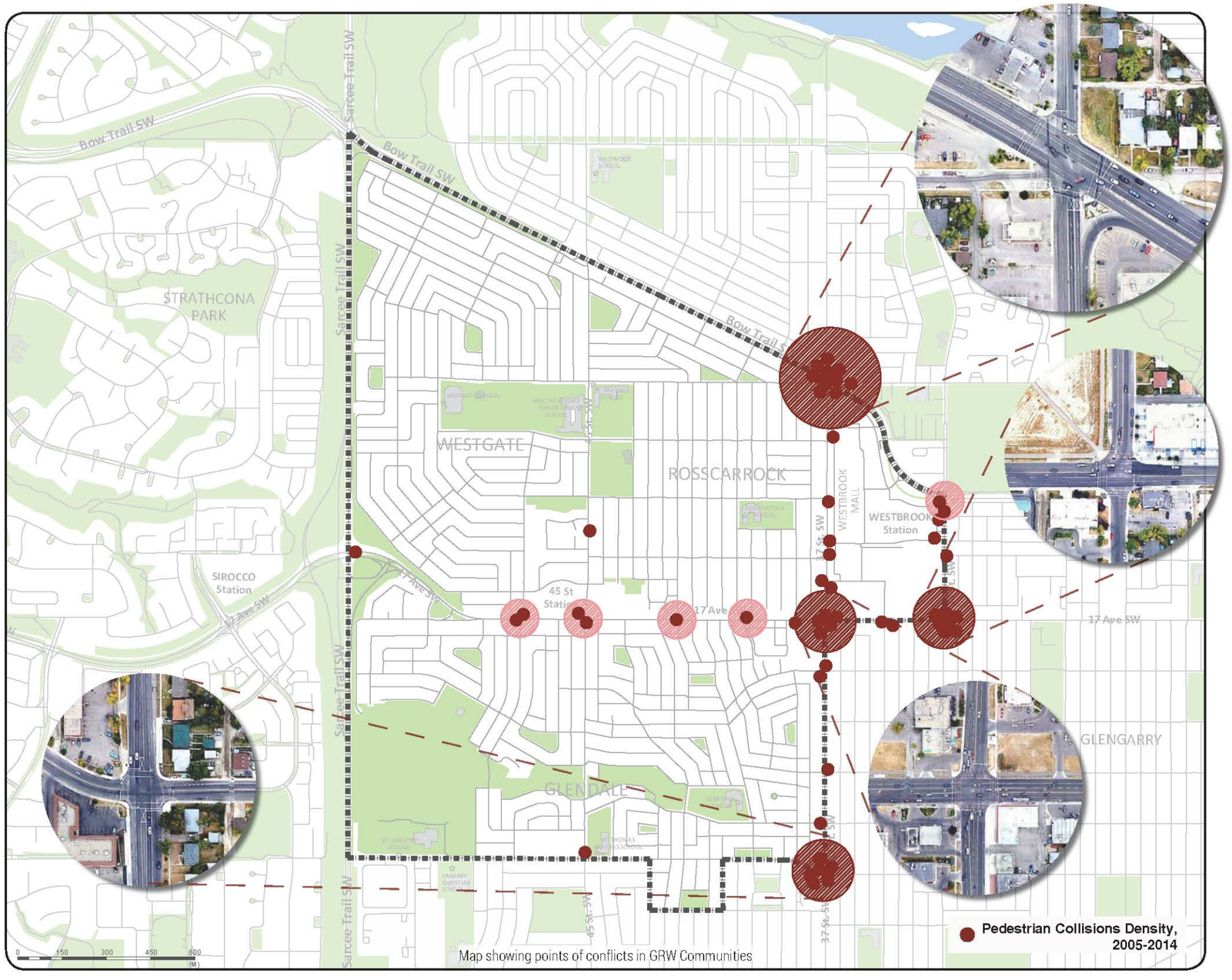
- Opportunity for intersection improvement at Bow Trail & 45th St. to ease the traffic movement and safe pedestrian crossing.
- Bow Trail and 37th St intersection can be improved as its a 5 arm intersection with 8th Ave accommodating only one-way traffic movement.
- 17th Ave and 45th St intersection has high volume of left turning vehicles, opportunity for intersection improvement by providing segregated lane for left turning vehicles to ease the traffic movement.











Map showing points of conflicts in GRW Communities

3.4.6 POINTS OF CONFLICT

Pedestrian Collision Density data from 2005 to 2014 from City of Calgary was overlaid with traffic volume data to analyze the points of conflicts. Further these points were observed to find out opportunities for improvements to ease the pedestrian and vehicular movement across the communities.

Shortcomings

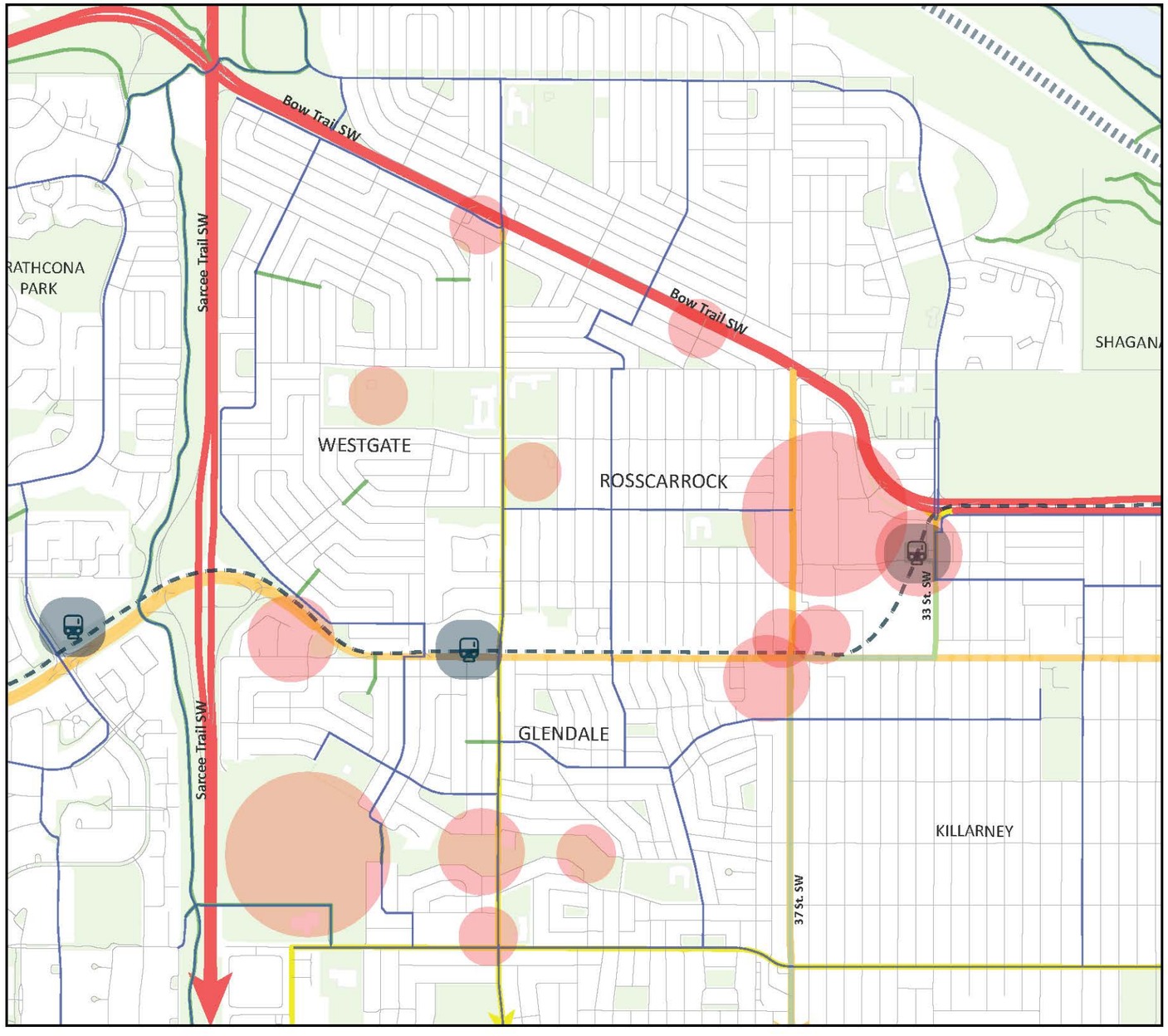
- Most pedestrian vehicular conflict density was observed on Bow Trail & 37th St intersection, probable reason being the odd 5-arm intersection design.
- 45th St needs improvement in pedestrian crossing infrastructure, because of school and playground zones.
- There are various points of conflicts on 17th ave, where pedestrian and vehicular collision density is high.
- Intersections along 17th Ave across 37th St and 33rd St need improvement for pedestrian crossings.
- Pedestrian crossing across 37th St near Westbrook mall need immediate improvement, because of high pedestrian collision density.
- 26th Ave and 37th St intersection witness high density of pedestrian vehicular collision, therefore opportunity for intersection improvement, for enhanced pedestrian crossing across intersection with raised crossings.
- 37th St witness for various pedestrian collisions, therefore opportunity for improvement of cross-section with some speed calming measure to make it safer and walkable for pedestrians.
- 45th St has potential for cross-section improvement, to enhance walkability across the stretch, with tight right turns and raised crossings.

TIGHT TURNS

RAISED CROSSINGS

ANALYSIS

3.5 FUNCTIONAL ANALYSIS



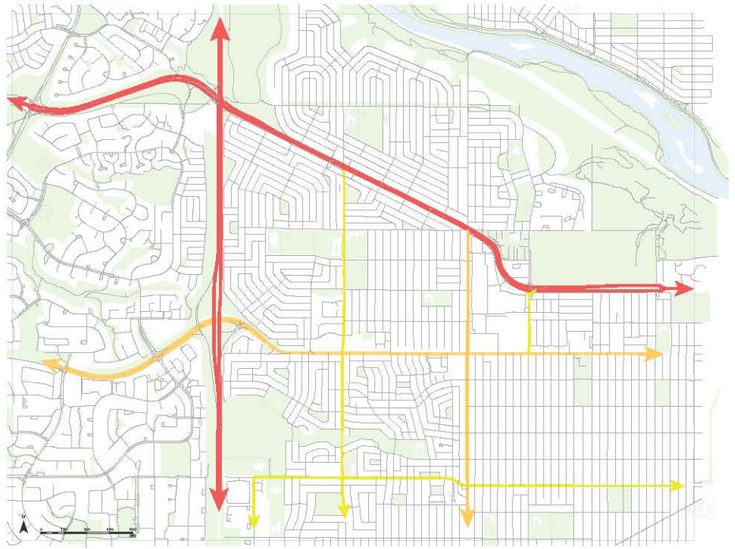
The functional analysis provides an overview of the site's opportunities at the analysis stage. The functional map informed the public engagement and subsequent processes in order to develop a comprehensive plan that addresses all elements holistically. Through the analysis process, we developed an understanding of how each element (land use, density, open space, public realm, connectivity, multi-modal transportation) will contribute to the complete community redevelopment. Moving forward, we have the analytical foundation to work with the community members to combine this analysis with their needs to develop concept design and policy to guide the evolution of the community.

Observations

- The community is well connected to the rest of Calgary through primary road networks and the West LRT.
- These networks support the major commercial in the area, but mainly through vehicular transport.
- The Parks and Open spaces could be better connected.
- There are significant amounts of land underutilized.

Opportunities

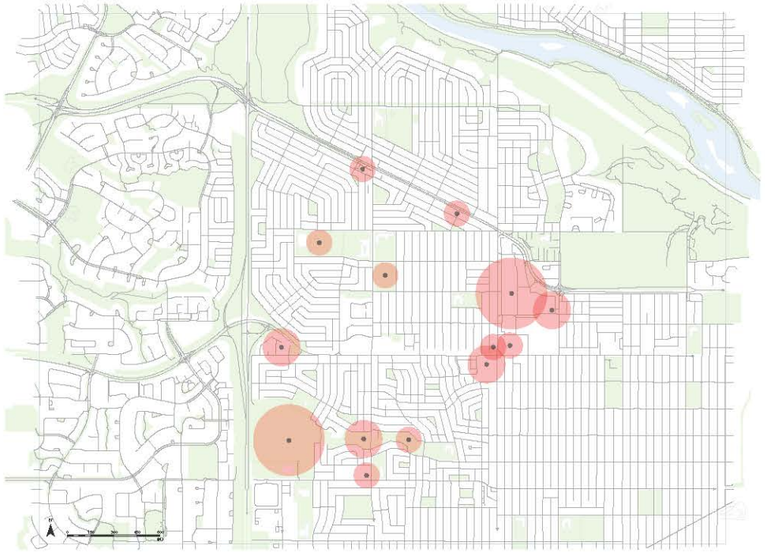
- Densify along major corridors (17th, 37th, and Bow Trail) to capitalize on the collocation of transportation, business, and nearby residences.
- Enhance pedestrian and bike connections through and to the community.
- Increase feeder connections to the LRT
- Add small-scale open space and parks to provide community gather spaces.



Skeletal Road

Arterial Road

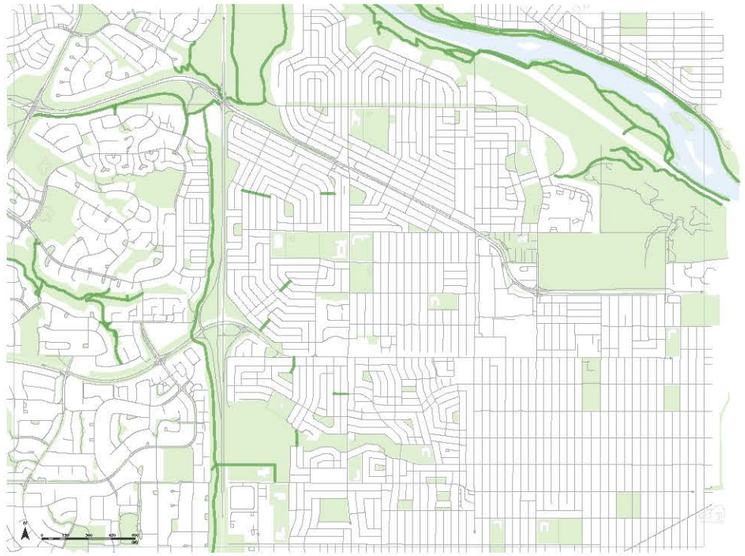
Collector Road



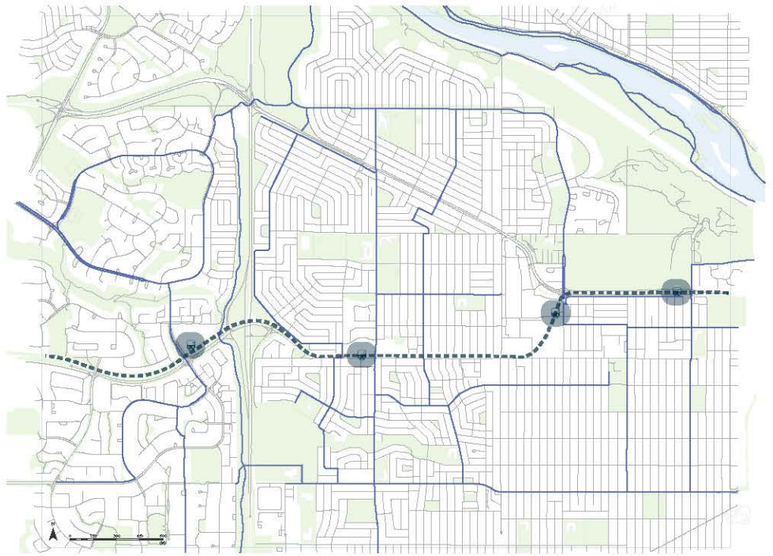
Neighbourhood Destination

Community Destination

Regional Destination



Regional and Neighbourhood Pathways



West LRT Line

LRT Station

PUBLIC ENGAGEMENT

PUBLIC ENGAGEMENT

4.1 COMMUNITY WORKSHOP

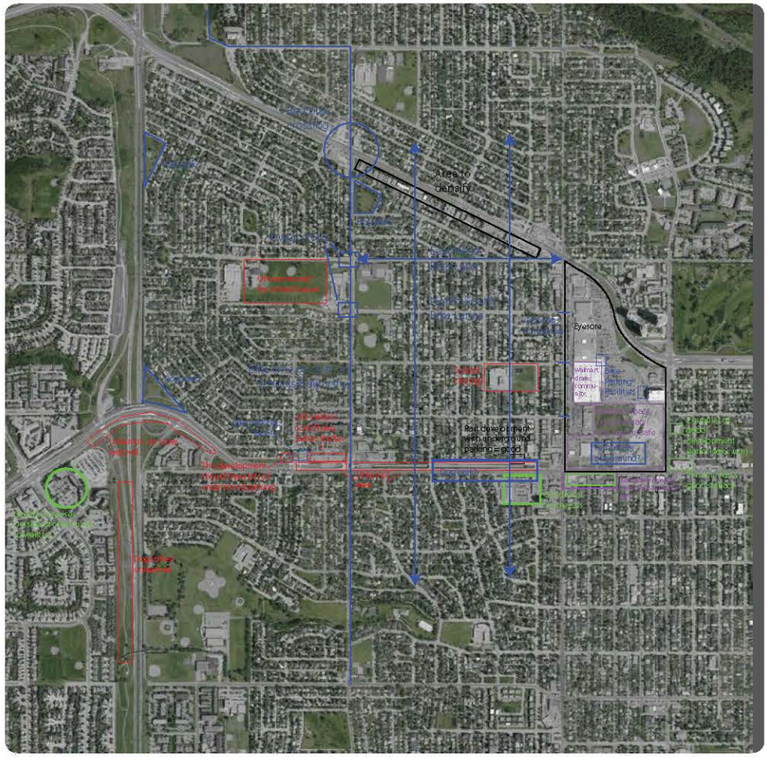
On Saturday March 2nd, 2019, the students from the EVDS Master of Planning program (EVDP 644) met with the residents of Glendale, Rosscarrock and Westgate at the Glendale Community Association. The workshop ran from 9:45am-12pmm and there was over 60 residents that attended. This allowed two students to be at six tables, with roughly ten residents at each table. From here large base maps were printed and a students went over both the challenges and the possibilities within the communities.

