

espace
NUE

Final Area Plan for the Redesign of ByWard Market





ByWard Market

December 20, 2021

Marchés d'Ottawa Markets
55 ByWard Market Square
Ottawa, ON
K1N 9C3
Canada



Dear Zach Dayler

Espace N.U.E. is pleased to present its final area plan for the ByWard Market. This plan is the result of three months of site visits, interviews, previous plan studies reviews, statistical analysis, case study analysis, and graphic analysis and design work. It should be noted that our work inserts itself in a long line of previous recommendations that have already been made for the area. For that reason, we have paid particular attention to the originality of our work. Our area plan, in other words, should be used to complement existing studies that have been conducted on the site.

You will find the plan is divided into four chapters. First, an introduction which describes the site, our mandate and our methodology. Second, our site analysis which outlines the major challenges and opportunities at hand in the site. This analysis serves to support our last chapter, the proposed site design, which presents our design vision in response to our analysis. Finally, the area plan ends with our conclusion, which highlights the key points of design, suggests an alternative design idea we considered for the destination building and provides a table of priorities, which should help kick start future implementation discussions.

Sincerely,

Dominique Boulet, Adrien Gignac-Eddy,
Daniela Rodriguez Martinez & Noah Wu

Espace Novateur et Urbain pour l'Environnement INC.

Executive Summary

The recent approval of ByWard Market's Public Realm Plan (PRP) on 27 January 2021, which will be accompanied by a 129-million-dollar investment in the area, represents an enormous opportunity for the area and the city of Ottawa. It is within this context that Marchés d'Ottawa Markets contracted our team, Espace N.U.E., to approach the revisioning of the area from an outsider's perspective and to come up with a creative vision for the site. This vision is meant to complement the much more thorough Public Realm Plan, on which it builds.

Our work has consisted of a series of site visits, stakeholder interviews, literature reviews, statistical and visual analyses, as well as designs in the form of maps, sketches, and abstract conceptualizations. The result of this work can be found in this report, divided into two core sections: a situational analysis and a proposed site design. The vision encompasses the area, which is bounded by Sussex Drive to the west, Clarence Street to the North, Dalhousie Street to the east, and George Street to the South. Yet, ByWard Market is also a building, located at 55 ByWard Market Square Street, which serves as the area's centrepiece and main attraction. Finally, the ByWard Market Neighbourhood refers to the even larger boundaries encompassed by that encompasses Rideau Street to the South, King Edward Avenue to the East, Sussex Drive to the West, and Sussex Drive to the North, useful distinction to consider, particularly in the analysis portion of this report.

Our situational analysis of the site revealed ByWard Market's unique potential within Ottawa. The area's rich and diverse history, stunning built environment, and central location enabling connections with the entire city, particularly stood out. Our analysis also revealed this potential is, for the most part, unrealized. The area's rich history of diversity, struggle, and innovation is largely ignored. Its built heritage has suffered from the absence of a cohesive vision and significant scarring: large boulevards and highways cutting pedestrian access, the replacement of historic buildings with parking garages, and a general confusion about the site's purpose in relation to the rest of the city. Even ByWard Market's central location is not considered in the planning of the area. While most visitors access the area by public transit or active transport, most of the site is designed to facilitate access by car. Many parts of the site are, therefore, used as a parking lot for people not even accessing the market. In effect, this abundance of parking not only has no justification, but makes lively public space and public activation more difficult, killing the area's liveliness. While attempts at activation are being made, these are severely limited by the lack of public space in the area. Furthermore, there is a lack of creativity surrounding activation in the winter, meaning one of the most central locations of the city is not active year-round. Our concept for the site, therefore, centers around rewiring the site to better embody its central location and purpose as a destination within the city. Our main observations include:

1) The need to create more safe and accessible public space in order to make the area a destination

2) The need and opportunity to take usable space currently used by cars to arrive at this end

3) The need to ensure the site will be supported by a large community of base users in order to justify taking space away from cars and support the liveliness of the area.

4) The need to value the site's current and historical food orientation, and build on it in all future developments.

These findings led our team to develop three pillars of design for our vision: creating an experience, building diversity, emphasizing what is local. With these pillars, we have developed a series of interventions that can be summarized as:

- Two anchor buildings—revitalizing the 55 ByWard Market building and transforming 70 Clarence into a modular destination building: Our main interventions here include creating a lively produce market centred on local experiences relating to the buying and preparation of food. The destination will serve as a complementary use to the original market building by focusing on communal uses, food services, and retail.

- Pedestrianization of the area: York Street will become fully pedestrianized and serve as a key link and public space between the two anchor buildings. Full pedestrianization of William Street and ByWard Market Square Street will serve as additional links in the area and will create space for the market to expand on days in which that is needed. Fully pedestrianizing Clarence Street will give space to service retailers to expand into the street, as has already begun in the summer months. The transformation of George Street into a shared street will allow for the public space in front of the historical market building to be reinvigorated, all the while preserving vehicle access points for retailers and grocers in the market area.

- Enhancing pedestrian circulation: The addition of public space and pedestrian corridors will contribute greatly to pedestrian circulation, particularly through the added safety and freedom of movement, but also through the improved viewpoints. This category of interventions also includes creating a unique pedestrian experience by revitalizing the NCC courtyards. In terms of pedestrian connection to the rest of the city, this includes creative ways to draw pedestrians to the market, including through the expansion of existing popular leisure pathways in the city, so that they lead directly in the market area.

- Intentioned Winter Programming: The creation of added public space throughout the area will open many possibilities of experience building, allowing the area to become a destination. Programming needs to be organized accordingly for this to happen, attracting people from across the city. This category of interventions focuses solely on winter interventions, as it is the season that is currently the least busy in terms of both visitors and programming. Winter programming options discussed include various street furniture amenities, skating rink options that use the leisure paths, various public space activities, and year-round market building activations.

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1.1 Geographical Context

The ByWard Market is one of Ottawa's oldest and most notable sites. Located in the historical core, its rich heritage as a continuous site of trade is an important part of the greater story of the city. It is still the main area for trade and opportunity. At the same time, the ByWard Market has not benefited from cohesive planning to ensure its value is preserved and enhanced. This is now changing with the recent approval of the ByWard Market's Public Realm Plan on 27 January 2021, which will be accompanied by a 129-million-dollar investment in the area. This newfound excitement and investment in the ByWard Market is an enormous opportunity. It is an opportunity to create a market for future generations—a market that injects social and economic vitality to the area and tells a more inclusive story of Canada, of environmental stewardship, and of social justice. For this project, we refer to the ByWard Market with four main different boundaries, depending on the specific objectives and requirements

For instance, we look at the demographic composition of residents in seven adjacent census tracts to identify what kinds of services may be most demanded. The definitions of these geographical boundaries are listed below, and the main area of analysis is illustrated in *Figure 1*.

The four main areas we will refer to are:

1. The **ByWard Market building** is located at 55 ByWard Market Square. It acts as a focal point in the local urban fabric.
2. The **ByWard Market Area** or the **ByWard Market** is bounded by Sussex Drive to the west, Clarence Street to the North, Dalhousie Street to the east, and George Street to the South. This area provides a coherent commercial offerings centred around food and entertainment, and most pedestrian activities take place in this area.
3. The **ByWard Market Neighbourhood** is the surrounding area around the market that encompasses Rideau Street on the South, King-Edward Avenue on the East, Sussex Drive on the West, and Sussex Drive to the North. Saint-Patrick Street signals the border of the commercial section of this area.
4. The **Neighbouring Areas** encompasses the neighbourhoods surrounding the ByWard Market that is useful to take into account for various analyses of the ByWard Market Area.



Figure 1: The bounded area of analysis and the ByWard Market building

1.2 The Market Building and its Surrounding Spaces

The ByWard Market evokes two images, the market building itself and the intertwined public spaces around it. What we find particularly unique about the ByWard Market is that the majority of the activity occurs around the Market building and not in its interior space (*Figures 2 & 3*). We have observed that there are many important public spaces in between the stands and the surrounding streets.

Because of this, we wish to concentrate on improving the connection between the indoor and outdoor spaces on the periphery of the Market building. We would like to primarily focus on the activation of the surrounding areas with minor interventions to the building itself (*Figure 4*) that would further support the social communication that is already taking place between the stands and the street space.



Figure 2: View of the Market building

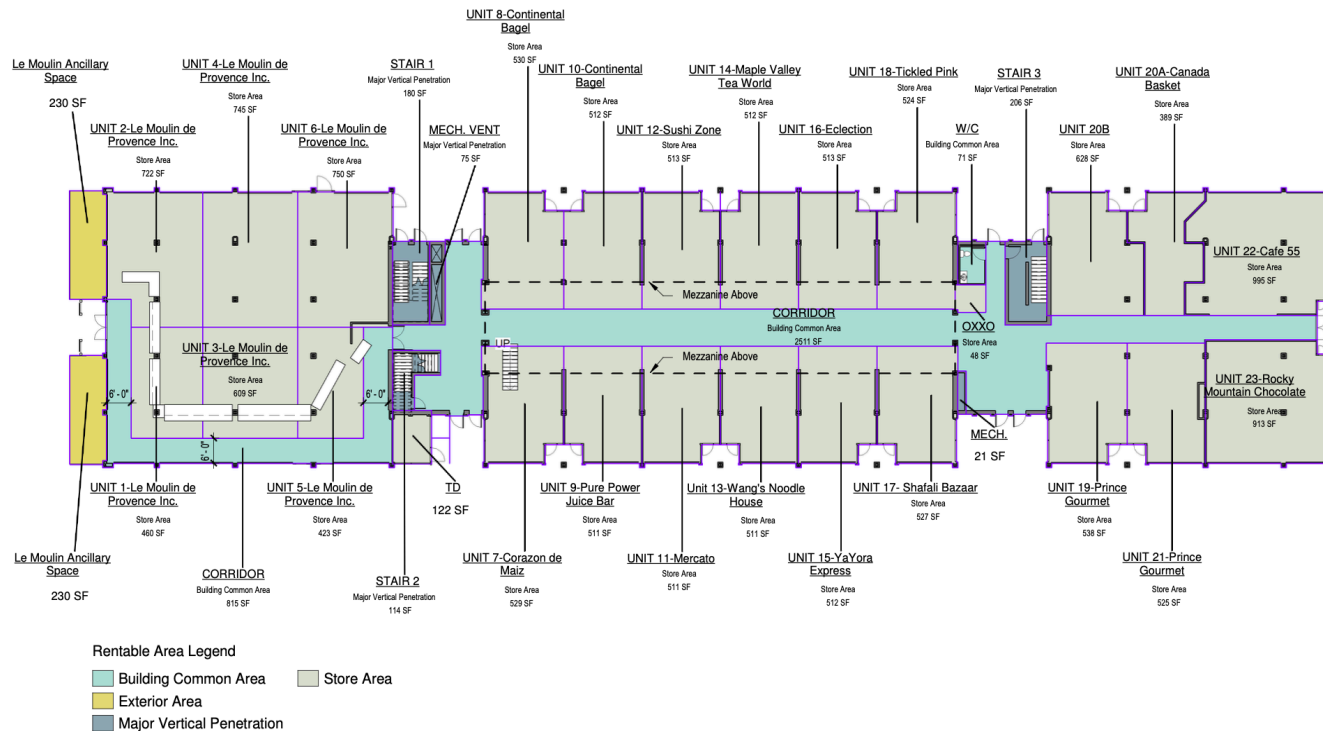


Figure 4: Floor plan of the ground-floor of the Market building with current tenants

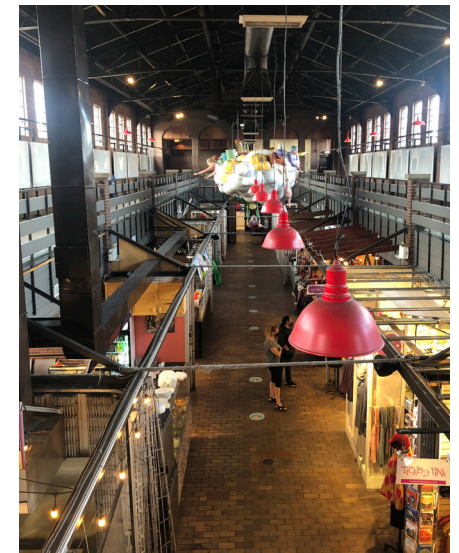


Figure 3: View of the interior of the ByWard Market building

1.3 Mandate & Methodology

With this project, Espace N.U.E. has looked to build on the Public Realm Plan and the momentum that currently exists for the reimagining of the ByWard Market area to suggest an **innovative, sustainable, and inclusive** plan that is designed for future generations. As part of the fulfillment of this mandate, Espace N.U.E. has:

1. Conducted three site visits in the area;
2. Interviewed stakeholders;
3. Consulted previous planning documents for the area;
4. Conducted an extensive literature review of the area;
5. Conducted statistical analyses using census data;
6. Created analysis and design maps;
7. Created sketches and visual renders of design proposals

These outputs were divided throughout three phases in the project:

Phase 1: Background Research, Situational Analysis, and Comparative Case Studies

Phase 2: Propose Potential Activation Strategies and Initiatives

Phase 3: Development of a Final Report and Presentation

The project has also included three deliverables, spread throughout phase 1 and 3:

Phase 1: A situational analysis report

Phase 2: A public presentation of the vision to the client and important stakeholders

Phase 3: A final area plan

This report is the last deliverable of our project, and the culmination of all our work. It includes two core chapters: a site analysis and site design proposal. The site analysis outlines all the important analysis considerations that we uncovered throughout our work. Our site proposal uses the results of this analysis to develop a coherent vision for the area, offering a way forward to reinvigorate the site.



Figure 5: View of the exterior of the ByWard Market building from George Street



Figure 6: View of ByWard Market Street



ByWard Market

2.1 Summary of Public Realm Plan Reports

As was previously mentioned, this proposal is partly founded in the Public Realm Plan that has been approved by the City of Ottawa. This Plan is based off of Public Life Studies that were conducted during summer, fall and winter from 2018-2019, including information about travel counts, social activities, and so on. The geographic area considered is much larger than our boundary of the ByWard Market.

PUBLIC REALM PLAN (PRP)

MARKET USERS

- The market is more popular on weekends
- People do not linger in most public spaces because these spaces lack “stickiness”
- There are low levels of cycling traffic
- People have been observed walking on roads
- Children are underrepresented users

MARKET USE AND ACCESS

- Three primary activities in the area in all seasons in order of frequency: standing, sitting, café/patio sitting
- 75% of respondents visit the market to shop and/or eat
- 80% of respondents use active transportation to access the area
- ByWard Market is one of the most popular tourist attractions among respondents, and among them 81% respondents were local

WINTER USES

- 22% decline of users travelling through the space on weekdays in winter compared to fall.
- 34% decline of users travelling through the space on weekends in winter compared to fall.
- 53% decline in activities taking place on winter weekdays compared to fall
- 59% decline in activities taking place on winter weekends compared to fall
- Important locations effected: Colonel By and Rideau underpass, Clarence St. near Dalhousie St., and York and Willam Street Plaza

The Recommendation Report was prepared by The Planning Partnership, Parsons, 8 80 Cities and Gabriel Mackinnon to complement information presented in the Public Realm Plan. The summary of the Public Realm Plan and its Recommendation Report is provided in *Figure 7* and *Figure 8*.

PRP RECOMMENDATION REPORT

DESIGN VISION

- Pedestrian-priority streets and public spaces – celebrate history and create space for new stories
- Food market as central feature
- York and George Streets facilitate movement and offer opportunities to gather/linger
- Street network supports needs for residents and visitors
- District is greened with trees

PRINCIPLES

- Create a bold and memorable public environment to celebrate the Market and the area’s unique character
- Pedestrians first
- Enhance the Visitor Experience
- Beautify the Market
- Welcome Everyone
- Support Businesses
- Balance the needs of the residents/tourists and businesses/residents

ACTIVATION STRATEGIES

- Increase wayfinding
- Pedestrian space, active transportation in all forms
- High quality infrastructure
- Flexible spaces and furniture (to be used for different purposes)
- Providing accessible public washrooms
- Retail/patio zones
- Increase public art
- Cohesive paving strategy
- Greening of the area – 30% tree canopy on all streets
- Creation of a destination building at 70 Clarence St.
- Heritage interpretation strategy

Figure 7: Summary of Public Realm Plan

Figure 8: Summary of Public Realm Plan Recommendation Report

2.2 History and Land Use

The story of the ByWard market district is one of diversity, growth, struggle and resilience. Located on unceded Algonquin territory, the market and surrounding street grid were first laid out by Colonel John By during the construction of the Rideau canal between 1826 and 1832 (Figure 9). From its inception, the Rideau canal created two geographically divided neighbourhoods. On the western side of the canal, Upper Town was reserved for the residences of the town's elites and its military institutions. On the eastern side, Lowertown was reserved for commercial and industrial activity, and housed the town's working class.

The location of ByWard market at the time of its founding was incredibly strategic, and instrumental to the market's rapid growth as a centre for trade, culture, and recreation. Just across the Ottawa river in La Reserve de Hull, an indigenous settlement belonging to the Community of Nations (Algonquin, Nipissing, Mohawk) had been established since at least the end of the fur wars in 1701 (Figure 10). La reserve de Hull was culturally and economically connected to the Lake of Two Mountains reserve (near Montreal), as well as the entire Ottawa River valley. Algonquin, Nipissing, and Mohawk hunters and voyageurs in the Ottawa River Valley would also make their way to ByWard Market to trade furs. These cultural and economic connections inserted the ByWard market into a larger trade network incredibly early on.



