



Just Passing Through

Activating 140 West Franklin through Environmental Design

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Spring 2016

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Introduction

The following study assesses human use and those features that afford use in the open space at 140 West Franklin Street in Chapel Hill, North Carolina. We begin with a history and background of the site to provide context, then move into our research questions, methodology, and end with results and recommendations.

The Story of 140 West

Parking Lot #5

Prior to the groundbreaking of the current 140 West Franklin Street mixed-use development on January 5, 2011, the site was a surface parking lot, owned by the Town of Chapel Hill.¹ Named parking lot #5, the 1.7-acre lot was located in the town center of Chapel Hill on a block bordered by West Franklin Street to the south, Church Street to the west, and Rosemary Street to the north (Appendix A, Figure 1).² The parking lot served as general parking for town residents and visitors and included 173 spaces.^{3,4}

In 2006, a concept plan proposal for a mixed-use residential/retail development at the site of parking lot #5, was submitted to the Town Council of Chapel Hill, the Community Design Commission, and the Historic District Commission for review.⁵ The concept plan proposal described the development of a mixed-use complex with 124 residential dwelling units, 24,000 square feet of retail floor area in three buildings, and the construction of an underground parking lot with approximately 375 spaces.⁶

The impetus for this proposal was the desire to create a development that would invigorate downtown Chapel Hill, stimulate the local economy, and unite East and West Franklin Street.⁷ At the time that 140 West Franklin Street was proposed, downtown Chapel Hill, similar to other college towns, suffered economically during university breaks. Chapel Hill Councilman Ed Harrison said that the Town Council's solution for this problem was to bring residents to the town center, through developments such as 140 West Franklin, in an effort to create a "24-hour, 54-week downtown."⁸

¹ Town of Chapel Hill, 2013

² Town of Chapel Hill, 2006

³ HNTB North Carolina, 2007

⁴ Town of Chapel Hill, 2006

⁵ Town of Chapel Hill, 2006

⁶ Town of Chapel Hill, 2006

⁷ Town of Chapel Hill, 2013

⁸ Schwartz, Joe. Indy Week, 2009

The 140 West Franklin development was also intended to stimulate the economy and bring more people to the street through the unification of East and West Franklin Street. Gordon Merklein, the University of North Carolina's executive director for real estate, said that there was no real street-level experience along Franklin Street due to the retail setback of University Square and the existence of surface parking lot #5.⁹ "There's a whole break along Franklin Street" he said, which ideally would be remedied by the 140 West project and the redevelopment of University Square. These projects were meant to "fill in that gap and re-create a sense of place."¹⁰ Former Chapel Hill Mayor, Mark Kleinschmidt, said that parking lot #5 created almost a wall between East and West Franklin Street, but through the 140 West Franklin development there would be a change "in the way at least some people engage with Franklin Street...It will put people in the space, not just people who are quickly moving through the space."¹¹

Numerous planning meetings and community engagement processes followed the introduction of the concept plan proposal for 140 West Franklin Street to the Town Council, and by February 2007, the Town of Chapel Hill and RAM Development Company reached an agreement to move forward with the proposed development.¹² The final agreement specifically noted certain principles and priorities that would be required of the developer as they constructed the project. Specifically, the developer was required to provide at least 15 percent of units as affordable housing, maintain the community's high standards for sustainability and design while retaining economic viability, include a public plaza and gathering space, install public art, and construct underground public parking.¹³ ¹⁴ As previously mentioned, groundbreaking of the 140 West Franklin Street project occurred on January 5, 2011 (Appendix A, Figure 2).¹⁵

Vision

The vision for 140 West Franklin Street was to create a downtown Chapel Hill gathering space that enticed residents to come to relax, enjoy public art, attend events, and eat or shop at the surrounding stores.¹⁶ A number of intentional strategies were employed in the design and development of 140 West Franklin Street to realize this vision, most notably a 26,000-square foot public plaza.¹⁷ The public plaza was designed to be open on two sides to both Franklin Street and Church Street, in order to create a welcoming environment that encouraged public use and enjoyment of the space. Within the public plaza, the RAM Development Company, the developer hired for the project, dedicated one percent of their overall budget to the creation of artwork intended to activate the space and encourage public engagement and retention (Appendix A, Figure 3).¹⁸

