

Woven Networks: Reinventing Street Life in Downtown Minneapolis

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Chapter 1: Introduction

Many first time visitors to downtown Minneapolis are struck by the sidewalks devoid of pedestrians, they are even more struck by the extensive Skyway system they see overhead connecting 69 city blocks. Once a person realizes that most of their fellow pedestrians can be found in the maze over their heads, they will discover how difficult it can be to get into the Skyways. To the people using them almost everyday, such as workers that commute into the city, the Skyways are seen as a great amenity to the downtown that makes traversing the area more palatable during the cold winters and hot summers typical of the upper-Midwest climate. Recently, the mayor of Minneapolis and other city leaders have begun to recognize the negative impacts the Skyway system is having on the public space and sidewalks of the downtown core **(Figure 1)**.¹ While many users do not entirely agree

that they have a negative impact on the urban environment, when examined through the lens of architecture and urban planning it is obvious that the Skyways are prohibiting the creation of a vibrant, lively, and diverse public space in downtown Minneapolis.

Interestingly, the Skyways were first introduced in the 1940s and 50s by city planners seeking a solution to the increasing pedestrian flows in the downtown **(Figure 2)**. They not only dealt with the problem of crowded sidewalks, but also provided an opportunity to double the amount of valuable leasable retail space in downtown buildings, making them a worthwhile investment for developers.² Eventually, the Skyways became recognized as a way to reject the harsh Minnesota climate and the sidewalks and public spaces surrounding many downtown buildings began to be ignored.



Figure 1
Current appearance of the streets and sidewalks in downtown Minneapolis, note the lack of pedestrians, blank building facades and wide street.



Figure 2
Street activity on Minneapolis' Nicollet Avenue in the 1920s.

The first thought that comes to mind when trying to tackle the problems caused by the Skyways is to simply remove them, but this is not even an option for the city as they are privately owned and operated by the building owners that they connect. Furthermore, people using them like them and most do not want to see them removed. A solution must be thought of in order to address the dying street life in downtown Minneapolis; it needs to draw from the energy happening in the Skyways (**Figure 3**) and should provide a viable pedestrian alternative. The result will be a new urban typology that exists as a multi-leveled city where activity is happening on all levels in the public realm.

This thesis will investigate the way in which connections can be made between the private Skyway system and the public realm of the streets and sidewalks below them. In order

to reinvigorate downtown Minneapolis into a place not solely centered on shopping and restaurants, the sidewalks and public spaces of the downtown core must be reimagined to provide true public or democratic space that allows for spontaneity (**Figure 4**), something absent in the privatized Skyways. Creating lively public spaces outside the Skyways requires downtown Minneapolis' empty sidewalks to be reimagined so they may become more walkable and active during all times of the year. The first step to reimagining street life in downtown Minneapolis is the gradual removal of the elevated system as the streets and sidewalks begin to be prioritized. The removal of the Skyways will have to be done incrementally and strategically in order to draw from the most heavily used ones to put people outside and into the public realm. While Minneapolis' attempt to create a multi-leveled city has failed in many ways through



Figure 3
Typical lunch hour in the Minneapolis Skyways, most people prefer to stay in the Skyways rather than walk on the sidewalks.



Figure 4
People gathering in public space in downtown Minneapolis.

the creation of the Skyway system (**Figure 5**), the city is now beginning to understand these issues and has a rare opportunity to replace an unsuccessful infrastructural network with one that responds to its surroundings and can easily grow and change along with the city. This is the opposite of the current Skyways, which ignore their surroundings and lacks the capacity to grow or easily adapt to changes (**Figure 6**). The end result will be a downtown full of life and activity where people have a new found respect for the interactions that are possible once people step out from the private Skyways and into the public realm.

Notes:

1 Star Tribune, "Maze of Minneapolis skyways: A dead end?," 22 January. 2012 <<http://www.startribune.com/local/minneapolis/137828733.html>>

2 Twin City Sidewalks, "Climate as Proxy for Capital within the Minneapolis Skyway System," 12 January. 2012 <<http://tcsidewalks.blogspot.com/2012/01/climate-as-proxy-for-capital-within.html>>



Figure 5
View of the first Minneapolis Skyway spanning over Marquette Avenue shortly after its construction in 1962.



Figure 6
An example of a Minneapolis Skyway "dead-ending" where a potential new building could be built.

Chapter 2: Understanding the Problem

Part I: History of the Skyway

The idea of the Skyways for downtown Minneapolis was first proposed in the 1940s as the downtown became more congested with cars and pedestrians trying to share the public right-of-way. More space was being given to the cars and rather than take some of that space back for pedestrians, some thought that a dedicated system for pedestrians raised above the cars would be a more efficient and safe way to deal with the congestion.

At the time, nothing resulted from this idea, and cars and pedestrians continued to coexist in the public right-of-way. In the 1950s, a couple of major corporations began to relocate their corporate offices from downtown Minneapolis to the outlying suburbs and the first shopping mall was built in Edina, MN, a short ten minute drive from downtown Minneapolis (**Figure 7**).

This new movement to the suburbs worried downtown property and business owners and led them to form the Downtown Council in an attempt to stem the flow of business to the suburbs. The council was able to influence the city to create a planning department in 1959, this department assembled the first plan laying out the future development for downtown Minneapolis. This plan included the first sketches for what would later be known as the Minneapolis Skyway System (**Figure 8**).

Interestingly, the first visions for the Skyways were open-air walkways connecting plazas above the streets, very different from the current enclosed skyways.

In 1962, the first Skyway was completed with the second one not far behind, being completed only one year later (**Figure 9**). Eventually the



Figure 7
Southdale Center in Edina, MN shortly after its construction in the 1950s.

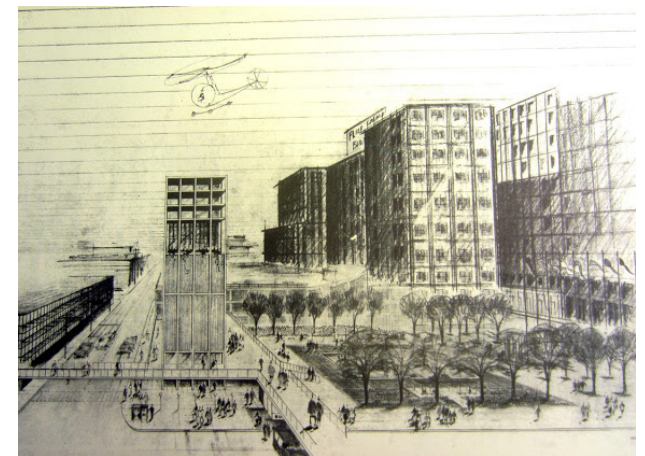


Figure 8
Concept sketch from 1959 for the Minneapolis Skyways, note the openness of them and that they connect to public plazas.

Skyways would comprise an entire network that stretches across the majority of downtown Minneapolis. The first Skyways were nothing more than simple enclosed bridges spanning across a street to connect office space on either side of it, they are owned and operated by the building owners that constructed them and the city has no jurisdiction over them other than permitting for new ones. Eventually the role of the Skyway changed and now they have created lasting implications for the city.

Until the 1980s, most Skyways were nothing more than bridges linking offices across a street, but when the city began to experience a construction boom, the role of they Skyways began to change. Marking this change was the completion of the IDS Center, with its Crystal Court occupying the entire block at the base of the building. This court or atrium was designed to look like a shopping mall and none of the

stores that lease space in it have a presence on the sidewalk, let alone an entrance directly out on to it. What the Crystal Court did for the first time was to link up a number of Skyways into a central point creating a node along what was a disconnected infrastructure used primarily by office workers. The Crystal Court was a huge success and encouraged other building owners and developers of new buildings to include their own courts in their buildings (**Figure 10**), which would also link to the Skyways.

Building owners at this time also began to line the interior corridors linking the Skyways to their courts with retail shops, virtually drawing the activity found on the sidewalks into their buildings. This would eventually lead to not only empty sidewalks, but also blank facades and vacant storefronts lining the sidewalks and making for an exceptionally unwelcoming



Figure 9
The Minneapolis Skyway System opens in 1962 to great fanfare.



Figure 10
Gaviidae Commons in downtown Minneapolis is an example of the types of courts or atriums that the Skyways connect.

place for pedestrians to be **(Figure 11)**. Additionally, as more of these courts and interior corridors were built, the Skyway system became a more cohesive and navigable network despite the number of private owners operating each skyway in their own slightly different way. It was during this time that one began to recognize the segregation occurring in downtown Minneapolis. There was a noticeable difference between those using the private skyways and the people using the public sidewalks.

Part II: What is Public or Democratic Space and Its Importance

Public space means different things to different people and often the term is used to describe spaces that are privately owned and lack the characteristics necessary for truly public or democratic space.¹ Such a definition of public

space is apparent in the Minneapolis Skyway system, which is privately owned and does not allow for the type of discourse necessary to foster a sense of community or a democratic society **(Figure 12)**.

If someone were to visit downtown Minneapolis in hopes of experiencing the atmosphere and meeting local residents, they would first be greeted by empty sidewalks but eventually find a Skyway filled with shoppers and restaurant-goers. At first glance it would appear downtown Minneapolis has a lively and vibrant downtown, but it would quickly become apparent that the activities taking place in the Skyways are driven by consumerism and not other activities typical to most public spaces like gathering in groups, casually strolling on the sidewalks or relaxing on a bench and watching passersby.



Figure 11
Typical blank facade along the sidewalks of downtown Minneapolis.



Figure 12
The IDS Center's Crystal Court, the place most people think of when looking for public space in downtown Minneapolis, despite the fact it is privately owned and operated.

Public spaces are seen on many different scales – from the large public plaza built specifically to provide a shared communal space that is open to all or the smaller more organically formed spaces that arise from a community’s everyday routines and rituals **(Figure 13)**.² Finding examples of either type of public space in downtown Minneapolis proves difficult, due in large part to the popularity of the Skyways.

But the Nicollet Avenue Pedestrian Mall in downtown Minneapolis is an example of public space that was built specifically as a community resource, which also serves the everyday rituals of those living and working in the downtown **(Figure 14)**. This pedestrian priority street allows for unplanned interactions and creates an air of spontaneity; as one has to negotiate within a space lacking the controls common to the Skyway; this leads a person to

recognize their role in the space and allows for greater engagement with their surroundings. The Skyways, however, do not lend themselves easily to spontaneous interactions as they are controlled privatized spaces and are separated from the public space of streets and open spaces.

One common characteristic found in nearly all types of public spaces are the increasing number of controls placed upon them.³ The policing that takes place is often motivated by local authorities trying to provide a sense of safety in their public spaces. The desire for greater safety is often based on unfounded notions suggesting that few controls on public space can lead to unsafe or undesirable individuals taking control.

In downtown Minneapolis, this has resulted in a culture that now accepts and has grown



Figure 13
Gammelortv, a popular square in Copenhagen Denmark that was originally formed by the paths taken by medieval residents of the city when taking herds of livestock to pasture outside the city’s walls.



Figure 14
The Nicollet Avenue Pedestrian Mall in downtown Minneapolis, one of the few streets regularly used by pedestrians.

accustomed to the segregation occurring due to the Skyways. The Skyways prohibit large groups of people from gathering whether it is planned or impromptu. The alternative would be to gather in the street, but this proves undesirable as the empty sidewalks present an unwelcoming urban environment with few opportunities to be seen or interact with fellow pedestrians whether alone or gathering in a group.