Figure 10: Map of the Ottawa River Valley drawn by Champlain

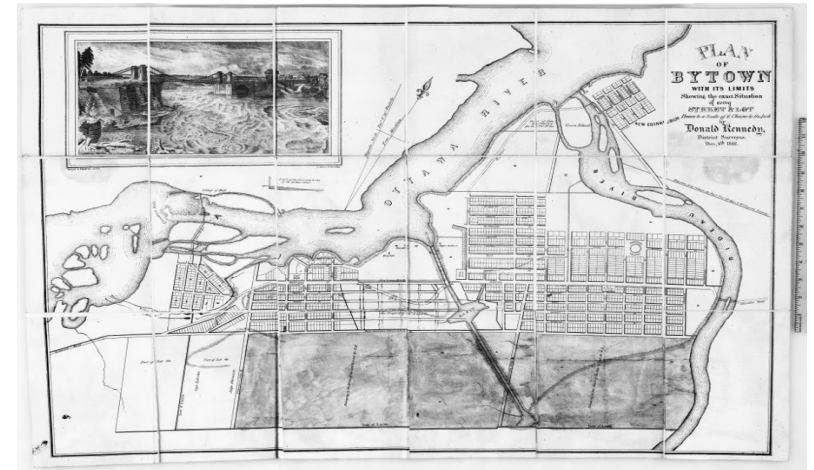


Figure 9: Plan of Bytown with Lowertown to the east and Upper Town to the west, 1842

2.2.1 A burgeoning Lumber industry

As the 19th century progressed, the lumber industry gained dominance in the regional commercial activities. The felling of wood in the valley had devastating impacts on the environment, and therefore, indigenous hunting and trapping activities—forcing many to find alternative sources of revenue. The lumber industry attracted many indigenous labourers, as well as French-Canadians. Many French-Canadians settled around the ByWard market district, the industry's hub, while indigenous residents maintained a distinct neighbourhood in La Reserve de Hull. Irish Canadians also settled in the area after having immigrated in mass to work on the construction of the Rideau canal. After the completion of the canal in 1832, Irish and French Canadians often came into direct conflict, competing for access to jobs in the lumber industry. This culminated in what became known as the Shiner's Wars between 1835 and 1845, a conflict which particularly marked the area.



2.2.2 Ottawa: a capital city

While there is no record of Algonquin involvement in changing the city's name from Bytown to Ottawa in 1855, the name "Ottawa" does come from the Algonquin word "adawa," meaning "to trade". In that sense, ByWard Market's character embodies the city's raison d'être and history. This character remained as Ottawa became the capital city of Canada, with the ByWard Market maintaining its role as a centre for trade and commerce in the city. This did, however, play out differently as the lumber industry was gradually surpassed in importance by the growing importance of government, education, and service industries. The market district continued to be a place of opportunity for newcomers, many of which worked the food and service industries. Jewish immigrants established a particularly large and prominent presence in the area, specifically in the eastern portion of Lowertown.

2.2.3 Scarring in the Urban Fabric

By the post-war years, however, the area's residential population began to decline. Many residents aspired to suburban lifestyles and left the downtown. The resulting urban blight opened the door to large infrastructure projects such as widening of roads for through automobile traffic. The widening of King Edward Avenue (*Figures 11 & 12*), for example, cut Lowertown in half and contributed to isolating the ByWard Market district from surrounding pedestrian traffic. The population flight also indirectly deteriorated historical housing, as these became less popular options to live in. This, along with development pressures, meant that when the area started to see a new influx of residents in the 1990s, much of the historical housing stock was destroyed rather than preserved. While the ByWard Market area did fare better in this regard than the eastern portion of Lowertown, this affected the entire area.



Figure 11 & Figure 12: View of King Edward Avenue in 1938 and again in 2013, showing how the avenue was enlarged to make way for automobiles

2.2.4 Land Use

While land use has evolved over time in the ByWard Market district, it is remarkable to notice the significant portions that have remained unchanged (*Figure 13*). This painting of Ottawa from 1895 shows the city and some of its land uses in detail. Of particular importance to us are the main market building (unchanged), and the secondary market building (currently a parking garage), which will become a destination building once the Public Realm Plan is implemented. We can also see the many commercial and industrial uses in the area—some of which have persisted to this day—as well as the still standing institutional buildings (i.e. Notre-Dame Cathedral Basilica). The most important evolution in land use has been the transformation of residential buildings into commercial buildings in the immediate vicinity of the market area, as well as the construction of much higher density buildings slightly further from the market.

In the today's land use of the market, retail and commerce are the most popular and Parking is the third most popular use of space in the area. The core of the ByWard Market is mainly commercial whereas residential areas are peripheral to the shops and restaurants in the area, this configuration facilitates the coexistence of diverse activities.



Figure 13: Land Use Map from 1895, historic market building is indicated

2.3 Environmental Analysis

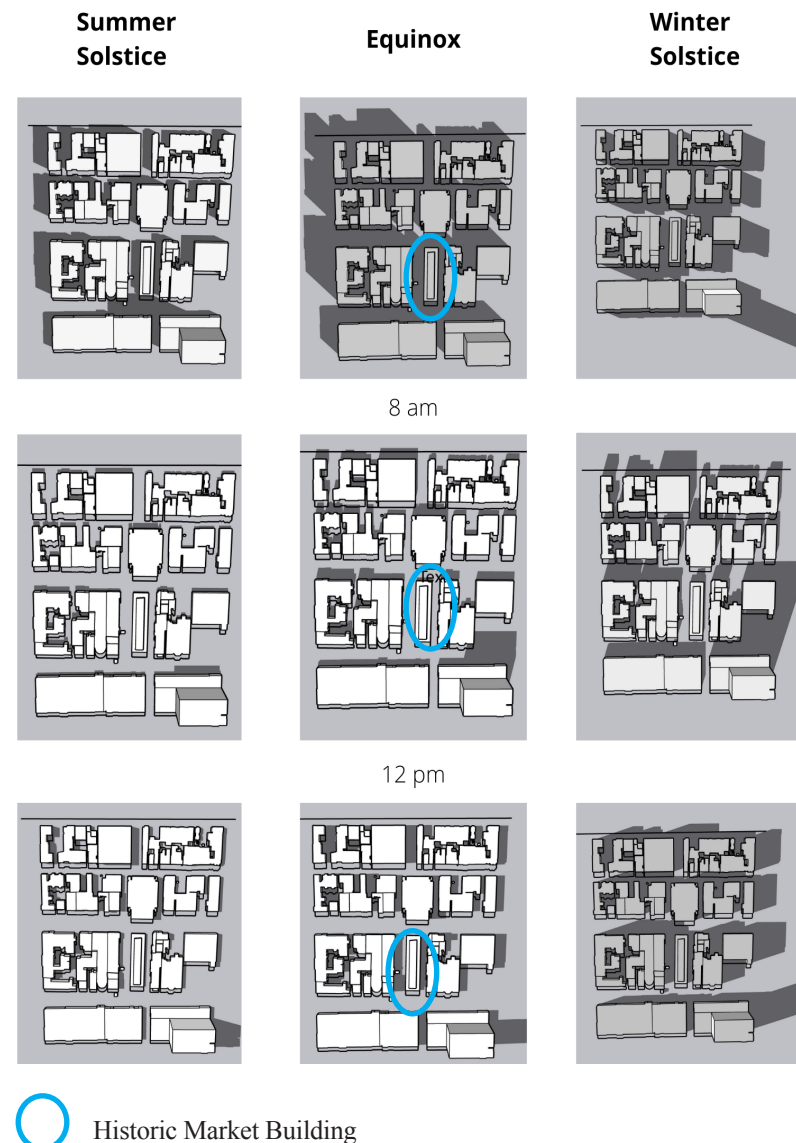
The ByWard Market area has an exceptionally large amount of paved surfaces due to high building density, prevalence of surface parking (on-street parking and surface parking lots), and lack of greenery. Tree canopies on the public right-of-way (i.e roads, sidewalks) are also scarce, which makes the area an urban heat island. The local surface temperature in the Byward Market Area can reach 33 degrees Celsius in July.

In contrast, the Major's Hill Park, which is located toward the southeast of the market, has a much cooler surface temperature in the range of 22 to 25 degrees Celsius. This contrast emphasizes the importance of urban greenery for regulating local temperature.

Greenery and tree canopies on the public right-of-way affect user experience and comfort through provision of shade, shelter and temperature regulation. According to the shadow study (Figure 14) we conducted for the ByWard Market Area, existing building shadows in the area do not provide sufficient shading on the public right-of-way during the hottest months of the year (ie. the period between summer solstice and fall equinox). Pedestrians in the streets and outdoor public spaces are exposed under intense sunlight between 12 pm and 4 pm.

The only places where they can seek relief are the NCC courtyards. In the winter months, however, the problem shifts. Daily temperatures are already quite low, with low averages of -14 degrees Celsius and average highs of -6 degrees Celsius in January, but building shadows make the area even colder for users, as they are far more prominent than in the summer months. Sustainable solutions that regulate temperatures in both the summer and the winter should be explored.

Despite the difficult weather extremes, there is one particularly positive opportunity to note. Our team noted during our site visits that users seem eager to go out, even in difficult climate conditions. During one of our visits, it was particularly cold and rainy, but because there was an event activating the space and drawing people to the market, there was a warm and lively atmosphere (Figures 15 - 17). This is an encouraging sign for winter activation, as it shows the willingness of users to come to the Market and hang out even in less pleasant weather conditions.



○ Historic Market Building

Figure 14: Shadow study for the ByWard Market Area defined by Clarence Street to the north, Dalhousie Street to the east, Rideau Street to the south, and Sussex Drive to the west. This shadow study is conducted by convention on specific dates of the year. The building shadows at different times of the day are depicted by the darker shade on the backdrop. Shadows of tree canopies are not included in this study as the area has very few street trees.



Figure 15 & 16 People gathering on William Street on a cold winter day to attend an outdoor vending event



Figure 17 People gathering on George Street Plaza on a cold winter day to attend an outdoor festival

2.4 Current Activation and Social Activities

The 2018-2019 Public Life Studies involved non-participant observations of social activities that took place in the public realm (e.g streets and plazas) of the ByWard Market on weekdays as well as weekends during three different seasons. Since these observations were conducted at key locations within the ByWard Market area, the supplemental graphics depict the prevalence of different types of activities at different locations. Secondly, the intercept surveys collected responses in regard to perceived threats to social life in the market. We also provide our observations of the built environment and social activities during our field visits in the fall of 2021.

Overall, the social life in the ByWard Market is centered around commerce, dining, and entertainment according to the intercept survey responses. As depicted in *Figure 18*, the most common activities in the ByWard Market area in summer and fall are casual standing, café/patio sitting, taking pictures, and bench sitting.

The effect of seasonality on the level of activities and the vibrancy of social life is obvious on *Figures 19* where the winter activity level is significantly lower. Particularly, there is a drastic decline of all forms of outdoor sitting in the ByWard Market in winter. The potential reasons include frigid weather, lack of shelter from the wind and snow, closure of most patios, reduced accessibility, and lack of outdoor winter programs. The attractiveness of enclosed or climate-resistant spaces during winter manifests in the higher level of commercial activity and eating/drinking compared to fall. The winter Public Life Study also indicates that people who use mobility devices (eg. wheelchairs and strollers) face particular difficulties in accessing and using the market area in winter. There is a strong case for increasing the number of climate-resistant spaces and improving winter accessibility in efforts to maintain a high activity level in the ByWard Market year-round.

Different streets and nodes within the market area seem to foster a different profile of activities due to variations in the built features and amenities/service offerings. According to the observations made in fall 2018 (*Figures 18*), for example, picture-taking is the most prevalent in the York Street Plaza where the Ottawa Sign is located. It is reasonable to describe the York Street Plaza in its current use as a predominant tourist destination, especially during weekends. On the other hand, Clarence Street and the George Street Plaza are popular destinations for patio sitting and dining thanks to the high density of bars and restaurants. These two locations cater to residents and tourists alike. In plazas where benches and tables exist, bench sitting is common.

The last factor that greatly influences the activity level in the market is temporality, specifically the day of the week, and weekend programs. On *Figures 18*, it is obvious that the activity level rises significantly at all locations on weekends, compared to weekdays. This can be attributed to an increased presence of tourists and more free time for relaxation. In addition, from our observations, weekend events, including the farmer's market and concerts featuring local artists at the George Street Plaza, enhance the vitality of social life in Byward Market by drawing a large number of visitors into the market and transforming car-oriented and underused spaces into vibrant sociable spaces.

The interactions between seasonality, amenities/service offerings, and temporality (ie. weekday vs. weekend) can also affect the activity level at different locations. The comparisons between *Figure 18* and *Figure 19*, manifest these effects. For example, one comparison shows that in fall, the activity level on Clarence Street surges on the weekend due to increased outdoor patio sitting, which suggests that Clarence Street is more a weekend destination catered to restaurant-goers and entertainment customers. When taking seasonality into consideration, winter has the largest negative impact on activity level on Clarence Street because outdoor dining is no longer available as a result of weather conditions.

On the other hand, the activity level around the George Street Plaza remains high and consistent throughout the week. The activity level is more resilient to changes in seasonality thanks to the diverse mix of activities that take place at the George Street Plaza, which is in turn enabled by the diverse commercial offerings and public spaces nearby. This contrast depicts the advantage of incorporating diverse amenities that can enable opportunities for different activities, including diverse commercial offerings and accessible public spaces to build resilient social life in the ByWard Market.





2-Analysis Considerations

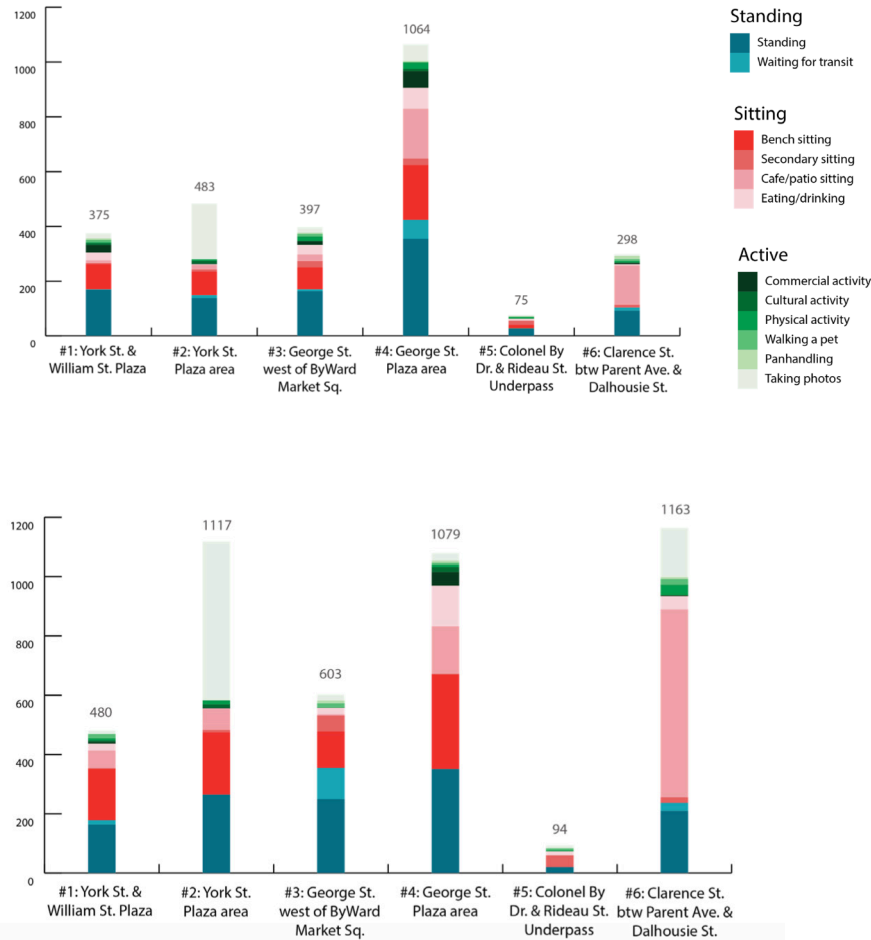


Figure 18: Observed activity counts at different locations within the Byward Market on a weekday and the weekend; source: public life studies 2018-2019