⁹ Schwartz, Joe. Indy Week, 2009

¹⁰ Schwartz, Joe. Indy Week, 2009

¹¹ Ferral, Katelyn. Ram Realty Services, 2010

¹² Town of Chapel Hill, 2013

¹³ Town of Chapel Hill, 2013

¹⁴ Town of Chapel Hill, 2010

¹⁵ Town of Chapel Hill, 2013

¹⁶ Town of Chapel Hill, 2016

¹⁷ Town of Chapel Hill, 2013

¹⁸ Town of Chapel Hill, 2016

The artwork at 140 West Franklin Street was to be designed through a Chapel Hill Arts Master Plan, led by landscape artist Mikyoung Kim. The arts master plan focused on the new 140 West Franklin Street development as a site for public art commissions that integrate environmental concepts into the architecture and landscape of downtown Chapel Hill.¹⁹ The artwork was meant to reflect life cycles of light and water, and integrate sustainable design through rainwater harvesting and solar light collection. Lastly, the artwork was intended to be inspired by Chapel Hill and highlight its unique sense of place. Two art installations were planned for the space in two specific areas, a sculpture in the main public plaza, and a large wall-mounted work in the Rosemary-facing courtyard.^{20 21} The pavement of the plaza was designed to complement the sculpture with repeating curvilinear elements on the ground and raised benches at points facing the sculpture.²²

Programming with funds set aside by the developer was planned for the 140 West Franklin open space to further encourage use and unify Franklin Street. Concerts, farmer's markets, and community festivals were planned for the summer months when people spend more time outside and need a place to gather.²³

Architectural peer review of the 140 West Franklin Street was positive. Marvin Malecha, FAIA peer reviewed the 140 West Franklin Street site plan in 2007 and stated that he believed the development would be a "substantial enhancement of the 'town' experience." Malecha further states that the "pedestrian gallery that cuts through the property is inviting" and the strategy of human-scale public space and retail "insures that pedestrian activity will easily enliven the spaces and avoid the vacant space syndrome that affects so many great plazas in the wrong location."²⁴

Grand Opening Event

On Friday, April 26, 2013, the 140 West Franklin Street mixed-use development project celebrated its grand opening with a public celebration in the new plaza.²⁵ Hundreds of people came out to see the unveiling of the sculpture and take part in the numerous programming events in the space (Appendix A, Figure 4).²⁶ Retail was already scheduled to open in the coming months, including Lime Fresh Mexican Grill, Gigi's Cupcakes, the Eye Care Center, and Old Chicago, and more than three-quarters of the condominiums in the building had been purchased.²⁷ Chapel Hill 2020 Co-chair George Cianciolo said that the town had "wanted to see places where the community could come together and that is exactly what" happened.²⁸ Cianciolo went on to say that 140 West Franklin Street was going to be Chapel Hill's version of the Weaver Street lawn, a popular public open space in Carrboro.²⁹ Aaron Nelson, the President and CEO of the Chapel Hill-Carrboro Chamber of Commerce was looking forward to 140 West Franklin Street fostering

¹⁹ Kim, Mikyoung. Mikyoung Kim Design, 2007

²⁰ Kim, Mikyoung. Mikyoung Kim Design, 2007

²¹ Town of Chapel Hill, 2016

²² Town of Chapel Hill, 2016

²³ Chapel Hill/Orange County Visitors Bureau, 2012

²⁴ Malecha, Dean. Downtown Economic Development Initiative, 2007

²⁵ Town of Chapel Hill, 2013

²⁶ Nash, Rachel. Chapelboro.com, 2013

²⁷ Town of Chapel Hill, 2010

²⁸ Town of Chapel Hill, 2010

²⁹ Town of Chapel Hill, 2010

new business in the area. He stated that, "the architecture is excellent and the retail is coming."³⁰ Nelson further added that, "you can seamlessly walk all the way down to the west end [of Franklin Street now] and it's wonderful."³¹

