

2013

PLAN 5000

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# HALIFAX PEDWAYS IN THE COGSWELL REDEVELOPMENT AREA



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## EXECUTIVE SUMMARY

The Barrington, Cogswell and Purdy's Wharf pedways were built in Halifax within the context of an urban renewal and modernization process that occurred between the 1960s and 1980s. Components of an even larger urban renewal plan were completed during that time, but have proven outdated or unfinished, leading to current questions about the future of pedways. As cities are examining the roles of pedways in their own context, Halifax must do the same as it shifts focus to pedestrian-friendly streets and encourages street level retail uses. Halifax is seeking to redevelop the Cogswell Interchange and the use and impact of pedways in the area need to be considered.

Within the overarching HRM by Design document, various policies directly and indirectly relate to pedways in Halifax. Specifically, the Downtown Halifax Secondary Municipal Planning Strategy and Design Manual contain policies permitting the construction of new pedways, but specify that they must conform to strict design guidelines. Many policies within the guidelines promote street level pedestrian use and retail shops, suggesting that they are the preferred design elements of any new construction.

The motivations behind pedestrians acting in certain ways strongly relate to the surrounding environment, and cities were motivated to build pedways for reasons such as climate and urban renewal. In more detail, literature and studies from other cities have shown that pedways have both positive and negative effects in areas such as efficiency, modernity, street level retail, and the public use of space.

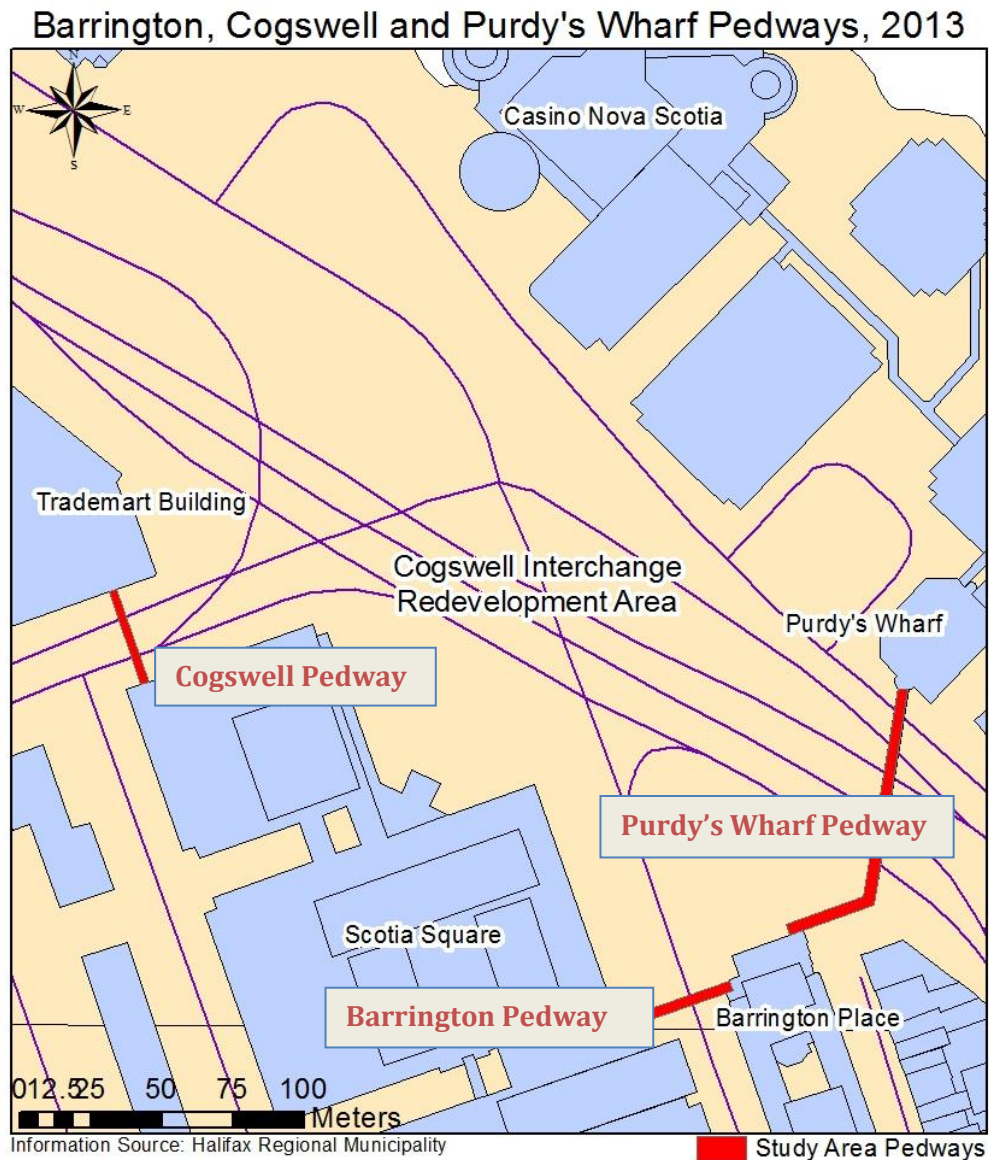
Observations from site visits to all three pedways included various factors such as their design, amenities, accessibility, street level retail and more. Differences in the pedways observed were related to age, accessibility, appearance and noise levels. Similarities observed between the pedways were related to ownership, climate control, hours of operation and codes of conduct.

The Barrington, Cogswell and Purdy's Wharf pedways offer strengths such as their convenience, weather protection and ownership structure, yet have weaknesses related to their accessibility and limits to public space. Additionally, there are a few opportunities for pedway expansion in accordance with HRM by Design and for improvements to the current structures. Threats include possible future street layout changes, age and occupancy levels of the attached buildings.

Conclusions from this report are that the Barrington, Cogswell and Purdy's Wharf pedways play an important role in the movement of pedestrians across otherwise inaccessible areas and offer opportunities for continued use with the improvement of some design elements. However, additional research should be undertaken regarding their impact on street level vibrancy before making decisions about expanding the system.

## INTRODUCTION

The Northern section of Halifax's downtown was transformed dramatically between the 1960s and 1980s. Large developments connected by pedestrian pedways spanning Barrington Street, Cogswell Street and Hollis Street were part of a new and modern skyline in the historical city. However, Halifax was not alone in its endeavors, as other cities constructed similar pedways, spurred by harsh climates (Allan, Cui & Lin, 2013) and promises of urban renewal (Terranova, 2009).



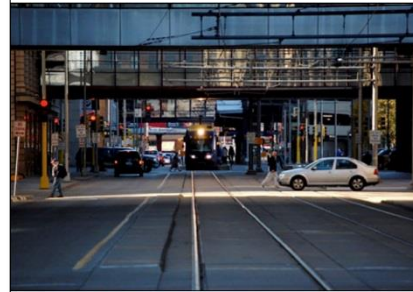
**FIGURE 1: COGSWELL, BARRINGTON AND PURDY'S WHARF PEDWAYS CONNECT MAJOR DEVELOPMENTS. SOURCE: HRM**



Today, the popularity of pedways has waned in some cities, demonstrated by their dismantling, while others continue to expand their pedway networks (McFee, 2013). Within this divergent landscape, questions are being raised about the impact of pedways on street level vibrancy and studies have shown both positive and negative effects in other areas (Allan, Cui & Lin, 2013). With the intention of improving its downtown, Halifax Regional Municipality (HRM) has adopted a vision that highlights the importance of sustainability by ensuring that its downtown is vibrant, dense, walkable and environmentally sensitive (HRM by Design). The current policy context which encourages pedestrian friendly neighbourhoods, at-grade retail and vibrancy points to an increased focus on pedestrians in HRM.

