# **BRIDGELAND 2050:** SIX VISIONS FOR FUTURE LAND USE CHANGE

EVDP 644 (B01) FINAL STUDIO REPORT 2016



## Foreword

With the support of the Federation of Calgary Communities and the Faculty of Environmental Design, the Master of Planning degree program's Advanced Professional Practice Studio was able to establish a partnership with the Bridgeland Riverside Community Association BRCA to explore a future vision for Bridgeland. EVDP 644 is the final studio in the Master of Planning program and provides students with an opportunity to apply their knowledge and skills to a professional planning situation.

The purpose of this report is to present the "Six Visions for Bridgeland 2050" represented by two posters each that visually illustrate a scenario of critical factors and driving forces likely to affect Bridgeland over the next thirty years (Poster 1); and, the potential land use plan and community form resulting from these factors and forces (Poster 2). The final posters in this report were reviewed and displayed at the BRCA Annual General Meeting April 20, 2016.

The evolution of these visions was significantly informed by feedback from the BRCA through a major community engagement event February 27, 2016, community documents and information shared by the BRCA Planning Committee and a final review by BRCA Planning Community representatives of all six visions presentations on April 13, 2016.

Each of these very different visions of Bridgeland 2050 have been created to support the BRCA in their ongoing discussions with private and public stakeholders in exploration of the choices involved in planning for Bridgeland's future. The 'what if?' scenarios visualized in these six visions provide alternative futures for Bridgeland that we hope will help foster ongoing discussion and build consensus around the values and priorities necessary for long range planning. To enable this report to be better used as a working document by the BRCA Planning Committee, it has been printed on one side of the page, to allow notes and record of discussion summaries to be made for each vision poster.

On behalf of the student participants, the Master of Planning Program, and the Faculty of Environmental Design, I would sincerely like to thank Stantec for their studio sponsorship, the Federation of Calgary Communities, and the Bridgeland Riverside Community Association for their support and assistance. Ongoing partnerships and sponsorships in support of professional education make an important contribution to the success of our graduates and their future contributions to creating healthy, vital and sustainable communities.

Mary-Ellen Tyler, PhD Faculty of Environmental Design Instructor, EVDP 644 (B01) 2016

Advanced Professional Studio Project Master of Planning University of Calgary

> Instructor Dr. Mary-Ellen Tyler





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## **Credits and Acknowledgements**

#### Stantec

Calgary Federation of Communities

Carmon Blacklock, *President of the Bridgeland Riverside Community Association (BRCA)* 

#### Members of the BRCA Planning Committee:

Ali McMillan, *Planning Director* Joe Belland, *Development Chair* Brian Beck Chris Hedlin Chris Bell Denis Mino Kirsten Dow-Pearce Linda Demecha Sherry Burgess Natasha Solotina Susan Kapetanovic-Marr Lloyd Howe, *Connections Chair* Clay Gilles Irene Hammerling Brooke Gilles Jason Kubke

Michelle Smith Cowman, *Beautification Chair* Bertina Burger Deb Lee Jennifer Magnard John McKee Susan Mulholland

Ana Karina Hidalgo, PhD Candidate, Faculty of Environmental Design Dr. Mary-Ellen Tyler, Associate Professor, Faculty of Environmental Design Cover Photo: Kian H. Kalhori

## Introduction to the Visioning Process

Long range planning requires a 'vision' since no one can know what will happen in the next thirty 30 years. Professional planning practice deals with the future and with uncertainty. In order to develop a strategic planning approach to urban redevelopment in a long range timeframe, planners must rely on methods such as visioning, forecasting, and scenario development. The history of a scenario-based strategic planning process goes back to the 1970s and in the 2000s, scenario-based planning has been used to address uncertainty in land use planning, transportation planning, and regional development. The purpose of creating planning scenarios and visions is to initiate conversations with a range of stakeholders about values, needs, opportunities and challenges involved in redevelopment.

The process we used in creating these six visions for Bridgeland 2050 involved a sequence of four activities:

#### 1. Five "Scapes" Exercises:

These excercises were used to identify important cross-scalar (temporal and spatial) strategic themes likely to influence Bridgeland now and in the future. The "scapes" exercises are intended to help identify patterns relevant to Bridgeland's long term urban form evolution and which may not be observable.

These five "scapes" exercises involved identifying:

- **'Eco-scape':** spatial and temporal patterns related to natural and urban landscape connectivity, landscape structure and function, ecological life support systems and processes.
- **'Techno-scape':** spatial and temporal patterns related to urban infrastructure and service delivery technologies.
- **'Socio-scape':** spatial and temporal patterns related to housing, demographics, cultural diversity and social service delivery.
- 'Finance-scape': spatial and temporal patterns related to real estate prices, income, tax revenue generation, service deliver costs etc.
- 'Ideo-scape': spatial and temporal patterns reflecting political ideology, popular culture, community values, consumer trends and government policy.