As cities have grown more diverse and less segregated over the past half-century, many still feel the desire to commune with those “like” them resulting in a built environment that supports seclusion and exclusivity, which is typically geared toward the needs of business and consumerism. The rise of consumerism has prompted many popular franchises, including Starbucks, to adopt the term “third place” as a way to describe the type of

atmosphere their stores provide (**Figure 15**). The “third place” can best be described as the place one goes between work and home (**Figure 16**), a space to forget the routines of everyday life.⁴ This definition of the third place plays upon peoples’ ideas of what they find most comfortable, which explains why brands would adopt this description as a tool to market themselves. However, the inventor of the term, retired University of South Florida sociology professor Ray Oldenburg. Public space describes the notion of third place as places that present a certain element of danger or spontaneity, where people can gather and communicate openly, to speak out or amuse.⁵

Although much of the human interaction happening in downtown Minneapolis occurs in controlled and privately owned spaces, it is occurring nonetheless (**Figure 17**), and this highlights the desire for communion. Not



Figure 15
An example of what Starbucks would like you to do when you hear the term “third place.”



Figure 16
Ray Oldenburg’s idea of the “third place.”

only is this desire inherent to human nature, but it also has the power to lessen “psycho-social” problems and can improve the quality of a person’s life. Public spaces play a large role in helping to facilitate someone’s need to communicate with others. Successful public spaces provide opportunities for seeing and interacting with many different people. Whether this interaction is with known or unknown persons does not matter, the experience of being in public becomes more enjoyable and comfortable for all users of the space through interaction with others.

The interactions that take place in a public space allow for a shared experience amongst its users, these experiences help to form common memories and fantasies between many people despite differences in background or experience. When a person is able to interact with many different people, it

elevates their knowledge and understanding of others; this has the power to boost their communication skills and makes them more adept at relating to all types of people. Furthermore, information about one another is exchanged in public spaces, making a person’s life more visible, which often results in the type of social bonds that help to form a community.⁶

If the activity occurring in the private Skyways were to be pushed out into the public realm of the sidewalks and streets of the city, one’s life begins to be more visible and they truly engage with their surroundings. As long as the activities in the Skyways remain there, people will continue to be disconnected from the rest of their community and it will only prolong the issue of segregation between Skyway users and sidewalk users. Once people begin to leave the Skyways, they will have the opportunity to interact with a wider



Figure 17
People enjoying public space in downtown Minneapolis at a weekly farmer’s market.

variety of people rather than those similar to themselves in the Skyways. This will have a positive affect on the community, as the division between the two groups of people will not be as palpable and greater awareness of others in the community will increase understanding between various groups of people.

This thesis focuses on trying to get people out from the Skyways and into the view of the public realm to not only add much needed activity to the empty streets and sidewalks, but to also break the barrier of segregation between Skyway users and sidewalk users resulting in a more public and democratic city.

An example of a successful public space typology is the “European square,” best described as the cobbled stone square found in the center of most European towns and cities, they are open to everyone in the

community and are a place where many planned or unplanned events can occur.

European squares rouse sociability, interaction is expected but it is carefree and solely for the purpose of enhancing one another’s sense of wellbeing. Such sociability allows for more democratic communication as interactions are based on personal qualities and civilities, not social or economic status. European public squares are recognized as part of the community, thus great value is placed upon them for the number of shared memories that have occurred within them. These memories may be deep-seated notions rooted within the culture or they could be on a more personal level, either way they are viewed as a piece of history, further adding to the value of the square.

But how should American public spaces be designed in order to achieve the same level

of success as European public squares? Clearly not the way they appear in downtown Minneapolis – empty and lifeless, rather they should exemplify the community they serve and need to be a place that welcome interaction and public discourse. As few controls as possible should be put upon the space so that people in it feel as though they can speak freely and let their true selves be shown. Few controls will also provide an important sense of spontaneity for the space, helping users to recognize it as a third place, a space that feels just as comfortable as a person’s home or workplace.

Many modernist architects around the turn of the twentieth century envisioned cities of the future as hyper-dense and stratified into multiple levels, putting cars, trains, and pedestrians on separate levels (**Figure 18**). While few if any of these dreams of the future

city were ever realized, many cities have taken on the notion of a multi-leveled city. Boston has the “Big Dig,” which buried Interstate 93 under the city and many of the open blocks left after the old above-grade highway was demolished were turned in parks and open space for the public to enjoy. Seattle has its Freeway Park spanning over Interstate 5, which links the First Hill and Capitol Hill neighborhoods to the downtown, a link that was severed after construction of the interstate.

More relevant to Minneapolis and the idea of a multi-level city is Manhattan’s Highline, a former raised rail line that has been turned into park space that creates much needed open space in a very dense part of the city (**Figure 19**). This new use for the rail line allows it to interact with the buildings and neighborhood around it in a way that it had not done before, unlike the way the Skyways ignore their sur-



Figure 18
A “Five-Story Street,” 1914 sketch of what future cities could look like. Notice the emphasis on density and the multi-layered movement of people and vehicles.

roundings (**Figure 20**). The one thing all of these examples have in common that the Skyway does not is the fact that they all took on challenges posed by pieces of city infrastructure and turned them in to public space to benefit the people of each city. The Skyways in Minneapolis can be seen as a city infrastructure, but one that is private and turns its back on the city it supposed to be serving.

A public space for Minneapolis that exemplifies the possibilities of multi-leveled cities rather than their pitfalls would create a much more vibrant and exciting public realm on the streets and sidewalks of the downtown. The public space found here should act as a third place where all users feel comfortable and it should be prioritized over the private spaces of the Skyways. It should be a place that allows spontaneous interactions and gatherings to occur to make it lively and ever changing rather

than static and uneventful, much like the Skyways themselves as well as the activity occurring within them.

Part III: Connection to Climate

Much of the success the Skyway has experienced is owed to the cold winter temperatures and high summer humidity found in Minneapolis. Although the Skyways were originally built as a complement to the sidewalks as a way to reduce pedestrian flows as well as provide an additional floor of leasable retail space, it was quickly adopted as a means to reject the harsh climate. In order to convince people to choose the sidewalk over the Skyway, careful design considerations need to be taken in order to create an inviting streetscape where the climatic needs of pedestrians is addressed.



Figure 19
Manhattan's Highline, an old elevated train line is converted to public space above the streets and sidewalks, interacting with the buildings that surround it in a way it never did before.



Figure 20
The Minneapolis Skyways ignore their surroundings, both the street and the buildings around it, making it a rather static and rigid infrastructure.

This thesis argues that the Skyway system is unnecessary despite the harsh Minnesota climate. If the weather were the main reason there are Skyways in downtown Minneapolis, many other cities would have Skyways as well. Places like Seattle, Helsinki and Moscow all seem like good candidates for Skyway systems based only on their climates, but people in those cities have learned to live with frequent inclement weather and each city has been able to build successful public spaces without having to turn to an overbearing infrastructure that seals people off from their surroundings **(Figure 21)**. Fortunately, Minnesotans are proud of their high tolerance for extreme weather and many enjoy celebrating the fact that they live in Minnesota despite the climate.

One example of Minnesotans embracing their climate is the recent construction of Target Field **(Figure 22)**, the Minnesota

Twins' ballpark, ending a longtime debate in the state over the construction of a publicly funded open-air stadium. The team's original stadium, Metropolitan Field, was eventually deemed undesirable because it was open to the elements leading to the construction of the Metrodome in the early 1980's. The Metrodome was covered with a giant inflated dome and was a popular venue for Twins games, Vikings games, and many other events for over a decade.

Then in the late 1990's, as the team began experiencing decreased fan attendance, the Twins asked the state to finance the construction of a new ballpark, one that was open-air as they realized that these types of stadiums draw in larger crowds. After many years of debate and public outcry over the construction of a publicly funded stadium, the Minnesota Legislature approved the project



Figure 21
Residents of Helsinki, Finland enjoying public space even though it is winter.



Figure 22
Target Field, the new open-air stadium in Minneapolis. It is the first of three such stadiums being built to replace the enclosed Metrodome, an example of Minnesotans celebrating their climate.

and Target Field opened in the spring of 2010 to great fanfare. Since then, the team has seen a return of fans to their games despite sometimes early spring weather more closely resembling winter and many hot and humid summer days.

The construction of the open-air Target Field has encouraged other teams in the area to build their own open-air stadiums. The University of Minnesota's Golden Gophers football team has already completed their new stadium, which puts fans outside and can be very cold during late autumn games (**Figure 23**). The Minnesota Vikings are currently designing their own new stadium, which will also be open to the outside despite the fact that the NFL schedule goes well into the winter (**Figure 24**). The construction of such large and expensive projects that force people to come into contact with their climate, even

though what they are replacing has worked well to protect people from the elements, proves that Minnesotans have what it takes to survive their harsh climate and actually prefer to celebrate it, rather than avoid it; the Skyways avoid the climate and do nothing to celebrate it.

The solution to issues presented by the Skyways needs to bring people outside and into contact with their climate and surroundings. Doing so will get more people outside, adding activity to the currently lifeless public realm found in downtown Minneapolis. For this to be successful, the buildings currently in the downtown need to offer some sort of protection to the pedestrians on the sidewalks. Elements as simple as awnings or canopies would suffice to protect sidewalks from snow and rain making them more comfortable for pedestrians to walk on (**Figure 25**). Unfortunately, most buildings in the downtown present blank facades with



Figure 23
The Minnesota Golden Gopher's TCF Stadium, another newly constructed open-air stadium in Minneapolis.



Figure 24
A rendering for the new Minnesota Viking's open-air stadium.

few elements of overhead weather protection. Therefore, a citywide system of such elements must be designed and implemented in order to make the street level more desirable to be on rather than the hermetically sealed Skyways.

Part IV: Walkability

Although many of the sidewalks in downtown Minneapolis can be rather unwelcoming and present little activity, the downtown core is a rather compact place and is quite walkable in terms of distances. But in terms of pedestrian comfort the sidewalks lack many of the design considerations present in many other cities with sidewalks bustling with pedestrian activity.

In downtown Minneapolis, most pedestrians prefer to walk through the Skyway rather than the desolate sidewalks. Sidewalks have long played an important role in cities as the place

where public life happens. Apart from providing a safe space for pedestrians to walk, they have other characteristics that reinforce their important role. Many of these characteristics are tacitly acknowledged by the public, which has led to their fading role in places like Minneapolis where they are often ignored.

Sidewalks are places to see and be seen and have many theatrical aspects. This was a result of the rise of department stores and consumerism present in the mid- to late nineteenth century where not only did the stores have appealing displays to look at, but also pedestrians were sites to be seen **(Figure 26)**.⁷ In addition to department stores and smaller shops trying to capitalize on the theatrics of sidewalks, street vendors also tried to take advantage of sidewalks and the pedestrian activity on them. But as the public became more concerned with their



Figure 25
An example of overhead weather protection in Seattle, WA, it's part of the building code to include this on commercial buildings in the city.



Figure 26
What the streets and sidewalks of downtown Minneapolis looked like in the winter of 1898.

appearance, department stores and shop owners tried to distance their retail activities from those occurring on the sidewalks, forcing many street vendors into more undesirable parts of cities.

In many nineteenth century cities this created noticeable distinctions between more upscale shopping districts and working class neighborhoods where pedestrians, bicyclists, and street vendors all negotiated sidewalk space making for a vibrant and lively public life on the sidewalk.⁸

While it is unrealistic to expect the sidewalks of present-day Minneapolis to display a similar level activity as sidewalks from the nineteenth century, the idea of having streets and sidewalks with different types of activities occurring at once is very appealing and would help to draw people out from the Skyways.

Some may argue that the Skyways of Minneapolis present the same opportunities afforded by sidewalks in other urban centers, these people most likely subscribe to the notions behind the “voluntary city” where markets and philanthropy are able to provide for society in the same way that government can. The ideas behind the voluntary city run counter to what many planners and community activists believe; that a top-down approach to planning and community development should only be implemented by municipalities with the intention of helping everyone, not just market or financial interests.⁹

While a more traditional approach to planning and community development led by local government is most able to serve all levels of society, many people are still attracted to privately developed neighborhoods and urban developments that are only made possible

through large private investment. Although these privately funded developments may seem appealing at first and in line with a city's best interests, the developers behind them are most concerned with their profit from the project and not the long-term development of a community.¹⁰ Furthermore, these types of developments often exude a certain amount of exclusivity and the same types of controls seen in the Minneapolis Skyways are exerted on the public spaces of such privately funded developments. What this suggests is the necessity for a pairing of private investment with close involvement of city planners and policy makers in order to create public spaces and sidewalks that serve the public as well as the capital interests of the private developers.