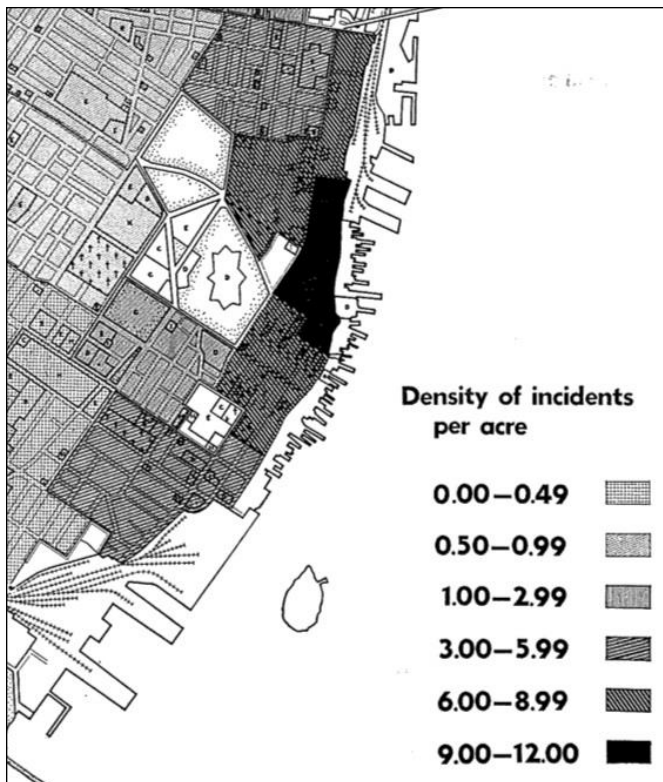
## Urban designers: Minneapolis should dump skyways

By Steve Berg | 11/15/07



Two prominent urban designers argue that Minneapolis skyways take the life out of the city by moving people off the streets. Photo by Steve Date

**FIGURE 2: EVEN IN CITIES WITH POPULAR AND EXTENSIVE PEDWAY NETWORKS, QUESTIONS ARE BEING RAISED ABOUT THEIR FUTURE. SOURCE: MINNEAPOLIS POST, 2011.**



**FIGURE 3: GORDON STEPHENSON'S REPORT JUSTIFIED URBAN RENEWAL PROJECTS BASED ON LOCATIONS WITH HIGH CRIME RATES, HEALTH PROBLEMS AND OTHER SIMILAR STATISTICS. SOURCE: STEPHENSON REPORT, 1957.**

As cities are examining the roles of pedways in their own context, Halifax must do the same. The timing is particularly relevant, as questions about the current and future use of the Barrington, Cogswell and Purdy's Wharf (spanning Hollis Street) pedways must be asked as the city seeks to redevelop the Cogswell Interchange and Halifax Developments plans changes to Scotia Square mall. This report will aim to investigate the current role of these three pedestrian pedways in light of the anticipated changes to the neighbourhood through a background, policy and literature review. Furthermore, it will evaluate their current use by way of the SWOT (Strengths, Weaknesses, Opportunities and Threats) method and provide recommendations for future study of their sustainability in

light of the anticipated developments.

## BACKGROUND

To understand the context in which the Cogswell area pedway system developed one must first look to the major events that began in the 1950s, which drastically transformed the landscape, shaping the roles and functions of the area that exists today.

The late 1950s marked a turning point in Halifax's development history, specifically for the area around the Barrington and Cogswell Streets in the Northern section of the downtown.



**FIGURE 5: THROUGHOUT THE 1960S, CITY COUNCIL RECEIVED NUMEROUS PROPOSALS FOR THE LAND THEY HAD CLEARED. THE ABOVE PROPOSAL, CORNWALLIS CENTRE I, WAS NOT ACCEPTED, BUT THE MODEL STILL EXISTS TODAY. SOURCE: NOVA SCOTIA ARCHIVES, 2013.**

Until this time, the area around City Hall, Jacob Street, Barrington Street and Argyle Street had been home to over 1,600 largely working-class families who were living in dense, poorly maintained housing (Doehler, 2001). Halifax City Council, which had been debating issues such as slum clearance and housing for the first part of the decade, commissioned



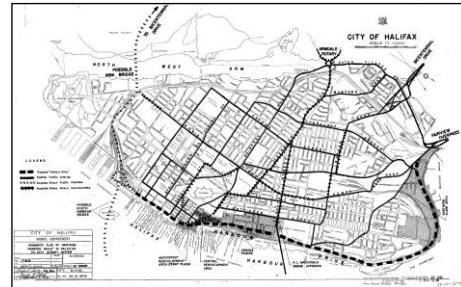
**FIGURE 4: SCOTIA SQUARE AND THE COGSWELL INTERCHANGE AFTER COMPLETION. THE COGSWELL PEDWAY IS SHOWN ON THE FAR RIGHT. SOURCE: CBC NEWS.**

University of Toronto planning professor Gordon Stephenson to undertake an urban renewal plan in 1956 (Paterson, 2009). Released in 1957, Stephenson's wide-ranging and long-term plan called for the razing of slum areas that he had determined would facilitate the revitalization of the area. In place of the low-income residential areas that existed, he suggested that large commercial developments and highways would be better suited (Stephenson, 1957). Stephen's



report only went so far as to suggest the removal of 8.8 acres of housing, but after considering his report, the City of Halifax proceeded to raze 16 acres, which then remained vacant for nearly ten years until the construction of the Scotia Square complex (Neville, 2010).

Throughout the 1960s the City of Halifax received multiple bids for the redevelopment of the Barrington and Cogswell Street area, all of which included large shopping complexes, hotels, office towers and parking garages. The proposals also featured separate vehicular and pedestrian spaces, some of which included pedways connecting the hotels, civic areas or shopping malls (Doehler, 2001). The third and successful proposal, received in 1966, was from Halifax Developments and was named Scotia Square (Ibid.). Its proposal included office towers, apartment towers, a shopping mall and the Trademart building that was connected by a pedway across Cogswell Street (Ibid.).



**FIGURE 6: HARBOUR DRIVE'S WATERFRONT ROUTE WOULD HAVE DRAMATICALLY ALTERED THE HALIFAX LANDSCAPE. SOURCE: HRM ARCHIVES, 1963.**



**FIGURE 7: THE FIRST PHASE OF THE PURDY'S WHARF OFFICE COMPLEX OPENED IN 1985 COMPLETE WITH A CONNECTING PEDWAY STRETCHING ACROSS THE COGSWELL INTERCHANGE. SOURCE: MAIL STAR, 1985.**

Construction commenced in 1967 and major components of the complex including the Trademart building, office towers, mall and hotel were completed by the early 1970s and exist today (Ibid.). To undertake the massive project, a complete redesign of the streets in the surrounding area was also required, and at the same time as Scotia Square's construction, the city embarked on a highway project called Harbour Drive.

While Halifax City Council was soliciting bids for a redevelopment project in the Cogswell and Barrington Street area, they also pressed forward on a plan to construct a waterfront expressway that would provide a link to connect the two harbour bridges with the South End port and add another bridge across the Northwest Arm. With anticipated increases in traffic as a result of the Scotia Square project, the city succeeded in constructing the Cogswell Interchange portion of the project before opposition to the demolition of heritage buildings killed



the Harbour Drive and Northwest Arm bridge plans (Cantwell, 2004). As a result, the maze of onramps and off-ramps that defined the interchange remained underutilized and separated areas of the city.

Barrington Place was constructed around 1981 (personal communication, Nov. 28, 2013), and featured a hotel and retail shops. Its location directly across the street from Scotia Square on Barrington Street replaced a row of older housing with a newer structure, but maintained the façade of the buildings that faced Granville Street (Ibid.). A major component of the project was a pedway connecting the hotel and shops with Scotia Square across the street, providing a direct link for pedestrians between the two buildings, allowing them to avoid the busy street in between.

Just over four years after the construction of Barrington Place, the first phase in a complex called Purdy's Wharf opened in May 1985, across the Cogswell Interchange on the Halifax waterfront (Chronicle Herald, 1985). A key link in the project was a pedway system connecting the four-storey Xerox building in the Purdy's development to Barrington Place shops that fronted Barrington Street (Ibid.). The main pedway connection spanned one of the widest sections of the Cogswell Interchange, providing a pedestrian link between the two large developments that were otherwise cut off from one another by the highway.