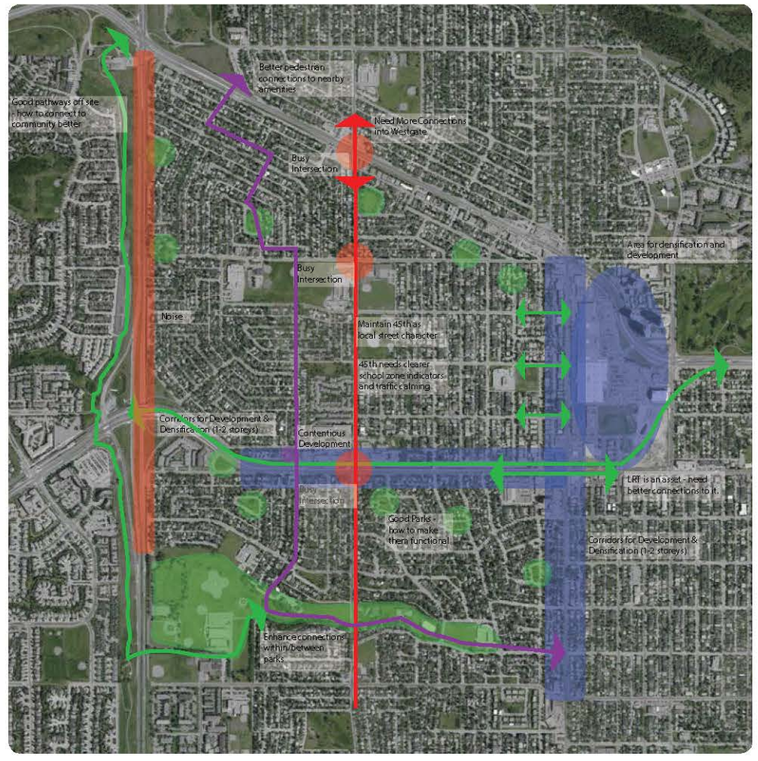
Today's Challenges

The tables began their discussion by talking about the current issues and constraints in the neighbourhood. Although, each table had somewhat different discussions many of the same topics of conversation arose. There are some major traffic concerns in the neighbourhood, and many people use the communities to cut through at high speeds to continue on their commute. There is also an issue with both idling, and speeding to pick up students from the schools that are located in all three schools. This causes issues for neighbours and residents both within their vehicles and as pedestrians. Creating a same environment along 45th was a main concern. There were also issues with Bow Trail and 17th Ave, both pedestrian crossings, and several streets where the left turns had issues. Residents were also concerned about how their communities were changing and wanted to set areas where development would occur. Many people wanted this to be located along the outer edges, to maintain character within the communities.

Future Possibilities

This line of questioning began by residents circling and explaining the most special areas within the neighbourhood. Although these were different across each table, parks and green space seemed to be the most consistent. Residents also described their neighbourhoods to be special because they have excellent neighbours. The conversation then shifted towards transportation. Many residents walk around the community for exercise, but not many walk to grab goods. Some walk to Westbrook Mall, and Sunterra Market in Signal Hill, but he majority drive to get their everyday goods. There wasn't too many people that bike, but some were happy about the connections to the Bow River trails through Edworthy Park. When the conversation shifted to future possibilities of development, the tables were split. Some residents didn't want any development because they thought their neighbourhood didn't need change and would be against all future opportunities. However, some residents were okay with it on the outer edges of the community. The same split came when asked about lane way homes or backyard suites. Many residents were against it, stating their concerns with privacy, building heights and modern designs not fitting into their communities. However, some residents were okay with these suites as long as the concerns were met appropriately. Overall, the discussions were very efficient and helped each group understand the needs and concerns of the residents and help guide the design.

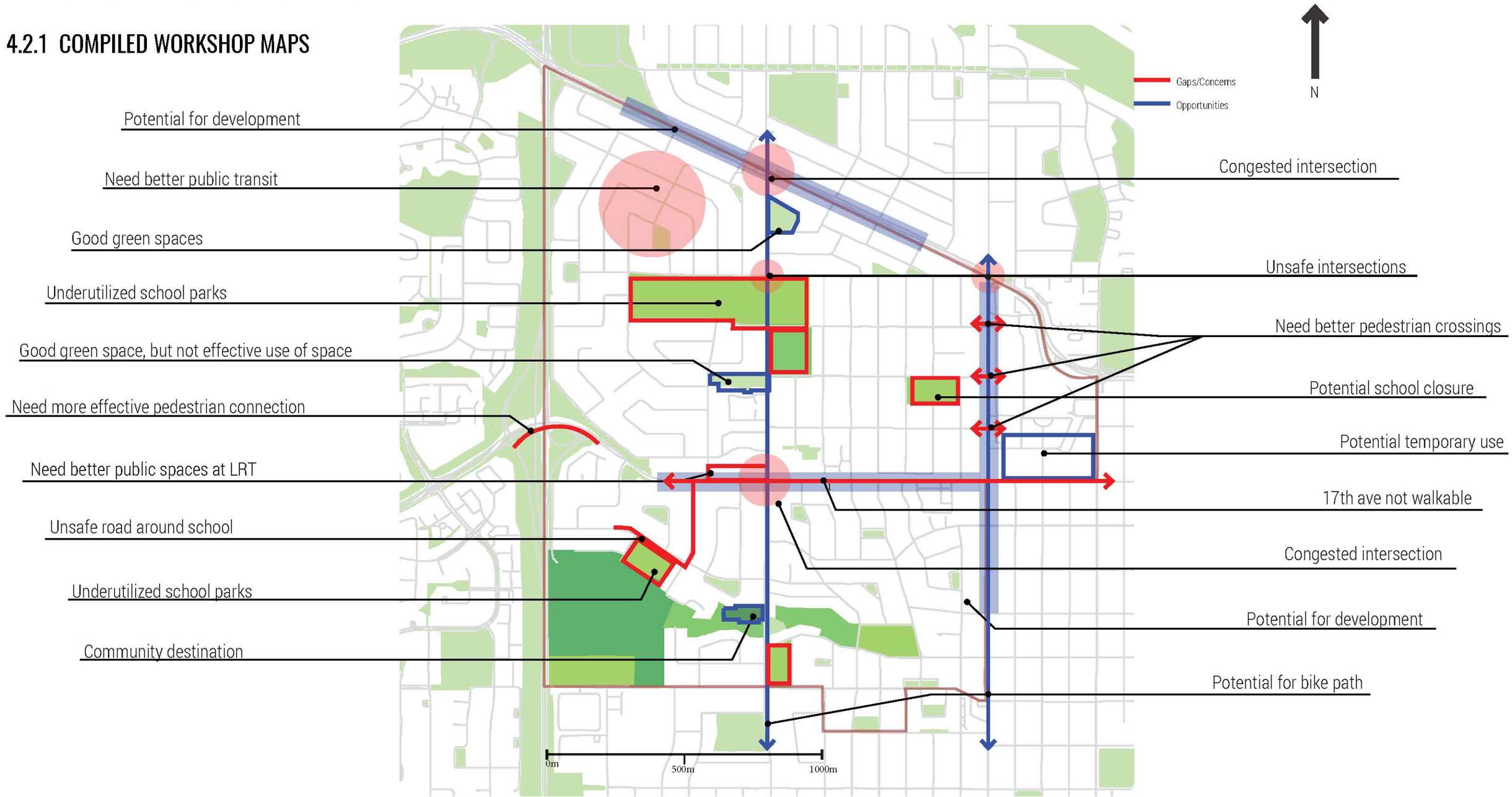




PUBLIC ENGAGEMENT

4.2 GAPS AND OPPORTUNITIES

4.2.1 COMPILED WORKSHOP MAPS



4.3 GUIDING PRINCIPLES

Following the March workshop, EMC Planning Group had some major takeaways, which tied into our three guiding principles. These guiding principles helped guide the analysis, and using the same three categories: Quality Community Environment, Active & Connected Living, and Community Growth & Development, these will help guide the design phase. Understanding the needs and concerns of the residents of Glendale, Rosscarrock, and Westgate, these three principles can come to life.

Quality Community Environment

Residents living in GRW communities all wrote down that the green space, both in their community and located near by was one of their favourite characteristics of the community. Living by these green spaces it helped create the identity of GRW. Although, we did hear and note that Rosscarrock doesn't have near the same amount of green space, the proximity to parks is still important and favourable. Even though there is a lot of green space, many of these 'pocket parks' and other green spaces weren't used as much as they used to by the community. This is because many of them have only one bench and not a lot them. Residents admitted some small changes would be important for the community, but adding too much would take away from their current charm. Recreational amenities were also important. Living close to the green networks in Edworthy Park, Shaganappi Golf Course, Optimist Athletic Park and Turtle Hill were all important to the residents. Although, these are great, there is still some underutilized spaces, such as the school fields and areas. These are used for students, but after school hours and weekends there isn't any major benefit to the community. When the community was ask about the street-scape, vegetation and trees were important. Planting street trees is important for both the environmental aspect, but also the appearance and pedestrian safety. After hearing from the residents in the workshop, our initial guiding principle of quality community environment became that much more important to EMC in achieving the needs and wants of the community.

Active & Connected Living

Connectivity and transit were brought up as one of the most important issues. The 45th street and Westbrook stations are there, but many residents don't use the LRT due to proximity issues or the lack of need to travel into Downtown. This was surprising to many of the students, but many of the residents drove into work or didn't have the need to travel in the direction. These same residents said that when the LRT came in 2012 this changed many of the bus routes they relied on to do everyday errands and activities. One area in particular is the NW corner of Westgate, this has had two separate changes effect public transit in the area. In addition to public transit, the need to create safe and reliable intersection and roads was important to people of all ages. Today, there are many intersections along Bow Trail, 17th Avenue, 45th Street and 37th Street that are unsafe for both pedestrians and cars. For pedestrians the sidewalks, are unprotected and narrow along 37th street and 17th Avenue, making walking very undesirable. Also, crossing Bow Trail is hard and dangerous. Parents don't want their kids walking North to school or practices, and drive them instead. Creating safe and reliable crossing was amongst the biggest concerns across all six tables.

The intersection are also currently not effective for drivers either. There are a handful of intersections notes on the previous map that make it almost impossible to turn left, due to the short left hand turn signal. It's easier for people to enter their community, that it is to leave, creating a lot of congestion on major commuter roads in the communities. Not many residents commuter to work by bike, but there were a handful of them who recreationally road bikes. Creating a safe crossing on Bow Trail was important for them to access the Bow River pathways. Also residents wanted a bike path or cycle track to connect to Glenmore Reservoir.

Community Growth & Development

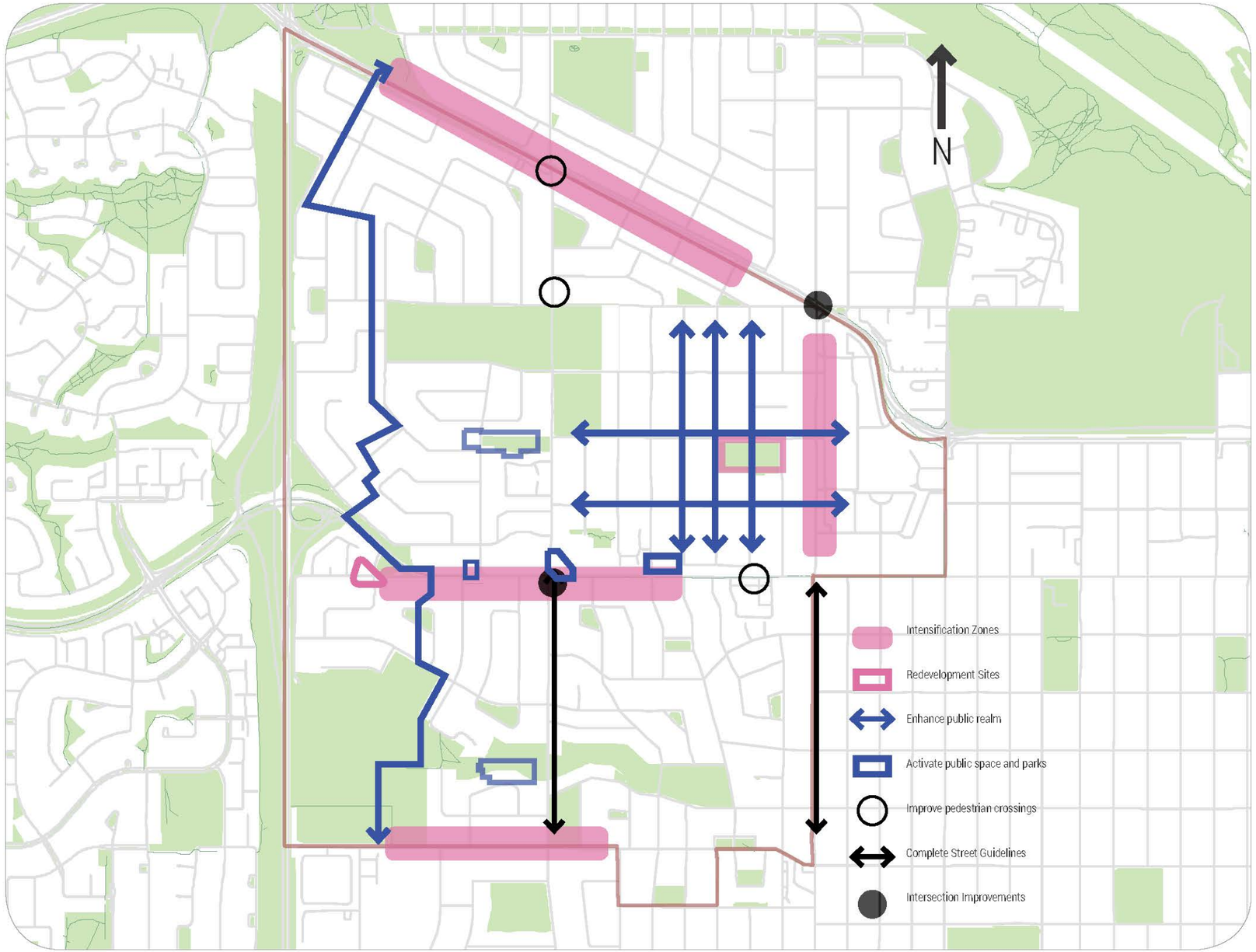
Community growth and development was the most split and controversial topic at all six tables. There were many residents that were very against development of any kinds, while some residents were okay with it in moderation. As development is occurring in the area, and a plan needs to be created, it was important for us to understand where development should occur. Residents expressed concerns about development, but also explained there is a lack of affordable and senior housing. The development that does occur has to be on the commuter roads, and height and parking have to be taken into consideration. Another concern was commercial options. Right now GRW, has Westbrook Mall, and a handful of commercial pockets scattered throughout the communities. However, many of these are unwalkable for many residents and the one's that are close don't offer everyday goods, but rather 'niche' commercial goods like paint shops or dry-cleaning businesses. Adding additional commercial, that could attract bakeries or coffee shops would give these residents walkable commercial options. Finally, with ROsscarrock school potentially closing the residents were extremely against the redevelopment of the site for higher density housing. The area is important to remain open because when the area does develop, the children need a school to attend. Community growth and development is important for us to both meet the needs of the community, while adding our professional opinions moving forward.

