

WINNIPEG, MANITOBA'S ABANDONED RAIL BRIDGES: A STUDY OF REPURPOSING FOR COMMUNITY USE



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Capstone Report

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ABSTRACT

Abandoned rail bridges in Winnipeg provide an opportunity to repurpose significant and historical infrastructure for community use and benefit. Despite being inactive for decades, the Bergen Cut-Off Bridge (Mynarski and North Kildonan) and the Oak Point Bridge (St. James and River Heights-Fort Garry) have remained abandoned. These forgotten structures may be adapted into meaningful assets for the community. This research investigates the preservation and re-use of existing city infrastructure and the potential to repurpose it as a space that connects communities, expands recreation opportunities, and communicates and celebrates the bridges' histories.

This project utilizes semi-structured interviews and a focus group to understand the neighbourhood perceptions and situational context of the bridges, as well as the opportunities and challenges involved with repurposing efforts. To demonstrate the possibilities for Winnipeg's rail bridges, examples of other repurposed rail bridge projects in North America were provided to research participants. This capstone found that repurposing the abandoned rail bridges can benefit the communities adjacent to the bridges and the city of Winnipeg. Overall, participants were engaged in the concept; however, several critical challenges identified must be addressed to move forward efforts to repurpose the Bergen Cut-Off Bridge and the Oak Point Bridge.

A coordinated effort between the municipal government, rail bridge owners and a group championing the project is required to gather support and address current and future project roadblocks. With the establishment of interest and investment from various stakeholders, this opportunity has the potential to transform underutilized urban infrastructure into valuable community assets for all Winnipeggers.

Keywords: Repurposing, rail bridge, active transportation, industrial infrastructure

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1. INTRODUCTION

1.1 Problem Statement

Over the past two centuries, the rail industry has witnessed periods of investment and decline. These periods have been affected by various shifts in the market and demand, including booming grain trades, economic depressions, and competition from new modes of transportation (Campbell, 2017; Rosa, 2014). When rail lines are no longer feasible to maintain and operate, rail companies opt to terminate their service. The discontinuation of a rail line or portion thereof is referred to as **abandoned** (Rosa, 2014). When land rail lines are abandoned, they leave tracks and prescribed paths that can be converted into walking and cycling pathways (Erlanger, 2019). However, in some instances, the abandoned rail lines include bridge connections, many of which are century-old structures. These structures often feature then-emerging bridge techniques for their design and retain their value as historical landmarks (Kramer & Goldsborough, 2021).

As shifts in the rail market have produced abandoned rail bridges, many of which are nestled within the urban fabric, a couple of questions arise:

- [1] What can become of the rail bridges? and,
- [2] How can the bridges become assets for their adjacent communities?

Many jurisdictions across North America have realized this opportunity and repurposed their bridges to support active transportation use, among other utilities. A selection of repurposed rail bridge precedents is compiled in **Appendix C**.

The selected precedents are located within the urban fabric, are constrained by adjacent neighbourhoods, and have been repurposed to support active transportation use. In addition, each precedent features a unique, historical rail bridge in a different context. Although the size of the bridge and settings differ significantly, each jurisdiction was able to successfully preserve their local rail bridges and create an amenity for the surrounding communities.

Winnipeg features two abandoned rail bridges that present similar opportunities to transform major, unused city infrastructure into assets. These bridges are unique, as they are the only two rail bridges in the city that are no longer used for rail transportation or serve other purposes. Use of the Bergen Cut-Off Bridge (Canadian Pacific Railway) and the Oak Point Bridge (Canadian National Railway) was discontinued by their respective railway companies decades ago (Kramer, 2021; Kramer & Goldsborough, 2021). Both bridges show signs of age and are currently underutilized, as they are inaccessible to the public. This capstone investigates the preservation and re-use of existing city infrastructure and the potential to repurpose it as a space that connects communities, expands recreation opportunities, and communicates and celebrates the bridges' histories.

1.2 Research Design and Questions

Data was collected for two months, from December 2021 to January 2022. I conducted nine semi-structured interviews with neighbourhood resident group representatives from bridge-adjacent areas and municipal planners familiar with these neighbourhoods. Further, I conducted one focus group in January 2022 with a stakeholder group comprised of an elected official, a municipal staff member and representatives of local interest groups concerned with connectivity, heritage infrastructure and green transportation alternatives. Through the findings from the semi-structured interviews and the focus group, I aim to address the following three research questions:

- [1] What is the current situational context of abandoned rail bridges in Winnipeg?
- [2] What are the similarities and differences in how municipal planners, stakeholder groups and surrounding communities define, value, perceive and experience Winnipeg's abandoned rail bridges?
- [3] What opportunities do Winnipeg's abandoned bridges present, and what challenges do they face when repurposing is considered?

1.3 Overview

The capstone features seven chapters, as follows:

Introduction: Introduces the topic of abandoned rail bridges, identifies the problem, and gives an overview of the research questions and methodology.

Context for Winnipeg's Abandoned Rail Bridges: Provides background information on Winnipeg's two abandoned rail bridges, the Bergen Cut-Off Bridge and the Oak Point Bridge.

Literature Review: Discusses the literature as it relates to place and space, in-between spaces, rail bridges as abandoned, historical and industrial remnants and active transportation.

Methodology: Describes the methodology employed in the study, including a description of research participants, an overview of the research activities and limitations.

Findings: Presents the key themes that emerged from the semi-structured interviews and the focus group.

Analysis and Discussion: Provides a critical discussion of the significant findings and expands on ideas identified in the literature.

Conclusion: Discusses the research questions; presents recommendations, areas for further research and final thoughts for the study.



Figure 3: Rail line remnants in Bergen Cut-Off Park

2. CONTEXT FOR WINNIPEG'S ABANDONED RAIL BRIDGES

This chapter presents an overview of the context of Winnipeg's abandoned rail bridges. I begin by discussing the locality of the abandoned rail bridges within the city of Winnipeg. Subsequent sections discuss the Bergen Cut-Off Bridge and the Oak Point Bridge context separately, and includes information of their historical backgrounds, land use and zoning, circulation patterns and site approaches and constraints. The information in this chapter provides a common understanding of the bridges' backgrounds and helps to frame the research findings and the interpretation of research data.

2.1 Abandoned Rail Bridges in Winnipeg

The Bergen Cut-Off Bridge, which spans the Red River, is located in north Winnipeg. The North Kildonan neighbourhood bounds the bridge to the east and the Mynarski neighbourhood to the west.

The Oak Point Bridge, which spans the Assiniboine River, is located in west Winnipeg. The River Heights-Fort Garry neighbourhood bounds the bridge to the south and the St. James neighbourhood to the north. The neighbourhood of Daniel McIntyre (Wolseley) is located northeast of the Oak Point Bridge.

Figure 4 shows the neighbourhoods adjacent to the boundaries of the Bergen Cut-Off Bridge and the Oak Point Bridge. Neighbourhood boundaries are based on the City of Winnipeg's Electoral Wards 2018-2022 (The City of Winnipeg, 2018).

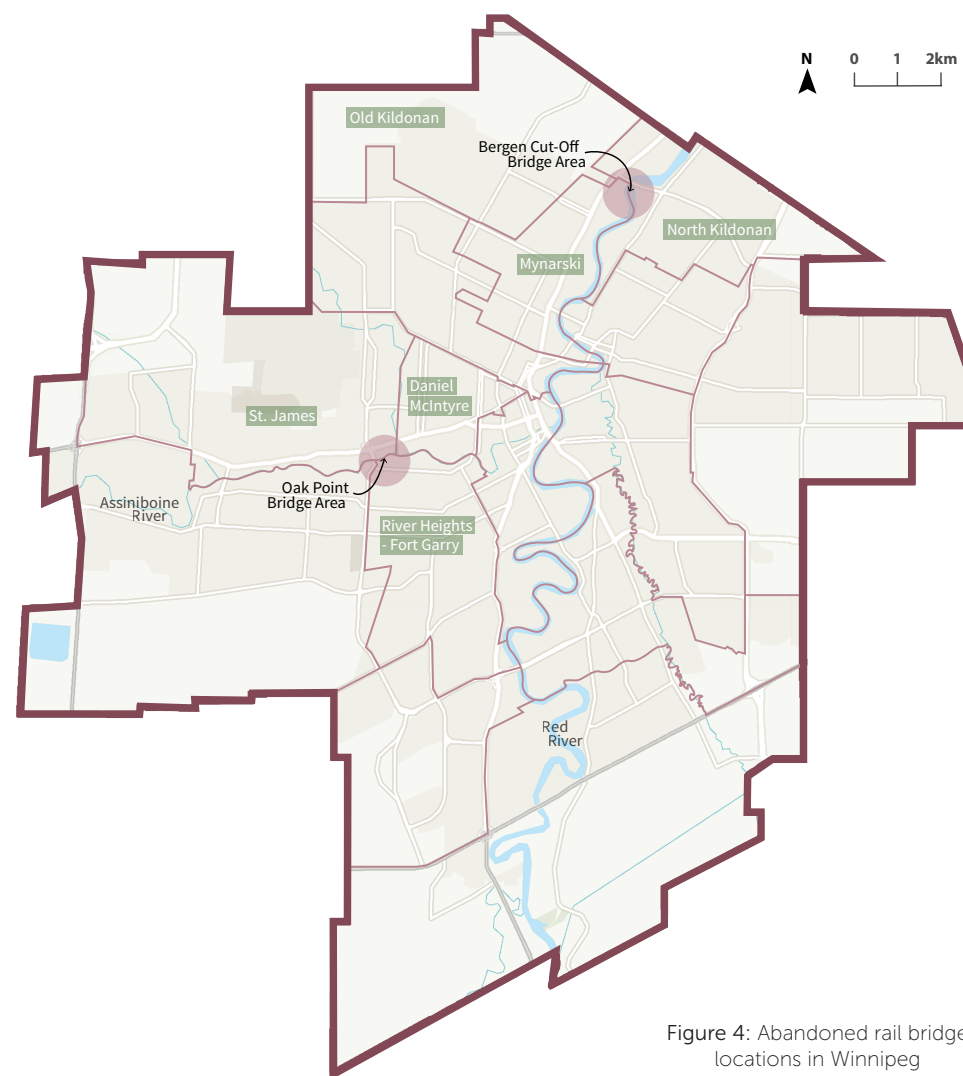


Figure 4: Abandoned rail bridge locations in Winnipeg

2.2 Bergen Cut-Off Bridge

2.2.1 Historical Background

The Bergen Cut-Off Bridge was built to support the booming grain trade in the early 1900s (Campbell, 2017). Plans for the Bergen Cut-Off rail line, including the bridge, were commissioned by the Canadian Pacific Railway (CPR) in 1911 to help address current and future demands on the rail transportation system (Campbell, 2017). In the 1900s, the city of Winnipeg was much smaller than it is today. The decision to build the Bergen Cut-Off rail line and its accompanying rail yard, the North Transcona Rail Yards, in the Rural Municipality of Kildonan was to help resolve congestion issues (Campbell, 2017; Headon, 2013). This was intended to minimize and avoid conflict with the growing city's footprint (Campbell, 2017; Headon, 2013). The first rail crossing on the Bergen Cut-Off Bridge occurred in May 1914 (Kramer & Goldsborough, 2021).

The Bergen Cut-Off Bridge includes seven concrete piers, two abutments on each approach and a supporting pier (Kramer & Goldsborough, 2021). The middle portion of the bridge was built as a "central swing span," which rotated open to accommodate the passing of large vessels along the Red River (Kramer & Goldsborough, 2021). The double-tracked rail bridge had the capability to hold two trains at the same time (Headon, 2013; Tizzard, 2007). After approximately 14 years of use, the Bergen Cut-Off line ceased operation in December 1928 due to changes in grain traffic demand and improved rail facilities in Winnipeg (Campbell, 2017; Kramer & Goldsborough, 2021).

Despite attempts over the years to use the Bergen Cut-Off Bridge for municipal and provincial vehicular traffic purposes, the bridge remained inactive for decades (Kramer & Goldsborough, 2021; Tizzard, 2007; Winnipeg Free Press, 1953, 1964). In 1985, developer and restaurateur Griffith Tripp, with landscape architect Garry Hilderman and planner David Witty, purchased 22 acres of the Bergen Cut-Off property from CPR (Newman, 1987; Tizzard, 2007). The proposal for the bridge included "restaurants on two levels under the west span's trusses, with kiosks built on the elevated approach," a "garden on the centre span, with pumps in the river feeding a giant waterfall" and an audio-visual component to project the "history of the river with its own water" on the waterfall (Tizzard, 2007). The bridge's west side was viewed as the catalyst of the project because it is easily accessible via Main Street and is home to numerous amenities including Kildonan Park, Kildonan Park Golf Course and Rainbow Stage. The aforementioned partners made multiple attempts to move the project forward over ten years but struggled to garner support from the City (Tizzard, 2007). Despite dealing with political roadblocks, Hilderman expressed his continued excitement for the project as "it mixes engineering and architecture and urban design. It stretches the imagination and it's so much tied to the river" and "If the city comes to us, we'll jump on it" (quoted in Tizzard, 2007). The Bergen Cut-Off Bridge has remained in private ownership since 1985.

In the time between its decommission and the present, the Bergen Cut-Off Bridge's timber decking has been removed, and its centre swing span has remained fixed in the open swing position (see **Figure 5**) (Campbell, 2017). In recent years, the Bergen Cut-Off Bridge has drawn interest from community reporters and locals that see the bridge as an opportunity to "revive a neglected bridge and create a famous historic landmark in [the] beautiful Kildonan area" (Girard, 2018). Advocates for repurposing the Bergen Cut-Off Bridge believe that it can support active transportation, enhance connections to nearby neighbourhoods, improve access to Kildonan Park's amenities, offer new views of downtown Winnipeg, act as a draw for tourists and beautify the city (Girard, 2018; Guenther, 2021a, 2021b).



Figure 5: The Bergen Cut-Off Bridge in October 2021

2.2.2 Land Use and Zoning

The areas surrounding the Bergen Cut-Off Bridge are comprised of Kildonan Park Golf Course to the west, and residential and green space to the east (see **Figure 6**). The bridge is also close to Fraser's Grove Park, a linear park that runs along the Red River. The land use east of the Bergen Cut-Off Bridge is primarily residential, with commercial use following the length of Henderson Highway. Concentrated commercial zones are located at the intersection of Henderson Highway and the Chief Peguis Trail. Land to the south-west of the Bergen Cut-Off Bridge contains Kildonan Park and residential neighbourhoods. The surrounding area's major industrial use is the City of Winnipeg's North End Water Pollution Control Centre, located north-west of the Bergen Cut-Off Bridge.

Figure 6's land use and zoning parcels are adapted from the City of Winnipeg's Assessment Parcels, from the Assessment and Taxation Department (The City of Winnipeg, 2022).

2.2.3 Circulation

There is a significant presence of active transportation paths in the Kildonan Park area, west of the Bergen Cut-Off Bridge (see **Figure 7**). While both sides of the bridge feature paths that run alongside the riverbank, the west pathways are integrated into a contiguous network within Kildonan Park and the Kildonan Park Golf Course. Remnants of the bridge's east rail line now serve as an informal pathway, on elevated land leading to Henderson Highway. The Bergen Cut-Off Bridge is also close to Canada's national trail system called the Trans Canada Trail.



Figure 6: Land use zoning of the Bergen Cut-Off Bridge area (Esri Canada, 2022)



Figure 7: Circulation of the Bergen Cut-Off Bridge area (Esri Canada, 2022)



Figure 8: Bergen Cut-Off Bridge west approach

The Trans Canada Trail runs across the Kildonan Settlers Bridge, and crosses into Kildonan Park. The Kildonan Settlers Bridge is the closest water crossing for active transportation and vehicles in the area. It is located approximately 380 metres north of the Bergen Cut-Off Bridge.

Figure 7's pathway information is derived from Google Map's Bicycle Layer, which was created by Winnipeg Trails Association volunteers (Google Maps, n.d.).



Figure 9: Bergen Cut-Off Bridge east approach

2.2.4 Approaches

The Bergen Cut-Off Bridge's west approach is located in Kildonan Park Golf Course and is currently accessible by golfers (see **Figure 8**). However, for safety concerns, the City of Winnipeg has fenced off this area to prevent the public from accessing the bridge. On the east approach, the bridge appears to be significantly elevated from grade which creates inaccessibility (see **Figure 9**).

2.3 Oak Point Bridge

2.3.1 Historical Background

The Oak Point Bridge was commissioned by the Canadian National Railway (CNR) in 1907 (Headon, 2013; ViceVersa Developments Inc v. The City of Winnipeg, 2013). As part of the CNR's Oak Point Subdivision, the bridge supported three types of traffic: rail, pedestrian and vehicular (Kramer, 2021). The first rail crossing on the bridge occurred in May 1908 (Kramer, 2021). Safety issues for pedestrians and vehicular traffic were documented in the 1910s and 1920s, which led to the eventual construction of the adjacent St. James Bridge (Kramer, 2021).

