

# Saddle Ridge - Taradale

## PLANNING CONCEPTS

**URBAN DOTS**



PLANNING + DESIGN



**UNIVERSITY OF CALGARY**  
SCHOOL OF ARCHITECTURE,  
PLANNING AND LANDSCAPE

PLAN630  
ADVANCED PROFESSIONAL PLANNING STUDIO  
APRIL 2023



# Acknowledgments

## Project Team

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## Instructor

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## Steering Committee

Asim Baig, SRCA President

Peter Bhullar, SRCA Vice-President

Terri Littau, TCA President

Ben Bailey, Planning, City of Calgary

Maggie Dycke, Neighbourhood Services, City of Calgary

Boris Karn, CivicWorks

## Land Acknowledgment

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In the spirit of respect, reciprocity and truth, the Urban Dots Planning + Design team honours and acknowledges Moh'kinsstis, and the traditional Treaty 7 territory and oral practices of the Blackfoot confederacy: Siksika, Kainai, Piikani, as well as the Îyâxe Nakoda and Tsut'ina nations. We acknowledge that this territory is home to the Métis Nation of Alberta, Region 3 within the historical Northwest Métis homeland. Finally, we acknowledge all Nations - Indigenous and non - who live, work and play on this land, and who honour and celebrate this territory.



## Executive Summary

Saddle Ridge and Taradale are growing communities located in northeast Calgary. Currently, the communities are facing challenges from an urban design and pedestrian connectivity perspective due to their car-centric design and lack of identity. Although the site has a strong natural environment and a diverse population, it lacks in housing diversity, proper placemaking, and an inviting pedestrian environment. The location of the Saddletowne LRT station, which marks the end of the Blue Line, brings potential for transit-oriented development and destination-oriented design.

This report combines the work done by the Urban Dots Planning + Design team for the communities of Saddle Ridge and Taradale, starting from a critical site analysis to finalized design concepts and interventions that could be used as recommendations to implement and guide the growth of these communities. These recommendations are a product of our understanding and research of the site, along with community input and feedback from the Steering Committee.

Our recommendations address the challenges and opportunities of the communities by:

- diversifying housing and land use
- improving mobility and connections
- revitalizing the public realm

Each strategy above is supported with specific policy recommendations, providing the communities with guidance to achieve these strategies. Our strategies and design concepts address the current and future needs of the site, and this document provides a framework to achieve that.

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# Section 2.

# PROJECT INTRODUCTION



# Project Introduction

This document responds to the communities of Saddle Ridge and Taradale by providing a vision that is focused on growth, development, sustainability, and connectivity. This is an academic project completed through PLAN 630 Advanced Professional Planning Studio in the School of Architecture, Planning and Landscape. This document provides the community associations with recommendations, based on our analysis of the site and what we heard from our engagement sessions.

## Our Team

Urban Dots Planning + Design is a small women-lead consulting firm based in Calgary. We are a team consisting of multidisciplinary backgrounds and a unique range of skills and knowledge. Our goal as a Planning + Design firm is to provide a guided plan with a series of strategies and recommendations to enhance the sense of place and livability of the Saddle Ridge and Taradale communities.



**NADA AFFAN**

BA 2021, MPLAN 2023

Nada is a second year Master of Planning student at the University of Calgary. She has a Bachelor of Arts in Urban Studies degree from the University of Calgary, and has experience in community engagement. She is interested in creating strong and sustainable communities with connected transportation and open space networks.



**PALLAVI SINGH**

BArch 2019, MPLAN 2023

Pallavi is a second year Master of Planning student at the University of Calgary. She has a Bachelor of Architecture and has experience working on urban scale projects and the area of urban design. She is interested in urban design, and sustainable and equitable planning.



**KRITI ACHARYA**

BArch 2019, MPLAN 2023

Kriti is a second year Master of Planning student at the University of Calgary. She has a Bachelor of Architecture from Nepal with experience in public engagement in both Nepal as well as Calgary. Her interests are in inclusive planning practices, community planning and local area policies.

## Project Scope

The following scope describes the work that will be completed within the timeline of the project:

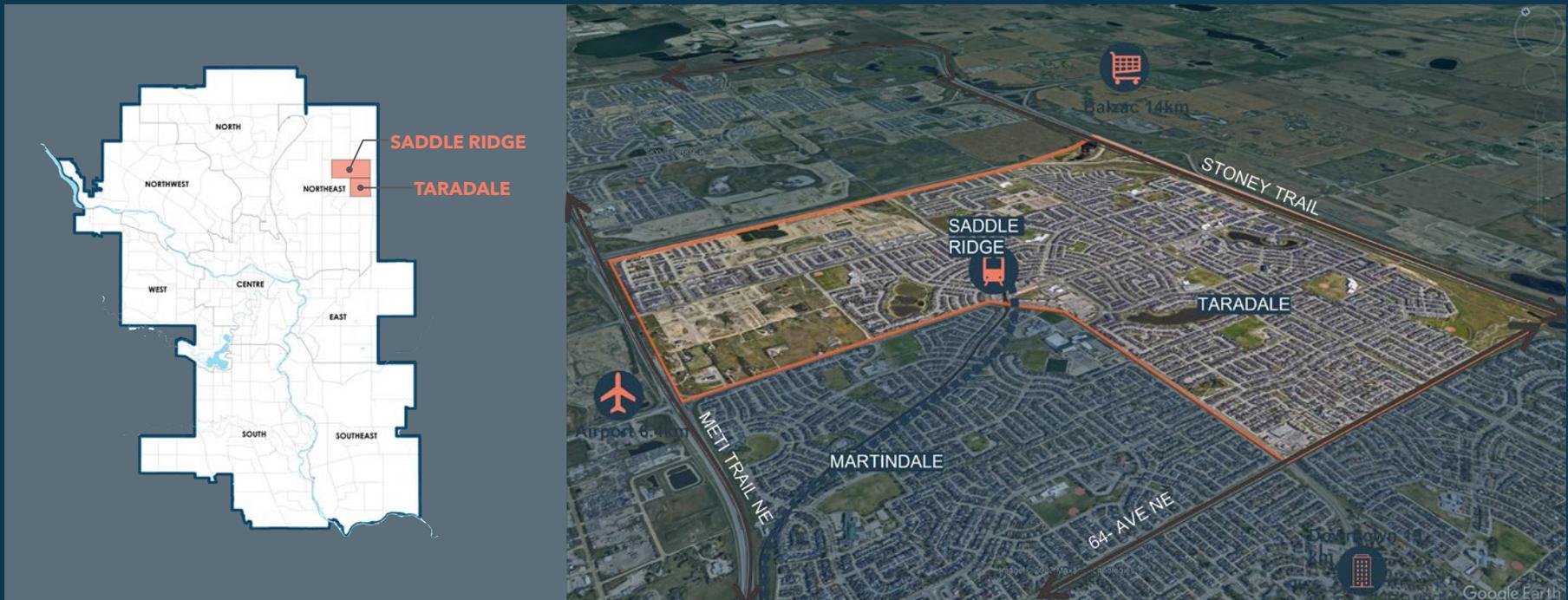
- Detailed site analysis addressing environmental, social and physical aspects of the site
- Community feedback from engagement workshops
- Existing site 3D modeling
- Development concept and land use planning
- Development of open space system, street network, and pedestrian environment
- Commercial area development
- Housing diversity recommendations
- Mobility / transportation strategies
- Setting urban design guidelines

### **Limitations:**

The project will limit to its investments priorities in the aspect of detailed design, along with planning and design recommendations that may not directly address all municipal interests.

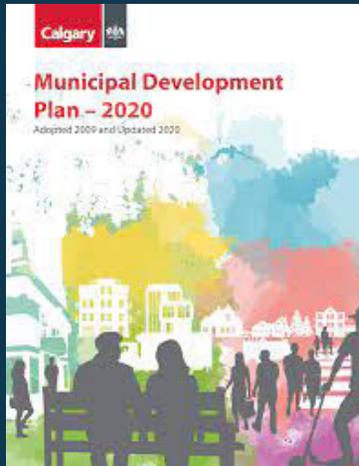
## Site Context

- The communities of Saddle Ridge and Taradale are located in northeast Calgary and are bounded by Stoney Trail NE to the east and the Calgary International Airport to the west.
- These communities are primarily residential with multiple open green spaces and ponds.
- Both communities are home to several schools and have multiple bus stop locations.
- The Saddletowne C-Train station, which marks the end of the blue Northeast Line, is located in the Saddle Ridge community.
- The Genesis Centre is a highly utilized community and recreation space where events and programs are held.



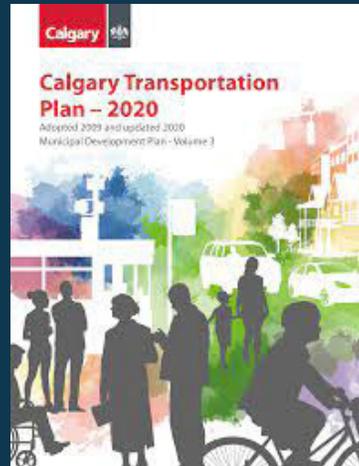
## Legal Framework

We have identified a total of four statutory and non-statutory documents to ensure that our concept plan and vision for the site aligns with the City of Calgary's policy framework. These documents will be referenced as we move through this project, providing us with direction on how to address the issues identified in the communities of Saddle Ridge and Taradale.



### Municipal Development Plan (MDP)

A statutory document guiding the vision for Calgary's growth and development for the next 60 years.



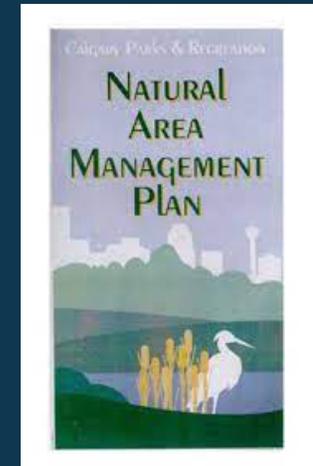
### Calgary Transportation Plan (CTP)

A statutory document highlighting the city's plan to provide sustainable modes of transportation to Calgarians for the next 60 years.



### Saddle Ridge Area Structure Plan (ASP)

A statutory document guiding the various land use and development decisions for the Saddle Ridge, Taradale, and Martindale communities.



### Natural Area Management Plan

A non-statutory plan providing policy guidance for the protection and management of Calgary's natural areas.

# Project Understanding

## Immigration and Demographic Trends

The communities of Saddle Ridge and Taradale welcome new immigrants at a higher rate compared to the rest of the city. New immigrants typically move to these two communities and settle down with their families. However, new demographics in the community are limited in terms of housing due to the lack of housing diversity.

## Cultural Richness and Identity

The Communities of Saddle Ridge and Taradale are rich with members of different ethnic and cultural background. The area has an opportunity of enhancing the culture with spatial identity of the communities.

## Economic Diversification

Currently, the economic activity in the Saddle Ridge and Taradale communities are limited to the town centre in Saddletowne, which serves as an economic and social hub. Diversification of economic activities and creating additional commercial hubs would serve the community and create employment opportunities.

## Economic Diversification

While the communities have several green spaces and ponds, they lack proper programming. Planning these spaces effectively and integrating connections in the green network system can increase the quality of open spaces and increase amenities for the residents.

## Community Access and Legibility

The residential and collector streets in the communities lack elements of identity, which limits the legibility of the streets. Introducing and enhancing urban design elements would improve wayfinding and accessibility. Walkability and accessibility of road infrastructure is overlooked in the community, which hinders mobility options for those in need.

## Extension of Northeast LRT Line

The city of Calgary has future planning on the extension of the Blue line towards the North East. The new development proposals in the area will need to align with extended transit connection and TOD opportunities.



# Key Stakeholders

Key stakeholders include the City of Calgary, respective community associations, prominent businesses, schools, and developers.



City of Calgary



Federation of Calgary Communities



Saddle Ridge Community Association

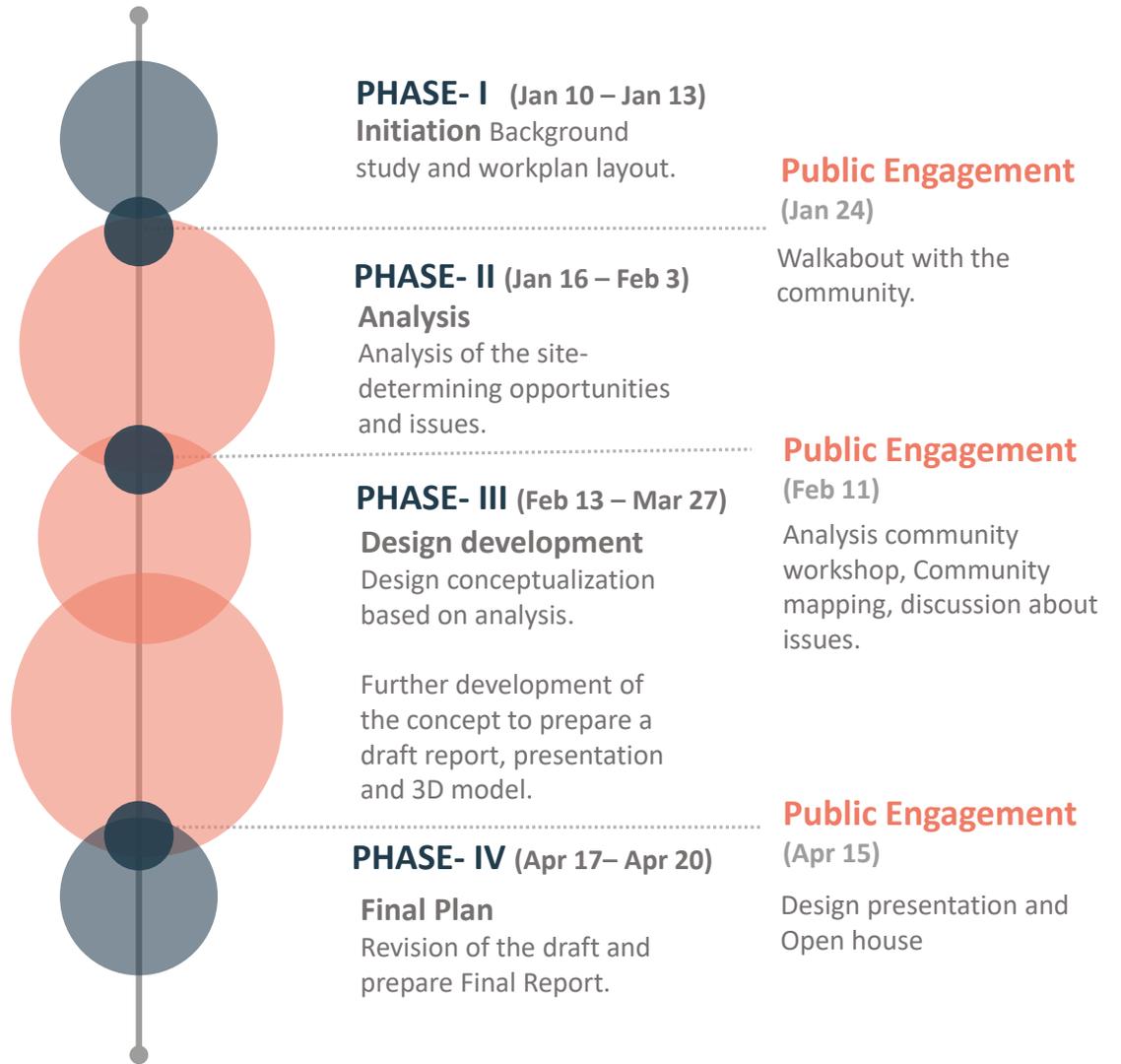


Taradale Community Association

Community Amenities and Institutions:	Schools:	Private Land Owners and Developers:
<ul style="list-style-type: none"> <li>• The Genesis Center of Community Wellness</li> <li>• Saddletown YMCA</li> <li>• Attainable Homes Calgary</li> <li>• NE Community Skatepark</li> </ul>	<ul style="list-style-type: none"> <li>• Peter Lougheed Calgary Board Light of Christ School</li> <li>• Hugh A. Bennett School</li> <li>• Saddle Ridge School</li> <li>• Taradale School</li> <li>• Ted Harris School</li> </ul>	<ul style="list-style-type: none"> <li>• HOMES BY AVI</li> <li>• True man Homes</li> <li>• Alta Ramps</li> <li>• Max Tayefi Architect</li> <li>• KA Associates</li> <li>• Zeidler Architecture</li> <li>• Sunder Lumber Industries</li> <li>• Urban Systems, etc.</li> </ul>

# Methodology

Our process was carried out in four phases, with community engagement included throughout. Phase- I involved identifying the opportunities and issues in the Saddle Ridge and Taradale communities. In Phases-II and III, our team worked with the community and key stakeholders to better understand and analyze the site area in depth. The steering committee was involved from Phase- II and onwards, providing comments and guidance as we refined and further developed our concepts. An open house was held on April 8 at the Genesis Centre where we shared our design concepts with the public and community residents.



**Initial Research Phase:** This will help us understand and identify emerging issues in the Saddle Ridge and Taradale communities. The research will be an off-site market study to gain a high-level idea and understanding of the communities.

**Planning and Scheduling:** A work plan will be created in the early phase which will guide our team to achieve the scope of the project. The work plan includes a timeline, job assignment, and tentative budget.

**Legal Frameworks Review:** As the city is bounded by multiple rules and regulations, reviewing the municipal plan and policies will help us prioritize and understand the municipal vision for the area.

**Photo Inventories:** These will be the collection of photos taken during the site visits. Photo inventories will reflect the experiences and stories of the site, which is important to initiate the concept in future phases

**Base Mapping:** Generating base maps to analyze topography, infrastructure, land use, community assets, demographic, and socio-economic characteristics.

**Background Data Collection:** The site analysis will be carried out by collecting background data from various primary and secondary resources.

**Growth Area Projection:** This will help identify the areas of growth potential on the site, which will align with the findings from the analysis and public engagement Phase- I.

**Land Use Plan:** Recommending a built form character and land use planning methods will be helpful for the public to understand potential street networks, open space, housing typologies, and public realm.

**3D Modeling:** This will allow the community members to visualize our vision and concepts for the community.

**Report and Presentation:** These will be prepared to share with the public and key stakeholders. The report will consist of the proposed land use and density changes, along with a design for the community that includes street details, open space typologies, housing typologies, and recommended development priorities.

**Public Engagement:** The public engagement sessions are categorized in three phases throughout this project. The first public engagement will be a walkabout with the community members. The second public engagement, which is scheduled after the analysis phase, will be a community workshop that will allow us to engage and gain input from the community. The final community engagement will be carried out as an open house session.

# Project Schedule

Task	Start date	End date	Assigned to	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16
<b>Initial Research</b>																			
Emerging issues	10-Jan	13-Jan	Kriti (Jr)	█															
Legal Frameworks	10-Jan	13-Jan	Kriti (Jr)	█															
Site observation	10-Jan	13-Jan	Nada (Sr)	█															
Photo inventories	10-Jan	13-Jan	Kriti (Jr)	█															
Base mapping	10-Jan	13-Jan	Pallavi (T)	█															
Planning and Scheduling	10-Jan	13-Jan	Nada (Sr)	█															
Project meetings	10-Jan	20-Jan	ALL	█	█														
<b>Public Engagement Phase-1</b>																			
Walkabout with community	20-Jan	20-Jan	Nada, Kriti		█														
<b>Analysis</b>																			
Background data collection	16-Jan	20-Jan	Kriti (Jr)		█														
Site context study	16-Jan	20-Jan	Kriti (Jr)		█														
Historical evolution	16-Jan	3-Feb	Kriti (Jr)		█	█	█												
Morphology	20-Jan	3-Feb	Pallavi (T)			█	█												
Infrastructure	20-Jan	3-Feb	Pallavi (T)			█	█												
Community profile	20-Jan	3-Feb	Nada (Sr)			█	█												
Socio-cultural aspects	20-Jan	3-Feb	Nada (Sr)			█	█												
Project meetings	16-Jan	11-Feb	ALL		█	█	█	█											
<b>Public Engagement Phase-2</b>																			
Analysis community Workshop	11-Feb	11-Feb	Nada (Sr)					█											
Discussions about issues	11-Feb	11-Feb	Nada, Kriti					█											
Community mapping	11-Feb	11-Feb	Nada, Kriti					█											
<b>Design development</b>																			
Growth area projection*	13-Feb	17-Feb	Pallavi (T)						█										
Landuse plan	13-Feb	10-Mar	Nada (Sr)						█										
Street networks	13-Feb	10-Mar	Nada, Kriti						█										
Open space	13-Feb	10-Mar	Nada, Kriti						█										
Built space character design	13-Feb	10-Mar	Nada, Kriti						█										
3D modeling	13-Feb	27-Mar	Pallavi (T)																
Draft report and presentation	27-Feb	15-Apr	Pallavi (T)																
Project Meetings	13-Feb	27-Mar	ALL						█		█	█	█	█	█	█	█	█	█
<b>Public Engagement Phase -3</b>																			
Analysis Presentation	15-Apr	15-Apr	Nada, Kriti																
Open house session	15-Apr	15-Apr	Nada, Kriti																█
<b>Final report and presentation</b>																			
Revision	17-Apr	20-Apr	Kriti, Pallavi																█
Presentation and Final report	17-Apr	20-Apr	Pallavi (T)																█
Project meetings	17-Apr	20-Apr	All																█

# Section 2. ANALYSIS





## 2.1. Cultural Landscapes

# Historic Timeline



Calgary - heart of traditional Blackfoot territory. Deer and Buffalo Hunting Areas in the past.

**12,000 years ago to late 1800s**



Area is divided into 5-10 acre parcels-even city lots - \$250 per acer

**1912**



Cultivated as farmlands and fenced and open grasslands

**1929**



Young families began buying the acreages and built homes seeking country life

**1950**

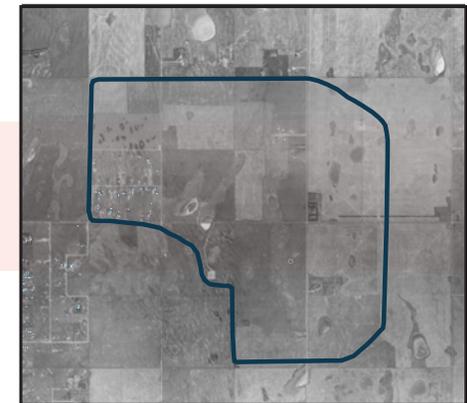


Taradale annexed into City of Calgary in 1961. More than 100 homes built.

**1960s**

The site which was previously grasslands and farmlands have extensively developed into masterplan communities of Saddleridge

City of Calgary Map 1975



# Historic Timeline



Saddle Ridge's rural community hall - Quonset Hall Opened

1972



New developments by big developers. Starting from Taradale moves to the south.