Our three guiding principles were thoughtfully created to guide our analysis and workshop results to create a design that meets the needs of the residents. EMC's knowledge and professionalism has stemmed from EVDS' wide range of topics and understandings. The plan that has been created took account of the residents' voices and concerns, while creating a plan for the communities to have for years following. The plan will help guide these communities through their future development, and can be used to show future developers in the area.

CONCEPT DESIGN & POLICY

CONCEPT DESIGN & POLICY

5.1 OVERVIEW



Following the analysis, EMC proposed design options and received feedback from community on how to move forward with the final design and policy for the Area Redevelopment Plan. The adjacent figure summarizes the major design intervention sites as aligned with the three guiding principles.

Community Growth & Development

The design interventions include land-use amendments to increase the diversity of uses and density in strategic areas throughout the community. The zones in pink are slated for intensification to capitalize on the major transportation corridors and create vibrant destinations within the community. There are several sites within the community for which we have proposed specific redevelopment opportunities to demonstrate the potential and suitability of this type of land-use throughout the community.

Quality Community Environment

The design interventions include opportunities to enhance pedestrian and bicycle connectivity, provide active parks, plazas, and community destination spaces, as well as how to enhance the pedestrian realm through green infrastructure. The interventions focus on enhancing the public realm to promote an engaged and vibrant community life and contribute to building a strong sense of place.

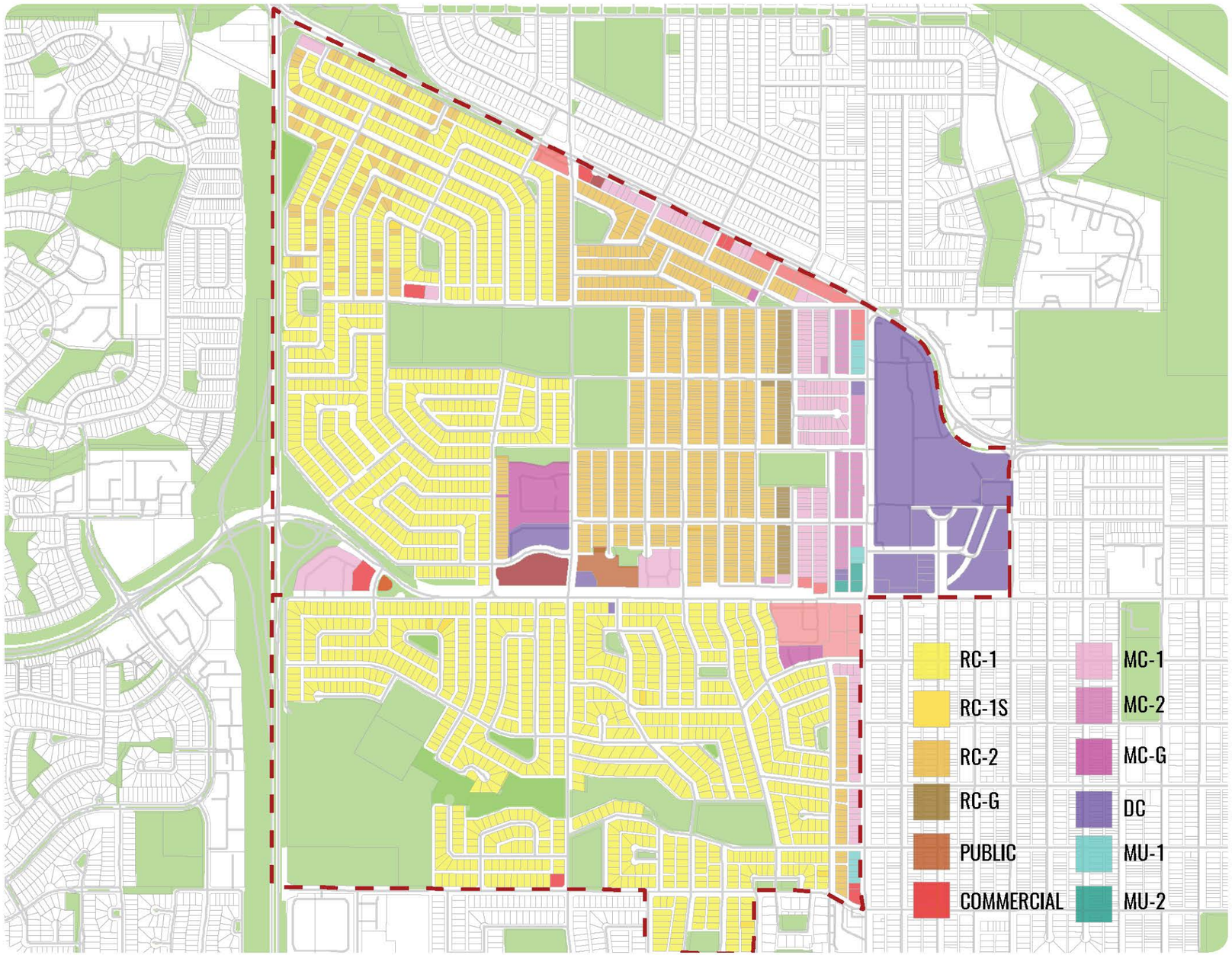
Active & Connected Living

The design interventions promote active transportation options that are safe and accessible to connect people within the community and to nearby amenities. The bike and pedestrian infrastructure focuses on innovative crosswalk strategies, separated bike lanes along major routes, and on enhancing safety. The vehicular solutions focus on creating more efficient transportation networks and connections into and out of the community through simple interventions. The opportunities for transit-supportive infrastructure include a new bus loop and direct routes to encourage use of the public transportation and better connect people to the LRT.

All design interventions are elaborated on in the following section to provide visual and policy recommendations.

CONCEPT DESIGN & POLICY

5.2 COMMUNITY GROWTH AND DEVELOPMENT



5.2.1 CURRENT ZONING MAP

Overview

Several land use changes are proposed in the GRW communities. These changes were done from both resident feedback at the workshop and the professional opinion of EMC Planning Group. The majority of changes occurred in areas are LRT stations (45th & Westbrook stations). Westbrook Mall is currently owned by Matco Developments, so there has been no changes on the site and it remains as a Direct Control. However, the currently zoned Rosscarrock and the East-West density gradient has been maintained. The updated plan has highlighted the 45th street station as the area of major change. Currently the station has all RC-1 surrounding it, so this was changed to MU-1 in sites surrounding, with MC-1, RC-G and R-C1s gradually decreasing in heights and density. This will help create a transit-oriented development (T.O.D.) 'Village'. The mixed-use will bring a wide-variety of businesses in close proximity to both the current and new residents of the GRW regions. Bow Trail, 37th street, and 26th ave also saw some increases in density. This will allow densification to happen on the outer edges, while maintaining the character of the neighbourhood. This was noted as one of the most important things for residents in the workshop, and there opinions were heard. In the two or three blocks behind these three streets RC-1s was added to help smooth out the densification gradient. Finally, commercial was taken in to account. Residents explained the lack of goods and services within a reasonable walking distance. In addition to the mixed-use buildings, two commercial nodes were created one in Westgate and one for NW Glendale (in SW Westgate). These will give GRW residents commercial businesses at a reasonable distance, which in turn will limit the reliance of cars. All of these land use changes were done to help the GRW communities grow in a healthy manner.

Objectives

- To create transit-oriented development surrounding the West LRT stations of 45th street and Westbrook.
- Adding density increases along commuter roads to maintain RC-1 in center of communities.
- Addition of commercial nodes to increase walkable services for GRW residents.
- Increasing housing options for GRW residents
- The creation of new RC-1s areas to help bridge density changes leading into RC-1 areas.
- The increase of ridership at 45th street station LRT.
- The adoption of the 37th street SW Street-scape Master Plan.

5.2.2 PROPOSED ZONING CHANGES

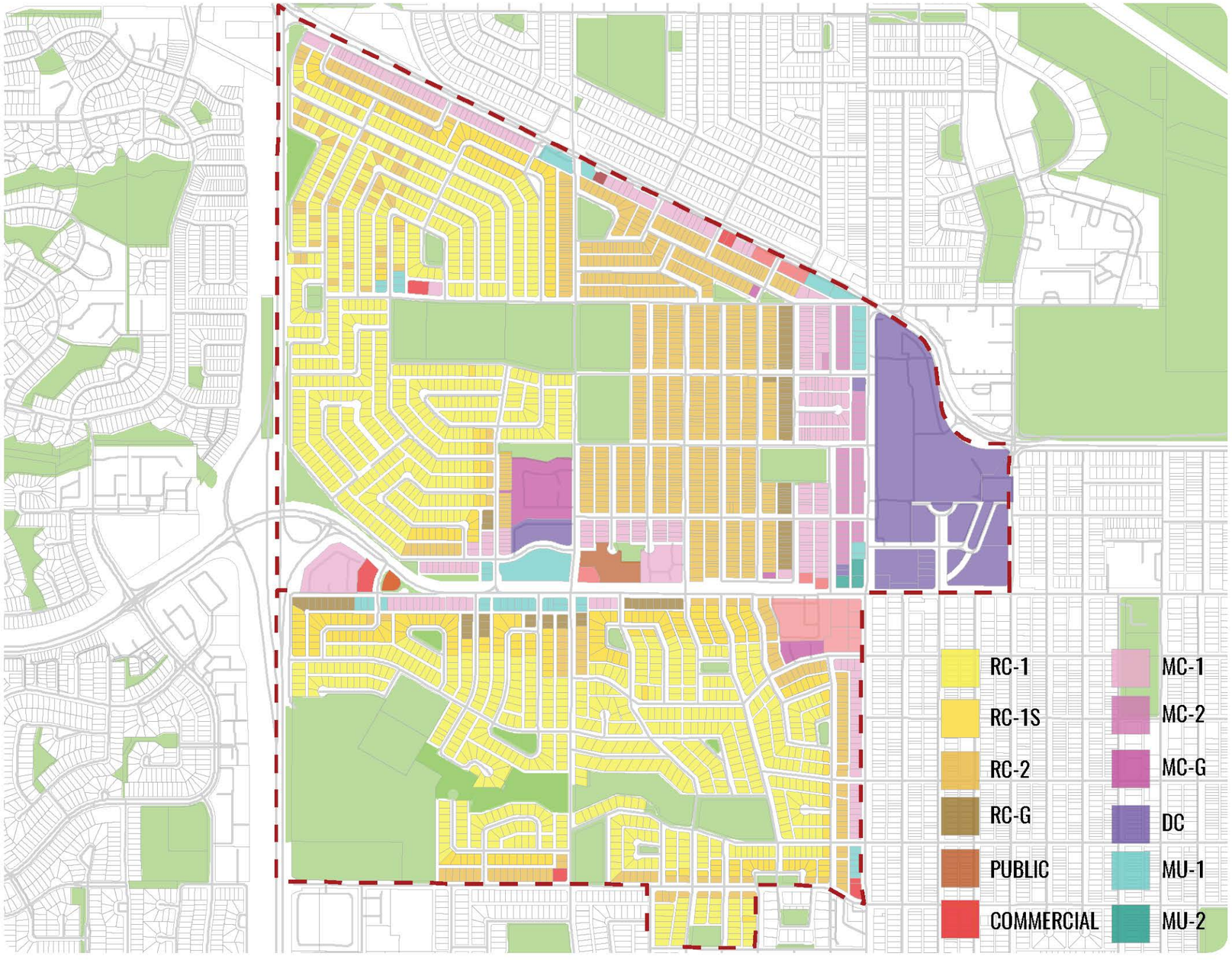
Policies

Residential Areas

- Residential areas land use designations are shown on 'Purposed Zoning Changes' map.
- Support single-family developments in R-C1 and R-C1s which is to retain current character of neighbourhood
- No new single-detached houses are to be built in MC-1, MC-2, MC-G, MU-1 or MU-2 zoned areas.
- Parking areas detached from buildings are not permitted.
- Building heights are to follow land-use bylaw and 'Proposed Building Heights Map'.
- Public improvements may be required with higher-density redevelopment proposals in GRW areas.

Mixed-Use Developments & Commercial

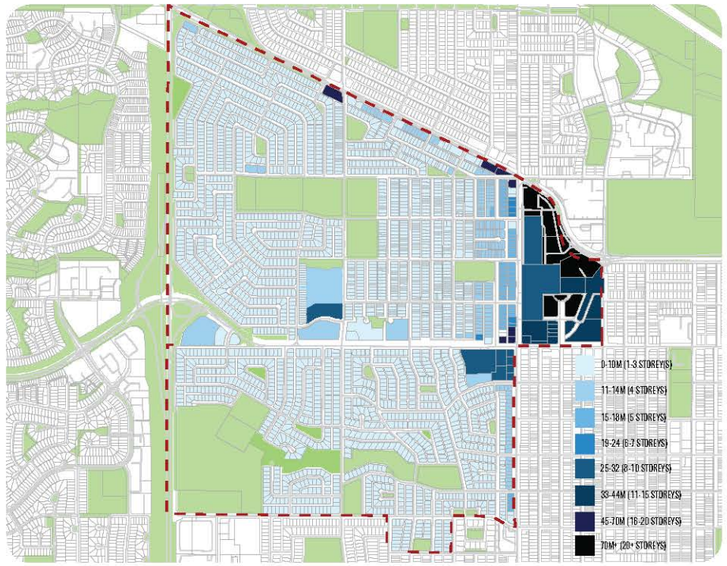
- Building heights are to follow land-use bylaw and 'Proposed Building Heights Map'. MU-1 and MU-2 have specific heights show beside 'h'.
- Maximum density shall follow the land-use bylaw and the permitted F.A.R.
- Automobile-oriented businesses are not permitted.
- Commercial businesses that don't require common pedestrian access should be located above the first storey.
- All residential units shall be above the first storey.
- Setbacks should be 3.0m to encourage street access.
- All buildings shall be able to accommodate people with all ranges of mobility.
- All entrances shall face the street and public sidewalks.
- Green-roofing and rooftop gardens are encouraged.



CONCEPT DESIGN & POLICY

5.2 COMMUNITY GROWTH AND DEVELOPMENT

5.2.3 CURRENT MAXIMUM HEIGHTS



5.2.4 PROPOSED MAXIMUM HEIGHTS

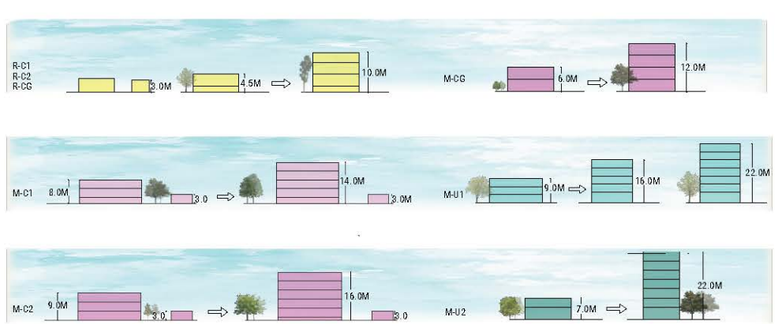
Overview

'Current Maximum Heights' shows that although there are areas currently with higher density in Rosscarrock, the heights aren't currently higher except near Westbrook Mall. Matco has zoning predesignated the site into a number of different Direct Control's. This has created situation where the heights along Bow Trail are the highest, but they gradually get shorter towards 17th Ave and the south portion of 33th st SW. The current zoning map has the heights gradually getting shorter heading West into the community. There are a few pockets of higher density along 17th ave, 37th st, and Bow Trail.