Such a relationship may manifest itself in different ways, it may be accomplished through a joint funding approach or stringent zoning

and building codes that place importance on streetscape design meant to foster a sense of community as well as provide inviting public spaces. By setting design guidelines that address the organization and form of a city in such a way that inhabitants are able to assign their own meanings and memories, a place will be created and it will have importance to those that use it.¹¹

Setting design guidelines that deal with the sidewalks or paths in a city can have some of the greatest impacts on an urban environment. The design of paths can be influenced by a variety of guidelines that all focus on creating a lively and inviting streetscape. Such guidelines should foster a sense of continuity on the path so that they may be read as a continuous network.¹² It is also important that the paths suggest a sense of directionality so that pedestrians feel as though they are heading

to a destination and not aimlessly wandering through the city.¹³ Paths need to create a feeling of opportunity as well as safety through well-designed edges, making the paths more exciting and creating inviting public spaces.¹⁴

Often the design guidelines implemented by a city seem most concerned with providing activity through retail and restaurant uses, which is similar to the goals of the developers that created the Minneapolis Skyway System. While creating urban spaces with retail amenities are able to attract people, which can also spur further development, it is important to consider leisure activities when setting design guidelines.¹⁵ Again, it is critical that a city's paths be read as a continuous network, this means that planners should be equally concerned with the design of the main pedestrian paths as well as those that lead to it.¹⁶

What can result from better-designed and more walkable pedestrian paths is a more democratic urban environment where pedestrian movement becomes the predominant means of transport. People will feel safer walking on the sidewalks and there will be greater opportunity to create spaces that have uses related to the community.¹⁷

The design guidelines put in place in New York's Times Square district provide an example of the success that can be achieved by rethinking a well established streetscape to create a more inviting and democratic public space. The Times Square Alliance hired the Project for Public Spaces (PPS) from May 2006 to June 2007 in order to better understand and reinvent how Times Square performs as a public space.¹⁸ The first thing that was noticed were the ground-floors of most of the buildings in the area did not support sidewalk

activity, gathering, or leisure activity. They also noticed that although the area is called Times Square, there is no actual square, but that there was a demand for use and activity in the street medians that could support new activity. Movement and circulation for pedestrians was difficult and the design of the sidewalks was not properly addressing the needs of its users. There were no flexible spaces and it was difficult at the time to get permission to temporarily close a street from cars in order to host community planned events. It was noticed that Times Square was not being perceived as a district and that the side streets leading to the area were not performing as destinations on their own.

The recommendations for Times Square included reconfiguration of streets to better accommodate foot traffic and to reduce the negative impacts of vehicular traffic;

architectural treatments and amenities to improve the pedestrian experience; retail strategies to diversity the district's attraction; and new public space programming such as performances and markets (**Figure 27**).¹⁹ Although PPS was only making these suggestions as temporary solutions, after being implemented the positive impacts on the streetscape and the Times Square district as a whole were quickly recognized and it was decided to implement these changes on a more permanent basis. This has given a new sense of life and vitality to Times Square; no longer is it a place for just tourists but also a place for New Yorkers where a sense of community can be displayed.

Part V: Theoretical Framework

Public space in downtown Minneapolis has been primarily relegated to its privatized

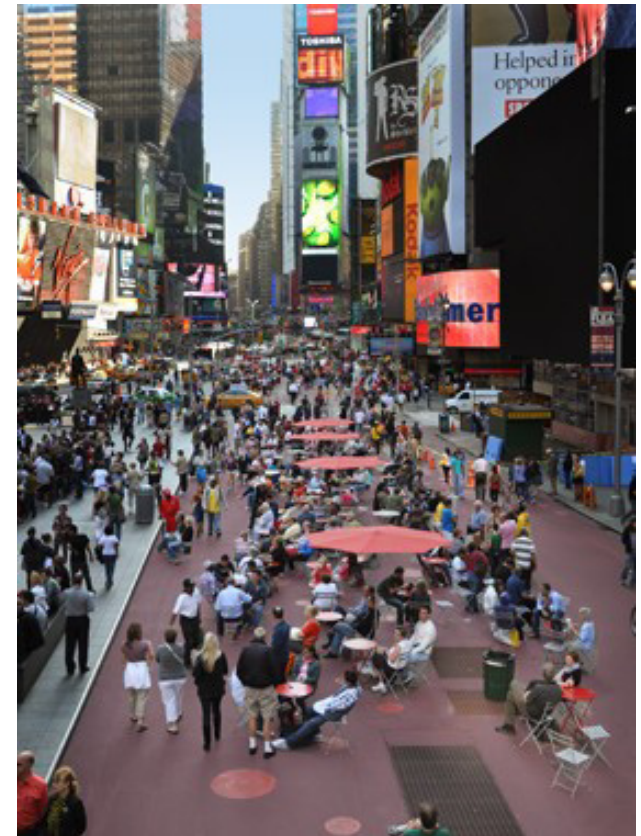


Figure 27
The redesign for Times Square, which is much more pedestrian oriented making for better public space.

Skyway system resulting in a public realm that offers few if any of the characteristics necessary for truly spontaneous and democratic public space. This is the result of the harsh climate in the region, which has helped the success of the Skyway and influenced many building owners to reconfigure their rentable commercial space to be near Skyways rather than face the street. This “reconfiguration” of retail space has created an empty and lifeless streetscape; thus, downtown Minneapolis’ sidewalks lack the life seen in most other urban centers and they no longer allow for the typical activities of a sidewalk to be performed.

In order to remedy these issues, new and better connections need to be made between the Skyways and the sidewalk. These connections should draw from the activity currently seen on the Skyway level that

stretches over the downtown. Constructing only one building to achieve this seems inadequate; rather, a better option is to build a new network that ties into the existing Skyways and leads people outside into the public realm and down to the sidewalks.

This new network should be more than just a path that connects between Skyways, rather it should provide protection over the sidewalks and help to address the many blank facades currently seen in downtown Minneapolis. The new network should be built in conjunction with basic street level improvements that are commonplace in most other cities like street trees and outdoor seating. This will all be done in an attempt to make the sidewalks a more welcoming place and to reimagine the multi-leveled city, but one relevant to Minneapolis and its existing Skyway system.

Notes:

1 Miles Orvell, ed., and Jeffrey L. Meikle, ed., *Public Space and the Ideology of Place in American Culture* (Amsterdam: Rodopi, 2009)

2 Orvell

3 Orvell

4 Orvell

5 Orvell

6 Suzanne H. C. Lennard et al, *Livable Cities: People and Places: Social and Design Principles for the Future of the City* (Southampton, N.Y: Gondolier Press, 1987)

7 Ben-Joseph, Eran, and Terry S. Szold, *Regulating Place: Standards and the Shaping of Urban America* (New York, NY: Routledge, 2005)

8 Ben-Joseph

9 Ben-Joseph

10 Ben-Joseph

11 Lynch, Kevin, *The Image of the City* (Cambridge, MA: MIT Press, 1960)

12 Lynch

13 Lynch

14 Crankshaw, Ned, *Creating Vibrant Public Spaces: Streetscape Design in Commercial and Historic Districts* (Washington, DC: Island Press, 2009)

15 Lennard, *Livable Cities: People and Places: Social and Design Principles for the Future of the City*

16 Lennard, *Livable Cities: People and Places: Social and Design Principles for the Future of the City*

17 Lennard, *Livable Cities: People and Places: Social and Design Principles for the Future of the City*

18 Project for Public Spaces, "Times Square," 20 April. 2012 <<http://www.pps.org/projects/timesquare/>>

19 Project for Public Spaces, "Times Square," 20 April. 2012 <<http://www.pps.org/projects/timesquare/>>

Chapter 3: Methods

Part I: Site Analysis

Minneapolis is located along the banks of the Mississippi River in the eastern central part of Minnesota. The first non-native settlement of the city started with the construction of Fort Snelling in 1819, the construction of flourmills in the late 1800s gave the city its first bit of recognition as an urban center. Eventually it would become the largest city in Minnesota as well as the cultural and financial center of both the state and the region, despite the harsh climate characterized by cold winters and humid summers. But this did not stop people from settling the area and building a rather large and prosperous city.

Minneapolis' mills gave it the nickname of "Mill City" and helped to create a bustling downtown filled with retail shops, banks, and hotels (Figure 7). Eventually the milling industry

would fade and the small retail shops would be replaced by large department stores and the city transitioned into a financial center for the region and gained a more cosmopolitan atmosphere, but still with lively and active streets and sidewalks (Figure 28).¹

The sidewalks were filled with activity; city planners began to propose construction of "elevated walkways" as a way to deal with the heavy pedestrian flows. Eventually it led to the construction of the Skyway system in the 1960s, which would become one of the largest elevated pedestrian walkway systems in the world. The Minneapolis Skyway system spans over seven miles and connects 69 city blocks (Figure 29).²

While both the name and the system itself



Figure 28
The Dayton's Department Store in downtown Minneapolis in the 1920s, the sidewalks had a lot more pedestrians then.

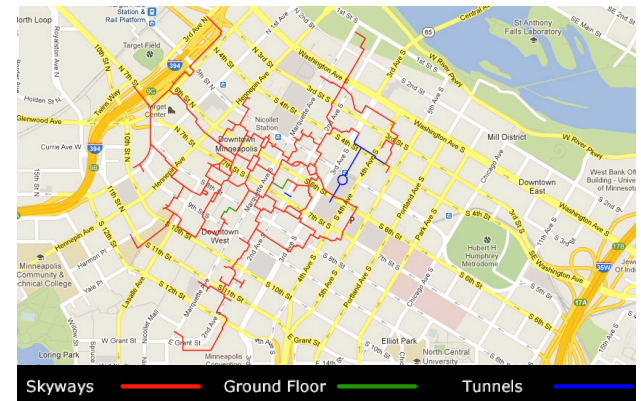


Figure 29
Map of existing Skyway network in downtown Minneapolis.

gave the city a new and more modern look **(Figure 30)**, it also effectively killed street life in the downtown core and many people living or working in downtown Minneapolis are now able to spend an entire day indoors thanks to the extensive system. But for people that do not use the Skyway system on a regular basis, it can be confusing and difficult to navigate. Many say just finding places to access the Skyway system proves difficult and recently a mobile phone app has been developed to help people navigate the maze of Skyways covering the downtown core.

Now the mayor of Minneapolis and city leaders are starting to recognize the problems posed by the Skyways and as part of the recently released 15 year plan, the city recognizes these problems need to be tackled.³ Despite the somewhat negative stance this thesis takes toward the Skyways, their popularity will be

seized upon and they will be recognized as an opportunity to provide much needed pedestrian activity for the empty downtown sidewalks below them.

One street in downtown Minneapolis that still has a good amount of pedestrian traffic is the Nicollet Avenue Pedestrian Mall. The street was given special pedestrian priority in 1968, as the Skyways were becoming a popular attraction in the downtown core, improvements were made to the street at the time to make it pedestrian friendly **(Figure 31)**. Today it is one of the few streets in downtown Minneapolis with retail storefronts facing the street and it is the only one with trees, landscaping, and pedestrian amenities. The only vehicular traffic allowed on the Nicollet Avenue Pedestrian Mall is buses, emergency vehicles and bicyclists. The street is often closed for special events and the buses that run through it are rerouted.⁴



Figure 30
The modern new look of Minneapolis after Skyways began to be built.



Figure 31
The Nicollet Avenue Pedestrian Mall circa 1970.