1990s



Further residential development with majority of single family homes being built.

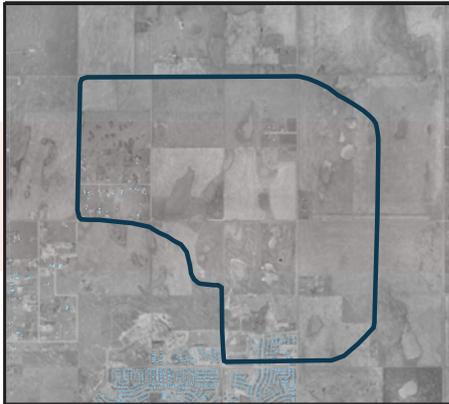
2000s



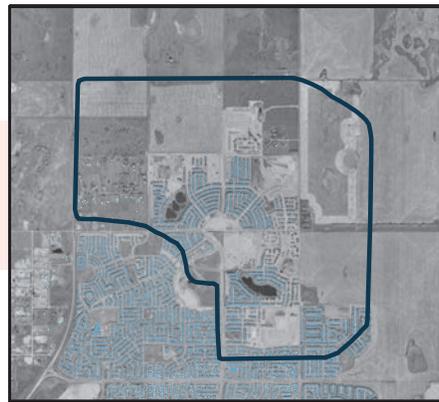
Stoney Trail is built

2007

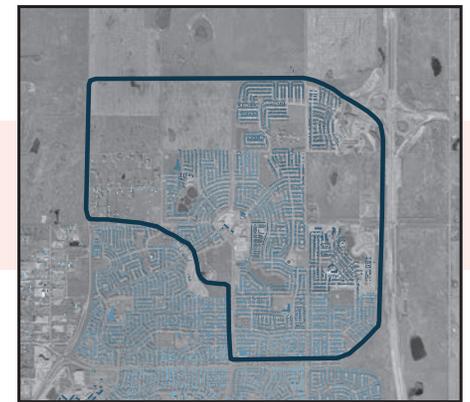
City of Calgary Map 1984



City of Calgary Map 2002



City of Calgary Map 2007 - Stoney Trail Built



# Historic Timeline



Construction of Saddle town station started in 2010 and opened in 2012



Genesis Center Constructed in 2016



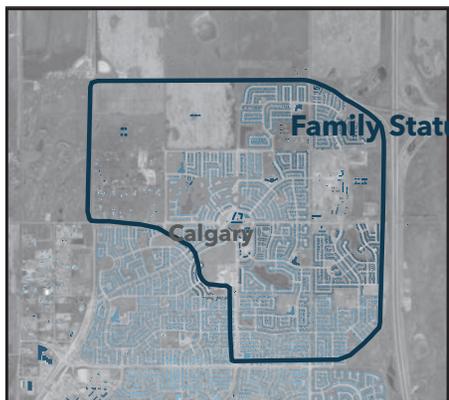
Present Day Site



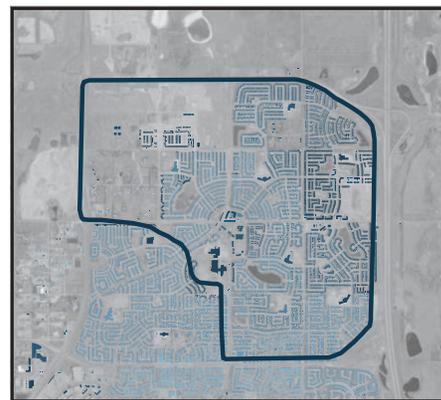
Proposal for Blue LRT line Extension and Airport LRT Line



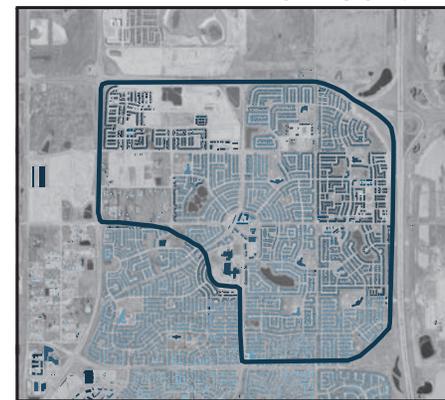
City of Calgary Map 2010



City of Calgary Map 2016

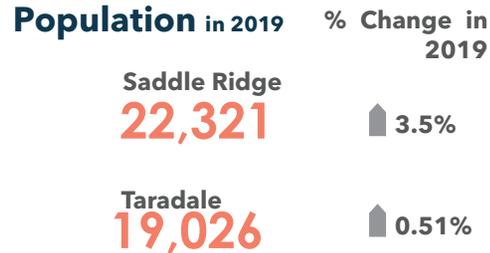


City of Calgary Map 2021

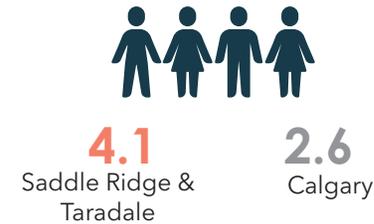


Percentage of families with children

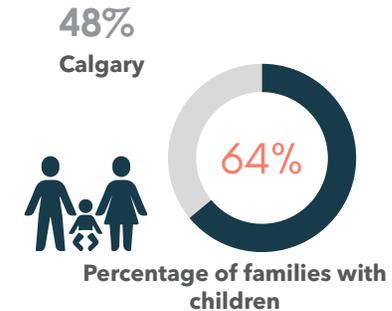
# Demographic and Community Profile



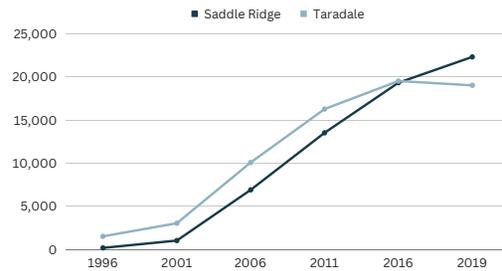
## Average Household Size



## Family Status

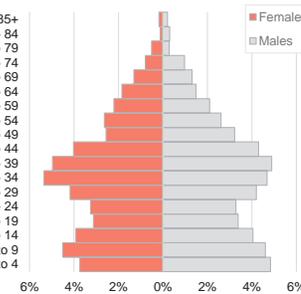


## Population Trend

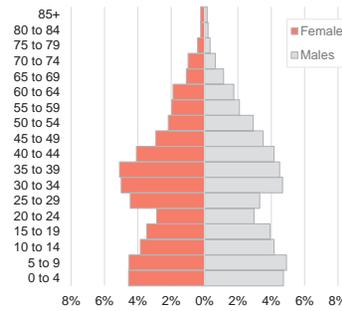


## Population Pyramid

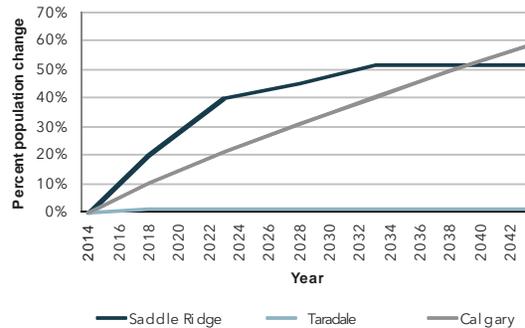
Saddle Ridge



Taradale



## Population Projection

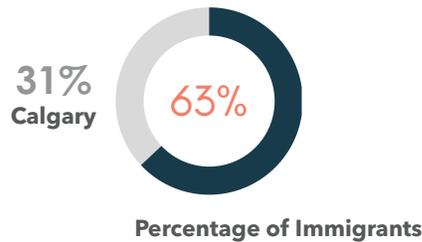


With the increase in developments in the 2000s, we can see a steep rise of population until 2016. Since then, the population for Taradale has been relatively steady while the population in Saddleridge is still increasing. According to the 2019 civic census data, the population for Saddleridge was 22,321 and 19,026 for Taradale.

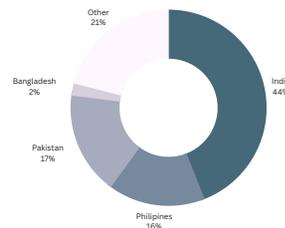
The average household size of the communities are almost double with the number of 4.1 compared to 2.6 for the entire city. The population pyramid you see here displays the high number of working people from 25-45, with children below 10 following next. We can also note that 60% of families in the community are with children.

# Demographic and Community Profile

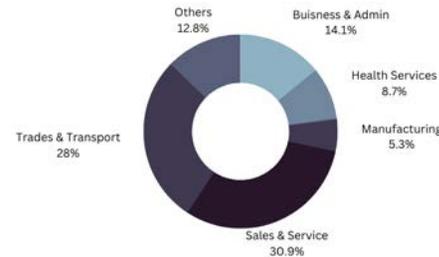
## Immigrant



## Ethnic Origin



## Major

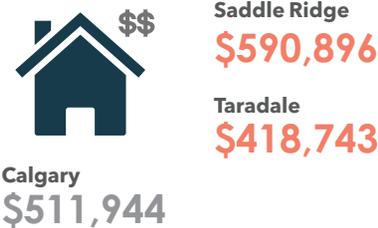


The percentage of immigrants in the communities are relatively high with 63% compared to 31% in the city, with major populations originally from India, Philippines, Pakistan and Banglades.

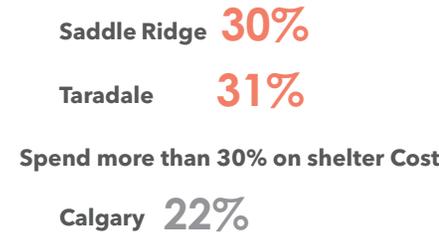
## Median Household



## Average Housing Price in Calgary

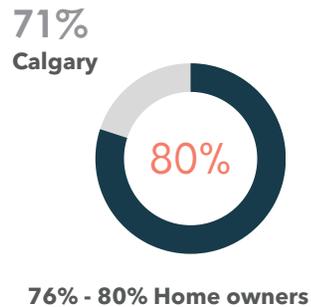


## Affordability

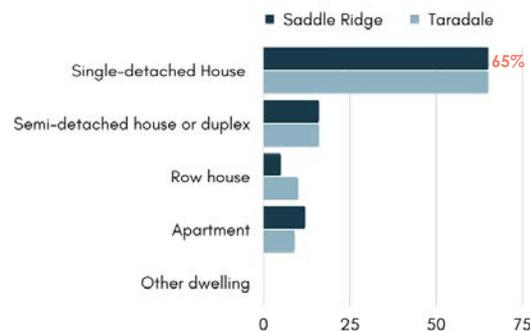


We also observed that 80% of the population are home owners and around 30% of the population spends more than 30% on shelter costs compared to 22% for the city.

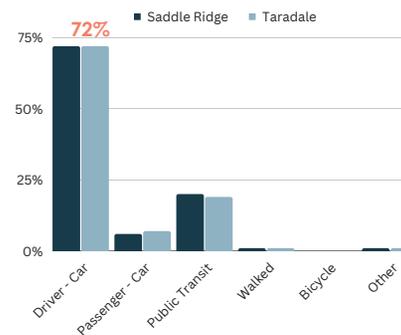
## Housing Ownership



## Dwelling Structure



## Modes of Transportation

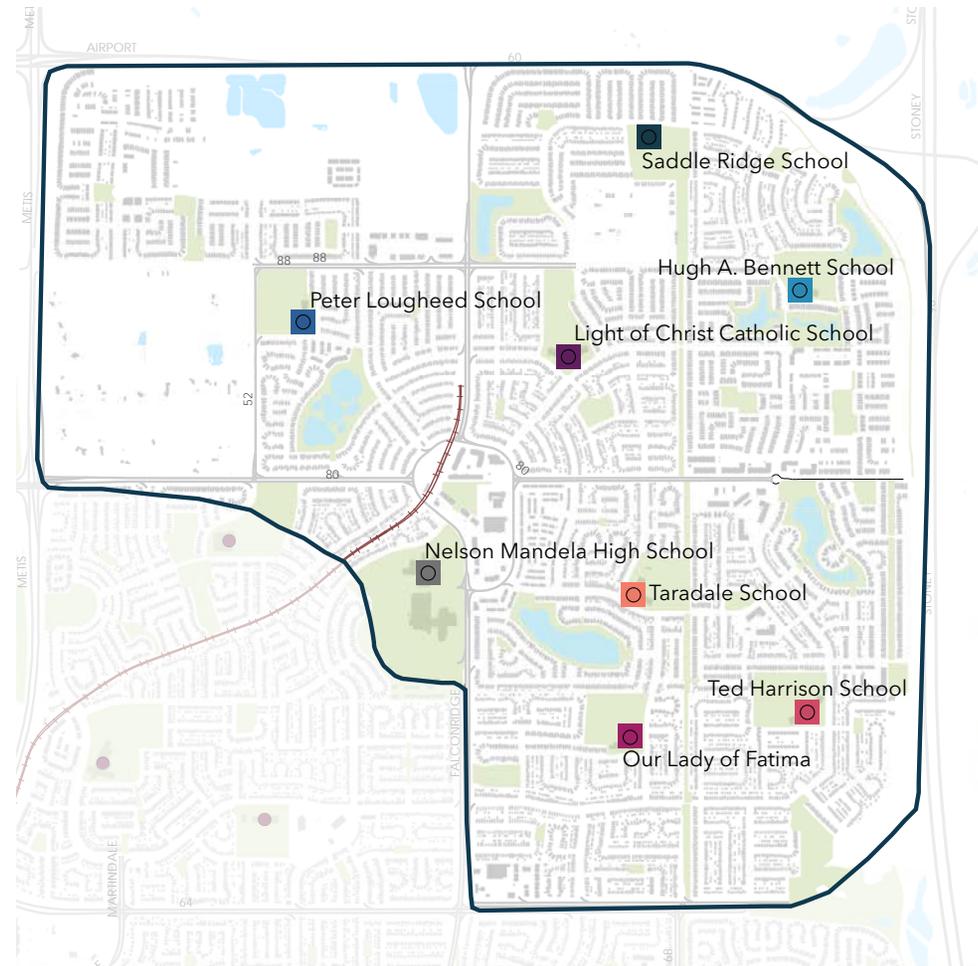
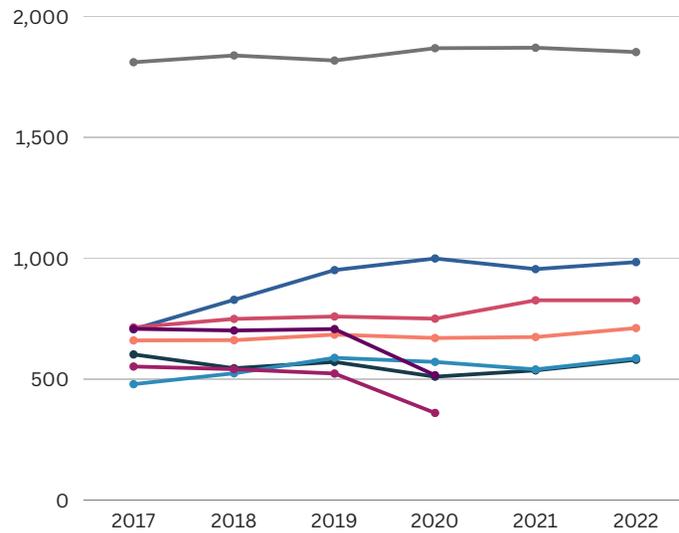


The dwelling structure in the communities are mostly single detached at 65% with minimal apartments. And lastly, around 80% of drive to work either themselves or as passengers compared to 76% for the city.



# School Enrollment

- Saddle Ridge School
- Nelson Mandela School
- Peter Lougheed School
- Taradale School
- Hugh A. Bennett School
- Ted Harrison Highschool
- Light of Christ School
- Our Lady Fatima School



# School Enrollment

## 2022 Enrollment Data



8.2%

**Saddle Ridge School**  
580 (K-GR3)

Saddle Ridge



3%

**Peter Lougheed School**  
984 (GR5-GR9)

Saddle Ridge



8.5%

**Hugh A. Berett School**  
586 (K-GR4)

Saddle Ridge



8.4%

**Ted Harrison School**  
826 (GR5-GR9)

Taradale



5.4%

**Taradale School**  
711 (K-GR4)

Taradale



-1%

**Nelson Mandela High School**  
1853 (GR10-GR12)

Martindale

We can see the enrollments have increased in the last 5 years, and are also steadily increasing. The high school enrolment is slightly lower than the elementary schools in the communities. This is possibly due to the communities having demographics with young children. We also have new schools opening to cater to the increasing number of the population.

# Functional Analysis

The functional analysis map show some notable areas in the community as well as the common paths community members take reach them.

## Cultural



## Legend

- Major Employment Areas
- Community Nodes
- Parks and Outdoor Gathering Area
- Religious Centers
- Schools
- Major Circulations



Being an immigrant-rich community with multiple faiths, it is important to note the surrounding religious centers which are major cultural centers in the communities.





# Open Space Categories



Saddle Ridge and Taradale communities has different categories of open space including three major storm water ponds. The Study area also consists of a green corridor that connects the two communities through the 80th Ave. However, the spaces are disconnected and underutilized, making the community members concerned about their natural system.

In this report the open spaces of the Saddle Ridge and Taradale community are categorized in six categories depending on its use.

- 1) Wetland and Green Corridors
- 2) Recreational Park
- 4) Neighbourhood Parks
- 5) Schools
- 6) Dog park

## Green Space Typologies - According to Programs

- Wetland/ Green Corridors
- Recreational Park
- Neighborhood Parks
- Schools
- Dog Parks

# Open Space Categories

## Wetland and Green corridors

Saddlecreek Ponds



Suncity Park



Green Corridor



The study area's prominent natural system are the constructed wetlands. These wetlands hold a range of biodiversity as well as give users an opportunity to connect with nature. Further examination of these locations revealed that the water features offer an appealing urban environment, but the residents are concerned about the cleanliness and upkeep of the wetlands. Additionally, the observations during the site visit also showed that there was less seating, trees and amenities in these kind of open spaces. Besides that, one of the major connection of the open space is the green corridor that connects the two communities together through 80th Ave.

## Neighbourhood Parks

Saddlestone Park



Manmeet Singh Park



LRT station Park



Inclusive Park



Neighbourhood parks are the second typology, which holds community scale open space programming. These park spaces are relatively successful and more accessible compared to the wetlands and green corridors. Although there is a lot of programming potential in these spaces, their long-term viability is currently hampered by the lack of adequate connections, paths, and programme options. One recurring element in these parks that was noticed was the inclusion of various play areas as a component of a programme, which may have contributed to its relative success.

## Recreational Parks

Genesis Center



Martha Heaven Cricket



Tarrington Woods Park



The Saddle Ridge and Taradale community holds a significant amount of recreational space. These recreational space provide recreational options like soccer, baseball and cricket. There is lots of potential for recreational parks, considering that the community is interested in having recreational spaces. However, the spaces could be more interesting and include trees and seating to accommodate people watching the games. Besides that, the large recreational space have potential to hold multiple usage throughout the year.

## School Playground

Hugh A. Bennet School- Soccer Field



Saddle Ridge School Playground



## Dog Park

Taradale offleash Park (Temporary)



Another open space type that is common in these communities are the school playgrounds. These school hold huge open spaces with very less programming. Besides, that there is only one dog park on the site, and that's the Taradale off-leash area. It is a temporary dog park which is not very maintained and is seen used mainly for parking.

# Urban Forest Analysis

## Tree Canopy Density

Higher density of Tree Canopies



Lower Density of Tree Canopies

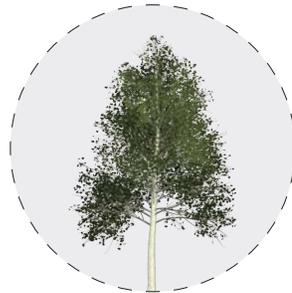


# Urban Forest Analysis

The study of natural system also consists of urban forest analysis where the density and number of trees on site were mapped. The densities are further compared to the existing photos of the site to analyze its on ground experience. There are lots of trees that are connected with the main open spaces along the edges of the parks on the map. However, it is not consistent along all open spaces on the site, so there is an opportunity to increase connectivity with the trees and open space network.



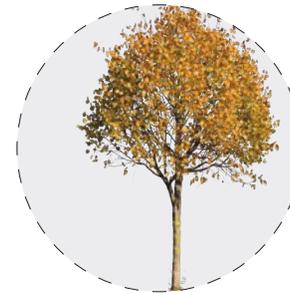
**Spruce Tree**  
 Size: Large  
 Type: Ever Green Tree



**Aspen Tree**  
 Size: Large  
 Type: Deciduous Tree



**Poplar Tree**  
 Size: Large  
 Type: Deciduous



**Linden Tree**  
 Size: Large  
 Type: Deciduous



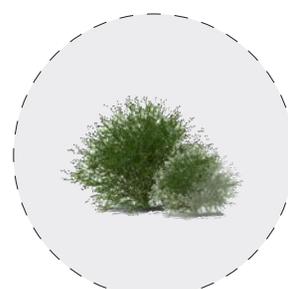
**Oak Tree**  
 Size: Large  
 Type: Deciduous



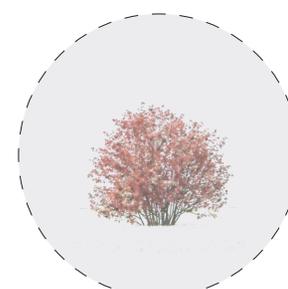
**Elm Tree**  
 Size: Medium  
 Type: Deciduous Tree



**Crabapple**  
 Size: Medium  
 Type: Deciduous



**Juniper**  
 Size: Small  
 Type: Shrub



**Choke Cherry**  
 Size: Small  
 Type: Shrub

# Topography

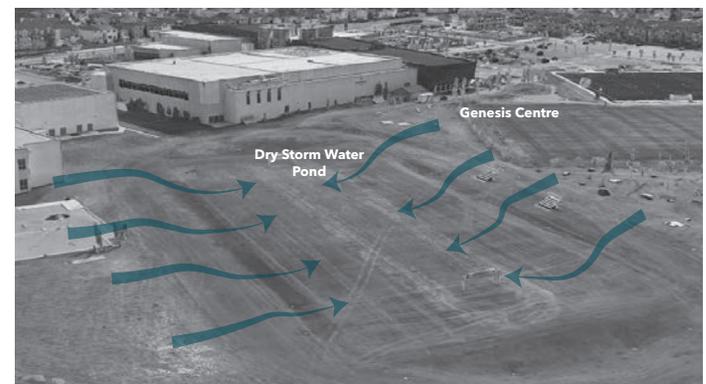
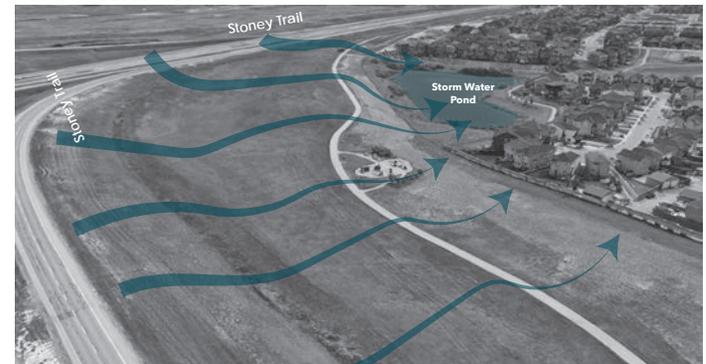


Elevation - 1110

Elevation - 1085

The topography of the site is almost flat having the elevation difference of 75m as shown in the map. But, the scaled down observation showed some areas with larger depression that has a probable storm water collection possibility. Some of the outdoor sports areas have a small depression, giving a dry stormwater pond feature, which could be developed in the future and used for stormwater management.