The synthesis of this information together with the BRCA's background information package informed the identification of a core set of issues and strategic challenges which were incorporated into the next steps of the process.

#### 2. Scenario Exercise:

Each vision was driven by the creation of a scenario which identified a set of specific and possible future directions for land use and urban form derived from the "scapes" exercises. Such future directions were based on the identification of key issues, and critical factors and driving forces directly affecting or influencing land use and urban form. However, while such drivers of urban spatial pattern are important – exactly how they will play out over the next 30 years is uncertain. In this context, scenarios become the 'stories' of how each student group thought the various futures might unfold. This Scenario development process involved:

• Selection of not more than 5 and not less than 3 critical factors/driving forces that your group thinks will have a direct affect or will directly influence the land use and urban spatial form of Bridgeland over the next 30 years.

• Selection of not less than 2 key words or phrases to describe the 'story' of your future land use Vision (for example: "Hi Tech and Green", "Hot and Gridlocked", "Cooperation in Hard Times", "Business Incubator", "Urban Agriculture", etc).

### 3. Patch Dynamics Exercise:

Patch Dynamics is used in landscape ecology and can be adapted to urban design and planning. Patches represent specific spatial areas that differ in composition, physical structure and processes. Patch dynamics can be used to generate potential future urban landscape patterns and configurations that respond to performance criteria such as increased connectivity and walkability or service delivery or housing affordability gradients. In this process, future urban landscape forms/spatial patterns emerge from the patch dynamic analysis process. A patch dynamic framework focuses on the alteration of structure and function of spatial heterogeneity over time involving 4 processes:

• mosaic configuration: heterogeneity in an area can be delineated by patches which have a spatially explicit relationship with one another. Patch delineation requires that areas differ from one another in structure, composition, or function. There is a spatial relationship of some kind among and between patches such that patch changes affect neighboring patches.

• patch generation: refers to all processes that can create new patches in an area. Any process can generate patchiness if it acts differently and locally across an extensive surface or volume.

• patch change: can be generated by processes external to and internal to a patch. Any information that can cause local responses and which moves or has differential effects across an area can cause change in sensitive patches.

- flux among patches: governed by processes related to the nature of the boundaries between patches.
- patch connectivity: the spatial and functional inter-relationships among patches which identify patterns of related versus unrelated processes and characteristics.

### 4. Land Use Vision and Plan Design:

Based on the results of the preceding 3 steps, the final stage in Vision development was configuring the future land use plan which involved the following activities:

- Development of a land use table to include the land use types and typologies consistent with the core set of issues and strategic challenges.
- Identify the size of the selected land use types and related physical and spatial 'footprints associated' with them (including as housing types).
- Design and illustrate a spatial land use pattern and its related community form for Bridgeland 2050 that represents the best spatial and functional 'fit' of the forces and characteristics emerging from the core issues, driving forces, and patch analysis.

Each of the six visions in this report have been developed using this approach and reflects a very complex process of creating, connecting, and organizing spatial information to create new places and new land use activities for the future of Bridgeland.





WE WOULD LOVE TO HEAR YOUR FEEDBACK! COME & GO FORMAT **BRIDGELAND RIVERSIDE URBAN DESIGN PRESENTATIONS APRIL 20** 

4 - 6 pm









# **VISION #1 BRIDGELAND 2050**



# **Vision Scenario Highlights**

By 2050, Bridgeland-Riverside will be recognized as a thriving community where each part of the neighbourhood will embody a unique character and enable a high quality of life for its residents. This will be achieved through the provision of diverse housing options, green spaces and networks, varied mobility options, and efficient energy generating systems. A socially inclusive neighbourhood that encourages interaction among diverse members of the community from seniors and students to young professionals and families.

The community will feature a large plaza with a multitude of amenities, public gathering spaces, and shopping destinations. A new arts district will form part of the neighbourhood's identity. This will be showcased through the development of a new fine arts college, an art walk meandering through the neighbourhood lined with galleries, studio spaces, and workshops anchored by a signature world class art gallery.

Bridgeland-Riverside's transportation network will provide a variety of ways to meet mobility needs in an efficient and enjoyable manner. Linear parks will link destinations in the neighbourhood, while a regional transit hub featuring a high speed rail station and an autonomous car centre will provide residents and visitors convenient access when travelling internally and externally to Calgary and the rest of Alberta.

Sustainable, energy-responsible generation and use will be a core component of Bridgeland-Riverside. A community identified as one that adapts to new priorities in climate change through innovative systems, technologies, and practices such as small-scale wind power generation, mandated energy efficiency in new buildings, and a district energy centre to efficiently power the community.