After attending the workshop and our reviewing our analysis, we understand that residents were most concerned about heights. They wanted their privacy to be met and didn't want extreme heights outside of Westbrook Mall area. Our plan didn't drastically change the currently zoned Rosscarrock. There are some pockets where MU-1 was on one street, so we changed the other side to meet that. The same goes for Bow Trail, we rezoned it to be MU-1 4 storeys (11-4m). Residents were generally okay with densification along boundaries. We created a gradient moving down into the community. This will create a transition into low-density housing and the needs and requests will be met. 45th street station and 17th avenue was also changed. Adding density around the 45th street station will have the least impact on the surrounding neighbours, because there are already MC-G and DC sites in the area with more height and densification. The zoning re-designation looks to respect the wishes of the community, while improving the current lack of transit oriented development in GRW.

Objectives

- Encourage a wide-variety of density and heights in GRW plan area.
- Transitioning into low-density is taken into consideration.
- Maintain and respect current RC-1, RC-1s, RC-2, and RC-G 10m high maximum in neighbourhood centers

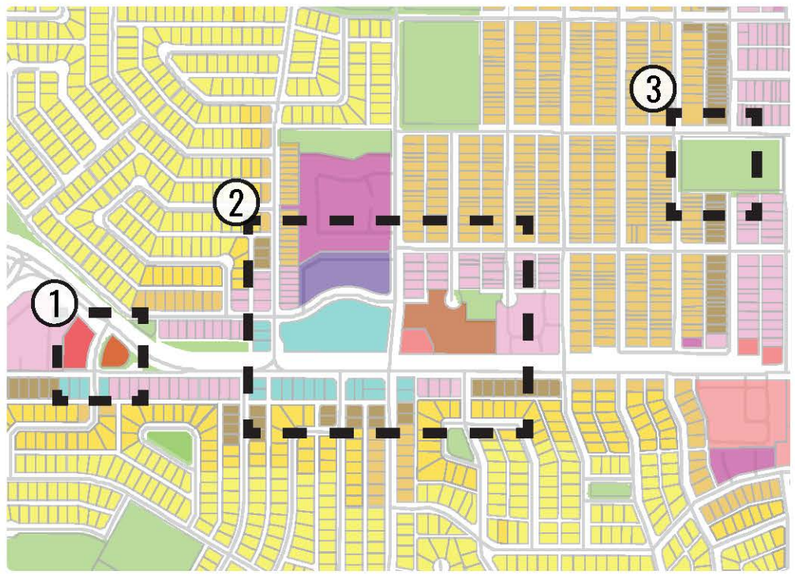


Policies

- Buildings with heights taller than 14m need to perform shadow studies to ensure low-density housing isn't greatly effected.
- New developments should be tallest near LRT stations.
- New developments taller than 14 should not be considered beside existing RC-1, RC-1s or R-C2 housing.
- New developments (outside of RC-1, RC-1s, RC-2 and RC-G), should be at least 2 storeys tall.
- Buildings over 14m tall should consider setback to eliminate massing over public realm.

5.2.5 THREE SITE NODES

1. SW Westgate Commercial node
2. 45th street station T.O.D..
3. Rosscarrock School retrofit



SITE 1: SW WESTGATE COMMERCIAL NODE

Overview

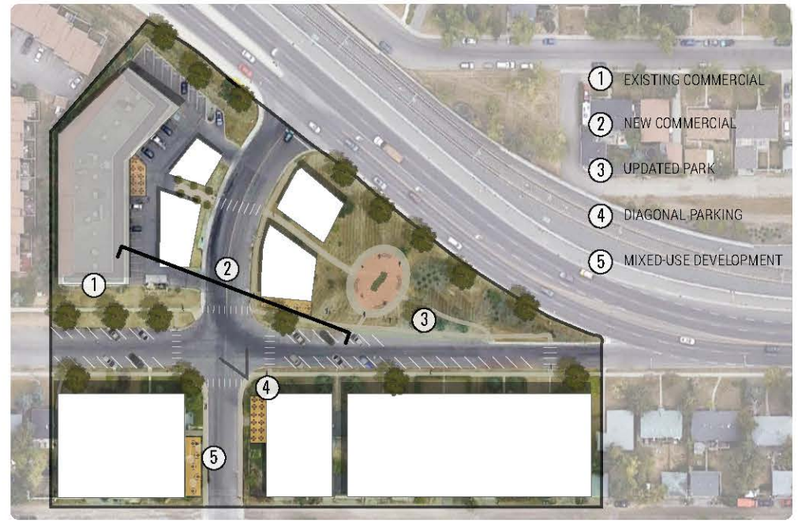
The commercial node located in SW Westgate, but is serviced by NW Glendale, currently doesn't directly benefit the community. Many of the businesses are 'niche' commercial and served the city, but don't offer the community everyday goods and services. The existing commercial offers many drive-in and drive-out businesses. The current zoning allows the entire site to be develop and the existing park beside. Adding a new neighbourhood commercial high street along Glenside Dr SW would directly benefit the community. In addition, adding MU-1, MC-1, and RC-G zoning along 17th Ave would bring enough new residents to service this new NW commercial node. The park is also currently underutilized and improvements can be made to act as a neighbourhood green space.

Objectives

- To create a new commercial High Street for residents in NW Glendale.
- Attract new commercial businesses that benefit the neighbourhood.
- Improve park along 17th Ave that is underutilized and not used.
- Encourage walking, cycling and LRT use in community.

Policies

- 1.5m setback along Glenside Road to create High street.
- Maximum two-storey heights within new commercial businesses.
- Diagonal parking created along 17th avenue to offer new spots for residential and commercial uses.
- Exterior of commercial buildings to be brick or stone to offer high-quality public realm.
- Existing commercial and new commercial on the side of park are encouraged to build patio spaces.
- New commercial shall have businesses that require mores pedestrian activity on the first storey.
- Mixed-Use buildings shall follow 'Mixed-Use Policies' reviewed previously.



CONCEPT DESIGN & POLICY

5.2 COMMUNITY GROWTH AND DEVELOPMENT

SITE 2: 45TH STATION T.O.D.

Overview

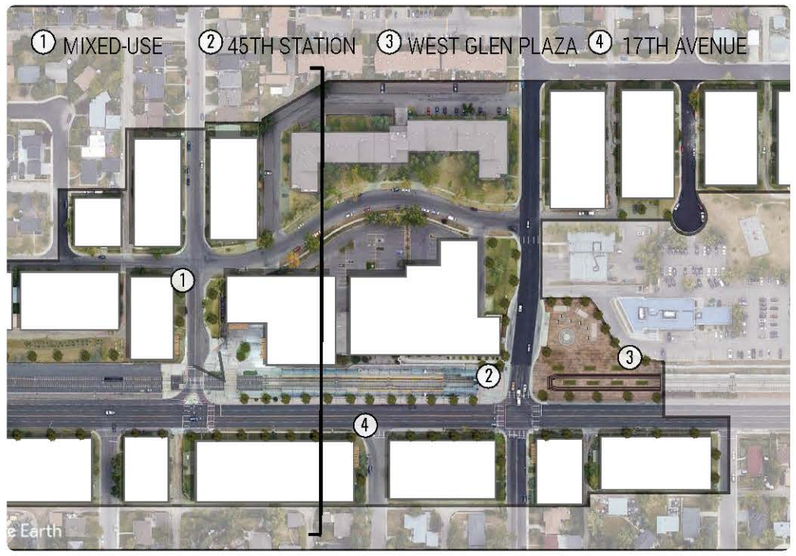
45th Street station is currently surrounded by RC-1 housing, the AMA building and the police and fire stations. None of these buildings add to the transit-oriented development (T.O.D.) Potential of the area. This is the GRW plan's largest density and heights. The heights are set up on a gradient so neighbourhood RC-1 aren't directly beside higher-density housing. These policies attract medium-density mixed-use buildings to help create a T.O.D. node for the GRW communities. Open space and plaza's in the area will also be developed to help attract businesses and redevelopment.

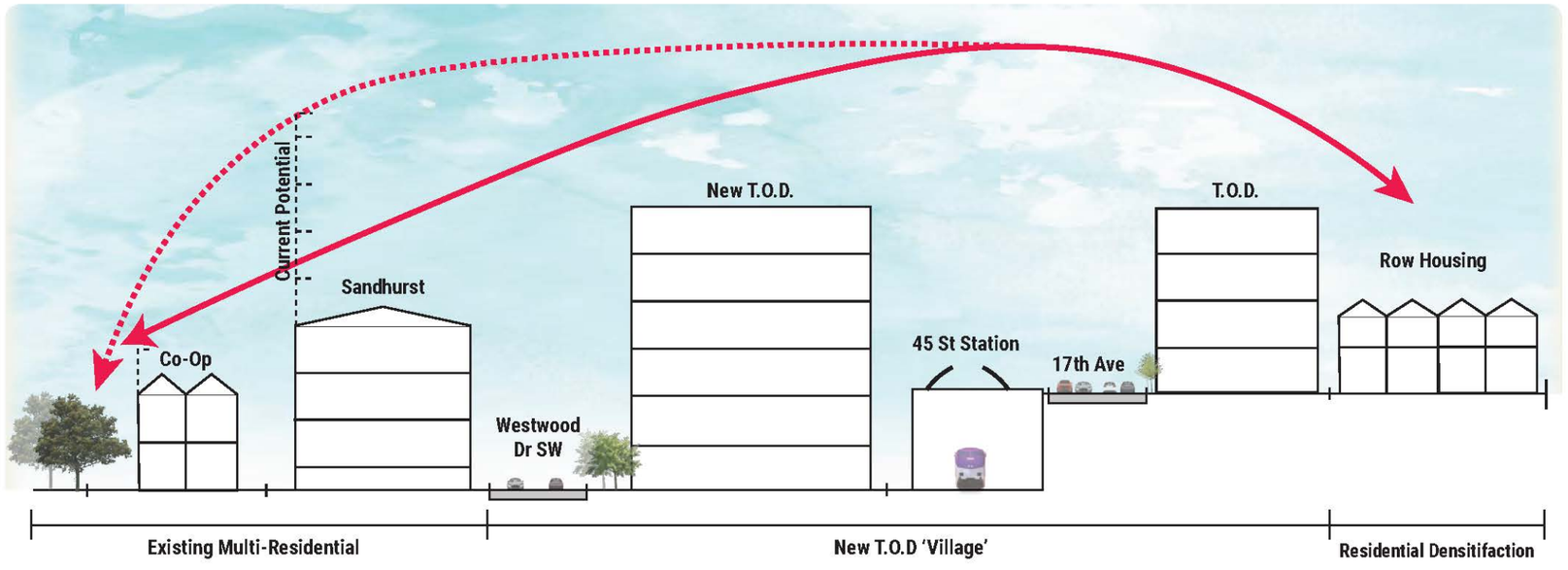
Objectives

- Create transit-oriented-development around 45th street station.
- Attract new commercial businesses that benefit the neighbourhood.
- Increase LRT ridership and alternative modes of transportation
- Improve 17th Ave commercial corridor.
- Develop West Glen Plaza and improve open spaces for transit users and residents

Policies

- Mixed-Use buildings shall follow 'Mixed-Use Policies' reviewed previously.
- Building heights are to follow land-use bylaw and 'Proposed Building Heights Map'. MU-1 and MU-2 have specific heights show beside 'h'.
- Commercial businesses on main floor should encourage pedestrian activity.
- Businesses in designated areas are encouraged to have patios.
- Density bonusing should be granted if designs benefit community or public space for pedestrians and transit users.
- Trees shall be planted where any existing trees are removed.
- Public art is encouraged along roads and sidewalks.
- West Glen Plaza should be designed for year-round uses.





SITE 3: ROSSCARROCK SCHOOL RETROFIT

Overview

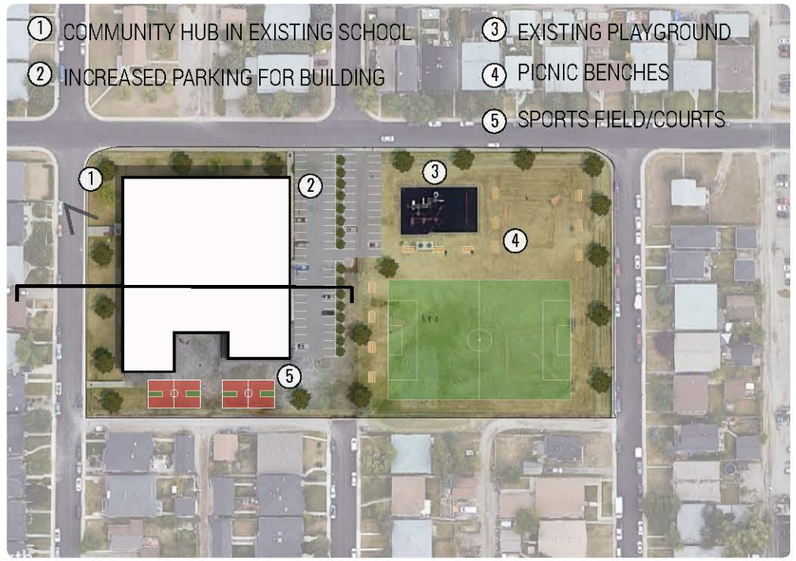
Rosscarrock School recently passed a vote 4-3 to remain open. This excellent news for the community because the area is slated to have an increase in density. However, the school only has roughly 90 students that attend, so both the land and school are underutilized. It would be beneficial for both the CBE and the community if the School shared uses. The goal for this site is to become a community hub. Half of the site and/or building could become a recreation centre, but in addition off language classes or other after school learning experiences. The park could also be improved to offer recreational uses and picnic benches for the many families in the area. This will be to fill the void in green space in Rosscarrock.

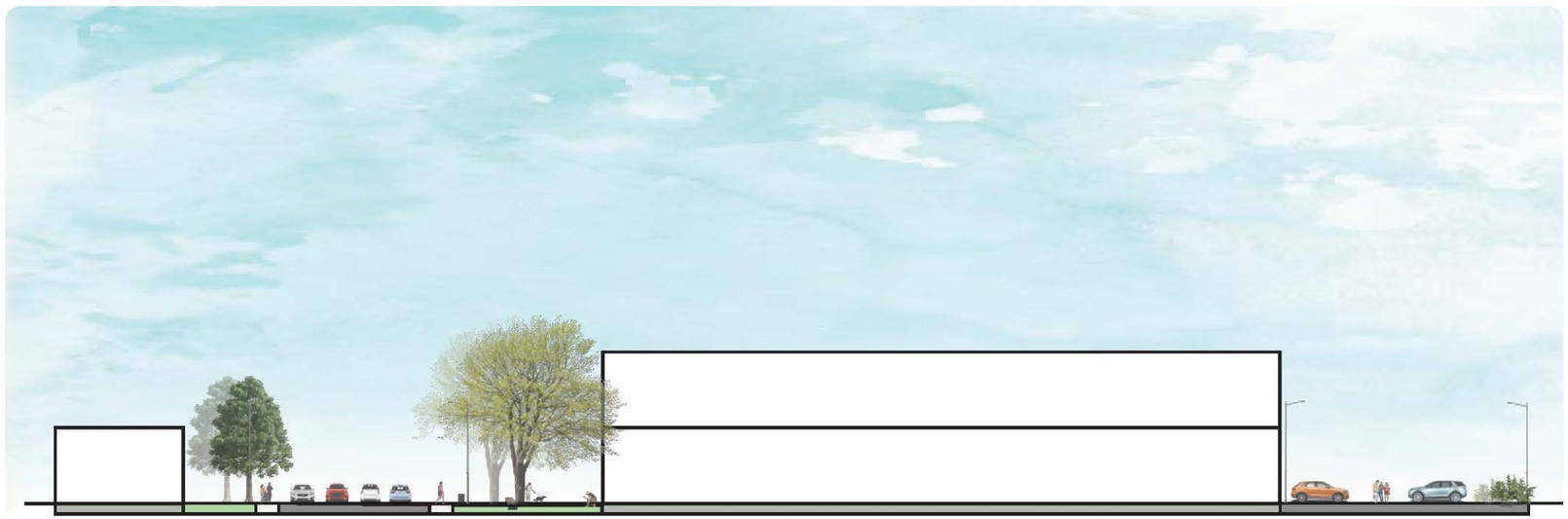
Objectives

- Community hub to share and coexist on site with Rosscarrock School.
- Flexible for spaces and classrooms for community groups and learning programs to use.
- Recreational options both indoor and outdoor for residents of Rosscarrock.
- Site will help fill void of lack of green space in Rosscarrock.
- Offer language and other classes to the increasing amount of immigrants moving into Rosscarrock.