Upon completion, the \$55 million 140 West Franklin Street project featured a three-section building complex with four stories along the street and eight stories at the center. The final building has 26,000-square feet of retail space on the ground level and 140 condominiums located on the higher floors, 18 of which are affordable units.^{32 33 34 35} A 337-space parking garage was built underneath the complex, two levels of which are public parking owned by the Town of Chapel Hill, and a 26,000-square foot public plaza was constructed with the previously planned artwork installed.³⁶

140 West Franklin Street Today

Today, the 140 West Franklin Street open space appears to be quite different than what was originally envisioned for the space. While the 140 West Franklin Street website still advertises the public space as the "ultimate gathering place in the heart of Chapel Hill," we question whether this is actually the case.³⁷ From anecdotal and personal experiences, we suspect that the 140 West Franklin Street open space is underutilized and does not tend to attract an engaged public. In terms of retail space, only half of the stores in the 140 West Franklin Street complex currently have renters leaving a significant amount of vacant buildings throughout the open space. While summer programming does exist to attract people to the open space, it is our suspicion that engagement in the space slows down when these events are not taking place.

The following analysis addresses three primary research questions that aim to discover whether the 140 West Franklin Street open space is realizing its original vision and if not, how the space can be improved to do so.

Site Description

The area that we have targeted for our study is the 26,000 square feet of open space at 140 West Franklin Street in Chapel Hill, North Carolina (Figure 1). The open space consists of three connected segments: the plaza, which is open on one side to Franklin Street and on one side to Church Street and connects in the center of the complex to the arcade (Appendix A, Figure 5); the arcade, which is an open-air walkway that extends from Franklin Street underneath two 140