### **Evan Joyes**

Has an undergraduate degree in B.A. Environmental Studies and Sociology. He has experience with municipal energy sustainability, urban environmental naturalization, and sustainability policy. He would like to practice long range strategic planning focused on sustainability and natural environments.

### **Tracy Tsui**

Has a B.A. in Urban Studies and professional planning experience at the municipal and community level. After her MPlan degree, the type of planning practice she is interested in pursuing is community planning and urban design.

### Lisa Wambaa

Has a BSc. Transport Planning and a MSc. Transport Policy & Business Management. She pursued a Planning degree to further expound on her knowledge in this field as she is interested in sustainable development, community planning and policy development.

## **SCENARIO**

Established in 1908, Bridgeland is an older inner city community that has experienced extensive redevelopment over the past couple of decades. With the neighbourhood's rise in population, rich history, location and proximity to downtown Calgary, this redevelopment is likely to continue.

By 2050, Bridgeland-Riverside will be recognized as a thriving community where each facet of the neighbourhood will embody a unique character and enable an overall high quality of life for its residents. This will be achieved through the provision of diverse housing typologies, green spaces and networks, enhanced mobility options, and efficient energy generating systems. A neighbourhood that encourages interaction among various members of the community, from seniors and students to young professionals and families.

# **CRITICAL FACTORS SHAPING** FUTURE REDEVELOPMENT

#### **VALUES & IDEALS**

"When asked what would strengthen their local economy, two-thirds of millennials and generation X believe that investing in schools, transportation choice, walkability, and key community features is the best way ... ' - APA Investing In Place



#### CONNECTIVITY

"Most would prefer to live someday in a walkable community and say a diversity in people and generational interaction is an important component of a successful community." – APA Investing In Place

#### **ENERGY**

"More renewable energy in Alberta will reduce greenhouse gas emissions, clean the air, and produce significant new investment and jobs."

- Robert Hornung, President of CanWEA

#### **INFRASTRUCTURE**

19,900 Roads Traffic Circle 8,635 Pathways . 84,607 Wind Turbines District Energy Parking High Speed Transit 20,000 TOTAL 149.082 m<sup>2</sup>

PARKS & **OPEN SPACES** 

Plaza Community Gardens Heritage Park Neighbourhood Parks Linear Park Urban Corridor Skating Rink Amphitheatre Central Plaza 26,650 TOTAL 173,395 m<sup>2</sup>

# **VISION 1: BRIDGELAND - RIVERSIDE**

#### GREATER MIXED DENSITY HOUSING



#### ALBERTA COLLEGE OF ART AND DESIGN (ACAD)





1/2

April 2016







#### RESIDENTIAL

Low	700
Medium	3,300
Medium-High	24,000
High	10,500
Live-Work	13,200
Mixed Use	7,500
<b>TOTAL</b> 61,700 m <sup>2</sup>	

#### **INSTITUTIONAL**

Professional Services	7,500
Offices	8,000
Education	37,027
Hotels	1,200
Art Gallery	3,025
Community Association	1,480
TOTAL 58,232 m <sup>2</sup>	

#### RETAIL

Supermarket	5,500
Small Retail	3,136
Street-Side Retail	1,870
TOTAL 10,506 m <sup>2</sup>	

4,480

#### HIGH-SPEED RAIL TRANSIT HUB

A connection from Bridgeland and Calgary to the rest of Alberta and Canada.



A social and iconic hub featuring a large plaza with a multitude of amenities and public gathering spaces.



BRIDGELAND - RIVERSIDE 30 YEAR VISION PROJECT Evan Joyes, Tracy Tsui, Lisa Wambaa EVDP 644: Advanced Professional Planning Studio (B01) Instructor: Dr. Mary-Ellen Tyler





ALBERTA COLLEGE OF ART AND DESIGN (ACAD)



2<sup>nd</sup> AVENUE









HIGH-SPEED RAIL TRANSIT HUB





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# VISION # 2 BRIDGELAND 2050



*Revitalizing laneways* 

### Jay Gu

I studied Architecture at the University of Toronto and bring strong graphic skills and problem solving abilities to urban planning. I am interested in innovative urban design and sustainable development practices.

#### Ruibin Li

As an international student who studied Urban Design and Planning in China, I bring a unique perspective to planning issues in Canada. I am interested in making people's life better through my work.

### Hayden O'Connor

Born and raised in Calgary, I took my undergraduate degree here in urban Studies. I am interested in improving the quality of life in built environments, wherever that leads.

# Vision Scenario Highlights

Our vision for Bridgeland is centered on improving the inter-generational quality of life as people move away from automobile dependency in the inner city. Walking and cycling networks have been created, new areas of commercial development leveraged by clustering new employment opportunities and increased community recreation space are important results of future redevelopment. In this vision, seniors housing is integrated into the community, urban agriculture is an integrated part of the urban environment, walking to work is the norm, and native species punctuate pedestrian walkways and local parks. The previous street grid which historically supported automobile traffic has been fused to create new land use and housing opportunities and laneways have been converted to new community social spaces.