Policies

- Encourage adaptive reuse of existing Rosscarrock School in coordination with the Calgary Board of Education.
- Heights to respect existing RC-2 neighbourhood and should exceed 13m.
- Parking shall be provided behind building to limit on-street parking.
- During any redevelopment, no mature vegetation shall be removed.
- Develop and improve green space to create recreational opportunities.
- Enhance the urban forest and landscaping.



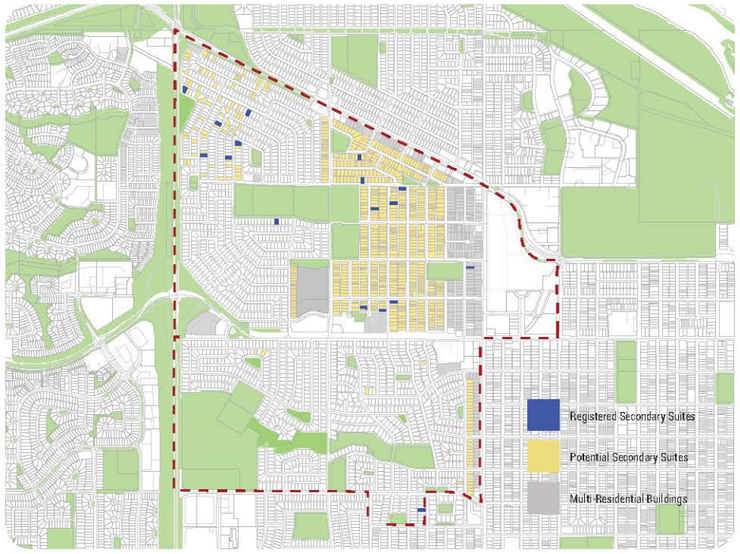


CONCEPT DESIGN & POLICY

5.2 COMMUNITY GROWTH AND DEVELOPMENT

5.2.6 LANE WAY HOMES

CURRENT SECONDARY SUITE AND LANE WAY POTENTIAL



PROPOSED SECONDARY SUITE AND LANE WAY POTENTIAL

Overview

Lane way homes (also known as backyard suites, granny suites, coach houses, carriage houses, garden suites, etc.) are detached dwellings found in RC-1 land use designations. The creation of these allow additional housing options in the community, and can blend into the RC-1 neighbourhoods without changing the character of the neighbourhood.

Objectives

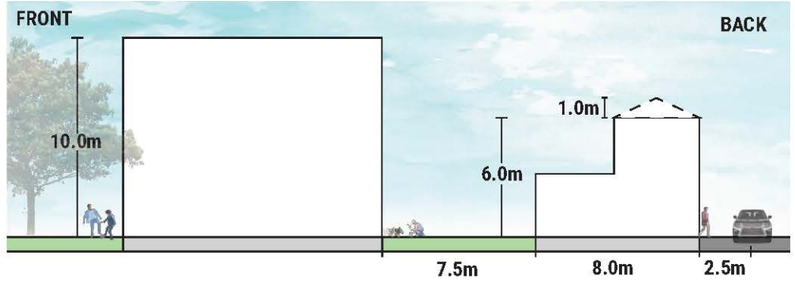
- Allow lane way homes in set areas to increasing housing options.
- Create safe and reliable rental options.
- Create options for extended family, dependents or caregivers.
- Enhance street-scape of existing lane ways in communities.
- All new lane way homes to meet the guidelines to ensure they fit into the community mold and character.

Policies

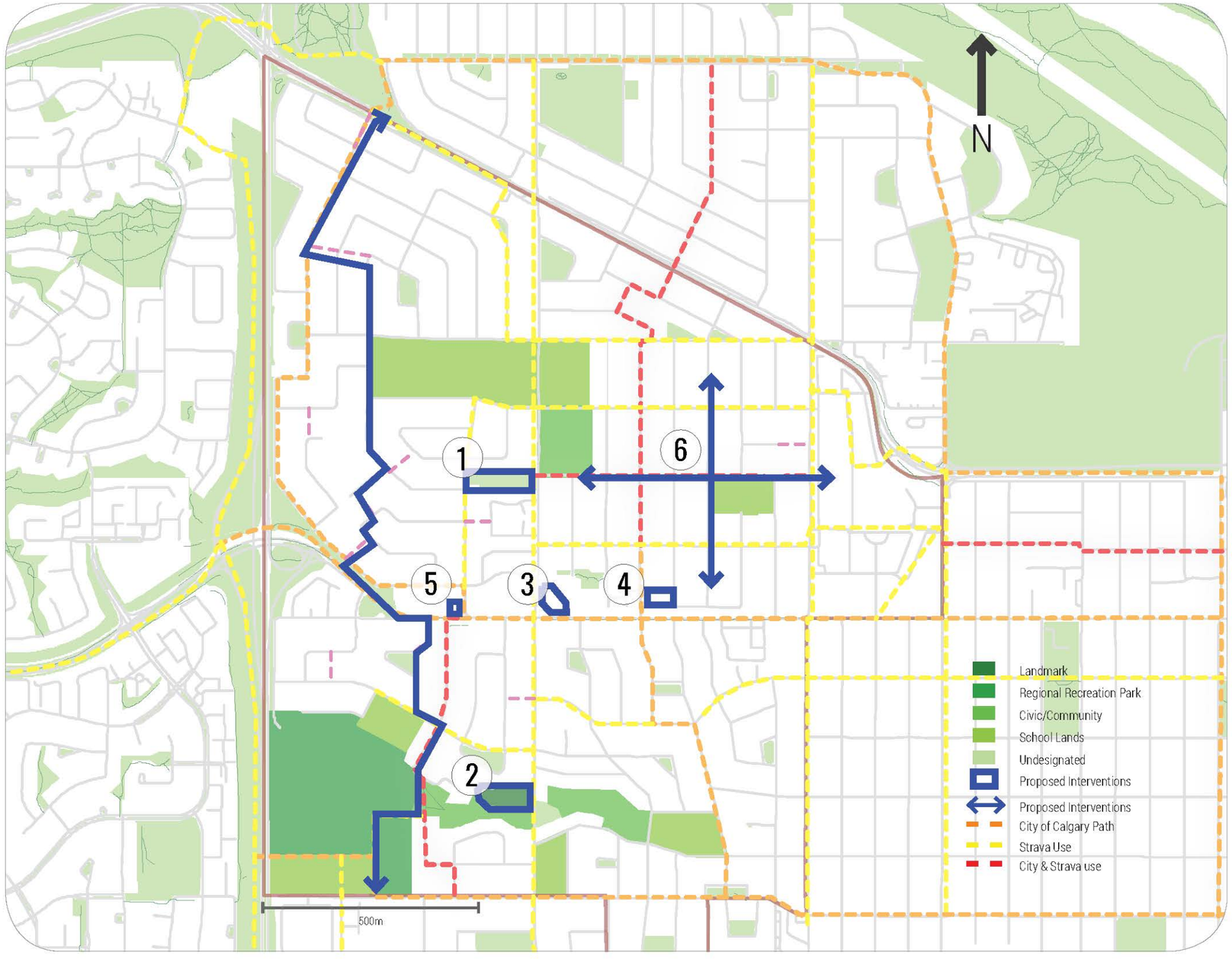
- Owners must reside on land parcel in order to rent out suite.
- One parking stall is required with each suite.
- Exterior lights shall be included.
- Mature vegetation cannot be removed during the development of suites.

Building size and guidelines:

- Lane way homes must be smaller than primary building.
- The building heights are a maximum of 6m, with an additional 1m of building additions.
- Buildings can be two storeys, but the second floor can't be larger than 60% of the floor-area of the first storey.
- The maximum length of the building is 8m.
- The coverage of the building can't be larger than 15% of parcel.
- Rear setback must be 2.5m from the centre-line of the lane way.
- Minimum 7.5m setback from the primary dwelling.
- Roof decks are prohibited
- Privacy must be taken into consideration when designer house; balconies and large windows are prohibited from facing neighbouring lots.



5.3 OPEN SPACES, PARKS, & PUBLIC REALM



The adjacent figure summarizes the elements of the open spaces, parks, and public realm that the analysis and/or community established as critical for community development. The sites represent examples of how the policies could be implemented for each type of green space. These interventions can be applied to other similar areas in the community or wider city context. In all instances, parks and open spaces should be designed as part of a safe, accessible, and comfortable pedestrian realm and should contribute to the place-making strategy for the area.

Natural amenities provide several benefits including:

- Environmental - provides benefits through preservation, habitat, and passive recreation.
- Social - encourages gathering and involvement, enhance sense of place
- Public health - promotes physical activity, psychological well-being, and use of active transportation
- Economic - contributes to higher property values, attracts investors and businesses stimulating other forms of economic growth and development.

Building on the inventory, engagement, and analysis, EMC developed a long-term strategy for policy and implementation. A long-term plan to preserve and enhances these elements will contribute to the development of a healthy and strong community. Furthermore, integrating the parks system with the land-use strategy and multi-modal transportation systems will establish a strong framework to guide sustainable and holistic redevelopment.

Design Objectives

1. Activate Pocket Parks
2. Enhance Community Destinations
3. Re-purpose underutilized space into memorable spaces for community members and visitors
4. Add green space for more equitable distribution throughout entire community
5. Reclaim space for people
6. Improve quality & connectivity of public realm

CONCEPT DESIGN & POLICY

5.3 OPEN SPACES, PARKS, & PUBLIC REALM

1. ACTIVATE POCKET PARKS

Overview

Pocket parks were identified by community members as one of the most important natural amenities in the neighbourhood which have the potential to be vibrant gathering spaces. However, the parks are underutilized and could be improved through design interventions and policies to transform them into community assets.

Objectives

- Create active pocket parks that promote use for all ages and abilities.
- Provide diverse uses through passive and active recreation opportunities.
- Connect the parks to the pathway system to encourage people to venture out into their communities and explore new spaces.
- Develop innovative design strategies to create safe and welcoming spaces.

Policies

Pocket Parks should be designed:

- To be connected to the regional and local pathway system
- To be accessible to people of all ages and abilities
- To provide diverse opportunities and may include active recreational areas, informal passive space, urban parks, and natural landscaped areas.
- To be useful and comfortable at all times of year. Parks should be designed to block prevailing winds, capture sunlight, and incorporate colour.
- To be easily maintained long-term by the City of Calgary. Alternatively, joint-use agreements with residents or business need to be established to ensure the parks are maintained.
- To link parks and open spaces with 'green streets' or mews.

- Design of the parks shall include Crime Prevention Through Environmental Design (CPTED) principles:
  - include pedestrian-oriented, ground directed lighting.
  - tree branches shall be 4ft and above ground level to ensure visibility.
  - fences shall be permeable to allow visibility into and out of the park for passive surveillance.
- The function and use of pocket parks should be reviewed every 5 years to ensure the program meets the current needs of the community.

DESIGN STRATEGY

St. Patrick's Island Park in Calgary provides a city-wide destination with amenities for people of all ages. The new park is connected to the new River Walk pathway and easily accessible by train and car.

Civic Park, Warragul Australia, (Fitzgerald Frisby) offers active and passive recreation through naturalized and formal play areas.

Kiruna Snow Festival in Sweden transforms a green space into a winter park for people of all ages. The green space features lined snow paths, ice sculptures, mazes, and seating areas.

2. ENHANCE COMMUNITY DESTINATIONS

Overview

The community identified Turtle Hill as a significant community destination that draws people from all three neighbourhoods and even across the City. Turtle Hill, and other major destinations such as the community centres, have the opportunity to be enhanced to provide year round community amenities for a variety of users.

Objectives

- Introduce more diverse activities to create a destination that supports the entire community and can adapt for future use.
- Connect the destinations to the community through active modes of transportation and green streets.
- Design destinations to be welcoming and engaging at different times of year

Policies

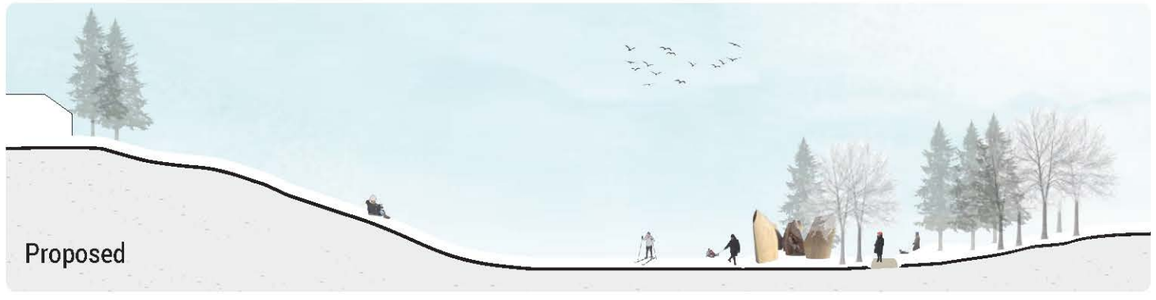
The design of community destinations should include the following factors:

- Pedestrian and bicycle linkages through the park should be included, and should not interfere with the existing uses ie. tobogganing at turtle hill or active recreational fields of play.
- to be connected to the regional and local pathway system
- to be accessible to members outside of the community through active transportation methods.
- to be accessible to people of all ages and abilities
- to be useful and comfortable at all times of year. Parks should be designed to block prevailing winds, capture sunlight, and incorporate colour.

- Destinations should provide more than one use in order to appeal to a broader demographic. Uses may include active recreational areas, informal passive space, urban parks, and natural landscaped areas.
- As major destinations, maintenance will be a crucial factor and should be coordinated with the City of Calgary or alternative methods should be explored.

- Design of the parks shall include Crime Prevention Through Environmental Design (CPTED) principles:
  - include pedestrian-oriented, ground directed lighting.
  - tree branches shall be 4ft and above ground level to ensure visibility.
  - fences shall be permeable to allow visibility into and out of the park for passive surveillance.

DESIGN STRATEGY



Turtle Hill is a great community destination and is used year round for tobogganing, soccer, and more. The space is fairly under-programmed though and could support more diverse uses

Winnipeg hosted a design competition for warming huts to encourage use and provide a variety of passive activities in the park.

Turtle Hill should be designed to connect people through the park and to the adjacent residential and commercial uses.

CONCEPT DESIGN & POLICY

5.3 OPEN SPACES, PARKS, & PUBLIC REALM

3. REVITALIZE UNDERUTILIZED SPACES

Overview

The community identified the need to revitalize vacant spaces and include temporary uses in order to bring people to the areas and capitalize on the land while waiting for development. Our analysis and community feedback supports temporary uses such as pop-up markets and coffee shops to invigorate underutilized areas.

Objectives

- Enhance the public realm by redesigning underutilized areas into functional and attractive public urban spaces.
- Create community gathering spaces that are unique and memorable.
- Provide urban spaces that encourage people to spend time out in the community.