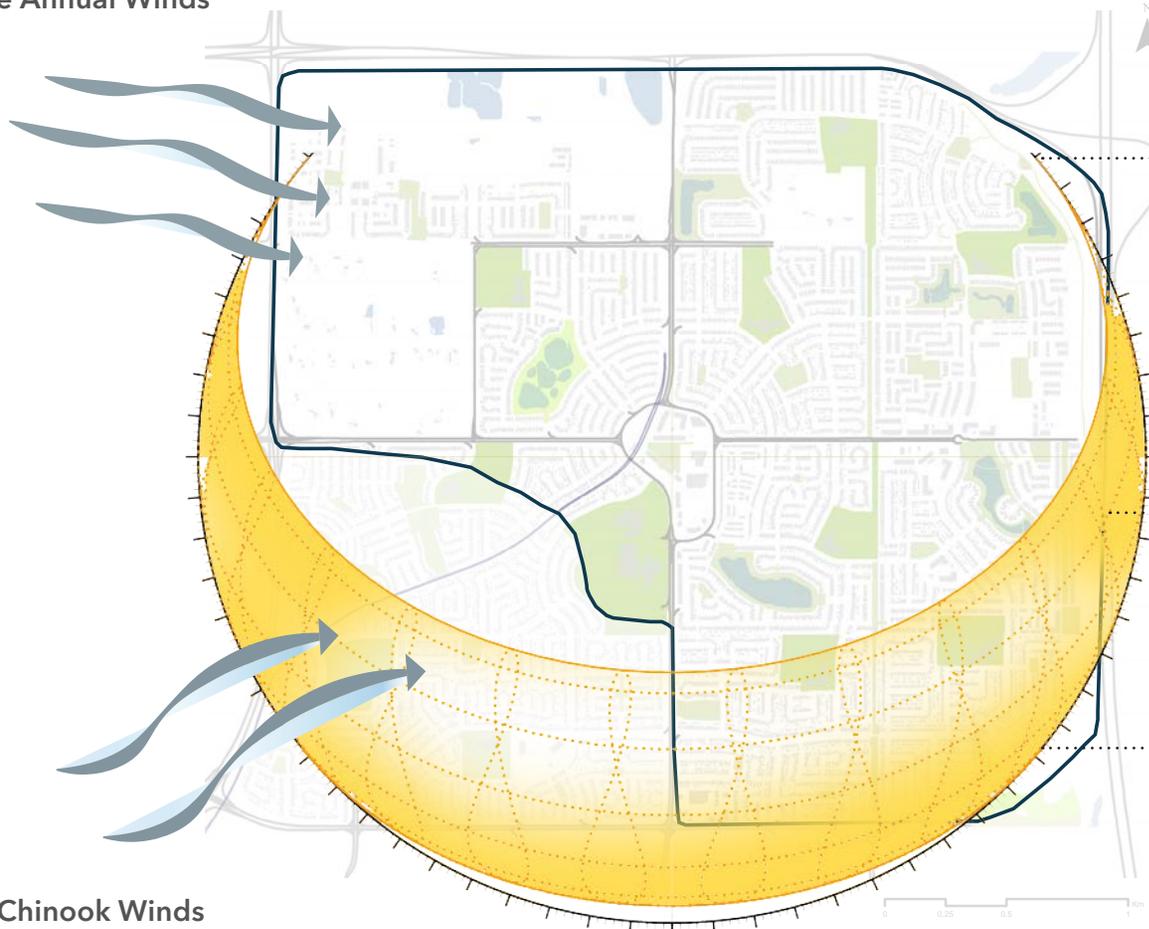
## Slope Study: Potential Storm Water Catchments



# Climate and Environment

The site location, like all of Calgary, receives very little sunlight during the winter and more sunlight for longer hours during the summer. As noticed, the site is relatively vacant and open with less tree canopies, so the average yearly winds from the north-west direction become severe, encouraging wind chills.

Average Annual Winds



Chinook Winds

### WINTER SOLSTICE

December 21  
 Solar Time: 20:31  
 Rise / Set: 04:42 / 20:35  
 Daylight: 15:53 Hrs

### SPRING EQUINOX

March 21  
 Solar Time: 20:29  
 Rise / Set: 06:45 / 18:38  
 Daylight: 11:53 Hrs

### SUMMER SOLISTICE

June 21  
 Solar Time: 20:31  
 Rise / Set: 04:42 / 20:35  
 Daylight: 15:53 Hrs

# Climate and Environment

The climate of the site is similar to rest of the Calgary with very cold winters with coldest air temperature of -32 C. The site observes low precipitation with 66 days of rainfall and 58 days of snowfall. The air is dry with some occasional wind.

But besides that the City of Calgary has observed that the temperature of the city is increasing and the projected temperature increase by 2050 in 3 C. Along with that the report " Calgary Climate Strategy " also mentions 54% increase in thunderstorm. (The City of Calgary, 2022)

- ↑ Average Temperature Increase by 3 C
- ↑ Coldest air temperature will decrease to -25 C by 2050
- ↑ 54% Increase in Thunderstorm by 2050
- ↓ Decreased snowfall



Avg Maximum Temperature  
July / August : 31 C



Coldest Air Temperature  
Jan: -32 C



Avg hours Sun per day  
Maximum: July: 10.2  
Minimum: December 3.6



Avg days with Rainfall: 66 days  
No rainfall: December, January & February



Avg days with Snow Fall: 58 days



Avg depth of Snow on ground:  
6cm



Avg windspeed (km/hr)  
Maximum: Apr/May: 17 km/hr  
Minimum: Aug: 13 km/hr

The site also holds maximum solar potential that provides opportunity to use the solar energy. As the City of Calgary encourages solar energy, homeowners can use this tool as a starting point to help assess their home's solar potential. (The City of Calgary, n.d.) Besides that these ideas can be used by the community centers like Genesis to promote renewable energy in these communities.

## Solar Potential mapping in Public Buildings



# Climate and Environment

## Winter Considerations

It is important to move forward with climate friendly community planning, which leads to consideration of needs for winter cities. It is important to consider including street lights on some of the pedestrian pathways especially for winter where the days are short and it gets dark quickly. Considering year-round outdoor activities could help with programming on the site, and maintaining the sidewalks with icy patches could improve the pedestrian experience.



Lack of Benches + Street Lights



Sidewalk Disconnection



Lack of Year-Round Activities



Icy Patches + Pedestrian Safety

The climate data and projections from the City of Calgary, shows that hailstorms are heavily affecting northeast Calgary. The hailstorm that hit Calgary on June 13, 2020 cost at least \$1.2 billion in insured damages, making it the fourth costliest natural disaster in Canada's history, according to the Insurance Bureau of Canada. (Rieger, 2020) From the residence it was heard that the houses with trees were comparatively less damaged. To reduce some of these natures of impact planting trees and creating a screen might be a way to initiate mitigation.



Hail Storm Aftermath

# Climate and Environment

## Winter Considerations

As one of the winter city, the quality of public realm also largely depends on its exposure to sun. During the site visit some potential for commercial and open spaces nodes were chosen to carry out a shadow analysis. This shadow analysis allows an understanding of areas that are shaded the most. This observation further helps in considerations to decide on appropriate location for future development.

### SPRING EQUINOX

March 21



Location - 1: Saddle Town

### SUMMER SOLISTICE

June 21

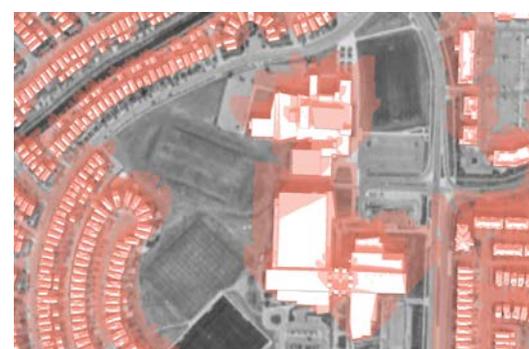


### WINTER SOLSTICE

December 21



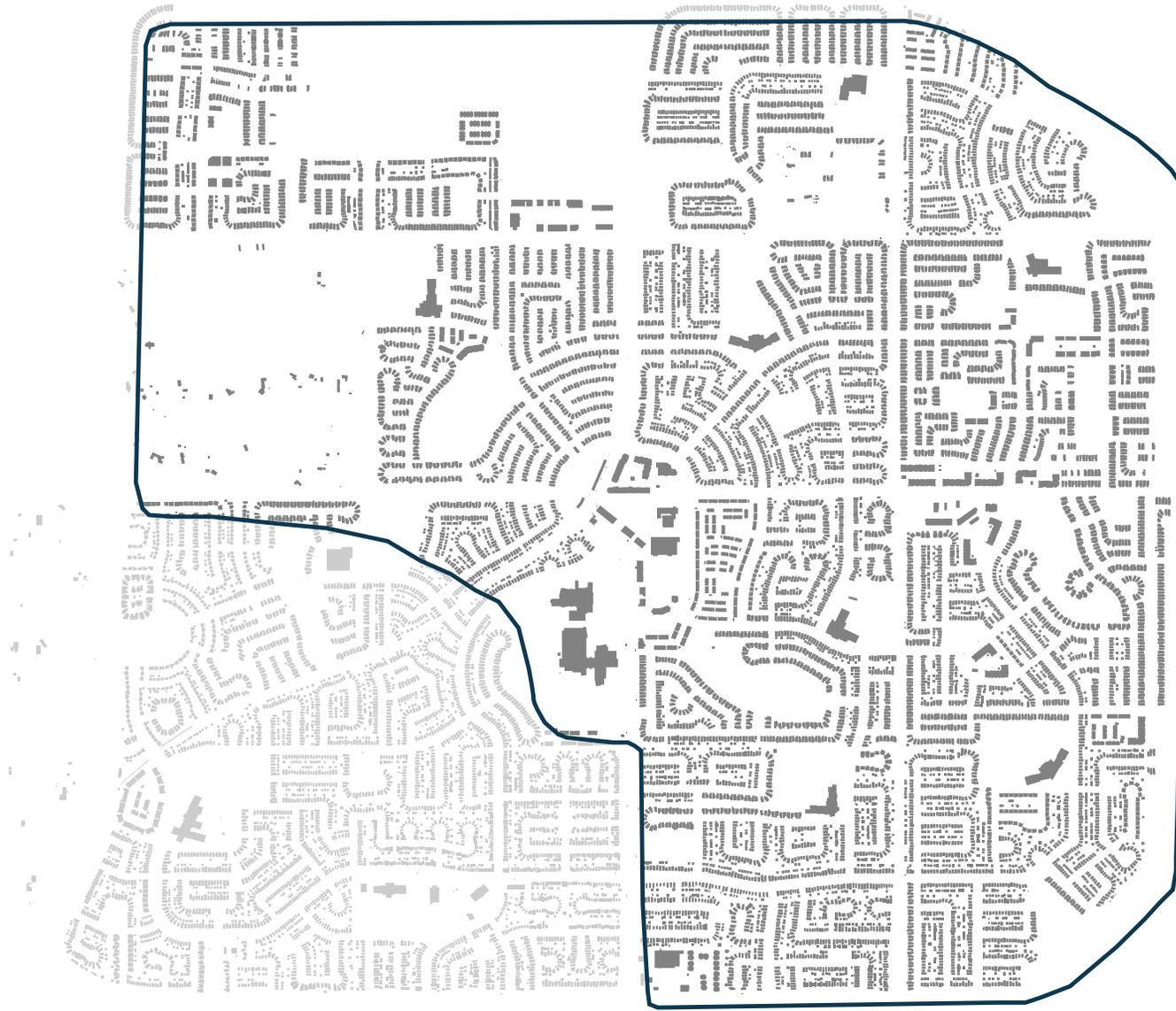
Location - 2: Genesis





## 2.3. Built Form

# Figure Ground



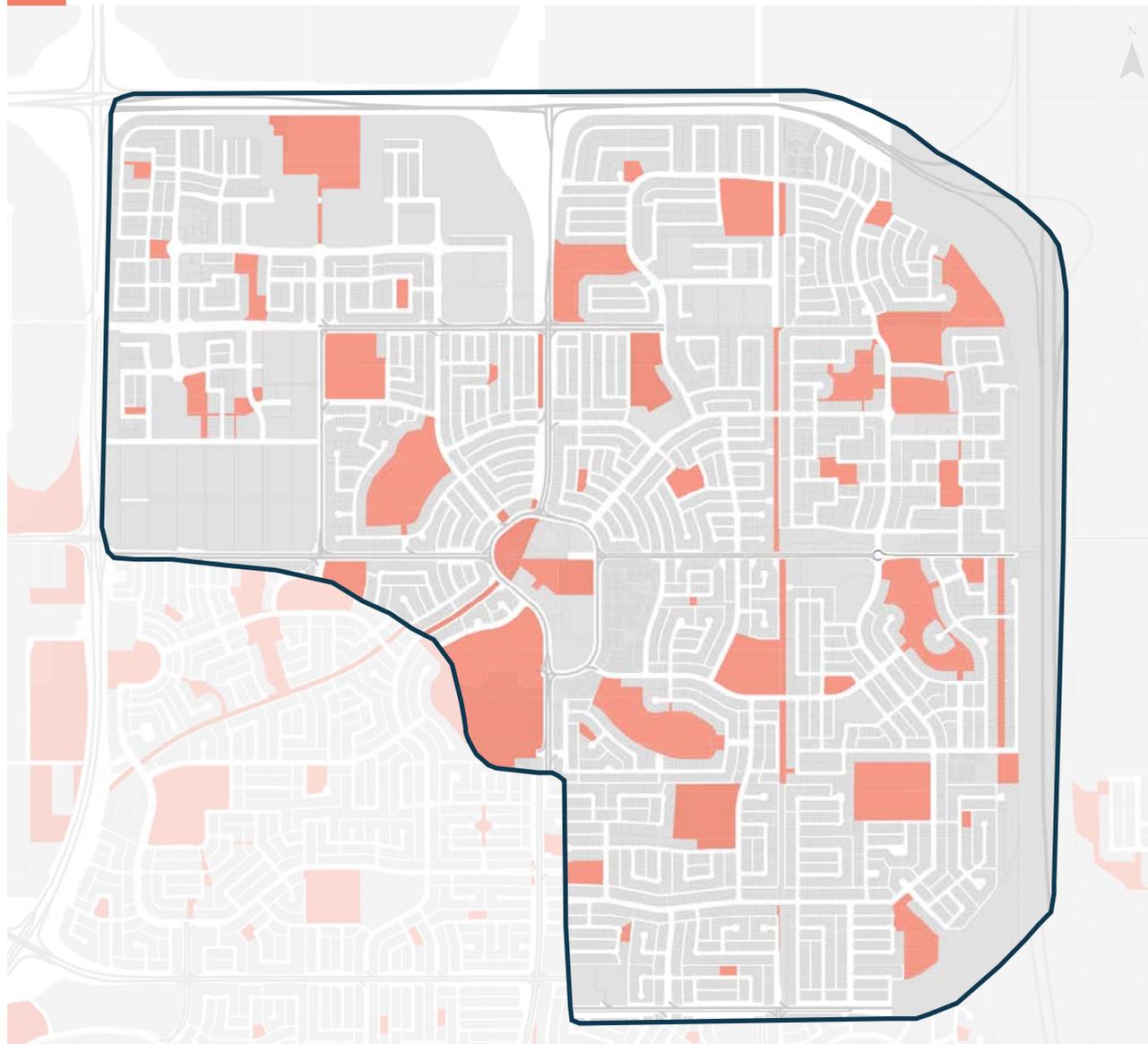
The built form in Saddle Ridge and Taradale is primarily single-family residential with pockets of commercial mainly concentrated around the Saddletowne Circle.

### Legend

■ Building Footprints



# Land Ownership



The land ownership map shows us the parcels that are privately owned (in grey) and city owned (in pink). The city owns lands are mostly parks, stormwater ponds, open spaces and schools. As well as some important building such as the genesis center and police/fire station. The excess of city owned parcels in the site allows us to program public spaces so that it would create vibrant places and increase usage.