Although there are a few Skyways spanning over the Nicollet Avenue Pedestrian Mall, they do not seem to have much of an effect on the number of people using the street, particularly during the lunch hour on a sunny summer day. But if you were to return to the Nicollet Avenue Pedestrian Mall in the evening, you would find it rather empty and desolate compared to the number of people on it during the day. If you walk a few blocks to the west however, you will find a large number of people enjoying the bars, restaurants and theaters along Hennepin Avenue (**Figure 32**), which is the “night-life” street in downtown Minneapolis. It is the heart of the city’s theater district, one of the largest in the nation and often times filled with pedestrians despite the fast moving cars on the street.

The cross streets running perpendicular to Nicollet Avenue and Hennepin Avenue are

suffering the worst from the impacts of the Skyway (**Figure 33**). All of these streets are one-directional with at least four lanes of traffic and parking on either side of the street. The sidewalks are narrow, flanked by either vacant storefronts or blank facades with little overhead weather protection. This thesis will focus on improving these streets to make them more pedestrian friendly and to better connect them to the bustling Skyways overhead.

Not only are these streets suffering the most from the Skyways, they also run through the heart of downtown Minneapolis, bisecting both Nicollet and Hennepin Avenues and the area is surrounded by the dense residential neighborhoods of the city. Most of the public transit and the bicycle lanes that take you to the downtown run through this part of downtown Minneapolis and most people think of this area when talking about downtown Minneapolis. It is



Figure 32
Hennepin Avenue, Minneapolis’ street for night life, lined with bars and restaurants and home to the city’s theater district.



Figure 33
South 10th Street in downtown Minneapolis, it intersects with both Nicollet Avenue and Hennepin Avenue, the Skyways completely ignore the sidewalks below and few pedestrians can be found on this street or other streets running parallel to it.

surrounded by a number of cultural institutions like Target Field, the Metrodome, and the Minneapolis Convention Center to name just a few.

Because this thesis focuses on such a dense and well-traveled part of the downtown, it is seen as having the most potential for creating a lively and active street life. The new designs for these cross streets will not only make them into destinations themselves, but they will also help bring people to the Nicollet Avenue Pedestrian Mall and Hennepin Avenue on the street level rather than through the Skyway system.

Part II: First Steps Toward a Reinvented Street Life

The first step in addressing the problem of empty and lifeless streets in this part of downtown Minneapolis is to look closely at the

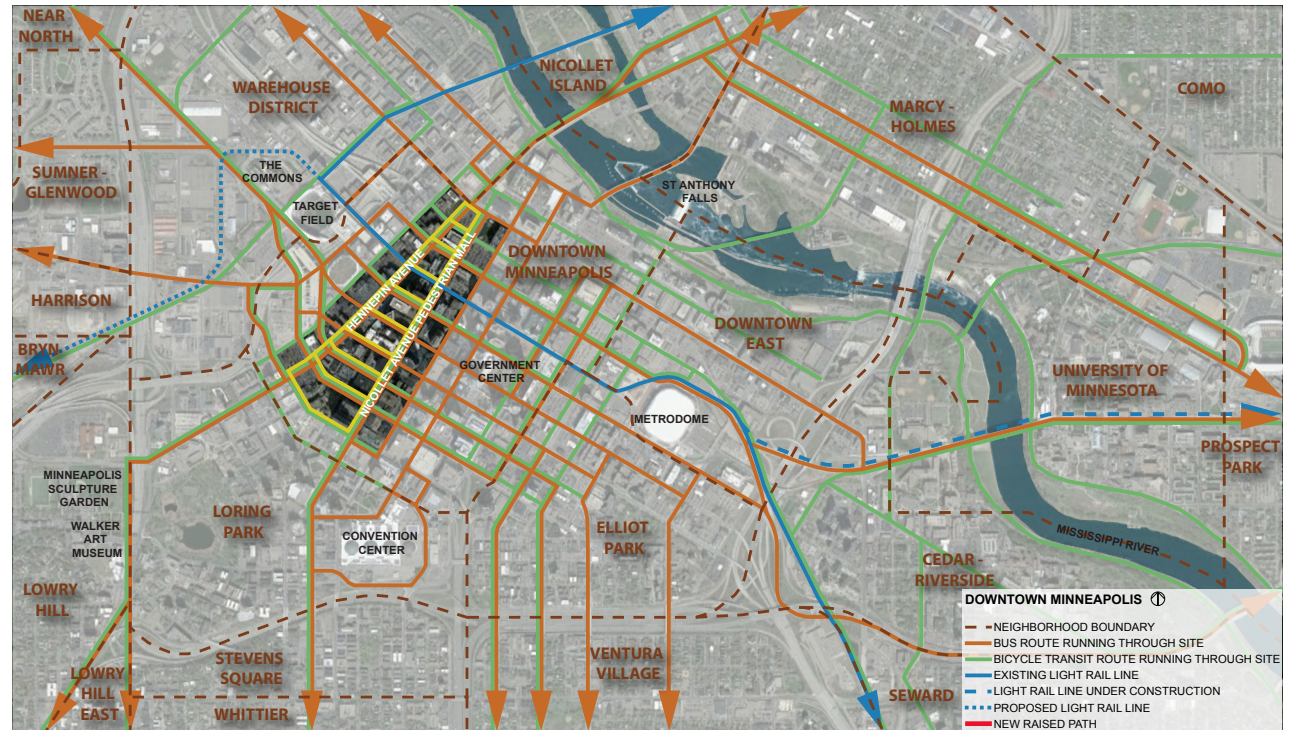


Figure 34

Map of Minneapolis focused on the area surrounding Hennepin Avenue and the Nicollet Avenue Pedestrian Mall, it is the heart of the downtown and is feeling the full effects of the Skyways on its streets and sidewalks.

streets running perpendicular to Nicollet and Hennepin Avenues to determine which ones can be altered or reduced in width in order to give more space to pedestrians (**Figure 35**). At first glance, there is no real hierarchy of streets in this area, each being at least four lanes wide with fast moving traffic in one direction. But after determining which ones are making broader connections across the city, and designating these as major arterial streets, it leaves a handful of other streets to be reduced in width and changed drastically.

While, some of the major arterial streets can withstand slight reductions in width, most of the street level changes on these streets will be to break up the street parking and intersperse it with plantings and street trees to make them more inviting places for pedestrians to walk. Two streets are being considerably reduced in width down to only two lanes of traffic,



Figure 35
Area of focus for the thesis, all of the streets have been given designations to indicate what type of atmosphere it should present. The street level land uses are also indicated, note the concentration of business along Hennepin Avenue and Nicollet Avenue but not the streets running perpendicular to them.

one of which will go from being a one-way to bi-directional. The additional space gained by reducing the street width will be given to pedestrians, there will be planting strips separating people from traffic and there will be other basic pedestrian amenities added like benches for people to sit at and added overhead weather protection.

The remaining streets in this area will be designated pedestrian priority streets, with their widths dramatically reduced down to only one lane of traffic. The paving pattern on these streets will be different than typical city streets to encourage pedestrians to move freely across the street and to signal to drivers to slow down. Rather than completely removing cars from these streets, it is necessary to leave some space for them as there are some existing parking garages that rely on these streets for access. After reducing the width, the additional

space will again be given to pedestrians with ample plantings and seating to make it an enjoyable place for people wanting to spend time along these streets.

Notes:

1 Brief History of Minneapolis, "How the Mill City was Established," 19 October. 2009 <<http://suite101.com/article/brief-history-of-minneapolis-a158274>>

2 Skyway Museum, "The Mostly True History of the Skyway," 19 April. 2012 <<http://suite101.com/article/brief-history-of-minneapolis-a158274>>

3 Star Tribune, "Maze of Minneapolis skyways: A dead end?," 22 January. 2012 <<http://www.startribune.com/local/minneapolis/137828733.html>>

4 City Block, "Minneapolis – Nicollet Mall," 12 August. 2009 <<http://cityblock.wordpress.com/2009/08/12/minneapolis-nicollet-mall/>>

Chapter 4: Design

Part I: Walkable Canopies

While the sidewalks of downtown Minneapolis can benefit greatly from basic street level improvements to bring them to the level of typical streets found in most other cities, this thesis takes the stance that such changes would not be enough to convince people to prioritize the sidewalks over the Skyways. The sidewalks have been neglected for so long in downtown Minneapolis, the buildings virtually turn their backs to it and focus all of their attention toward their interiors, whether it be shopping courts or corridors connecting Skyways. The city requires a new network to supplement the existing Skyway network in order to connect people more easily to the streets and sidewalks (Figure 36).

This new network will serve multiple purposes, it will create a new raised path to replace the some of the Skyways, it will provide access to

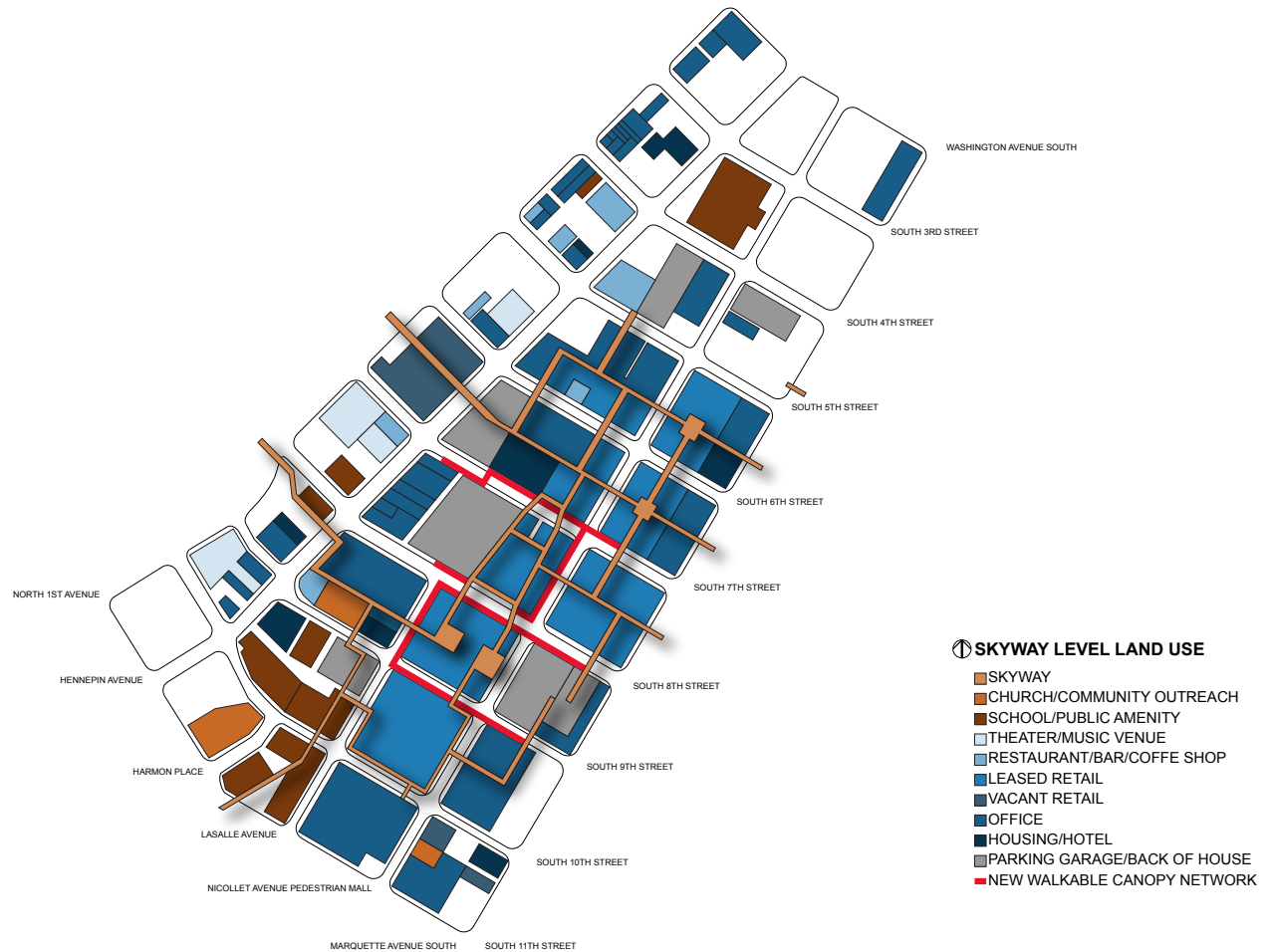


Figure 36
The new network laced in with the existing Skyway network over the sidewalk network. The new network is concentrated on streets running perpendicular to Hennepin Avenue and Nicollet Avenue.

multiple existing Skyways, and it will provide overhead weather protection on the street level. The structure for it will be independent of the buildings it is serving, it will be a city owned and operated system, rather than one controlled by the business owners using it. This will make it a part of the public realm, a place where all people are welcome in an attempt to bridge the gap between the Skyway and sidewalk users. In order to make the walkable canopies unobtrusive on the sidewalks, the structure for it will be a column that supports the path/canopy with girders cantilevered off of it with tension cables helping to support some of the load (**Figure 37**).

