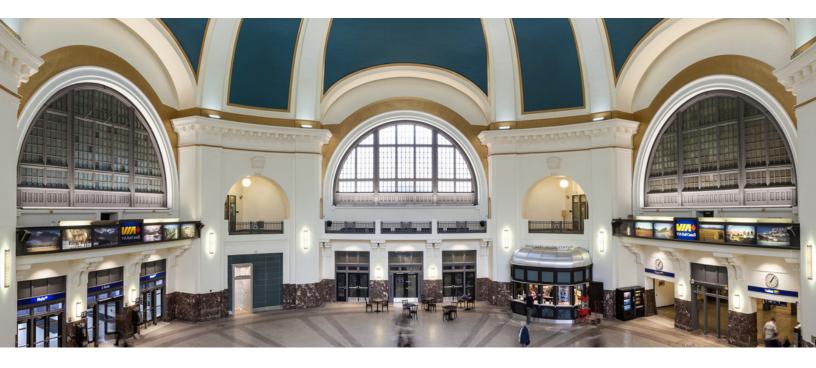
VIA Rail Union Station: Urban Planning for a Station at a Nexus

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Abstract

Heritage Planning Universal Design Connectivity When Union Station opened in 1912, the Manitoba Free Press called it "the most modern railway terminal in the world." Built between 1908 and 1911, Union Station is a monument to Winnipeg's boom years in the early 20th century. Now, more than a century after the building opened, BridgmanCollaborative Architecture has completed a \$6.5 million renovation of Union Station and its surroundings, making it a symbol of Winnipeg's 21st century rebirth.

This Case-in-Point project examines the political, planning, and architectural considerations that went in to the redevelopment of this historic building. It also explores changes to the pedestrian realm that have transformed Union Station's role as a nexus: a place that binds other places together through a series of connections.

The project will captures the pulse of the planning practice today by answering these questions: What were the goals and outcomes of the project? How did urban planning, architecture, and heritage preservation intersect for the project vision? And, most importantly, what were the lessons learned in the redevelopment of this Winnipeg landmark?

Background

Heritage Restoration

Union Station is a classified National Historic Site due to the quality of its design and its significance in Winnipeg's history. When architects Warren and Wetmore-best known for their work on New York's Grand Central Station-released their plans for Winnipeg's Union Station in 1908, an article in Construction magazine declared, "The great significance attached to this huge enterprise cannot be overestimated. It marks a history making epoch in the growth of our western country" (Matheson, 1908, p. 40).

existing condition of characterdefining elements to determine the appropriate intervention needed." Character-defining elements can include the "materials, forms, location, spatial configurations, uses, and cultural associations that contribute to the heritage value of an historic place" (Government of Canada et. al., 2010, p. 5).

Union Station features characterdefining elements from each of these categories. Warren and Wetmore designed Union Station in a monumental style worthy of the building's prominent location at the end of Broadway Avenue, western Canada's first grand boulevard.

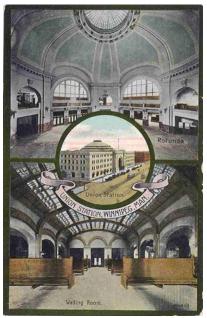


Above: Union Station Front Entrance (Leung, 1975)

Due to its status as a National Historic Site, Parks Canada was responsible for approving any restoration plans. Parks Canada requires restoration projects on historic sites to follow the Government of Canada's Standards and Guidelines for the Conservation of Historic Places in Canada and, in this case, the regulations in the Canada Transportation Act.

According to these standards, projects must first "evaluate the

Visitors entered the building "from Main street beneath a great stone arch, which has massive stone columns" (Schofield, 1911, p. 462). From there, people would move east into one of Winnipeg's most remarkable rooms: the Union Station rotunda. The room featured "great arched windows on all four sides, surmounted by a massive dome 90 ft. in diameter and rising 93 ft. above the level of Main street" (Schofield, 1911, p. 462).



Above: Union Station postcard c. 1911 (The Valentine & Sons Publishing Co.)

Wins Bridgman, the project's lead architect, says, "The purpose of this room was to be as bright and open to the world as possible. So, the oculus in the dome was glass and the four round windows were glass. When you would come into this room, there was this sense that you could see the sky and you could see all four directions. You could go anywhere in Canada. This was a place of possibility; the windows told you that story." Before boarding the trains for these other parts of Canada, ticketholders would have to walk down a slope to wait in the passenger area, which was located a few feet below the level of the lobby. This design allowed the trains to run overhead on the floor above, which was supported by a row of massive steel columns.

The architects on Canadian heritage restoration projects are required to protect the characterdefining elements of a building (like the ones described above) by "adopting an approach calling for minimal intervention," (Government of Canada et. al., 2010, p. 22). However, minimizing intervention becomes a challenge in projects like the Union Station, which integrates heritage architecture with modern planning standards for accessibility and connectivity.