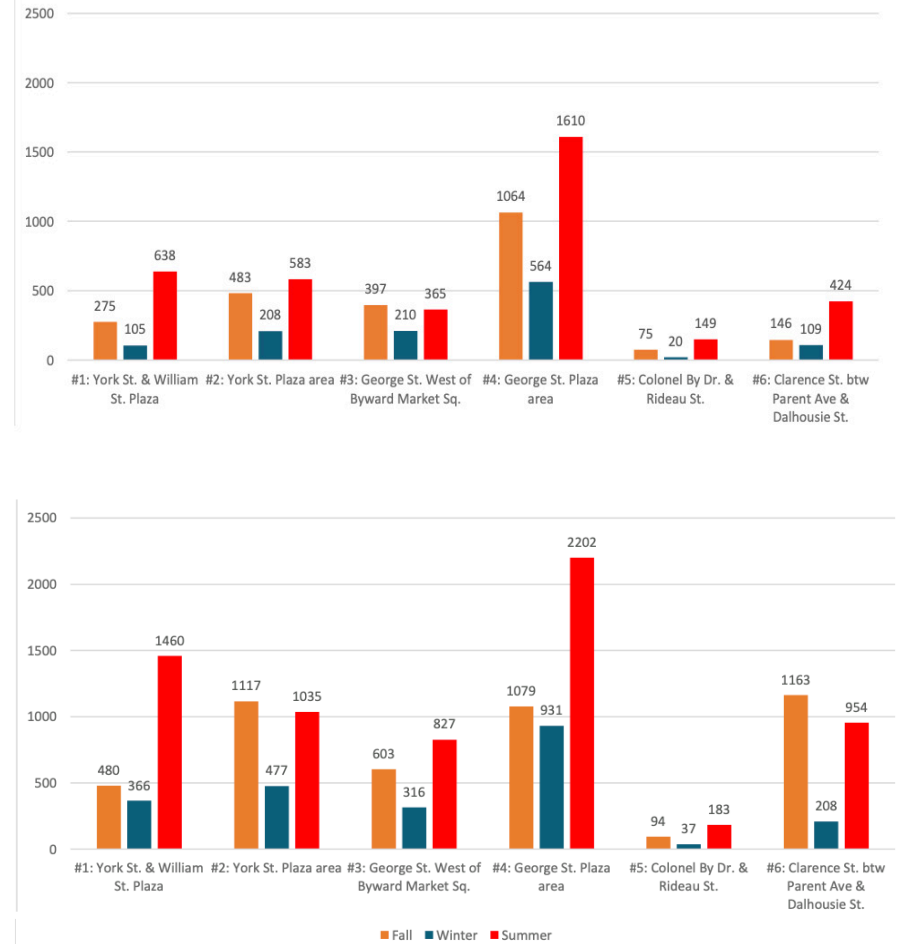


Figure 19: Observed activity counts at different locations within the Byward Market during different seasons in fall 2018; top graph: weekdays, bottom graph: weekend; source: public life studies 2018-2019

2.5 Circulation

2.5.1 Access To and From the Market

The ByWard Market area is well connected in terms of active transportation to its surroundings. In fact, the latest Public Realm Plan found that 80% of their respondents had traveled by active transportation. Although the current circulation infrastructure and transportation networks allow for active transportation to and from the area, pedestrian and cycling flow within the area could be improved in a way that provides opportunities for people to pause and linger. As the Active Transportation map illustrates, there are a variety of options for individuals to travel to and from the area: by bus, O-Train, by bike, and on foot. The understanding of the experience of moving through the area is especially of concern for us.

There are sidewalks throughout the Market area making it possible for pedestrians to travel along the main streets. However, we identified several characteristics of the area that hinder connectivity for pedestrians. Namely, the high number of on-street parking spots throughout the ByWard Market creates a car-focused atmosphere that makes it less pleasant to walk around. Simply having the sidewalk infrastructure is not enough to make the area enjoyable for pedestrians. If we are to build upon the Public Realm Plan, the cultivation of a pedestrian culture needs to be considered.

Currently the locations that have the highest level of pedestrian activity are:

York Street/ByWard Market Square

Clarence Street

George Street/Sussex Drive

William Street/George Street

The areas we have observed as particularly desirable for amelioration, are York St., between Sussex Dr. and ByWard Market Sq., and the block on ByWard Market Sq. between York and George Streets. These areas are currently populated with on-street parking spots which creates a disconnect between activities on the sidewalk and activities in the surrounding retail or public spaces. Intervening in these two locations could bolster a pedestrian culture for the area while also increasing connectivity.

2.5.2 Circulation Within the Market Area

In thinking of movement, connectivity, and pedestrian culture, visual corridors and wayfinding are essential (*Figure 20*). Two entry points are of particular interest: the intersections at York St. and Sussex Dr. and at the corner of William St. and Rideau St. These locations are important as they connect to other essential places just outside the Market area. The first connects to the stairs to Major Hill Park and houses the Ottawa sign, and the second connects to Rideau St. which is an arterial route, with a major bus terminal and connects to the Rideau Centre.

Both intersections have crucial visual corridors (*Figures 21 - 23*) that influence perceived connectivity and coherence in the area. Looking both eastward or westward along York St., the area is expansive and links the market building to the stairs of Major's Hill Park. Currently, on-street parking spots occupy physical and visual space contributing to the emphasis on cars rather than the pedestrian's experience (*Figure 21*). We have identified another important perceptual barrier in relation to the second intersection, the parking garage located at 70 Clarence St. The visual corridor northward along William St. is obstructed by this parking garage (*Figure 23*). This entryway and visual corridor is an important asset to the ByWard Market area. Currently, 70 Clarence St. blocks users' views to the many restaurants with terraces on its other side. There is then a separation of street-level activity on either side of this building, even though there are adequate sidewalks to move around it.



Ottawa ByWard Market

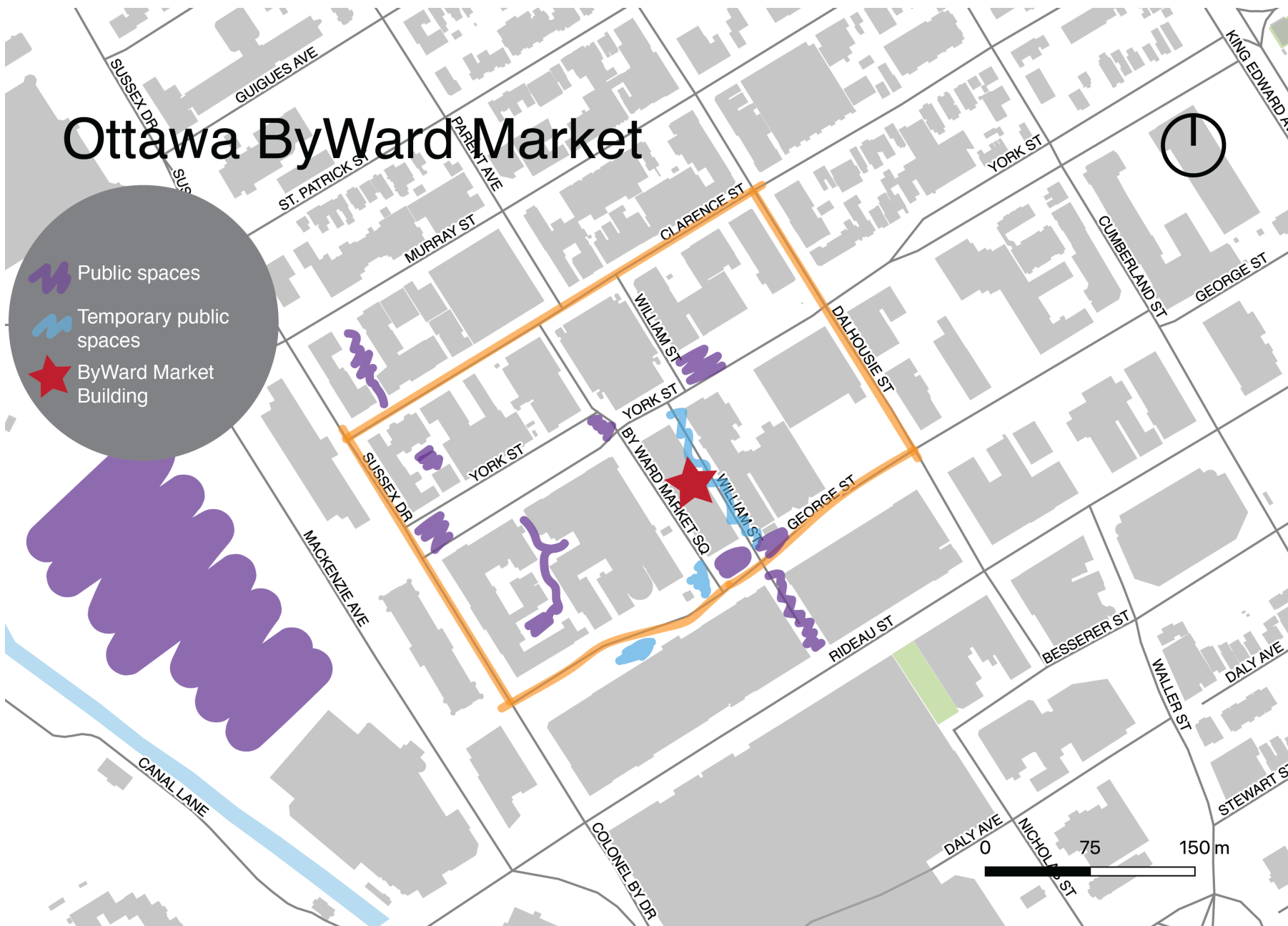


Figure 20: Public spaces in and connected to the ByWard Market



Figure 21: Visual corridor along York St. facing Major's Hill Park



Figure 22: Visual corridor along William St.



Figure 23: Visual corridor along York St. facing the Market from the steps of Major's Hill Park

2.5.3 Movement and Public Spaces

Closely related to the connectivity of the area are its public spaces. The map below illustrates the location of public spaces in the area, which clearly indicates that these spaces are not well connected for pedestrians. We are particularly interested in the Sussex Courtyards, the area near the Ottawa sign at Sussex Dr. and York St., York and William Street Plaza, and George Street Plaza.

The Sussex Courtyards offer interesting, and slightly hidden spaces for pedestrians to travel in parallel to more central roads, visit restaurant or café patios, or simply gather. Some Courtyards appear to be more active than others, and we have observed that overall, they lack activation and permeability that could connect them to the rest of the Market area. The Clarendon Courtyard seems to be the most active with its various patios, which is in stark contrast to the Jeanne d'Arc Courtyard. We believe this could be partly due to the connectivity issue previously mentioned in the area on York St. between Sussex Dr. and Byward Market Sq.

Another issue related to circulation is gathering or “stickiness” as described in the Public Realm Plan. The Byward Market area does not offer many opportunities for people to stay and hang around. George Street Plaza is cited as the most successful public space in the Public Realm Plan; it has the highest level of “staying activity” both on weekdays and weekends. One of our main objectives is to increase public gathering spaces and opportunities beyond George Street Plaza. The area near the Ottawa sign at Sussex Dr. and York St. and the York St. and William St. Plaza are both already existing public spaces that could be further activated to promote gathering.

2.5.4 Parking

There is an abundance of parking in the Byward Market. Ottawa's open data provides information on city parking lots, and paid public parking and is illustrated in the map below. Even from this limited information, it is clear that the area is well serviced for car parking (*Figure 24*). The Public Realm Plan cites that there are a total of 5225 parking spots in the area, with 656 on-street spots and 4569 off-street spots. We would like to draw attention to the municipal parking garage at 70 Clarence St., the Public Realm Plan lists the following numbers for off-street parking:

- Current peak off-street parking demand vs. supply within area:
 - * Supply = 4569 parking spaces
 - * Peak demand (weekday afternoon) = 3472 parking spaces
 - * Peak occupancy = 76%
- Clarence garage has 289 spaces
 - * Supply = 4280 parking spaces
 - * Peak demand (weekday afternoon) = 3472 parking spaces
 - * Peak occupancy = 81%

These numbers show that in removing the parking at 70 Clarence St. result in 4280 available Parking spaces. As was previously mentioned, the area with on-street parking on York street shown in the photo below presents an opportunity for a large pedestrian public space. Although the Public Realm Plan Recommendations Report suggests keeping some on-street parking spots we would like to consider the possibility of removing all parking on the block from Sussex Dr. to Byward Market Sq. With a total of 52 parking spots, removing all parking would result in the following demand for on-street parking in the area:

- Current peak on-street parking demand vs. supply within area:
 - * Supply = 656 parking spaces
 - * Peak demand (weekend evening) = 590 parking spaces
 - * Peak occupancy = 90%
- York St. has 52 parking spaces
 - * Resulting supply = 604 parking spaces
 - * Peak demand (weekend afternoon) = 590 parking spaces
 - * Resulting peak occupancy = 102%

These numbers show that in removing the on-street parking on York St. would leave a total of 604 on-street parking spaces. The high levels of demand on weekend evenings for on-street parking is attributed to the fact that parking is free on evenings. We believe there are other ways to mitigate parking issue, Such As bolstering the active transportation infrastructure, offering more free parking in the surrounding areas, or introducing a policy that requires a purchase in the area in order to park. In removing the parking from 70 Clarence St. and York St., a total of 341, would leave a total of 4884 parking spaces in the Byward Market area.



2-Analysis Considerations



Figure 24: Public spaces in and connected to the ByWard Market



The Market Building



Parking Spaces

2.6 User Analysis

The ByWard Market area is well suited to new potential users coming from surrounding areas. One type of new user would come from surrounding workplaces. There are more than 160 000 jobs located within a 15-minute walking distance of the ByWard Market. These main employers include government (Parliament, Federal Government, Ottawa City Hall), universities (University of Ottawa), museums (National Gallery of Canada, National Arts Centre, Ottawa Art Gallery), diplomatic services (U.S. Embassy). Adding to this large workforce is the university of Ottawa's more than 40 000 students, who might complement workforce users well due to differences in budget, schedule, and interests.

The presence of around 169 000 potential users in the immediate area justifies a local approach to the redesign of the market. The ByWard Market will not need to rely on outside users coming in by car (or other long-distance transport) if it properly mobilizes those potential users already physically present in the area. As we observed during our own site visits, this is currently poorly done. Walking from University of Ottawa to the ByWard Market for example, we found our paths limited by small sidewalks, major arteries slowing down foot traffic, and a lack of views and indications to lead us toward the site.

2.7 Influence of Nearby Food Outlets

As it currently exists, the ByWard Market building is heavily focused on food services (restaurants, quick eats, etc.), as opposed to food retail (produce, specialty stores, etc.). While there is more food retail in the neighboring City Run Parking Area, as well as along ByWard Market Square, the amount of space allocated to food retail is smaller than the amount of space allocated to food services in both the area and the building. Why is this the case?

One reason cited during our site analysis is the understanding that there are too many neighbouring supermarkets that would out compete any increase in food retail (in particular non-specialty food retail). There are more than 20 grocery stores that sell fresh produce, including local grocers and supermarkets, within a 5 km radius or a 6 to 10-minute driving distance from the market building. It is also relevant considering the grocery store found directly across from the market, as well as the 4 to 5 stores found within a 15-minute walk from the area. Residents nearby enjoy a high accessibility to fresh produce, compared to the rest of the city. This means food retail experience in the ByWard Market will have to be unique, original, and innovative in order to attract and build a loyal customer base.





2.8.Case Studies

2.8.1 Grand Rapid Downtown Market - Michigan

The Market is a mixed-use space that includes local food production, education, and entrepreneurship opportunities. It is an example of urban and economic revitalization through reconnection with local agriculture.

The Downtown Market area has the city’s largest concentration of shelters, food pantries, and social service agencies. The local poverty and unemployment rates are estimated to be 38% and 32%, respectively. Advised by these statistics, the market was redesigned to benefit low-income residents through food access, education, entrepreneurship, and job opportunities. The successful revitalization of the market was due to extensive programming that addresses public health, supports small businesses, generates new jobs. It also includes a flexible space built on the rooftop to host diverse activities and increase the revenue of the market.

The Grand Rapids Market in Michigan informs our vision of creating an attractive environment in the ByWard Market that is centred around food, while also providing social benefits for different local actors. It also highlights the inclusivity of agriculture and local producers, to encourage sustainable food practices.



Figure 25: Grand Rapids Downtown Market building

Lessons Learned

- Economic revitalization is the result of mixed-use space and diverse programming
- The market can be a catalyst for social and job opportunities



Figure 26: Grand Rapids Downtown Market interior rental space

2.8.2 Markthalle Neun -Berlin

Markthalle Neun is less fresh produce or flea market-oriented. It is a food hub that offers plates from national and international cuisines at accessible prices. Moreover, it is a community space that brings together neighbourhood residents—"foodies"—and some of Berlin's best gastronomes.

This market is a particular case of resilience and community engagement, as it almost ceased its activity due to competition from supermarkets. However, it was rescued by residents and supporters by creating extensive programming that includes festivals, courses, produce and various food and crafts from small businesses and local producers. Thanks to this initiative, the market became a tourist hotspot that supports different community groups.

Unlike North-American markets, Markthalle Neun does not have parking facilities, and it is easily reached by metro since a station is about a five-minute walk away. It is also accessible by two bus lines.

We selected it as a case study because it contributes to the vision of the ByWard Market as a community space that hosts multiple activities around food and events that increase the entertainment offer. These characteristics favour the transformation of the ByWard Market as a destination site to tourists and residents. The Markthalle Neun also demonstrates the need to emphasize the unique experience of going to a public market to enjoy the lively ambience and access to different activities.



Figure 27: Interior of Markthalle Neun main building



Figure 28: Interior of Markthalle Neun main building

Lessons Learned

- The success of a market lies in offering diverse services, a variety of programming and supporting local initiatives
- To attract visitors, markets must become a destination that fosters social life through flexible spaces that welcome residents and tourists
- Markets should favour flexible spaces to support a dynamic place on weekdays and weekends



2.8.3 Findlay Market - Cincinnati

Findlay Market is the region's premier destination for local food and artisan products, a dynamic public gathering place, and a vital community asset. The main principles of the market are (1) the variety of locally grown food, (2) human connection between the merchants and shoppers, (3) fair prices and high-quality products to offer an authentic shopping experience, and (4) support diverse start-up businesses and sustainability of locally owned and managed businesses.