In all, the entire area surrounding the Cogswell Interchange and Scotia Square was massively transformed in the decades between the 1950s and today. Major changes with intentions of urban renewal, convenience and modernity reflected a shift in thinking that prevailed at the time. Today, planners are rethinking strategies for revitalization. Furthermore, drawbacks in the design of the structures that exist, to be further explored in this paper, are causing planners to rethink the entire area once again.

## POLICY CONTEXT

The downtown area encompassing the Cogswell, Barrington and Purdy's Wharf pedways is governed by a policy manual called HRM by Design, incorporating the Downtown Halifax Secondary Municipal Planning Strategy, Downtown Halifax Land Use By-Law and Design Manual. These documents, released in March 2010, provide the vision and quantitative and qualitative elements of a policy framework

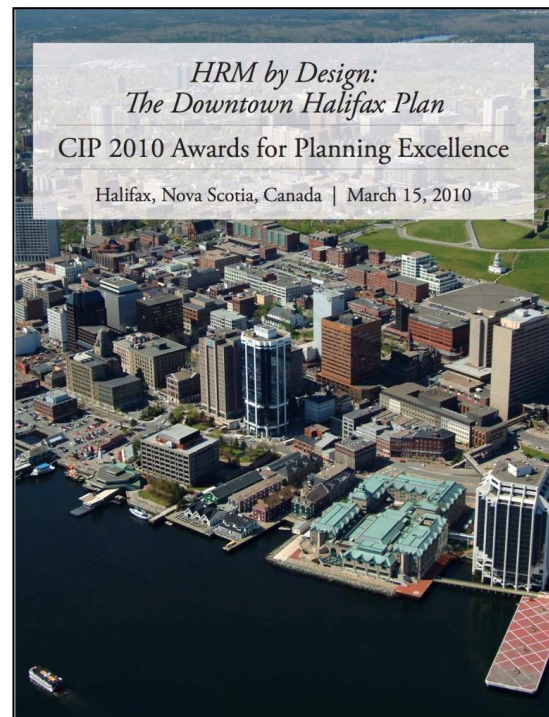


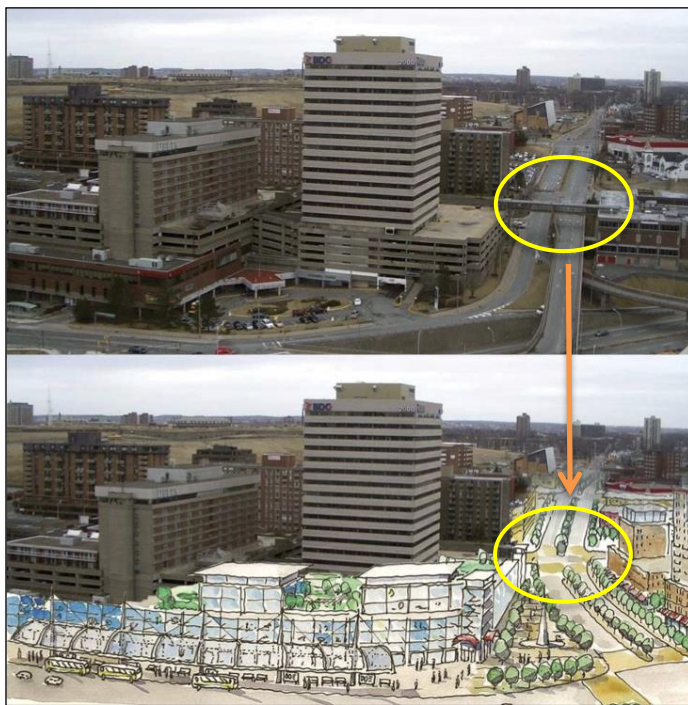
FIGURE 8: HRM BY DESIGN IS A COLLABORATION OF LAND USE DOCUMENTS GOVERNING LAND USE IN THE DOWNTOWN AREA. SOURCE: HRM, 2010.

within which any developments in the area must conform. Therefore, a thorough understanding of this context as it relates to the three pedways being examined is essential in considering their current use and any further expansion of the pedway network.

## DOWNTOWN HALIFAX SECONDARY MUNICIPAL PLANNING STRATEGY

The Downtown Halifax Secondary Municipal Planning Strategy (SMPS) begins with a broad vision for the future of the downtown by discussing the various precincts within the guiding principles of sustainability, livability, uniqueness, beauty, connectivity and vibrancy (HRM by Design, 2010). Specifically, the vision for Precinct 8: Cogswell Area calls for the dismantling of the Cogswell Interchange and a transformation of the precinct into a mixed-use neighbourhood with high densities of office, commercial and residential spaces. Pedestrian-scaled blocks with high-quality public spaces, and streets with retail uses at-grade are desired future developments for the area (Ibid.). Additionally, the vision invites the creation of a Cogswell Interchange Area Masterplan that would enable the redevelopment to occur in a fashion that maximizes functionality and vibrancy.

Chapter 3 of the SMPS discusses the built form framework and covers topics including land use and the development and design review process. Section 3.2.2 relates to primary



**FIGURE 9: A CONCEPTUAL DRAWING IN THE SMPS REIMAGINES THE CORNER OF BARRINGTON AND COGSWELL STREETS. THE EXISTING PEDWAY IS NOTICABLY MISSING. SOURCE: HRM, 2010.**

pedestrian-oriented commercial streetscapes, which are defined as having high levels of at-grade retail or other commercial uses and features shops close to the sidewalk, narrow storefronts, high glazing levels and frequent entrances (HRM by Design, 2010). It requires that any new developments occurring within those designated streetscapes provide at-grade uses that are consistent with the preexisting built forms (Ibid.). Policy 5 designates Barrington Street as a primary pedestrian-oriented commercial streetscape and Policy 6 enables HRM to designate any other streetscape as such in the future (Ibid.).

Section 3.4.6 relates to pedestrian weather protection within the context of the design review process, and specifically addresses the pedway system. The section acknowledges that while pedways provide year round interior connections between major downtown shopping areas, offices, hotels and convention centres, street-level pedestrian connections will be encouraged in the future

(HRM by Design). It also allows for the continuation of the pedway system as a part of major developments as long as the design conforms to the guidelines set out in the Land Use By-law and does not block east-west window views of the harbour (Ibid.). The 2010 HRM by Design policies are as follows:

Policy 24        HRM shall establish provisions in the Design Manual section of the Land Use By-law to encourage development to incorporate features such as canopies and awnings to provide weather protection for pedestrians at street level.

Policy 25        HRM may permit pedways to be constructed in conjunction with development projects provided they meet the guidelines set out in the Design Manual.

## DOWNTOWN HALIFAX DESIGN MANUAL

Another important guiding document for the future redevelopment of the area is the Design



**FIGURE 10: THE DESIGN MANUAL PROVIDES EXAMPLES OF WELL CONSTRUCTED PEDWAYS THAT MEET THE GUIDELINES. SOURCE: HRM, 2010.**

Manual. It is a crucial part of the HRM by Design Land Use By-law that serves as the primary reference manual for the design review process. It addresses the qualitative aspects of development applications through which approval is granted or refused by considering aspects

such as architectural design, streetscape presence and sustainability (HRM by Design, 2010). Any further developments in the area will have to meet these guidelines.