Policies

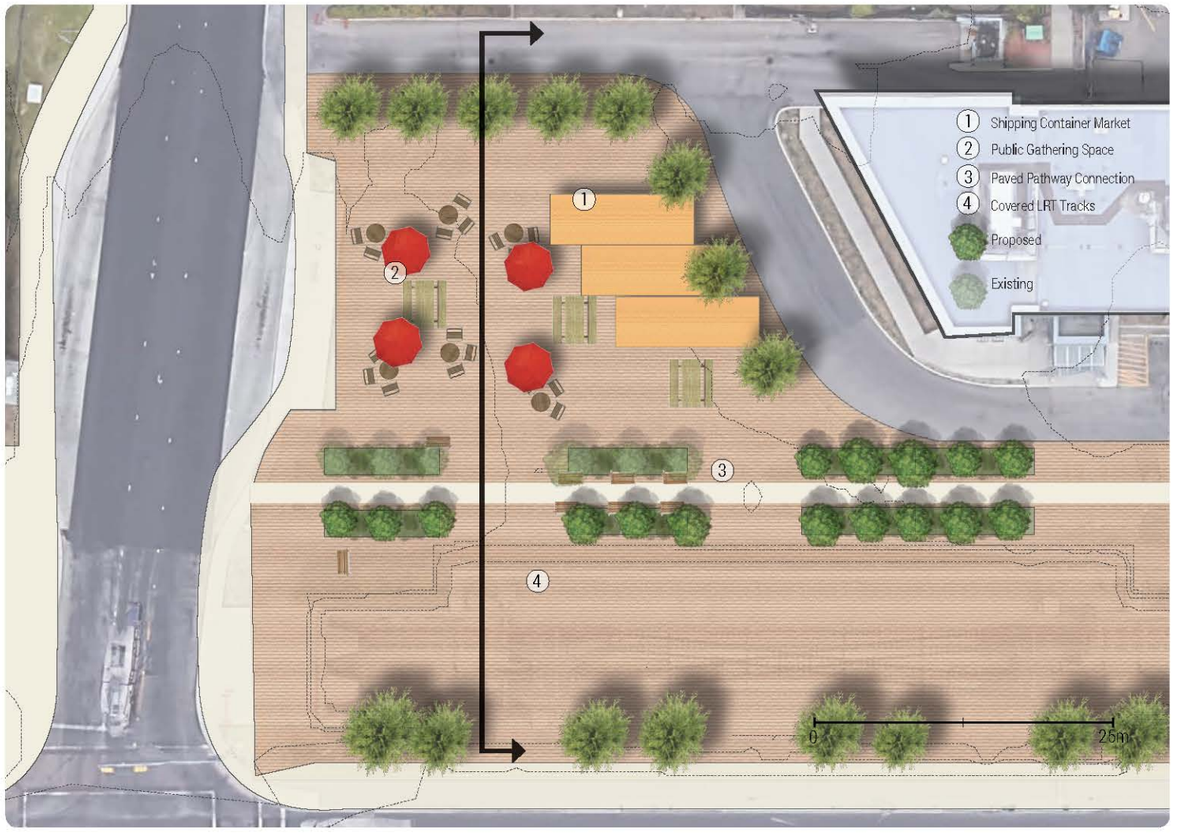
Underutilized parcels shall be re-purposed to:

- Provide active and passive programming to revitalize public areas and create community destinations.
- Provide temporary, flexible uses that respond to the needs of the community and can be used year-round.
- Design, function and programming are the key characteristics of an urban plaza and, therefore, they will be maintained in accordance with the Council approved Class A park maintenance standards*
- All parks and plazas shall be designed with clear transitions from surrounding uses, including urban design elements such as paving, benches and other amenities to encourage people to spend time in the spaces.
- The revitalized parks and plazas should exhibit a high level of urban design quality including coordinated furnishing, landscaping, lighting and design, even when considered a temporary use.

DESIGN STRATEGY

East Village pop-up market transformed a derelict parking lot into a city-wide destination that brought people together and encouraged economic growth for small-businesses. The initiative helped give the East Village a sense of place and a unique character.

The Inglewood Night Market occurs 4 times a summer for only one evening and is an excellent example of a temporary use that reclaims underutilized space to create a city-wide attraction.



*City of Calgary Open Space Plan, 2003

4. ADD GREEN SPACE FOR MORE EQUITABLE DISTRIBUTION THROUGHOUT ENTIRE COMMUNITY

Overview

Our analysis identified that certain areas of the community lack green spaces, most notably Rosscarrock. Through consultant with the community, we determined that adding green space was a priority and could be achieved by transforming underutilized lots. Adding green space is important for the physical and psychological health of residents, as well as the environmental longevity of the natural systems. Some green spaces also have the opportunity to generate economic benefit through increasing land values or directly by being a source of food and/or income from a community garden lot.

Objectives

- Add public green space to provide better availability and access for all residents.
- Create small-scale interventions that capitalize on underutilized spaces.
- Introduce programming to support active and passive activities to support a variety of users.

Policies

Green space shall be added to the community, particularly by converting underutilized space into community gathering areas, to create a more equitable distribution of green space throughout the community.

The new green spaces shall be designed to:

- Create neighbourhood scale destinations throughout the community.
- Create functional, diverse spaces through innovative programming that can be used throughout the year by a variety of demographics.
- Public and private lands shall be evaluated for potential sites.
- to be safe spaces with clear transitions from surrounding uses, including urban design elements such as paving, benches and other amenities to encourage people to spend time in the spaces.
- Demonstrate a high level of urban design including coordinated furnishing, landscaping, lighting and design.

- Community gardens shall have a community-designated coordinator to ensure the maintenance and function of the green spaces.

- Land-use applications for re-designation will only be required if the parcel of land under consideration is City of Calgary land with a current property value.

DESIGN STRATEGY

Community gardens will be led by a community member and have the potential to bring people together through a productive activity which can be enjoyed by people of all ages and abilities.

Green laneways offer another strategy for introducing green space. This would be a community initiative where residents take responsibility for a piece of the alley.

Rosscarrock currently has several small sites that could be re-purposed to add green space and bring people together in productive settings. Adding small spaces will help to meet the ARP's goals of a more equitable distribution of green areas.

CONCEPT DESIGN & POLICY

5.3 OPEN SPACES, PARKS, & PUBLIC REALM

5. RECLAIM PUBLIC SPACE FOR PEOPLE

Overview

Through our investigation we noted that the Right of Way was more than adequate for vehicular traffic, and that in some cases space could be re-purposed as small gathering spaces. By reclaiming street space or parking lot space for people we create small gathering nodes near existing/proposed amenities. This intervention requires very little infrastructure and if included in the Area Redevelopment Plan, the City application process could be relaxed to readily allow for these types of uses.

Objectives

- Provide a more active public realm for people.
- Convert space typically used for vehicles to accommodate pedestrians.
- Create a safe and active public realm through urban design initiatives.
- Introduce a new way of thinking about public space.

Policies

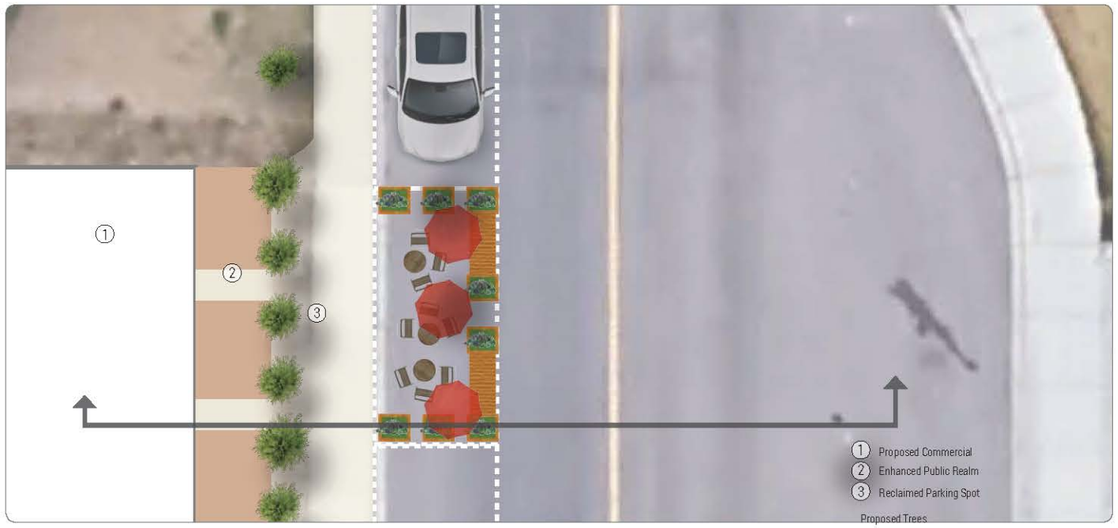
Public use space can be reclaimed for pedestrian use under the following conditions:

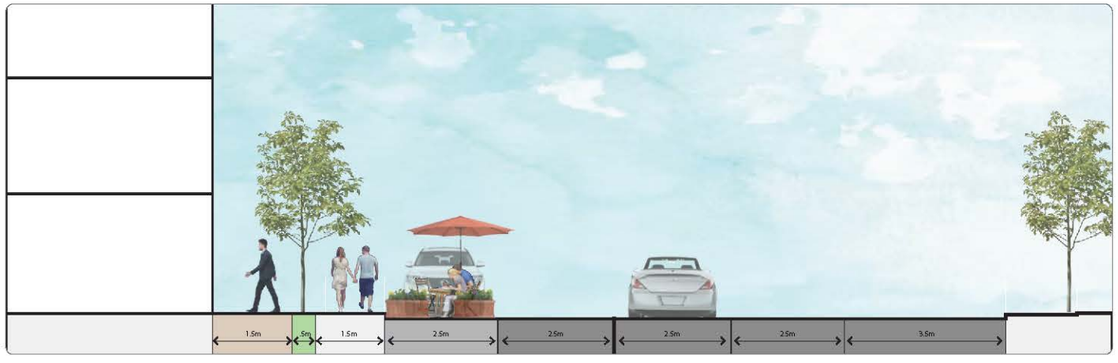
- the remaining right of way is wide enough to accommodate one lane of residential traffic each direction (2.5m).
- when in a parking lot, the intervention

Public space improvements shall:

- Make the pedestrian realm the priority to create a more enjoyable and accessible public experience.
- Create destinations adjacent to commercial/mixed-use land-uses to encourage gathering and support business.
- Should be located in places that generate relatively high levels of pedestrian activity.
- Ensure each public space is safe and accessible for people of all abilities and ages.
- Include raised physical separation from traffic (minimum .75m tall), clear designation of space through furniture or signage, and ground-oriented lighting.
- The width of an on-street reclaimed space shall be 2.5 metres or the width of a typical parking stall in the area as defined by the land-use bylaw.
- Furniture such as umbrellas or canopies should be included to protect people from the elements and enhance the urban design quality.

DESIGN STRATEGY





The Zeughaussgasse by Jan Gehl demonstrates how a simple series of benches in front of retail can create a vibrant pedestrian destination without impeding traffic.

Spaces in between buildings in New York have been re-claimed as small plazas to encourage people to stop and engage with their surroundings and each other.

Small-scale interventions can be easily implemented to encourage people to spend time in spaces and promote interaction.

6. IMPROVE QUALITY & CONNECTIVITY OF PUBLIC REALM

Overview

The quality of the public realm is an important factor in creating a safe, welcoming pedestrian environment. In addition, elements that contribute to this public realm often serve an environmental purpose through stormwater management, soil quality, and air quality. The public realm could be enhanced throughout the community, but particularly in Rosscarrock where our analysis identified a lack of green streets and urban design. Many of these strategies are long-term planning initiatives; however, some could be smaller scale and implemented quickly through coordination with City.

Objectives

- Enhance the urban forest throughout community, especially in Rosscarrock
- Create safer, welcoming streets through use of trees and green infrastructure
- Introduce wider sidewalks and vegetative buffers to enhance the quality of streets

Policies

Public realm improvements shall be designed to:

- Create an attractive public realm that enhances the quality and safety of the street-scape and encourages use.
- Incorporate green infrastructure to improve public realm quality and provide to natural stormwater management.
- Link parks and open spaces with 'green streets' or mews
- Include innovative design for stormwater management. Design shall rely on "best management practices" including wet ponds, dry ponds, storm conveyance methods, swales, trenches, and end-of-pipe practices as appropriate within the community context.*

- Residential streets shall be designed to include a vegetation buffer (minimum of 1m) to increase safety and serve as passive stormwater management.

DESIGN STRATEGY

Seattle boasts mature street trees that act as a buffer between pedestrian and traffic and create an overhead canopy supporting a welcoming urban environment.

Bioswales serve several functions to increase pedestrian safety, enhance the urban realm, and manage stormwater. These urban design elements are short-term initiatives that can have a big impact in the community.

Vauban's car-free streets feature extensive greenery providing a safe, welcoming environment and reducing the need for traditional stormwater management.

CONCEPT DESIGN & POLICY

5.4 ACTIVE AND CONNECTED LIVING

5.4.1 PEDESTRIAN & BICYCLE CONNECTIVITY

Overview

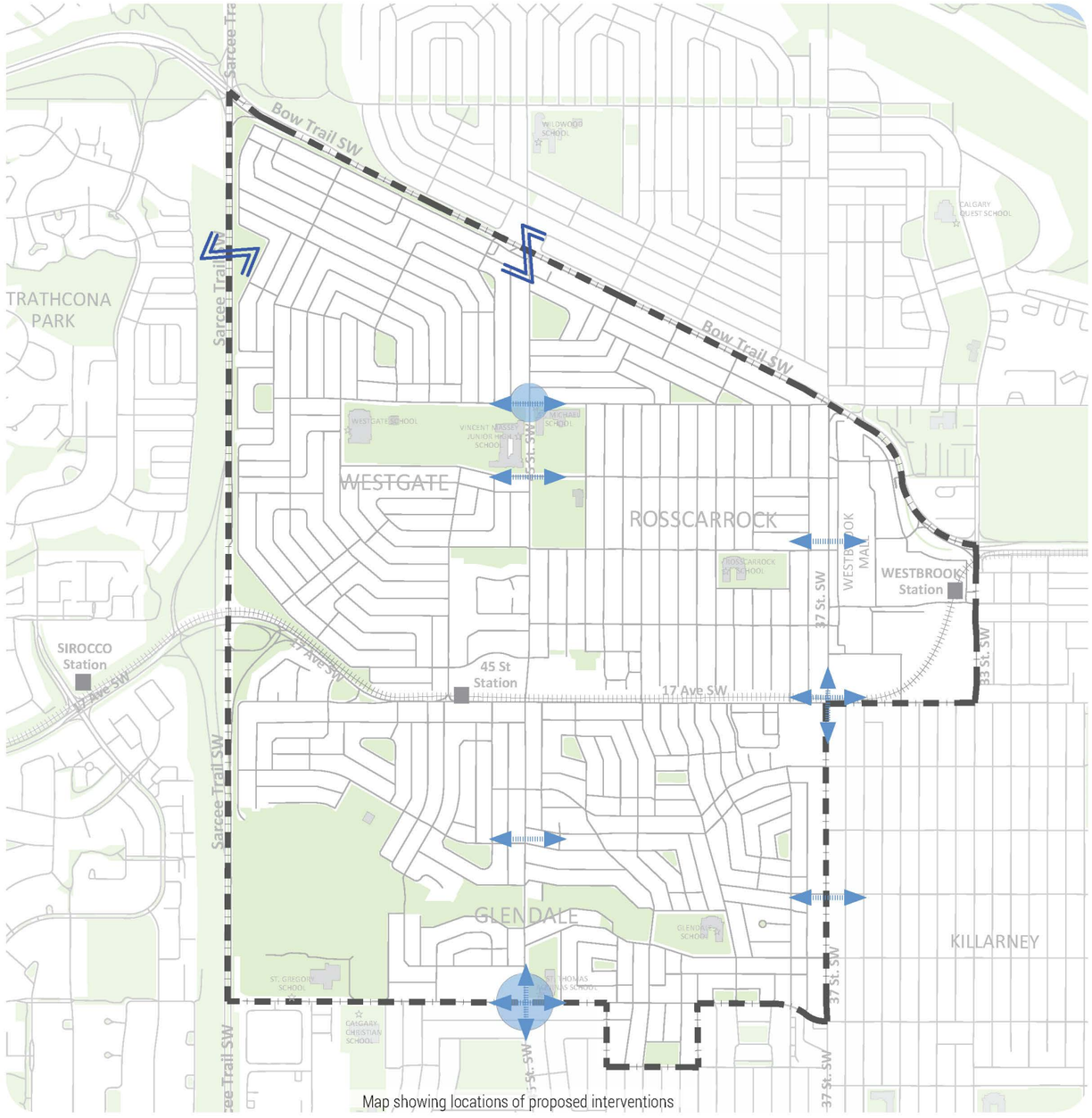
As per our third guiding principle to provide an active and connected living and to develop the community with the same vision, following objectives were framed for the GRW Communities. Presently, connection of GRW communities with the neighbouring communities is missing. Also, pedestrian infrastructure including crossings in GRW communities is not safe. In order to enhance the pedestrian environment and to make it more walkable, various policies and proposals were framed at various location to achieve the vision and objectives.