The 420-foot long bridge is constructed on five concrete piers and measures twenty feet wide (The City of Winnipeg, 2005). A manually operable swing mechanism is incorporated into the centre pier's structure (The City of Winnipeg, 2005). The Oak Point Bridge was decommissioned by the Canadian National Railway in the late 1990s and was eventually sold to ViceVersa Developments Inc. in 2003 (Kramer, 2021; ViceVersa Developments Inc v. The City of Winnipeg, 2013).

The sale included two parcels of land, the north and south approaches, and the bridge (ViceVersa Developments Inc v. The City of Winnipeg, 2013). In 2004, ViceVersa Developments Inc. was approved by the City of Winnipeg to build 20 to 24 condo units on the bridge, subject to conditions (Kives, 2010). These conditions included a servicing agreement and zoning agreement (The City of Winnipeg, 2005). The City's planner's report indicated "rail rationalization is presenting unique opportunities for using abandoned rights-of-way, marshalling yards, and related plant in ways that will enhance the urban environment," and was supportive of the housing proposal (The City of Winnipeg, 2005,

p. 37). As the proposal involves construction on the riverbank and Assiniboine River, it was subject to appropriate approvals from the Government of Canada Department of Fisheries and Oceans and the Province of Manitoba Conservation Department (Kives, 2010). Ultimately, the project did not move forward as it could not secure air rights from the Province (Kives, 2010). In 2009, the bridge's private owner attempted to sell the bridge, without success (Kramer, 2021). In recent years, ViceVersa Developments Inc. has been involved in legal disputes with the City of Winnipeg regarding the three public rights-of-way located underneath the bridge (see **Figure 10**) (ViceVersa Developments Inc v. The City of Winnipeg, 2013, 2015). As of 2017, the Oak Point Bridge has remained privately owned (Kramer, 2021).



Figure 10: The Oak Point Bridge in September 2021

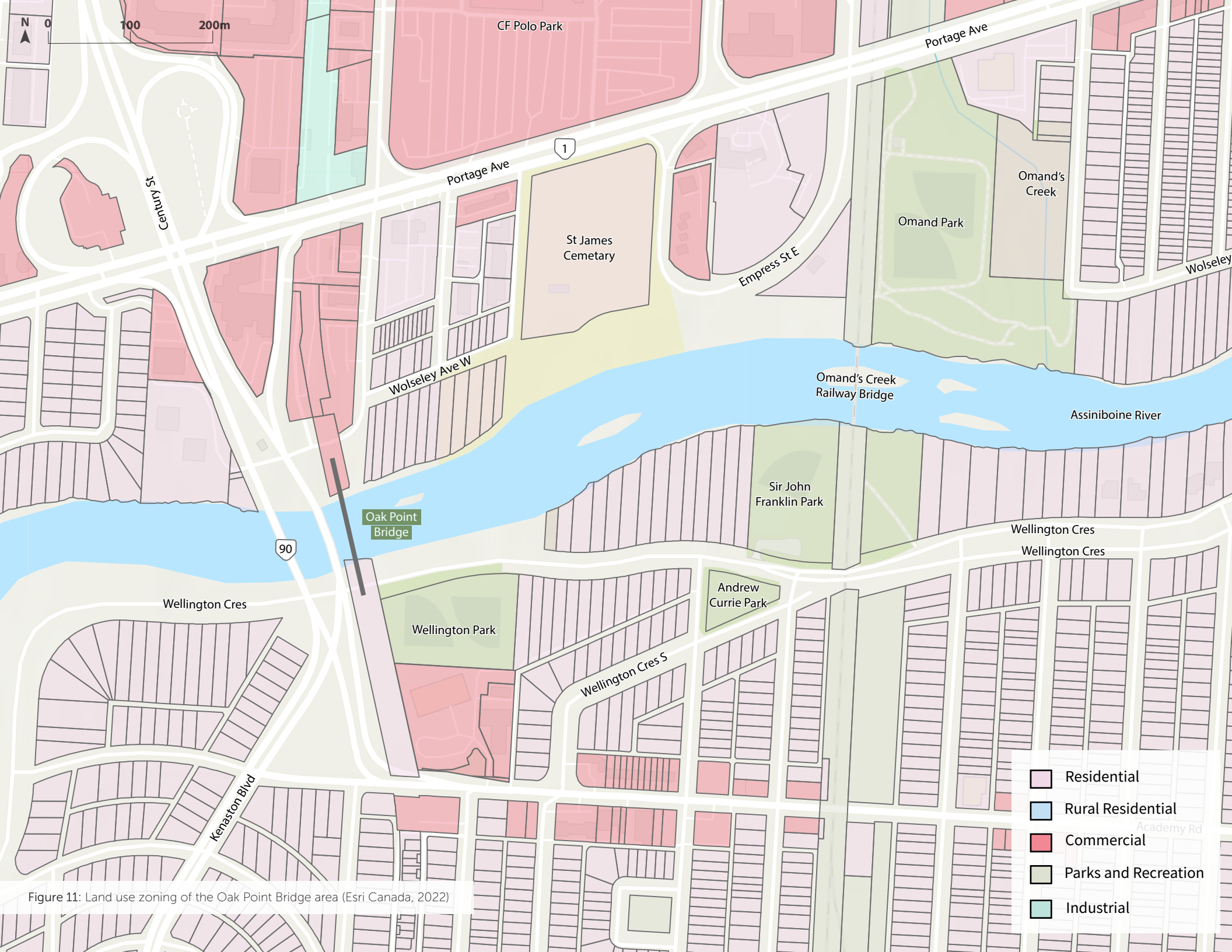


Figure 11: Land use zoning of the Oak Point Bridge area (Esri Canada, 2022)

2.3.2 Land Use and Zoning

The area to the north of the Oak Point Bridge is zoned for commercial use (see **Figure 11**). Immediately across Portage Avenue is Winnipeg's largest shopping centre, CF Polo Park. Adjacent lands to the bridge's north area are zoned as residential. Oak Point Bridge's south approach begins in Wellington Park. Other quality greenspaces around the area include Omand Park, Sir John Franklin Park and Andrew Currie Park. The bridge is close to Academy Road, which features a concentration of commercial amenities. Land adjacent to Academy Road is primarily zoned for residential use.

Figure 11's land use and zoning parcels are adapted from the City of Winnipeg's Assessment Parcels, from the Assessment and Taxation Department (The City of Winnipeg, 2022).

2.3.3 Circulation

The network that runs along Wellington Crescent is a popular path used by residents (see **Figure 12**). The Wellington Crescent pathway is also part of the Trans Canada Trail. There are two existing routes to cross the Assiniboine River available for active transportation, the Omand's Creek Railway Bridge and the St. James Bridge. The St. James Bridge is located approximately 13 metres from the Oak Point Bridge, while Omand's Creek Railway Bridge is 575 metres east. The pathway network around Omand Park is composed of lanes dedicated for bicycle use and becomes an informal pathway further west.

Figure 12's pathway information is derived from Google Map's Bicycle Layer, which was created by Winnipeg Trails Association volunteers (Google Maps, n.d.).



Figure 12: Circulation of the Oak Point Bridge area (Esri Canada, 2022)



Figure 13: Oak Point Bridge south approach

2.3.4 Approaches

As noticeable in the Oak Point Bridge's south approach image (see **Figure 13**), the rail has been removed and is partially grown over with grass. This approach has blended in with the adjacent park. The entrance to this bridge is rendered inaccessible from both sides with chain link fencing. On the north approach overgrown shrubbery and signs of encampments are noticeable (see **Figure 14**). These encampments are located on the approach and the riverbank beneath the bridge.



Figure 14: Oak Point Bridge north approach

2.4 Summary

This chapter has provided an overview of the locational context and historical backgrounds of Winnipeg's two abandoned rail bridges. Although the rail bridges have been abandoned by their respective rail companies, they have since been sold to private developers. Despite attempting to repurpose the rail bridges, private developers have struggled to receive the proper approvals to move these projects forward.

3. LITERATURE REVIEW

This literature review provides an overview and examination of the following four topics related to repurposing abandoned rail bridges to active transportation bridges in the urban context:

- Place, Space and Placemaking
- In-between Spaces & Liminality
- Rail Bridges as Abandoned, Historical and Industrial Remnants
- Active Transportation in Neighbourhoods

This literature review establishes an academic framework to support the research study. As rail bridges conversions are not widely discussed in the literature, the topics were chosen to support a deeper understanding of the related themes connected to altering places, underutilized spaces in cities, urban abandonment, historical infrastructure, industrial remnants, and the benefits of access to active transportation.

3.1 Place, Space and Placemaking

In the literature, the concept of *place* is often associated with its relationship to space, as all places begin as spaces. These concepts are explored in the works by Gieryn (2000), Teder (2018) and Vanclay (2008). Vanclay (2008) defines places as spaces infused with personal meaning. Gieryn (2000) elaborates arguing that space is a distinct and separate concept from a place, as spaces become places once populated with people, meanings, practices and identities (p. 465). While space is “detached from material form and cultural interpretation,” place “persists as a constituent element of social life and historical

change” (pp. 464-465). Similar discussions lead Teder (2018) to explain the unique relationship between space and place; they require each other to define their differences while also having the ability to transition from one state to the other in a fluid manner. The literature further expands on the definition of place and explores how places are created and connected to individuals or groups.

As discussed in the literature, the concept of place can be difficult to define; it is a flexible yet imprecise term that applies to many different disciplines (Dupre, 2019; Relph, 2008; Vanclay, 2008). Through the lens of sociology, Gieryn (2000) classifies the defining elements of place into three categories:

- **Geographic Location:** Specific location in the globe; can vary in scale;
- **Material Form:** Has a physical form; can be built, artificial or natural;
- **Investment with Meaning and Value:** Constructed by being built and subsequently interpreted or perceived; as different individuals and cultures understand a place, it is subject to change over time. (pp. 464-465)

When these defining elements are not present, as stated above, the place may revert to being a space. For example, if the supposed place is located in the virtual realm and not attached to a geographic location, it is considered a space (Gieryn, 2000). If a place begins to lose its meaning and value to an individual or community, it will become a space (Gieryn, 2000). This interpretation aligns with the fluid relationship between space and place, as Teder (2018) described.

Vanclay (2008) agrees with Gieryn's (2000) three elements of place. Relph (2008), Stedman (2003) and Vanclay (2008) expand on this definition by expressing how places are connected to personal meanings. Places may be distinct for someone because they've had a personal experience there, or they could take shape as a collective perception through community beliefs (Vanclay, 2008). Further strengthening the significance of a place involves ascribing a name to the location and distinguishing it through "the stories and shared memories connected to it" (Relph, 2008, p. 311). Stedman (2003) identified that meanings of a place are socially constructed concepts assigned by each person who has a special connection to that place. A single location may contain multiple meanings to different people as "any physical place has the potential to embody multiple landscapes, each of which is grounded in the cultural definitions of those who encounter that place" (Greider and Garkovich, 1994, as cited in Stedman, 2003, p. 672). This understanding dictates that the reasons a place may be special to a particular individual may differ significantly depending on many personal factors.

Places are generated through the process of *placemaking*. Whether for better or worse, placemaking can alter how individuals feel about a particular place (Vanclay, 2008). Teder (2018) states that placemaking is "the simultaneous building of physical objects and relationships; relationships between people, and relationships between people and places" (p. 13). The social building of places is essential when considering how placemaking occurs in practice. Lew (2017) outlines the two methods of placemaking most common in the literature:

- **Organic:** Occurs at the individual or community level; shaped by daily routines and social practices
- **Planned:** Conducted by professionals; to reshape people's experience and perceptions of a place (p. 2)

The process of planned placemaking has opened dialogue on the role of designers and the community through public participation. Design professionals can provide technical expertise and direction to placemaking initiatives while also understanding how changes affect the greater community (Aguila et al., 2019). Teder (2018) notes that while design professionals have knowledge and expertise to provide, they should not be the only voices considered in placemaking. Indeed, as placemaking practices continue to evolve, local experts will have a critical role to play as "placemaking makes expert culture porous and infuses it with the experiences, hopes, dreams and struggles of places and local placemakers" (Schneekloth & Shibley, 1995, p. 136). This perspective foresees a diminishing role for design professionals and places authentic, local knowledge derived from the community itself.

The landmarks or significant physical features of a neighbourhood are some of the most straightforward elements to which a community can attach meaning and forge emotional ties (Gieryn, 2000; Vanclay, 2008). When such places are altered or changed, what effect does this have on an individual's sense of place? According to Gieryn (2000), loss of place results in "devastating implications for individual and collective identity, memory, and history – and for psychological well-being" (p. 482).

Modifying or changing a place is complex because sense of place is a personal experience, meaning one locale may contain endless different meanings for various people (Vanclay, 2008). Because of the multiple attachment levels one location has, conflict or opposition can occur when places are destroyed or altered (Vanclay, 2008). Vanclay (2008) noted that "No change in the landscape or cityscape will ever be free of conflict or opposing views. Because one group's use of a place can impact other groups, there will be use conflicts. This frequently happens in public access areas where there are multiple uses and many users" (p. 4). These underlying tensions linked to changes in neighbourhoods, towns, or cities can make alterations incredibly delicate to navigate.

When considering altering a place and ensuring the accommodation of different users, Aguila et al. (2019), Relph (2008) and Vanclay (2008) offer different strategies for success. Relph (2008) suggests the community's diversity should be highlighted in the design of a place. This may be accomplished through "heritage preservation ... and a critical reinterpretation

of old regional traditions" (p. 320). Vanclay's (2008) strategy is centred around involving people, as he believes people develop a place attachment through actively engaging in the process to modify the place (Vanclay, 2008). For Aguila et al. (2019), placemaking initiatives should consider "enabling opportunities and interpretation for different users and change over time," instead of focusing on a community's preference from a moment in time (p. 256). This interpretation accommodates changes of preference that will occur over time and consider this factor in its placemaking decisions and plans.

3.2 In-between Spaces & Liminality

As communities shift, develop and grow over time, gaps or spaces may reveal themselves in the urban fabric. Spatially, these in-between areas "refer to spaces of absence, voids, and the gaps between the forms of objects" (Azhar & Gjerde, 2016, p. 282). These unplanned spaces represent a stoppage in urban functionality, caught in a static state (Azhar & Gjerde, 2016). Azhar and Gjerde (2016) and Piccinno and Lega (2019) take similar positions that urban development and architectural design can create these residual spaces. A similar concept is referred to in cultural and social study literature: *liminality* (Azhar & Gjerde, 2016). Whereas in-between spaces have a spatial component, liminal states can refer to transitions or ambiguities in culture, rituals or social identities (Downey et al., 2016). Liminal spaces are not burdened with conventions or rules; they offer "a potentially unlimited freedom from any kind of structure" (Downey et al., 2016, p. 9). According to these definitions, in-between and liminal spaces are elusive, unrestrained locales that may pose a challenge to understand and plan accordingly.

According to Azhar & Gjerde (2016), underutilized or leftover spaces located in the urban fabric can be classified further into two separate categories:

- **Continuous Spaces:** Transitional; relevant to time and space (e.g., building rear or frontage)
- **Discontinuous Spaces:** Temporal; physical qualities are distinct from its environment (e.g., openings, gaps, cracks, inaccessible areas) (p. 284)

Authors Piccinno and Lega (2019) expand on this classification by illustrating continuous and discontinuous in-between spaces in terms of their spatial and temporal qualities. Continuous spaces are defined by a limit, such as a line, to demonstrate their position in relation to a direction (p. 5). Spatially, continuous spaces refer to thresholds, edges, borders, and margins (p. 5). In contrast, discontinuous spaces are the “limit that arises between realities considered different and therefore distinguishable” (p. 5). Its spatial qualities relate to breaks, recesses, holes, distance, separation, while its temporal qualities refer to intermission and pause (p. 5).

To address these overlooked and lost spaces in cities, spatial analysis is required. This involves assessing a place in terms of its invisible networks and subtle movement patterns that extend to other connecting elements in the local fabric (Azhar & Gjerde, 2016). For Azhar and Gjerde (2016), in-between spaces can benefit the neighbourhood by acting as a connector between elements, as mediators between existing and new structures, as creativity generators and as a means to help strengthen communities’ sense of identity and social interactions. Similarly, Piccinno and Lega (2019) note that activating in-between spaces can produce meaningful arenas

for social, cultural and environmental transformation. Although positive outcomes can be made by reactivating in-between spaces, the proper supportive documents must be in place to allow for change. Planning guidance and policies are required to facilitate these changes; if left untouched, these spaces are subject to being forgotten by the public eye to retain no specified use or purpose (Azhar & Gjerde, 2016).