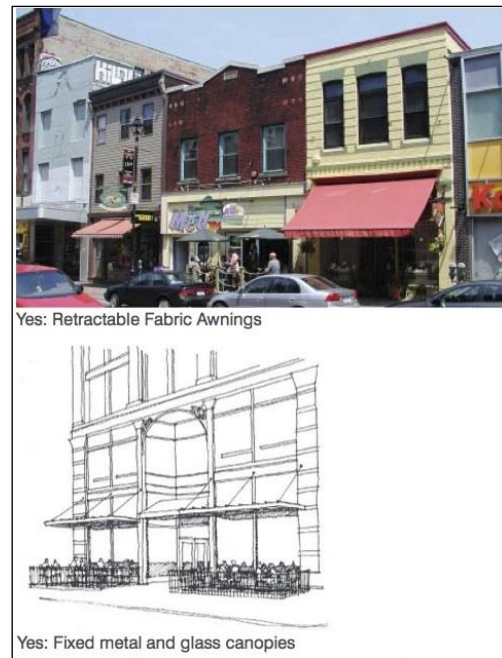
Section 2.8 in the Design Manual once again references Precinct 8: Cogswell Area with the application of several general criteria. Similar to the SMPS, it calls for the removal of the Cogswell Interchange infrastructure, but goes further to suggest the redevelopment of the Scotia Square and Purdy's Wharf developments with street-oriented infill, and the intensification of underutilized sites such as the Trademart building (HRM by Design, 2010). The manual specifies that pedestrian activities should be focused at sidewalk level and provided with weather protection using high-quality awnings and canopies (Ibid.).

Section 3.2.6 of the Design Manual addresses pedways, referring to them as "elevated pedestrian walkways" (HRM by Design, 2010). In keeping with the SMPS the manual suggests that the intent of the guidelines is to focus pedestrian movement at the street level with the objective of supporting sidewalk level retail and vibrancy (Ibid.). However, it also accepts that pedways are appropriate or necessary in some cases. In those circumstances, the 2010 Land Use By-law Design Manual requires that elevated pedestrian walkways adhere to the following guidelines:



1. Not be constructed in a north-south direction such that they block views up and down the east-west streets in the downtown.
2. Not be more than a single storey in height.
3. Strive to have as low a profile as possible.
4. Be constructed of highly transparent materials
5. Be of exceptionally high design and material quality.

Both of the preceding guiding policy documents outline a vision for focusing pedestrian activities at street level and encouraging retail uses at-grade. At the same time, pedways are recognized as appropriate in some cases, with further expansions allowed that meets the guidelines. Before evaluating the three Halifax pedways studied and their future uses, it is first important to understand the wider context in which pedestrian pedways exist.

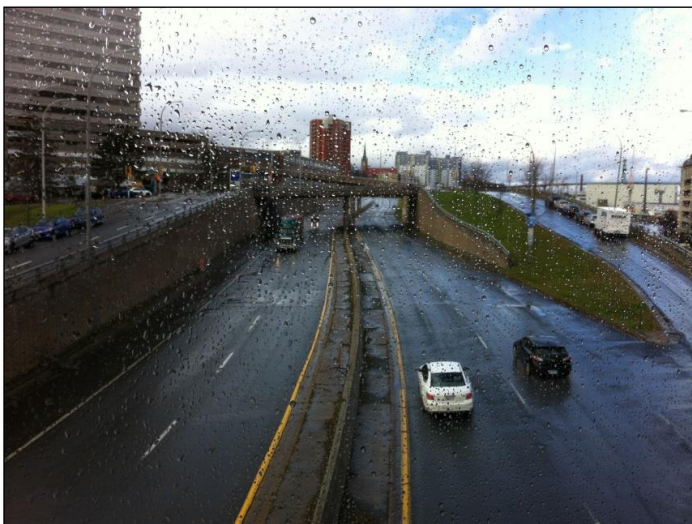


**FIGURE 11: ALTERNATIVES TO PEDWAYS INCLUDING AWNINGS AND CANOPIES ARE ENCOURAGED BY THE DESIGN MANUAL. SOURCE: HRM, 2010.**

## LITERATURE REVIEW

### PEDESTRIAN MOTIVATIONS

Before launching into the review of literature specific to pedways, some discussion



**FIGURE 12: THE PURDY'S WHARF PEDWAY IN HALIFAX PROVIDES WEATHER AND NOISE PROTECTION FROM THE COGSWELL INTERCHANGE BELOW. SOURCE: AUTHOR, 2013.**

regarding general pedestrian behaviours and perceptions is warranted. Although it is difficult to predict specific human behaviours, there are patterns that have been identified in how image, climate, noise and lighting affect how pedestrian trips are generated. Studies have shown that the state of the surrounding environment can impact how appealing an area is to pedestrians. Spaces that are well kept, have organized activities taking place or are crowded have



an appeal to pedestrians (Zacharias, 2001). The climate can also determine how pedestrians act. Temperatures between 2 degrees Celsius and 20 degrees Celsius are most optimal for pedestrians walking outdoors, and once 13 degrees is reached, the number of pedestrians who are strolling and sitting outside dramatically increases (Gehl, 1980; Li, 1994). It is important to note that the average temperature in Halifax is below zero degrees during December, January and February, suggesting that outdoor pedestrian activity is negatively impacted in winter months (Farm Zone, 2013).

Sounds and lighting are also factors in how pedestrians act and perceive different areas. Studies have shown that people generally walk faster and remember fewer visual details as the level of traffic noise increases (Zacharias, 2001). All three pedways in this study span streets and highways with high levels of cars, trucks and transit vehicles. Finally, the quality of lighting has an impact on the perception of certain areas. Pedestrians are more willing to walk in well-lit areas after sunset and have better perceptions on the friendliness of a community as well (Painter, 1996).

## CITY MOTIVATIONS

While Halifax has not started the conversation about the future of pedways in the city, a debate about pedways (above and below ground) has emerged in other cities. Critics argue that they negatively impact life on the street and proponents have defended their convenience and protection from the elements. Ultimately, there is not a clear consensus on the debate, as some cities throughout the United States have begun tearing them down, while at the same time, others in the United States and Canada invest in expansions (Allan, Cui & Lin, 2013). This suggests that an examination at the local level is important in evaluating the future of pedways.



**FIGURE 13: THE PEDWAY NETWORK IN DALLAS WAS ORIGINALLY ENVISIONED AS AN URBAN RENEWAL PROJECT THAT WOULD BRING PEOPLE INTO THE CITY. SOURCE: TERRANOVA, 2009.**

Directly comparing pedway systems in different cities is difficult to do as unique factors such as climate, building styles, streetscapes and ownership complicate the task. Even within cities, the pedway system often differs dramatically from section to section, as many were developed over many years or decades. Despite this, patterns among cities have emerged. Many share similar motives for development, and similar impacts. Halifax's pedway network can be categorized as a "tier three system" as identified by Maitland (1992) in his typology of more than 50 cities. Tier three systems connect fewer than 10 blocks (Ibid.). Pedways connecting 10-20 blocks belong to the second tier and those connecting more than 20 belong to the first tier.

One of the primary motives for pedway networks is their ability to protect from the outdoor climate. This motivation has been identified as a factor in a number of cities including Minneapolis, Cleveland, Calgary, Edmonton and Halifax (Allan, Cui & Lin, 2013). Other motivations for the use of pedways include the efficient movement of pedestrians and automobiles, commercial advantages, and urban revitalization (Ibid.).

The more specific motivations behind Halifax's Cogswell, Barrington and Purdy's Wharf pedways are not known, but it is clear that the overarching goal of urban revitalization was a factor in the construction of the buildings they serve to connect. As discussed earlier, revitalization of the downtown was one of the motives behind Scotia Square, the Cogswell Interchange, Barrington Place and to a lesser extent, Purdy's Wharf, as seen by the support and encouragement from the city (Doehler, 2001). A similar motive has been observed in cities such as Dallas, Texas. Records indicate that construction of the pedway system in Dallas was motivated primarily by the need for urban revitalization in the city, and much of the discussion during its construction in the 1960s and 1970s was around the need to bring more people into the city's downtown (Terranova, 2009).

## CITY IMPACT

More importantly, literature discussing the impact of pedways is helpful in understanding the role of the three pedways in Halifax. Overall, construction of pedways in cities has produced mixed results that have implications for current pedways and those of the future. Studies have shown that pedways have an impact on social life, urban streetscapes, the economy and the image of a downtown (Allan, Cui & Lin, 2013).