We selected this public market as a reference for social and environmental responsibility. The social aspect is visible in a series of programs that support food entrepreneurs, low-income families so they can access fresh produce, and businesses owned by minorities, women and immigrants to build equity and inclusivity. Concerning environmental responsibility, the focus is to green the market through strategies such as reducing energy consumption, neighbourhood beautification with greenery and tree planting to improve the local conditions, composting and recycling.

Findlay's market strategy is an example that we can adapt in the ByWard context to efficiently reactivate the market area through sustainable interventions to improve the environmental conditions and invite people to enjoy the public space of the surrounding area.



Figure 29: Public space in Findlay Market

Lessons Learned

- To enhance the public market experience, it is crucial to include the immediate area as part of the infrastructure that supports the market's functioning
- The market's area should prioritize pedestrian-oriented spaces to guarantee a safe zone of circulation and gathering
- The offer must provide high-quality products that are available at fair prices to be accessible to everyone
- Markets can promote sustainable practices through infrastructure and educational programming



Figure 30: Public space in Findlay Market

2.8.4 Faneuil Hall Marketplace - Boston

Faneuil Hall Marketplace is located in downtown Boston, so it is easily accessible by metro. Given that it is a popular tourist destination, it counts with a tourist bus parking short walking distance since most streets are cobblestone and pedestrian-oriented.

Faneuil Hall Marketplace has four great destinations in one location: Faneuil Hall, Quincy Market, North Market and South Market. They are located around pedestrian-oriented streets and public spaces that function as an open scenario for world-renowned street performers and musicians.

Beyond the diversity of retail, restaurants and food, Faneuil marketplace is a centre of entertainment with public events all year round. It also has free activities for all ages that allow an active public space. Therefore, we believe this market is a good reference for developing the potential of the ByWard area as a hub for recreation and enjoyment for tourists and residents. Given its central location, close to tourist attractions such as the National Gallery of Canada, Notre-Dame Cathedral, Major's Hill Park, and the Rideau Canal, the ByWard Market can play a crucial role in the area's configuration. Moreover, it has all the conditions to connect cultural sites and constitutes an enormous opportunity to position the market as a city landmark.



Figure 31: Public square in Faneuil Hall Marketplace



Figure 32: Stands at Faneuil Hall Marketplace

Lessons Learned

- Complimentary activities are needed to have an active market all year round
- A key to activating public space is to include diverse performances and activities
- Programming and spaces for all ages must be available to attract all family members

2.8.5 The Forks - Winnipeg

The Forks is an all-season gathering and recreational place at the Red and Assiniboine Rivers junction. The area contemplates a mixed-use approach including recreational, historical and cultural, institutional and supportive commercial uses. The market area has emphasized activating the public space in winter through diverse activities, such as the “Warming Huts,” temporary installations along the River Trail at The Forks to provide shelter in winter by adding creative infrastructure to enjoy the public space in temperatures below -30°C .

An interesting fact about The Forks is that they promote active transportation over driving all year round. People can access the market by cycling, paddling (thanks to the port), and skating in winter. Likewise, they have water buses accessible by wheelchair and operate seven days a week.

Consequently, we selected The Forks Market as a reference, especially for its compelling winter programming, since we aim to activate the ByWard Market area as a destination all year round. Therefore, The Forks informs our vision on design strategies and activities that transform the space into a lively district attracting people. Finally, The Forks has demonstrated that active transportation can successfully transform public spaces and open them for complementary activities. Therefore, it reinforces our proposal of pedestrianizing the ByWard Market so that people can participate in diverse activities on the streets and promote the use of nearby public transport alternatives to visit the area.



Figure 33: Outdoor leisure space at The Forks



Figure 34: Outdoor leisure space at The Forks

Lessons Learned

- Public space availability and diversity in programming is crucial to attracting visitors all year round
- It is vital to provide alternatives to visit the market other than driving to maximize the use of public space
- Sustainable practices benefit the economy of the market and enhance the visitor's experience

2.9 Governance

The governance of the ByWard Market area affect on the functioning of ByWard Market, thus, impacting the level of social activities and the quality of social life. Identifying the important actors in the area is the first step in understanding the delegation of powers and responsibilities, sources of finance, and other important political and social mechanisms.

Figure 35 features the most pertinent actors from different governance bodies. The table emphasizes a complex governance network that transcends political and social boundaries, which can create conflicts and inefficiencies in absence of platforms of communication and coordination.

Implicated governance bodies	Title of Actors Currently Implicated Partners Potential Partners	Pertinent powers, roles and responsibilities in relation to the ByWard Market	Description
Federal	Member of Parliament (MP)	Approve funding for area improvements (ex. secured funding for the Public Realm Plan)	Elected federal representative of the people who live in the Ottawa—Vanier electoral district.
	National Capital Commission (NCC)	Manage NCC properties in the market area	A crown corporation that owns property in the ByWard Market area
Provincial	Members of Provincial Parliament	Approve funding for area improvements	Elected provincial representative of the people who live in the Ottawa—Vanier electoral district
City / Municipal	City Councillor	Identify and address the concerns of citizens living in Ward 12 and represent the ward interests on the Ottawa City Council	Elected municipal representative of the people who live in Rideau-Vanier Ward on the city council.
	Marchés d'Ottawa Markets (ie. the client)	Manage the market building, the ground-level commercial spaces of the parking building, the seasonal outdoor farmers market, and market programming.	A non-profit, municipal service corporation supervised by the City Council
	Ottawa Tourism	Provide funding for tourism development initiatives	A municipal government division responsible for promoting tourist experience and tourism economy in Ottawa
	Accessibility Office - City of Ottawa	Provide funding for initiatives aimed at advancing accessibility in the ByWard Market	A municipal government division responsible for advancing accessibility in City services, programs, facilities and infrastructure.
	Gender and Race Equity, Inclusion, Indigenous Relations, and Social Development - City of Ottawa	Initiate and support programs to advance equity, diversity and Indigenous reconciliation in the ByWard Market	A municipal government division responsible for advancing municipal commitments to equity, diversity and Indigenous reconciliation.
Indigenous Governance	Algonquins of Ontario	Provide education about the history of Algonquin people in Ottawa and provide suggestions about how to integrate Algonquin traditions, culture, and arts into the public spaces of ByWard Market.	A provincial representative body for the indigenous Algonquin people of Ontario whose claim includes an area of 9 million acres within the watersheds of the Kichissippi (Ottawa River) and the Mattawa River.
Local community	ByWard Market Business Improvement Areas (BIA)	Organize and finance improvements in the ByWard Market to enhance business environment	An economic association of local businesses and property owners within a defined district
	Lowertown Community Association	Represent the interests of local residents of ByWard Market/Lowertown. Lobby and work with municipal officials, city staff, social service agencies on a wide range of neighbourhood issues.	A civil society group made up by representatives of local residents in the Lowertown area, tasked with matters of neighbourhood concern
	Salvation Army	Provide social services, such as shelter and food, to individuals in vulnerable circumstances in the ByWard Market	A non-governmental provider of social services to individuals experiencing poverty, homelessness and other difficulties.
	Ottawa Board of Trade	Provide technical support to business owners and advocate for policies that create opportunities and reduce barriers to business.	A non-profit, membership-based advocacy group, independently funded and driven by the business community in Ottawa
	Enviro Centre	Provide sustainability education and technical assistance and support community environmental initiatives	A non-profit organization that helps residents, businesses and institutions reduce their impact on the environment

Figure 35: The list of currently or potentially implicated actors in the ByWard Market Area

2.10 SWOT Analysis



2-Analysis Considerations

	Strengths	Weaknesses	Opportunities	Threats
History & Land Use	- A long history of commerce and strategic importance giving immense character to the space - Diverse communities with long lasting ties to the space - A diversity of building types, uses, characteristics and ages	- Lack of a cohesive narrative in and around the site - Various historical buildings and stories are scattered without being clearly indicated for users - Many parts of the area's history (for example indigenous history) are not sufficiently known, or valued	- There is a general will to mobilize around indigenous history and issues in Ottawa - Due to increasing awareness of the value of preserving heritage features, there is an opportunity to highlight marginalized Canadians values	- Development pressures mean heritage features are at risk of being further destroyed or alienated - In terms of land use, parking constitutes the third use of space. Therefore the area privilege drivers over pedestrians
Accessibility & Connectivity	- Many bus stops - O-Train station nearby - Sussex Courtyards offer interesting spaces for pedestrians - Temporary pedestrianization of William St.	- Lacks cohesive pedestrian culture - Physical and perceptual barriers caused by parking on York St. and at 70 Clarence St - Conflict between pedestrians and cars around the ByWard market building	- Existing Sussex Courtyards offer spaces for pedestrians between buildings - Possibility to repurpose 70 Clarence St parking building into a destination building	Cars and parking devalues the "gathering" power of the Market as a public place
Public Space & Green infrastructure	- Central area with diverse activities and high number of visitors - Pedestrianization of a section of William Street - Seasonal closure to car transit of some streets and creation of terraces from the different businesses - Human-scale buildings with mixed-use that create inviting streets	- Lack of vegetation - People are exposed to wind, heat, and cold in public spaces - Lack of sitting areas and urban furniture that enable stickiness - George street plaza is too small to develop varied programming	- Connectivity with Major's Hill Park and the Rideau Canal - Space to increase greenery and provide environmental and social benefits - Variety of retail stores, restaurants and commerce that guarantee a permanent use of public space - Potential to reorganize the interior space of the market building to make it attractive to use it as an indoor public space	- Most of the area is impervious. Therefore, rainwater and lack of thermal comfort can prevent people from gathering or walking through the area - The high percentage of space for cars (parking lots, street parking, and streets surrounding the market) - Traffic safety
Socioeconomic	- A large base of regular customers who are Ottawa residents - Occasional cultural programs help enhance the vibrancy of social life in the market - Diverse social activities particularly during weekends	- Social activities in the market decrease significantly in the market during winter months - A high unemployment rate in surrounding census tracts - Fluctuation in the level of social activities on certain street between seasons, as a result of homogenous service offering (ie. restaurants and bars) - Coordination between different political and social actors in improvements to the market	- Attract workers and users of large institutions located nearby - Increase the diversity of businesses in the market - Increase the accessibility and social offerings during winter months - A better integration of homeless population and panhandlers into market life	- Increased popularity of E-commerce - Commercial competitions the Rideau Centre - Effects of natural shocks (ie. climate change) on outdoor social activities - Decreasing business profitability and increasing rent

3.1 General Concepts in the Site Plan and Design

3.1.1 Understanding the Target User

One of the most important concerns brought to our attention centred on the feasibility of a produce oriented market, given the already high grocery store/resident ratio (see grocery store map in annex). For ByWard Market to be successful, therefore, it needs to attract users other than residents. The current strategy for getting people to the market centres on car transportation (*Figure 36*), explaining the important quantity of parking in the area. This strategy is incoherent: only 28% of current ByWard Market visitors use a car to access the market. While the pedestrian experience is currently eclipsed by cars in the area, pedestrians already represent 33% of users. The proportion of active transit users is even higher when we add cyclists (18%) and public transit users (18%).

Our vision starts with rectifying this major incoherence. To do so, we’ve identified three active transit poles (*Figure 37*), from which non-automobile users could be drawn. These poles are shown in the figure below: University of Ottawa staff and students (53 000 users), Parliament Hill (68 000 users), and the Ile de Hull (20 000 users). To these users we add the people already working in the ByWard Market area, and the 16 000 residents living in or adjacent to the area. This gives us an approximate 169 000 base users (Innovators and Early Adopters in figure below) to draw from to make the ByWard Market ‘a place to be’. Adding to the pool of base users, Greater Ottawa residents and tourists represent the second major market to target (Early Majority).

These users will increase as the power of attraction of the market increases. While some of the Greater Ottawa residents and tourists might want to come to the area by car, we believe important pedestrian prioritization will encourage large segments of even these users to reach the area by other means of transport. To reach this goal, however, the area needs to be a destination. This can only happen through a high level of area engagement from our base users.

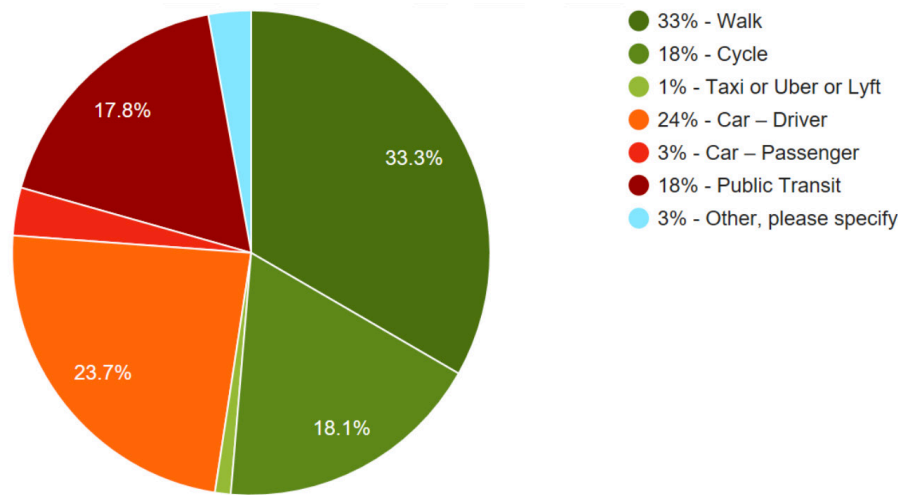


Figure 36: Mobility choice of market users when accessing the market



Reimagining the Market as the Centre of Three Active Transit Poles

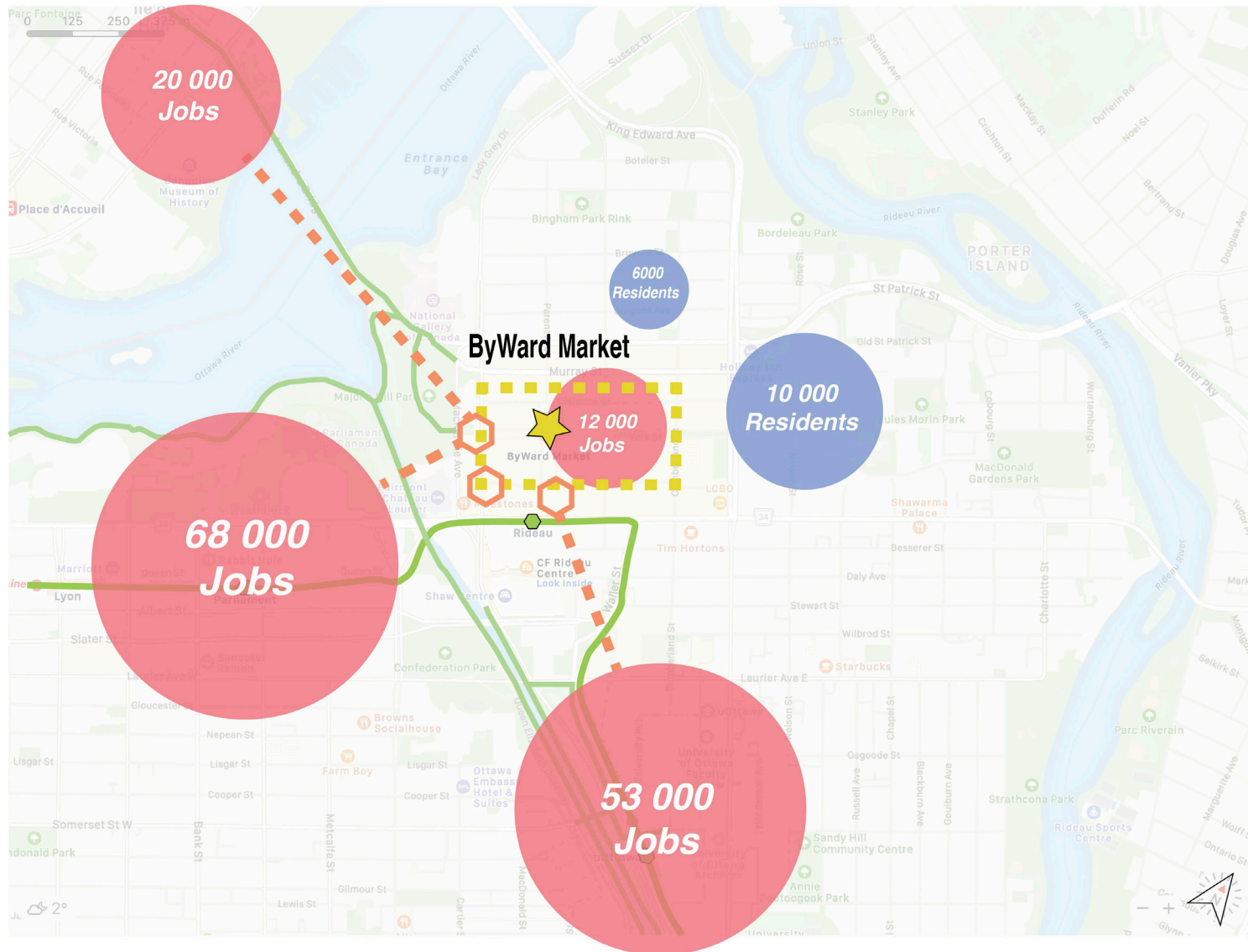


Figure 37: Reimagining the market as the centre of three active transit poles



3.1.2 How the Users Inform Our Pillars of Design

Our target users represent a diverse and complementary body of needs that, if activated correctly, could animate the market year-round, 24/7. The design pillars we've identified are the following:

Creating an Experience

Many of our target users are always looking for new, unique experiences that will complement their lifestyle. These users will be drawn to the market not out of necessity, but out of a will to be part of something greater. Like the many attractions Ottawa has to offer, ByWard Market has the potential to offer a truly unique experience by increasing and **activating its public space**.