#### Welcome to a day in Bridgeland 2050

Leaving your cozy 2 bedroom laneway home, you catch morning sun along the western edge of the humanscale walkway. As you move south, you cross paths with neighbors who are also on their way to work in the office district, East Village, or Downtown. As you approach 1st Ave, you hear the rumble of a tram or bus and notice a new hole-in-the-wall cafe with a quaint patio and soft music. Staying on the sunny north side, you move west along 1st Avenue and wave at children on their way to school. Edmonton Trail is less busy now that the Green Line is handling commuter traffic and you cross easily to your 7 floor co-working space. You proof-read a screenplay by someone in the same co working space over lunch and head over to the East Village for a meeting and dinner. Later, you walk back through St. Patrick's Island to that cafe you noticed earlier, where you stumble upon an art exhibit in an old cottage home and before heading home, you pick some kale and potatoes from the laneway community garden.

# VISION 2: Bridgeland 2050

#### Vision

changes in built form through innovation and resiliency. More compact and diverse land uses bring housing closer to where people work and play. Using a sensitive approach to re-imagining spaces, this vision aims to address significant growth and change while also highlighting the unique and exciting characteristics that create Bridgeland's identity.

#### A day in Bridgeland in 2050

- · Leaving your cozy two bedroom laneway home, you catch morning sun along the western edge of the human-scale walkway. As you move south, you cross paths with neighbours who are also on their way to work in the office district, East Village, or Downtown.
- · As you approach 1st Ave, you hear the rumble of a tram or bus and notice a new hole-in-the-wall cafe with a quaint patio and soft music.
- · Staying on the sunny northside, you move west along 1st Ave. and see a group of seniors wave at children on their way to school. Edmonton Trail is less busy now that the Greenline is handling commuter traffic and you cross easily to your 7 floor co-working space.
- · You proof-read a screenplay by someone in the same co-working space over lunch and head over to the East Village for a meeting and dinner.
- noticed earlier, where you stumble upon an art exhibit in an old cottage home before heading home.
- · You pick some kale and potatoes from the lane and return home.





Additional population: 6618



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1/2April, 2016

### Professional Planning Studio Project - EVDP 644 (B01) INSTRUCTOR: Dr. Mary-Ellen Tyler

# **BRIDGELAND - RIVERSIDE 30 YEAR VISION PROJECT** Students: Ruibin Li, Jay Gu, Hayden O'Connor



# LAND USE VISION 2 Bridgeland 2050

A - Sensitive Growth - Active, Lush, Safe, Enjoyable





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2/2 Professional Planning Studio Project - EVDP 644 (B01) INSTRUCTOR: Dr. Mary-Ellen Tyler April, 2016







#### Implementation

Use precedents to develop a pilot project for a mixed senior/student housing scheme. Students receive a discount on rent in exchange for a certain amount of work done to assist seniors with daily needs. This mutually beneficial program may also enable nurses and caregivers to re-prioritize their time towards more specialized tasks.

Test viability of street closures using traffic cones, recording impacts on congestion and pedestrian movement. These temporary pedestrian takeovers should aim to give a sense of ownership over public spaces and could include pop-up parks with various programs to re-imagine these spaces.

Encourage the use of native or well adapted species in park spaces, boulevards and private yards. Some examples include: Poplar, Rough Fescue, Three-Flowered Avens, Crocuses, Wolf-Willow, Brown-Eyed Susan, Wild Bergamot, Limber Pine, Chokecherry, and Mountain Ash

Look into changing backyard suites from discretionary use to permitted use in the R-C2 zoning district. Encourage the construction of laneway housing first on parcels adjacent to east-west avenues which have more access to light and provide more options for unit configuration.

# **BRIDGELAND - RIVERSIDE 30 YEAR VISION PROJECT** Students: Ruibin Li, Jay Gu, Hayden O'Connor

# **VISION # 3 BRIDGELAND 2050**





*Eco scape synthesis* 

## **Vision Scenario Highlights**

In 30 years Bridgeland will be an inclusive neighbourhood with a variety of housing typologies that are suitable for diverse age ranges and lifestyles. This will be achieved by adding gentle density in strategic locations. This means approving new residential units such as townhomes, courtyard apartments, and fourplexes that provide a variety of unit size without disrupting the scale of existing streets. Bridgeland will be able to accommodate population growth while respecting and supporting existing character.

A new research oriented jobs centre on the east side of the community will provide new employment opportunities. This will help attract and retain a dynamic workforce, while further developing Bridgeland's unique identity.

Bridgeland will be well connected with an emphasis on pedestrian mobility and transit access. Pathways and parks will provide vital links throughout the community, and the robust mobility network will connect residents to the destinations that attract people from all corners of Bridgeland.