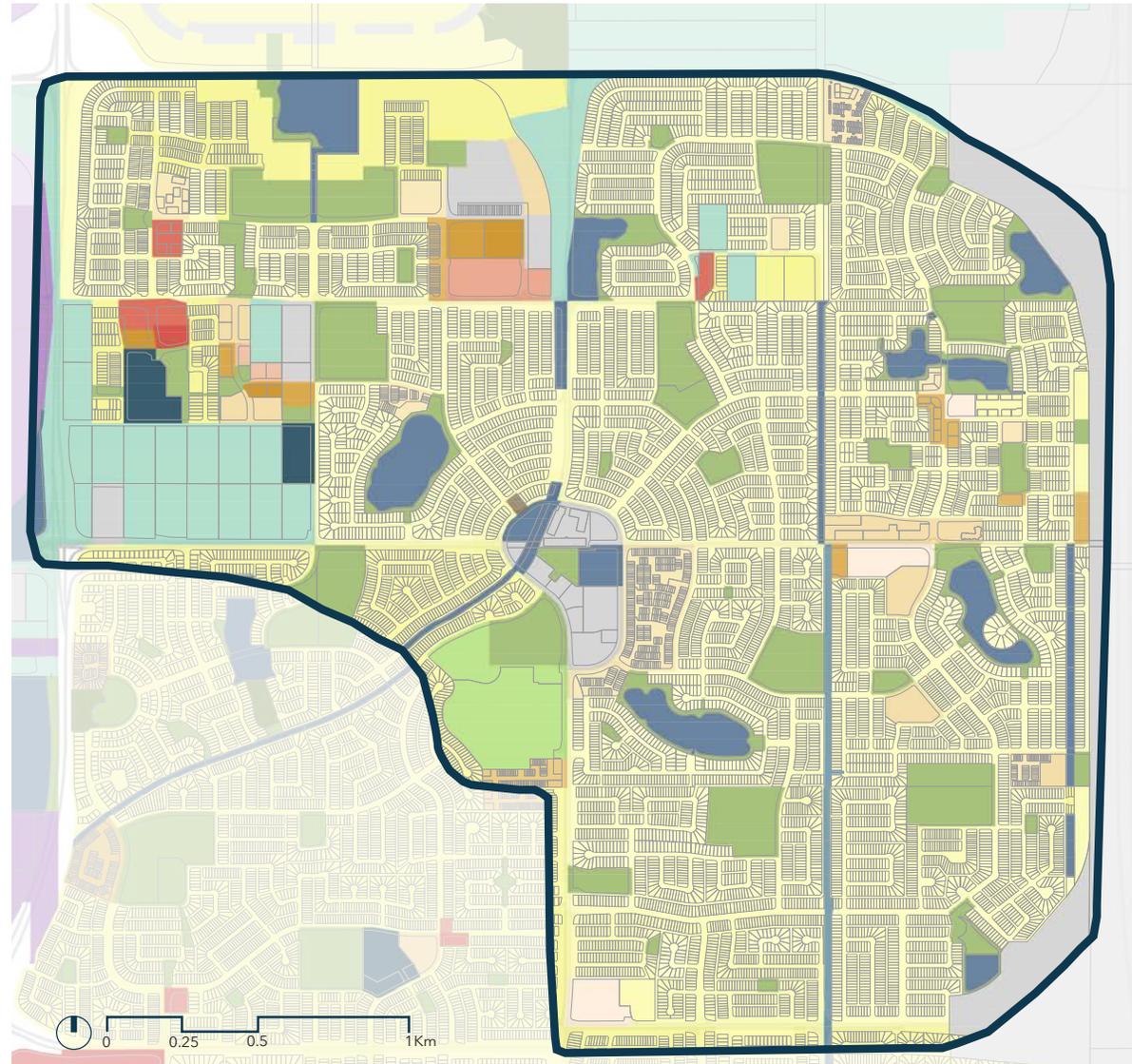
## Land Ownership

- City owned land
- Privately owned land



# Landuse Zoning

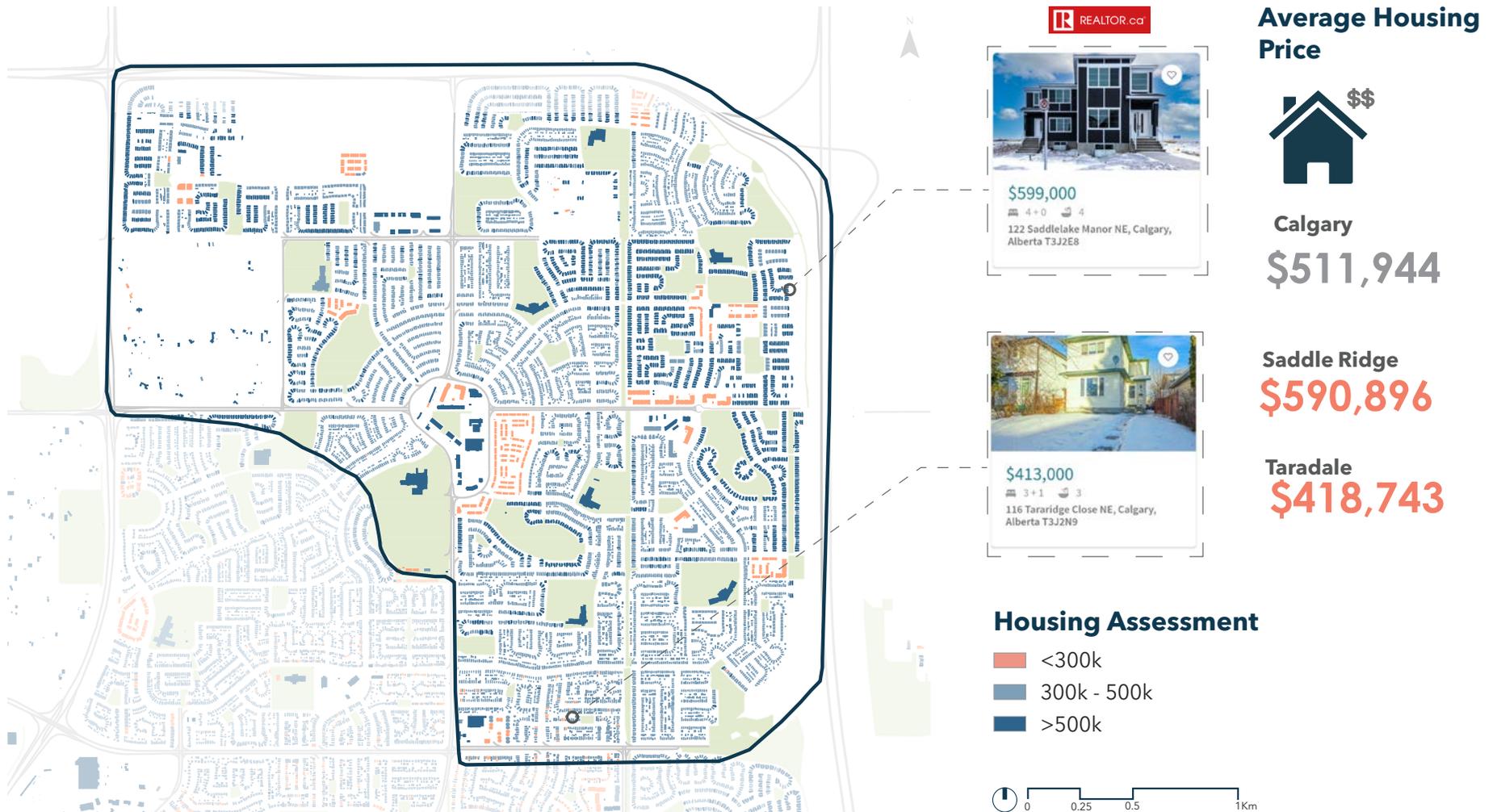
## Landuse Codes



	C-C1	Commercial - Community 1
	C-C2	Commercial - Community 2
	C-COR1	Commercial - Corridor 1
	C-COR2	Commercial - Corridor 2
	C-COR3	Commercial - Corridor 3
	C-N1	Commercial - Neighbourhood 1
	C-N2	Commercial - Neighbourhood 2
	C-R1	Commercial - Regional 1
	MU-1	Mixed Use - General
	DC	Direct Control
	R-1	Residential - One Dwelling
	R-1N	Residential - Narrow Parcel One Dwelling
	R-1S	Residential - One Dwelling
	R-2	Residential - One / Two Dwelling
	R-2M	Residential - Low Density Multiple Dwelling
	R-C1	Residential - Contextual One Dwelling
	R-C1N	Residential - Contextual Narrow Parcel One Dwelling
	R-C1s	Residential - Contextual One Dwelling
	R-C2	Residential - Contextual One / Two Dwelling
	R-G	Residential - Low Density Mixed Housing
	R-Gm	Residential - Low Density Mixed Housing
	M-1	Multi-Residential - Low Profile
	M-2	Multi-Residential - Medium Profile
	M-C1	Multi-Residential - Contextual Low Profile
	M-C2	Multi-Residential - Contextual Medium Profile
	M-CG	Multi-Residential - Contextual Grade-Oriented
	M-G	Multi-Residential - At Grade Housing
	M-H1	Multi-Residential - High Density Low Rise
	M-H2	Multi-Residential - High Density Medium Rise
	M-X1	Multi-Residential - Low Profile Support Commercial
	M-X2	Multi-Residential - Medium Profile Support Commercial
	I-B	Industrial - Business
	I-C	Industrial - Commercial
	I-G	Industrial - General
	S-R	Special Purpose - Recreation
	S-SPR	Special Purpose - School, Park and Community
	S-TUC	Special Purpose - Transportation and Utility Corridor
	S-UN	Special Purpose - Urban Nature
	S-CI	Special Purpose - Community Institution
	S-CRI	Special Purpose - City and Regional Infrastructure
	S-CS	Special Purpose - Community Service District
	S-FUD	Special Purpose - Future Urban Development

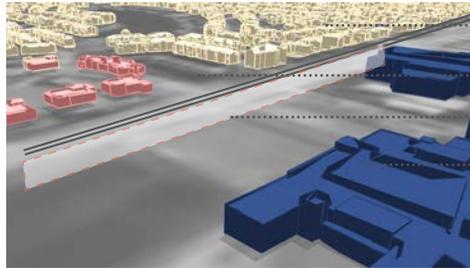
# Housing Affordability

On housing affordability analysis in the existing properties on the site, we can see few properties which are below the 300k line and most of them are in between 300-500k. Properties on the expensive range lie near park or water features, because that gives views and access to natural amenities. These are current listings of what is the average property listing price in Saddleridge and Taradale.



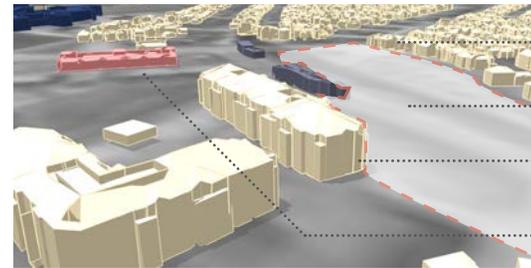
# Housing Affordability

## 1 Node 1



- ..... Single story commercial
- ..... Lack of street edge
- ..... Residential edge: 2- 3 storey
- ..... Large footprint of institutions and service centers

## 2 Node 2



- ..... Single family homes with back yard facing to the main
- ..... Open space for parking
- ..... New development
- ..... Disconnected commercial edge



# Housing Typology

We identified different housing typologies that could have major potential for diversifying and implementing gentle-density methods. Many single-family houses have a back garage, which we identified as an opportunity for backyard suites.

## Residential Typology



Single family house with back garage and back alley - potential backyard suites



Duplex house plots with existing secondary suites (basement)

# Commercial Typology

We identified several neighbourhood commercial developments, as well as several commercial cores, including one in Saddletowne Circle, which is in a prime location due to proximity to the LRT station. There are also multiple home businesses on site as well, such as a day home and kitchen supplier.

## Neighbourhood Commercial



Neighborhood Commercial - Taradale



Neighborhood Commercial - Saddletowne



Home businesses - Taradale

## Commercial Core



Commercial Core - Saddletowne Station



Commercial Core - Savanna

## 2.4. Infrastructure



# Road Network



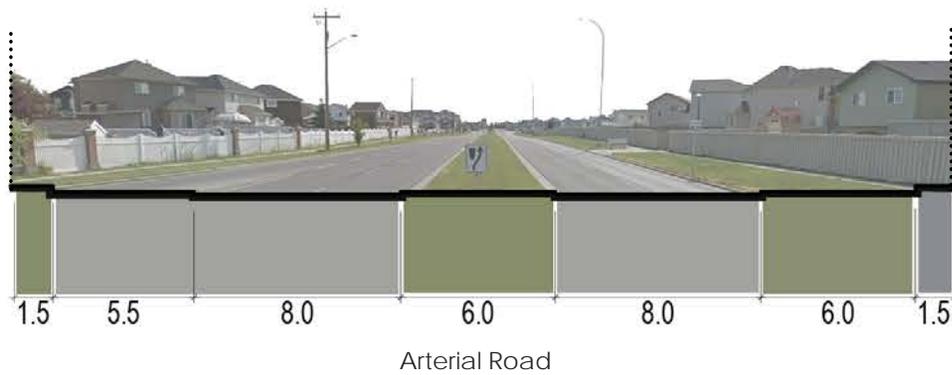
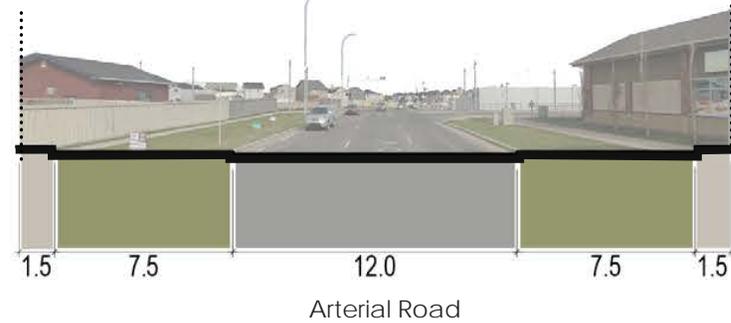
Saddleridge-Taradale’s mobility and road network makes up a large part of the site. The communities are connected to the rest of the city through major skeletal roads such as Stoney Trail and Metis Trail, arterial roads such as 80 Ave NE and Saddletowne Circle, and collector roads such as Saddlecrest Blvd NE and Taradale Drive NE.

## Legend

-  Skeletal Road
-  Arterial Road
-  Collector Road
-  Residential Road



# Road Typology



35

80th Avenue acts as a major arterial road and is an access point into the site. As you can see in the street sections, there is little consideration for the pedestrian experience, as roads make up a large part of the network.

## Stormwater Infrastructure



The stormwater infrastructure on site is distributed through drains and pipelines. The site is relatively flat, however the presence of the stormwater ponds allows water to drain. There are opportunities for bioswales and green infrastructure as the impacts of climate change are expected to intensify.

# Traffic Volumes and Incidents



- ☆ High Pedestrian Traffic
- 15000 - 25000 vehicles/day
- 26000 - 38000 vehicles/day
- 52000 vehicles/day

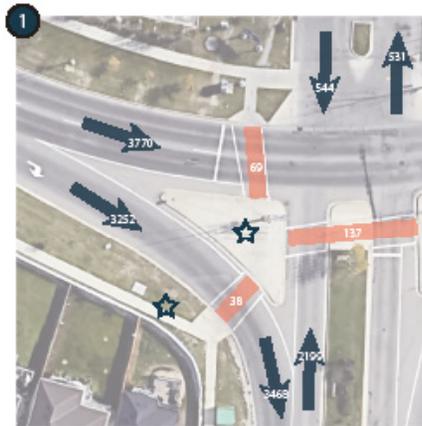


- | Pedestrian Incidents | Vehicle Incidents  |
|----------------------|--------------------|
| ● 1 incident         | ● 1-4 incidents    |
| ● 2-3 incidents      | ● 5-9 incidents    |
| ● 4+ incidents       | ● 10-15+ incidents |

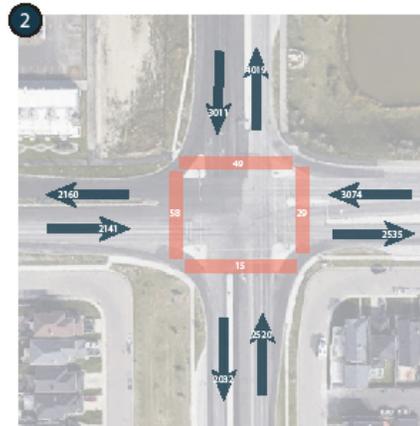


The site does see some heavy traffic along the major skeletal and arterial roads, including Stoney Trail, 80th Avenue, and Falconridge Blvd. We also noticed that there is high pedestrian traffic along major intersections, which links to the number of pedestrian incidents on site.

## Intersection Analysis



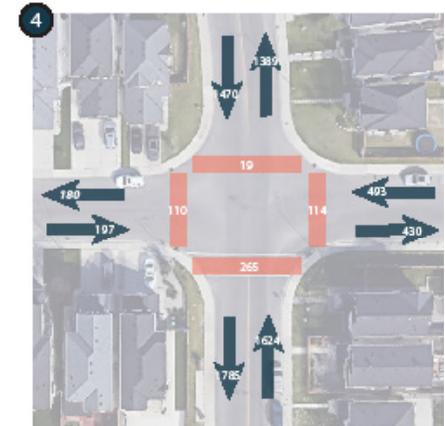
80 Ave NE & Saddletowne



88 Ave NE & 60 Street NE



Saddletowne Circle NE &  
Saddlemont Blvd NE



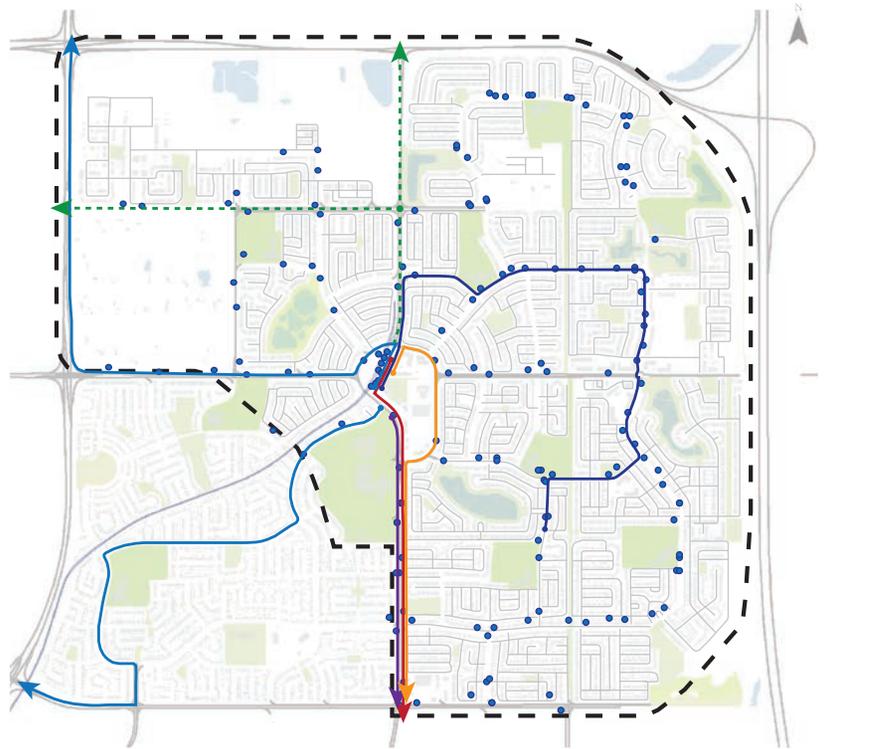
Taradale Drive NE & Taralake

☆ Traffic flow limiting pedestrian activity and posing safety concerns

The first intersection we analyzed is located on a 80th Ave and Saddletowne Circle, which has high vehicle traffic, and this possibly explains why the pedestrian traffic is relatively low. We also did notice that this intersection is a major barrier to pedestrian flow due to the curve in the road, discouraging traffic from slowing down on this arterial road.

The third intersection, which is located on Saddletowne Circle and Saddlemont Blvd, sees high pedestrian traffic and pedestrian incidents. Vehicle traffic flow is really busy on this intersection, so pedestrians have faced the most in terms of safety concerns.

# Bus Stops & Major Bus Routes



- Bus Stops
- MAX Orange BRT to Brentwood
- Bus 85 & 157 to Airport
- Bus 23 & 303 to Downtown
- Bus 303 to University of Calgary
- Bus 60 to Taradale
- Future Airport Blue Line Connection

Although the site is well serviced by multiple bus stop locations and an LRT line, people opt for driving as their primary mode of transportation. This may be due to frequency and commute time of buses. It takes approximately 50 minutes by bus to reach the University of Calgary from Saddletowne versus 21 minutes car ride. Some buses have a frequency of 20-30 minutes, which can be discouraging to people.

From Saddletowne Station:

Mode	to Airport	to University of Calgary	to Downtown
	53 min 22 stops 22 min frequency	50 min 21 stops 15 min frequency	33 min 10 stops 12 min frequency
	17 min 8.7 km	21 min 17.0 km	20 min 18.6 km
	45 min 14 stops	42 min 18 stops	24 min 10 stops

# Pedestrian & Cycling Network

Although there are paved pathways and sidewalks throughout the site, there are multiple walkability barriers for pedestrians. The sidewalks are quite narrow, there are roads without sidewalks, and fencing along pedestrian pathways, which creates an unwelcoming environment for people.



## Walkability Barriers



Narrow Sidewalks



Stoney Trail



Fencing



Residential Roads Without Sidewalks

# Major Walksheds

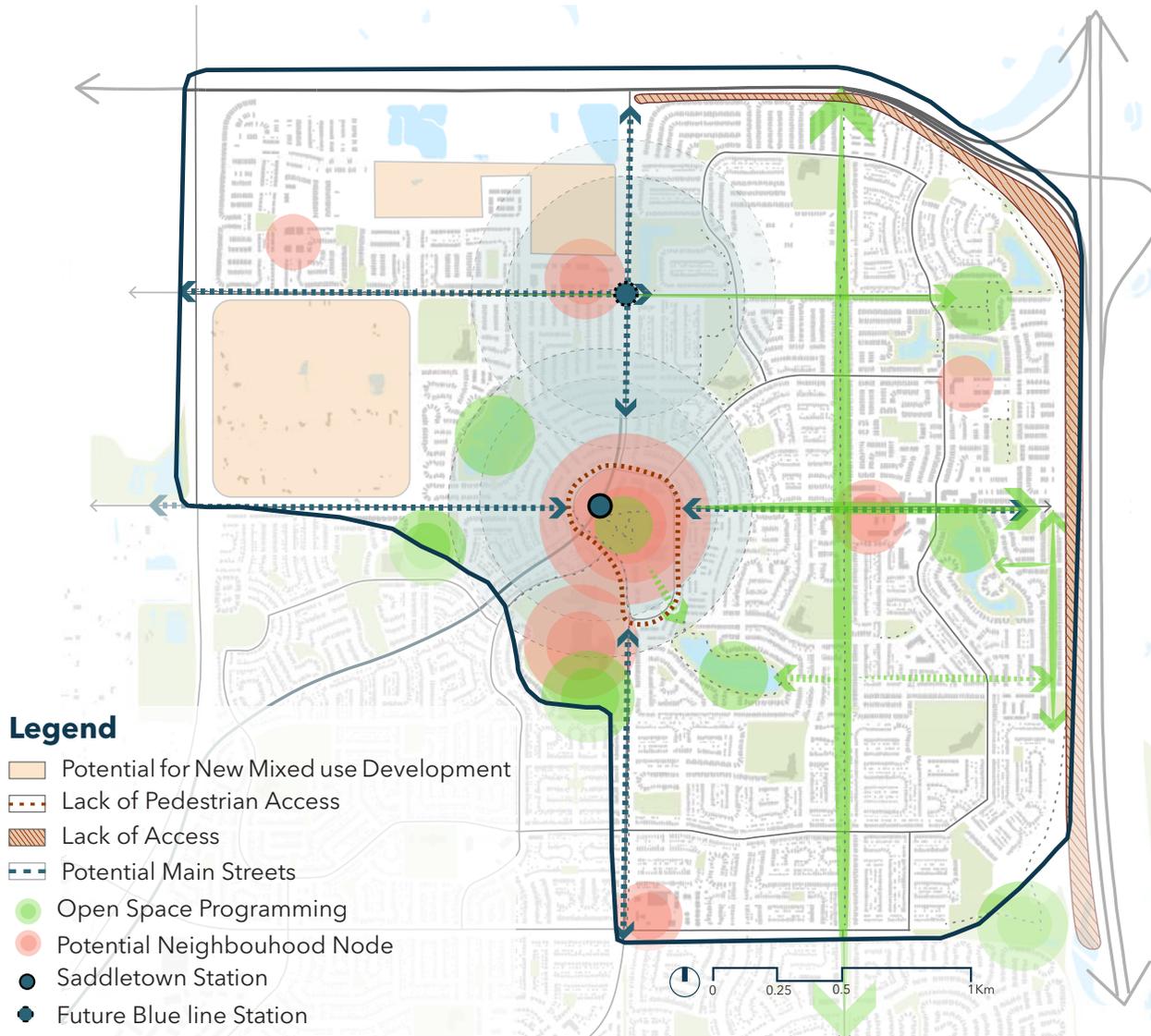


Our walkshed analysis informs us that the new blue line extension will improve transit walkability and proximity to nearby schools and facilities.

### Legend

- Walkshed
- 5-min walking radii
- Saddle Town Station
- Future LRT Station
- Schools

# Synthesis Map



## Legend

- Potential for New Mixed use Development
- Lack of Pedestrian Access
- Lack of Access
- Potential Main Streets
- Open Space Programming
- Potential Neighbourhood Node
- Saddletown Station
- Future Blue line Station

## Opportunities

- Mixed use developments in smaller commercial nodes
- Main street activation on streets connecting commercial pockets - 80th Ave, 60th Ave, Falconridge Blvd, 88th Ave
- Future TOD integration with extension of blue line
- Potential for secondary suites in plots
- Religious centers as cultural components to various population
- Genesis center as a common meeting point
- Market for programming in open spaces and park
- Potential for farmer's Market
- Existing stormwater allows connection to green infrastructure and landscaping
- Existing water infrastructure allows for programming related to water

## Challenges

- Lack of pedestrian access around Saddletown circle
- Lack of access and mobility to Stoney Trail
- Lack of trees in streets
- Lack of connection and proper access to open spaces
- Lack of safe crossings in streets
- Lack of seatings and designed urban realm
- Disconnected and Inactive streets
- Lack of legibility and difficulty in way finding
- Lack of lighting in open spaces

# Section 3. Community Engagement



## 3.1 Community Walkabout



Our community walkabout took place on January 24. This was the first time we got to explore the site and learn about its opportunities and challenges in-person.

Key observations that emerged from the site visit:

- Lack of street activation and multi-modal transportation options
- Primarily single-family residential with potential for housing diversity and choice
- Unwelcoming public realm
- Narrow sidewalks and disconnected pedestrian experience
- Multiple parks and open spaces with potential for programming and maintenance



# 3.2 Community Mapping



Talia and Kri.

The community mapping workshop took place at the Genesis Centre on February 11. Our class brought posters with aerial photographs of the site along with dot stickers and markers, allowing the community members to identify and map opportunities and challenges.

## 3.3 Community Open House



Our final community engagement session was held in the form of an open house at the Genesis Centre. Our team presented five posters that highlighted our vision and concepts to the community. Our class also constructed a 3D physical model of the site that included QR codes of our design interventions for people to visualize



## 3.4 What We Heard

**Traffic congestion** is a problem everywhere especially during school dropoffs and pickups.

Saddletowne Circle has the most **unsafe intersections**. There are so many pedestrian accidents and I don't feel safe walking, especially at night

Since the Safeway closed, we don't have any other options nearby. I like the Boston Pizza but I would prefer more **commercial options** like Starbucks or McDonalds.

I love the wetlands, I used to see students learning botany here, sadly not anymore. Our **open spaces are underutilized** and not maintained with very little amenities.

I like **biking/walking** to get to the Genesis Centre from my house, but the 80th Ave that leads me to the Genesis feels mundane.

I struggle with the community not having any **off leash areas** for my dog. I wish I had some more options.

I would love to see more **winter programming** in the open spaces and parks we have.