The ByWard Market's public space potential is unique in Ottawa. Its central location will enable it to draw the users it needs, its beautiful built environment will increase this public space's attractiveness, and its interesting medium density will give users the impression of a sheltered outdoor space, which other built forms do not offer. In order to enhance this feeling of safety and shelter, which will allow the public space to fully thrive, this pillar includes an important consideration towards **pedestrianization** of the area.

Building Diversity

Our target users represent an incredibly diverse body of interests, needs, and habits. For this reason, the ByWard Market needs to be **flexible** and **adaptable**, all the while ensuring **inclusive** and **diverse** activation. The importance of this design consideration led us to place enormous emphasis on **winter activation**.

Winter activation is what the market currently suffers the most from. According to the Public Realm Plan, the market area experiences a drop in users and activities of 22% on weekdays and 34% on weekends in the winter season, compared to the fall season. In the city as a whole, however, there are a variety of available outdoor activities, and we believe there is already a receptive culture for **spending time outside**.

Target Users



Civil Servants

- Higher income earners
- More flexibility post-covid
- In the process of diversifying workspaces



Students

- Highly flexible schedules
- Looking for an experience
- Varying incomes



Greater Ottawa Residents

- Noted demand for a quality produce market
- Increasingly young singles and couples



ByWard Residents

- Many neighbourhood markets to choose from
- Need a unique experience to justify travelling to ByWard
- General willingness for outdoor winter activities



Tourists

- Very experience oriented
- High spending potential

Figure 38: Target user profiles



Emphasizing Local

Our concept depends on an important amount of local base users to create a **destination**. We have continuously, therefore, prioritized the needs of local users throughout our vision. This means, emphasizing the advantages of pedestrianization, as well as the accessibility of public transport.

Emphasizing local needs also means ensuring local products are offered at the marketplace. This is true for both food and other crafts. It is also true for activations, ensuring local communities and organizations are included in activation planning. Emphasizing local needs also means offering enough **diversity and complementarity** in the organization of the space to allow for a circular economy—a theme that is particularly reflected in our vision for the historical market building.

Winter activation is what the market currently suffers the most from. According to the Public Realm Plan, the market area experiences a drop in users and activities of 22% on weekdays and 34% on weekends in the winter season, compared to the fall season. In the city as a whole, however, there are a variety of available outdoor activities, and we believe there is already a receptive culture for spending time outside.

3.1.3 Considering COVID-19

The COVID-19 pandemic caused severe disturbances to urban systems and interrupted people's lives and relationships with their environments across the world, especially in dense urban centres. From the experience of major cities around the world, the effects of COVID were mostly negative and damaging. Public health measures, including lock-downs and capacity limitations, hit downtown commercial areas particularly hard. As a result, commercial streets and districts became emptier of residents and visitors.

Life during the pandemic also brought about opportunities to rethink and redesign urban spaces and systems with creativity. For example, due to the closure of most indoor spaces in cities, people rediscovered the enjoyment and necessity of outdoor public spaces. This led to prevalent, tactical pedestrianization programs in the streets and parking spaces of cities across the world, including Ottawa. Moreover, the success and popularity of these initiatives will give a strong push for making outdoor pedestrian zones permanent after the pandemic.

3.2 Site Plan

The proposed vision (*Figure 39*) for the ByWard Market area is to transform the site into a welcoming, diverse and unique experience for everyone. Reinserting the ByWard Market building and its sister destination building as a centerpiece of the market allows this vision to come to light by enhancing the cohesion of the space, making clear to users they are entering a defined destination. Supporting these two anchors, the surrounding buildings, public space, and vibrant street network create a large structured network to give users a fully formed market experience. Consequently, the proposal for the site considers the revitalization of the immediate street network to the market through prioritizing pedestrian circulation and public space.

1) Clarence Street and York Street, between Sussex St and Dalhousie Street., and ByWard Market Square Street, from Clarence Street to George Street will be pedestrianized. The extension of the pedestrianization of William Street until Clarence Street is also recommended.

2) George Street between Dalhousie Street and Sussex Street will be shared, prioritizing pedestrians and cyclists while allowing cars to transit at a low speed (around 15km/h). This decision responds to the high number of visitors and the potential for connectivity with the surrounding area. Likewise, allowing some car access on George Street opens the possibility of accommodating unloading zones for commerce.

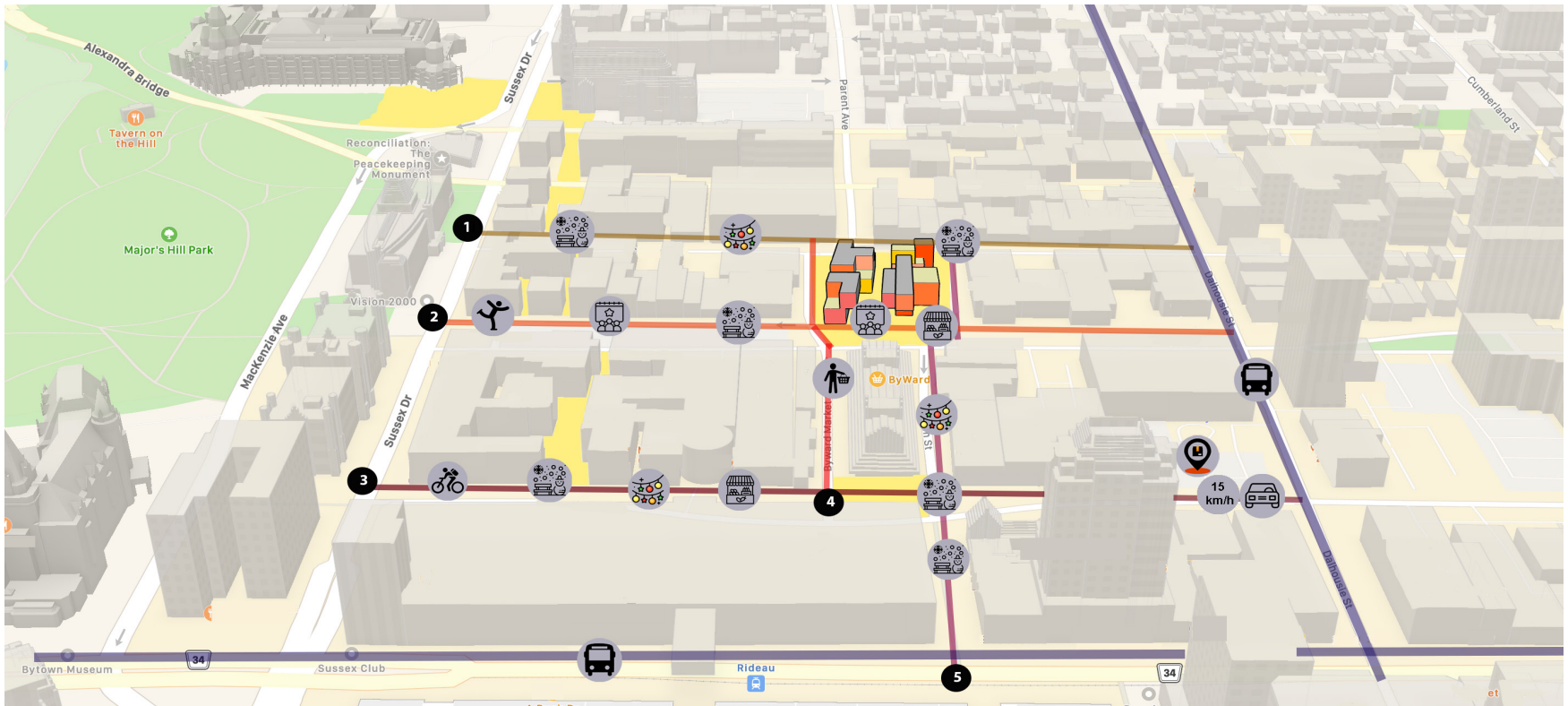


Figure 39: General site plan

- Pedestrianized streets
- Shared street
- Bus corridor

3.3 Anchor Buildings

Our general concept for the two anchor buildings is one of complementarity. We see the anchor buildings, not as two separate features, but one pillar for the area. This is true for the site as a whole, but also for the role of increasing cohesion that Ottawa Markets can play in the area.

Financially, Ottawa Markets depends heavily on the rents it receives from the historical market building. We would like to move high rent tenants and activities to the new destination building. Doing so will allow the smaller historical building to house smaller, produce oriented tenants who can't afford smaller. In other words, the profits from the destination will subsidize activities in the historical market building.

We envision the same to be true for the use of public space between these two anchor buildings. Currently, the most activated public space is found on the plaza just off George Street. Our vision would maintain this public space, but create an even larger one between the two buildings on York Street. This added public space will allow Ottawa Markets to host corporate activations, improving their financial independence and sustainability.

3.3.1 Historic Market Building Redesign and Use

The current commercial composition inside the ByWard Market building is incohesive and existing stores are predominantly oriented towards tourists. Commercial spaces in the market building have been leased out purely based on a merchant's ability to pay. Consequently, many residents don't use the market because they cannot find services and amenities that meet their needs.

From a user experience perspective, the current floor plan of the market building is also problematic. While the exterior of the market building is one of the most attractive in the area, its interior does not draw the same awe. Visitors feel unimpressed and avoid staying inside for long periods of time, except to use amenities like the washrooms. This is largely due to the lack of interior gathering spaces (*Figure 40*). The inner hallway is extremely narrow, making users feel confined.

The Public Life Studies and our stakeholder consultations identified a significant local appetite for a more fresh produce in the ByWard market. Building upon this, a series of cohesive interventions are envisioned for the ByWard Market building in this plan. The overall goal is to turn the historical building into an inventive food destination for all Ottawans and tourists who are passionate about good-quality produce and distinctive dining experiences.

To achieve this, the proposal for the ByWard Market building includes replacing most existing uses and commerce and redesigning the current floor plan to accommodate new activities that will take place in the building.

The new layout (*Figure 41*) reconfigures more than two thirds of the floor space on the ground floor. The objectives are to optimize the use of the floor space, make the user experience more comfortable, facilitate circulation, and provide additional amenities to support the Produce-Plus market activities. *Figure 39* depicts an image of how the new layout may look like in a cross-sectional perspective. The original corridor in the middle will be eliminated. The commercial spaces, reduced in square footage, will be brought to the centre of the building. This will provide sufficient space for an encircling movement pathway and seating areas on the sides of the building. The new commercial spaces will permit semi-permanent stands for fresh produce and other food-related products. The building's garage doors bordering William Street and ByWard Market Street will be preserved. New seating and movement spaces measuring 6 meters in width will be provided next to the garage doors. This layout will create a seamless transition zone between the streets and the interior of the buildings when the garage doors are rolled up.

On the second floor, the original layout of the floor plan is unchanged (*Figure 42*). The right wing of the building, currently an underused office space, will be converted into a community kitchen facility. The current public washrooms, which are separated on two sides by a foyer, will be combined and moved to one side of the building with a separate access. This will allow the previous foyer space to be added to the square footage of the kitchen. Dining tables will be installed along the corridor while leaving





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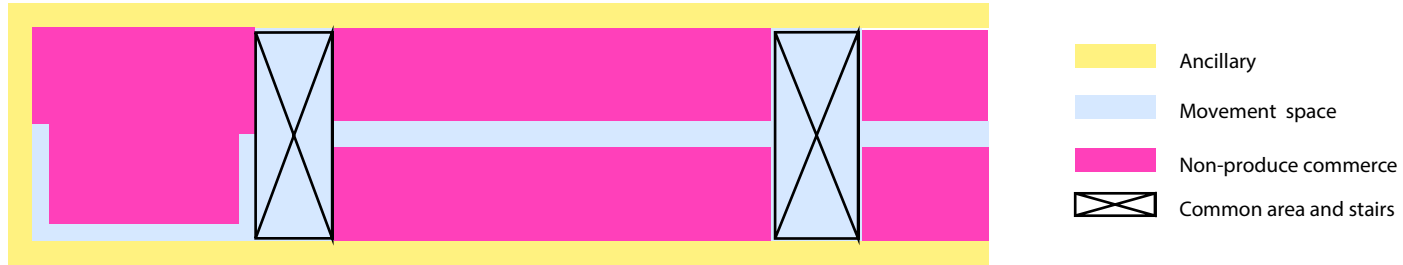


Figure 40: Current floor plan of the ground floor of the historic market

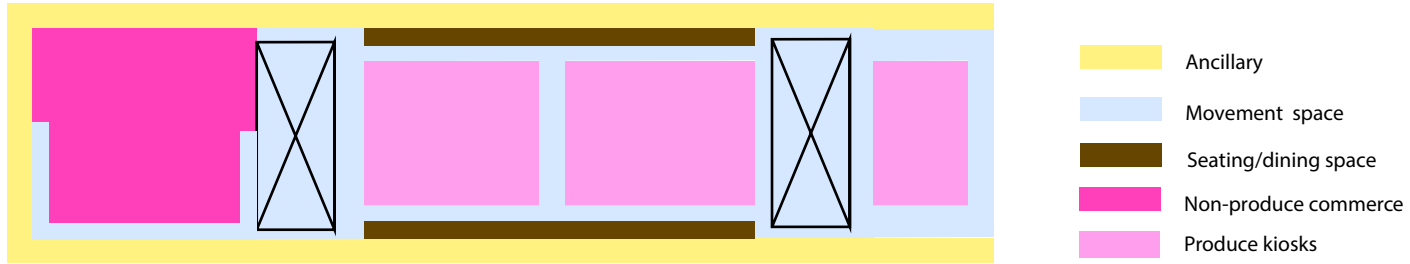


Figure 41: Redesigned floor plan of the ground floor of the historic market

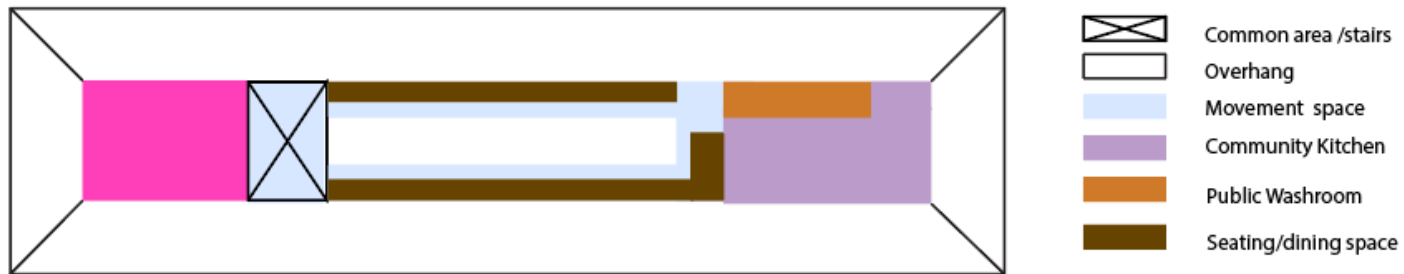


Figure 42: Redesigned floor plan of the second floor of the historic market



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enough circulation space. If the ‘stand-to-table’ service proves to be hugely popular, the left wing, currently the storage space for Moulin de Provence Patisserie, can be converted into an extension of the kitchen or an additional dining area. The Moulin de Provence Patisserie will receive storage space in the basement.

Our Produce-Plus Market vision takes into account the need to provide a diversity of experiences, and accommodate for a variety of users, all the while providing an outlet for local food and enabling users to participate in the circular economy. It offers an innovative way forward to compete with other grocery stores in the area, as well as other produce markets in the city. It does so through two main strategies: providing a diverse range of food retailers, and providing a ‘stand-to-table’ experience.

First, there will be a range of food retailers inside the market so that customers can purchase most food-related products in one-stop. Besides current anchor tenants, such as the Moulin de Provence Patisserie, the Produce-Plus Market will host produce stands operated by farmers and independent vendors and high-quality boutiques that sell cooking ingredients, meats and seafood, and cheese.

Second, the Produce-Plus Market will provide a unique ‘stand-to-table’ experience that doesn’t exist elsewhere in Ottawa. Designed with an ecosystem approach, the Produce-Plus market creates an original experience that can only be obtained in person at the market building.