3.3 Rail Bridges as Abandoned, Historical and Industrial Remnants

As cities evolve, gaps may reveal themselves within the built environment and produce abandoned infrastructure. According to De Franco (2020), urban abandonment “is undesirable for functional, economic, environmental, and social reasons” (p. 878). There is consensus in the literature regarding urban abandonment as a public policy problem, as public policy strives to operate cities as efficiently as possible (De Franco, 2020). In addition to public policy’s aims to operate cities efficiently, with minimal abandonment, decision-makers may also be under pressure from their residents to address these structures. Abandoned structures in the urban setting may be interpreted as “eyesores or wasteful presences [that] create critical pressure for policymaking, especially in dense, dynamic, and large cities” (De Franco, 2020, p. 878).

Abandonment is not exclusive to buildings. Indeed, rail line abandonment can occur in rural and urban settings when a rail company discontinues rail service on the entire line or a particular portion of a line (Rosa, 2014). As abandoned infrastructure is primarily considered an adverse condition, what can be done with discontinued rail bridges? Sloan (2008) illustrates five

scenarios possible to reinvest in rail bridges and continue their historical legacy, including (1) rehabilitating the bridge to carry vehicular traffic, (2) rehabilitating the bridge to serve as an amenity (e.g., pedestrian crossing or integrating into a park, open space or public space), (3) moving the bridge to another location, (4) rehabilitating the bridge to serve an entirely new function (e.g., incorporate into a trail network) and (5) maintaining the bridge to serve its current function. Although some scenarios occur more often than others, Sloan (2008) provides examples of each rail bridge scenario that has taken place in the United States of America.

Rail bridges can be perceived as historical landmarks, as their designs and technical achievements are unique to the time of their construction. As rail line abandonment becomes more common (Rosa, 2014), recognition of the historical value of the bridges and investment into preserving the bridges is growing (Sloan, 2008). However, it is challenging to preserve rail bridges successfully, as the easiest choice is to remove them once they are no longer functional (Sloan, 2008).

Beyond the technical design solutions needed to upgrade the bridges, the most critical component of rail bridge preservation efforts is the political environment (Sloan, 2008). A case study by Fredholm et al. (2018) noted that successful historical planning practices provide economic benefits to the community, such as tourism, investment and jobs. At the same time, historical conservation activities offer social benefits to the individuals involved, including group belonging and improved self-esteem (Fredholm et al., 2018). However, the study noted that local politicians respond primarily to the economic benefits of historic preservation planning as, “local politicians do not

sympathize with heritage conservation unless it is contextualized in economic terms or proven to be directly beneficial as a resource for the tourism industry or residential developments” (Fredholm et al., 2018, p. 744). As deduced by Sloan (2008) and Fredholm et al.’s (2018) arguments, communication with decision-makers plays a vital role in preserving historical bridges.

Further expanding upon the political environment, Sloan (2008) has detailed five factors necessary to preserve a historic rail bridge successfully:

- **A Champion:** A dedicated individual to lead the preservation efforts, navigate the political challenges, organize community support, and find funding sources
- **Appropriate Setting and Environment:** It must be feasible and reasonable to preserve the bridge and align within the surrounding context
- **Supportive Local Community:** Preservation must have support from the local community, including municipal officials; indifference or resistance can be detrimental to the projects’ efforts
- **Funds for Preservation:** Adequate funding for the size of the project; may be obtained from sources such as the federal government, local taxes, or non-profit organizations
- **Historic Bridge Fraternity:** Support from the historical community to justify preservation efforts; provides historical backing of the bridge to aid the champion’s efforts (pp. 201-203)

As a remaining structure of the rail industry, abandoned rail bridges are also connected to the movement to repurpose industrial remains into new uses. As Chan (2009) discussed, an individual may experience and perceive ideals of industry, industrial ruins and parks that contain industrial ruin in different ways. Industry may be perceived as a symbol of progress, economic workforce and a resource with endless potential, whereas an industrial ruin represents an economic decline and neglected, mysterious sentiments (Chan, 2009). Industrial ruin parks are associated with the sublime, nostalgia and feelings of historical pride. Chan (2009) is critical of sentiments surrounding industrial ruin parks, as the parks are often simplified versions of complex histories and focused on aesthetic qualities instead of historical accounts of the industry. The author advocates that parks containing industrial ruins should be treated “primarily as historical evidence and secondarily as aesthetic devices” (Chan, 2009, p. 30).

Considering different approaches for repurposing industrial ruins, Hardy (2005) argues that each site should be built with regard to its unique structure, activities it will be supporting and its aesthetic goals. For Hardy (2005), it is essential to maintain the original aspects of the industrial structures, “industrial sites are best redeveloped when some aspect of their original character and organization is preserved to recall the forces and people that brought them into being” (p. 36). When these sites are successfully designed and reused, they can “provide a genuine sense of place, one that celebrates both a rich history and an off-best aesthetic” (Hardy, 2005, p. 37). The literature indicates there is a romanticized ideal of old industrial structures. Although industrial ruins offer an opportunity to

reinvigorate past industry sentiments, it is essential to establish and incorporate educational components of the structure’s past use and any harm that occurred on the site (Chan, 2009).

3.4 Active Transportation in Neighbourhoods

According to Sallis et al. (2004), “physically inactive lifestyles are one of the major public health challenges of our time” (p. 249). Since the 1970s, biking and cycling rates have decreased threefold in the United States of America (Green & Klein, 2011). The growth of physically inactive lifestyles in America has been linked to the obesity epidemic and contributes to chronic illnesses such as diabetes, heart disease and stroke (Sallis et al., 2004). Increasing active transportation opportunities in our communities is a strategy to improve physical activity and reduce poor health outcomes. While organized sports leagues and recreational facilities such as gyms help improve individual fitness levels, they require an investment of money and skill (Litman, 2003). Litman (2003) noted that the most viable method of improving physical activity for most general populations is increasing access to active transportation.

Research across health, transportation and urban planning fields has begun examining the causes that produce inactive lifestyles (Sallis et al., 2004). Green and Klein’s (2011) research regarding a program designed to encourage active transportation and community design features noted the link between compact neighbourhood design, walking and obesity rates. Residents living in compact neighbourhoods, with “grid-pattern streets, short blocks lengths, and close destination places” tend to weigh less, walk more, and have lower rates of hypertension than those living in more sprawling neighbourhoods (Green & Klein,

2011, p. 42). The report by Green and Klein (2011) discussed that neighbourhood design features such as sidewalks, distances to destinations, visually appealing locations and parks are linked to increased rates of walking and biking. These design elements and close-by amenities attract active transportation users and promote further engagement. High levels of active transportation are beneficial to health. Sallis et al. (2004) noted that residents living in highly walkable neighbourhoods made approximately two times more walking trips per week than those living in less walkable communities. The literature agrees that various land-use factors affect the levels of active transportation in a neighbourhood (Litman, 2003).

Urban form factors have a reported effect on children's commute choices to school. One research study found that "children were more likely to walk or bike to school in dense, urban, mixed-use and highly connected neighbourhoods" (Stewart, 2011, p. 136). These neighbourhoods allow children to use low-traffic active transportation routes within reasonable walking or biking distances from home (Stewart, 2011). Recreational spaces for children located within walking distance of a child's homes lessened reliance on a parent's automobile for transportation. At the same time, walking to recreational places served as another form of physical activity (Stewart, 2011). By providing more opportunities for children to use active transportation networks to get around, children will be improving their physical, social and psychological well-being and development (Litman, 2003). These habits are essential to establish in childhood as "children who walk and bicycle are more likely to use these modes as adults" (Litman, 2003, p. 1). Therefore, improving active transportation opportunities is

beneficial to people of all ages.

3.5 Summary

The literature review has provided an overview of the key topics of place, space, placemaking, in-between spaces, abandoned, historical and industrial remnants, and active transportation. Places are derived from personal meanings attached to a location, which can differ significantly from person to person. Due to differing emotional attachments, conflicts can occur when places are altered. In terms of repurposing places, it would be beneficial to reuse in-between or lost spaces within our cities to enhance connectivity and community identity. Repurposing abandoned rail infrastructure is possible, but the right political and supportive conditions must exist to succeed. Further, active transportation is beneficial for all ages; however, active transportation engagement levels depend on land-use factors. Repurposing rail bridges presents a unique opportunity to reactivate underutilized, historical, and industrial infrastructure to benefit adjacent communities.



Figure 15: Oak Point Bridge Crossing Wellington Crescent

4. METHODOLOGY

The Bergen Cut-Off Bridge and the Oak Point Bridge were chosen as the study's subject sites, as both bridges are abandoned, historical remnants within the urban fabric of Winnipeg. Despite attempts by past proposals to repurpose these bridges (Kives, 2010; Tizzard, 2007), they have remained as untouched, enigmatic structures for years. This capstone report provides an opportunity to deepen the understanding of these bridges from the views of various stakeholders through interviews and a focus group exercise and includes guidance on potential steps to move forward with any repurposing activities.

The study employs two primary research methods involving human research subjects: Semi-structured interviews and a focus group. To facilitate this research, an ethics protocol was prepared over the course of two months, from September to October 2021. The protocol prescribed initial interactions with research participants (e.g., recruitment, communications), the consent process, data storage protocols, confidentiality precautions and the withdrawal process. The Research Ethics Board (REB 2) reviewed the protocol, along with the following attachments: recruitments scripts (phone and email), information sheet, consent forms, list of semi-structured interview questions, focus group guide and a slide deck of repurposed rail bridge precedents. The ethics protocol was approved on November 2, 2021, by the Research Ethics Board (REB 2) at the University of Manitoba, Fort Garry campus.

Potential research participants were contacted once approval was obtained from the Research Ethics Board. Participants were provided with a consent form three days prior to the scheduled interview or focus group. In the consent form, permission was granted by research participants to cite their name in this report. All focus group participants gave permission to use their name, while some semi-structured interviewees chose to be referred by a pseudonym. For legibility, all semi-structured interviewees have been assigned pseudonyms, and focus group participants are referred to by name. Where appropriate, details that could identify participants have been excluded in this report.

4.1 Research Participants

This study uses two primary research methods: Semi-structured interviews and a focus group session. Data collection occurred from December 2021 to January 2022. Participants for both research methods were divided into three categories. The participant selection intended to provide a range of the differing perspectives of various stakeholders. The following list is used to define this study's interviewees and focus group participants:

Semi-Structured Interviews

- **Municipal Planners:** This group includes individuals employed as planners within Winnipeg, with knowledge of the adjacent communities of the two abandoned bridges
- **Neighbourhood Resident Groups:** These participants are employed by or represent neighbourhood groups in the adjacent communities of the two abandoned bridges; most of these participants lived within the local neighbourhoods beside the bridges
- **Business Advocacy Groups:** These individuals represent Business Improvement Zones in the adjacent communities

Focus Group

- **Elected Officials** Includes participants who were elected to their council positions at the City of Winnipeg, and act as representatives for their respective wards
- **Municipal Staff Members:** These participants are employees of the City of Winnipeg
- **Local Interest Groups:** These individuals represent various organizations located in the city of Winnipeg that are concerned with connectivity, heritage infrastructure, and green transportation alternatives

The interviewees and focus group participants were identified through publicly available information sources (i.e., websites and news articles). Individuals were invited to participate via telephone or email. Nine individuals participated in the semi-structured interviews, and six individuals participated in the focus

group. The final response rate for the semi-structured interviews was 69%, while the response rate for the focus group invitees was approximately 55%. **Table 1** and **Table 2** outline the number of participants invited, participants who did not reply or declined, and participants who accepted.

Table 1: Semi-Structured Interview Responses

Category	Requested	No Response or Declined	Accepted
Municipal Planner	4	0	4
Neighbourhood Resident Group	7	2	5
Business Advocacy Group	2	1	1*

* Individual agreed to participate in principle but did not follow through

Table 2: Focus Group Responses

Category	Requested	No Response or Declined	Accepted
Elected Official	4	3	1
Municipal Staff Member	3	2	1
Local Interest Group	4	0	4

4.2 Brief Precedent Study

A brief precedent study was completed to understand the context of similar projects involving repurposed rail bridges in other jurisdictions, including the physical qualities of the sites and their benefit for the surrounding communities. Arab and Mullon (2022) define precedents as examples that “designate items of knowledge associated with previous achievements, whether in terms of urban or architectural form, urban programming, procedures, or working methods” (p. 2). As the two abandoned rail bridges in Winnipeg are located in an urban setting, and constrained by neighbourhoods beside each approach, the precedent study looked for projects with similar parameters. Ultimately four precedent projects were identified: two in Canada and two in the United States of America. Each precedent features a historic rail bridge located in an urban setting that was repurposed to facilitate active transportation and may include other uses that are beneficial to their surrounding neighbourhoods. Projects that did not meet these criteria were disqualified from selection.

Information and images of the precedent projects were compiled to present to interviewees and focus group participants. Presenting the details of other jurisdictions’ rail bridge precedents was intended to demonstrate the potential range of possibilities for Winnipeg’s rail bridges and guide the interview discussion. A slide deck of the four precedent projects were compiled and sent to interviewees and focus group members in advance of the meeting. During the interviews and the focus group meeting, I briefly reviewed the precedent projects and provided further contextual and historical information. Generally, information on each repurposed rail

bridge project included: location, rail bridge construction date, date repurposed to support active transportation and other uses (e.g., community gardens, wedding venue etc.). In some instances, the bridges’ length, the costs of repurposing, and repurposing sources of funding were also disclosed. The brief precedent study was also employed to determine the particular factors associated with each project’s successful repurposing.

4.3 Semi-Structured Interviews

From December 1 to December 13, 2021, nine semi-structured interviews were conducted via Zoom video-teleconferencing and telephone call. The interview durations were typically 50 minutes to 60 minutes. An external audio recorder was used to record telephone interviews and Zoom’s software was employed to record Zoom interviews. Following each interview, the data was transcribed and the audio recordings were subsequently deleted.

Semi-structured interviews were used to collect data on (1) the situational context of the rail bridges and (2) the perceptions and experiences of the rail bridges from the perspectives of municipal planners and surrounding communities. Rubin and Rubin (2012) explain how semi-structured interviews allow the researcher to pose pre-determined questions while also allowing time for follow-up questions based on the interviewee’s responses. To help guide the interview discussions, interviewees were provided with a slide deck containing images of repurposed rail bridges precedents in other jurisdictions and the interview questions three days in advance. Separate pre-determined interview questions were compiled for municipal planners and neighbourhood resident groups. Municipal planners were

asked to discuss the adjacent communities' planning goals and objectives, policies of the abandoned rail bridges and the barriers involved with repurposing activities. Neighbourhood resident groups were asked questions relating to neighbourhood sense of place, the current value of the rail bridge to their neighbourhood, as well as the potential benefits of a repurposed rail bridge and potential challenges facing repurposing efforts. A list of the semi-structured interview questions, the slide deck of repurposed rail bridge precedents, and the precedent notes are provided in the **Appendices** chapter.

The report utilizes pseudonyms for semi-structured interview participants. Municipal planners are referred to as: Planner 1, Planner 2, Planner 3, and Planner 4. To respect confidentiality, planners are not associated with any specified neighbourhood. Neighbourhood resident groups are referred by their associated neighbourhood and further distinguished by a number value (e.g., Neighbourhood 1, Neighbourhood 2 etc.).

4.4 Focus Group

The focus group was conducted via Zoom on January 13, 2022. The focus group was approximately one hour and 15 minutes long. Zoom's software was employed to record the Zoom meeting. Following the focus group, the audio recording was transcribed and the audio data was subsequently deleted.

The focus group was used for data collection of (1) the values and perceptions of various stakeholder groups, and (2) the opportunities and challenges of repurposing the two abandoned rail bridges in Winnipeg. Eight focus group questions were prepared, along with subsequent prompts and follow-up questions. Questions were determined based on Puchta and

Potter's (2004) writings, which recommend the questions to "be simple, unambiguous and unelaborated" (p. 52). At the beginning of the focus group, participants were presented with a brief overview of the findings from the semi-structured interviews and information on the repurposed rail bridges precedent slide deck. Participants were encouraged to speak one at a time and provide their honest opinions, even if they disagreed with others in the group. The focus group guide, the slide deck of repurposed rail bridge precedents, and the precedent notes are provided in the **Appendices** chapter.

4.5 Limitations

Time constraints of the capstone course limited the study. The participants were pre-determined, and these groups were limited in size and scope. Interview participants were selected on a first-come, first-serve basis, while also considering balanced representation from each adjacent community. Each community is represented by a planner and neighbourhood group representative, except for the Mynarski ward. Email and telephone calls were placed to secure a neighbourhood resident group representative from this area; however, no responses were received. Despite attempts to recruit representatives from local business advocacy groups, no interviews were successfully scheduled with these individuals. The study did not include other relevant stakeholder groups such as schools, places of worship, stand-alone businesses, and apartment/condo residential groups. Due to these limitations, the findings in this study represent a select group of individuals and are not indicative of all stakeholders' views.

As the focus group invited participants from municipal departments and elected officials, the recruitment was constrained by the municipal legal department. In at least one case, participation was declined due to the municipal legal department's advice. Some participants in the focus group were more vocal than others, which may have taken time away from other participants. Due to these factors, not every member of the focus group could provide their perspective on each question.