³⁰ Town of Chapel Hill, 2010

³¹ Town of Chapel Hill, 2010

³² Nash, Rachel. Chapelboro.com, 2013

³³ Town of Chapel Hill, 2010

³⁴ Daily Tarheel Online, 2016

³⁵ Town of Chapel Hill, 2010

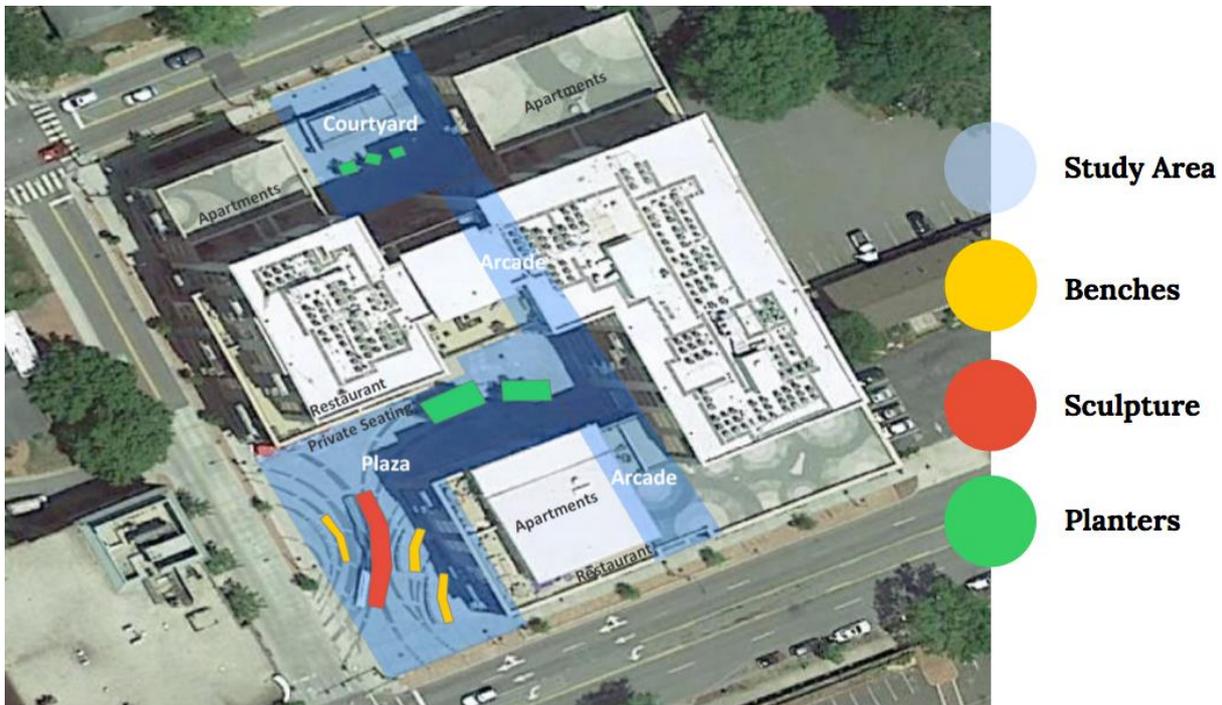
³⁶ Town of Chapel Hill, 2010

³⁷ 140 West Franklin Online, 2016

West Franklin building overhead connectors to Rosemary Street (Appendix A, Figure 6); and the courtyard, which is open via the arcade to Rosemary Street (Appendix A, Figure 7).

For the purposes of our study, we identified three primary elements of the 140 West Franklin Street open space that we expect may afford various human uses of the space. The three primary elements are: the sculpture, benches, and planters.

FIGURE 1: SITE OVERVIEW OF 140 WEST FRANKLIN STREET OPEN SPACE INCLUDING SEGMENTS AND FEATURES.



The sculpture

The sculpture, located in the center of the plaza segment of the 140 West Franklin Street open space, is an art installation titled, “Exhale,” created by Mikiyoung Kim (Figure 2). The curvilinear sculpture is approximately 60 feet in length and made of perforated stainless steel.³⁸ Fog is activated from inside the structure during the summer months and rolls from end to end to create a sense of flow and relaxation. Computer-programmed LED lights are also imbedded within the sculpture, illuminating the structure at night in waves of color from green to orange to purple. The sculpture was designed as a piece that will make people stop within the plaza to observe its features which in turn makes people part of the art installation themselves.³⁹

FIGURE 2: “EXHALE” SCULPTURE AT 140 WEST FRANKLIN STREET. ⁴⁰



³⁸ Google Maps

³⁹ Daily Tarheel Online, 2016

⁴⁰ 140 West Plaza

Benches

Based on the same curvilinear flow of the Exhale sculpture, three benches made of gray stone have been placed in the plaza segment of the open space surrounding the sculpture (Figure 3). One bench is located on the eastern side of the sculpture closest to Church Street, and two benches are located on the west side of the sculpture. Each bench is approximately 20 feet in length and approximately 2 feet high.^{41 42}

FIGURE 3: BENCHES AT 140 WEST FRANKLIN STREET.