—

# Section 4. Planning Concepts and Strategies



# Vision



The Sadderidge and Taradale communities provide a safe and legible environment for pedestrians through a vibrant streetscape and a quality public realm. A variety of urban amenities, housing diversity, and recreational opportunities creates connections between people and places, diversifies the area, and revitalizes the public realm to foster inclusivity and a sense of community identity and belonging.

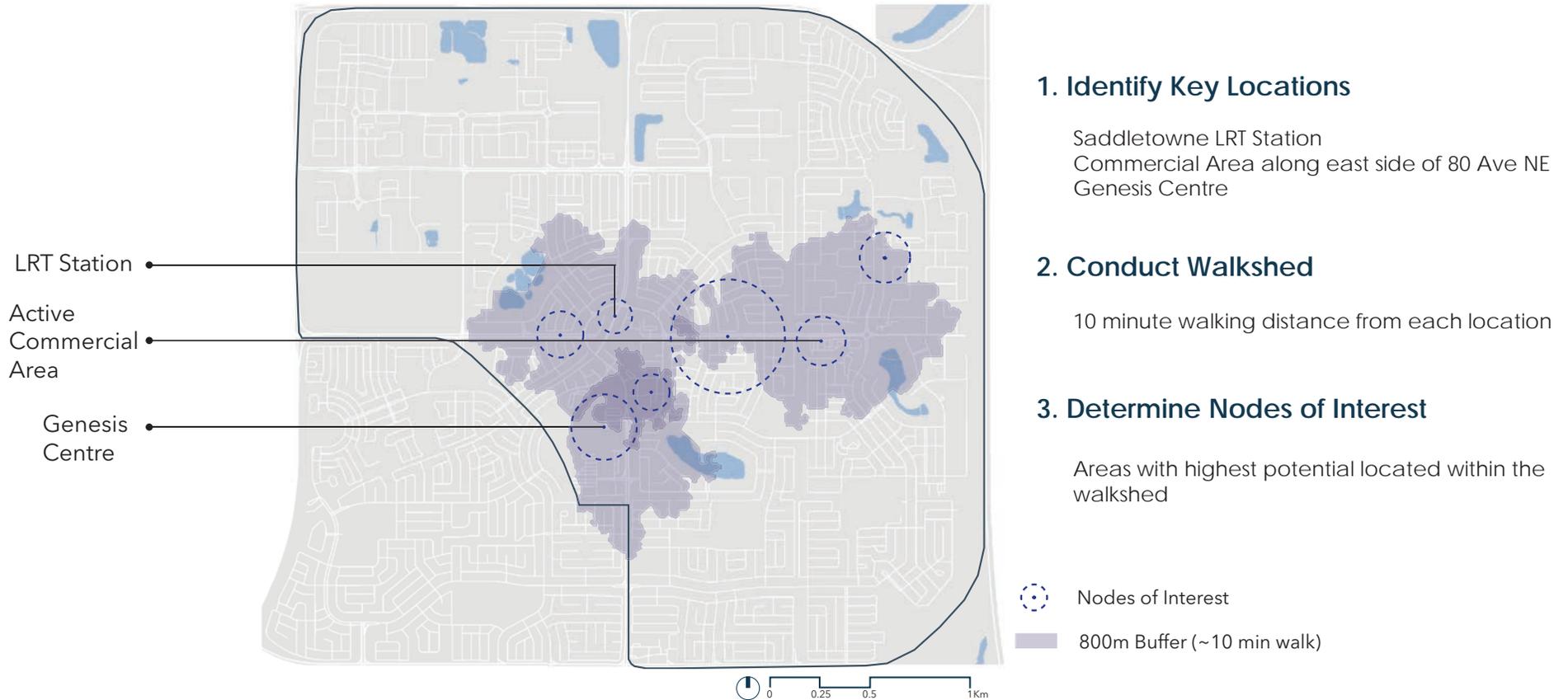
Our vision involves three principles: connect, diversify, and revitalize. The Saddle Ridge and Taradale communities provide a safe and legible environment for pedestrians through a vibrant streetscape and quality public realm. A variety of urban amenities, housing diversity, and recreational opportunities creates connections between people and places, diversifies the area, and revitalizes the public realm to foster inclusivity and a sense of community and belonging.

# Section 4.1

## Diversified Housing and



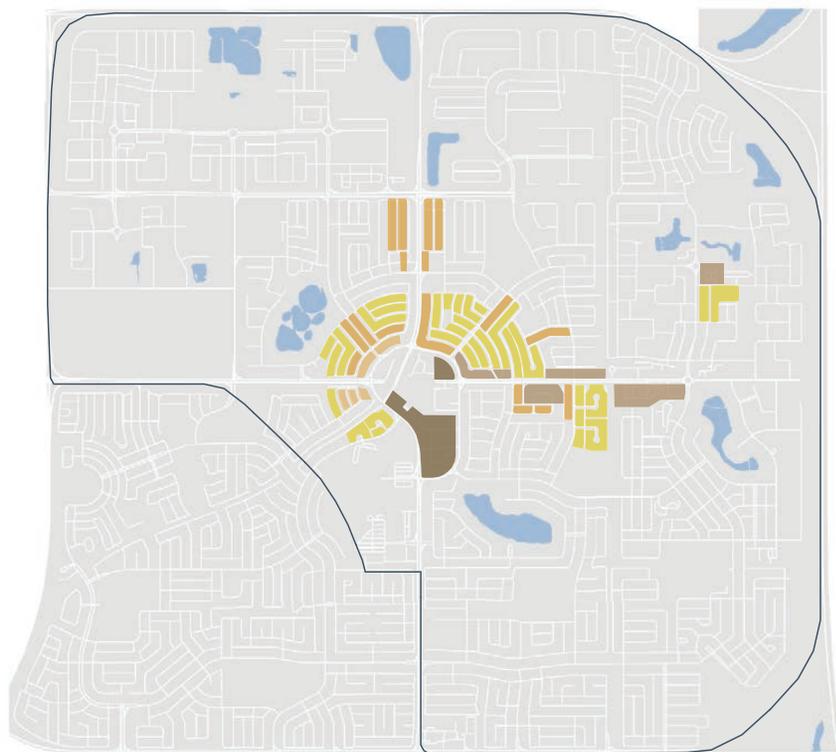
# Land Use Strategy



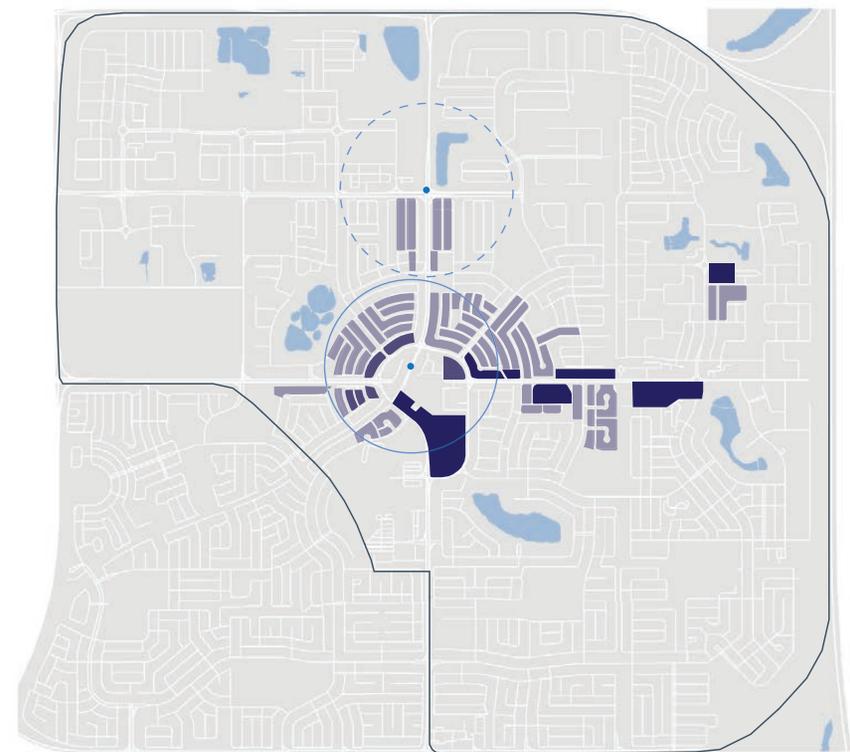
Our strategy involved identifying key locations that we saw had major opportunities for growth on the site, and that includes the Saddle Towne LRT station, the commercial area on the east end of 80th Ave, and the Genesis Centre serving as a community hub. We then conducted a 10-minute walkshed from each key location to determine which areas had the highest potential within each walkshed. This allowed us to identify our nodes of interest, which lays the foundation for why we chose these specific locations and land use.

# Proposed Land Use and Density

We propose a mix of land uses that allows for a range of gentle density options including secondary suites, townhouses, and stacked fourplexes that are between 1 to 3 storeys, to mid-rise apartment buildings and mixed-use developments that are around 3-4 storeys in height and 5 to 6 storeys around our main street and Saddletowne Circle.



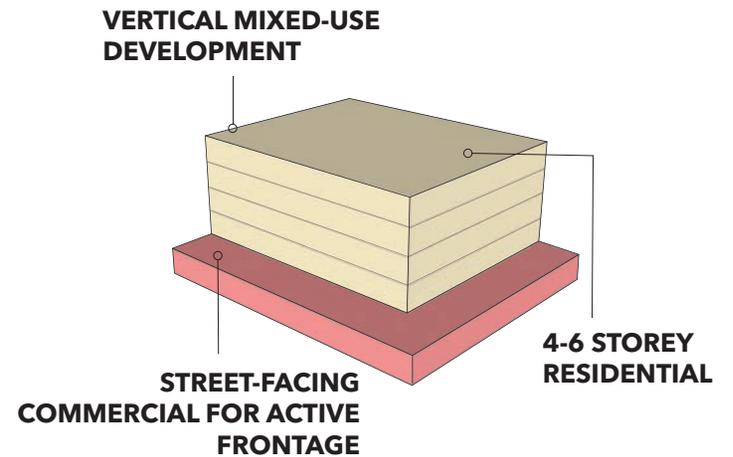
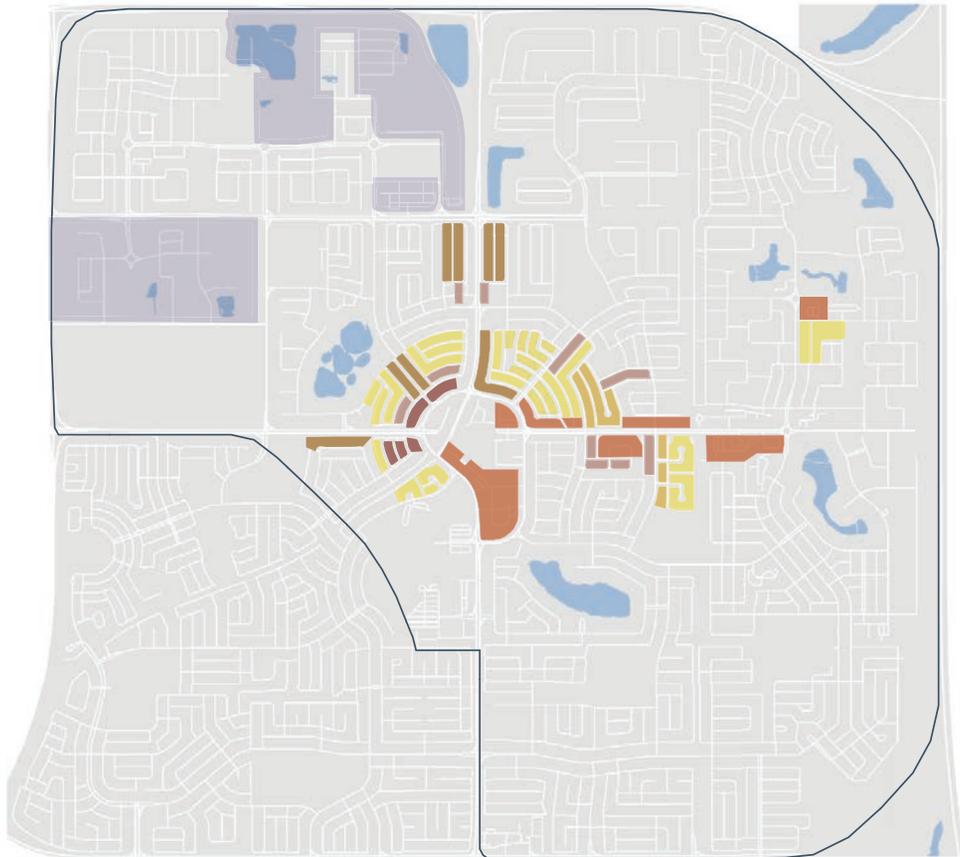
- R-CG** Residential
- M-C2** Multi-Residential
- M-CG** Multi-Residential
- M-U2** Mixed-Use (3 to 4 storeys)
- M-U2** Mixed-Use (5 to 6 storeys)



- Saddletowne LRT
- ⋯ Future Blue-Line
- 1 to 3 storeys
- 3 to 4 storeys
- 5 to 6 storeys

# Built Form Typologies

We identified the locations of each typology based on our nodes of interest, active potential, and our mobility and open space interventions. The secondary suites can be adaptable to multiple uses under the same land use zone, encourages multigenerational living, and promotes ageing in place because multiple generations can live in the same area. We did identify several home businesses on the site, such as day homes and kitchen suppliers, so potential live-work units near the commercial and active areas is an opportunity to promote these businesses and allow them to flourish.

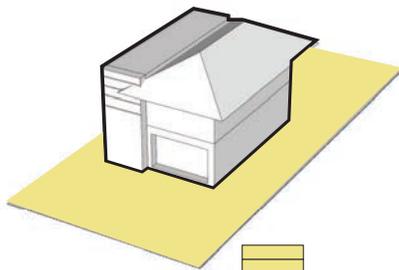


- R-CG** Secondary Suite
- R-CG** Live-Work Unit
- M-CG** Townhouse/Rowhouse
- M-CG** Stacked Fourplex
- M-U2** Mixed-Use Commercial-Residential
- M-C2** Mid-Rise Residential
- Development Underway

# Typologies

## R-CG: Residential - Grade-Oriented Infill District

This zone permits live-work units to accommodate the family and home businesses located on site.

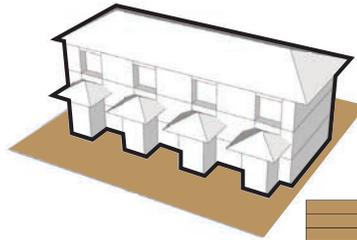


Live-Work Unit  
RC-G  
2 storeys



## M-CG: Multi-Residential - Contextual Grade-Oriented District

This zone allows for townhouses with access at grade, so existing single detached homes would be adjusted to accommodate this type of housing.

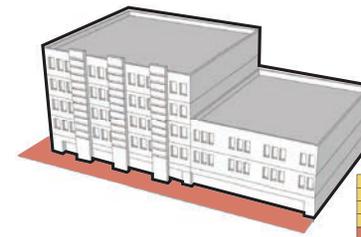


Townhouse  
M-CG  
2-3 storeys



## MU-2: Mixed Use - Active Frontage District

This zone allows for commercial and residential uses facing the street, integrating mixed-use buildings to promote diversity and accessibility.



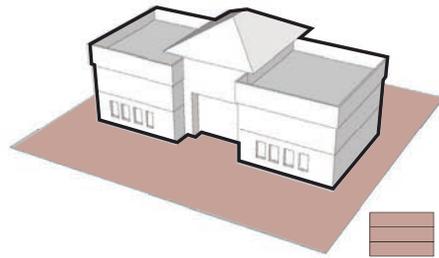
Mixed-Use  
MU-2  
4-6 storeys



# Typologies

## M-CG: Multi-Residential - Contextual Grade-Oriented District

This zone allows for fourplexes with access at grade, promoting gentle-density integration.

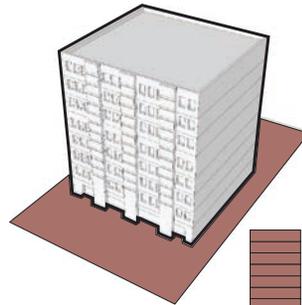


Stacked Fourplex  
M-CG  
2-3 storeys



## M-C2: Multi-Residential - Contextual Medium Profile District

This zone allows for low to medium rise apartment buildings, which will integrate well with the existing low-density site.

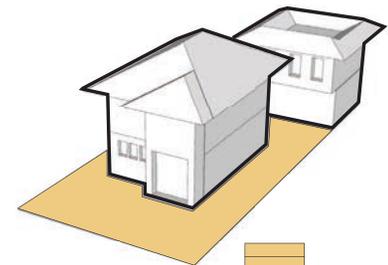


Mid-Rise Residential  
M-C2  
5-6 storeys



## R-CG: Residential - Grade-Oriented Infill District

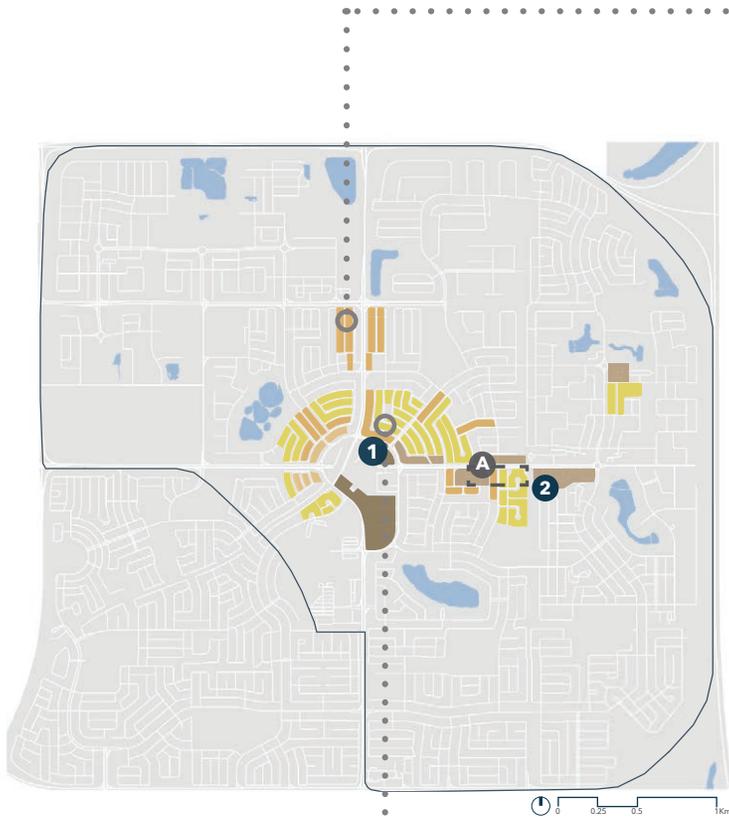
This zone accommodates secondary and backyard suites. This could be an existing main residence with a garage or a main residence with no garage could have a new backyard suite integrated.



Secondary Suite  
R-CG  
2 storeys



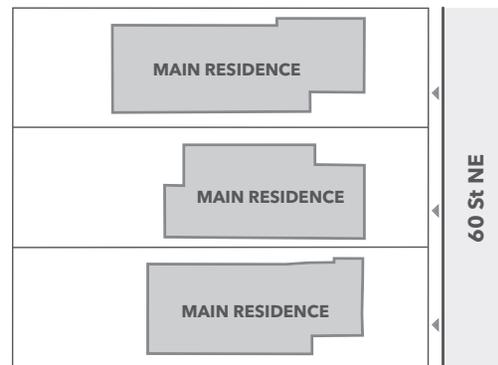
# Residential Density Changes



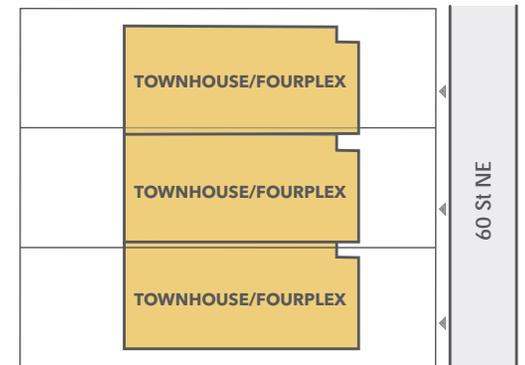
## Townhouse / Stacked Fourplex

2-3 storeys

Main Residence = no garage or attached garage



Existing



Proposed

## Secondary Suite / Live-Work Unit

2-3 storeys

Main Residence = no garage, detached garage, or located in main residence



Existing



Proposed

# Commercial Nodes

There are several commercial areas on site that has potential for mixed-use and housing integration. One of our commercial nodes is located in Saddletowne Circle - we propose to integrate residential apartments above the existing commercial to encourage higher density and close proximity to nearby amenities. The similar idea will be used in the active commercial area on the east side of 80th Ave, where we propose to add residential above the existing 1-storey commercial, in addition to new mixed-use buildings in the empty parking lot.

## 1 Existing



## 2 Existing



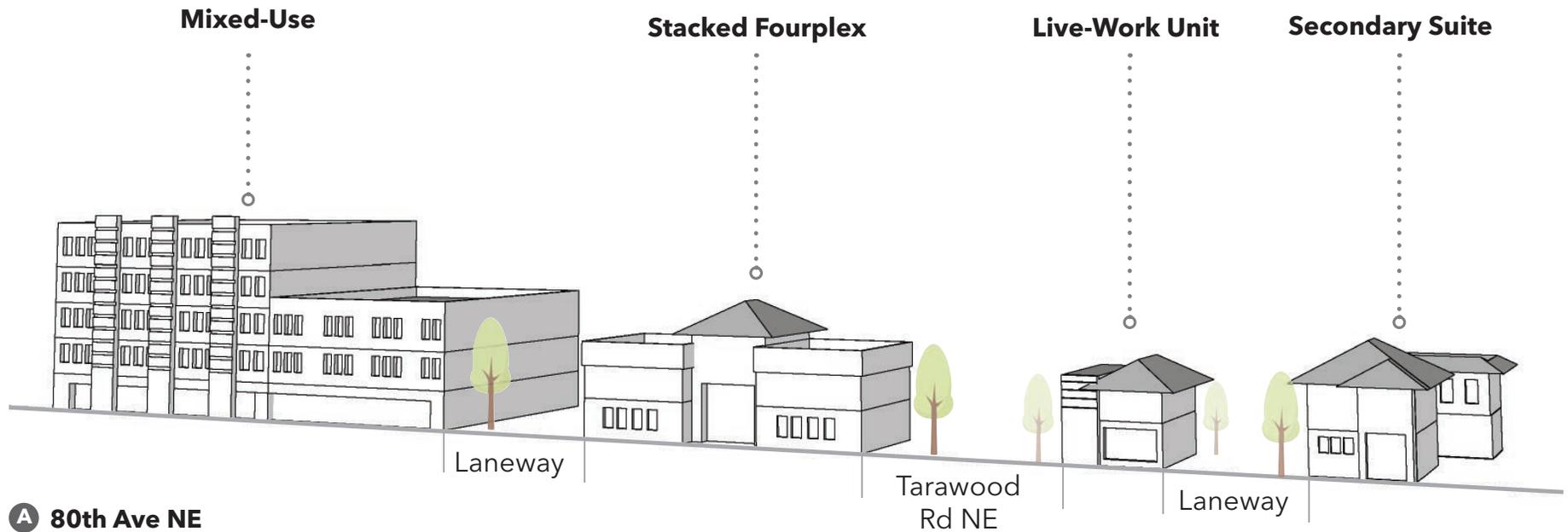
## Proposed



## Proposed



# Main Street



## A 80th Ave NE

80th Ave NE is an important arterial road, with potential for main street development. The existing road is primarily low-density residential and most houses don't face the street. The fencing and narrow sidewalks along the road creates an unpleasant public realm experience. We propose a mix of housing typologies to promote housing choice, such as mixed-use, multi-residential, and secondary suites. This will also create a pleasant and welcoming public realm experience with housing and commercial diversity.