Certain authors have identified convenience and efficiency in downtown areas as some of the positive benefits provided by pedways (Wan, 2007; Corbett, 2009). This is due in part to the ability of pedways to spread the movement of people over multiple layers, allowing for efficiencies in the use of space and function. In dense cities with crowded sidewalks, the availability of another level is an advantage that provides more options for movement between locations. For example, in Hong Kong's high-density central business district, pedway construction increased pedestrian mobility and decreased commuting times that had been restricted by automobile and pedestrian congestion along narrow city streets (Wan, 2007).



**FIGURE 14: HONG KONG'S PEDWAY SYSTEM HAS LOWERED PEDESTRIAN COMMUTING TIMES BY SPREADING OUT MOVEMENT OVER DIFFERENT LEVELS. SOURCE: WAN, 2007.**



**FIGURE 15: THE INDIANAPOLIS PEDWAY NETWORK LINKS MORE THAN 4,715 ROOMS AND IS AN APPEAL TO TOURISTS AND VISITORS TO THE CITY. SOURCE: ICCLOS, 2013.**

(Trade Centre Limited, 2013). Along the same thinking, Indianapolis's convention center website prominently displays the pedway connections between the center and 12 "premium" hotels that feature over 4,715 rooms- a clear marketing appeal for tourists and visitors to the area (ICCLOS, 2013).

However attractive, examples have shown that pedways encourage quick pedestrian flows, without opportunities for sitting or people watching, going against the ideals that some authors have described as best for public spaces (Robertson, 1993). However, this issue does contradict the earlier examples of efficiency, where the intention behind pedways in crowded cities like Hong Kong, was to speed up the time it took pedestrians to get from point A to point B (Wan, 2007).

Some cities have demonstrated that those lacking in the necessary population density to support both street level and pedway level retail have seen declines in street level retail and a "hollowing out" of their downtowns (Terranova, 2009). This was the case in Dallas, Texas where the highly efficient pedway system channeled people away from the streets, leaving only cars as the primary street level activity (Ibid.). However, other cities have demonstrated that activity can be supported on two separate levels. Halifax's population density ranks 13<sup>th</sup> out of 33 Census Metropolitan Areas in Canada and it is aiming for an increase in people living on the peninsula. However, it is important to raise questions about its ability to support activity on two levels (Fraser, 2013). Finally, Minneapolis is home to the biggest pedway



**FIGURE 16: NICOLLET MALL IN MINNEAPOLIS IS A THRIVING STREET DESPITE THE BUSY PEDWAY SYSTEM OVERHEAD. SOURCE: MINNEAPOLIS POST, 2011.**

system in the United States, yet has many areas that are home to both thriving street level retail and an above ground pedway network (Dillon, 1985). Minneapolis has also managed to maintain many of its anchor department stores downtown. Again, this example justifies the need for a closer examination of Halifax's pedway system at the local level to determine the effects in this context.

Finally, the issue of public space has been widely discussed in literature surrounding pedway systems. Some authors have suggested that the growth of pedways has led to a privatization of space, where active pedestrian spaces have become increasingly indoor and privately owned (Robertson, 1993). This has placed limits on the types of activities allowed in them; significantly restricting what can and cannot be done when compared to public spaces on the street. Additionally, in many pedway systems, the multitude of private owners and managers complicates understanding of the roles and codes of conduct required by people using them (Byers, 1998; Nemeth, 2009). However, advantages of private ownership have allowed some cities to save money on the costs that would potentially be involved in the construction and management of pedways (Nemeth, 2009).



**FIGURE 17: THE CODE OF CONDUCT FOR ALL THREE PEDWAYS IN THE STUDY AREA LIMITS ACTIVITIES LIKE LOITERING AND GATHERING IN GROUPS. SOURCE: AUTHOR, 2013.**

## SITE VISITS

With the physical and policy context understood, the next step in understanding the role of the Cogswell, Barrington and Purdy's Wharf pedways is to examine first-hand observations of their condition, use and regulations. While this is not a comprehensive study, it lays the groundwork for further study and aims to inform greater understanding of the Halifax context. For the following section, information was gathered on five separate occasions throughout the month of November 2013. Between November 7<sup>th</sup> and 30<sup>th</sup>, pictures and descriptive notes were taken of all three pedways between the hours of 11AM and 7PM. The mean temperature on all three days remained between 0.9 and 11.5 Celsius and conditions varied from sunny to light rain showers (Environment Canada, 2013). A summary of observations is provided in Table 1.



**Table 1- Summary of Site Visit Observations. Source: Author, 2013.**

<b>Observed Features</b>	<i>Cogswell</i>	<i>Barrington</i>	<i>Purdy's Wharf</i>
<b>Quality (appearance, building materials)</b>	-Concrete, glass and steel construction	-Glass and steel construction	-Glass and steel construction
<b>-From inside</b>	-High sunlight penetration	-Cross beams obstruct views somewhat	-Tinted glass
	-Aged construction	-Floor tiles look aged	-Cross beams do not feel as obstructive
			-Carpeting
<b>Exterior Profile (how much visual space it takes up)</b>	-High height over roadway makes it appear visually smaller	-Significant profile: partially blocks crosswalk lights	-Length is significant, but lower profile due to size of roadway
<b>Orientation (NS or EW)</b>	North-South	East-West	North/East-South/West
<b>Maintenance</b>	-Aged, but clean	-Aged, but fresh paint on cross-beams	-Well-maintained, clean
<b>Ownership</b>	Crombie REIT	Crombie REIT	Crombie REIT
<b>Age (approximate years)</b>	50	32	28
<b>Hours of Use</b>	24/7	24/7	24/7
<b>Code of Conduct?</b>	Yes (see graphic)	Yes (see graphic)	Yes (see graphic)
<b>Daytime Use</b>	Little	High	Moderate
<b>(Use after 6pm)</b>	Little	Moderate	Little
<b>Seating</b>	None	None	None
<b>Bathrooms</b>	None	None	Yes, but locked
<b>Street Access</b>	-None from Trademart side	-Scotia Square side: Poor	-Scotia Square side: Good
	-Scotia Square side: poor	-Barrington Place side: Good	-No access to Granville.
			-Upper Water Street: Poor
<b>Wheelchair accessibility</b>	None: stairs only	-Scotia Square side: Good (ramp)	-Barrington Place side: Mediocre (shabby elevator)
		-Barrington Place side: Mediocre (shabby elevator)	-Purdy's Wharf: Good (elevator)
<b>Complexity</b>	Extremely poor: Inconvenient elevator, walking across parking garage, stairways, little signage	Excellent-Straightforward entrance and exit	Excellent: Straightforward entrance and exits
<b>Nighttime Lighting</b>	Good	Good	Average
<b>Noise</b>	Medium noise level (passing traffic, echoing)	Medium noise level (echoing, pedestrians)	Quiet
<b>Climate control</b>	Unheated	Unheated	Unheated
<b>Other routes to destination?</b>	None- Onramp beneath crossing	Yes, crosswalk underneath	None- Freeway beneath crossing
<b>Surrounding vibrancy (pedestrians)</b>	Very few	Yes: Transit stops beneath	Very few to none
<b>Surrounding street retail</b>	None	Very few: Convenience store at entrance to Barrington Place side	Yes: Restaurants, café on Granville (inaccessible)
			No: No street retail on Lower Water St.

Additionally, information to confirm the regulations, ownership and age of the pedways was gathered from the Halifax Developments Customer Service Centre, the Senior Manager of Property and Leasing for GWL Realty Advisors (owners of Purdy's Wharf complex) and a long-time employee from the Delta Barrington.

## COGSWELL PEDWAY



**FIGURE 18: THE COGSWELL PEDWAY'S ACCESS IS LIMITED TO EMPLOYEES OF THE FORMER TRADEMART BUILDING ONLY. SOURCE: AUTHOR, 2013.**

use a key card to gain access.