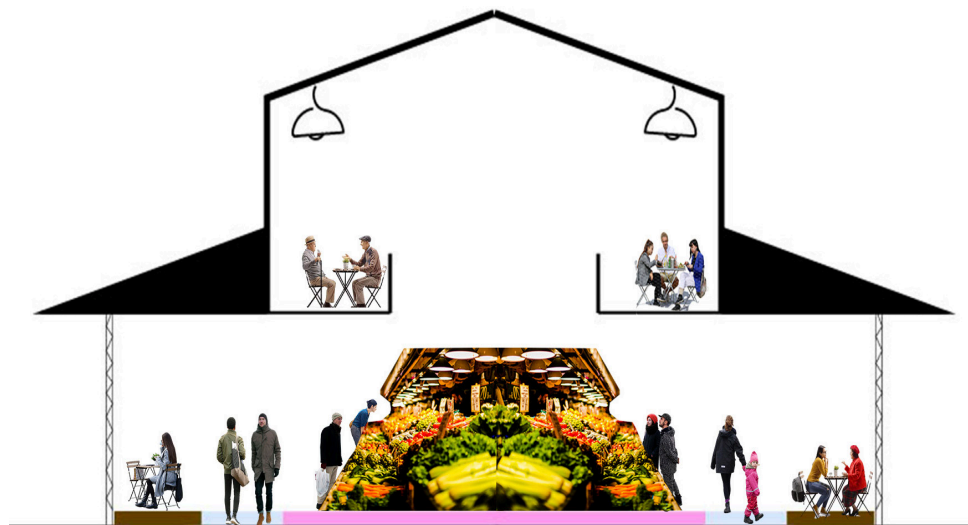


Figure 43: Cross-sectional depiction of the new layout of the historic market building

Every week, a new menu consisting of a couple meal options will be displayed in the kitchen. For each meal, an instruction card featuring the required ingredients will be provided to market customers, who will find and purchase the ingredients on the ground floor. Once the food is chosen, market customers will bring their food there to be prepared and plated (where an affordable service is charged). They will then be able to choose to dine in dedicated seating areas inside or around the building, or can decide to bring the food home.

This interesting service model gained a large popularity in markets in Asian countries, such as the ‘Hema Fresh’ stores operated by Alibaba in China. The success of this model depends on its differentiation from conventional dining experience in restaurants and food courts. Customers get to participate in the food-making process where they get to see, touch, and pick the ingredients that make up their meal, which has proven to be a very appealing experience. Moreover, by tasting the freshness of the ingredients, customers will be propelled to purchase more to bring home.

This service model also generates numerous social benefits. The kitchen represents an excellent opportunity to invite young aspiring chefs in Ottawa to create delicious recipes according to what is available in the market. In this way, the market becomes a platform for promoting local culinary talents. Secondly, the shopping activity is particularly suitable for families with young children. Parents can engage their children in this activity like a ‘treasure hunt’ in a marketplace, enabling the capacity to identify different food items and to trade.



3.3.2 Modular Destination Building

To activate the ByWard Market area through the reconfiguration of the street network and the increase of public space, we propose replacing the parking building on 70 Clarence Street with a multipurpose destination building.

The current parking building presents a barrier between York St and Clarence St. It is fragmenting the connection of both streets and the possibility of improving the commercial link and direct access to the market building. Not only is there potential for the destination building to bring physical cohesion to the area, but also increase social cohesion for the area's identity. The uses of the destination building will support the activities and uses of historical Market building. In order to solidify the district as a food-related destination, the modular destination building is essential. Without this building, the type of activation necessary to reinvigorate the area will not be fully possible. Therefore, we propose a destination building that responds to the dynamics of the ByWard Market area with diverse uses in a flexible space, developing a relationship between the indoor and outdoor areas while bolstering social food-related activities and programming.



Figure 44: Design inspiration for the modular destination building. Flexible areas to host diverse activities and uses

A module design is envisioned as it generates visual and physical permeability between the destination building and the site. This design allows public space development connecting the different modules, so it is possible to traverse the lot and link York Street, William Street, ByWard Market Square Street, and Clarence Street through the destination building. Moreover, a modular structure can enhance outdoor conditions through design, improving thermal comfort year-round.

Figures 44 & 45 are references for the vision of the destination building. They represent the idea of an open and connected design to the existing built environment. They show the possibility of developing activities around the buildings, reinforcing the vision of open spaces between the modules. Figure 45 illustrates how the modularity concept allows the building to interact with the context and generate transit and gathering places.



Figure 45: Example of a modular concept. It allows visual and physical permeability and integrates the surrounding area



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The uses inside each module of the destination building are selected and allocated based on four key factors: 1) external competition and pressure, 2) current land use and service gaps, 3) compatibility with surrounding uses, and 4) social equity.

The CF Rideau Centre next door poses significant competition for retailers. It is crucial to identify and appeal to merchants that sell high-quality, niche products in order to ensure long-term stability and sustainability of commercial rentals inside the building. An example can be independent retail stores that sell curated Canadian or local merchandise that appeal to tourists and residents alike.

In addition to goods retailing, food retailing will be a major component of commercial activity and entertainment inside the destination building. Given that the ByWard Market area already has a very high concentration of food services, a differentiable model must be adopted in order to forge a unique identity around fine dining experience at the destination building. A promising model is the gourmet food market. Examples of this model include Le Central (*Figure 46*) and the Time Out Market (*Figure 47*) in Montreal. Unlike conventional food courts in shopping malls, these gourmet food markets invite top chefs and icons in a city's gastronomic scene to operate a food stand in a delightful, hip venue. A module on William Street will be entirely dedicated to host this new venue.



Figure 46: Interior of Le Central, Montreal



Figure 47: Interior of the Time Out Market, Montreal

In the consultations, local residents and stakeholders identified several gaps in current land use and service offerings inside the ByWard Market area. Most notably, the area lacks indoor communal spaces and spaces for family activities in general. Hence, it is desirable to allocate part of the destination building to accommodate these unmet local needs while enabling other visitors to benefit from these uses. For instance, a community educational centre that provides cooking classes and workshops on sustainable agriculture and food consumption is wished for by local residents. Children-friendly classes and activities will be integrated into regular programming at the centre and the registration will be open to all Ottawa residents and tourists. Ideally, the centre will receive monetary and food donations from visitors and event participants and distribute them to food-insecure families in the area. Geographically, the centre will occupy the second module of the destination building on William Street and insert itself in harmony and synergy with the abundant food services nearby.

To conclude, the destination building will be programmed as a diverse and vibrant place for retail, entertainment and communal activities. Public facilities, such as public washrooms, are provided inside each of the modules. The information about space allocation to each of the uses is featured in *Figure 48*.

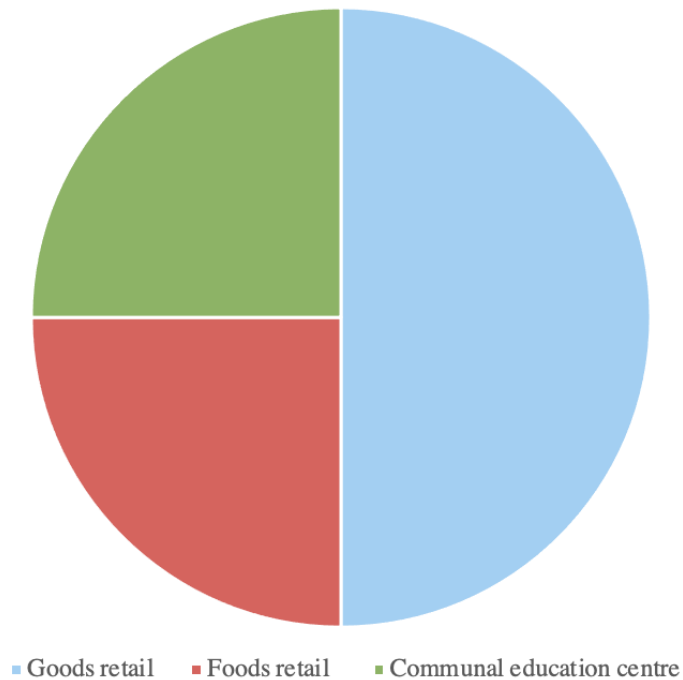


Figure 48: Allocation of floor spaces to different uses within the destination building



3.4 Street Design and Programming

As part of the proposal for the pedestrianization of the area, we consider some strategies that will enhance the activation of the streets as public spaces for everyone. We acknowledge that some strategies require significant transformations, but others can be incorporated in the short term.

All strategies aim to provide thermal comfort to favour the activation of the ByWard Market area all year round. As we confirmed during the field visits to the ByWard Market, people are willing to be outdoors in challenging weather conditions if some activities and elements give them a reason to visit the area. Therefore, public space can be active in the winter months by providing optimal infrastructure and diverse programming.

Moreover, the transformation of the street network presents the opportunity to rethink strategies that respond to the climate emergency through sustainable design and develop an inclusionary approach that welcomes everyone to the area.

3.4.1 Short-term Strategies Oriented to Winter

Strategies that could be easily implemented in the near future are increasing colour, lighting, and street furniture. Incorporating colour and lighting through permanent and programmable installations could help to encourage the usage of public space as it attracts people to the area and boosts its visual appeal despite the cold weather. Likewise, colours and lighting can be part of the way-finding strategy to improve visibility and give hierarchy to some locations

Installing temporal and permanent urban furniture that allows for flexibility in use would be beneficial as well. Priority installations might be outdoor heaters next to sitting areas, adjustable lighting, and shelters offering heat and brightness. Incorporating urban furniture could also be an opportunity to collaborate with students and artists' to create temporary structures such as the annual art and architecture competition in Winnipeg, called "Warming Huts".

3.4.2 Long-term Interventions

For longer-term interventions it might be useful to consider installing sustainable drainage systems, such as Bioswells, on road shoulders on York Street and George Street. Using this type of sustainable design principle and others that mitigate the climate emergency and encourage the development of active and passive activities are important to the overall experience of visiting the area year-round. Two other opportunities would be to replace surface pavement for permeable surfaces of different designs that do not prohibit movement of people using mobility devices and to increase the tree coverage in wide street sections (*Figure 49*) or open areas where allowed.



Figure 49: Example of a bioswell on road shoulder



3.4.3 ByWard Market Square Street

The vision for ByWard Market Square Street is to transform it into a completely pedestrian right-of-way where seasonal and permanent street installations in combination with programming will open the space up to a range of possibilities and activities. For instance, food trucks and artisan stalls should be permitted on ByWard Market Square Street whenever the weather allows. While being food-centric, independent artisan stalls on ByWard Market Street that sell Canadian and locally-made artifacts and products will attract tourists to the immediate area. This induces a spillover effect for food services nearby.

The current situation of ByWard Market Square Street in *Figure 50*. Whereas, *Figure 51* depicts what ByWard Market Square Street might look like after being redesigned during summer and winter time. The permanent interventions envisioned for ByWard Market Square Street include coniferous trees on one side, catenary lighting, permeable pavement blocks, and raised platforms at the intersection with York Street. These improvements will enliven the streetscape, particularly at night, and lower the effects of weather-induced barriers, such as slush, runoff, and pedestrian circulation.

Removable street furniture, particularly tables, chairs, benches, will be provided in ample numbers along ByWard Market Square Street to accommodate the high demand from customers of the Produce-Plus market, other visitors, and tourists. Outdoor umbrellas will be installed next to each table in the summer and autumn to provide protection against the heat, rain, and other elements. The flexibility of this furniture means users can rearrange them into configurations that best serve their needs. Moreover, they can be rotated during different seasons depending on the demand or removed during large street-wide events. For instance, some tables can be replaced by controlled fire pits, and small light installations during winter.

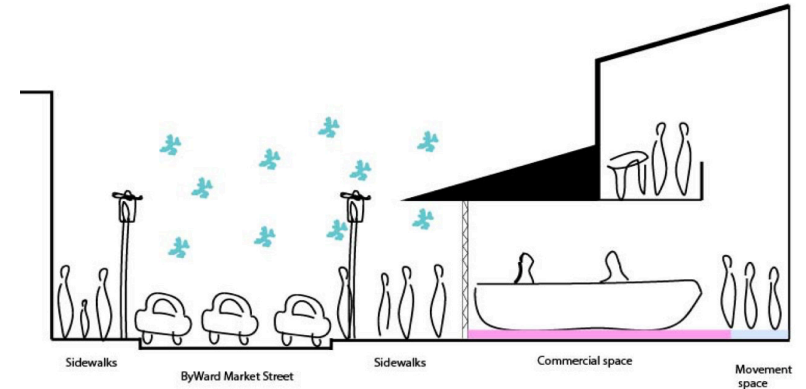


Figure 50: Current situation of ByWard Market Street

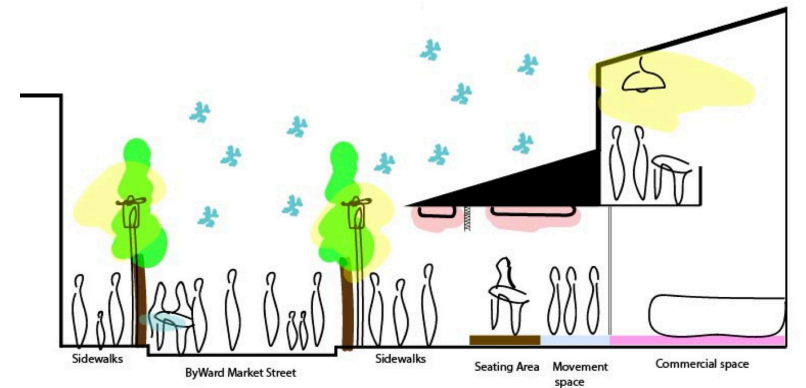
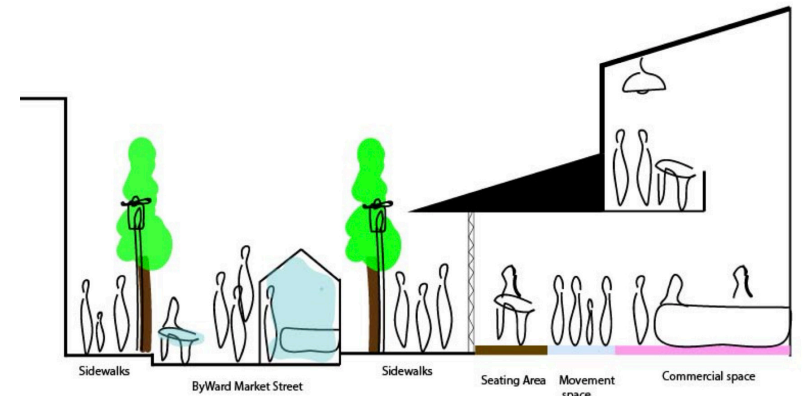


Figure 51: ByWard Market Street after being redesigned (Top: Summer/ Bottom: Winter)

3.4.4 William Street

William Street has already undergone complete pedestrianization on the segments between Rideau Street and George Street. Our site visits found that this pedestrianization has been extremely successful. It is, by far, the most lively segment of the ByWard Market area. Urban furniture and street decorations draw users to the space, and make it an interesting area to walk, gather, and linger. The absence of cars also contributes to this effect, as it creates a new, calmer, and safer atmosphere. It has also enabled small festivals and events to occupy the space with stands, bringing in new crowds.

In many ways, William Street reaffirms our vision that pedestrian streets increase the permanence of visitors. It illustrates the importance of a transition from car-oriented spaces into places for everyone. It is the perfect example of transformations that favour activation of the ByWard Market. Therefore, our vision for the street is to extend its current pedestrianization into Clarence Street, and to continue to build on the street's remarkable achievements.



Figure 52: Temporarily pedestrianized section of William Street between George Street and York Street



Figure 53: Permanently pedestrianized section of William Street between Rideau and George at night



3.4.5 George Street

Given that George Street has a mix of uses, we propose a transformation of the street into a shared space oriented to pedestrians but still allows car access. We envision a street that incorporates cyclists and car transit at low speed. This guarantees that all businesses and commerce can effectively load and unload their goods at specific zones. In the intersections with pedestrian streets (William St and ByWard Market Square St), we propose raised pedestrian crossings that give continuity to the pedestrian streets prioritizing people's movement over cars, reversing the current pattern. George Street will include loading zones, bike parking, street furniture and areas to promote seasonal festivals.

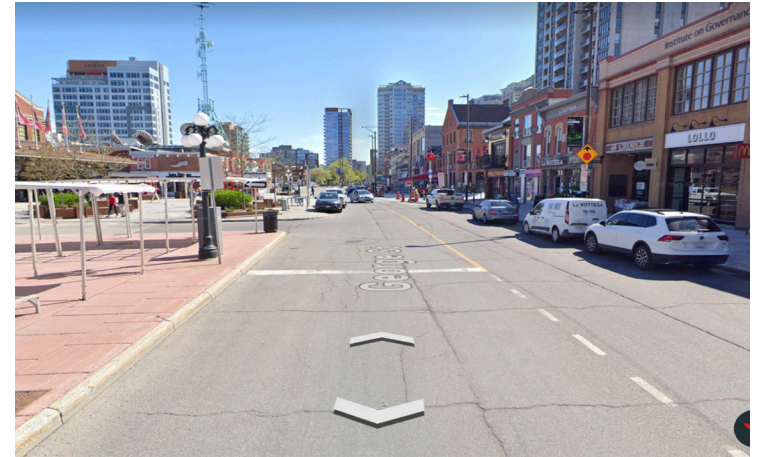


Figure 54: Current situation of George Street, source: Google Earth



Figure 55: George Street redesigned during Christmas

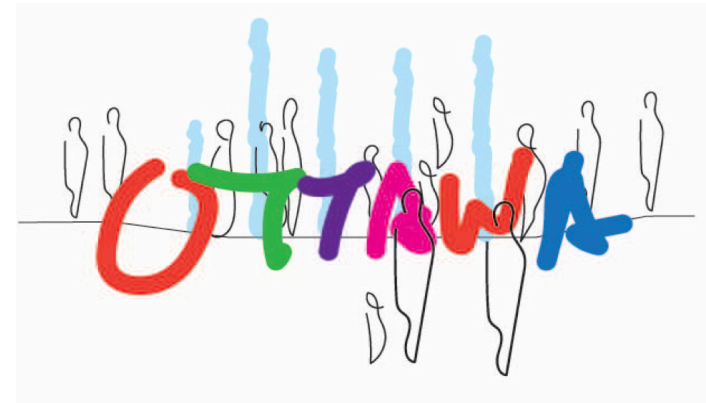
3.4.6 York Street

York is the main street for the pedestrian network because its width favours the possibility of developing the central public space of the area. York is a key street that connects the ByWard Market with cultural and touristic sites, so there is a high level of pedestrian activity permanently.