4.6 Summary

This chapter reviewed the research methods of individual interviews and a focus group. Participation was garnered from residents, municipal planners, and stakeholder groups related to active transportation, heritage, and the adjacent communities. The research participants provided perspective through their particular lenses to better understand the current context of the abandoned rail bridges in Winnipeg. The next chapter reviews the findings derived from the research methods.



Figure 16: Access to Bergen Cut-Off Park via Kildonan Drive at Essar Avenue

5. FINDINGS

This chapter provides an overview of my findings from the semi-structured interviews and the focus group exercise. The findings from the two research methods will be discussed separately within this section. The findings for the interviews and focus group are further organized into themes. These themes were guided by the work of Thomas (2006) and derived through an inductive coding process. The inductive coding approach seeks to identify the “themes or categories most relevant to the research objectives identified” from the research data (Thomas, 2006, p. 241). The identified themes provided a common framework for presentation of the research findings and the subsequent interpretation of the findings. Further examination of these findings will be provided in the **Analysis and Discussion** chapter.

In the first section, I will present the findings from the semi-structured interviews. The interviewees represented four different areas within the city of Winnipeg. These four areas include the communities directly adjacent to the two abandoned rail bridges: the Bergen Cut-Off Bridge and the Oak Point Bridge. Some interview participants waived their anonymity and have given permission to use their names in this report. However, I have chosen to assign pseudonyms for all interviewee participants to establish consistency for this report (for pseudonym naming conventions, see section **4.3 Semi-Structured Interviews**). The interview questions were tailored to the interviewee, as required. The interview findings will include areas of agreement and disagreement amongst participants.

The last section comprises the findings from the focus group exercise. All focus group participants waived their anonymity and have agreed to list their names in this study. They are as follows: City Councillor Ross Eadie (Mynarksi Ward), Darren Burmey (City of Winnipeg Bridge Planning and Operations Engineer), Cindy Tugwell (Executive Director of Heritage Winnipeg), Anders Swanson (Executive Director of Winnipeg Trails Association), Mark Cohoe (Executive Director of Bike Winnipeg) and Mel Marginet (Green Action Centre - Sustainable Transportation team). As opposed to the semi-structured interviews, not every focus group participant answered the question posed. This is due to the nature of the focus group, as participants may choose to listen for some questions and general time constraints. Similar to the interview findings, areas of agreement, disagreement and common themes are presented in this section.

5.1 Semi-Structured Interviews

5.1.1 People Make Neighbourhoods Feel like a Community

Interview participants from the neighbourhood resident groups in North Kildonan, Wolseley and River Heights-Fort Garry expressed their community's strong social ties are positive elements of their respective neighbourhoods. Speaking of the aspects they liked in the Wolseley neighbourhood, Wolseley 1 noted,

I would say that at the top of the list would probably be the feeling of community in this neighbourhood. I've lived here most of my adult life, and it is rare ... that I could be outside for more than 15 minutes without bumping into someone I know, engage in a conversation.

North Kildonan 2 had similar sentiments regarding the neighbourhood east of the Bergen Cut-Off, noting,

You can talk to people on the street, ... and people will respond, that's sort of a general thing that people aren't afraid to talk to people or turn their heads to look around. You walk down the streets, you say hello or good morning ..., people will respond.

Specific to the River Heights-Fort Garry area, there has been a noted shift in resident demographics. According to River Heights-Fort Garry 1, it is a positive benefit that the neighbourhood has changed over the years. In speaking of this, the participant said, "There's a lot more cultural and ethnic diversity, and I feel that's giving the community a much different feel, that it's just changing ..., and I feel that's a good thing." Wolseley 1 also identified the Wolseley neighbourhood as having a diverse mix of residents, and this was a positive attribute of the area.

Most participants in North Kildonan, Wolseley and River Heights-Fort Garry noted the human factors that produce and help foster a sense of community. However, some social improvements could be made. For example, in the North Kildonan neighbourhood, North Kildonan 2 highlighted the need for residents to develop a stronger sense of community identity to which residents can feel attached to. In speaking to this, they noted, "I wish more people had more of a sense [of a] community in terms of people thinking about being distinct." Further on, the participant added onto North Kildonan's community identity, saying, "My experience [is] that, that's not really that high compared to perhaps other communities in Winnipeg." Other communities identified by this participant as having a strong community identity included Wolseley and Transcona.

5.1.2 Community Pride is Personal

When participants were asked if they felt proud of their respective neighbourhoods, they confirmed they felt prideful for various reasons, depending on the neighbourhood to which they belonged to. North Kildonan 2 acknowledged feeling particularly proud of North Kildonan because of its rich history, explaining,

There's been a lot of notable people over the years that lived there, ... people contributed a lot to the larger community, [to the] city of Winnipeg as a whole [and] Manitoba. I think there's a lot to be proud of, there's been many accomplishments in this area.

Research participants hailing from Wolseley agreed that they were proud of their neighbourhood, particularly because

its residents have a high degree of open-mindedness and awareness for each other and greater causes. In speaking of being prideful of this culture, Wolseley 2 noted,

I like that it's a community-minded community in a lot of ways, that there is a ton of capacity in the neighbourhood, people who are very engaged, people who are politicized, people who care very much about not just themselves, but they see the connection between their own well-being and the well-being of their community and others.

Wolseley 1 expanded on this sentiment, adding, "we have a tremendous degree of tolerance for differences. I think if the rest of the world were more like us, it would be better."

While the research participant for River Heights-Fort Garry 1, also acknowledged they were proud of their neighbourhood, "This is where I choose to raise my family, buy a home. I do like working here, I do like being part of the community," they also identified some areas for improvement. In contrast to Wolseley's expressed awareness, River Heights-Fort Garry 1 said,

I do think there has to be maybe more open-mindedness by some of our residents around some of the social issues and things. We've got pockets of need in our community ... [and] when I talk about some of the social issues in our community [people] think I'm talking about like it's on the moon, but it's literally right down the street.

5.1.3 Recreational Opportunities Are Valuable

While speaking with the neighbourhood resident groups, it became clear that recreational opportunities (accessing walking trails, cycling paths, neighbourhood parks, rivers, and community facilities) are a part of their regular routines, are used frequently by other residents and can act as venues that bring people together. When asked which places or spaces they go to often, North Kildonan 2 spoke of the connections that run through the area, saying, "In the warmer months, I like to go for walks. [You can] walk along the river, ... where the Bergen Cut-Off Bridge is. That's a place I've been a number of times and ... we also have the Northeast Pioneers Greenway, which connects to the Chief Peguis Greenway." The North Kildonan 2 interviewee also mentioned that the Northeast Pioneers Greenway and the Chief Peguis Greenway are "nicely paved and in a sense, it's easier to travel on" than the pathway close to the Bergen Cut-Off.

Interviewees from Wolseley identified the use of parks and trails that connect points of interest and the Assiniboine River as valuable places for residents to exercise, travel and spend time outside with others. When speaking of Wolseley's accessibility to outdoors, Wolseley 1 described a common walking path used by many residents:

The loop is a walk that many Wolseley-ites take part in, where you walk down Westminster to Omand's Creek, cross Omand's Creek Bridge to Wellington Crescent, Wellington Crescent to Maryland bridge and then back into Westminster Along the way, and nearby there's lots and lots of parks. There's Vimy Ridge Park which is a great place for congregating, ... there's Aubrey Park, there's the tot lot across the street, there's Omand's Creek Park.

The same interviewee also spoke about how the river is utilized in the winter by residents and can attract people to the outdoors. Wolseley 1 noted,

The river between Omand's Creek and Maryland is teeming with ... hundreds and hundreds of people especially if it's a sunny day and because it's in a recess like the riverbed, ... it can even be 25 below and if it is sunny and not windy people are in there, in that strip sitting on lawn chairs and gloves off even at minus 25.

Wolseley 2 also highlighted the parks and river as places frequently visited in their neighbourhood. In speaking of Omand's Creek, this participant noted,

I run there, I just walk around My partner has been taking the same photo every day since Covid started. Over 600 days, he's gone to the park and taken a photo of the bench looking out on the river and to see the change of the seasons, and to see some days there's people sitting there, sometimes not, sometimes there's garbage, but it's that kind of relationship to that little bit of nature that's in our neighbourhood.

Wolseley 2 also expressed their appreciation for the close-by river, stating, "I'm so grateful to have access to the river In the winter, we spend a lot of time on the river, and in the summer, we have a canoe, and we like to paddle."

In speaking of recreational opportunities in their area, River Heights-Fort Garry 1 mentioned they frequently use their bike to get around for "short errands, sometimes for work if my work allows." The participant added the Open Streets initiative on Wellington Crescent, which restricted car access on selected streets during the Covid-19 pandemic to allow for safe travel for pedestrians, cyclists, rollerblading etc., "has been seen as

a huge asset. Having it close during Covid for people to, not only exercise or get air, people are using it as a safe corridor for kids to get to school or travel through the community." One of the neighbourhood improvements for the area identified by the participant was to upgrade and better maintain city infrastructure, as "recreation facilities [have] not been tended to over the last some years as the City has been building out. Some of our community assets are actually in need of repair or replacement."

5.1.4 Local Rail Bridges Are Not Utilized

When asked questions regarding their perceptions of the Bergen Cut-Off Bridge and the Oak Point Bridge, neighbourhood resident group representatives spoke of the curiosity surrounding the bridges and also acknowledged their current lack of utility. Wolseley 1 mentioned the Oak Point Bridge's presence and sense of mystery, stating, "It is not being utilized in any fashion other than just something to look at and to ponder why hasn't someone done something with that?" When asked if the Oak Point Bridge was valuable to the neighbourhood, the participant referenced the stillness and inactivity of the bridge, saying, "Right this minute it's not. All it is, is a statue for people to look at as they pass by." Wolseley 2 felt similar sentiments regarding the Oak Point Bridge and questioned how much people interacted with it, given that the Omand's Creek Bridge is close-by, "gets used a ton" and is already a "busy pedestrian corridor."

In speaking of their perspectives of how the Oak Point Bridge is utilized, River Heights-Fort Garry 1 also questioned how much the bridge was used, "I've seen some weird stuff, people putting signs and things like that on the bridge. I don't see tons of kids going out there or anything like that; I don't know what

else happens out there. On occasion, you do see like somebody will be protesting, so [there] might be a sign up for a day or two.” River Heights-Fort Garry 1 and Wolseley 2 both indicated that the park on the south side of the bridge is utilized as a toboggan hill for children in the winter.

North Kildonan 2 identified the Bergen Cut-Off Bridge as a distinct feature of North Kildonan and spoke of the historical and structural achievements of the bridge’s design and longevity, noting,

I think it’s valuable in the sense it brings in the historical perspective. It’s part of the history of the area ... It was well built; when they built the piers of it, it was built right down to bedrock. I mean, right now, it’s 107 years old. ... Would other bridges last as long ... with basically just being neglected and left alone for all the time?

This participant also spoke of the greenspace adjacent to the east side of the Bergen Cut-Off Bridge and questioned how much this area was utilized by North Kildonan residents saying, “the pathway that’s on this side of the river is unique, [but] I don’t know how many people actually go on it. Probably, not a huge number or people aren’t aware of it, I would guess.”

5.1.5 Policy Planning Gaps

Municipal planners familiar with the City of Winnipeg’s planning and policy direction documents have acknowledged the lack of specific references to abandoned rail bridges in the planning documents. As noted by Planner 2, abandoned rail bridges “are not directly referenced in any way in our planning and policy documents,” and by Planner 3 as “I can’t think of a specific policy statement about [the abandoned rail bridges].”

However, some of the municipal planners interviewed mentioned that some of the City of Winnipeg’s planning policies could be interpreted to include repurposing the abandoned rail bridges under the umbrellas of connectivity or sustainability. Planner 2 noted,

If you were to sort of interpret some of the policy around sustainability and connectivity, one could interpret that means increasing linkages between neighbourhoods. In a city that’s bisected by the Red River, [it] makes sense that the bridges would be a low-hanging fruit to try and include.

When asked how the City of Winnipeg considered the abandoned rail bridges in terms of planning and policies directions, Planner 4 referenced the rail bridges’ inclusion in the City of Winnipeg Charter. Speaking of past proposals that attempted to construct infrastructure on top of the bridge as well as a pathway connection to the riverbank, they noted,

The City of Winnipeg Charter does not allow anything to be built in that area, and it has to do with flood protection measures, so it’s embedded in the legislation, that certain types of structures are not allowed and that any bridge over the river is meant to be a transportation facility, not a place on which development can occur.

Further to this caveat, the participant elaborated how this detail may affect efforts to repurpose the bridges, “in a way, in terms of land use planning development on the bridge is for something other than transportation is not entertained and that’s a lot to do with flood protection and ensuring that the rivers’ capacity to move water through the city is not hampered.”

5.1.6 A Repurposed Bridge Can Benefit the Community and Beyond

Most research participants categorized as neighbourhood resident group representatives and municipal planners outlined several positive benefits associated with repurposing the Bergen Cut-Off Bridge and the Oak Point Bridge. For the Bergen Cut-Off Bridge, North Kildonan 1 suggested a repurposed bridge with active transportation capability would allow people to access amenities across the way, “You can cycle from the east, go across the bridge, go to Kildonan Park and go to the performances in the park.” Planner 4 had similar sentiments of a repurposed bridge providing better access to Kildonan Park for east side residents, noting,

It certainly would enhance the area. In effect, it would make things across the river closer because, for instance, cyclists or pedestrians wouldn’t have to use Chief Peguis [Trail], so it would basically bring Kildonan Park closer to East Kildonan.

Neighbourhood resident group interviewees further identified positive opportunities for repurposing the Oak Point Bridge. Participants from both sides of the Oak Point Bridge highlighted the potential social benefits of an enhanced connection point. In speaking of this connection for the north and south sides of the river, River Heights-Fort Garry 1 said, “it could be something very cool that not just one community benefit[s] from, ... it could be shared by both communities to have something common between them.”

Wolseley 1 suggested opening the bridge may enhance the social bonds within Wolseley and open further opportunities.

When asked if repurposing the Oak Point Bridge would enhance the area’s sense of place, Wolseley 1 responded,

Yeah, I do. I think it would help breakdown the boundary between the east and west parts of Wolseley, ... most people see the Omand’s Creek and the bridge and the rail as a boundary that they are reluctant to cross for no good reason they just, there’s not a good enough reason for them to go back and forth between that. You open up that Oak Point Bridge, and you’re going to get people from my area of Wolseley going across into that other part, and inevitably they’re going to chat with people ... if you had a bridge there like they have in Minneapolis, someone would eventually get the bright idea, we should have an ice cream stand, or we should have a coffee [stand] ..., and before you know it, I think people would from both communities would start mixing to a greater extent and that can only be a good thing.

River Heights-Fort Garry 1 highlighted the different stores and amenities across the Assiniboine River in the St. James/Wolseley area, “There’s restaurants there, there’s services. There’s a walk-in doctor’s office right there at Portage Ave and St. James St. There’s a lot of really good access points.” In thinking about accessing these services via the repurposed bridge, the participant explained, “I do think that should [the] rail bridge morph into something else it would give [a] better access point, not only to people who are exercising or commuting but also for these errands and trips and things like that.”

Repurposing the Oak Point Bridge was identified as a potential solution to help improve existing connections in the area. In discussing the existing pedestrian sidewalk over the northbound crossing of the St. James Bridge and the Omand's Creek Rail Bridge, Planner 3 noted,

The St. James Bridge; I don't know if you've ever walked or biked over it. It's not the warmest, fuzziest, feeling, experience, and I would say too, the Omand's Creek Bridge ... is a good connection but as far as, [does] it really successfully accommodates people on bikes or walking? It's pretty tight. It works, but it's not ideal, and so adding a really, really quality connection at that location would be really, really great.

Wolseley 1 also spoke about the traffic issues on Omand's Creek Rail Bridge, stating,

Pedestrians and bikes are constantly fighting for space because it's so narrow it's very difficult for a pedestrian and cyclist to pass one another. If a cyclist knew ... it would be 30 seconds to a minute of biking to get to the Oak Point Bridge, a lot of people would choose that as a crossing point to [Wellington] Crescent instead of Omand's Creek [Bridge] and I think it would alleviate a lot of pressure on the Omand's [Creek] Bridge.

Beyond the local connectivity and social benefits a repurposed rail bridge can bring to the adjacent communities, neighbourhood resident group representatives for the Oak Point Bridge area agreed this concept would help promote healthy living by providing an opportunity for active commuting and exercise and shifting away from reliance on cars for transportation. According to River Heights-Fort Garry 1, repurposing the rail bridge "can promote healthy living, active

transportation, commuting. There's a potential to really shift people that live in the neighbourhoods away from always having to feel like they need to drive their cars."