Bridgeland will be amenity rich with all essential community services. Value added community facilities such as a new library and community event centre will enrich the existing community culture while providing more space for events and concerts. Increased population and jobs will help support and attract new businesses to Bridgeland.

In summary, Bridgeland will provide all the benefits of an inclusive, connected and amenity rich community.

### Jessi Fry

Graduated with an undergraduate degree in English from St. Francis Xavier University in Antigonish, Nova Scotia in 2011. She gained experience in journalism and insurance prior to pursuing planning at the University of Calgary. Most recently she worked for the City of St. Albert Planning and Development Department and Bike Calgary.

#### **Ryan Siersma**

Completed his undergraduate degree in Geography at Queen's University in 2014. He has worked for the Region of Durham's Planning Department as well as for the City of Calgary in Transportation Planning. Following completion of his Master of Planning, Ryan will start in a full time position with Dillon Consulting.



# **VISION 3: BRIDGELAND 2050**

## **Scenario**

## In thirty years Bridgeland is:

An inclusive neighbourhood with a variety of housing typologies that are suitable for diverse age ranges and lifestyles

A well **connected** community with great pedestrian mobility and transit access

An **amenity rich** area with all essential community services

## **Scapes + Opportunities**



- New infills not located near amenity areas
- Underutilized transit locations
- Opportunity to strengthen connections between residences, amenities and transit



- Limited number of parks in Bridgeland
- Large areas of underdeveloped surface parking
- Opportunity to strategically redevelop at small and large scales

## **Driving Forces**



Adding gentle density in targeted areas not only increases housing diversity and choice but also supports local amenities and services

#### **Mobility and Connections:**

#### Strategic Redevelopment:



Improve pedestrian connectivity to services and amenities while decreasing reliance on the automobile

#### **Main Streets:**



Use redevelopment opportunities to stengthen the identity and character of 1st avenue while attracting and retaining new local services



Create a functional employment hub and research facility near existing public transit locations

#### **Community Amenities**



New community services such as a daycare and community event centre will fill gaps in existing community amenities. The addition of middle density housing as well as traditional unit types creates a more inclusive and diverse community

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1/2April, 2016

**BRIDGELAND - RIVERSIDE 30 YEAR VISION PROJECT** Jessi Fry, Ryan Siersma Professional Planning Studio Project - EVDP 644 INSTRUCTOR: Dr. Mary-Ellen Tyler



Bridgeland's unique character will inform its 30 year development pattern. This patch map identifies different areas, each with a unique identity and appeal. Key areas of redevelopment potential include the zoo parking lots, Alberta Health Campus, 1st avenue corridor and a residential transition into the bowl

Research Par

Parks & Open Space

### **Patches**



## Land Use Table + Typology



Community Service Courtyard Apartmen **Playing Fields** Fourplex/Sixplex Library Single Family Home Hockey Rink Townhouse

#### 12





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2/2April, 2016 Jessi Fry, Ryan Siersma

# VISION # 4 BRIDGELAND 2050



Bridgeland as a place for people

### Megan Mucignat

B.A. International Development (Hons) is a globetrotter who wants to put her international experience to work engaging with communities to envision their future.

#### **Derek Pomreinke**

B.A. Urban Studies, is a practicing city planner with The City of Calgary who looks forward to working with communities and developers after completing his Masters.

# **Vision Scenario Highlights**

Thirty years is both a long time and no time at all. So much has changed since 1985, yet the specifics of what makes a great community have stayed the same. A great community is one where regardless of your place in life you can find somewhere affordable to live. Where regardless of your preferred mode of travel, you can get where you want to go safely and easily. Where regardless of your home situation, there is a park or plaza close by where you can relax.

With these three factors in mind, our vision increases residential density, creates several new linear and plaza spaces, and creates a pedestrianized loop encouraging travel within the community and to its surroundings. Pedestrian space will be reclaimed along several major roads, allowing for continuous pedestrian travel through the heart of the community.

Another key aspect of this vision is major mixed-use redevelopment of the seniors/health area in the community's southeast. Redevelopment into high-density residential, office, and urban-format retail will create a more inclusive environment for seniors while simultaneously providing the area with an increase in employment opportunities. This will make better use of the area's accessibility while encouraging more all-hours activity.

The creation of two gateways at the east and west entrances to Bridgeland should create space for two grocery stores, while existing institutional space can be repurposed to accommodate two new schools and a library. With more residents, jobs, and amenities, Bridgeland can continue to be the eclectic, unique community it is today, not just for the next thirty years, but forever.