We envision a space free of car transit and parking to develop flexible spaces that support the activation of the street with diverse programming.. Considering that it is a wide street, we propose the development of a central public space between Sussex Street and ByWard Market Square Street, that includes tree species that endure winter. This strategy will favour thermal comfort for pedestrians all year round, providing shade in summer, permeable surfaces that filter rainwater, and a barrier for wind in the winter. Having a green space also narrows the street, facilitating the development of activities in cold months because it reduces the disturbance of air currents.

York Street plays a vital role in the site as it links the ByWard Market building and the destination building. It is the main access to both facilities, giving continuity to the pedestrian movement and creating the opportunity to develop a focal public space. Given that it is a street with restaurants, bars, and retail, we found the need to prioritize a safe main public space that connects the diverse uses to encourage people to visit the area to shop, gather, and access a large variety of cultural activities. Therefore, we consider York St the central hub of activity that welcomes visitors to the ByWard Market area.

Elements that will support the development of York as a lively street include adaptable street furniture to allow flexible uses, specific zones to host different events, and commercial stands. Likewise, extensive programming and temporary elements, such as a skating rink (*Figures 56 & 57*) near the Ottawa sign and access to the proposed skating leisure pathway to attract more people in the winter.



Figures 56 & 57: Concept for a concaved water fountain that can be transformed into a skating rink in winter





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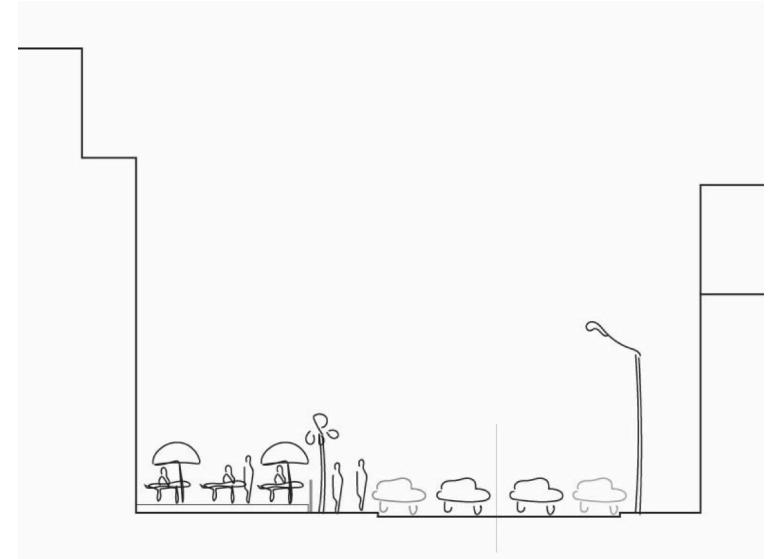


Figures 58: Illustration of the transformation of York Street with adaptable street furniture according to season; top: current situation, bottom: redesign concept

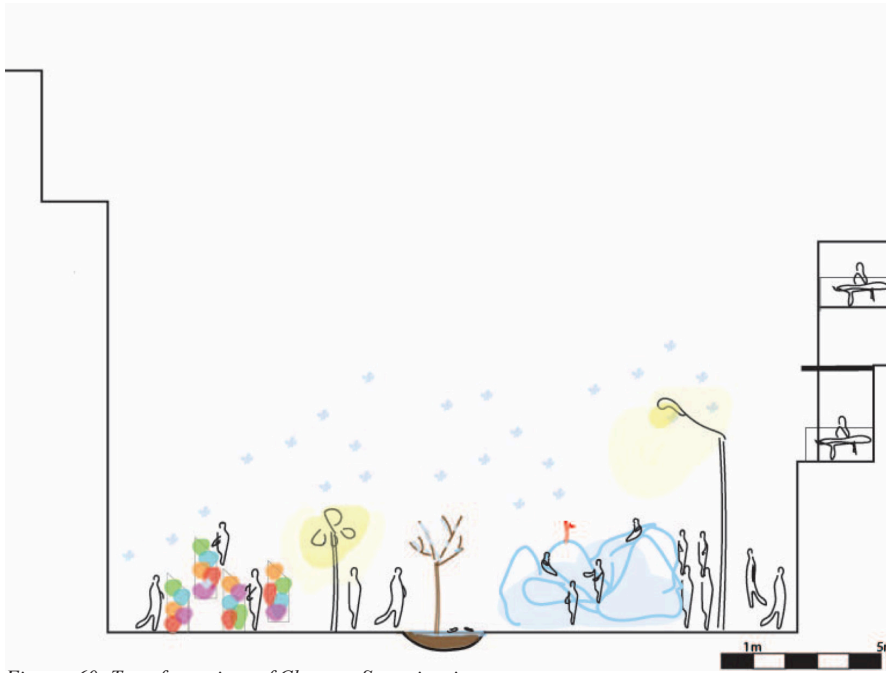
3.4.7 Clarence Street

Clarence Street is a crucial street as it is one of the access points to the proposed destination building. It is a commercial street-oriented towards restaurants and bars. During summer, it becomes a vibrant street with terraces that encourage permanence. Therefore, our intention with its pedestrianization is to favour winter activation by including street furniture to create gathering places that allow for a diversity of activities. Turning Clarence Street into a pedestrian corridor also enables the connectivity between the network of courtyards, one of the major components of our plan to revitalize public space.

Figure 59 illustrates the current configuration of the street. Figures 60 & 61 represent the vision for Clarence St in winter and summer.



Figures 59: Current situation of Clarence Street



Figures 60: Transformations of Clarence Street in winter



Figures 61: Transformations of Clarence Street in summer





3.5 Public Space Connectivity and Winter Activation

3.5.1 Courtyard Connectivity

Public space has guided a large part of our vision for the ByWard Market area. We aim to transform the current car-oriented space configuration into a space where people can enjoy public life in a safe and inviting environment. Therefore, the immediate street network's pedestrianization responds to the willingness to increase public space surface, guaranteeing accessibility to everyone. Consequently, our proposal includes the courtyards between George Street and St. Patrick Street.

We consider the courtyards an excellent opportunity to connect the ByWard Market area with emblematic sites such as The National Gallery of Canada and Notre-Dame Cathedral.

Given the diverse dynamics in each courtyard, they can become active squares and pathways that support the main activities on the pedestrian network.

Therefore, the strategy to activate the courtyards is based on creating wayfinding to connect visitors to the different locations of the ByWard Market area. To properly activate them, it is vital to make the entrances to the courtyards easily identifiable to the pedestrian circuit through signage that can include lighting, artistic installations, and colourful interventions on the pavement. This signage can then lead people through the different courtyards and primary public spaces. The signage design can also serve as an engagement opportunity for community groups, residents and businesses to create a sense of appropriation to keep the wayfinding installations in optimal condition.

Furthermore, the wayfinding strategy (*Figures 63 - 65*) will benefit the connectivity and the economic activation of the restaurants and commercial areas next to the courtyards. This network of squares and paths can be part of the identity of the ByWard Market area by including these outdoor spaces as part of the attractiveness of visiting the site, and therefore, enhance their use. Finally, due to the spatial configuration of the courtyards, they present favourable conditions for winter activation, and they can also adopt some of the short-term streetscape strategies.



Figures 62: Depiction of a connecting path that traverses all the NCC courtyards in the ByWard Market



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Figures 63: Use of colourful paint / light projection to indicate the connecting pathway between the courtyards



Figures 64: Use of colourful paint / light projection to indicate the connecting pathway between the courtyards



Figures 65: Use of overhead decors, such as garlands and catenary lighting, to indicate the connecting pathway between the courtyards

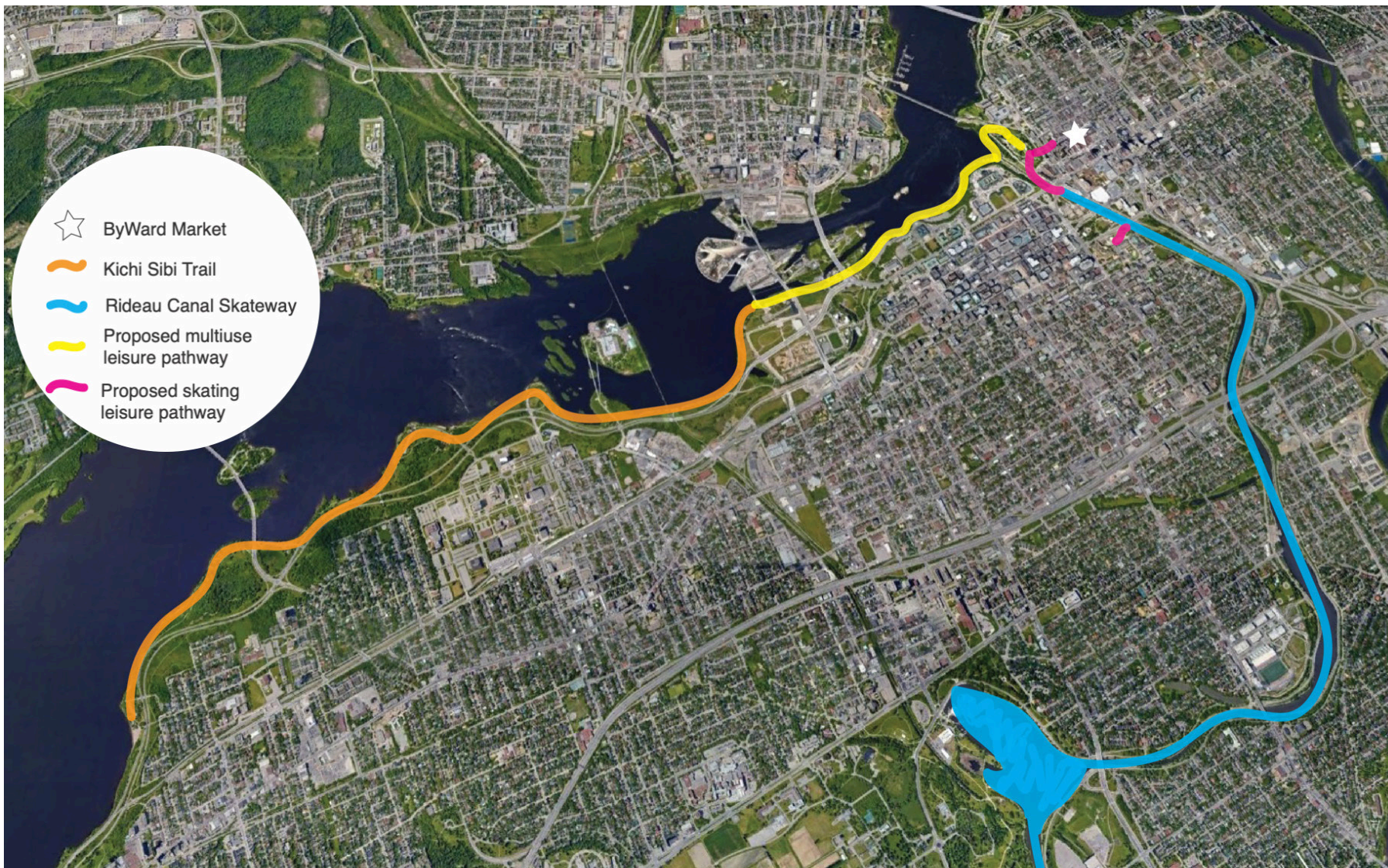
3.5.2 Winter Leisure Pathways

One option we have considered in relation to connection and winter activation is winter leisure pathways, where two pathways that already exist would be extended. These would be beneficial in two ways; the pathways would increase connectivity between the rest of the city and the area of the ByWard Market, while also activating the space. The two pathways in question are the Kichi Sibi trail and the Rideau Canal skateway, which are illustrated in *Figure 66* where the existing paths and their proposed extensions are marked.

In orange there is the Kichi Sibi trail, which currently runs from Westboro to the Canadian War Museum, and the yellow is the proposed continuation of this multi-use trail into Major's Hill Park located very near to the market. People can already walk, snowshoe, ski, or winter bike along this path. This extension would allow individuals to take part in these activities whilst traveling all the way next to the market area.

The concept is similar for the Rideau Canal skateway, which is already extremely popular in Ottawa during the winter. This pathway could extend and connect directly to the ByWard Market into the proposed skating rink on York Street.

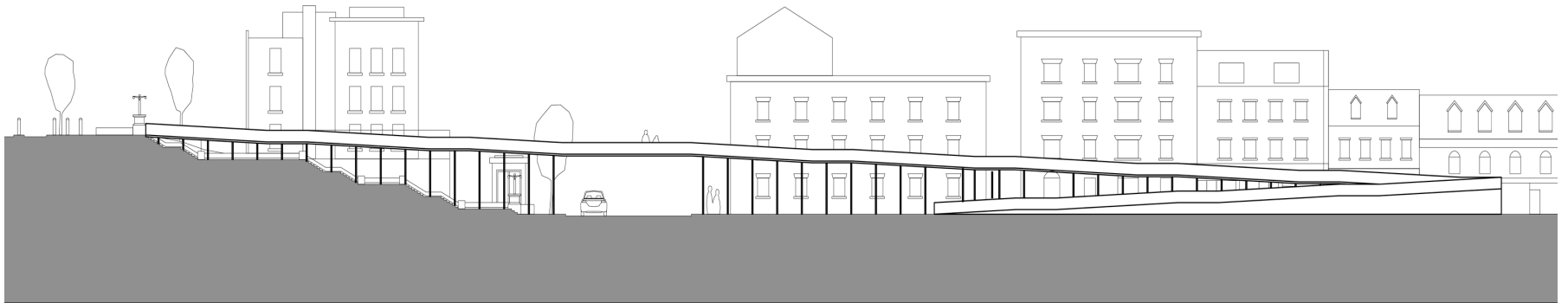
Figure 67 is a section showing what the pathway might look like connecting the pathway over Sussex Drive. This type of skating pathway and ramp is inspired from an event called Crashed Ice that takes place in various cities, Ottawa being one of them. Crashed Ice is a race event for athletes where a temporary skating ramp is built with scaffolding (*Figure 68 and 69*). This example is interesting because it shows a willingness and plausibility for this type of infrastructure and the location of the ramp in Ottawa is very similar to where the Canal skateway could be potentially extended. Of course, the concept for the ByWard Market would not be for athletes but could be built in a family friendly manner and at an extremely slow incline for safety as depicted in *Figure 69*.



Figures 66: Existing winter leisure pathways and proposed extensions



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Figures 67: Existing winter leisure pathways and proposed extensions



Figures 68: Crushed Ice Ottawa



Figures 69: Crushed Ice St. Paul

3.5.3 Winter Activation and Programming

For the ByWard Market to be a dynamic place, not only does the area need public space for people to gather but also intentioned programming and activities. This is especially important in the winter when the area sees a dramatic decline in visitors. The strategy presented here envisions using seasonality to the area's advantage, using weather conditions to mold the space. A balance of outdoor and indoor activities is needed to draw both residents and tourists.

Future programs and activities should be developed with consideration of the Market's identity to create a cohesive experience for the visitor. For example, the overall vision we propose for the area is food-oriented and accessible, meaning that the range of what happens in the market area should include food-related programming and free activities for everyone. It is important to not only have a strong commercial identity, but to accompany it with a similar social identity to have a distinct sense of place.