The goal of such a system is to make connections to the Skyways more visible and easier to access in the hope that it will draw people out from the Skyways and add much needed life and activity to the public realm.

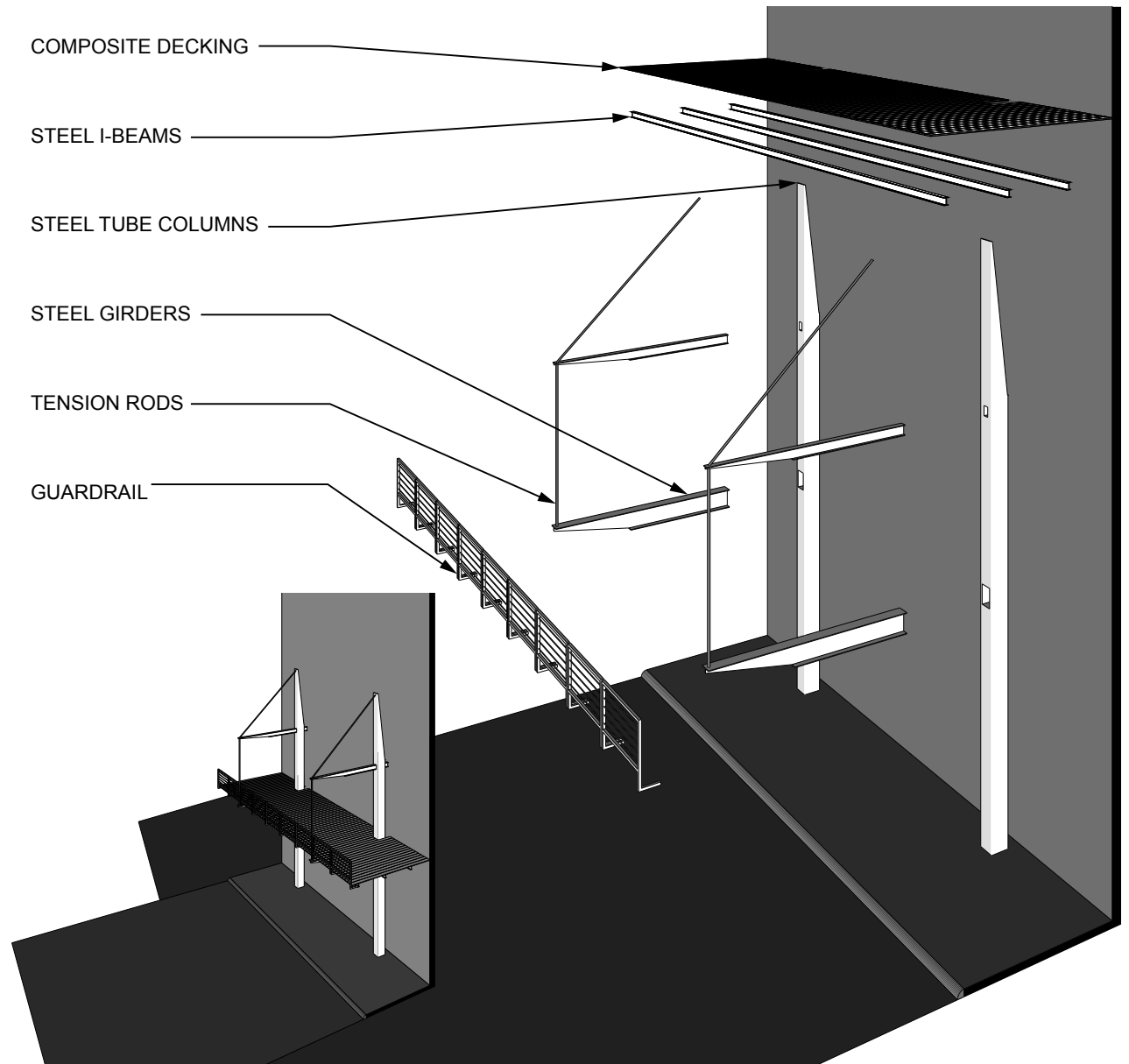


Figure 37

A structural system has been devised to make the walkable canopies less obtrusive on the sidewalk as well as independent from buildings they are serving. It can be assembled from kit of parts that can be easily assembled or disassembled as the city changes.

Unlike the existing Skyways, this network will have the ability to adapt as the city around it changes and grows due to its easily replicated structure. It will allow downtown Minneapolis to become a multi-leveled city by providing activity at both levels as the street level businesses and sidewalks will have new overhead weather protection and the buildings facing walkable canopies above can begin to open up to the new path that has been created.

Part II: Phasing

Implementing this new network as well as improved streetscapes over such a large portion of the city could prove difficult and would best be approached by phasing these changes into the urban fabric of the downtown. Additionally, the intended changes to the existing Skyway network would most likely happen in different stages but any outcomes



Figure 38
Street level improvements before the new walkable canopy, simple improvements like reducing the width of street, street trees and seating will improve the streets greatly.



Figure 39
The same three streets after the new walkable canopy network is added, making for a more active multi-leveled city.

would be based on the success of the new walkable canopy network as the decision to remove and shrink the existing Skyway network would come down to the building owners that operate them.

The most logical first phase of such an endeavor would be to make street level improvements based on whether they are a major arterial street, a reduced width street or a pedestrian priority street. These improvements could be very basic in nature, as these streets lack most if any of the typical amenities given to the sidewalks found in most other cities, like street trees and plantings, benches, awnings or even storefronts for the matter. The second phase would be the construction of the new walkable canopy network, assuming that the city, the owner of the new network, could convince the building owners with Skyways that span over South 7th, 8th and 9th Streets to

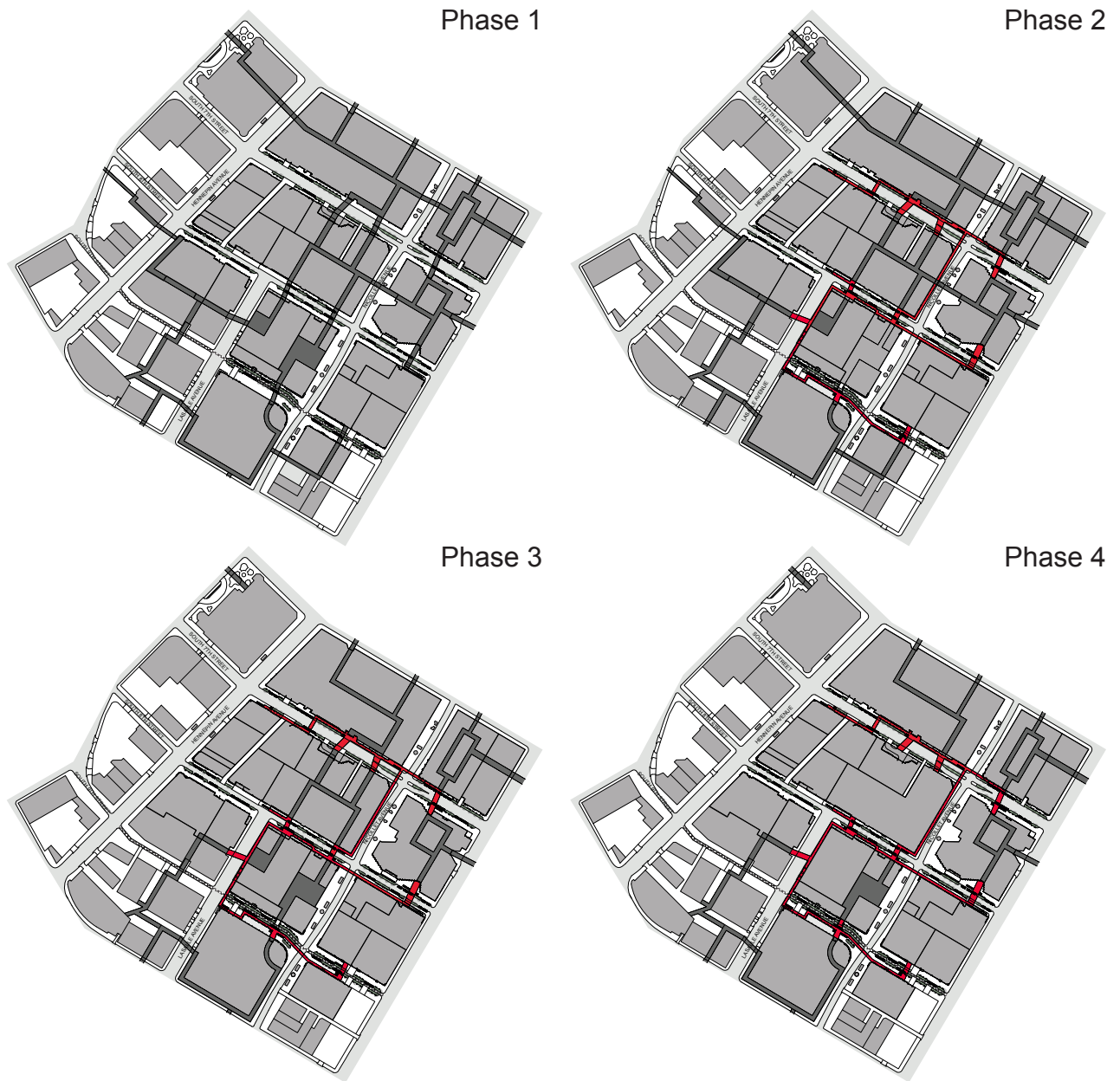


Figure 40

The first phase of trying to improve the street life in downtown Minneapolis begins with basic street level improvements, then the construction of the new walkable canopy system, which influences changes to occur with the existing Skyway network.

remove their Skyways and replace them with new walkable canopies.

The third phase would be the removal of the Skyways spanning over the Nicollet Avenue Pedestrian Mall and Hennepin Avenue, this assumes the success of the walkable canopy network in getting people out from the Skyways and down to the sidewalks. The fourth phase would be the removal many interior corridors connecting Skyways, as building owners begin to reorient their retail space toward the street, both along the sidewalks and the walkable canopies. The result would be a new network woven into the existing skyway network that brings people out into the public realm creating more a lively and active street life in the downtown.

Part III: A Dynamic System

It has already been stated that the new walkable canopy network would be easily adaptable to its surroundings and change along with them. This thesis focuses on three specific elements of this network that display the multifaceted approach to activating both the sidewalk and walkable canopy levels. The first and probably most obvious approach is the removal of Skyways and their replacement with open-air sky bridges that make similar connections to the previous Skyways, but force people to go outside and join the public realm, even if only briefly. These bridges are used the most on South 7th Street, which would remain a main arterial street so separating pedestrian traffic from vehicular traffic and emphasizing the street life and activity on the new walkable canopy level.