Universal Design

One of the main reasons VIA Rail initiated the major renovation project was to bring the building up to code with the requirements for the transportation of persons with disabilities found in the Canada Transportation Act. These regulations require the elimination of "undue obstacles ... to the mobility of persons with disabilities" (Canada Transportation Act, Part V, s. 170).

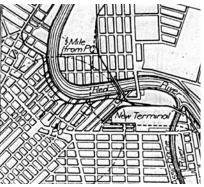
The elimination of undue barriers is central to the concept of universal design, which aims to create inclusive environments that offer tremendous value to the maximum number of users.

According to the City of Winnipeg Universal Design Guiding Principles (2006), universal design "is about putting people first, providing the same opportunity for accessing City of Winnipeg services, landscapes, buildings and information to young and old, with or without disabilities regardless of life circumstances" (City of Winnipeg, 2006, p. 2).

Facts & Outcomes

The major renovation project of Union Station started in 2012 and finished in May 2014. For this project, BridgmanCollaborative Architecture worked closely with Parks Canada's Shelley Bruce, a Built Heritage Conservation Advisor with more than 30 years in heritage architecture experience. VIA Rail also selected Michael Woelcke, General Manager of VIA's Regional Services, to serve as their representative on the project team.

The team met in Union Station's rotunda to discuss the most essential parts of the building that would require renovation during the project. They decided to commit to several significant alterations to the west entrance vestibule, the rotunda, the passenger area, the train shed, and the east entrance.

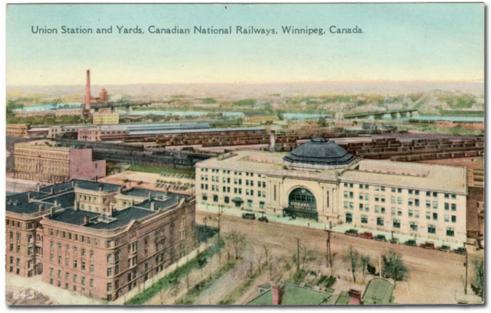


Above: Union Station and Surrounding Area (Matheson, 1908, p. 41)

These alterations focused on improving access, light, activity, and connectivity.

Access

In the original design of Union Station, there were no elevators from the passenger area to the train tracks. This meant that a ticketholder in a wheelchair would have to be carried up the stairs to board a train. Accessibility thus became a key reason why VIA Rail needed to renovate Union Station.



Above: Union Station postcard c. 1920 (McInnes, Manitoba Historical Society)

The primary task of the design team was to install an elevator in the passenger thoroughfare that would connect to the track level above. Once these plans were complete, the team discussed other ways to make the centuryold more accessible. Architect Wins Bridgman says, "It is of utmost importance that we reinterpret our historic buildings with the values of our society. Our values are inclusivity."

When planning for universal design improvements to Union Station, the project team considered more than just usability. They followed the Canadian Transportation Agency's Guide for Passenger Terminal Accessibility, which says, "Designers must also consider economic, cultural, gender, and environmental concerns in their design processes. These principles offer designers guidance to better integrate features that meet the needs of as many users as possible" (Canadian Transportation Agency, 2007, p. 7).

Interestingly, toilets became the most important focus in making Union Station an inclusive place. The project designs included four new washrooms. They placed two of these washrooms in the rotunda, where people can access them twenty-four hours a day, seven days a week. They built two other washrooms in the passenger waiting area; these are universal toilet rooms, which are gender-neutral and have automatic doors that are designed for wheelchair access. "It's really a delicate thing to say we are able to provide safe toilets in a public space that is open 24 hours a day," says architect Wins Bridgman. "We wanted to be able to create both privacy and—because it's also a public place—to let people know they have access to a washroom that is safe."

To do this, they designed the entrance to the washrooms in the rotunda without a main door. The team transformed the lighting in the passenger tunnel in order to make it brighter and more welcoming to pass through. They also completed an ambitious upgrade to the rotunda.

Over time, many alterations had taken place that changed the original intent of the rotunda. The windows that once filled the rotunda with light had been gradually blocked up as offices expanded on Union Station's second and third floors.



Above: The barrier-free washrooms in the rotunda are open year-round (Kroeker, 2015)

This means that the public cannot be locked out of these washrooms, making this an example of true barrier-free access. It also means that washroom users are always within the hearing range of the security guard and other visitors in the rotunda if they should ever feel the need to call for help.

Light

The team identified lighting improvements as another way to upgrade the safety and quality of the building's public space. Bringing back a quality of light to the room required an innovative design. "Instead of trying to imitate what the window was," says architect Wins Bridgman, "we created a high level of light to give the illusion that the oculus is floating above the rotunda—in the sense that it could just pop off—that anything could happen. So it was an interpretation in an attempt to get back to the initial characteristic." "For me, the planning key was helping people to understand where they are in this little piece of the city that's so important to our history."