The Cogswell Street pedway was built around 1973 (personal communication, Nov. 28, 2013), and is the oldest of the three pedways discussed in this report, connecting the former Trademart building and the Scotia Square parking garage. The Trademart building, which was the first completed portion of the Scotia Square development, is now named Brunswick Place and is home to the Provincial Department of Education and Early Childhood Development, a CIBC call centre and warehousing space (Crombie REIT, 2013). Since the building has transitioned from its original use as a wholesaler depot, the Northern entrance through the Cogswell pedway has become limited to employees only, who must

The Cogswell Street pedway is constructed primarily of concrete, glass and steel. The interior reveals a utilitarian design with a concrete floor covered with industrial carpeting, shatterproof windows and exposed piping and electrical along the ceiling. The exterior of the pedway appears to be showing its age, with concrete patching and some water spots, although the interior was clean with no visible trash or dirt. On one occasion, a maintenance employee was observed washing windows in the pedway, suggesting that it is well kept.

Gaining access to the Cogswell Street pedway is a challenging task and it is not wheelchair friendly. The following steps are required to find the pedway if traveling from the Scotia Square food court (a common meeting place):



**FIGURE 19: THE INTERIOR OF THE COGSWELL PEDWAY APPEARS AGED, BUT WELL-MAINTAINED. SOURCE: AUTHOR, 2013.**

1. Walk to the Northeast section of the mall towards the entrance to Cogswell Tower.
2. Take the parking garage elevator to the 5<sup>th</sup> floor (highest it will go).

3. In parking garage, walk to furthest Northwest corner (no signage).
4. Enter stairwell and walk up one flight of stairs.
5. Entrance to pedway is at the top of the stairwell.

There are no street-level retail shops located close to the Cogswell Street pedway and little pedestrian activity. The roadways below are comprised of on and off ramps leading to the Cogswell Interchange and the multiple levels of roadway dominate the surrounding landscape. Additionally, blank concrete walls of the Trademart building and Scotia Square parking garage both face towards the street.

## BARRINGTON PEDWAY

The Barrington Street pedway is one of the more pronounced pedways in Halifax, spanning one of the most recognized and historic streets in the city (HRM by Design, 2010). While not a component of the original Scotia Square design, it was

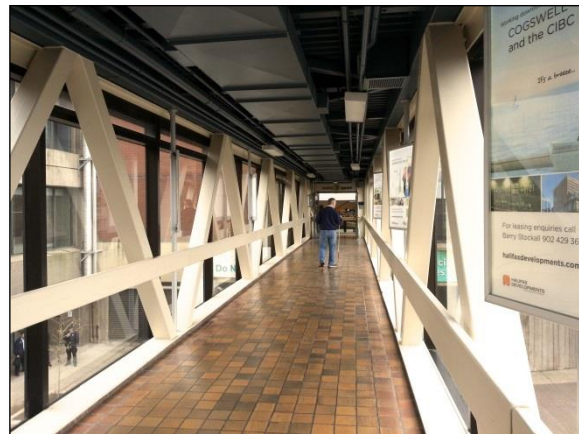


**FIGURE 20: BARRINGTON PLACE UNDER CONSTRUCTION DURING THE EARLY 1980S. SOURCE: SKYSCRAPER FORUM, 2010.**

added when the row housing on the opposite side of Barrington Street was demolished to make way for Barrington Place, a hotel and retail complex constructed during the early 1980s (personal communication, Nov 28, 2013). Halifax Developments currently

owns both properties, enabling hotel guests to travel seamlessly between the hotel side and the shops of Scotia Square. Today, Barrington Place is home to the Delta Barrington hotel and is undergoing renovations to convert many of the former retail spaces over to small businesses, government offices and a fitness club.

The Barrington Street pedway is constructed primarily of glass and steel and unlike the Cogswell pedway has no concrete pillars. It also features steel crossbeams that are noticeable from both the inside and outside. The interior construction reveals an aged brown tile floor, freshly painted beams and advertisements for available space in properties owned by Halifax Developments. Dark paint along the ceiling conceals the visible plumbing and electrical components better than that of the Cogswell pedway.



**FIGURE 21: THE INTERIOR OF THE BARRINGTON PEDWAY REVEALS A DIFFERENT CONSTRUCTION TECHNIQUE FROM THE COGSWELL PEDWAY. SOURCE: AUTHOR, 2013.**

The street level below the Barrington Street pedway is a busy pedestrian area despite the lack of street fronting retail, and features a lighted crosswalk and transit terminal. During all daytime periods of observation, both the crosswalk and the pedway were used heavily. However, the street level connection to the pedway on the West side of the street requires climbing a steep set of aged concrete stairs. The entrance to the pedway on the East side of the street is convenient, but wheelchair users must go all the way to the corner of Duke Street to enter either Barrington Place or Scotia Square in order to access the pedway, as both entrances directly below the pedway are inaccessible.

## PURDY'S WHARF PEDWAY

The Purdy's Wharf pedway is noticeably longer in length than the Barrington and Cogswell Street pedways, spanning one of the widest sections of the Cogswell Interchange.



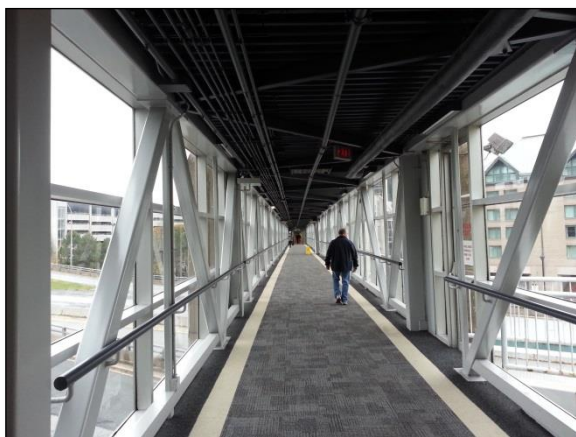
**FIGURE 22: THE PURDY'S WHARF PEDWAY IS THE LONGEST SPAN IN THE HALIFAX PEDWAY SYSTEM. SOURCE: AUTHOR, 2013.**

Constructed in 1985, it matches the reflective glass, steel and concrete design of the first phase of the Purdy's Wharf development (Mail Star, 1985), connecting what was formerly known as the Xerox Building on Upper Water Street, to Barrington Place on Barrington Street.

The interior of the pedway is more modern in appearance than the Cogswell and Barrington pedways. Commercial carpeting, sound insulated windows and light colours give the pedway a more appealing feel, and traffic passing

underneath was barely audible. Fewer pedestrians were observed when compared to the Barrington Street pedway, but it still appeared busy especially during the lunch hour. A significant number of the pedestrians appeared to be white-collar workers, and a higher proportion of males to females were evident.

The Purdy's Wharf pedway spans a number of streets including Granville, Hollis and Upper Water Street. Access from Barrington Street is navigated easily, with an entrance beneath the Barrington Street pedway. At the other end of the pedway, access to the street level at Upper Water Street is possible using a set of elevators. No street level retail is present on Upper



**FIGURE 23: LIGHT COLOURS AND LARGE WINDOWS ADD TO THE APPEAL OF THE PURDY'S WHARF PEDWAY. SOURCE: AUTHOR, 2013.**



Water Street, and as mentioned earlier, little is present on Barrington Street. However, the pedestrian-only section of Granville Street that runs directly beneath the pedway does support a number of retail shops and a university campus, but few pedestrians were observed there on all dates of observation. Until recently, relatively convenient access was possible to the Granville Street area through a set of escalators in Barrington Place but recent renovations removed them. Currently, a stairway closer to Duke Street provides access to the street level pedestrian area on Granville Street.

## ALL PEDWAYS

All three pedways discussed have many similarities, particularly because they are all owned and maintained by Halifax Developments, a Crombie REIT company. The code of conduct for all pedways is the same, with rules preventing loitering, soliciting, sleeping, swearing, and more. These rules are in keeping with the provincial guidelines for private property (personal communication, Nov. 21, 2013). Additionally, all of the pedways are open 24 hours a day, seven days a week and are monitored by a private security team (Crombie REIT, 2013).