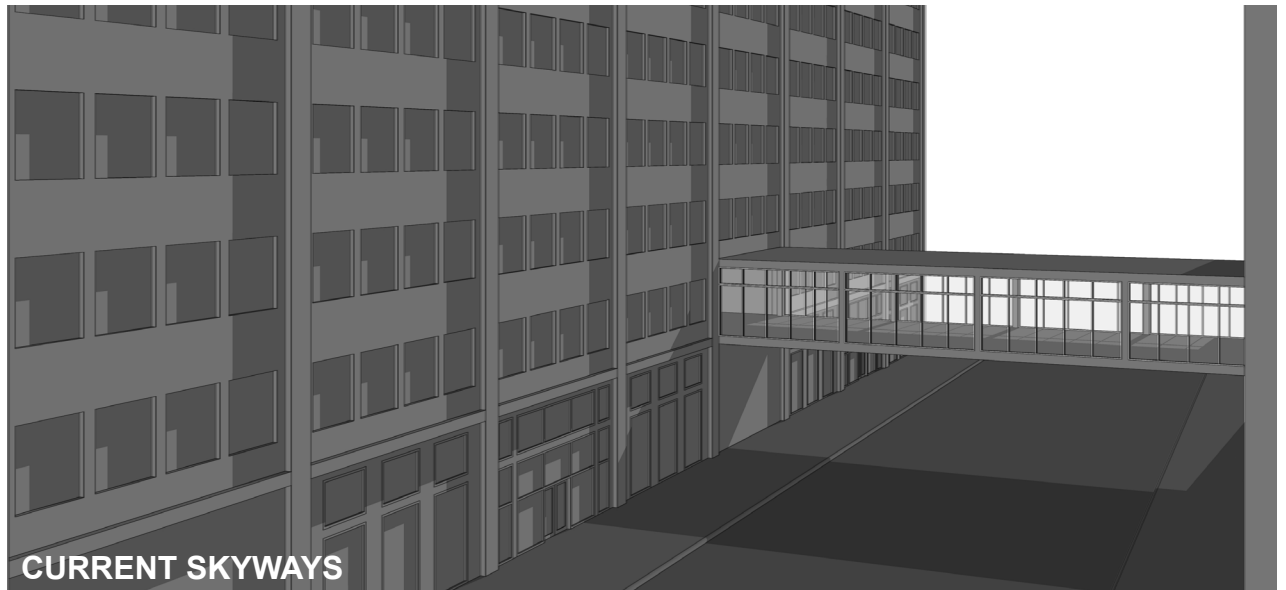
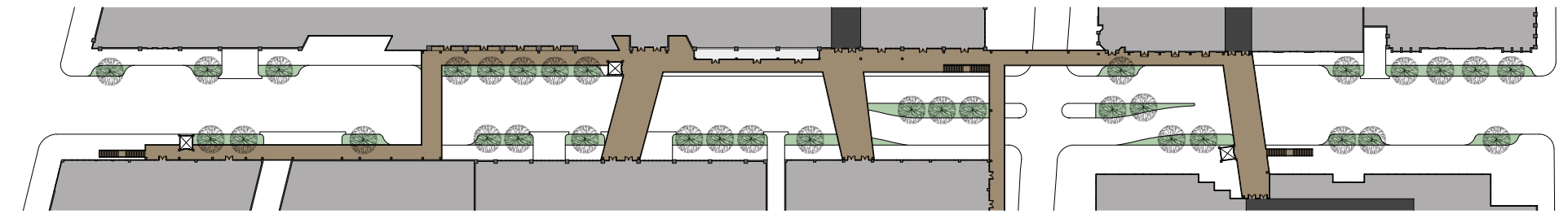


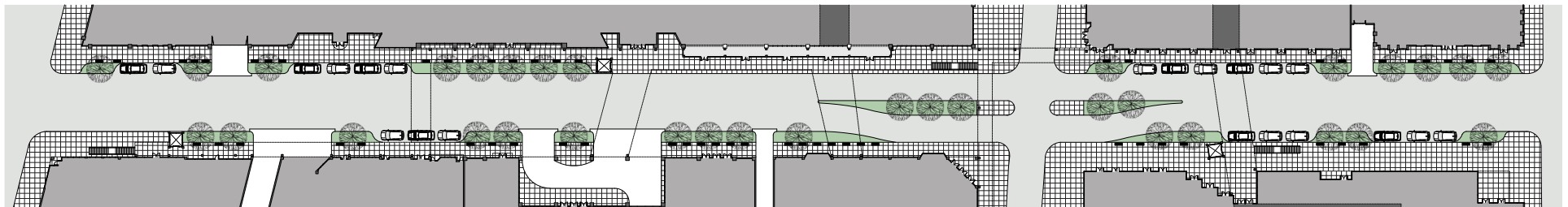
Figure 41

The current Skyways spanning over South 7th, 8th and 9th Streets will be replaced with open-air bridges that get people outside and into the public realm, even if they still follow the path of the old Skyways, the bridges will provide access to the walkable canopy network from Skyway level.

South 7th Street



Skyway Level Plan



Street Level Plan

Figure 42

Three Skyways are replaced with open-air bridges, there are two new bridges to span across South 7th Street, a major arterial where pedestrians may prefer to cross the street on a separate level. Notice the buildings facing the walkable canopy network begin to open out on to it on both levels.

South 7th Street

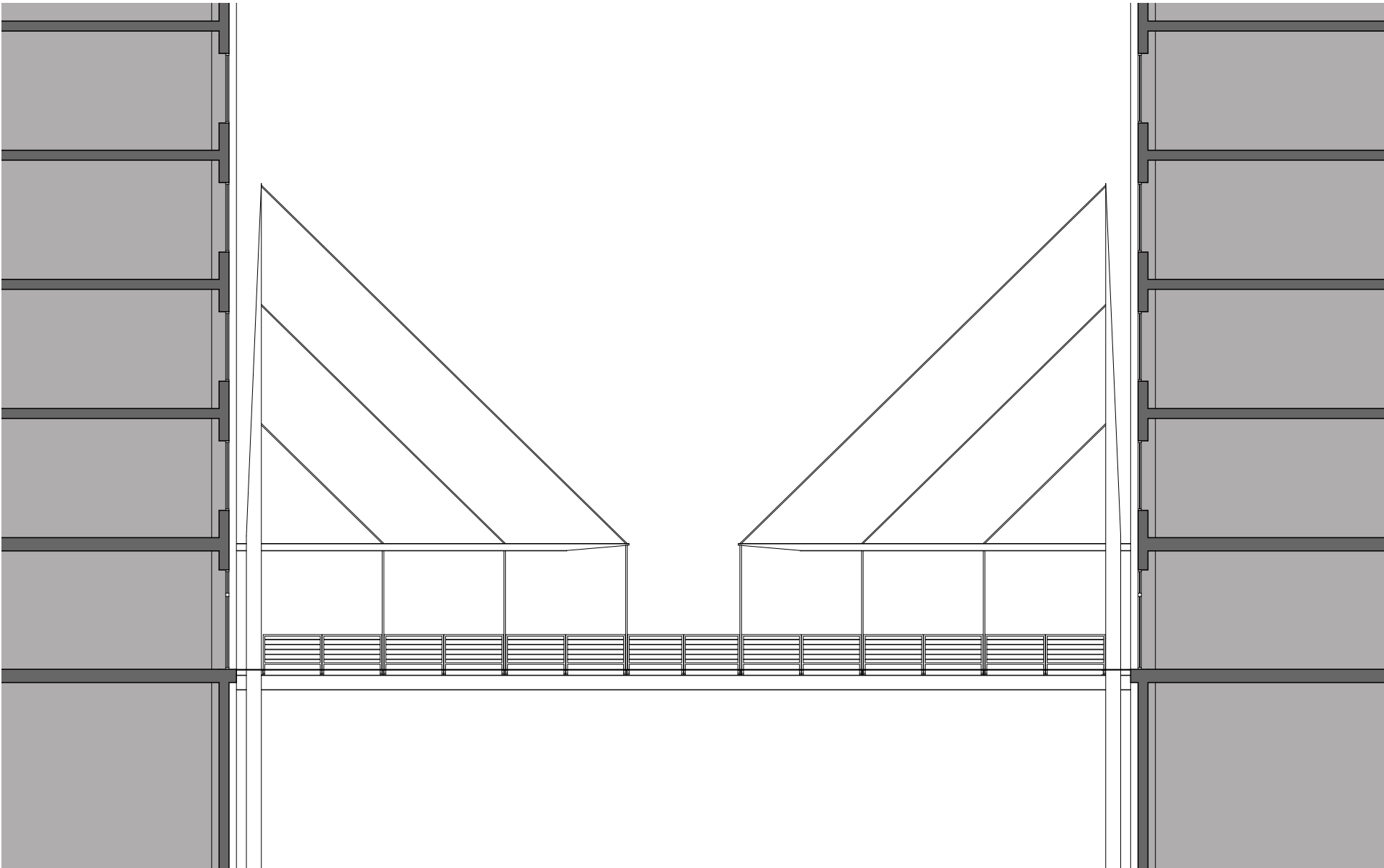


Figure 43
Street section showing an open-air bridge.

South 7th Street



Figure 44
View from an open-air bridge looking northwest.

South 7th Street

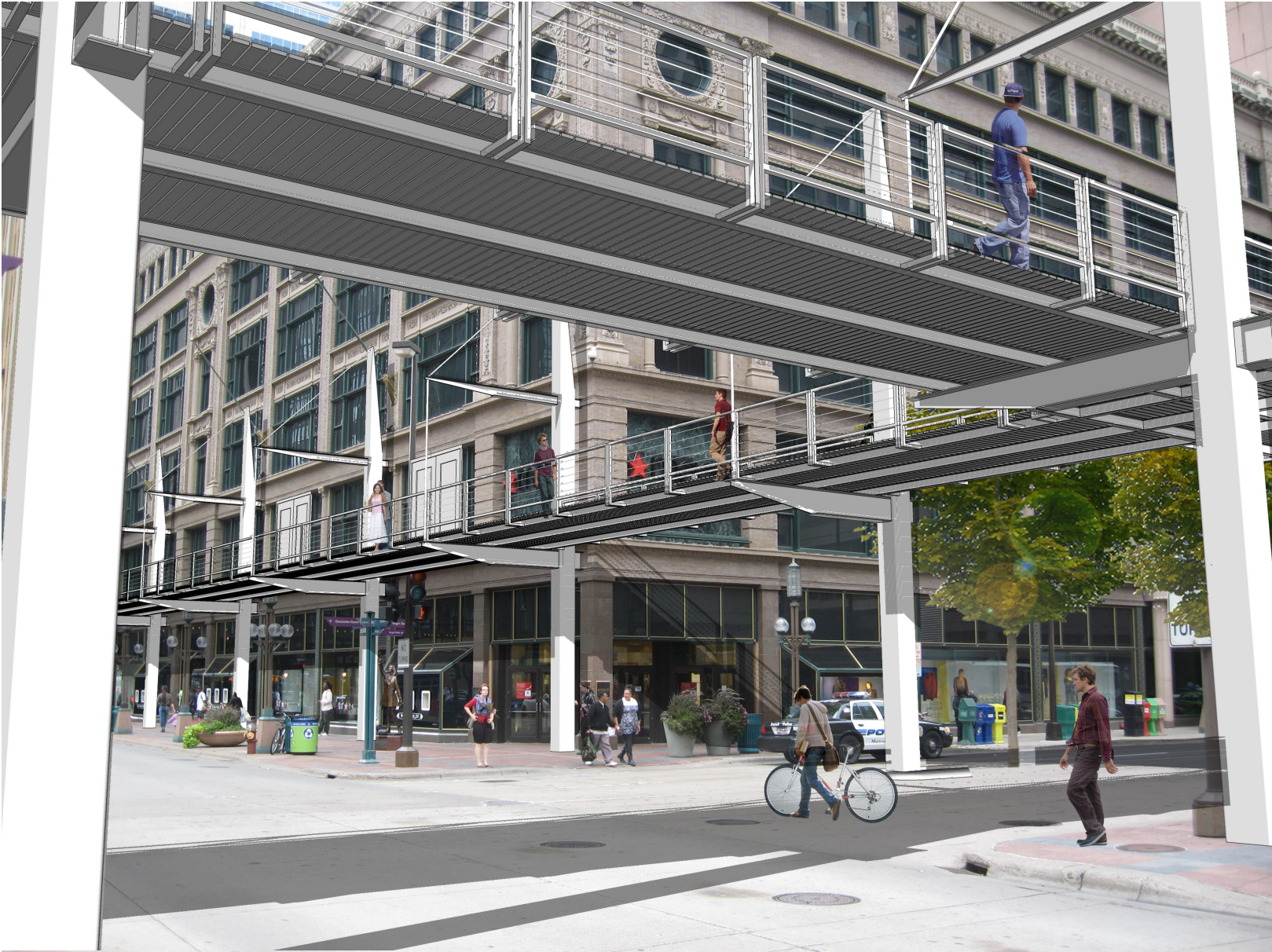


Figure 45
View of new walkable canopy from the intersection of Nicollet Avenue and South 7th Street.