The municipal planners for both areas in the city felt a repurposed bridge that supports active transportation use would benefit the community and increase connectivity in the city of Winnipeg. Planner 1 explained that this change would be a positive enhancement for connectivity as, "from an amenity feature of having the pedestrian connection there, I think they're super positive to both neighbourhoods on each side of the bridge, just creates better connections throughout the city, more pleasant environment to be a pedestrian in."

Considering the repurposed bridges in the context of the city, Planner 2 felt the repurposed bridges would also act as a precedent for other jurisdictions to look to and reflect positively on the city's image. He described this sentiment as,

I think for the city as a whole to have things ... that others can point to and say, ... here's what Winnipeg did, look how great it is. I think it's a good look for the city to embrace our heritage, repurpose these old structures because it's one thing to have a bridge; I mean a bridge is just moving people from point A to point B, but when you can integrate it with something that's culturally and significant to your heritage, I think it just makes people connect better with your community and take pride in their city so I think it would be a great. It would be very beneficial.

5.1.7 But There Are Many Hurdles

The biggest challenges to repurposing the bridges as identified by interview participants include cost, structural integrity issues, local opposition, and ownership. Beginning with the high costs associated with repurposing the Bergen Cut-Off Bridge, North Kildonan 2 shared anecdotal estimates from a retired City of Winnipeg engineer. The participant argued that these costs were so high that repurposing the bridge would not be supported by residents, “spending 100, 150 to 200 million or something like that to have it open and be done ... people would really complain about the City wasting money on useless things.” When asked to identify the barriers associated with repurposing the Oak Point Bridge, Planner 1 noted, “cost is a pretty big barrier, not knowing of the structural integrity, so [there’s] potential for other costs associated with bringing them up to speed.” Associated with costs is the question of who will be paying to undertake the appropriate studies or upgrades. River Heights-Fort Garry 1 acknowledged this barrier, asking “Funding. Who’s going to fund it ... is significant.”

Interviewees discussed the structural integrity issues of the Bergen Cut-Off Bridge more than the integrity of the Oak Point Bridge. The neighbourhood resident group representatives from the Bergen Cut-Off area wondered about the swing portion of the bridge being fixed in the open position and the erosion on the east side of the bridge. North Kildonan 1 mentioned the unknowns associated with the open portion of the bridge, noting, “you’d have to straighten that bridge out. There’s a part going across; I don’t even know if that moves. So would they have to destroy that and just build something going across?” North Kildonan 2 spoke of the worsening erosion of the bridge’s

east riverbank, acknowledging “The bank is eroded especially on the east side, so the bridge is actually getting further away and further away from the from the land.”

As there may be locals opposing repurposing efforts, another barrier is gathering consensus and backing from residents. The neighbourhood resident group interviewees in the Bergen Cut-Off Bridge area both mentioned increased traffic would most likely be a concern for residents. As noted by North Kildonan 2, this issue was brought up in past proposal discussions, stating, “[repurposing the bridge] would bring all this traffic ... into the area, and people that live along this side of the river, along Kildonan Drive, ... would highly object to that happening.” Due to lessons learnt from the past proposals, this participant felt “most people, certainly anybody that lives nearby just wants to keep [the bridge] the way it is.”

Another barrier flagged by most research participants was that residents may not want better connectivity, as this would allow others to access their neighbourhood. North Kildonan 1 acknowledged this issue came up with another proposal to construct a brand-new bridge near the Bronx Park Community Centre to the west side, noting, “the people on the east side said we don’t want the people from the west to come over.” Residents near the Oak Point Bridge acknowledged similar sentiments; as Wolseley 2 explained, this was also an issue that has been expressed in the past by residents. In speaking of this, Wolseley 2 said, “people that live along the river on the other side of the river they may not want people from the north side of the river coming to the south side of the river because they associate that with trouble.”

The municipal planner interviewees discussed the technical, legal and administrative roadblocks associated with repurposing the bridges. From the perspective of the City of Winnipeg, this would include acquiring ownership of the bridges, examining how to link the bridges to other infrastructure, including building corridors that lead to the bridges and how to prioritize this project.

5.1.8 This Concept May Work Better for Other Bridges

While some research participants noted the various barriers facing repurposing the Bergen Cut-Off Bridge and the Oak Point Bridge may be too far to overcome, these same participants were amenable to the idea that this concept may work better for other bridges. North Kildonan 2 expressed they would not support repurposing the Bergen Cut-Off Bridge as the bridge is “just too far gone” and regarding repurposing, “I don’t think it would really add anything.” However, the same participant was open to other bridge opportunities, “Maybe in other areas, it might be viable. ... All those things have to be looked at on a case-by-case viewpoint. Does it make sense here?”

Wolseley 2 acknowledged the value of the rail bridges and the repurposing concept, “I do see them as assets, and I think the whole rails to trails movement is really important.” However, they felt rail bridges needed to be considered within the entire context of the city and evaluate the need for greater connectivity, “We have to look at all this rail structure as assets and take that community development approach of seeing ... how do we best develop them so that they meet the goals that we have for a healthier city.” Speaking specifically about the Oak Point Bridge, this participant expressed that Wolseley residents may be

more concerned about upgrading the frequently used Omand’s Creek Rail Bridge, rather than investing in the abandoned bridge, noting, “for that specific bridge [Oak Point Bridge], I’m not sure that that’s the biggest priority because it’s so close to other pedestrian infrastructure.”

As identified by Planner 2, the rail bridge in South Point Douglas, which is currently active, may serve as the ideal opportunity to be repurposed. For this participant, the Bergen Cut-Off Bridge and Oak Point Bridge can be seen as “one-offs,” as compared to the area of South Point Douglas as there is “a lot of political interest right now in seeing Point Douglas redeveloped, specifically South Point Douglas.” South Point Douglas has already been identified as a “major redevelopment site” which is “an area that requires comprehensive planning and in order to transition it from an old industrial area into a mixed-use walkable kind of district.” These existing policies can help push the momentum forward on this area and the rail bridge within it.

5.2 Focus Group

5.2.1 Participants See the Potential

When presented with the slide deck of repurposed rail bridge precedents in other jurisdictions and asked if there was a desire to pursue a similar project in Winnipeg, most participants in the focus group recognized the opportunities the two abandoned rail bridges can offer to the City of Winnipeg. From Bike Winnipeg’s perspective, Mark Cohoe highlighted their locational functionality as “there’s utility in both of them” and “they’re both close to either existing or planned serviced connections.” In

thinking of repurposing the bridges to active transportation bridges, Cohoe noted, “certainly having more access points across the rivers is a benefit.” As agreed by Anders Swanson from the Winnipeg Trails Association and Cohoe, repurposing efforts would also provide an avenue for placemaking activities. In speaking of this opportunity, Cohoe suggested a placemaking perspective would be beneficial to “think beyond, the passing through aspect of [the bridges].”

Some participants shared their thoughts on how the repurposed bridges can be incorporated into a planning vision for the entire city. As described by Swanson, “I think what you actually need is a whole menu of bridges” to choose from. This type of strategy would allow creative thinking for the abandoned bridges identified and other potential water crossings to create a connected network. From Swanson’s perspective,

Both of these [bridges] are a matter of saying, ... in order to affect permeability and make all these places more walkable, we need one every 500 metres, and then these two just happen to have concrete in the water already, so it’s a straight value calculation saying, okay is it worth it to try and save these right now? Let’s do a quick study.

For Cohoe, a broader analysis of connectivity and capacity management regarding active transportation corridors should be explored. Some of these issues can be included in the City of Winnipeg’s Transportation Master Plan “as an opportunity ... to think about how your capacity is managed and how your connections, your directness are managed, and your permeability services [are] managed through this.”

5.2.2 Structural Integrity and Ownership Must Be Addressed First

As the discussion with the focus group progressed, it became clear that ownership and the structural integrity of the Bergen Cut-Off Bridge and Oak Point Bridge are critical components of repurposing activities that should be investigated early on. The City of Winnipeg’s Bridge Planning and Operations Engineer, Darren Burmey, confirmed the abandoned rail bridges in question are both “privately owned.” Swanson and Councillor Eadie discussed their past conversations with the owners of the Bergen Cut-Off Bridge. Swanson noted “the owner of the Bergen Cut-Off contacted [The Winnipeg Trails Association] not long ago asking to gift us that bridge,” while Councillor Eadie said “I tried to work with [the owners] in the past because we had some ideas of introducing it.” Further complicating the ownership issue of the Bergen Cut-Off Bridge is the multiple individuals that may own different piers, as acknowledged by Councillor Eadie, “there was a group that owns some of the piers, and then one individual who worked for the group owned two piers on the other side where he wanted to build his home.” Another challenge to the private ownership of each bridge is that the owners may have differing visions for the bridges’ use that differs from active transportation.

In Councillor Eadie’s past experiences with the owners of the Bergen Cut-Off, structural integrity remained a question as “the main issue was how stable are the piers? And who’s paying to have the whatever scientists it is, who has to look at the underwater situation of the piers.” Burmey highlighted the structural issues with both bridges, noting the Bergen Cut-Off Bridge has “20% of the span removed and also the swing span

is swung so it needs to be swung back so there would be a cost for that. [Councillor Eadie] indicated about the substructure and underwater pier inspections, and [those] need to be undertaken, so the condition needs to be determined.” For the Oak Point Bridge, Burmeyer acknowledged “there are significant costs to remediate that as well” including “riverbank stabilization” and configuring “approach pathways.”

The focus groups participants agreed ownership and structural integrity need to be examined to help inform the scope of the undertaking. Swanson expressed it is difficult to commit to leading the Bergen Cut-Off project as,

Until some work is done, like a geotechnical or ... riverbank engineering [report], that combination of people that get in there and tell you how much of a disaster this would be to take on. They don't know the answer to that yet. They could give different types of approaches like, don't you dare touch that swinging bridge, repurpose it this way, don't touch it with a ten-foot pole, we don't know.

Executive Director of Heritage Winnipeg, Cindy Tugwell, agreed with this perspective to move both bridges forward, noting “you'd have to do structural integrity study with an engineer before you'd even remotely know how to pursue this with ownership.” Tugwell also emphasized the need to understand ownership perspectives as, “no stakeholders, no community, no one is going to go to bat for advocacy for this until the ownership is secured and we know what they want to proceed with.”

5.2.3 Indigenous Perspectives Should Be Considered

Focus group participants brought forward the need to include Indigenous voices in conversations surrounding the bridges and help guide their future decisions. Swanson explained this perspective as “these are railway bridges in the context of a country going through Truth and Reconciliation. There is a lot of embedded meaning and in the development of that railway and what it did for opening land.” Winnipeg Trails Association has actively explored “re-think[ing] transportation planning from an Indigenous perspective” in their work. Swanson highlighted the possible Indigenous considerations of the bridges including, honouring treaties, respecting existing fish habitats, and re-thinking one's connection to nature. Conversations surrounding the bridges should also include transferring knowledge and decision-making capabilities to Indigenous peoples “because of that link between the treaty and the treaties, and the rivers and how that land and that space should be used, and how they should be informed and consulted.”

Although none of the focus group participants identified themselves as Indigenous, many acknowledged Swanson's comments. They wondered what Indigenous groups would like to see happen to the Bergen Cut-Off Bridge and the Oak Point Bridge. Tugwell explained “I totally agree with the Indigenous conversations of brainstorming. Maybe it isn't even utilizing the bridges in that capacity, getting rid of them.” At the same time, Eadie noted, “would [Indigenous peoples] rather see [the bridges] just deteriorate and be out of there, and not block the river?”

5.2.4 Community Support May Vary

When considering the opinions and perspectives that community members may have regarding repurposing the two abandoned rail bridges, the public may be hesitant to increase connectivity to adjacent neighbourhoods. Burmeyer and Swanson acknowledged in their past projects, people have brought forth concerns with increasing access to other neighbourhoods. Burmeyer noted in other bridge projects, “sometimes [people] get concerned about actually having connection across the river,” while Swanson’s experience with increasing bike connectivity has uncovered “racist or classist” viewpoints.

Some research participants also highlighted the importance of timing these projects appropriately to garnish community support. Mel Marginet, from the Green Action Centre, expressed the need to determine the structural integrity and ownership issues of the bridge before bringing ideas to the public because “you’[d] just really hate to get a lot of community groups and folks involved in imagining what this could be and then actually, no it’s not possible, you’[d] hate to dangle that carrot and then take it away.” Tugwell cautioned gathering community support may be challenging to establish early on in the process as the repurposed bridges’ may be perceived as “too small of a project in the context of priority.”

5.2.5 Many Organizations Have a Role to Play

When asked who should be involved and lead repurposing efforts, the focus group participants mentioned various organizations that could contribute to this undertaking. Swanson expressed the Winnipeg Trails Association’s interest to lead this project, stating: “If anyone’s got the \$200,000, we’ll get it going.” Swanson expanded on this statement, expressing that any organization similar to the Winnipeg Trails Association, or someone with “experience, ... someone willing to invest some money, to take a chance and figure out what’s going on” would be needed to lead these efforts and determine the structural integrity/ownership issues of the bridges. Tugwell, representing Heritage Winnipeg, noted, “from a historical perspective, we’d like to see [the bridges] refurbished as opposed to destroying them.” However, Tugwell also commented on the amount of “preliminary work that needs to be done before [they] can even contribute into it being a positive thing for me to say what I think it should be utilized for.”

Another organization that could help move the repurposing efforts forward is the Trans Canada Trail. Swanson described the Trans Canada Trail as an organization with “a lot of friends,” and a collaborative partnership would be a “strategic move” to help draw attention to the bridge project. Proposing to locate a trail connection on the bridge(s) could help build awareness of the project and gain attention from influential Canadians. Other groups identified by the focus group participants as project stakeholders, to be included in project discussions are the bridge owners, neighbourhood organizations, Indigenous groups and adjacent user groups such as the Kildonan Park Golf course and local business improvement zones.

5.2.6 How is This Project Prioritized Within the City?

Although the majority of the focus group participants recognized the benefits of repurposing the abandoned rail bridges in Winnipeg to provide additional active transportation crossings across the Red and Assiniboine Rivers, the question of need, prioritization and its associated costs remain barriers. In speaking to need for the repurposed bridges in Winnipeg, Swanson acknowledged “They obviously are. Are they a priority? That’s only a budget question.” Cohoe also recognized the benefit of the project and noted the bridges “also [have] to fit within the overall planning and prioritization, so that becomes ... the challenge.”

Considering the prioritization between the Bergen Cut-Off and Oak Point Bridge, the Bergen Cut-Off Bridge may be seen as lesser of a need. According to Burmey, this is because the City of Winnipeg has provided upgrades to the nearby Kildonan Settlers Bridge, “we widened the sidewalk to make it multi-use or more multi-use ..., and it connects to existing active transportation paths that go along Chief Peguis Trail.” According to Councillor Eadie, an area near the Bergen Cut-Off Bridge has “a different proposal to do active transportation for the Chief Peguis Trail extension” therefore, this makes “[it] more unlikely that the Bergen would be viable” as an option for repurposing to support active transportation.

In contrast, Burmey noted the Oak Point Bridge is “being looked at for its incorporation in the current Route 90 project.” The Route 90 project would utilize the Oak Point Bridge as a dedicated pedestrian/cycling pathway, “instead of having a sidewalk on one of the vehicle bridges, [it’s] using [the] repurposed railway bridge ... for active transportation.” According to Burmey,

“there’s a few million dollars to relocate the [Oak Point] Bridge and then a few extra million to convert it into what we need.”

In response to the notion that the bridges may be too close to other river crossings, Swanson expressed the bridges and their potential conversion to support active transportation should be looked at “in the context of a climate change lens” when questions of “is it worth building this? Is this too close to other bridges” are brought forward. Tugwell cautioned the need to establish prioritization for this project as she “can’t support something or any organization would have trepidation about supporting something when it’s not high enough up on the priority list of what needs to get accomplished in this city.”

5.3 Summary

This chapter provided a summary of the key findings from the semi-structured interviews and the focus group exercise. Participants felt the two abandoned rail bridges in Winnipeg hold value and recognized opportunities to re-activate their use for active transportation. Several critical challenges and barriers must be addressed to facilitate repurposing. These findings are analyzed, discussed, and synthesized in relation to the literature review in the next chapter.



Figure 17: Oak Point Bridge, North Approach

6 . ANALYSIS AND DISCUSSION

This chapter connects concepts explored in the literature to the findings emerging from the semi-structured interviews and focus group session. Patterns, relationships, connections, and areas of significance were derived from this exercise to help address the study's research questions:

- [1] What is the current situational context of abandoned rail bridges in Winnipeg?
- [2] What are the similarities and differences in how municipal planners, stakeholder groups and surrounding communities define, value, perceive and experience Winnipeg's abandoned rail bridges?
- [3] What opportunities do Winnipeg's abandoned bridges present, and what challenges do they face when repurposing is considered?