# Policy Recommendation: Housing and Landuse

## **1.1. Diversify housing to provide choice and promote ageing in place.**

1.1.1. Provide ground-oriented housing, including secondary suites, rowhouses, and fourplexes.

1.1.2. Zoning and land use shall be adjusted accordingly to increase density and provide additional housing choices.

1.1.3. New developments shall integrate a building height of up to 6 storeys to encourage gentle density and maintain the existing character of the site.

## **1.2. Activate commercial areas and enhance public realm**

1.2.1. New developments shall face the street to create an active frontage in the streets.

1.2.2. Fencing placed in front of houses along our main streets shall be removed.

1.2.3. Encourage diversity and accessibility by integrating a mix of uses with active frontage commercial at the ground floor and residential above.

1.2.4. Saddletowne Circle shall incorporate mixed-use commercial-residential developments along with medium-rise residential apartments to build a transit-oriented development.

# Section 4.1

## Improve Mobility and Connection

### Increase Active Mobility



Street designs that support active transportation and integrate green

### Incorporate Complete Streets

Street designs that supports all kinds of usage including places for sidewalk and gathering spaces



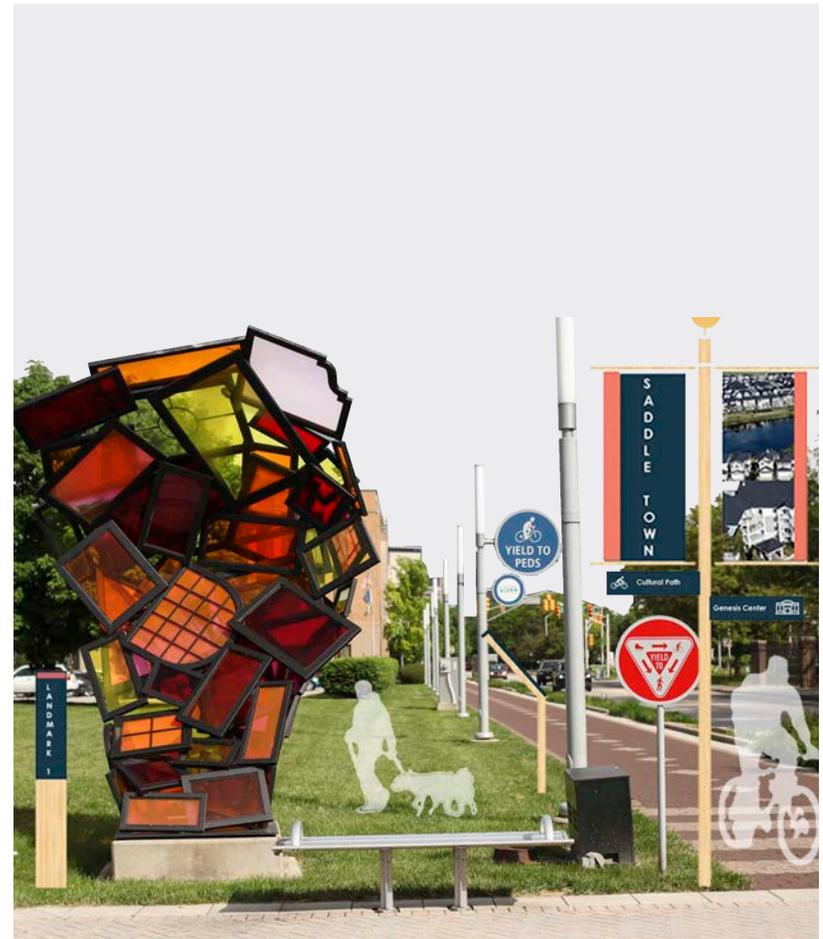
### Multi-modal Connections



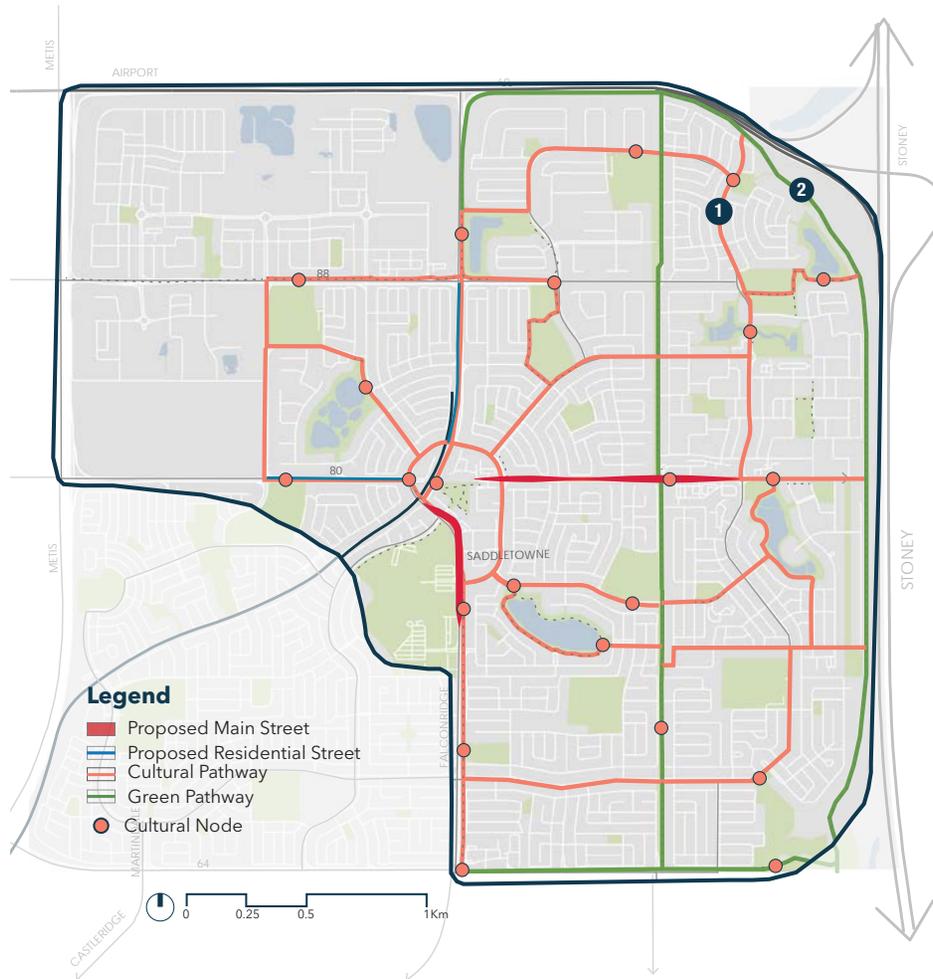
Design for a range of mobility choices, prioritizing active and sustainable modes of

### Increase Pedestrian Accessibility and Traffic Calming

Street designs that are inclusive, equitable and safe for all users. Prioritize safety of the most vulnerable.



# Increase Active Mobility



At present, community members lack areas where they could walk to, gather, and have a sense of belonging and connectivity in their community. In response to this, we introduce the idea of a Cultural Pathway system that connect potential areas which can be developed into attractions. The cultural pathways are proposed in major roadways connecting existing natural and potential gathering areas in the community.

## 1 Cultural Pathways



Saddle Towne Circle

Adapted from Indianapolis Cultural Trail, Indiana

## 2 Green Pathways and Trails



Xuhui Runway Park (Sasaki)

**Bike Paths & Shared Streets**



Shared Active Pathway, NACTO

**Green Infrastructure**



Bio swales, High Point, Seattle

**Street Murals**



Magic Carpet Mural, North Carolina

**Street Amenities**



Indianapolis Cultural Trail, Indiana

**Seating, Shelter and Lighting**



Lonsdale Street Boulevard, Melbourne (Sally Cameron)



Lonsdale Street Boulevard, Melbourne (Sally Cameron)

The Cultural Pathways will be designed keeping active mobility as a priority such that community members have to be walkable with the provision of bike paths and shared streets, provision of way-finding elements and locational signages giving the pathways itself a sense of place.

Existing walking trails will also be renovated and connected to the cultural trail.

To make them successful, usage will be encouraged by adding seating, lighting, creating ways of highlighting pathways and increasing greenery through tree plantation and bioswales. Increasing greenery will not only provide shade and shelter, but also adds to storm-water management and improve the overall quality of the neighbourhood.

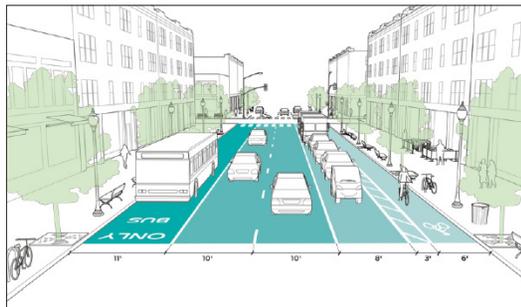
# Incorporate Complete Streets

- Safe and accessible for all users: pedestrians, bicyclists, transit users and vehicle drivers
- Re-allocate lane widths to accommodate additional functionalities.
- Activate street frontage and make streets a destination.

## Re-Allocation of Lane Widths



Before



After

## 1 Neighbourhood Main Street



## 2 Residential Boulevard



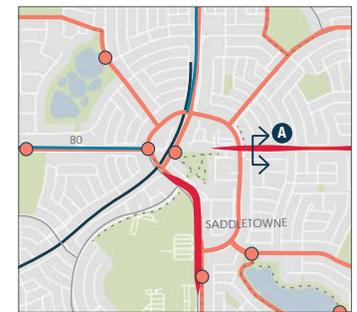
A well designed street needs to be safe and accessible for all users - pedestrians, bicyclists, transit users and vehicle drivers. We propose transforming existing streets into complete streets in the communities to activate and animate the streets in the neighborhood. We recommend reallocating the street and reducing the lane widths to accommodate other functionalities like bike paths, widened sidewalks and turn lanes. Reducing lane widths is a proven method in reducing vehicle speed, where speeding was one of the concerns heard from community members. Turn lanes will also help reduce traffic challenges in the community.

We focus on the complete street transformation to major roads that connect the saddletown circle to nearby commercial and residential areas which have large potential to become neighbourhood main streets or actively used residential boulevards.

# Complete Streets Transformation - Neighbourhood Main

The large 4m lanes are reduced to a minimum standard which will still allow sufficient access to vehicles while reducing vehicle speed. These spaces are then used to activate encourage active mobility and make vibrant streets with added amenities.

## C After - 80th Street as a Neighbourhood Boulevard



Key Map

## Before - 80th Street

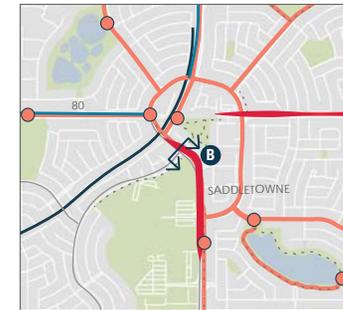
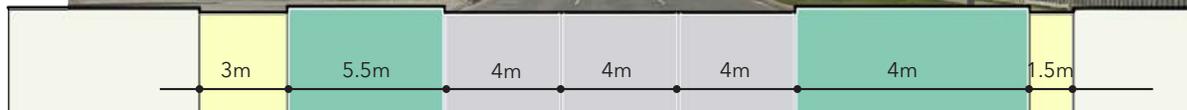


### Legend

- Green/ Stationary Zone
- Side Walk
- Bike Path/ Shared Pathway
- Vehicular Lane
- Parcel Area
- Retail
- Residential

# Complete Streets Transformation - Neighbourhood Main

## B Saddletown Circle Street Before



Key Map

## Saddletown Circle - After as a Main Street

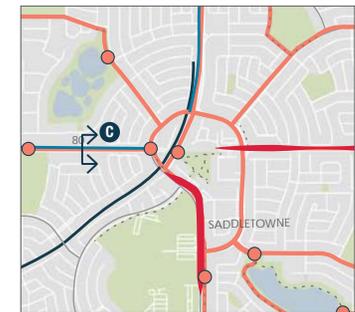


### Legend

- Green/ Stationary Zone
- Side Walk
- Bike Path/ Shared Pathway
- Vehicular Lane
- Parcel Area
- Retail
- Residential

# Complete Streets Transformation - Residential Boulevard

## C After - 80th Street as a Neighbourhood Boulevard



Key Map

## Before - 80th Street



### Legend

- Green/ Stationary Zone
- Side Walk
- Bike Path/ Shared Pathway
- Vehicular Lane
- Parcel Area
- Retail
- Residential

# Multi-Modal Connections

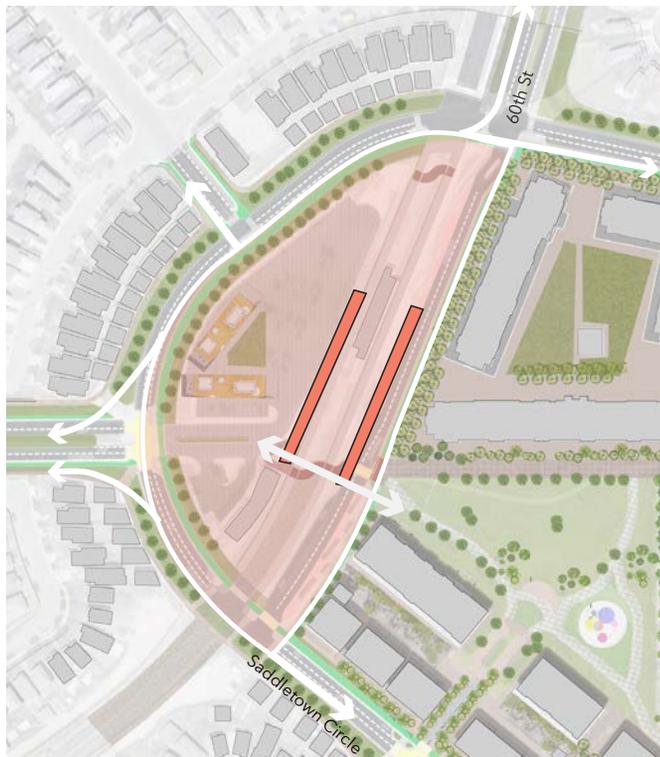


Saddle town station is a huge opportunity to incorporate principles of transit-oriented development and hence - multimodal connections. At present the saddle town station area is a hub for transit users who use the blue line LRT, Bus Rapid Transit as well as local bus routes. However, the transit hub lacks quality infrastructure supporting its transit use. Its is also disconnected to pedestrians and people who are dropped off in the area. And people are left with no clear directions to move towards nearby amenities in the area, hence making wayfinding a challenge.

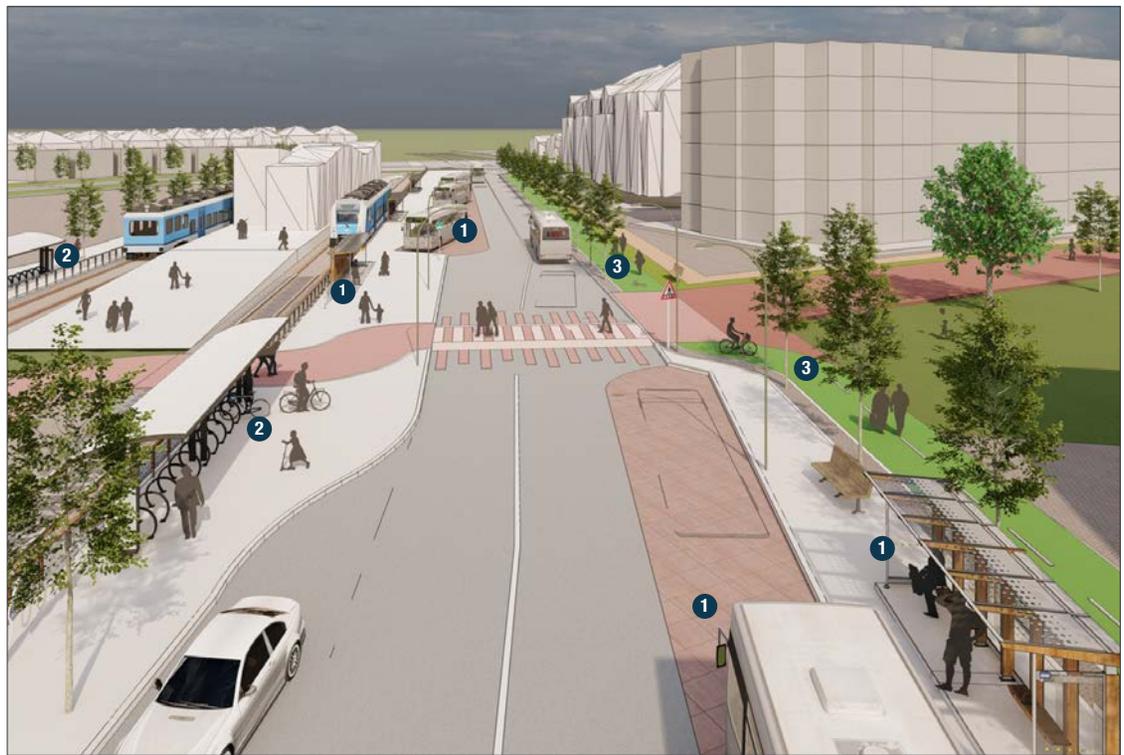
We recommend activating the station area to provide a range of transportation options like bicycles, e-scooters, walking and also improve bus infrastructure.

## Multi-Modal Connections

- Improve Infrastructure for buses and active modes of transportations
- Incorporate Bike paths and bike sharing options
- Incorporate Micro-mobility options
- Well connected Transit hub and curb infrastructure
- Well designed drop off areas



**Saddletowne Transit Station Area**



**Proposed interventions in the station area to improve multi-modal**

### 1 Improving Bus Infrastructure and Drop-off Areas



Kassel-style Transit Curb, San Bernardino, (NACTO)



Colored concrete demarcates the stop zone, Metroway, Alexandria



Proposed Transit Infrastructure in Saddletowne: Bus Shelter and Coloured Stop Zone

The bus zone can be highlighted with well-designed bus shelters and curbside design. Elevated bus stop platforms as well as colored stop zones help facilitate near level boarding and demarcate stop zone respectively.

### 2 Bike Sharing and Micro Mobility options



Docked bicycles in Gothenburg, Sweden



Neuron E-Scooters in Calgary



Proposed Transit Infrastructure in Saddletowne: Bike Shelter and Parking

Either side of the transit station can incorporate temporary as well as long-term parking stations for bikes and scooters, not just for cars.

### 3 Incorporating bike infrastructure



Neuron E-Scooters in Calgary



Proposed Transit Infrastructure in Saddletowne: Bike Paths and Seating

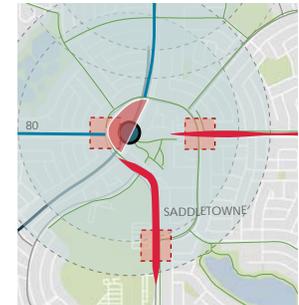
It will also include incorporating bike lanes and improving pedestrian infrastructure around the site with the help of well-designed crossings, sidewalks, etc.

# Increase Pedestrian Accessibility and Introduce Traffic Calming

Targeting problems of pedestrian accessibility in major areas, we recommend traffic calming measures as well as inclusive design of street infrastructure.

A successful way of doing this is by reducing the curb radii and adding curb extensions which decrease the walking distance for the pedestrians crossing the streets while slowing the traffic in turnings which have been identified as areas where most accidents happen.

The intersections which were identified as major accident spots have been further treated with raised intersections which increase pedestrian accessibility and reduce vehicle speed by maintaining the level of the sidewalk for pedestrians and adding bumps for vehicles.



## 1 Curb Radii Reduction

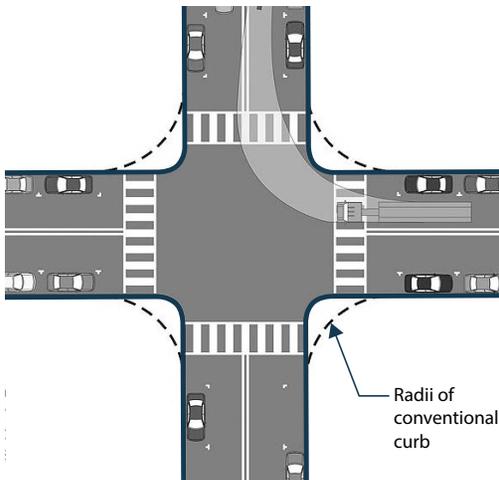


Diagram of reduced curb radii, Institute of Transportation Engineers (ITE).