On South 8th Street, which would be a reduced width street, the new walkable canopy would replace the blank walls and empty storefronts with “retail in-fills” built into the canopy system. This would create street facing retail to enliven the sidewalks as well as the walkable canopy above. This street would also replace its Skyways with open-air sky bridges similar to the ones on South 7th Street.



CURRENT BLANK FACADES

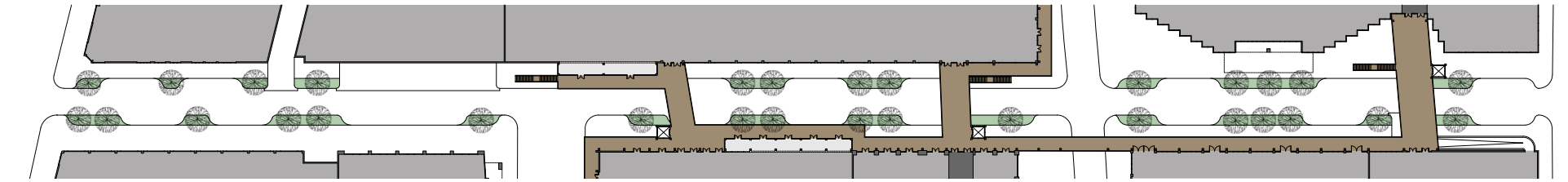


FUTURE RETAIL INFILLS

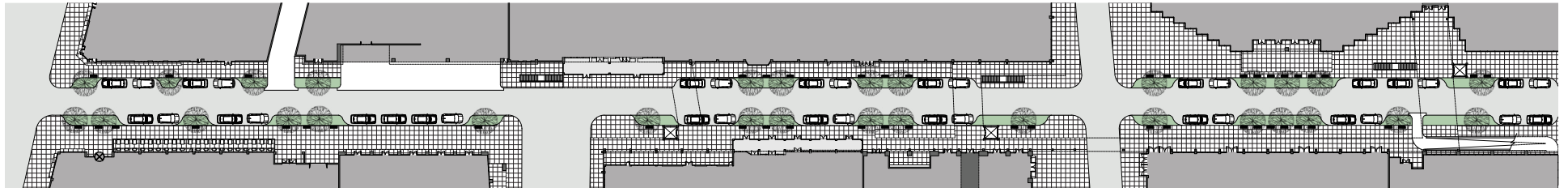
Figure 46

After reducing the width of South 8th Street, the sidewalks would have plenty of room for pedestrians as well as new retail in-fills to activate the blank facades on both levels of the walkable canopy network.

South 8th Street



Skyway Level Plan



Street Level Plan

Figure 47

The three existing Skyways are replaced with new open-air bridges and there are numerous opportunities to activate the blank facades found along this street with retail in-fills after the width of the street is reduced.

South 8th Street

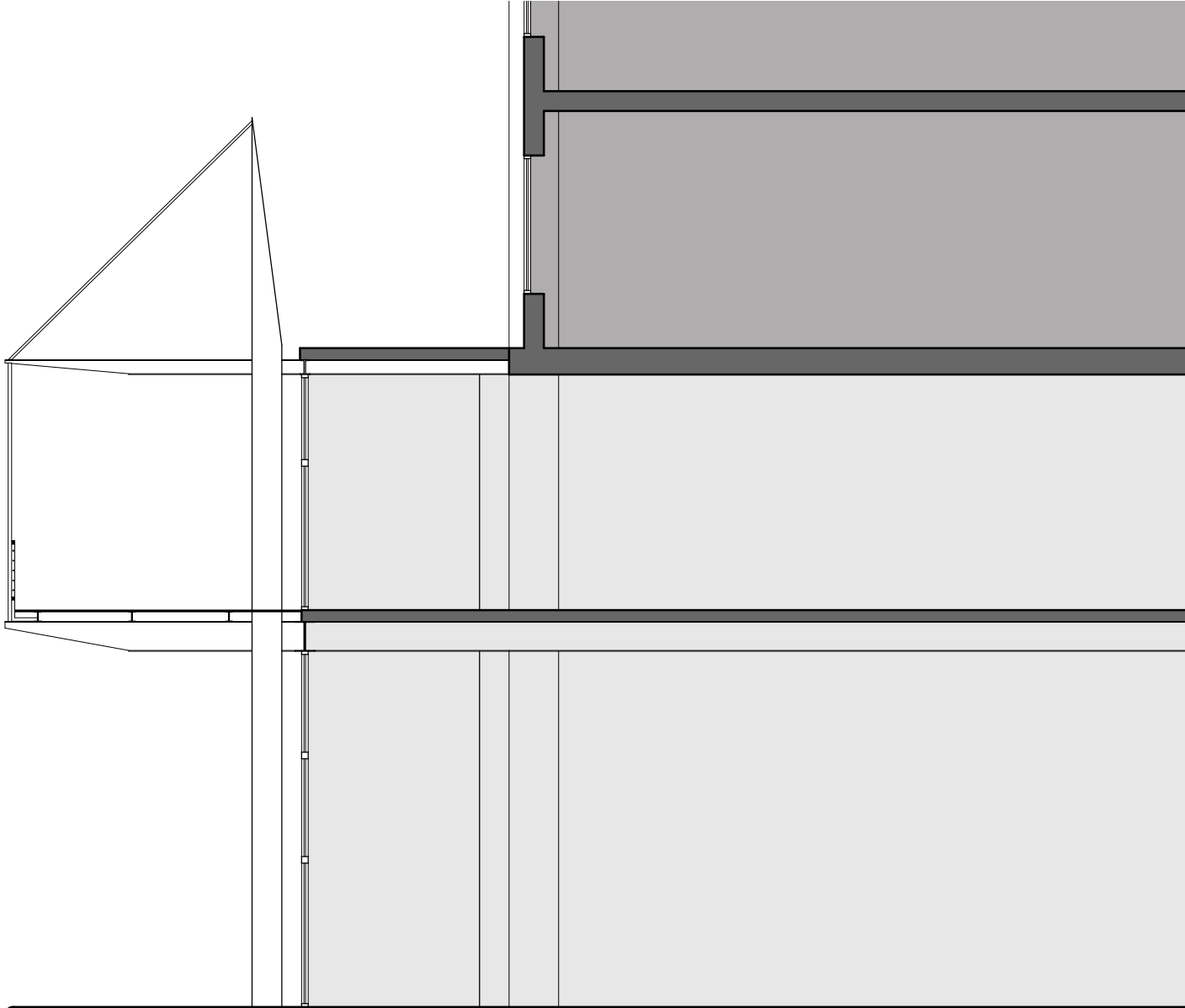


Figure 58
Street section showing a retail infill, built as part of the walkable canopy network to activate blank facades.

South 8th Street



Figure 49
View from an open-air bridge looking northwest.

South 8th Street



Figure 50
View of a new retail in-fill activating a once blank facade on both the sidewalk level and the new walkable canopy level.

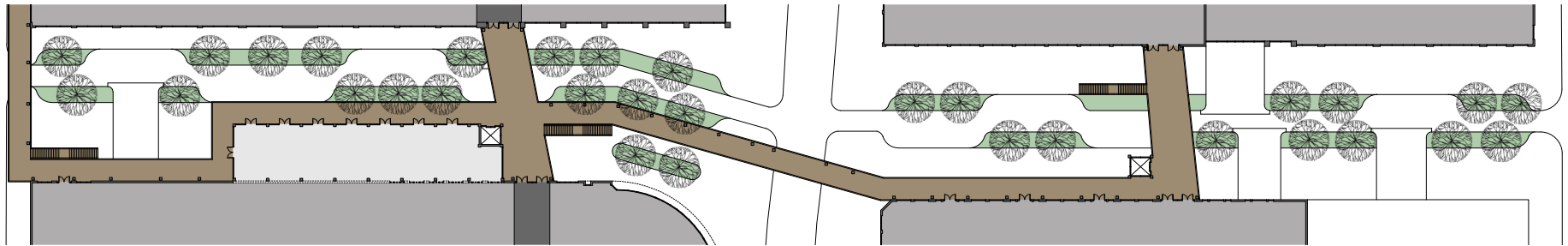
South 9th Street, a pedestrian priority street, there are both open-air sky bridges, retail in-fills and features abundant vertical connections between the new walkable canopy and the street level below. These types of connections would be important on any street that is connected to the new network, but such connections would be especially important on a pedestrian priority street where there would be more pedestrians than other streets and activation of both the street level the walkable canopy level would rely on adequate vertical connections.



Figure 51

The current Skyways ignore the sidewalks below them as well as the buildings they connect, but the new walkable canopy makes direct vertical connections to the sidewalks and serve the buildings around it.

South 9th Street



Skyway Level Plan



Street Level Plan

Figure 52

South 9th Street will be turned into a pedestrian priority street, so vertical connections between the walkable canopy network and the sidewalks are important in order to make both levels active.