- Marcella Poirier, BridgmanCollaborative Architecture

Activity

With the original emphasis on light restored, the design team turned to other means of adding life to the building. "That's the key element of any restoration," says BridgmanCollaborative's planner, Marcella Poirier. "How do we make it alive again?" public events are starting to occur in as it becomes successful again as a walk through. It is a pathway, but it's also a space where someone will stop and play the violin now, where someone will have a conference or a wedding: where something will occur."



Above: The Rotunda on New Year's Day (L.B. Foote, 1924)

The majority of the team's work took place in the rotunda. To add life to this area, they thought of the rotunda like an Italian piazza. One of the things that makes these places great, Wins Bridgman notes, is that they have the potential for many different kinds of uses.

Bridgman says, "Multiple meanings in any space is really what gives the depth—the quality that we all share a space, that we all live through spaces in our memories at different times in our lives. The rotunda is a space that To encourage this multiplicity of uses, the design team lined the halls of the passenger area with historic images by Winnipeg photographer L.B. Foote showing how people used the building in its early days. "Whether it be a New Year's party or the first impressions of the prairies," Bridgman notes, "this is a moment of discovery."

This moment of discovery has taken on new meaning in the 21st century; people now receive their Canadian citizenship at Union Station. The celebration takes place in the rotunda. "You can sit in this rotunda and watch people become new Canadians," Poirier explains. "It's exciting to see people experiencing this space for the first time."

Connectivity

One of the other new functions of the rotunda is that it acts like a true pedestrian thoroughfare for the first time in its history. In the original design of Union Station, pedestrians had no access to leave the station through the east side of the building; this led to the private grounds of the railway companies' team yards. In 1989, the railway yards were redeveloped into The Forks National Historic Site, which has become Winnipeg's premier tourist attraction and outdoor public space. For VIA Rail, it was imperative that the new renovation would allow pedestrians to pass from Main Street through Union Station to The Forks.

Poirier describes this approach: "I was listening to the client and he was describing people coming off of the train, sometimes having a delay. They would go to the Forks and couldn't find their way back to Union Station. For me, the planning key was helping people to understand where they are in this little piece of the city that's so important to our history. No matter what changes happen over time at The Forks site, it is essential to know that you are not lost. You are not an outsider. You can move through."

Because Union Station is never closed, the pathway through the building is really an indoor public street. Bridgman considers the Union Station pedestrian corridor in the same way that he looks at "streets or public spaces around the world that are covered and become part of a building." He says, "Certainly, this overall building has its private sectors and places where people work. But the part which is public and almost a path is the area in the rotunda and in the passenger tunnel. Therefore it acts like a street and like a public place."

To improve the wayfinding to Union Station from the Forks. the team designed a new canopy outside the building's east entrance. The canopy features bold letters that read "VIA Rail Gare Union Station," welcoming visitors in both of Canada's national languages. This entrance is visible from the Esplanade Riel pedestrian bridge that leads to the French neighbourhood of St. Boniface. A footpath runs in a straight line from the bridge past the Canadian Museum of Human Rights towards Union Station. This emphasizes the axial eastwest route that runs through the station's pedestrian tunnel right through to Broadway Avenue.

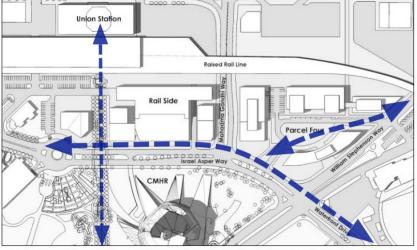
Conclusions & Lessons Learned

These planning and design considerations have helped Union Station reimagine its role as a nexus for Winnipeg in the 21st century. The modifications to the building preserve its heritage elements while incorporating universal design that makes Union Station "a comfortable place for everyone to live, visit, do business and play in" (City of Winnipeg, 2006, p. 2).

Of course, there are practical realities that limited some of the ideal goals of the project.

or lock one of the universal toilet rooms in the passenger area so that they cannot be used by a person in need. But it also means that people are allowed to use the space in spontaneous ways—like stopping to play the violin—that provide a public good.

"That's why the station at a nexus is important," says Poirier, "because it puts its finger on one



Strengthened Connections to Portage & Main, Exchange District, St. Boniface, Broadway (Forks Renewal Corporation, 2013, p. 21)

Originally, the project team wanted to put some light behind the east and west windows in the rotunda to contribute to the lighting in the room. However, this wasn't feasible in the budget. The team compromised by installing some exterior lighting, which shines onto the north and southfacing windows.

One of the other important lessons the team learned is that once construction is complete, they can no longer control how the space is used. This means that people might move garbage cans in front of a counter designed for wheelchair access moment in a series of multiple moments."

This moment may prove to be the most significant one in Union Station's long history. The renovations have allowed people in the building to connect in ways that were not possible before.

Wins Bridgman believes this has been the key to reinterpreting Union Station. "In planning for a nexus," he says, "we are always looking at how much people can see of each other."







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Above: Union Station's East Entrance viewed from The Forks (Kroeker, 2015) Top Left: Design sketches for Union Station renovations (BridgmanCollaborative, 2014)