## 2 Curb Extensions



Bulb-Out Intersections, NYC (NACTO)

## 3 Raised Intersection



Intersection Design (NACTO)

## 3 Tactile Paving



Paleisbrug, Neitherslands (Jannes Linders)



Aerial view of bulb-outs, City of Winston-Salem (NACTO)

## 4 Surface Treatment



Creative Crosswalks, Sacramento

## 5 Street Signages

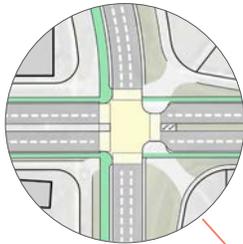


Street Signages, Vancouver (City of Vancouver)

## Intersection Designs Around Saddletowne Circle



Saddletowne Circle NE and 80th Ave



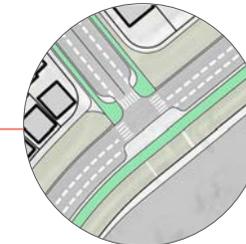
80th Ave and Saddletowne Circle NE



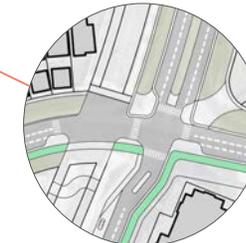
Saddletowne Circle and Martindale



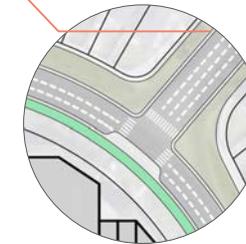
Saddletowne Circle and Saddletowne



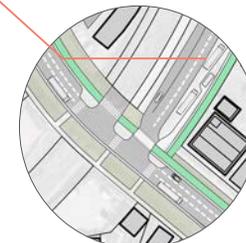
Saddletowne Circle NE and Saddleridge Dr



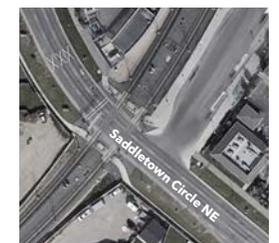
Saddletowne Circle NE and 80th Ave



Saddletowne Circle and Saddlemont



After



60th St and Saddletowne

Before

**Before**      **After**  
**Raised Intersections in Problem Areas**

## Surface Treatment in Crossings

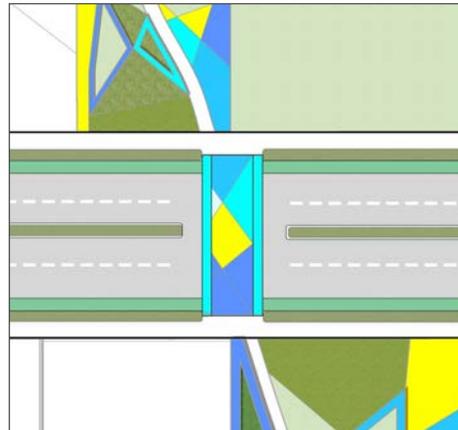
Surface treatment like adding colors and texture can help clearly demarcate crossings or expand pedestrian space. And Lastly, Street signages are an important factor in legibility and traffic safety - and these signages should be increased in intersections as well as in major pedestrian movement areas like the Saddle town circle.



**80th Ave - Before**



**Crossing at Saddletowne Station - Before**



**80th Ave - After**



**Crossing at Saddletowne Station - After**

## Policy Recommendation: Mobility and Connections

### 2.1. Encourage Active Mobility and connection to site attractions and amenities through Cultural Pathway System.

2.1.1. Establish a Saddletowne Cultural Pathway Guideline to help define characteristics of cultural pathways.

2.1.2. Major roadways connecting existing natural and potential gathering areas in the community shall be designated as cultural pathways.

2.1.3. Saddletowne Cultural Pathway shall have a unique system identity while allowing variations in individual segments for cultural elements or public art.

2.1.4. Incorporate sustainable design approaches to add greenery with increased tree plantation and bioswales in sidewalks and street medians.

2.1.5. Bike paths widened sidewalks and green areas will be added in the pathway system to encourage active mobility.

2.1.5. Pathways should incorporate seating, shelter and safety amenities to encourage usage by all ages.

### 2.2. Transform major streets in Saddle Ridge and Taradale as complete streets to activate street fronts.

2.2.1. Re-allocation of roads shall be encouraged in order to incorporate complete streets characters to make it accessible for all users: pedestrian, bicyclists, transit users and vehicle drivers.

2.2.2. Decreasing lane widths will be encouraged in major roads in order to reduce traffic speed and allow space for other amenities.

2.3. Improve transit infrastructure to incorporate multi-modal transportation options.

2.3.1. Saddletowne Transit Station shall incorporate improved infrastructure and shelters for buses, bikes and e-scooters.

2.3.2. Bus and Transit infrastructure may have colored paving to demarcate drop off areas and increase legibility to transit users.

### 2.4. Increase pedestrian accessibility and introduce traffic calming measures

2.4.1. Curb Radii shall be reduced, and curb extensions shall be added as required in intersections to increase pedestrian accessibility.

2.4.2. Raised crossings may be used in intersections that are identified as problem areas for pedestrians.

2.4.3. Pedestrian oriented signages and tactile paving shall be incorporated in roads increase accessibility.

# Section 4.3

## Revitalize Public Realm



# Interventions

The observation of the open space typologies and its opportunities and constraints led to different degrees of interventions. These interventions were categorized in terms of its requires revitalization and its potential to create a vibrant public realm. The map below shows the open spaces that has long-term design intervention, tactical intervention, amenities improvement and nature based design potential.



The first category of open space revitalization (orange) are the areas with high potential of revitalization and are in proximity to many amenities. These open space conceptualizes major design interventions to create vibrant and relatively busier public realm. The second types (light yellow) are the area where tactical intervention can be used to activate the space and reduce safety issues. Third (olive green) are the parks and open spaces which needs improvement/addition to their existing amenities and last one (darker green) are the open space where nature based intervention are needed to restore the ecology and maintain a broader biodiversity.

## Legend

- Site Boundary
- Focus Area
- Cultural Path
- Major Design Intervention
- Tactical Design Intervention
- Amenities Improvement Areas
- Nature Based Design Intervention

# Major Design Interventions

The major design interventions are applicable in the areas that are proximity to other amenities and where there is more likely for maximum people flow. This intervention will largely contribute in creating valuable green spaces with long term masterplanning.

## Genesis Center: Diverse and Vibrant Recreational Spaces

Julia Reserve Youth Precinct, Australia (AILA Awards and Competitions, 2020)

Genesis Centre Plan



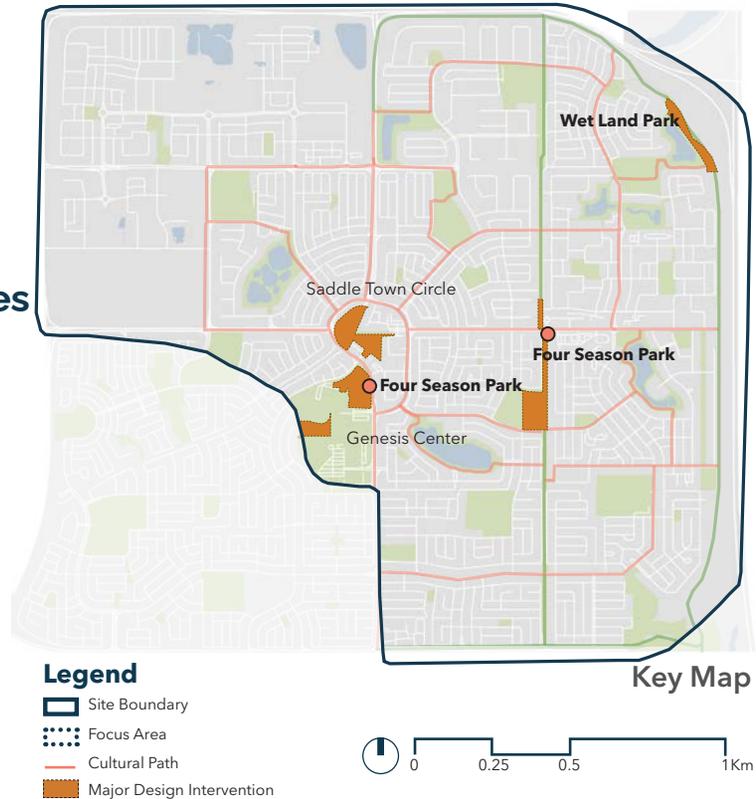
1. Basketball Court



2. Squash



3. Table Tennis



Near the saddle town LRT station, we see 4 nodes with potential major design intervention. One of them is the Genesis center. Currently Genesis center hold less variety of recreational options and as heard from people, they seek for more recreational options. This space has a potential to accommodate more diverse and vibrant recreational space. These space may include some of the user's interest sports like basketball court, Outdoor Squash and table tennis.

# Major Design Interventions

Another focus area is the interconnection of the Green corridor, named as "Hub Garden" which will have interventions like raised colored crossing, Colourful Planters, Open Commercial along the edge as well as some learning Landscapes near the School. With these interventions this space will be able to achieve a distinct character of the space while connecting the two corridors through the 80th Ave to make is pedestrian friendly, with improved legibility and sense of continuity.



Aerial View of The Hub Garden



Raised Crossing Connection of the Green Corridor



Planters and Pavement to Create Vibrancy



Community Gardens ( Continuity to the colour pattern)

# Major Design Interventions

## Four Season Park (Nelson Mandela School)

Klyde Warren Park, Dallas (World Atlas, n.d.), Whistler Olympic Plaza (Tourism Whistler, n.d.) Adult Playground : Lawn on D, Boston (Sammons & Mahoney, 2021)

From the analysis of the open space and from the residents comment it was observed that most of the school playgrounds were underutilized. However, these large spaces posses lot of opportunities to make it a multi-use open space. One of the prototype is envisioned as "Four season Park" in the Nelson Mandela School. This open space can have splash parks and farmers market during warmer days and skating rink and Christmas lights during colder days. This will help promote social interactions among the people not only during the summers but also during the winter period. This all year round design intervention will encourage active lifestyle while creating a safe and vibrant open space.



The Existing View of Nelson Mandela School



Vision: Four Season Park - Summer



Vision: Four Season Park - Winter



Klyde Warren Park, Dallas  
(World Atlas, n.d.)



Adult Playground : Lawn on D, Boston (Sammons & Mahoney, 2021)



Whistler Olympic Plaza  
(Tourism Whistler, n.d.)

# Tactical Interventions

These interventions not only are quicker and cheaper in nature but also bring together the people in the community to revitalize their own neighborhood. These interventions allows the community to reclaim the space immediately and redesign. As the community of Saddle town and Taradale has multi cultural demographics these interventions can also vbe a short term plaza/markets during festivals or events.

## Tactical Urbanism in a Community Space



**Community Space - Play Area**  
(Dykstra, 2013) Seattle Design Festival, USA



**Garden Bed with Built-in Seating**



**Wheelchair Accessible Table**



**Community Garde ns/ Boulevard Gardens**



### Legend

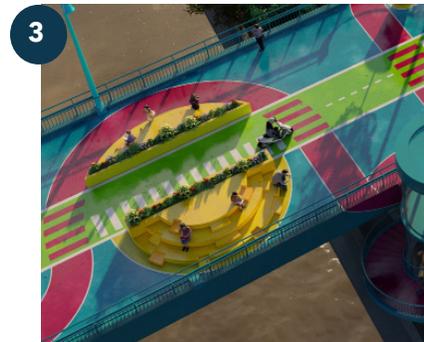
- Site Boundary
- Focus Area
- Cultural Path
- Tactical Design Intervention



Some tactical intervention in the neighborhood scale is focused on community gardens and play areas. The green corridors can hold community gardens, boulevard gardens and recreations along the alley way ends. Using these tactical intervention the open space can also accommodate all age groups. In the prototype mentions here we are envisioning Basketball for the youth, Play areas for the children and some seating space and community garden for Adults and Seniors. This way the existing corridor can be used to create parks that accommodate needs of all age groups.

# Tactical Interventions

## Tactical Urbanism in a Community Space



**Pedestrian Amenities on the Linear Park**  
(High Loop China)

# Tactical Interventions

## Tactical Urbanism in a Commercial Space

Tactical interventions on commercial areas can have pop up plazas and can hold a temporary plaza space during some functions or festivals. These areas can also use concepts like urbhang, which is a concept of creating an outdoor living room to activate spaces and commercial space in the neighbourhood. These spaces will help activate the existing commercial strip of Saddle Ridge and activate these spaces for immediate use.



Existing View of the Parking Lot

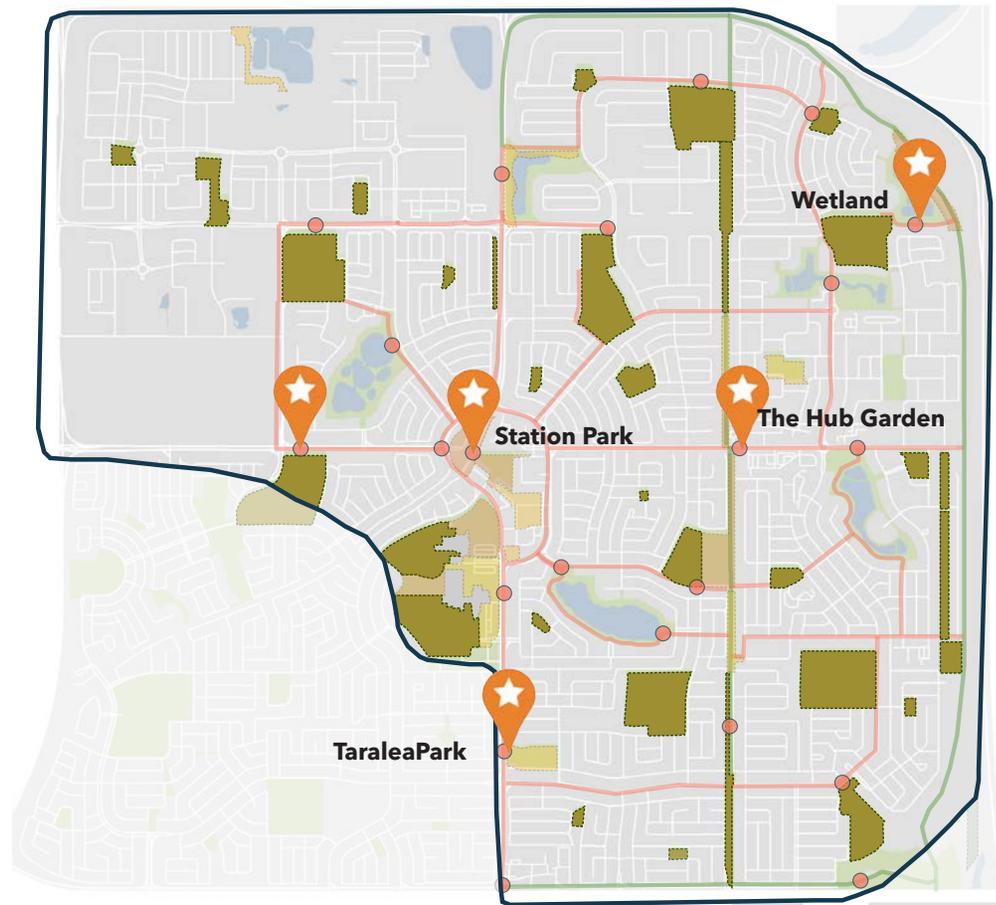


Urban Living rooms  
Urbhang, Lebanon (Livelicity, n.d.)



Proposed View of the Parking Lot During Festivals / Events

# Amenities Improvement Area



## Legend

-  Site Boundary
-  Focus Area
-  Cultural Path
-  Amenities Improvement Areas
-  Public Art

The amenities improvement areas are the areas where additional facilities like public washroom, inclusive play equipment, seatings and tree canopies shall be improved. This can have sensory element like musical play instruments in playgrounds to make the areas more inclusive and welcoming to the users. Additionally these areas can also hold some offleash dog areas within the parks.

A major part of this intervention is introducing public art as community's gateways that will help the communities to give an identity. These public arts should be community scale as shown in the examples and be able to reflect the community's culture and diversity.

## Landmarks - Public Art



Recycled Public Art



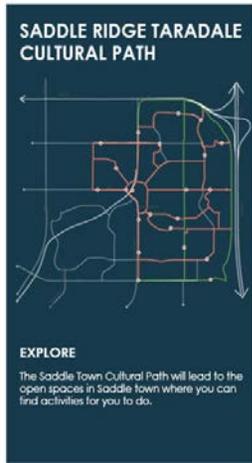
Light Arts



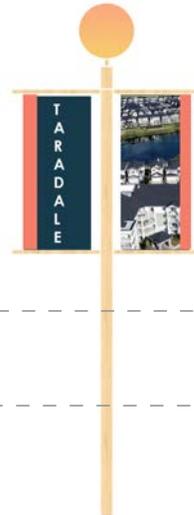
Murals

# Amenities Improvement Area

## Wayfinding



Cultural Pathway Map Signage



Locational Identity Signage



Multi-Directional Signage



Interactive Signage



Additionally, having signages and banners that provides a community locational identity, improves directional way finding shall be in-cooperated in these areas. The signage can also be interactive signage that can provide much more details for one who are curious to learn more about the community and also provide an online version of multi-lingual options for the users. These signage will also build a positive memory about the place and contribute to the user experience.

# Nature - Based Design Solutions

This intervention is basically ecological restoration. The ecological restoration process will help trap and prevent undesirable maximization of habitat and create a balanced biodiversity within these natural systems. Having a natural system with rich biodiversity might bring a lot of programs like bird watching, plant explorations as well as help reduce the increasing mosquito's problem around the wetlands.



**Increased Tree Canopy :  
Reduced Environmental  
Impact**  
(Green works, n.d.)



**Ecological Mosquito  
management**  
(City of Boulder, n.d.)



**Birds Watching in Wetlands**  
(Green works, n.d.)



**Butter Fly**



## Legend

- Site Boundary
- Focus Area
- Cultural Path
- Nature Based Design Intervention



# Envisioned User Experience



## Visitor from Neighbourhood

I like the wetlands, they hold a proper biodiversity. I come here on weekends to watch the birds with my grandson.



## Families

I like that the neighbourhood parks are inclusive for all ages and abilities. My kids enjoy the park spaces and always have some stuff to be engaged.



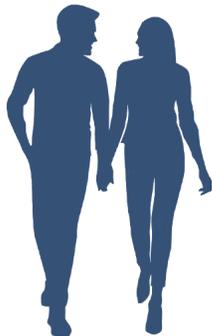
## Senior Couple

I lived in this neighbourhood for 30 years but the new farmers market has changed our lives. Fresh produce shopping is much more fun and accessible.



## Youth

I used to prefer playing basketball over soccer but since the Genesis Center built new courts, I like to come here every week.



## Young Couple

Me and my wife moved to this neighbourhood a year ago and we had something to do all year on the parks nearby.



## Wheelchair User

The older I get the more I forget. The way-finding signage has helped me a lot. It's easy to navigate around the neighbourhood.

# All year- Round Programming

The open areas are aimed to have programs all year round to provide a different set of programming in different seasonal condition. The mapping is done as illustrated in the diagram below that ranges from January to December. The diagram is a typical prototype to display multiple ways to accommodate programming to activate public realm. But, these programs can vary according to the needs and interest of the community members.



## Policy Recommendation: Revitalization of Public Realm

### 3.1. Application of Various types of intervention to redesign open spaces and public realm to encourage usage.

3.1.1. Different degrees of interventions, such as major design interventions, tactical interventions, amenities interventions, and nature-based design solutions described in section 4.3 of this document will be applied to redesign open areas which have potential to develop as attractions in the communities.

3.1.2. Different degrees of interventions shall respond to all year-round programming. For example, the public realm should have programs that are applicable for the winter season.

3.1.2. Tactical interventions shall represent to the cultural diversity of the Saddle Ridge and Taradale communities.

3.3. Open spaces directly connected to the cultural path shall utilize their maximum potential by integrating with the cultural pathway system in terms of programming. For example, the open spaces can accommodate bike rentals, flower shops, food trucks, and public art.

3.4. Wayfinding signage should be integrated throughout the open space networks. These signages shall follow a clear graphic protocol that is easily readable and interactive.



# Section 4.4

## Special Site - Saddletowne



# Saddletowne Circle Masterplan



Applying the idea of reallocating lanes, we have proposed pedestrian-oriented circulation in the Saddletowne circle street. Street parking is proposed in the lane adjacent to the circle which alongside added bike lanes and widened sidewalks increase active mobility and animates the street front.

## Legend

- 1 Saddletowne
- 2 Station Park
- 3 Market
- 4 Police Service/ Fire
- 5 Plaza
- 6 Boston Pizza
- 7 Mixed-Use with Courtyard
- 8 Main Street (80th Ave)
-  Bike Path/ Shared Street
-  Raised Intersection
-  Traffic Direction

# Saddletowne Circle Interventions



## Housing Diversity

Provide housing choices and options to target and meet the needs of residents.

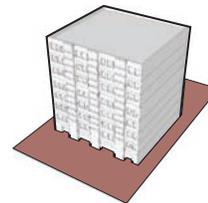
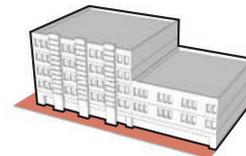


## Transit-Oriented Development

Potential for TOD near the Saddletowne LRT station and in the Saddletowne Circle.



We adjusted the zone in the circle to accommodate more diverse land use and developments. We envision retaining the character of the site by keeping the existing commercial, but adding residential above, which addresses the needs of diverse housing, achieved through MU-2 zone. Flexibility of development of live-work units, secondary suites as well as denser residential developments like apartments and fourplexes around the circle will be achieved through RC-G, MC-2, MC-G respectively.



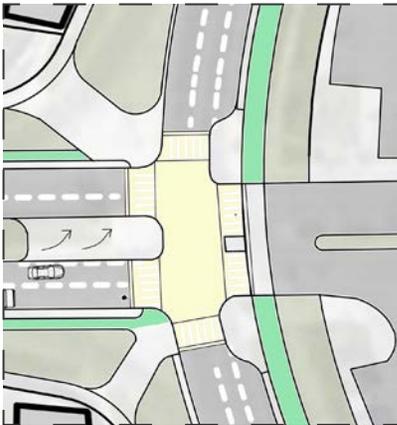
### Proposed Land Use in Saddletowne Circle:

- **MU-2** Mixed Use - Active Frontage District allowing commercial and residential uses at the street level.
- **M-C2** Multi-Residential - Contextual Medium Profile District allowing 3 to 5 storey apartment buildings.