Objective

- Create walkable environments & provide a variety of transportation options.
- Promote safety for all transportation system users.
- Enable public transit, walking and cycling as the preferred mobility choices for more people.

Policies

- Street and sidewalk design should prioritize the comfort and convenience of pedestrians and cyclists, while accommodating the needs of motorized vehicles.
- Pedestrians and cyclists should be given the highest priority in the planning, design, operation and maintenance of transportation infrastructure within communities
- In areas where walking, cycling and transit cannot provide convenient and reliable travel choices, emphasis should be on mitigating congestion and improving capacity for private vehicles.
- Pedestrian connectivity among neighbouring communities should be enhanced through Pedestrian overpass.
- Pedestrian crossings at intersections need to be designed in a manner that increases visibility between pedestrians and drivers. Design features to be considered at key intersections include raised table top crossings, LED Flashers and mid-islands.
- Pedestrian crossings across 45th St should be upgraded with LED Flashers and raised crossings.
- New direct vehicle connections to an individual property from Bow Trail are not permitted.



Map showing locations of proposed interventions

PEDESTRIAN OVERPASS

"Pedestrian connectivity among neighbouring communities should be enhanced through Pedestrian overpass"

- Proposed a pedestrian overpass at Bow Trail and 45th St intersection, for improving pedestrian connectivity and safety and to create walkable environments.
- Similar pedestrian overpass is proposed across Sarcee Trail, at the location shown in the adjoining map to increase the pedestrian connectivity to the neighbouring community

RAISED PEDESTRIAN CROSSING

"Pedestrian crossings across 45th St should be upgraded with LED Flashers and raised crossings."

- Proposed raised table-top crossing with LED flashers at various points on 45th St, to create safe pedestrian crossing. Typical example is shown near St. Michael School on 45th St.
- Similar raised table-top crossings are proposed, at various locations on 45th St as shown in the adjoining map to create safe walkable environment.

PEDESTRIAN MID-ISLANDS

"Pedestrian crossings at intersections need to be designed in a manner that increases visibility between pedestrians and drivers. Design features to be considered at key intersections include raised table top crossings, LED Flashers and mid-islands"

- Proposed mid-island & raised crossing at 37th St near Westbrook mall, to create safe pedestrian environment.
- Similar, mid island & raised crossing is proposed at two more locations on 37th St as marked on the adjoining map.

CONCEPT DESIGN & POLICY

5.4 ACTIVE AND CONNECTED LIVING

PEDESTRIAN & BICYCLE CONNECTIVITY

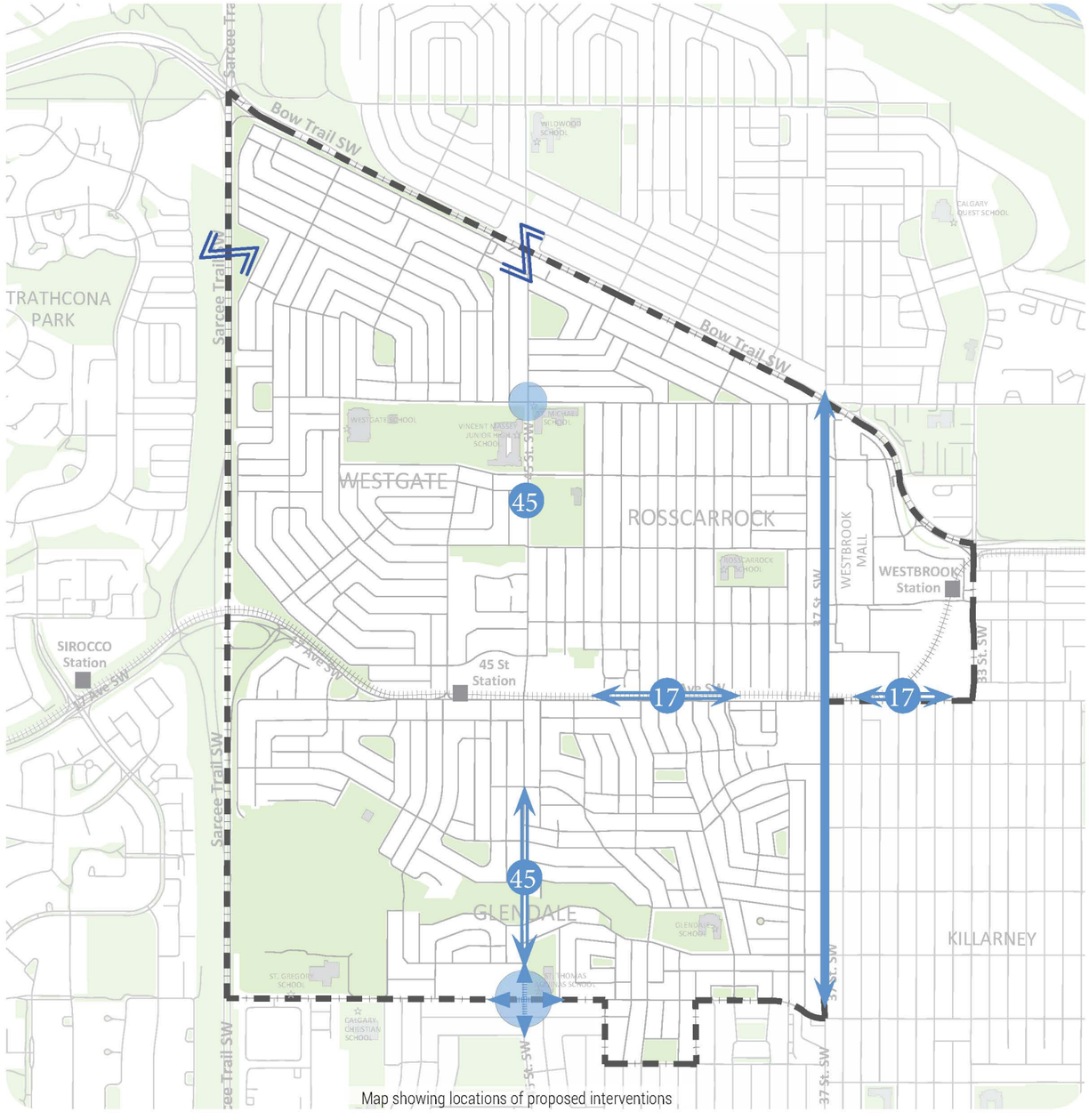
As per our third guiding principle to provide an active and connected living and to develop the community with the same vision, following objectives were framed for the GRW Communities. Presently, the streets are missing few cross sectional elements as per the complete street guidelines and also safety is an issue for pedestrians and cyclist in community. To achieve our vision and objectives, various policies and concept proposals were framed.

Objective

- Create walkable environments & provide a variety of transportation options.
- Create Complete Streets & Increase mobility choices.
- Promote safety for all transportation system users.
- Enable public transit, walking and cycling as the preferred mobility choices for more people.

Policies

- The highest priority should be given for improvement of the Primary Transit Network and supporting infrastructure that promotes walking and cycling within communities.
- Segregated bike-ways should be developed along 37th St and 45th St.
- Pedestrian paths should be segregated by green buffers on 17th Ave.
- Transit stops on 45th St and 37th St should be upgraded and a buffer should be developed through streetscapes redevelopment. Buffer may include streetscapes elements like trees, or bollards etc.
- Provide a bus loop in Westgate community for buses passing through 45th St, to promote use of Public transit and serve the under serviced area.
- Traffic should be slowed down throughout the area by various speed calming measures on 45th St and 17th Ave such as narrowing roadway widths, tight right turns, introducing textured paving road materials and creating island buffers, such as on-street parking, green buffer between carriageway and the pedestrian paths.
- A continuous network of pedestrian sidewalks and multi-use pedestrian/bicycle pathways should be provided throughout the 37th St and 45th St, with segregation of bike-ways and pathways by a green buffer.
- 37th St and 45th St should be designed and constructed as per the complete street guidelines to meet the minimum standards for safety and operations.



Map showing locations of proposed interventions

SPEED CALMING - ISLAND BUFFERS

"A continuous network of pedestrian sidewalks and multi-use pedestrian/bicycle pathways should be provided throughout the 37th St and 45th St, with segregation of bike-ways and pathways by a green buffer"

- Proposed cross-section improvement across 45th St, with segregated pathways by green buffer to provide a safe pedestrian environment.
- Proposed island buffers on 45th St as speed calming measures to provide a safe pedestrian environment.
- Proposed shared bike-ways on 45th St.

SPEED CALMING - MATERIAL CHANGE

"Traffic should be slowed down throughout the area by various speed calming measures on 17th Ave such as narrowing roadway widths, introducing textured paving road materials and creating island buffers, such as on-street parking, green buffer between carriageway and the pedestrian paths."

- Proposed speed calming measures on 17th Ave using textured paving road materials, between 34th and 36th St. and 38th and 40th St to make 17th Ave more pedestrian friendly.
- Proposed table top intersection on 17th St, at marked location as shown in adjoining map.

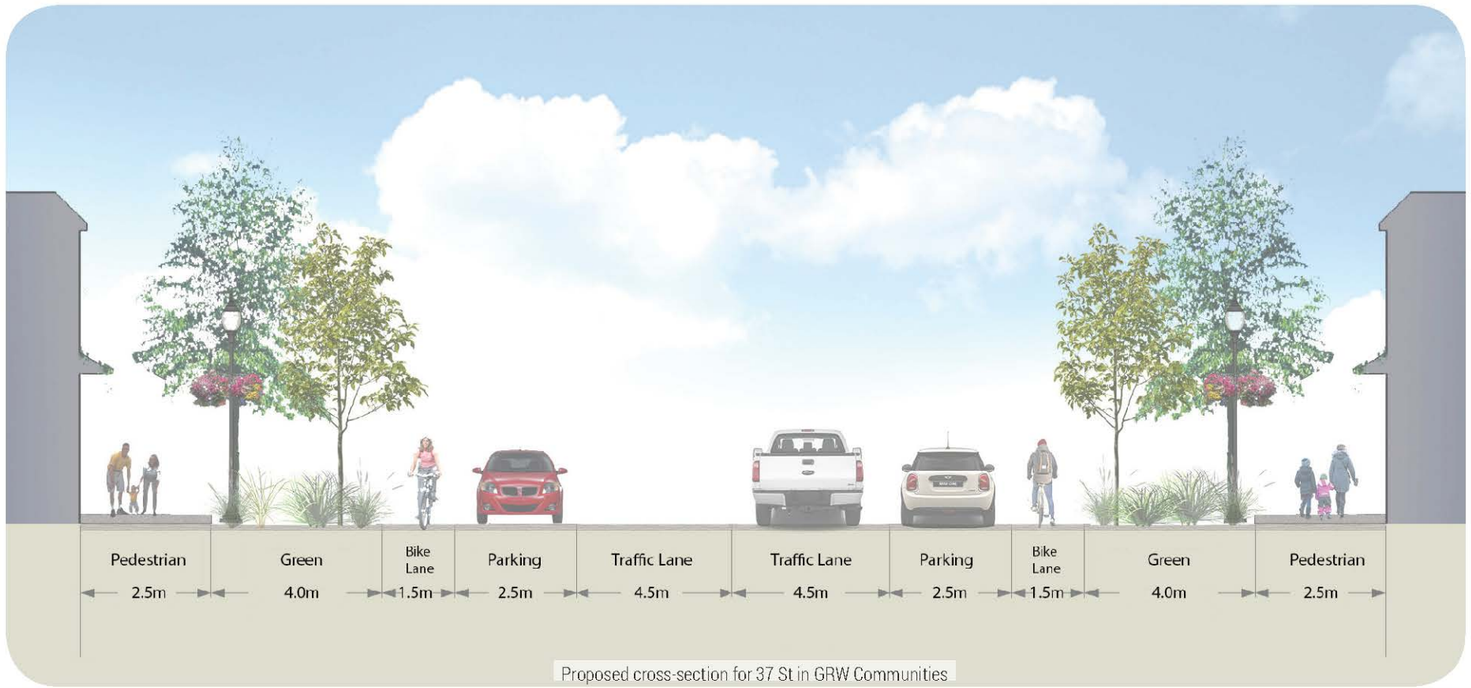
SEGREGATE BIKE PATHS

"37th St and 45th St should be designed and constructed as per the complete street guidelines to meet the minimum standards for safety and operations"

- Proposed cross-section improvement across 37th St, with segregated bike-ways and pathways separated by green buffer to provide a safe pedestrian environment.
- Proposed cross-section improvements as per complete street guidelines on 37th St that will act as speed calming measures as well to provide a safe pedestrian environment.

CONCEPT DESIGN & POLICY

5.4 ACTIVE AND CONNECTED LIVING



Proposed cross-section for 37 St in GRW Communities

"Segregated bike-ways should be developed along 37th St and 45th St"

"37th St and 45th St should be designed and constructed as per the complete street guidelines to meet the minimum standards for safety and operations"

"A continuous network of pedestrian sidewalks and multi-use pedestrian/bicycle pathways should be provided throughout the 37th St and 45th St, with segregation of bike-ways and pathways by a green buffer"

- Proposed cross-section improvement across 37th St, with segregated bike-ways and pathways separated by green buffer to provide a safe pedestrian environment.
- Proposed cross-section improvements as per complete street guidelines on 37th St that will act as speed calming measures as well to provide a safe pedestrian environment.

5.4.2 TRANSIT CONNECTIVITY

In the same direction for creating safe environment for all users and to promote use of public transit, following objectives and policies were framed that aim at achieving our vision of creating a community that promotes active and connected living.