Upon personal observation, the Barrington, Cogswell and Purdy's Wharf pedways do not have any provided seating, nor do they have bathrooms that are available for the public to use. All pedways are protected from wind and rain, however they are not heated. Finally, with some exceptions, all three pedways are situated in areas that generally lack street level vibrancy and retail.

## EVALUATION

Based on these observations, the following will evaluate the three pedways, using the S.W.O.T method of analysis.

## STRENGTHS

Halifax's Cogswell, Barrington and Purdy's Wharf pedways have a number of strengths related to their designs. All three provide protection from wind, rain and snow that are a common occurrence in Halifax. As one of the primary motivations in their construction, this feature has performed well (Allan, Cui & Lin, 2013). Secondly, the Purdy's Wharf pedway, and to a lesser degree, the Barrington and Cogswell pedways provide isolation from the noise of traffic beneath. This is a feature



FIGURE 24: THE COGSWELL PEDWAY PROVIDES A LINK ACROSS AN OTHERWISE INACCESSIBLE AREA. SOURCE: AUTHOR, 2013.

shown to be appealing to pedestrians (Zacharias, 2001). Finally, the provision of security and good lighting are also positive factors in the design of the Halifax pedways, as they are open 24 hours a day, 7 days a week.

Another positive benefit of the three pedways discussed is that they provide convenient linkages between areas that would otherwise be disconnected, encouraging pedestrian traffic between the connected buildings. The Purdy's Wharf pedway is especially critical, as it spans a significant stretch of highway that is not accessible to pedestrians otherwise. While smaller in size, the Cogswell pedway also provides access between two areas that are cut off from one another due to highway ramps beneath.

Finally, the private ownership of the three pedways is a benefit because the City of Halifax does not have to invest any time or money into their upkeep. The liability for what happens in them is also the responsibility of the owner, which is a positive aspect for the city, which is constantly struggling with budget pressures to provide basic services. This provision frees the city to concentrate its efforts on sidewalk clearance in the neighbourhood and maintenance in other areas.

## WEAKNESSES

The Cogswell, Barrington and Purdy's Wharf pedways have a number of drawbacks related



**FIGURE 25: THE PROFILE OF THE BARRINGTON PEDWAY BLOCKS THE PEDESTRIAN CROSSING LIGHTS WHEN APPROACHING FROM THE SOUTH. SOURCE: AUTHOR, 2013.**

to their design. First, the orientation of the Cogswell Street pedway blocks a sight line to the waterfront, going against recommendations in the Design Manual of HRM by Design (2010). Secondly, the quality of concrete and steel materials in the Cogswell and Barrington Street pedways appears to be less than “high-quality” and the transparency of the Purdy's Wharf pedway is limited by its reflective coating – features necessary for new pedways as mentioned in the Design Manual (Ibid.). Finally, the Design Manual condition suggesting that pedways have a low profile (Ibid.) is not met by the Barrington Street pedway, which significantly alters the view down the street and partially blocks the crosswalk lights for vehicles approaching from the South.

The three pedways also present a number of weaknesses related to their street access and complexity. During observations it was noted that the Cogswell pedway is not accessible at all from the North side of the street and therefore only serves the employees of the former Trademart building. The Barrington Street pedway provided good street access, and while each end of the Purdy's Wharf pedway was accessible to the street, its design ignores a potentially accessible pedestrian street (Granville Street) entirely. Recent renovations to



**FIGURE 26: REACHING THE COGSWELL PEDWAY INVOLVES NAVIGATING THE FIFTH FLOOR OF THE SCOTIA SQUARE PARKING LOT, WITH NO SIGNAGE PROVIDED. SOURCE: AUTHOR, 2013.**

Barrington Place have made access to Granville Street even more difficult. Wheelchair accessibility was also an issue for the Cogswell Street pedway, which was entirely inaccessible, while the most convenient entrance to both other pedways from Barrington Street was accessible only by stairs. Finally, while the Barrington and Purdy's Wharf pedways are relatively simple to locate and traverse, the Cogswell pedway was extremely difficult to find, rendering it inaccessible for a number of reasons.

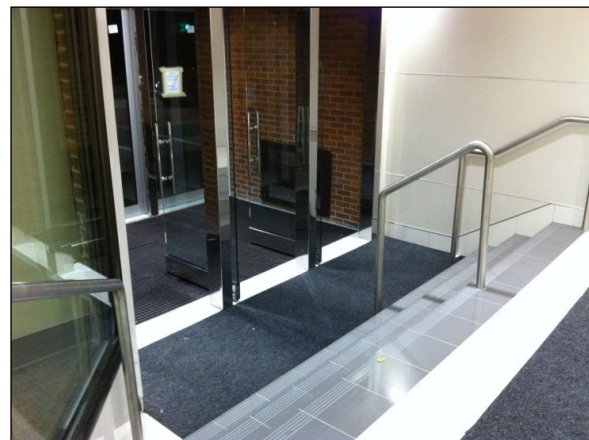
Private ownership was mentioned earlier as a positive benefit for the city, but it also provides some drawbacks. As discussed in the literature review (Robertson, 1993), the limitation of activities and enforcement of a code of conduct make the Barrington, Cogswell and Purdy's Wharf pedways as quasi-public spaces. While the city benefits from the cost of maintaining the pedways, pedestrians are confined to private spaces where they must abide by strict rules, especially in cases such as the Cogswell and Purdy's Wharf pedways, where no alternative routes exist.

Private ownership was mentioned earlier as a positive benefit for the city, but it also

The negative impact that pedways can potentially cause towards street level retail is worthy of mention, as it is one of the most frequently discussed problems in literature relating to pedways (Allan, Cui & Lin, 2013). In the case of the Cogswell, Barrington and Purdy's Wharf pedways in Halifax, this report cannot conclude whether or not there is any effect on street level retail due to time and research limitations. Additionally, with the exception of the Granville Street area, there is a general lack of street level retail in the entire area due to its original design, preventing measurement or evaluation in this regard, from taking place.

## OPPORTUNITIES

Opportunities for the Barrington, Cogswell and Purdy's Wharf pedways are limited to specific developments as mentioned in HRM by Design. However, future developments within the Cogswell Interchange redevelopment that meet the conditions of the Design Manual and will not impact street level retail establishments negatively may be prospects for the expansion of the existing pedway system. Additionally, enhancements to the design and function of all three pedways could



**FIGURE 27: THE ADDITION OF A WHEELCHAIR RAMP AT THE ENTRANCE TO THE BARRINGTON PEDWAY WOULD DRAMATICALLY INCREASE ACCESSIBILITY. SOURCE: AUTHOR, 2013.**

potentially be made to lessen the negative impacts discussed earlier including the provision of more accessible entrances and exits and a switch to more transparent glass.

## THREATS

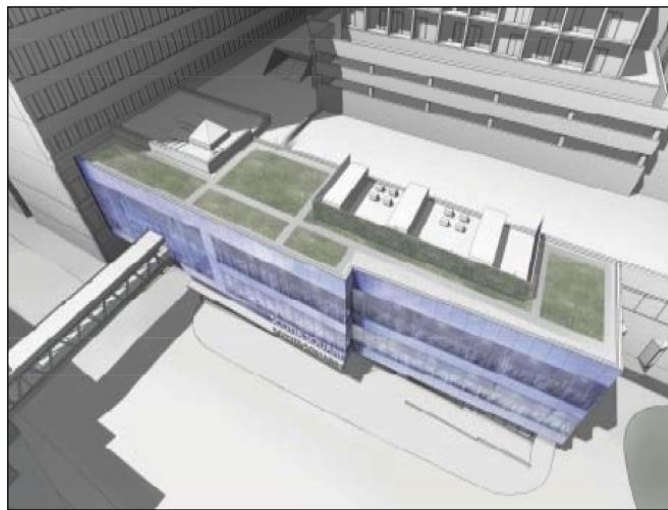
The pedways are not under any significant threats at this time. However, an important factor in the Cogswell pedway, and to a lesser extent, the Barrington pedway is their age. As the city determines the fate of the Cogswell Interchange, other infrastructure of the same age will likely face similar questions regarding the cost of replacement or maintenance. The redevelopment of the Cogswell Interchange could also dramatically alter the landscape in a way that could severely limit the usefulness of the pedways. The future of the area has not yet been decided, but will be discussed in further detail in the following section.