The analysis section is guided by the work of Thomas (2006) and employs an inductive approach to derive common themes arising from the interview and focus group transcriptions. Consideration of arising themes was also given to the categories most relevant to the research questions. Working themes have been critically revised and refined with several reviews of the data. The identified themes were used to provide a common framework for presentation of the research findings, analysis, and discussion.

The analysis chapter is organized into three major sections. The sections are intended to address the research questions and help contextualise repurposing conversations, examine the benefits and challenges associated with these efforts, and steps to move the concept forward for Winnipeg's abandoned rail bridges. These sections are categorized as "Thinking About the Big Picture," "Opportunities," and "Building Momentum and Implementation." Subsequent themes are provided within these sections.

6.1 Thinking About the Big Picture

It is relevant to contextualize the conversation on repurposing Winnipeg's abandoned rail bridges. Discussions of local values and dynamics within the communities adjacent to the rail bridges are key to properly repurposing these structures for active transportation. We must also consider framing the conversation regarding the ongoing efforts towards truth and reconciliation. Understanding what these structures could offer residents are also examined through examples of repurposed rail bridges in other cities. Investigating which factors led to successful rail bridge conversions in other jurisdictions may derive lessons for Winnipeg. This section explores reconciliation conversations, social dynamics, neighbourhood values and community perspectives, along with lessons learnt from precedents that help inform the dialogue in the following analysis and discussion sections.

6.1.1 Indigenous Perspectives at the Onset

Any conversations surrounding future use, alteration or repurposing of the abandoned rail bridges in Winnipeg require engagement and inclusion of Indigenous perspectives. As highlighted by Swanson during the focus group meeting, the development of the rail industry, and its disruption to land, had historical impacts on Indigenous peoples in Canada. This is a noteworthy matter, as Canada is currently undergoing reconciliation efforts with Indigenous groups. The focus group discussion topic led participants to question what Indigenous peoples would like to see happen to the rail bridges. Theorized considerations included prioritizing the natural habitats of wildlife around the bridges, respecting treaties, leaving the bridges as they are, or removing the structures completely to allow the rivers to flow unimpeded.

Indigenous perspectives may lead to revolutionary ideals of what transportation could look like, as demonstrated by the work of Janell Henry, a member of Roseau River Anishinabe First Nation (Birnie, 2020). According to Swanson, Henry led a planning process that saw Winnipeg as a blank slate and asked people where to put right-of-ways. The result was Winnipeg “looked like a dartboard with radiating circles coming from the middle” with “the centre radiating outwards, which is sort of the natural shape and form of a city that takes place when it’s built mainly around walking” and where “there’s any rivers that run through that then ... you have a bridge wherever that goes.” This process was Henry’s “way of bringing a certain amount of Indigenous culture” to transportation planning.

The voices of Indigenous groups may have differing ideas for the Bergen Cut-Off Bridge and the Oak Point Bridge

than those discussed above. This highlights the importance of consulting, engaging and hearing Indigenous voices in the planning process. Before firm decisions are established, these considerations must be contemplated, as preference may be given to leaving the bridges in their current state or removing them entirely from rivers.

6.1.2 Setting the Scene

Residents living in North Kildonan, Wolseley, and River Heights-Fort Garry expressed a strong kinship and appreciation for the communities in which they choose to live. All the local research participants living in these areas mentioned the special social bond felt between people in their communities. The positive social dynamics are manifested in the interactions with each other daily. In particular, residents in North Kildonan and Wolseley spoke of the friendliness of people they encounter when they go for walks or spend time outside. The growing diversity of residents in River Heights-Fort Garry was a positive aspect for River Heights-Fort Garry 1. Despite acknowledging some improvements that could be made in the community, overall, the residents felt a strong connection to their communities.

In considering the literature’s discourse on place, place possesses three elements: a geographic location, material form and investment with meaning and value (Gieryn, 2000). The neighbourhoods of Wolseley, North Kildonan and River Heights-Fort Garry all have a geographic location, a specific point in the world, and a material form, as they have a physical structure made up of natural and built elements. The third element of place, investment with meaning and value, can be perceived differently by individuals or groups (Gieryn, 2000). This element

can change as people's interpretations or perceptions of a place can shift over time. The findings from interviews with residents suggest the positive social dynamics in the neighbourhood have been built and recognized on a community basis.

Wolseley and River Heights-Fort Garry share the Assiniboine River as a geographic location, while North Kildonan and Mynarski share the Red River. When discussing the physical elements that make neighbourhoods unique, some participants highlighted the river. However, Wolseley participants brought up the value and usability of the river several times when speaking on other topics, such as activities that bring people together and the desire to improve accessibility to the riverfront. It was clear the Wolseley interviewees felt connected to the Assiniboine River and appreciated its value as a community asset. Compared to the interviewees from North Kildonan and River-Heights, the value of the Red River was mentioned less frequently and may suggest a lesser connection to place.

As discussed in the literature, places are attached to personal meanings built through individual or collective experiences (Vanclay, 2008). This idea is explored through the neighbourhood resident group interviewees' discussion of what elements they are proud of in their communities. The sources of pride differed for each individual, but overall, each interviewee indicated they were proud of their community. Individual neighbourhood pride derived from the rich history of the area for North Kildonan (North Kildonan 2), the open-mindedness of Wolseley (Wolseley 1 and Wolseley 2), and as a good place to raise a family in River Heights-Fort Garry (River Heights-Fort Garry 1). These factors helped contribute to their individual sense of place and connection to their respective neighbourhoods.

6.1.3 Creating a Destination

During the meetings with interviewees and focus group members, participants were presented with a sample of repurposed rail bridge to active transportation bridge precedents from other jurisdictions within North America. Generally, participants were receptive to the images and information shown in the slide deck. In many instances, the precedents helped demonstrate the possibilities of transforming rail structures into assets for the surrounding communities. However, a small selection of research participants recognized the positive benefits in other bridge conversions in other jurisdictions, but were ultimately not supportive of repurposing the Bergen Cut-Off Bridge and Oak Point Bridge. These participants expressed their perspective of the overwhelming challenges involved in the repurposing process.

In many of the discussions with research participants, Winnipeg bridge projects that have been repurposed to support active transportation use, were mentioned as local precedents, such as the Elm Park Bridge (Bridge Drive-In Bridge) in Fort Rouge-East Fort Garry and St. Vital, as well as the Forks Historic Railway Bridge in Fort Rouge-East Fort Garry. The north side of the Elm Park Bridge features the iconic BDI, an ice cream stand, which serves as a destination and draw for the use of the bridge. Marginet explained the use of this bridge as a corridor for leisure,

I'm just down from the BDI Bridge, which is super popular people love it. I wouldn't say that used really as transportation just because it's not along where lots of people are going, in terms of transportation routes but ... it tends to be more leisure walking.

One of the research participants expressed the need to establish a draw to entice people to want to go to the bridge, and travel across it. For North Kildonan 1, the draw was a major determinate needed to garnish their support for repurposing the bridge. In speaking of this topic, they asked,

What's there on each side of the bridge? Is there a nice park, is there a hamburger stand, a VJ's that sells hamburgers, or a Dairy Queen or BDI? How are you going to draw people in the summer? And how are you going to draw people in the winter?

Establishing a draw for the project helps attract people to the project and adds another reason to invest in repurposing the bridge.

6.1.4 Lessons from Precedents

Other jurisdictions in North America have seen success in repurposing their abandoned rail bridges to serve active transportation use. The compiled precedents in **Appendix C: Rail Bridge Precedent Slide Deck** provide insight into the factors that led to the successful repurposing of these selected projects. Most of the precedent projects had two elements in common: the projects were driven, in part, by a local advocate and by converting the bridges to support active transportation, the bridges would link or fill a gap to increase connectivity.

Beginning with the Canadian projects, Bill Thorpe was a key advocate for repurposing the Bill Thorpe Walking Bridge. The bridge was aptly renamed in his honour to recognize his role in aiding the development of the Fredericton Trail System (Fredericton Trails Coalition, n.d.-a). This connected trail system was bolstered by the addition of the Bill Thorpe Walking Bridge,

as it would connect various multi-use trails on both sides of the Saint John River (Fredericton Trails Coalition, n.d.-b). In Ottawa, the Chief William Commanda Bridge also had the support of a local advocate, Mayor Jim Watson. Mayor Jim Watson's attention was focused on "remaking the [bridge] into a multipurpose pedestrian and cycling bridge" (Duffy, 2021). As noted by an Ottawa city councillor, the repurposed bridge would be beneficial for neighbouring communities, as it would open connectivity for the daily commuters that travel between Ottawa and Gatineau (Senack, 2021).

The Stone Arch Bridge in Minnesota was spearheaded by two Minneapolis legislators (Smith, 2022). The legislators sought to increase the availability of park space along the river. The Stone Arch Bridge presented an opportunity to connect the two parks adjacent to the bridge (Smith, 2022). While the information was limited on the factors leading to the successful repurposing of the Old Drake Hill Flower Bridge, it appears no clear advocate or gap in connectivity drove the project forward. In this case, the efforts to preserve the bridge as a historical artifact may have played a significant role in its successful conversion, as the bridge was added to the National Register of Historic Places in 1984 and subsequently repurposed to support active transportation in 1995 (Town of Simsbury Connecticut, n.d.).

The factors leading to the successful repurposing of historic rail bridges suggest each situation and context is highly variable; however, most projects had the support of local advocate(s) and were identified as filling a gap or increasing connectivity.

6.2 Opportunities

This section explores the various opportunities, possibilities, and benefits of re-activating Winnipeg's historic, abandoned rail bridges. Considerations are discussed from the perspective of re-activating underutilized infrastructure, extending the reach of recreational spaces in the affected neighbourhood, exploring what participants identified as opportunities and the applicability of the rail bridge to active transportation bridge concept. These themes help understand how the proposed use can benefit the local communities and Winnipeg.

6.2.1 Re-activating Forgotten Infrastructure

From interview discussions with the residents of the communities adjacent to the abandoned rail bridges, it was clear that the bridges were unused by residents. The bridges retain value for some of the research participants as interesting structures to look at and for their historical value. Neighbourhood resident group interviewees acknowledged that the Oak Point Bridge serves as a visual appealing artifact that continues to generate curiosity. Meanwhile, the Bergen Cut-Off Bridge has been identified as an important marker of history for railway use in the area and represents a technical achievement of its time.

According to the literature, spaces such as abandoned bridges may be defined as in-between spaces. These static spaces can result from urban development or architectural design (Azhar & Gjerde, 2016; Piccinno & Lega, 2019). However, in relation to Winnipeg's abandoned rail bridges, the creation of these static spaces may have resulted from shifts in railway demands and operations, and more recently, with challenges to changing the bridges' use (Kives, 2010; Tizzard, 2007). Although freedom is

associated with these types of spaces in cities (Downey et al., 2016), they are also associated with less positive connotations, such as gaps in the urban fabric, distances, separations and pauses (Piccinno & Lega, 2019). These concepts align with some of the descriptions of the research participants as Wolseley 1 referred to the Oak Point Bridge as a "statue for people to look at."

In-between or liminal spaces are in danger of remaining in the same static state if specified uses or purposes are not attributed (Azhar & Gjerde, 2016). We also see the continued inactive state of the bridges can be detrimental to the repurposing efforts, as the bridges may deteriorate beyond feasible repair. North Kildonan 2 acknowledged this issue is affecting the Bergen Cut-Off Bridge, as "it's too far gone" structurally and may have been a successful proposal if it was presented decades ago. However, some research participants highlighted the historical importance of the bridges. For example, Swanson noted, "these are not the type of bridges that are going to ever get built again." For these reasons, the City of Winnipeg, the bridges' owners, and other organizations may feel inclined to develop a strategy to re-activate dormant infrastructure and view the bridges as opportunities.

6.2.2 Expanding Recreational Reach

The literature review highlighted the importance of providing opportunities for active transportation as a means to combat physically inactive lifestyles in North America (Litman, 2003). Physical elements of a neighbourhood, such as close-by destinations, sidewalks, aesthetically appealing places and access to parks, have a positive correlation to increased use of active transportation (Green & Klein, 2011). The research participants who lived in the neighbourhoods adjacent to the Bergen Cut-Off Bridge and the Oak Point Bridge acknowledged that residents frequently use the recreational opportunities—such as trails, paths, streets, parks and rivers—for leisurely activities and travelling from point A to point B. Local recreational opportunities are beneficial for many reasons, such as providing an avenue for exercise, time outdoors, commuting and spending time with friends, family or other residents in the neighbourhood. As the literature emphasizes, providing opportunities specifically for active transportation can help people in a community develop healthier lifestyles (Litman, 2003). This, in turn, can help combat a culture of inactivity (Litman, 2003).

Recreational opportunities are valuable for all ages, including the adult interviewees and children in their neighbourhoods. Regarding children's use of active transportation, the literature notes highly connected, and mixed-use neighbourhoods tend to have more children opt to use active transportation to commute to school (Stewart, 2011). Some of the interviewees mentioned children use active transportation routes in both Wolseley and River Heights-Fort Garry for travel to school and for leisure. Issues of traffic safety, as well as aging infrastructure, were identified by participants as

areas that could be improved in the neighbourhood.

Beyond improving existing recreational infrastructure, another opportunity exists to expand the current recreational opportunities in the neighbourhoods and connect existing green spaces and amenities across the riverways. The Bergen Cut-Off's east side contains a naturalized, linear path perpendicular to Henderson Highway, while the west side includes the Kildonan Park Golf Course, which includes a path that follows the river. The north side of Oak Point Bridge is close to a path that connects to Omand's Creek Bridge, while the south of the bridge has Wellington Park and a sidewalk along Wellington Crescent. Connecting these pathways and greenspaces would provide additional close-by destination places that could help encourage the use of active transportation and promote healthy lifestyles.

6.2.3 Explore the Possibilities

Interviewee and focus group participants identified several opportunities associated with repurposing the abandoned rail bridges in Winnipeg. Generally, neighbourhood resident group representatives highlighted the localized benefits of an added active transportation corridor to the adjacent communities. As noted by River Heights-Fort Garry 1, if the Oak Point Bridge were repurposed, it would provide better access to many services across the way—such as restaurants and a doctor's office—and provide an opportunity for leisure and commuting trips. Wolseley 1 saw the bridge as an opportunity to better connect the west and east areas of Wolseley and increase social connections with River Heights-Fort Garry.

Wolseley 1 also thought the community members might be interested in hosting a coffee or ice cream stand on the repurposed bridge and attract customers from adjacent communities. As discussed in the literature, sense of place can be strengthened by naming the location and producing shared stories and memories tied to that place (Relph, 2008). The opportunities identified by various residents adjacent to the abandoned bridges speak to the ability of locals to ascribe meaning and purpose to the bridges and interest in shaping the bridge's use.

While the municipal planners identified benefits for the direct communities adjacent to the bridges, they also provided broader scale benefits for the city. Planner 1 explained repurposing the bridges to support active transportation would enhance connectivity within the city. Planner 2 emphasized that other jurisdictions could look to Winnipeg as a great example of creating a significant project for heritage and culture and can act as a source of pride for residents. Similarly, the focus group participants saw the repurposed bridges as beneficial for both residents and Winnipeg as a whole. A selection of the focus group opportunities identified includes: providing better access points for Winnipeggers, supporting placemaking opportunities and integration into the City of Winnipeg Transportation Master Plan.

6.2.4 Examining the Best Opportunity

The findings revealed that the overall concept of transforming underutilized rail bridges to active transportation bridges is generally well-accepted, even by the research participants against applying the concept to the Bergen Cut-Off Bridge and

the Oak Point Bridge. These findings suggest that there may be a greater chance of success in applying the concept to another bridge in the city or another suitable context. The literature supports the preservation of historical rail bridges, given there is an "appropriate setting and environment" for the project (Sloan, 2008). This includes feasible and reasonable conditions within the surrounding context of the rail bridge in question. If the challenges and barriers of the Bergen Cut-Off Bridge and Oak Point Bridge proposed projects are deemed insurmountable, this concept may be suitable for another rail bridge.

Planner 2 noted the rail bridge located in South Point Douglas may become inactive in the future. Given the political interest and enthusiasm in the area's general redevelopment, with policies to support major planning transformations, there may be a viable opportunity to repurpose the area's existing rail bridge. Another opportunity exists to think of repurposing abandoned bridges in a broader scale level of planning. According to Swanson, this opportunity would involve "develop[ing] a Waterways Crossing Plan, to ... look at the whole city and talk about how that would transform commutes and access."

6.3 Building Momentum and Implementation

This section discusses the steps necessary to begin building support, gathering momentum and implementing the concept of rail bridge to active transportation bridge in Winnipeg. The topics examined include considering where rail bridges could fit into policy, the determinants of ownership and structural integrity, the challenges that must be addressed, organizations that may play a role and the importance of the political environment to enable project progression.