South 9th Street

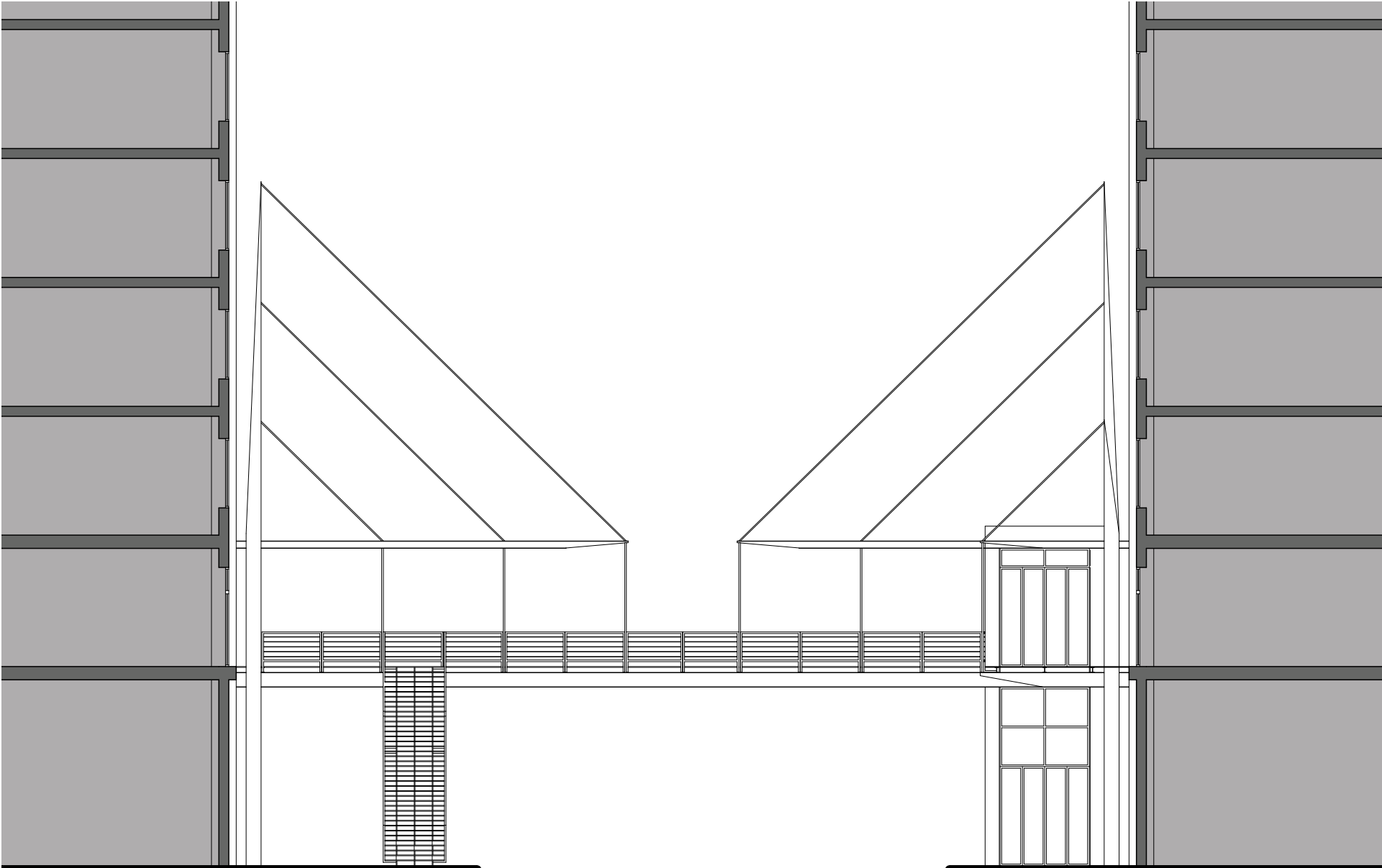


Figure 53
Street section showing vertical connections adjacent to open-air bridges.

South 9th Street

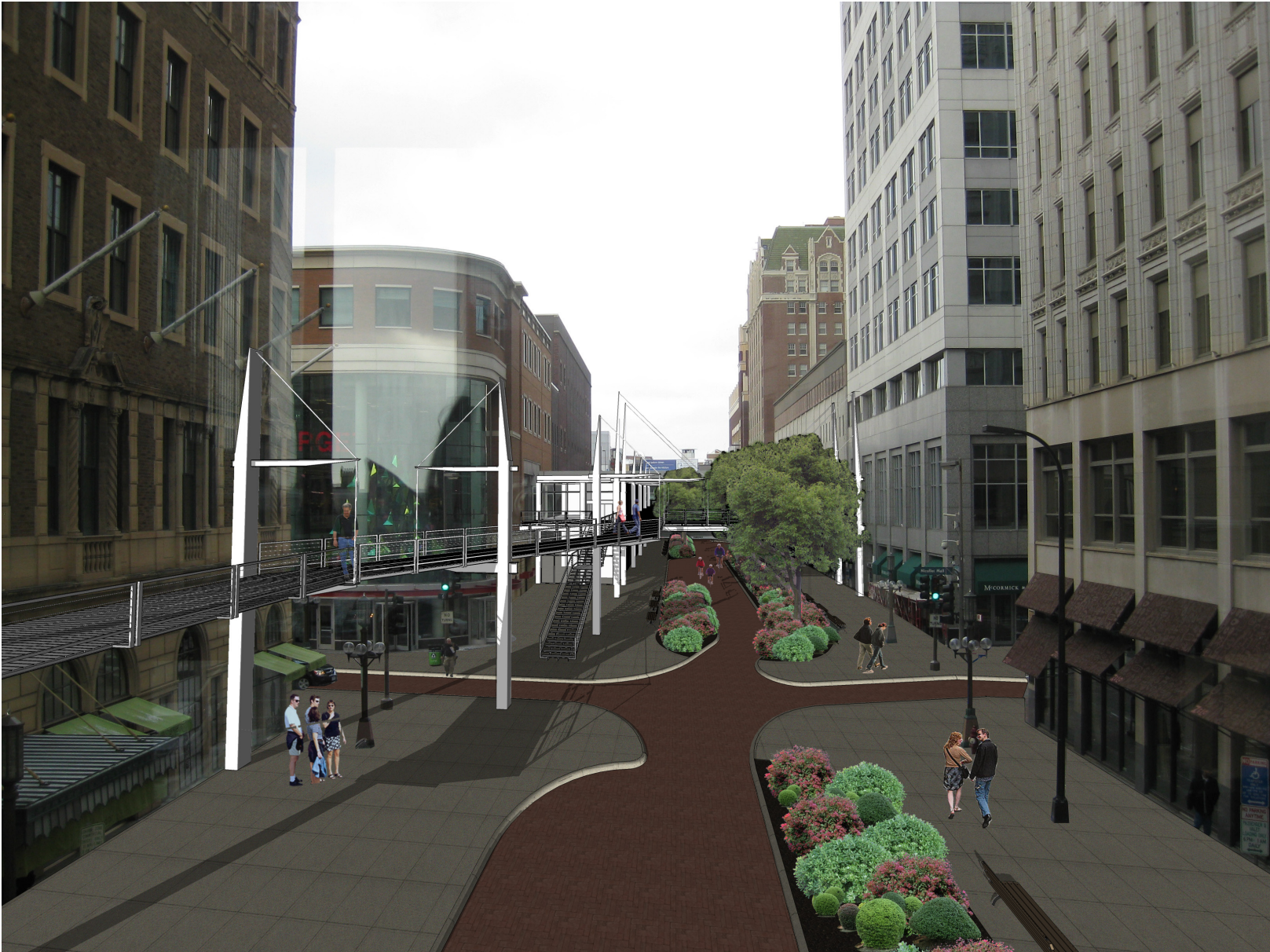


Figure 54
View from an open-air bridge looking northwest.

South 9th Street

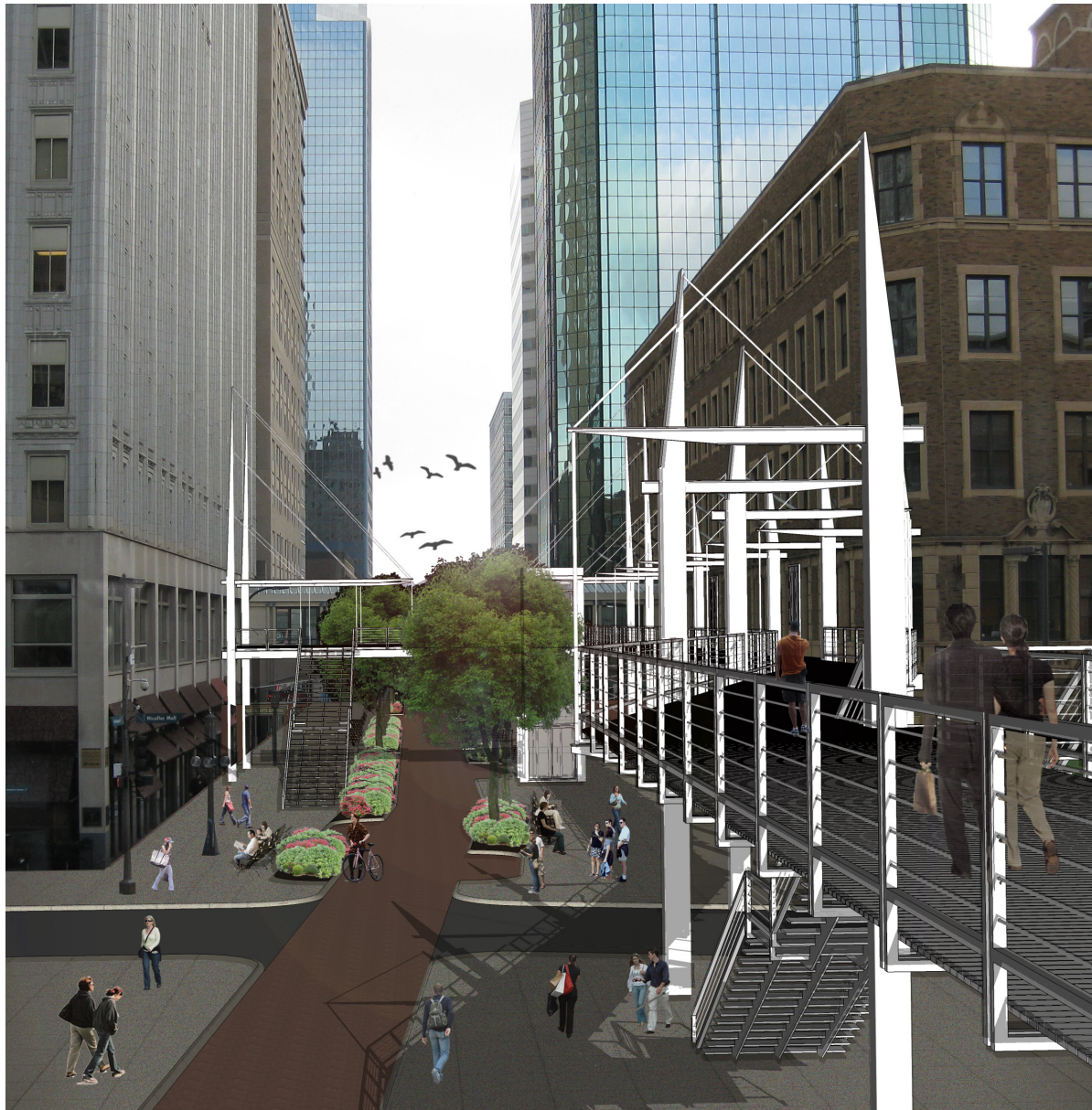


Figure 55
View from an open-air bridge looking southeast.

These three streetscape design proposals can be easily replicated and implemented in other parts of the downtown as the walkable canopy network grows and changes. This system is different from the static and unresponsive Skyways. They would contribute to the creation of a lively and active multi-leveled downtown Minneapolis. The ultimate purpose for each of them is to lead to the gradual removal of the existing Skyways while adding to the street life and activity as it begins to grow.



Chapter 5: Conclusion

The current state of downtown Minneapolis is a far cry from the lively milling town it used to be, thanks in no small part to the extensive Skyway network. This system has created a segregated downtown core made up of private and public users. Most people attribute the success of Minneapolis to the Skyways, which insulates people from the harsh climate, but many other cities survive equally harsh climates without having to build an overbearing system across nearly 70 city blocks. Minneapolis existed and thrived for over a century before the construction of this system and much of that time predated modern heating and air-conditioning systems. So the excuse that Minneapolis needs the Skyways due to its climate does not hold water, rather residents of the city should celebrate their climate and return to the streets and outdoor public spaces. The existing Skyways weaken the walkability of

downtown Minneapolis with its confusing routes and its unpredictable nature.

This thesis suggests that the first step to creating a more vibrant street life in downtown Minneapolis is to implement basic street level improvements. These could include street width reductions, new planting strips, and outdoor seating. Making these changes will create more welcoming sidewalks, unfortunately they will continue to be ignored by the buildings facing them and the Skyways above.

The walkable canopy network proposed in this thesis strives to create a new urban typology mixing the existing Skyways, a new network of walkable canopies and the improved sidewalks to create a multi-leveled city full of life and vitality. It would be built as an easily

maneuverable system that could adapt along with the city as it grows and changes. This new network would lead to the gradual demolition of many of the existing Skyways, resulting in a more navigable system occurring on two levels.

The walkable canopy network would replace the enclosed Skyways with open-air sky bridges and address the issue of blank facades and vacant storefronts by creating retail in-fills as part of the new canopy network. It would also allow for new, more visible, and public vertical connections to be built along it, making access out of the existing Skyways easier. In the same manner the Skyways gradually drew street life from the public realm in its private system, the new walkable canopy network attempts to reverse this trend and gradually pull the activity occurring in the Skyways out and into the public realm where it belongs.

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