Objective

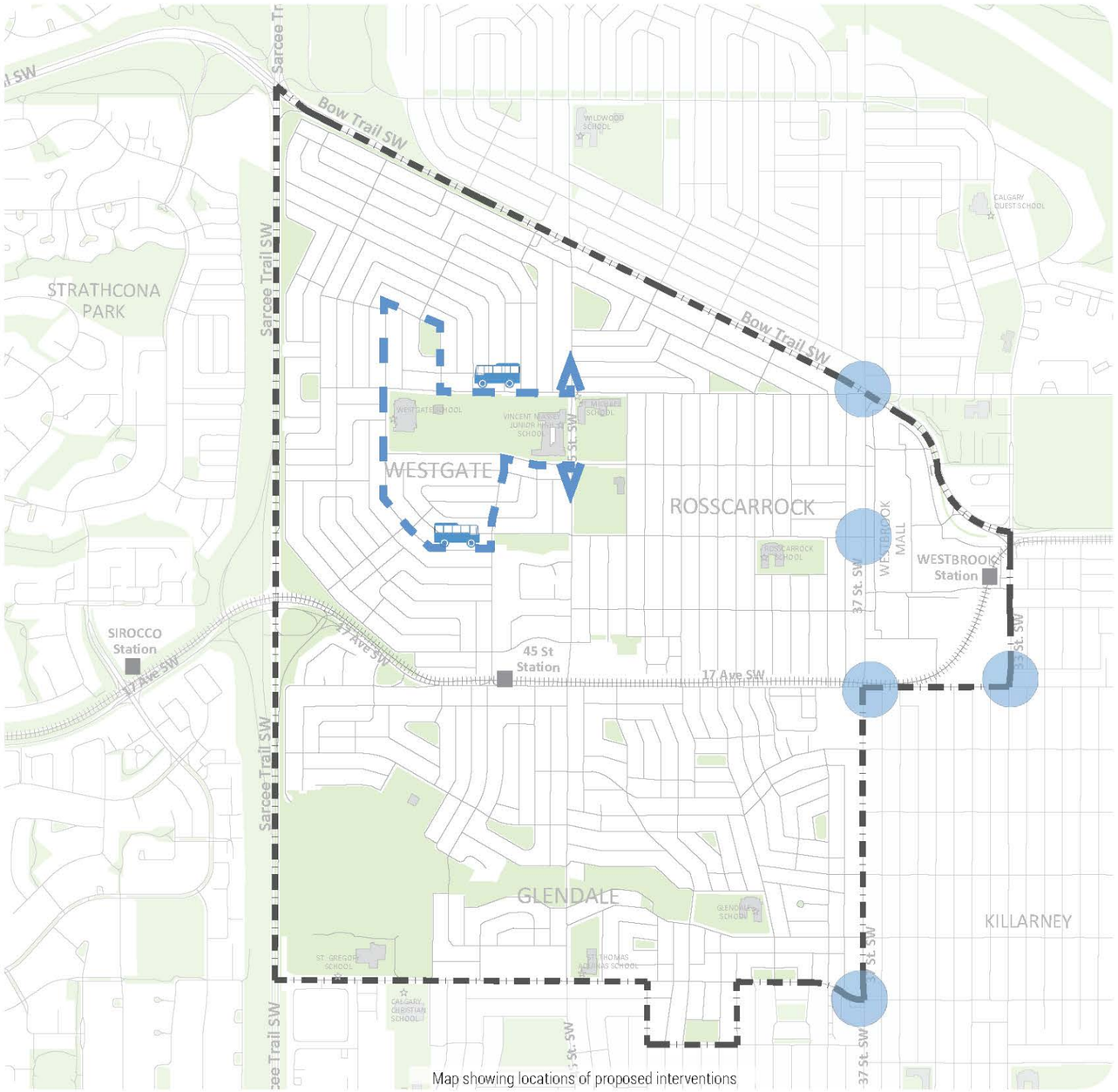
- Enable public transit, walking and cycling as the preferred mobility choices for more people.

Policies

- The highest priority should be given for improvement of the Primary Transit Network and supporting infrastructure that promotes walking and cycling within communities.
- Transit stops on 45th St and 37th St should be upgraded and a buffer should be developed through streetscapes redevelopment. Buffer may include streetscapes elements like trees, or bollards etc.
- Provide a bus loop in Westgate community for buses passing through 45th St, to promote use of Public transit and serve the under serviced area.

"Transit stops on 45th St and 37th St should be upgraded and a buffer should be developed through streetscapes redevelopment. Buffer may include streetscapes elements like trees, or bollards etc"

- Proposed improvement of Bus stops along with Bus loop in westgate community for buses passing through 45th St, to promote use of Public transit and serve the under serviced area.



Map showing locations of proposed interventions

CONCEPT DESIGN & POLICY

5.4 ACTIVE AND CONNECTED LIVING

5.4.3 VEHICULAR CONNECTIVITY

Traffic congestion and pedestrian safety is an issue at various streets and intersection of the GRW communities and to provide safe environment for all transportation system users, following objectives and policies were framed supporting our vision of active and connected living for the community development.

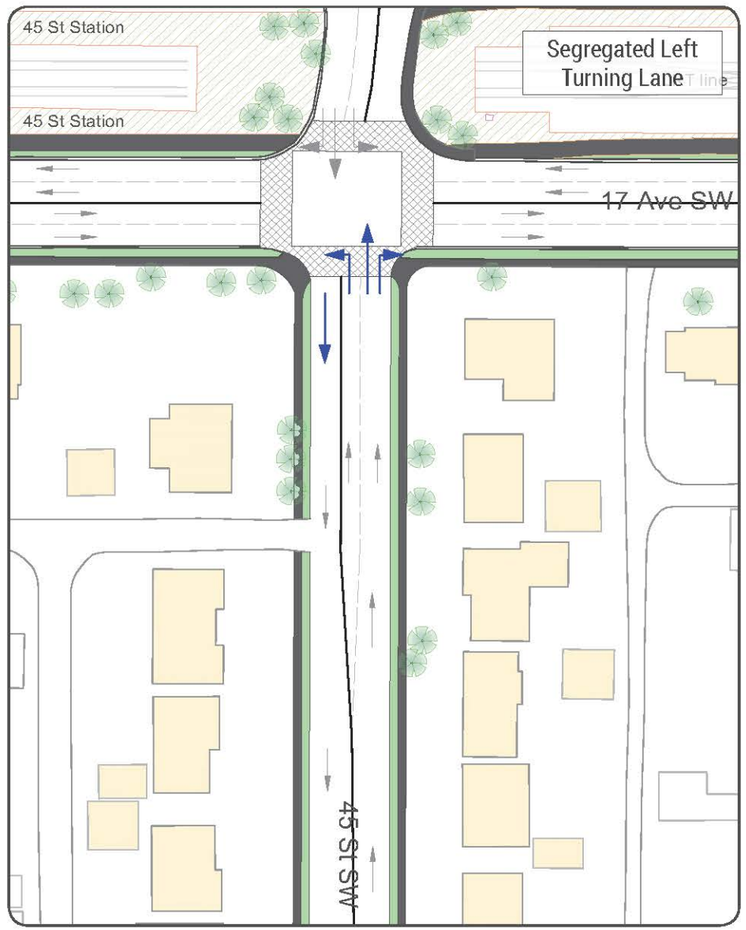
Objective

- Create walkable environments & provide a variety of transportation options.
- Promote safety for all transportation system users.
- Street and sidewalk design should prioritize the comfort and convenience of pedestrians and cyclists, while accommodating the needs of motorized vehicles.
- In areas where walking, cycling and transit cannot provide convenient and reliable travel choices, emphasis should be on mitigating congestion and improving capacity for private vehicles.

Policies

- Bow Trail and 37th St intersection should be improved, so as to mitigate the issue of pedestrian vehicular conflicts.
- Bow Trail and 37th St intersection improvement should be done in a way, so as to provide equal and easy access to all users and properties throughout the communities.
- 17th Ave and 45th intersection should be improved, so as to reduce the congestion issues in peak hours along with provision of safe pedestrian crossing.
- Bow Trail and 45th St intersection should be improved, so as to provide safe pedestrian crossing across Bow Trail.

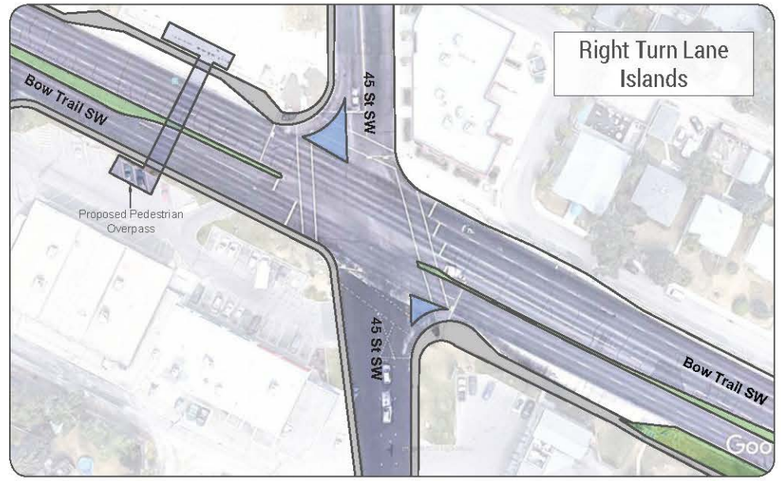
INTERSECTION IMPROVEMENT - 17 AVE & 45 ST



"17th Ave and 45th intersection should be improved, so as to reduce the congestion issues in peak hours along with provision of safe pedestrian crossing"

- Proposed intersection improvement with segregated left turning lane, at 17th Ave and 45th St intersection.

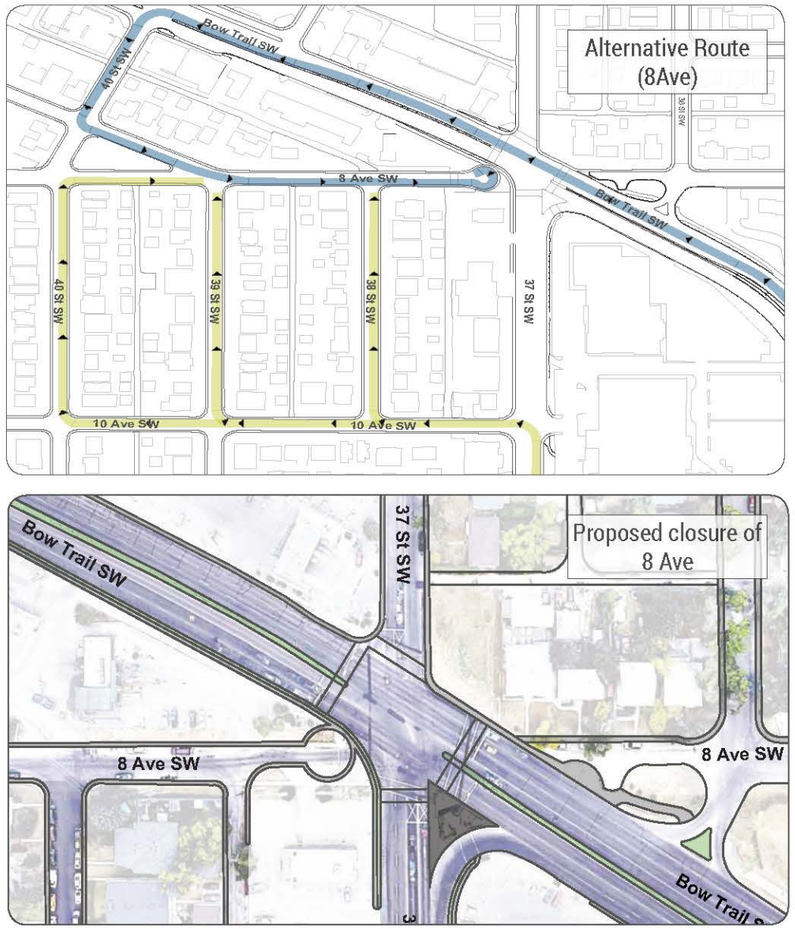
INTERSECTION IMPROVEMENT - BOW TRAIL & 45 ST

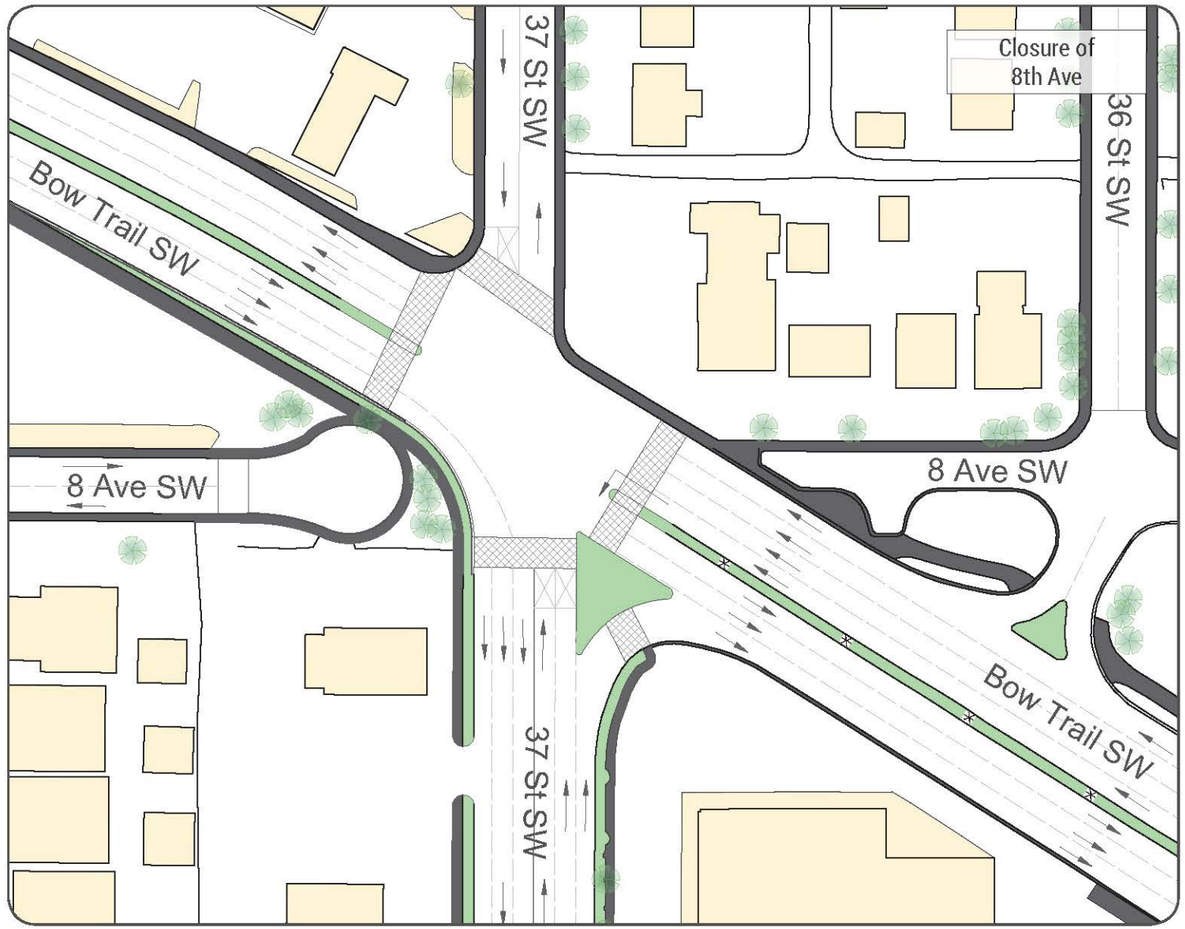


"Bow Trail and 45th St intersection should be improved, so as to provide safe pedestrian crossing across Bow Trail"

- Proposed at grade intersection improvement, with development of right turning islands at Bow Trail and 45th St intersection, for safe pedestrian crossing across intersection.

INTERSECTION IMPROVEMENT - BOW TRAIL & 37 ST





"Bow Trail and 37th St intersection should be improved, so as to mitigate the issue of pedestrian vehicular conflicts"

"Bow Trail and 37th St intersection improvement should be done in a way, so as to provide equal and easy access to all users and properties throughout the communities"

- Proposed intersection improvement at Bow trail and 37th St, with closure of 8th Ave.
- Proposed road quality improvement for alternative routes, for 10th Ave and 45th St.
- Proposed auto sensor left turning signal at Bow Trail and 42nd St Intersection, to provide convenient access to 8th Ave.
- Proposed Right turning island improvement on Bow Trail and 37th St intersection, for a safe pedestrian crossing.
- Proposed short at-grade pedestrian crossings on Bow Trail and 37th St intersection, to provide safe and walkable environment along intersection.

CONCLUSION

CONCLUSION

Glendale, Westgate, and Rosscarrock are established communities that are facing pressures to grow and densify as Calgary continues to evolve. The Area Redevelopment Plan has been created as a result of extensive work with the communities, stakeholders, and cities. From our analysis and engagement, EMC Planning Group developed three core principles to guide the project: community growth and development, quality community environment and active and connected living. The plan is a synthesis of our investigations, professional expertise, as well as the excellent community feedback and suggestions.

EMC Planning Group's Area Redevelopment Plan will act as a guide for the communities to move forward. The plan provides responsive and innovative strategies for potential redevelopment and revitalization within all three neighbourhoods. The plan follows all legal context in Calgary while providing policy and design recommendations. The ARP could be used as an important tool for the community associations and will help these communities grow and maintain their image as Calgary's most desirable neighbourhoods.

EMC Planning Group would like to thank the community associations, steering committee, as well as all residents that gave their feedback at the workshop and open house. Without the hard work of the committed teams these plans would not have been possible.

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REFERENCES

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