6.3.1 Where Do They Fit In?

Overwhelmingly, the municipal planners interviewed agreed that there was no direct mention of abandoned railways in the City of Winnipeg's planning and policy documents. In thinking about how the abandoned rail bridges may be comprehensively incorporated into the City of Winnipeg's guiding documents, it is important to understand where these references could be made. As many of the interviewees mentioned, existing policies around connectivity and sustainability can be interpreted to support repurposing the rail bridges into an active transportation use. There is an opportunity to expand these policy areas to include explicit reference to abandoned rail bridges and supportive repurposing activities. Some municipal planner interviewees also questioned if the City of Winnipeg's Pedestrian and Cycling Strategies identifies the two rail bridges in question as active transportation opportunities. The City of Winnipeg's Pedestrian and Cycling, in addition to overarching policies of connectivity and sustainability, may serve as the most applicable places to mention the abandoned rail bridges.

As discussed in the literature, urban abandonment is considered a public policy issue, as generally, abandonment is regarded as an undesirable, wasteful and inefficient presence in cities (De Franco, 2020). Along with the pressure to run efficient cities, decision-makers may also be subject to demand from the public to address abandoned structures. In relation to the two abandoned rail bridges in question, urban abandonment may become a priority to address from the perspective of the City of Winnipeg through planning and policy documents.

6.3.2 Don't Jump the Gun

Generally, focus group participants agreed that matters of ownership and the structural integrity of the Bergen Cut-Off Bridge and the Oak Point Bridge need to be determined before other repurposing activities commence. These are two critical issues. In terms of ownership, if the bridges' private owners do not support repurposing efforts and do not wish to collaborate with the City of Winnipeg and other stakeholder groups leading these efforts, the project will struggle to move forward.

Interviewees were also concerned about the potentially high costs of bringing the bridges up to code. North Kildonan 2 provided an anecdotal estimate of 100 to 150 million dollars, as quoted by a retired City of Winnipeg engineer, would be required to refurbish the Bergen Cut-Off Bridge. As discussed in the focus group, the structural integrity of both bridges requires a professional assessment to determine the level of remediation required and associated costs. Burmey indicated that "significant" remediation work would be necessary for both bridges. This includes building approaches, assessing the underwater piers, and stabilizing the riverbank. The literature notes successful rail bridge preservation projects require adequate funds for preservation (Sloan, 2008). However, if the costs to stabilize and convert the rail bridges are determined to be too high, the project could be unrealistic and unfeasible.

As initial funds will be required to determine the structural integrity of the bridges, the question becomes, who is responsible for paying for these investigations – the owners of the bridges, the City of Winnipeg or other fundraising bodies? Given the uncertainty of the bridge's structural costs, someone must be

willing to take a chance on the initial cost outlay and determine the remediation work required.

6.3.3 Addressing the Challenges and Gathering Support

The literature review highlighted a supportive local community is a part of the essential elements needed to successfully preserve a historical rail bridge (Sloan, 2008). The community's indifference or resistance can derail the project (Sloan, 2008). As discussed in the focus group, the timing of gathering community support for repurposing efforts is especially important as, if the community is brought into the process too early, they may see the project as too small of a priority. Alternatively, if the community is brought in before ownership and structural integrity issues are determined, there is the danger of prematurely getting people excited.

In addition to timing, gathering community support will require addressing the challenges identified in public engagement processes. Interviews with neighbourhood resident group representatives and municipal planners, along with the focus group members, highlighted similar challenges the project will face. These include high project costs, structural integrity concerns, ownership cooperation, traffic concerns and the legal, technical and intergovernmental matters of approving the project. Many research participants highlighted the public may be resistant to increased connectivity, as this would allow people from outside of their immediate area to gain access to their neighbourhood. Each research participant who spoke of this potential concern also voiced their disagreement. Finding a balance to address all the challenges raised by community members is key to gathering their support for the project.

6.3.4 Turning Curiosity into a Plan

Taking a vision for a project and turning it into a plan will require collective efforts from various groups. As described in the literature, the project needs a "champion" to lead, organize and advocate for the project, as well as deal with political challenges and secure funding sources (Sloan, 2008). The champion is a dedicated individual or group of individuals that spearhead the project. Swanson expressed the Winnipeg Trails Association could take on this project if they had access to funding to investigate the bridges' structural integrity. Winnipeg Trails or another group with "experience, ... someone willing to invest some money, to take a chance and figure out what's going on," could lead these efforts.

The literature has also indicated the project will benefit from the support of the local historical community (Sloan, 2008). Support from these groups helps justify preservation efforts, which in turn, supports the champion's work. While Tugwell suggested her organization would like to see the bridges preserved, she also acknowledged the project's current questions surrounding ownership and structural integrity need to be determined before she could consider her support.

The focus group participants further identified collaborating with other organizations, such as the Trans Canada Trail, would help draw attention to the project from the public and notable public figures. Once the project has identified a champion to lead the repurposing efforts, one of their first steps may be to secure funds dedicated to investigate the structural integrity of the bridges. As indicated by Marginet, funding opportunities may be available from the Government of Canada's Active Transportation Fund, which has dedicated \$400 million

to support modal shifts to active transportation (Government of Canada, 2022) or through local funding opportunities such as the Winnipeg Foundation.

6.3.5 The Political Piece

Efforts to preserve the historical rail bridges and transform them into active transportation corridors may prove futile if the political environment does not support the project. Sloan (2008) indicated that the political environment is the most critical factor for rail bridge preservation efforts. The will of the politicians played a significant role in the past proposal for the Bergen Cut-Off by Hilderman, Tripp and Witty (Tizzard, 2007), as discussed in section **2.2.1 Historical Background**. Hilderman acknowledged their proposal had difficulty gaining the interest of city councillors and were waiting for the political environment that would support their imaginative project (Tizzard, 2007).

Both focus group participants and municipal planners recognized prioritization was intertwined with City budgets. Swanson stated that the repurposed bridges “[are] obviously [needed]. Are they a priority? That’s only a budget question.” As the Bergen Cut-Off Bridge is in close proximity to the Kildonan [Settlers] Bridge, which recently underwent active transportation upgrades, from the perspective of the City of Winnipeg, this may make any upgrades to the Bergen Cut-Off Bridge unfeasible. Discussions with the focus group members revealed that the Oak Point Bridge is being considered in the City of Winnipeg’s Route 90 Improvements Study, which may result in the Oak Point Bridge being used for active transportation. As funds are already dedicated to studying this possibility, the Oak Point Bridge may have the political backing to be repurposed.

6.4 Summary

Rail bridges in Winnipeg must consider local values of adjacent neighbourhoods as well as the perspectives of Indigenous peoples. Understanding these voices and perspectives will help inform decision-making around repurposing efforts. As identified by neighbourhood resident group representatives, municipal planners and stakeholder groups, the concept provides many opportunities. These opportunities are beneficial for the adjacent communities and the greater city. Looking ahead, repurposing efforts will need to address several challenges to gain community support and get the political backing necessary to move the project and concept forward.

6.5 Next steps

The findings suggest Winnipeg’s abandoned rail bridges can be utilized for more active purposes that can benefit local neighbourhoods and the city by increasing connectivity through access points for active transportation. Despite the many opportunities identified by participants, there are equally as many challenges that face repurposing efforts. Many critical factors must align to make this proposal a success. Concluding thoughts on the study, recommendations and the answered research questions are presented in the following chapter.



Figure 18: Bergen Cut-Off Bridge, East Approach

7. CONCLUSION

This chapter completes the capstone project by tying together concepts explored in previous chapters and provides concluding remarks. I begin by addressing the capstone project's research questions. Subsequent sections discuss recommendations to move the Bergen Cut-Off Bridge and Oak Point Bridge projects forward, identify areas for further research and provide final thoughts.

7.1 Addressing the Research Questions

Question 1: What is the current situational context of abandoned rail bridges in Winnipeg?

Winnipeg's two abandoned rail bridges, the Bergen Cut-Off Bridge and the Oak Point Bridge, are privately owned structures, which research participants have identified as underutilized infrastructure assets. Municipal planner interviewees indicated no specific planning policies reference the two abandoned rail bridges in question. Residents living in communities adjacent to the bridges support the general concept of repurposing rail bridges to support active transportation use and its associated benefits. However, the neighbourhood resident group representatives interviewed had mixed opinions regarding if they would support repurposing their local rail bridge. The Oak Point Bridge resident interviewees were more supportive of repurposing their respective bridge, relative to the Bergen Cut-Off Bridge neighbourhood resident group interviewees.

Question 2: What are the similarities and differences in how municipal planners, stakeholder groups and surrounding communities define, value, perceive and experience Winnipeg's abandoned rail bridges?

All research participants perceived and defined the rail bridges as inaccessible structures. They also acknowledged they are assets for Winnipeg that hold value and present several opportunities discussed further in Question 3. The research participants quickly identified many challenges associated with repurposing the rail bridges to support active transportation use. The majority of participants speculated local opposition concerns would include a reluctance to increase connectivity to their neighbourhoods and prefer their communities stay within their current boundaries. In general, the adjacent community interviewees' scope was focused on hyperlocal issues. The municipal planners had a broader sense of matters within large areas of Winnipeg, while the stakeholder group was concerned with city-wide issues. There were mixed opinions among neighbourhood resident group representatives on whether they supported repurposing the rail bridges; however, more positive sentiments were expressed by municipal planners and stakeholders in the focus group.

Question 3: What opportunities do Winnipeg's abandoned bridges present, and what challenges do they face when repurposing is considered?

Winnipeg's abandoned rail bridges present several opportunities for the adjacent communities to the bridges and the city. At the city scale, a repurposed rail bridge can re-activate dormant historical infrastructure and enhance connectivity and access points in the city. The project could become a destination and focal point for Winnipeggers and act as a precedent project for other cities. There is also an opportunity for the City of Winnipeg to incorporate the rail bridges into various planning and policy documents such as the Transportation Master Plan and Pedestrian and Cycling Strategies. At the local scale, a repurposed rail bridge can extend the reach of recreational and green spaces in the affected neighbourhoods, offer placemaking activities, and better social connections within the neighbourhood and to the adjacent neighbourhood. Access will be increased to services in neighbouring areas and provide more opportunity for leisure activities and alternative routes for commuting trips.

The challenges and barriers facing the project are significant as many of these matters could derail the project entirely if not resolved. These include determining the structural integrity of the bridges and the associated costs for remediation. The project will also require support and collaboration with the bridges' private owners. The Indigenous perspective is an important aspect to incorporate early in the planning processes as Indigenous people have a special relationship to the lands occupied and the history of railways. The project may also face

local opposition to increased traffic and connectivity challenges. From a jurisdictional perspective, technical and legal issues will need to be determined. Politically, the project may not be accepted by decision-makers and may be too low of a priority to dedicate sufficient funds and efforts to a repurposing project.

7.2 Recommendations

The City of Winnipeg is currently assessing the condition and capacity of Route 90 and the St. James Bridge. As part of this review, the adjacent Oak Point Bridge is under consideration for its viability to accommodate active transportation. The recommendations of this report apply to both bridges. However, it is important to note the Oak Point Bridge is further ahead in the planning process.

There are seven recommendations for stakeholders, which include, the City of Winnipeg, bridge owners, and community groups. These recommendations are intended to provide an opportunity for these interested parties to assess, repurpose and move the projects forward. The recommendations are guided by the literature review and findings from discussions with neighbourhood resident group representatives, municipal planners and stakeholders.

[1] Develop Planning Policies for the Rail Bridges (directed to City administration and elected officials):

As identified by the municipal planners, there are no current mention of the rail bridges in planning and policies documents. The inclusion of the rail bridges in forthcoming policy documents will support efforts to repurpose the bridges and legitimize their recognition as assets for the City of Winnipeg.

[2] Change Ownership from Private to Public (directed to bridge owners):

Consideration of changing ownership of the bridges from private ownership to public ownership (i.e., the City of Winnipeg). As active transportation is a public use, it makes most logical sense for the public space to be owned, operated and maintained by a public entity.

[3] Identify a Group to “Champion” the Project (directed to Winnipeg Trails/Other):

A community group or the creation of an organization dedicated to the redevelopment of the Bergen Cut-Off Bridge and the Oak Point Bridge (i.e., Friends of the Bergen Cut-Off) is beneficial to lead repurposing efforts and champion the project. As identified by the findings chapter, this group will first coordinate with the private owners to conduct a structural assessment; subsequently, the group will need to secure seed funding to perform the structural assessment. Once the structures are assessed, the group can engage with stakeholders and develop a strategic plan.

A critical component of the champion role will be to engage and garner political support and secure long-term funding from all three levels of government. This is not to suggest that all funding necessarily comes from the government. The champion should consider seeking opportunities for private sector funding as well.

[4] Develop Political Will (directed to the project champion):

For the purposes of this report, municipal politicians were invited to participate. However, it is encouraged that the champion engages with all three levels of government, including municipal, provincial, and federal elected officials.

[5] Funding Opportunities (directed to the project champion):

In order for any project to move forward, seed funding is required to assess the condition of the Bergen Cut-Off Bridge and to facilitate and develop a vision for what the community wants or needs from these historical structures. It is commonly known there are funds available for this type of initiative. The following are four sources of funds available for this project. They include: City of Winnipeg Community Incentive Grant Program (City of Winnipeg, 2019), Province of Manitoba Building Sustainable Communities Program (Province of Manitoba, n.d.), Government of Canada Active Transportation Fund (Government of Canada, 2022) and the Winnipeg Foundation Major Capital Grant (The Winnipeg Foundation, 2019). Elected officials have a say in how these grants are awarded, tying into Recommendation 4.

[6] Public Engagement, Indigenous Consultation and Strategic Plan (directed to the City of Winnipeg and the project champion):

Once funds are allocated and the appropriate facilitator or consultant has been retained, it is important to continue with one-on-one, focus groups, public engagement, and Indigenous consultation. This step can only begin once seed funding has been secured. The purpose of this engagement and consultation process is to identify the wants and needs of the greater community. It will be the responsibility of the consultant to consult, engage and put together a strategic plan for the project. Recognizing that this project is early on in the feasibility stage, the strategic plan will be a living document for a project that could take 20+ years to implement.

[7] Design Competition (directed to the project champion):

Seed funding could be used to launch a design competition to re-imagine the rail bridges for active transportation use. These visuals may serve to gather support and interest in the project, and keep project momentum moving forward.

7.3 Areas for Further Research

The following areas for research have been identified to further the information presented in this study and support efforts to repurpose the rail bridges into active transportation bridges.

- **Assessments:** To determine the structural integrity of the Bergen Cut-Off Bridge and the Oak Point Bridge, a variety of assessments will need to be undertaken, including structural assessment, environmental impact assessments, and riverbank assessment and stabilization studies
- **Legal and Jurisdictional Considerations:** Because the bridges fall under municipal, provincial, and federal jurisdictions, it is important to have a better understanding of the legal and jurisdictional issues
- **Precedent Study:** An examination of other rail bridge to active transportation conversions can offer insights into funding sources and opportunities, bridge ownership and operation, the frequency of public users and level of success
- **Cost-Benefit Analysis:** In a typical cost-benefit analysis, projects are examined through the lens of capital and operating costs with a view of generating economical and intangible benefits. When the economical and intangible benefits outweigh the costs, the likelihood of community and political support would reflect positively on the project

7.4 Final Thoughts

There are many merits and opportunities to repurposing Winnipeg's historic rail bridges for the neighbouring communities and the city. Based on the research conducted in the study, there is an overall interest to enhance the adjacent communities of the two abandoned rail bridges identified.

The Oak Point Bridge is currently being considered by the City of Winnipeg to be incorporated as an active transportation path in the Route 90 Improvements Study project. The City of Winnipeg's administration is interested in repurposing this structure and there appears to be a high propensity for moving forward with the initiative. Given the City has already invested resources into upgrading the adjacent Kildonan Settlers Bridge, the Bergen Cut-Off Bridge is less likely to be prioritized in the near-term.

In summary, the successful repurposing of rail bridges requires interest and support from stakeholders, structural and financial feasibility, coordination from ownership and most importantly, political backing.



Figure 19: Trail beneath the Bergen Cut-Off Bridge, adjacent to Kildonan Park Golf Course

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Figure 6: Esri Canada. (2022). Land use zoning map of the Bergen Cut-off Bridge area. Adapted by author from <https://univmb.maps.arcgis.com/home/item.html?id=3647899c04a84e74b7f1aa75f6d614c2>

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APPENDIX A: SEMI-STRUCTURED INTERVIEW QUESTIONS

Semi-Structured Interview Questions for Municipal Planners

Background

1. May I have your permission to record this interview?
2. Could you please confirm the name of the organization with which you are employed or represent? What is your position?
3. Could you briefly describe your roles and responsibilities?

Planning

4. In your opinion, what features make [relevant neighbourhood] desirable? What improvements could be made?
5. What are some of the short-term planning goals for the [relevant neighbourhood]? [e.g., increase walkability, increase active transportation opportunities, improve opportunities for businesses]
6. How does the [relevant neighbourhood] align with OurWinnipeg 2045's planning goals and objectives?
7. How does the City consult with [relevant neighbourhood's] residents regarding changes that may be made in the community?