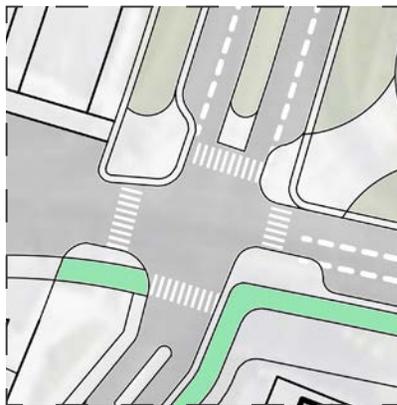
# Saddletowne Circle Interventions

## Pedestrian Oriented Streets - Intersection Redesign

Ease of movement to and from the Saddletowne circle has also been emphasized with redesigned intersections discussed previously. Interventions in terms of transit infrastructure increase transit experience and colored pathways, signages and locational banners welcome pedestrians into varied experiences in the Saddletowne circle.



a 80 th Ave and Saddletowne Circle NE



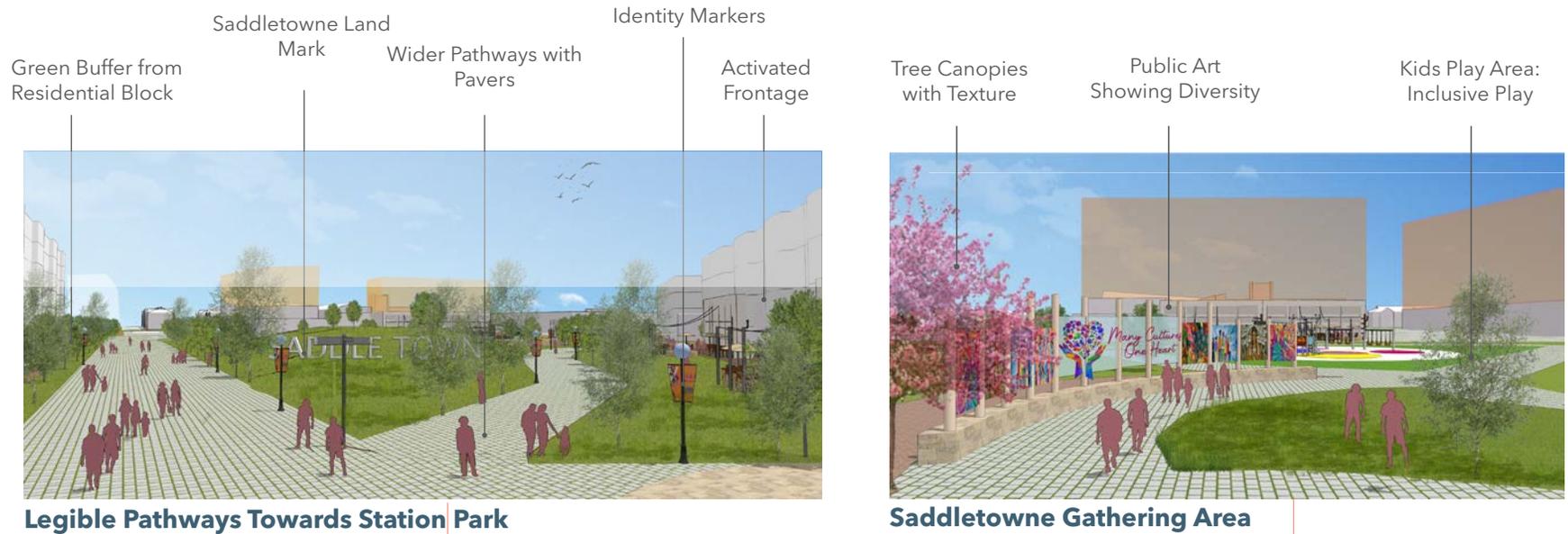
b Saddletowne Circle and 60th Street

## Improved Transit Services and Multi-Modal Connectivity



# Saddletowne Circle Interventions

Saddle town circle has a major potential in terms of public realm revitalization. It Includes major Design Intervention on the central park, which here is named as "Station Park". As this park lies in proximity to the Saddle town station and on the Culkultural path the major interventions are proposed in this park. The Open space on the park will hold a public art that can display Multicultural values of the communities. Additionally the existing Parking can hold Pop up Plaza's as discussed as one of the tactical intervention to activate spaces. These open space will help the community give an identity and also introduce the community with various way finding signages.



Green Buffer



Public Washrooms



Outdoor Patios



Inclusive Amenities

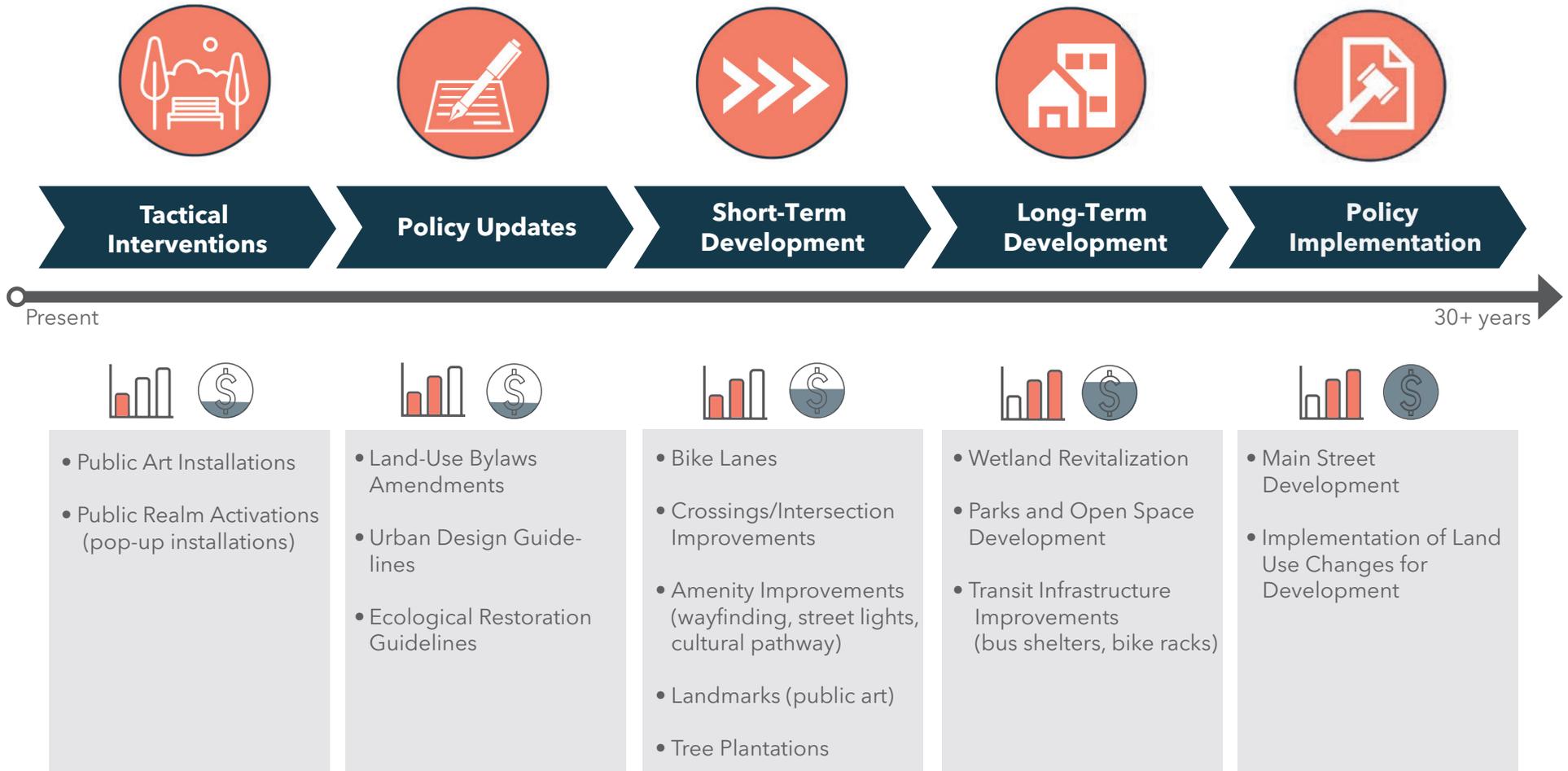


Inclusive Playground



# Implementation Strategy

To envision the recommended planning strategies, we have a timeline that lists our implementation strategies, with the corresponding projects and an estimation of when they can be implemented considering scale and budget. The timeline begins with tactical interventions as the strategy that could be completed right away. We then will move to policy updates, short term and long term developments, and finally ending with policy implementation, which would mean developments like that of main streets with the implementation of land use changes.



## Conclusion



The communities of Saddle Ridge and Taradale lack pedestrian-oriented connection within the community and there is huge opportunity to improve mobility infrastructure in the site. Our strategy introduces a cultural pathway system within the site which connects the potential areas of attraction while increasing active mobility and accessibility to community members. Saddletowne station poses strong potential for Transit-Oriented Development, within the Saddletowne Circle as well as surrounding areas, particularly along our proposed main streets.

Our strategy of improving mobility and connections on the site involves implementing multimodal transportation options, as well as traffic calming measures to address the road and speeding concerns expressed by the residents. Our proposed land use and housing typologies address the need for housing diversity, provide choice and flexibility, and increase density while maintaining the existing low-density character of the site. Finally, our strategy of revitalizing the public realm involves providing the community with programming and placemaking opportunities to create a sense of place and identity.

This document can serve as a guide and framework to create places that are vibrant, healthy, resilient, and well-connected in the communities of Saddle Ridge and Taradale.

## References

- A brief history of laneway homes in Toronto: From the '90s to now. Craig Race Architecture. (n.d.). Retrieved from <https://craigrace.com/news/a-brief-history-of-laneway-homes-in-toronto-from-the-90s-to-now/>
- Abdel, H. (2021, July 20). BookWorm Pavilion / Nudes. ArchDaily. Retrieved March 8, 2023, from <https://www.archdaily.com/965307/bookworm-pavilion-nudes>
- ALA Awards and Competitions. (2020). Julia Reserve Youth Park. 2020 National Landscape Architecture Award Winners Gallery. Retrieved March 8, 2023, from <https://aila.awardsplatform.com/gallery/daMPBJrB/pQEZYbEk?search=fc5e55989576862e-16>
- ArchDaily. (2016, September 15). Into the Wild / Openfabric + Dmau. ArchDaily. Retrieved March 8, 2023, from <https://www.archdaily.com/794732/into-the-wild-openfabric>
- Best trails in Stone Lake Community Wetland Park. (n.d.). AllTrails. Retrieved March 8, 2023, from <https://www.alltrails.com/parks/us/wisconsin/stone-lake-community-wetland-park>
- Biocycle. (2012, March 14). Recycled Organics Make Splash In Green Infrastructure. BioCycle. Retrieved April 20, 2023, from <https://www.biocycle.net/recycled-organics-make-splash-in-green-infrastructure/>
- BNTHMCRWL: Paleisbrug. DOMUS. (n.d.). Retrieved from [https://www.domusweb.it/en/architecture/2015/05/22/benthem\\_crouwel\\_architects\\_paleisbrug.html](https://www.domusweb.it/en/architecture/2015/05/22/benthem_crouwel_architects_paleisbrug.html)
- Borka, M. (2022, March 12). KONGJIAN YU & TURENSCAPE'S RED RIBBON PARK: ALONG CELEBRATION PATH. Max Borka. Retrieved March 8, 2023, from <https://www.maxborka.com/mapping-the-design-world/red-ribbon-park/>
- Budds, D. (2018, December 18). Cooper Hewitt 'Road Ahead' exhibition examines future of mobility. Curbed. Retrieved April 20, 2023, from <https://archive.curbed.com/2018/12/18/18144513/future-mobility-autonomous-vehicles-cooper-hewitt>
- City of Boulder. (n.d.). Ecological Mosquito Management. ArcGIS StoryMaps. Retrieved March 8, 2023, from <https://storymaps.arcgis.com/stories/26548d1e7cae4b45b7f11c6c50e1aabc>
- City of Vancouver. (2022, November 21). Pop-up plazas | temporary pop-up plazas. City of Vancouver. Retrieved March 8, 2023, from <https://vancouver.ca/streets-transportation/pop-up-plazas.aspx>
- Clow, C., & News. (2021, July 29). E-scooters rollout in Vernon. Penticton Western News. Retrieved from <https://www.pentictonwesternnews.com/news/e-scooters-rollout-in-vernon/>
- Design Concepts. (n.d.). Learning Landscapes Denver Public Schools Creative Educational Playground-Colorado Landscape Architecture Firm. Design Concepts. Retrieved March 8, 2023, from <https://www.dcla.net/learning-landscapes>
- Discover Atlanta. (n.d.). Atlanta BeltLine - Bike, Walk, Run or Dine on the BeltLine. Discover Atlanta. Retrieved March 8, 2023, from <https://discoveratlanta.com/things-to-do/outdoors/beltline/>
- Dykstra, T. (2013, September). Flickr. Retrieved March 8, 2023, from <https://www.flickr.com/photos/architecturegeek/9898336175/>
- ERA arch. (n.d.). WexPOPS: Pop-up Plaza. ERA Architects. Retrieved March 8, 2023, from <https://www.eraarch.ca/2019/wexpops-pop-up-plaza/>
- Fourplex: Stacked. Missing Middle Housing. (2021, January 14). Retrieved from <https://missingmiddlehousing.com/types/fourplex>
- Grand concourse. Grand Concourse | NYC Street Design Manual. (n.d.). Retrieved from <https://www.nycstreetdesign.info/process/grand-concourse>
- Green works. (n.d.). Fernhill Wetland Master Planning and Design. Retrieved March 8, 2023, from <https://greenworkspc.com/ourwork/fernhill-wetland-mitigation-master-plan?rq=Fernhill>
- Group leisure and Travel Magazine. (2019, June 27). Dreamland in Margate launches its summer Roller Coast Festival. Group Leisure & Travel Magazine. Retrieved March 8, 2023, from <https://www.groupleisureandtravel.com/news-and-views/dreamland-in-margate-launches-its-summer-roller-coast-festival/7942.article>
- Hinnerskov, L. (2014, October 6). Superkilen: Welcome Europe's strangest public park. CNN. Retrieved March 8, 2023, from <https://www.cnn.com/travel/article/copenhagen-surreal-park/index.html>

A brief history of laneway homes in Toronto: From the '90s to now. Craig Race Architecture. (n.d.). Retrieved from <https://craigrace.com/news/a-brief-history-of-laneway-homes-in-toronto-from-the-90s-to-now/>

Abdel, H. (2021, July 20). BookWorm Pavilion / Nudes. ArchDaily. Retrieved March 8, 2023, from <https://www.archdaily.com/965307/bookworm-pavilion-nudes>

AILA Awards and Competitions. (2020). Julia Reserve Youth Park. 2020 National Landscape Architecture Award Winners Gallery. Retrieved March 8, 2023, from <https://aila.awardsplatform.com/gallery/daMPBJrB/pQEZYbEk?search=fc5e55989576862e-16>

ArchDaily. (2016, September 15). Into the Wild / Openfabric + Dmau. ArchDaily. Retrieved March 8, 2023, from <https://www.archdaily.com/794732/into-the-wild-openfabric>

Best trails in Stone Lake Community Wetland Park. (n.d.). AllTrails. Retrieved March 8, 2023, from <https://www.alltrails.com/parks/us/wisconsin/stone-lake-community-wetland-park>

Biocycle. (2012, March 14). Recycled Organics Make Splash In Green Infrastructure. BioCycle. Retrieved April 20, 2023, from <https://www.biocycle.net/recycled-organics-make-splash-in-green-infrastructure/>

BNTHMCRWL: Paleisbrug. DOMUS. (n.d.). Retrieved from [https://www.domusweb.it/en/architecture/2015/05/22/benthem\\_crouwel\\_architects\\_paleisbrug.html](https://www.domusweb.it/en/architecture/2015/05/22/benthem_crouwel_architects_paleisbrug.html)

Borka, M. (2022, March 12). KONGJIAN YU & TURENSCAPE'S RED RIBBON PARK: ALONG CELEBRATION PATH. Max Borka. Retrieved March 8, 2023, from <https://www.maxborka.com/mapping-the-design-world/red-ribbon-park/>

Budds, D. (2018, December 18). Cooper Hewitt 'Road Ahead' exhibition examines future of mobility. Curbed. Retrieved April 20, 2023, from <https://archive.curbed.com/2018/12/18/18144513/future-mobility-autonomous-vehicles-cooper-hewitt>

City of Boulder. (n.d.). Ecological Mosquito Management. ArcGIS StoryMaps. Retrieved March 8, 2023, from <https://storymaps.arcgis.com/stories/26548d1e7cae4b45b7f11c6c50e1aabc>

City of Vancouver. (2022, November 21). Pop-up plazas | temporary pop-up plazas. City of Vancouver. Retrieved March 8, 2023, from <https://vancouver.ca/streets-transportation/pop-up-plazas.aspx>

Clow, C., & News. (2021, July 29). E-scooters rollout in Vernon. Penticton Western News. Retrieved from <https://www.pentictonwesternnews.com/news/e-scooters-rollout-in-vernon/>

Design Concepts. (n.d.). Learning Landscapes Denver Public Schools Creative Educational Playground-Colorado Landscape Architecture Firm. Design Concepts. Retrieved March 8, 2023, from <https://www.dcla.net/learning-landscapes>

Discover Atlanta. (n.d.). Atlanta BeltLine - Bike, Walk, Run or Dine on the BeltLine. Discover Atlanta. Retrieved March 8, 2023, from <https://discoveratlanta.com/things-to-do/outdoors/beltline/>

Dykstra, T. (2013, September). Flickr. Retrieved March 8, 2023, from <https://www.flickr.com/photos/architecturegeek/9898336175/>

ERA arch. (n.d.). WexPOPS: Pop-up Plaza. ERA Architects. Retrieved March 8, 2023, from <https://www.eraarch.ca/2019/wexpops-pop-up-plaza/>

Fourplex: Stacked. Missing Middle Housing. (2021, January 14). Retrieved from <https://missingmiddlehousing.com/types/fourplex>

Grand concourse. Grand Concourse | NYC Street Design Manual. (n.d.). Retrieved from <https://www.nycstreetdesign.info/process/grand-concourse>

Green works. (n.d.). Fernhill Wetland Master Planning and Design. Retrieved March 8, 2023, from <https://greenworkspc.com/ourwork/fernhill-wetland-mitigation-master-plan?rq=Fernhill>

Group leisure and Travel Magazine. (2019, June 27). Dreamland in Margate launches its summer Roller Coast Festival. Group Leisure & Travel Magazine. Retrieved March 8, 2023, from <https://www.groupleisureandtravel.com/news-and-views/dreamland-in-margate-launches-its-summer-roller-coast-festival/7942.article>

Hinnerskov, L. (2014, October 6). Superkilen: Welcome Europe's strangest public park. CNN. Retrieved March 8, 2023, from <https://www.cnn.com/travel/article/copenhagen-surreal-park/index.html>

National Association of City Transportation Officials. (n.d.). Conventional Crosswalks. National Association of City Transportation Officials. Retrieved April 20, 2023, from <https://nacto.org/publication/urban-street-design-guide/intersection-design-elements/crosswalks-and-crossings/conventional-crosswalks/>

National Association of City Transportation Officials. (n.d.). Neighborhood Street. Urban Street Design Guide. Retrieved April 20, 2023, from <https://nacto.org/publication/urban-street-design-guide/streets/neighborhood-street/>

PWL partnerships. (2021, February 2). Ketcheson Neighbourhood Park « Landscape Architecture Platform. Landezine. Retrieved March 8, 2023, from <https://landezine.com/ketcheson-neighbourhood-park/>

Regional municipality of Buffalo. (n.d.). Kiyām Community Park. Regional Municipality of Wood Buffalo. Retrieved March 8, 2023, from <https://www.rmwb.ca/en/parks-and-recreation/kiy-m-community-park.aspx>

Residential Lighting. (n.d.). Attraction Lights. Retrieved March 8, 2023, from <https://www.attractionlights.com/outdoor-lighting-projects/residential-lighting/>

Sammons, L., & Mahoney, M. (2021, June 17). This Adult Playground In Massachusetts Is Loads of Fun. Only In Your State. Retrieved March 8, 2023, from <https://www.onlyinyourstate.com/massachusetts/lawn-on-d-ma/>

Schuler, T. A. (2022, April 13). Placemaking Pitfall - ASLA Northern California Chapter. ASLA-NCC. Retrieved April 20, 2023, from <https://asla-ncc.org/placemaking-pitfall/>

Seiden, T. (2020, February 14). Superior, CO: Main street development: KTGy: Architecture: Branding: Interiors: Planning. KTGy. Retrieved from <https://ktgy.com/ktgy-unveils-designs-for-downtown-superiors-main-street-mixed-use-portion/>

Shuang, H. (2018, October 22). Xuhui Runway Park / Sasaki. ArchDaily. Retrieved April 20, 2023, from <https://www.archdaily.com/904222/xuhui-runway-park-sasaki-associates>

stackt. (n.d.). Home. Retrieved March 8, 2023, from <https://stacktmarket.com/>

The City of Newyork. (2022). Curb Extension | NYC Street Design Manual. Street Design Manual. Retrieved April 20, 2023, from <https://www.nycstreetdesign.info/geometry/curb-extension>

The City of Newyork. (2022). Grand Concourse | NYC Street Design Manual. Street Design Manual. Retrieved April 20, 2023, from <https://www.nycstreetdesign.info/process/grand-concourse>

Toombs, A. (2022, August 3). City opens 10 new accessible and inclusive playgrounds. LiveWire Calgary. Retrieved March 8, 2023, from <https://livewirecalgary.com/2022/08/03/city-opens-10-new-accessible-and-inclusive-playgrounds/>

Tourism Whistler. (n.d.). Ice Skating in Whistler. Tourism Whistler. Retrieved March 8, 2023, from <https://www.whistler.com/activities/ice-skating/>

UCL Institute for sustainable resources. (2022, April 22). Medellín: a new chapter of resilience | UCL Institute for Sustainable Resources. UCL. Retrieved April 20, 2023, from <https://www.ucl.ac.uk/bartlett/sustainable/news/2022/apr/medellin-new-chapter-resilience>

Urban Landscape institute. (n.d.). Revitalising Central Dandenong. Citygreen. Retrieved April 20, 2023, from <https://citygreen.com/case-studies/lonsdale-street-transformed-into-melbourne-green-boulevard/>

Vancouver, C. of. (n.d.). Signs, signals, and regulations. City of Vancouver. Retrieved from <https://vancouver.ca/streets-transportation/signs-signals-regulations.aspx>

Wikimedia Foundation. (2023, February 23). Transit-oriented development. Wikipedia. Retrieved from [https://en.wikipedia.org/wiki/Transit-oriented\\_development](https://en.wikipedia.org/wiki/Transit-oriented_development)

Www.promisemoney.co.uk. (2022, May 12). Live work property mortgages with promise money. Promise Money. Retrieved from <https://www.promisemoney.co.uk/live-work-mortgages/>

Waseem, F., 7, B. A. H., & Solutions, B. P. M. (2022, March 25). Reston Association pushes for VDOT to redesign 'pork chop' road island. FFXnow. Retrieved from <https://www.ffxnow.com/2022/03/25/reston-association-pushes-for-vdot-to-redesign-pork-chop-road-island/>

Wikimedia Foundation. (2023, February 26). Bicycle-sharing system. Wikipedia. Retrieved from [https://en.wikipedia.org/wiki/Bicycle-sharing\\_system](https://en.wikipedia.org/wiki/Bicycle-sharing_system)

World Atlas. (n.d.). Klyde Warren Park - WorldAtlas. World Atlas. Retrieved March 8, 2023, from <https://www.worldatlas.com/parks/klyde-warren-park.html>

(2018, October 21). Xuhui Runway Park / Sasaki. ArchDaily. Retrieved from <https://www.archdaily.com/904222/xuhui-runway-park-sasaki-associates>

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