# VISION 4: BRIDGELAND 2050

### SNAPSHOT OF 2015

Topography & Slopes

·12 4 ha total with slope greater than 15% •Natural barrier to building

Hospitality **Public Realm** District & Open Space ·23 restaurants on 1st Ave ·14.5 ha total ·Local economic engine ·Lacking connections ·Animates the street and between parks and plazas

Calgary Zoo Parking Lot •15 ha parcel ·Potential regional redevelopment site •Good connection to LRT









St Patrick's Island Regional park •Upgraded post 2013 flood ·Bridge needs upgrade with all-age amenities Lacks direct connection to ·Connection to East Village St Patrick's Island and Inglewood to the south ·Regional route

Long Term **Care District** •14.5 ha total area ·Isolated, lacks amenities ·Seniors comprise 20% of

Memorial Drive •91,000 vehicle trips/day ·Artery for downtown traffic Massive barrier to The Bow River and amenity space



Connection

Multi

achieve the vision.

**Public Engagement** 



Public Space Lifestyle Choice

Single Family & Laneway

CRITICAL FACTORS

PLANNING PROCESS

As Bridgeland changes in the future, each patch will change in its own unique way.

PATCHES

community revealed

natural "patches", areas

that have similar form or

development potential.

defined by the makeup

of their core, but also by

the edges they share with

Patches are not only

Analysis of the

other areas.

SCAPES

The patch analysis revealed important nodes.

An inventory of the amenities close to each node highlighted both important features to be preserved and redevelopment opportunities.

Critical examination of Bridegland's economy, technology, society and ideology informed different land use concepts designed to



Land Use Mapping

Amenity &

Regional

Use

Redevelopme

11

St A







						1 /	2	
_		C-Train	Olympics	Gen	eral Hospital Demolition		Today	
	1980			1990	\$2000	\$ 2010	\$2020	<b>\$</b> 2030
	TIMELI	NE						
	-		-	Bridgeland s	population			11,000 PEOPLE 6,2



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1/2	BRIDGELAND - RIVER
April, 2016	
Professional Plannin	g Studio Project - EVDP 644 (B01

**Connectivity Mapping** 



## LAND USE PLAN

This land use concept reinforces 1st Avenue as the community's main street by making it the core of a pedestrianized loop from Edmonton Trail to the LRT station. Increased residential density adjacent to 1st will bolster the customer base for local shops, while the community's southeast offers the opportunity for a major mixed-use redevelopment including residential, seniors, office, and urbanformat retail.



Massing model of the redevelopment area, looking northeast



Potential streetscape on pedestrianized Edmonton Trail, looking south



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2/2 April, 2016

Programed Natural Park & Dog Park

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### LAND USE ESTIMATES

LAND USE	Hectares (2016)	Hectares (2050)	Units	Population	Jobs
High Residential	1.6	6.1	1,850	3,000	100
Med Residential	10.5	31.9	3,300	5,600	200
Low Residential	39.1	14.5	400	1,000	60
Retail	3.0	7.2	-	-	700
Office	1.1	5.2	-	-	5,200
School/Institution	4.2	4.1	-	-	150
Seniors/Health	14.4	3.7	1,100	1,300	290
Local Parks/Plaza	11.0	12.3	-	-	-
Regional Parks	36.2	39.5	-	-	-
Regional Redevelopment	48.7	45.1	-	-	-
Parking	2.6	1.6	-	-	-
Grand Total	172.4	171.3	6,650	10,900	6,700

C-TRAIN

### CONNECTIVITY **NETWORK**

Prioritized rights-of-way for multi-modal transportation connecting Bridgeland internally and to the rest of city.











Laneway housing & secondary suites in low-density residential



Increased residential density with missing middle structure types



All-ages programming in public and amenity spaces



Potential urban agriculture/ brewery district on regional use site



Design principles for safety and resilience in a changing climate

# VISION # 5 BRIDGELAND 2050



Land use vision

### Kian H. Kalhori

Second year Master of Planning at University of Calgary, Bachelor of Architecture from University of Tehran As a Planner, I am interested to pursue my carrier in Urban Design and Land Use Planning where I can combine my architectural and planning skills.





# **Vision Scenario Highlights**

The 30 year vision for Bridgeland aims at forming a vibrant, more walkable and less car dependent community which supports lifelong skills upgrading and education. Bridgeland will be a lively urban hub where it is a part of an inner-city network including Downtown Core, East Village and Inglewood.

This vision focuses on transit-oriented development, high quality community services and hierarchy and integration in order to achieve a higher residential density. Variety in building typologies alongside connecting green corridors and public plazas create a dynamic urban environment. The new land uses will form a great connection with the Bridges Redevelopment as well as the rest of the community.

The strategic redevelopment patterns are based on the current land use where factors like existing infill and walkable time distance areas formed the areas with potential for change. By creating a functional pedestrian internal circulation and access to community facilities and public spaces, Bridgeland can strengthen its unique socio-cultural identity where residents and visitors can enjoy a resilient neighbourhood just across the river from Downtown Calgary.