Abandoned Rail Bridge

8. Can you describe how abandoned rail bridges are considered in the City of Winnipeg's planning and policy directions?
9. a) Can you discuss the challenges faced by past proposals to repurpose the abandoned bridges?
b) What lessons can be learned to inform future proposals?
10. Have community members voiced their opinions about the abandoned rail bridge in the past? What were their thoughts?

[brief presentation of the images and information of rail bridge to active transportation precedents from other jurisdictions]

11. Would a repurposed rail bridge be considered a benefit to the neighbourhood?
12. What barriers, from a planning and zoning perspective, need to be addressed to facilitate this transformation? [Are there others? e.g., Public Works, Winnipeg Fire Service, Winnipeg Police Service]
13. What barriers, from a community consultation perspective, need to be addressed to facilitate this transformation?
14. What barriers, from an intergovernmental perspective, need to be addressed to facilitate this transformation?

APPENDIX A: SEMI-STRUCTURED INTERVIEW QUESTIONS

Semi-Structured Interview Questions for Neighbourhood Resident Group Representatives

Background

1. May I have your permission to record this interview?
2. Could you please confirm the name of the organization with which you are employed or represent? What is your position?
3. Could you briefly describe your roles and responsibilities?

Place

4. What do you like about your neighbourhood? What do you not like?
5. Are you proud of your neighbourhood? Why or why not?
6. What places or spaces do you often go to within your neighbourhood? Why?
7. What places or spaces do you feel connected to within your neighbourhood? Why?
8. Are there any landmarks or significant physical features that make your neighbourhood unique?
9. Are there any activities or events that bring people together in your neighbourhood?
10. What changes would you like to see to improve your neighbourhood?

Abandoned Rail Bridge

11. Do you feel the abandoned rail bridge in your area is valuable to you and your neighbourhood? If yes, in which ways?
12. How have people used/interacted with the bridge and the land approaching the bridge in the past? How are they used now?

[brief presentation of the images and information of rail bridge to active transportation precedents from other jurisdictions]

13. Would a repurposed rail bridge be considered a benefit to your neighbourhood?
14. Could repurposing the Bergen Cut-Off/Oak Point Bridge to an active transportation bridge (pedestrian and cycling travel) help contribute to your community's sense of place?
15. a) What opportunities does the abandoned rail bridge present when repurposing is considered?
b) What are the challenges that the community will face in attempting to repurpose the bridge?
16. If you would support an initiative to repurpose the bridge, how do you think the project should be funded? [e.g., the government, business improvement zone tax, fundraising, sponsorship, public-private partnership, increase to municipal tax or combination]

APPENDIX B: FOCUS GROUP GUIDE

Introductions

- May I have your permission to record this focus group?
- Could you please confirm the name of the organization with which you are employed or represent? What is your position?
- Could you briefly describe your roles and responsibilities?

[brief presentation of the images and information of rail bridge to active transportation precedents from other jurisdictions]

Question	Follow-up Questions or Prompts
1. From your perspective, is there a desire to pursue a similar project in Winnipeg?	What would make this project desirable?
2. Between the Bergen Cut-Off Bridge and Oak Point Bridge – which project is most likely to succeed in being repurposed?	
3. Who can lead the repurposing projects?	Examples: government department, community advocacy groups, political champion, municipal official or other
4. Who may be opposed to these projects?	What are their potential concerns? Is there a way that we can adequately address their concerns? How might the contradictory or opposing viewpoints of any stakeholders be overcome?
5. a) What opportunities do the abandoned rail bridges present when repurposing is considered? b) What are the potential challenges in repurposing the rail bridges?	Is this likely to happen?
6. Which additional organizations should be included in this discussion?	
7. What kind of funding is available to move this project forward?	Examples: funding to commission a feasibility study, or help develop design approaches and ideas (to help with fundraising)
8. What are the possible next steps?	Examples: developing an ongoing stakeholders meeting, working group, feasibility study or other

APPENDIX C: RAIL BRIDGE PRECEDENT SLIDE DECK

REPURPOSED RAIL BRIDGE
PRECEDENT PROJECTS:

BILL THORPE WALKING BRIDGE
FREDERICTON, NB

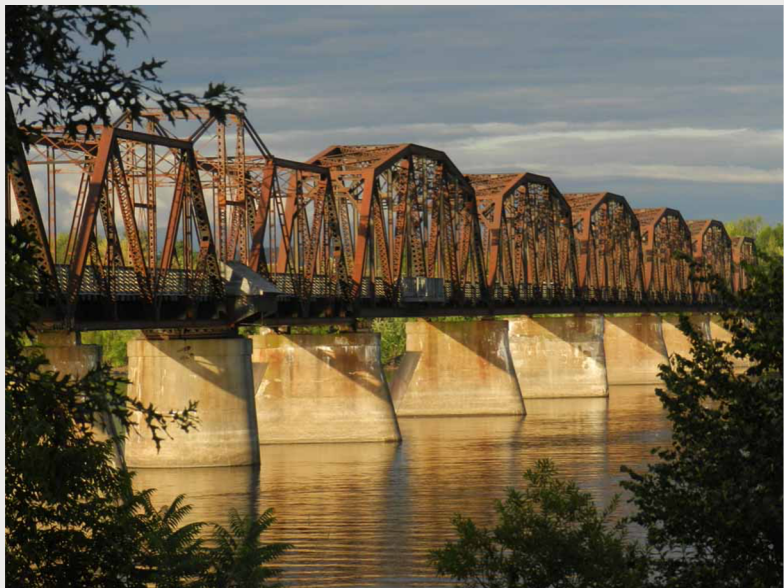
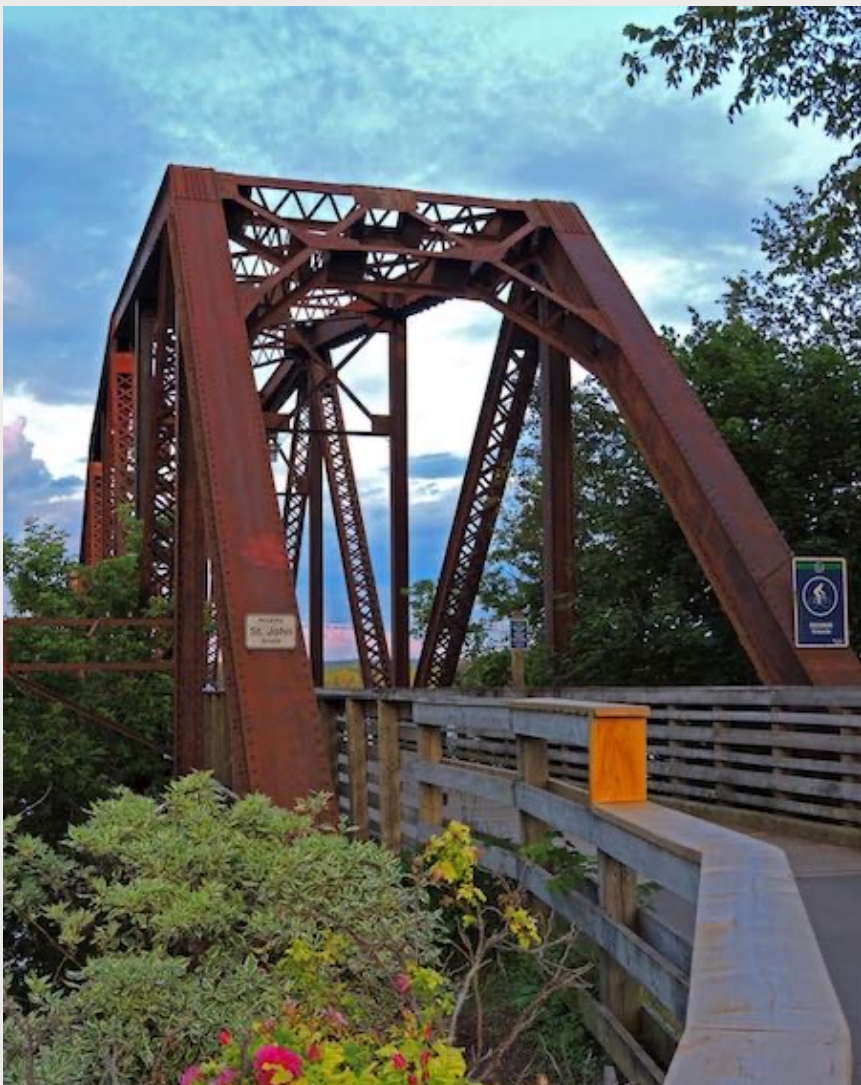
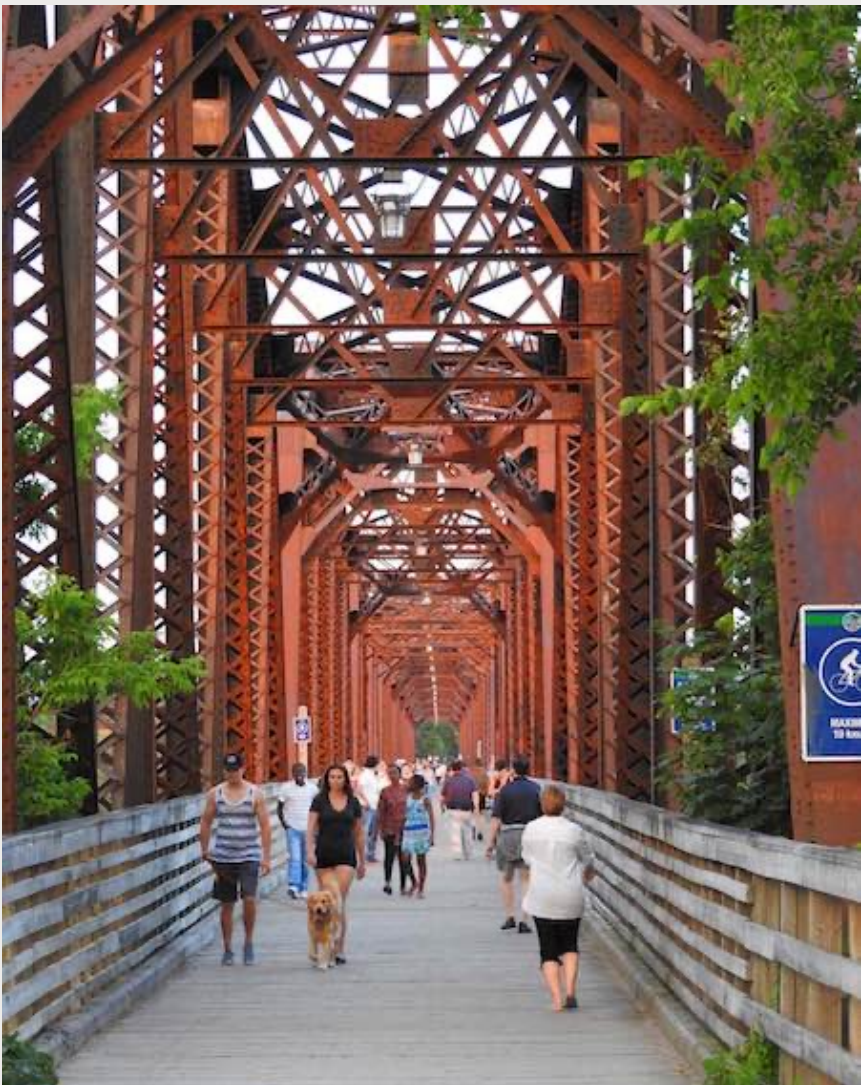
OLD DRAKE HILL FLOWER BRIDGE
SIMSBURY, CT

STONE ARCH BRIDGE
MINNEAPOLIS, MN

CHIEF WILLIAM COMMANDA BRIDGE
QC/ON



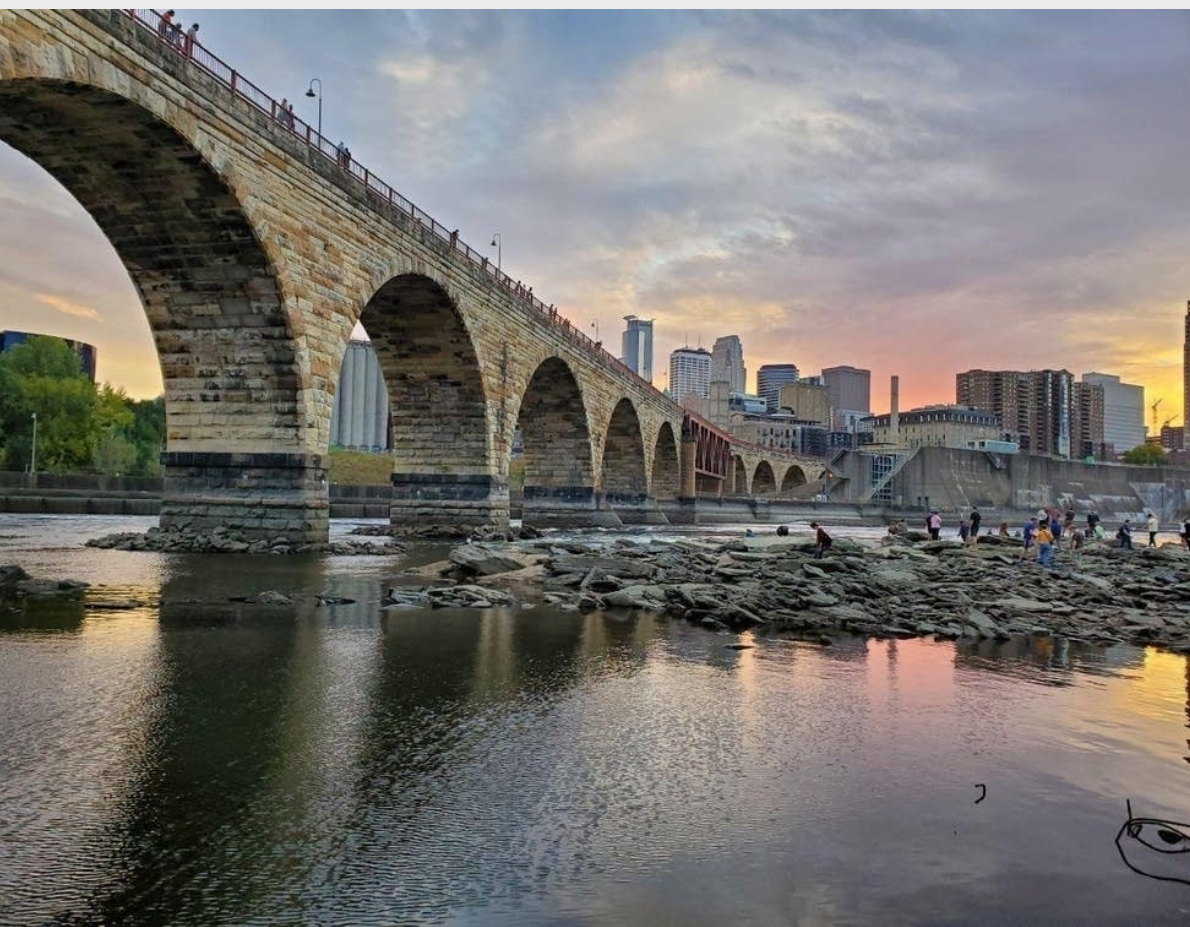
BILL THORPE WALKING BRIDGE - FREDERICTON, NB



OLD DRAKE HILL FLOWER BRIDGE – SIMSBURY, CT



STONE ARCH BRIDGE – MINNEAPOLIS, MN



CHIEF WILLIAM COMMANDA BRIDGE - QC/ON



I M A G E S

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APPENDIX D: RAIL BRIDGE PRECEDENT SLIDE DECK NOTES

Bill Thorpe Walking Bridge, Fredericton, New Brunswick (City of Fredericton, n.d.)

- Location: Crosses the Saint John River, in the downtown core
- Use: AT pathway
- Construction date: 1938 by CN
- Date Repurposed: 1997
- Length: 607 m

Old Drake Hill Flower Bridge, Simsbury, Connecticut (Town of Simsbury Connecticut, n.d.)

- Use: AT pathway, community gardens, wedding venue
- Construction date: 1892
- Date Repurposed: 1995
- Length: 183 ft
- Costs/Funding: \$575,000 in restoration costs; 80% paid by the Federal Transportation Grant

Stone Arch Bridge, Minneapolis, Minnesota (Huber, 2021; Smith, 2022)

- Location: Crosses the Mississippi River, downtown
- Use: AT pathway, includes historical plaques of the bridges/history
- Construction date: 1883
- Date Repurposed: 1994

Chief William Commanda Bridge, Quebec/Ontario (City of Ottawa, 2022)

- Location: Crosses the Ottawa River, connects Ottawa and Gatineau
- Use: AT pathway between two cities
- Construction date: 1879 by CPR
- Date Repurposed: Construction began in 2021; opening scheduled for 2022
- Costs/Funding: \$14 million from City of Ottawa; \$8.6 million from federal government