Figures 70: Interactive media wall installation in winter

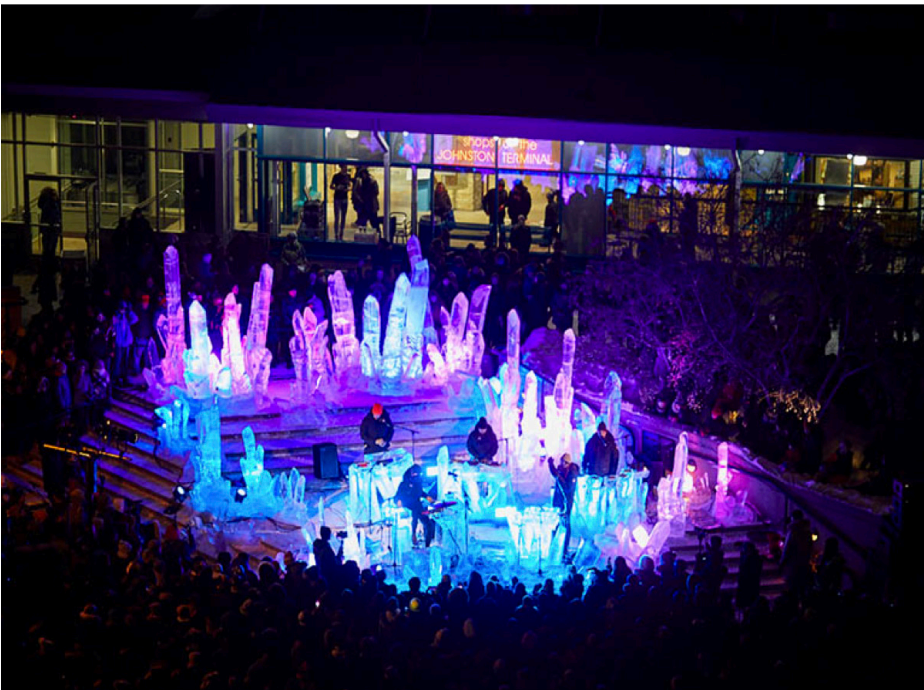
In general terms, with the new spacious York Plaza, the ByWard Market would be an ideal location for winter festivals and temporary events. As Winterlude already partly occurs in the market, the new space would allow for the expansion of the festival's activities. Other festivals could equally use the space. Because of the size of York Plaza, this would also be a great location to play with and utilize the seasonality to create activities. As previously mentioned, having a free skating rink would be a great option and the snow from the rest of the Market area could be brought into York Plaza to build structures to protect visitors from the wind or be used for an activity such as a maze.

Inspired by other similar events, a food-related outdoor program could be successful in the ByWard Market. There are two events in question that could be hybridized and easily implemented in the area: Dinner is Served and RAW: Almond. The first event, Dinner is Served, was a studio project with the architecture school at Carleton University in Ottawa where students would design and build outdoor pavilions to host restaurants. At the end of the studio project, chefs utilized the pavilions and people from the university community and elsewhere came to dine and experience the different pavilions. Similarly, RAW: Almond is a temporary outdoor culinary event that occurs on the river in Winnipeg, Manitoba. Top chefs from Canada and around the world come to prepare food in a temporarily built structure on the ice.

A program that lands somewhere in between these two events could be created for the ByWard Market. For example, there could be collaboration between the Market and Carleton University to have a sort of competition to design and build outdoor winter dining pavilions for the restaurants and bars in the area. This could then result in an outdoor festival throughout the ByWard Market. Having a community built and collaborative approach to this programming would be in line with the proposed identity of the Market.



Figures 71: Example of winter light installations



Figures 72: Example of winter light installations

Having regular indoor programming is also key in ensuring activation of the area year-round. This is one of the reasons the proposal of the modular destination building is necessary. The destination building would be the main area where indoor programming could occur. Part of the space would be dedicated to having educational activities related to food and sustainability.

Again, these are part of the cohesive identity envisioned for the ByWard Market. For example, there could be a variety of cooking classes as well as activities for families on the cycle of food production and nutrition. It is important that these classes are available at affordable rates and perhaps even offered on a sliding scale. In keeping with the spirit of the public market, these activities should not be expensive.

Overall, in developing future programming and activities, it will be important to incorporate seasonality rather than shy away from it and to always consider the identity of the ByWard Market. With the proposed public spaces and new destination building, the Market area would be well equipped to host both temporary and regular outdoor and indoor activities. The ByWard Market has the potential to draw both residents and tourists to the area year-round.





ByWard Market

4.1 Alternative for the destination building: Adaptive Conversion of 70 Clarence St.

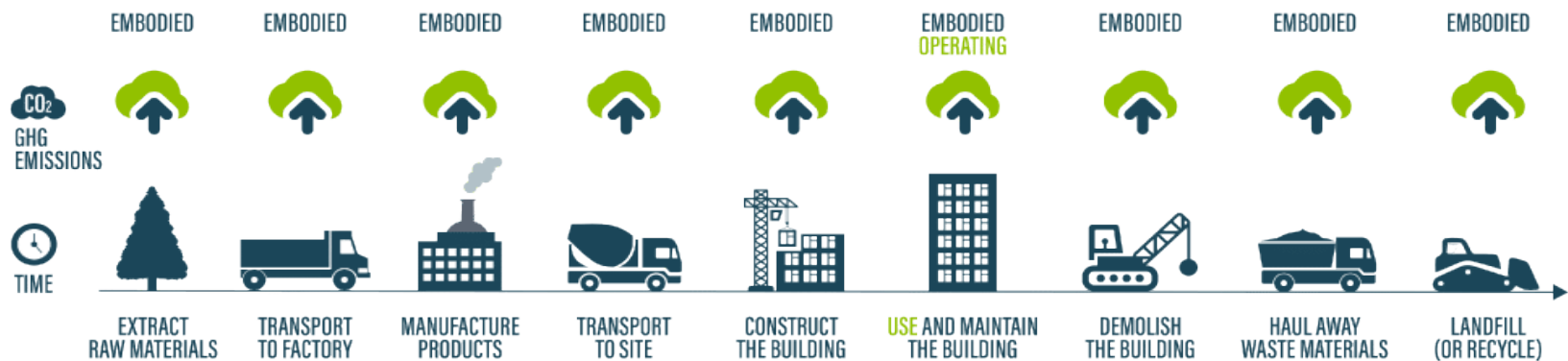
An alternative that was considered for the future of the parking lot located at 70 Clarence St. was the retrofitting of the building. Ultimately, the approach suggested is the demolition of the parking lot for the reasons mentioned previously. However, it is important to present the consideration of this alternative option.

Globally, building retrofits have become a popular practice in sustainable urban policy and the construction industry as part of a greater effort to reduce carbon emission and residual wastes in cities. The life-cycle diagram in Figure 73 depicts all the processes that take place over the entire lifespan of a building. Evidently, existing buildings, depending on the material composition and size, embody a considerable amount of carbon emission and energy over the life cycle. If we consider the downstream effects at landfill sites, the related activities cause serious disturbances to the natural environment.

Currently in Canada, non-degradable building materials represent 9% of the total solid wastes sent to landfills every year, measuring 2,151 kilotonnes in 2016. The City of Ottawa has a unique opportunity to provide an inspiring example of building retrofits by collaborating with industry leaders on a place-adaptive conversion of the parking building on 70 Clarence Street.

In alignment with the Zero Waste vision in the city's new Solid Waste Master Plan for the next 30 years, this collaborative project will sow the seeds of more research activities and innovations in the building and construction industry in Ottawa and the rest of the country.

Several attributes make the parking building on 70 Clarence Street a good candidate for reuse and retrofit. For instance, the building has interesting architectural elements, such as the arched openings and columns on all four sides. The building's concrete structure can be reinforced to permit additional floors. Moreover, the building is already served by utility grids and plumbing. Additional information about this alternative option is provided in the Annex.



Figures 73: Life-cycle analysis of carbon emissions in buildings, source: Architecture AIA 2030



4.2 Conclusion and Priority of Interventions

The overall vision proposed for the ByWard Market in this report reimagines the future of the area as one that is centred around food and as a destination for both residents and visitors. To develop this type of district many interconnected changes need to be implemented. There is a need to refocus the area as a public destination for pedestrians and to give less priority to cars and parking. As discussed throughout this report, the ByWard Market is ideally located to draw people into the area from three main active surrounding poles: University of Ottawa, Parliament Hill, and Ile de Hull. The potential users of the space are already nearby, but intentional activation and improved connections are needed to establish a district with a distinct experiential identity. Special consideration should be given to winter activation and programming as this is the season where the ByWard Market sees the greatest decline in visitors. Curating a unique winter experience would also bolster the Market's identity. The social conceptualizations need to be matched with the three pillars of design suggested: creating an experience; considering a diversity of budget, users, and activation; and focusing on the local.

All interventions discussed throughout this report should be strongly considered. Although the ideal scenario would be to implement everything suggested in this report, it is a radical approach that could be incrementally phased where certain elements could be prioritized. What is utterly essential is to create a cohesive identity for ByWard Market both physically and conceptually. In order to do this, Espace N.U.E. believes everything discussed in this report is extremely relevant. However, there is still a hierarchy of priorities to the interventions (*Figure 74*). In this last section, the top three priorities for the ByWard Market are outlined.

The ByWard Market would benefit from being redefined as a district as a place where people can go do their groceries, have a curated experience, and simply hang out. For this to be achieved, the first two priorities are the reconfiguration of the 55 ByWard Market Square building and the transformation of 70 Clarence St. into a modular destination building. Having these two new anchor buildings will serve as the heart of the food-related district. The third priority would be the pedestrianization of the area, as this both allows the activity of the anchor buildings to spill out into new public spaces and for people to come to the area to simply enjoy the spaces. This intervention could very easily be done in phases with the prioritization of York St., then ByWard Market Sq., and lastly Clarence St.. These top three priorities would create significant changes to the area and draw more users to the Market.

The ByWard Market area already carries great importance in the city of Ottawa and has incredible potential to become a dynamic market for people to come and stay. What should be stressed is that the future of the ByWard Market area needs to be considered holistically and not in fragments. One of the main issues identified is the lack of cohesion conceptually and physically. In moving forwards, the Market must relate both design and social interventions to the desired identity of the area.

Reconfiguration of the 55 ByWard Market building
Transformation of 70 Clarence St. into modular destination building
Intentioned winter programming & activities
Pedestrianization of York St.
Pedestrianization of ByWard Market Sq.
Shared street configuration of George St.
Continued pedestrianization of William St.
Pedestrianization of Clarence St.
Increasing connectivity & wayfinding throughout the NCC courtyards
Short-term winter-oriented strategies: colour & lighting, shelter & warmth through street-furniture
Long-term winter-oriented strategies: drainage systems, permeable surfaces, trees
Leisure pathways

Figures 74: List of proposed interventions and the order of priority, the darker the shading, the higher the intervention is on the priority

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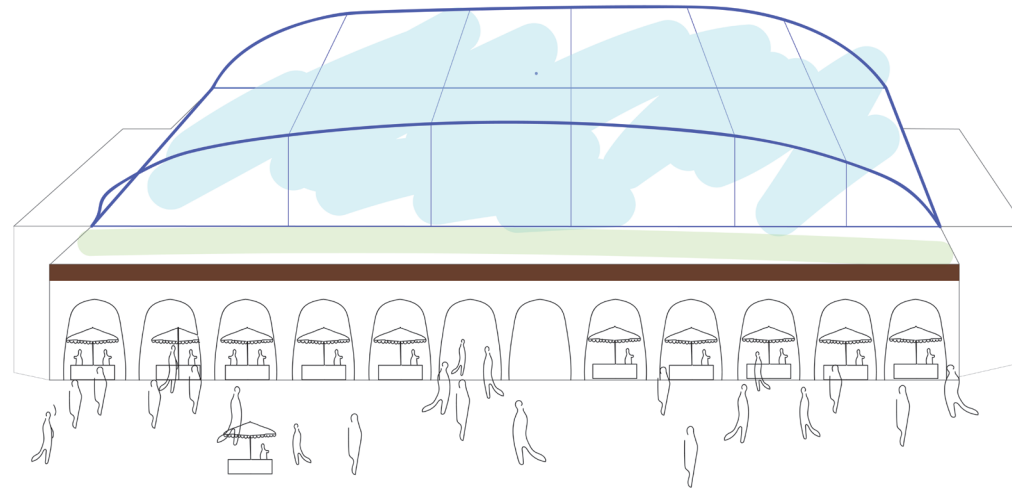
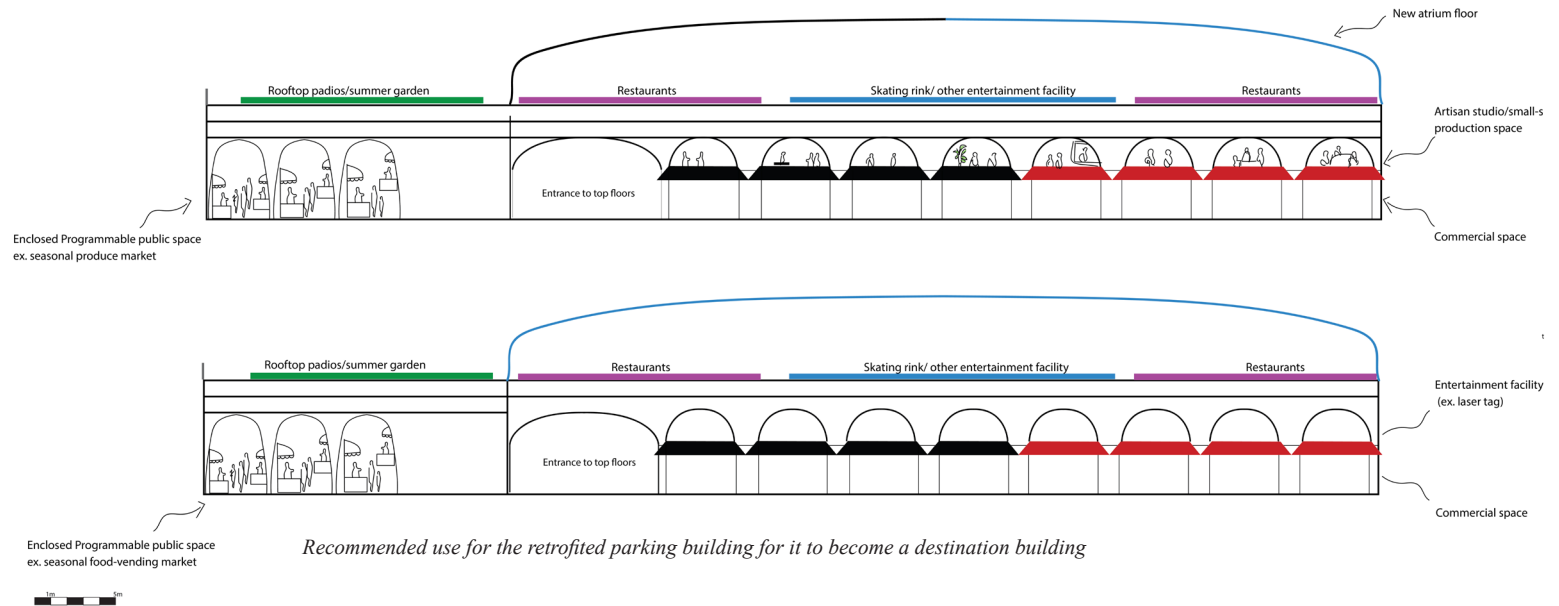
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6. Annex



4- Concluding Notes



View of the converted building from York Street

View of the retrofitted parking building from George Street



A possible bundle of customized retrofit strategies for the building is depicted in Figures 74 and 75. This design includes three main interventions below. However, engineering studies and financial analyses have to be conducted by professionals to determine the feasibility.

Strategy 1:

Hollowing the protruding section that borders York Street and eliminating the floor to double the ceiling height. This covered space can support a range of diverse, seasonal programs, such as farmer’s market and festival events, in all weathers, while also providing excellent permeability for pedestrian circulation.

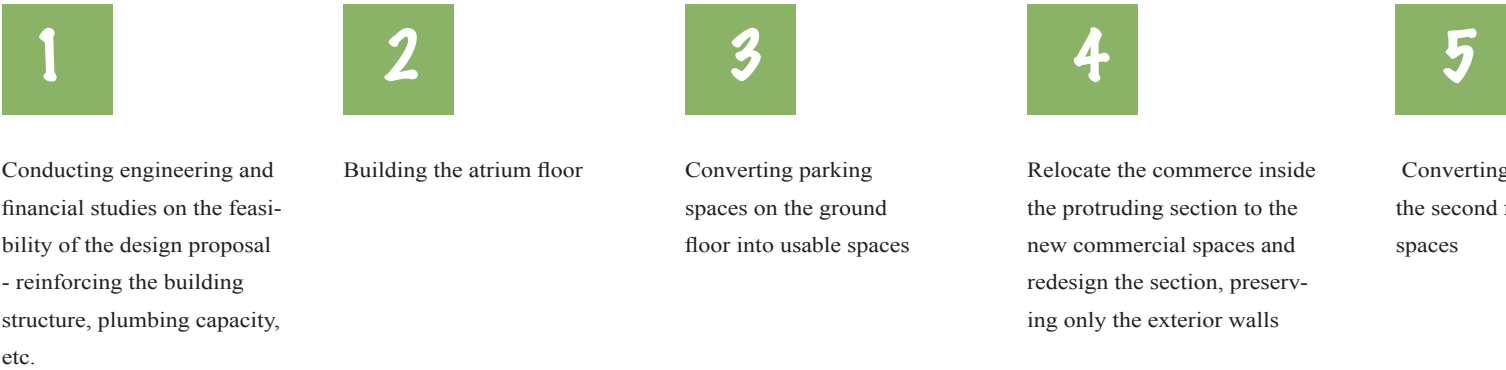
Strategy 2:

Replacing parking spaces by other uses, such as commerce, entertainment, and community use.

Strategy 3:

Building a atrium on the top floor to create a sophisticated

These strategies can be carried out in consecutive phases to minimize the impacts on businesses and rent revenues for the city. A brief phasing guidance (Figure 76) for implementing this particular design is provided in Figure. In terms to envisioned future uses, the retrofitted building will achieve the same space allocation ratios as the modular destination building concept.



Figures 76 Phasing Guidance for the adaptive retrofits of 70 Clarence