## FUTURE DEVELOPMENTS

As mentioned previously in this report, a number of changes are in store for the area surrounding Barrington, Cogswell and Hollis Streets. The redevelopment of the Cogswell Interchange is one of the most significant projects in the future of Halifax's downtown and it will dramatically alter the landscape. Furthermore, changes to Scotia Square will also change the streetscape of Barrington Street. With an understanding of the role that the three pedways played in the past and present, it is useful now to present the plans for the future, which may impact the pedways and the pedestrians who use them.

### SCOTIA SQUARE ADDITION

In February 2013, Crombie REIT submitted a proposal to expand the Scotia Square mall with a three level addition to the area fronting Barrington Street (HRM, 2013a). A street level pedestrian entrance, retail and glass façade are key aspects of the design that are substantial changes from the existing structure, and in its application, the company noted that the addition would improve street level activity and connectedness. The pedway across Barrington Street will remain in its current form despite the changes (Ibid.). In April



**FIGURE 28: THE ADDITION TO SCOTIA SQUARE AIMS TO INCREASE STREET LEVEL VIBRANCY WHILE MAINTAINING THE EXISTING PEDWAY ACROSS BARRINGTON STREET. SOURCE: CROMBIE REIT, 2013.**

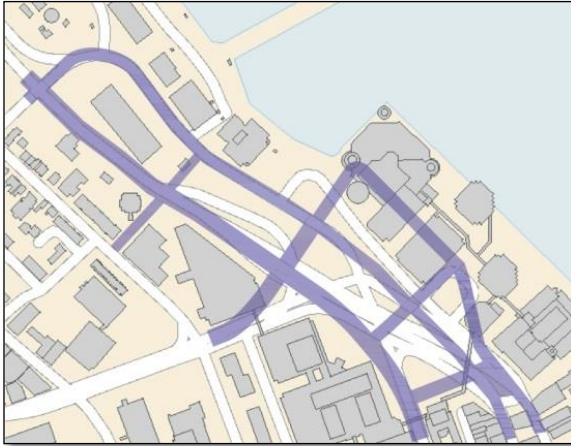
2013, the HRM Design Review Committee voted to approve a Substantive Site Plan, in accordance with the planning department's recommendations (HRM, 2013b).



As desired by the city in HRM by Design, the Scotia Square project presents an opportunity to improve the street level vibrancy and retail in the area, as there is currently a lack of both as noted in the observations. However, if this project signals a trend towards street level retail along the Northern portion of Barrington Street, the impact of the pedway could potentially become more influential. Further study is needed to determine how the Barrington Street pedway might positively or negatively affect a change of this sort.

## COGSWELL INTERCHANGE

Earlier discussions in this report have alluded to a major redevelopment of the Cogswell Interchange area. With the failure to complete Harbour Drive and lower than expected traffic numbers since its creation, the interchange never truly fulfilled its intended purpose, and has been underutilized since its inception (Cantwell, 2004). Over the past few decades there have been increasing discussions in the municipality and wider community regarding the future of the site and how it can possibly be redeveloped.



**FIGURE 29: THE HRM BY DESIGN VISION FOR THE COGSWELL INTERCHANGE PROPOSES A NEW STREET LAYOUT THAT WOULD IMPROVE STREET-LEVEL MOBILITY BETWEEN THE LOCATIONS CURRENTLY SERVED BY PEDWAYS. SOURCE: HRM, 2012.**

The municipality commissioned reports in 2001 and 2004 to look at how the interchange was being used, and some alternative road networks to replace it

(HRM, 2012). During the process of establishing HRM by Design, the city formally voted to get rid of the structure in 2009 (Metro News, 2012). More recently in May 2013, the Strategic Urban Partnership (SUP) and the HRM Mayor's office held a community meeting to discuss ideas for the future of the site and solicit input from the public (SUP, 2013).

As mentioned in the Secondary Municipal Planning Strategy section of HRM by Design, the municipality's vision for the Cogswell area is to transform it into a mixed-use area of offices, commercial and residential uses, with retail uses at-grade (HRM by Design, 2010). Additionally, the strategy calls for a Cogswell Interchange Area Masterplan that will guide the redevelopment (Ibid.). This document will be key to understanding the future of all three pedways in the area, as it may shine light on whether the pedways that exist will be needed due to road reconfigurations, or if there will be opportunities to expand the network between new developments. As the process of redeveloping the Cogswell Interchange continues, the role of the Barrington, Cogswell and Purdy's Wharf pedways will be better understood.

## CONCLUSION

This research into the Barrington, Cogswell and Purdy's Wharf pedways presents a number of lessons learned, and opportunities for further study. First, while there is not a clear



**FIGURE 30: THE PEDWAYS PROVIDE IMPORTANT LINKAGES BETWEEN MAJOR DEVELOPMENTS AND PROTECTION FROM THE WEATHER, BUT WITH ANTICIPATED CHANGES TO THE SURROUNDING LANDSCAPE, THEIR FUTURE REMAINS UNCLEAR. SOURCE: AUTHOR, 2013.**

consensus on the overall cost or benefits of the pedways, a number of aspects provide benefits to the city. The three pedways discussed provide protection from a Halifax climate that can often be cold and uncomfortable for pedestrians walking at street level. Secondly, the ownership structure of the pedways leaves the construction and maintenance of them to the private sector, freeing the city to manage other priorities. Finally, the pedways provide a major convenience to pedestrians, especially where there are no alternative routes between the buildings they connect.

The pedways do have some drawbacks that may have implications for the future of the Cogswell redevelopment area. The city's intentions to increase the street level retail and pedestrian vibrancy in the area could be inhibited by the pedways if the density in the area cannot support two levels of activity. Any expansions in the area should be considered and studied carefully. Additionally, while the city benefits from private ownership of the pedways, the resulting restrictions on their use may warrant ensuring that alternative, fully-public and accessible routes are available to pedestrians in the future.

The Barrington, Cogswell and Purdy's Wharf pedways function well overall, but small changes could provide enhancements for pedestrians. Evidence suggests that improvements to the accessibility, signage and appearance of the pedways would encourage more pedestrian use, especially with regard to the Cogswell



**FIGURE 31: STUDIES EXAMINING THE IMPACT OF PEDWAYS ON AREAS SUCH AS THE UNDERUTILIZED GRANVILLE STREET AREA WOULD PROVIDE VALUABLE INFORMATION FOR MAKING DECISIONS ABOUT THE FUTURE OF THE PEDWAYS. SOURCE: AUTHOR, 2013.**

pedway, which could most benefit from these improvements. As a result, these enhancements to the existing structures would bring the pedways closer to meeting the current guidelines of the requirements outlined in HRM by Design.

While this report has provided an evaluation of the current use of pedways in Halifax, and provided an understanding of the strengths, weaknesses and alluded to potential impacts of the Barrington, Cogswell and Purdy's Wharf pedways, opportunities for further study should be explored. Evaluations of pedestrian movement within the system would provide a deeper understanding of how many, who and when people are using it. Furthermore, specific impact assessments of the Purdy's Wharf pedway on the street level retail on Granville Street would aid in understanding the future implications of the pedways on new developments that are part of the Cogswell Interchange redevelopment project.

Questions remain about the future of the Barrington, Cogswell and Purdy's Wharf pedways, but their place in the past and present is clear. They play an important role in the provision of weather-protected and convenient passage between major developments in Halifax's downtown and are most are well-used as a result. However, evidence from other cities and observations on this system suggest that there are drawbacks to their use, and the municipality should carefully consider any future expansions by investing in further impact assessments that consider local conditions. If the continuance of the current pedways and an increase in street level vibrancy is desired, a balance must be struck to ensure that both objectives are achieved in a sustainable fashion.

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