# VISION #5: BRIDGELAND 2050 LIFELONG EDUCATION **URBAN HUB**

Bridgeland's redevelopment over the 30 years will be driven by land prices, increasing urban density adjacent to downtown and East Village resulting in a demand for increased **public amenities** and social cultural **lifestyle choices**.



## **Key Features of Future Development**

- More walkable, transit oriented and less car dependent community
- Community facilities to support lifelong skills upgrading and education including new technologies
- Vibrant mix of land uses

### UNIVERSITY OF CALGARY

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### **Opportunities for Redevelopment Given Current Land Use**

1. Infill Development:

Future patterns based on current infill 2. Time Distance:

Areas within a 5 minute walk radius to support walkable neighbourhood

3. Areas with Greater Potential for Land Use Change



LAND USE + TYPOLOGIES	DISTRIBUTION	DEDICATED DEVELOPABLE LAND	DENSITY (DWELLING UNIT PER HECTAR)	TOTAL NUMBER OF UNITS	PROJECTED POPULATION
HOUSING	35%				
ATTACHED ROW HOUSE	20%	3.5 ha	80 du/ha	280	840
LOW-RISE APT	20%	3.5 ha	180 du/ha	630 (3-4 Storey)	1260
MID-RISE APT	25%	4.5 ha	250 du/ha	1125 (5-7 Storey)	2250
HIGH-RISE APT	15%	3 ha	330 du/ha	990 (8+ Storey)	1980
VILLAS	20%	3.5 ha	20 du/ha	70	280
TOTAL	100%	18 ha	N/A	3095	~6500

#### + TYPOLOGIES MIXED-USE OFFICE-RETAIL RETAIL-RESIDENTI OFFICE-RESIDENTIAL MEDIA CENTRE COMMUNITY SERVICES MULTI USE WORKSHO HEALTH CLINIC COMMUNITY GARDI CENTRE FOR WELL BEING RECREATION CENTRI PARKS AND PUBLIC SPACE PLAZAS LOCAL PARKS

LAND USE

**BRIDGELAND - RIVERSIDE 30 YEAR VISION PROJECT KIAN H. KALHORI** Professional Planning Studio Project - EVDP 644 (B01) INSTRUCTOR: Dr. Mary-Ellen Tyler

1/2April, 2016

### Strategic Redevelopment Pattern



	DISTRIBUTION PERCENTAGE	DEDICATED DEVELOPABLE LAND	BUILDING FOOTPRINTS
	25%	15 ha	
	50%	7.5 ha	5.5 ha
	15%	2.5 ha	2 ha
	25%	3.5 ha	2.5 ha
	10%	1.5 ha	1 ha
	20%	11 ha	
	50%	5.5 ha	4.5 ha
	4.5%	0.5 ha	0.3 ha
	30%	3 ha	0.3 ha
;	4.5%	0.5 ha	0.4 ha
	11%	1.5 ha	N/A
S	20%	10 ha	
	20%	2 ha	N/A
	60%	6 ha	N/A
	15%	1.5 ha	N/A
	5%	0.5 ha	N/A





UNIVERSITY OF CALGARY FACULTY OF ENVIRONMENTAL DESIGN

2/2 April, 2016 **KIAN H. KALHORI** 

**BRIDGELAND - RIVERSIDE 30 YEAR VISION PROJECT** Professional Planning Studio Project - EVDP 644 (B01) INSTRUCTOR: Dr. Mary-Ellen Tyler

# VISION # 6 BRIDGELAND 2050



### **Charlene Wilcock**

Charlene Wilcock is passionate about how the built form can shape vibrant communities and sustainable transportation options. She has a background in Film and Television Production, Urban Studies, and Communication. Charlene has worked for TransLink, the City of Calgary and will be working for the Capital Region Board in May. Charlene can be reached at: cawilcoc@ucalgary.ca or on twitter @CharleneWilco

### **Russ Leedham**

Russ Leedham has an interest in the long range implications of community scale and regional planning initiatives. He has an educational background in Geographic Information Systems (GIS) and Geomatics Engineering, accompanied by diverse technical work experience in the fields of civil engineering, transportation planning, and urban planning. He will be working for a private consulting firm beginning in May. Russ can be reached at leedham.russ@gmail.com.

### Andrea Kormylo

Andrea has a Bachelor of Fine Arts, majoring in Photography, and a diploma in Business Administration. She has worked on the business side of the energy industry for several years, handling contracts, leases and accounting duties. She has a strong interest in natural resources planning and hopes to work in the environmental sector, analyzing and minimizing environmental impacts and promoting sustainable land development. Andrea can be contacted by email at andrea.kormylo1985@gmail.com.

## **Vision Scenario Highlights**

Bridgeland is currently home to over 5000 people, and is recognized as a family-friendly, mixed income, inner-city neighbourhood, with several distinct local businesses and home to regional attractions, such as Telus Spark and the Calgary Zoo. Our 30-year vision for the community is to build upon these strengths and create a unique and vibrant urban village, one that is complete and connected, providing individuals with a community where they can live, work and recreate. This will be achieved through strategic redevelopment that will enhance the community's sense of place through the integration of old and new, the creation of inviting public spaces and supporting the desire for local business and employment opportunities.

With a population estimated to reach over 9000 people by 2050, and steadily rising land prices, Bridgeland must accommodate not only more residents, but also those of differing family structure and income levels. The urban village provides a mix of housing at varying densities, such as laneway homes, townhomes, midrise apartments, condominiums and live-work units, offering alternatives to the single-family home and suitable for a variety of household formations at varying levels of affordability.

The urban village is functionally diverse and provides gathering spaces and employment opportunities. It is structured around a thriving core, consisting of: local retail, park space and an activity center and housing options. These new features will become destinations for residents and visitors, and will help to support the local economy and build a sense of community. A technology park, focusing on alternative and green energy research, will provide further employment opportunities in an emerging sector in close proximity to the community, rapid transit and major transportation routes.

Due to the demand for sustainable mode share options, a transit hub will be situated along the Edmonton Trail corridor and surrounded by commercial, retail and medium-high density. This will provide better accessibility in and out of Bridgeland. Furthermore, a neighbourhood greenway will offer safe cycling and pedestrian connections, while reducing congestion in the area.

Lastly, the urban village aims to preserve the unique historic and architecturally significant buildings that currently exist in the community, by repurposing them for modern uses while maintaining the character of the area.

### VISION 6

# URBAN VILLAGE

# complete + connected

Bridgeland is a family-friendly, mixed-income, inner-city neighbourhood and has the beginnings of transit-oriented development and a thriving main street. It is also in close proximity to major regional attractions (Bow River, St. Patrick's Island, Calgary Zoo, and Telus Spark).

The following 35 year scenario builds on these existing elements and opportunities to create an even more complete, connected, and family friendly community. The goal is to create a **unique** and vibrant urban village that consists of:





Accessible multi-modal options





of old & new



5. Linked natural areas & public spaces 6. Employment & innovation areas



## WHAT IS DRIVING REDEVELOPMENT?

Outcome: increasing the diversity of housing types so that

various income groups and family types can live in the area.

### 1. Population Growth

Outcome: accomodating and additional ~4.000 people by 2050 (based on historic growth patterns).

2. Rising Land Prices



# **TO TAKE PLACE?**

### **Existing Spatial Patterns**



Outcome: increasing sustainable mode share to reduce congestion and support active lifestyles.



3. Transportation Demand Management

4. Desire for Local Businesses ビ

Outcome: encouraging the establishment of small local businesses along strategic corridors and nodes.

## 5. Opportunities for Diversification

Outcome: providing areas for employment and innovation to enable and support economic diversification.





Edmonton Trail Corridor: likely to redevelop similar to the Meredith Block because of proximity to downtown and two major transportation corridors, and large areas of underutilized surface parking. Fragmented Mix: is lacking a strong identity and is not wel integrated with the rest of Bridgeland. This area could be better connected to and serviced by the commercial corridor along Edmonton Tr. The Bridges: has the potential to be the heart of the community and become the main connection point for the neighbourhood because of the LRT corridor and main street redevelopment Seniors & Health Care: disconnected and isolated from community with portions of underutilized Π pace. High potential due to proximity to Bridges redevelopment, LRT, and Memorial Dr Zoo Parking Lot: separated from community by Tom Campbell's Hill but has potential for large scale edevelopment because of adjacency to major transportation routes and singular land ownership

# **BRIDGELAND-RIVERSIDE 30 YEAR LAND USE VISION** Andrea Kormylo, Russ Leedham & Charlene Wilcock Instructor: Dr. Mary-Ellen Tyler



# WHERE IS REDEVELOPMENT LIKELY

EVDP 644 Winter 2016 - Advanced Professional Planning Studio 1 of 2





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l Use Type	Units	People	Jobs	Area (ha)
ownhouse	1125	2700		36.80
<b>Density</b> s, Courtyard Apartment	519	1143		12.88
<b>ty</b> Irtments, 4-6 Storey	422	844		5.62
Density	691	1106		5.53
	39	93	431	1.29
sidential	104.5	209	465	1.40
mmercial			794	3.18
			320	1.28
			1186	4.74
e			201	2.01
Community Centre			1413	7.06
en Space				8.78
				1.43
	2901	6095	4810	92.00
		_		

### **BRIDGELAND-RIVERSIDE 30 YEAR LAND USE VISION** EVDP 644 Winter 2016 - Advanced Professional Planning Studio 2 of 2

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