Planters

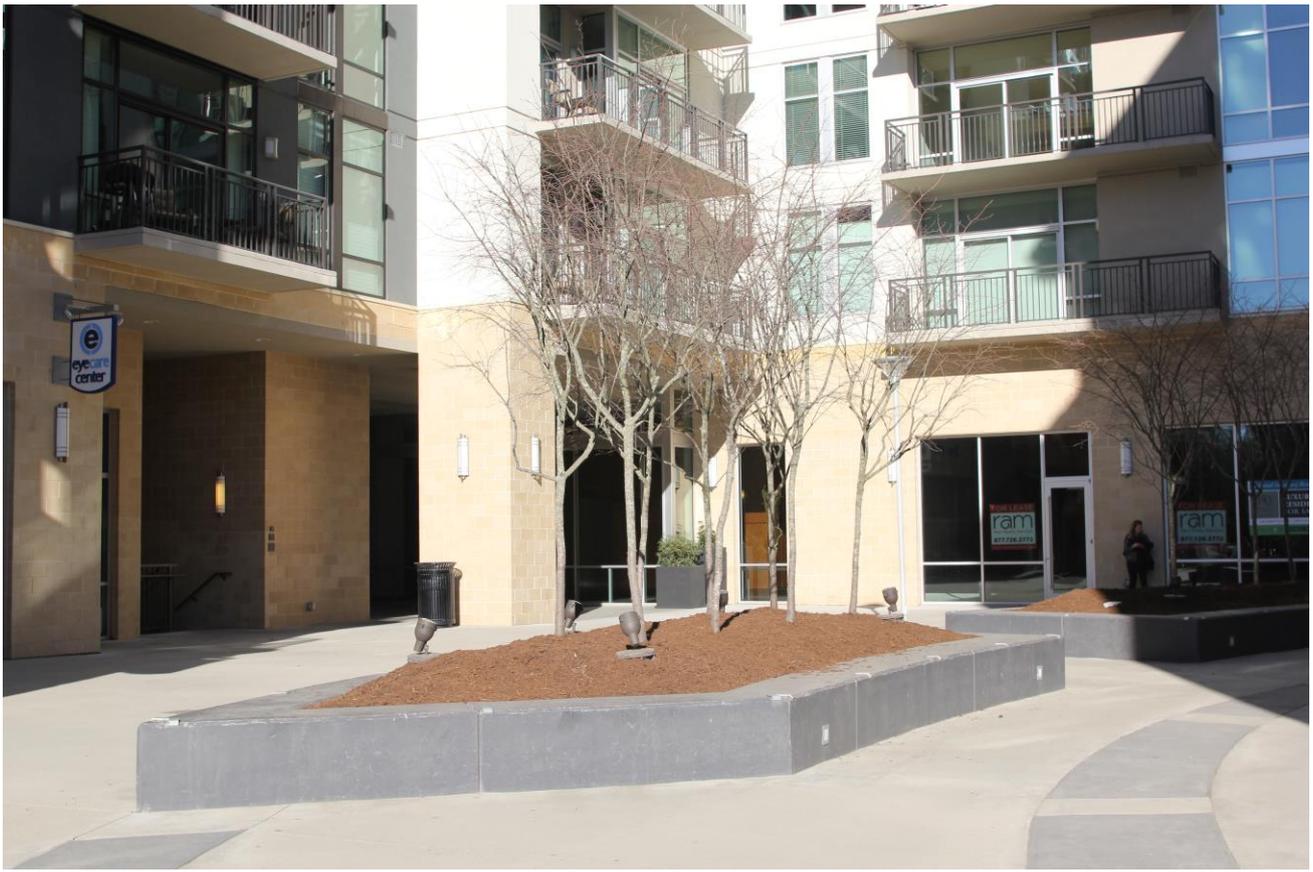
There are two large planters in the plaza segment of the open space as well as three smaller planters in the courtyard segment of the open space (Figure 4). The two large planters follow the same curvilinear flow as the sculpture and benches and are approximately 25 feet in length. They each contain four trees and some small shrubbery. The three smaller planters in the courtyard each contain one tree as well as flowers, and approximately four feet by four feet. The smaller planters have a small gray stone edge that is not deep enough for seating.⁴³

⁴¹ Town of Chapel Hill, 2016

⁴² Google maps

⁴³ Google maps

FIGURE 4: LARGE PLANTERS AT 140 WEST FRANKLIN STREET.



Key Questions

The space at 140 West Franklin was intended to be the premier public space in Chapel Hill.⁴⁴ Is it fulfilling this role? To consider this question, we have adopted the framework of Danish architect and urban designer Jan Gehl, whose work explores the relationship between human behavior and the physical nature of public space. Gehl posits that there are three types of outdoor activities - necessary, optional, and social - and the extent to which each is happening is indicative of, and influenced by, the physical environment.

Necessary activities are those which are functional, or more or less compulsory, such as commuting to work or school, or running errands. These occur almost irrespective of the nature of the physical environment.

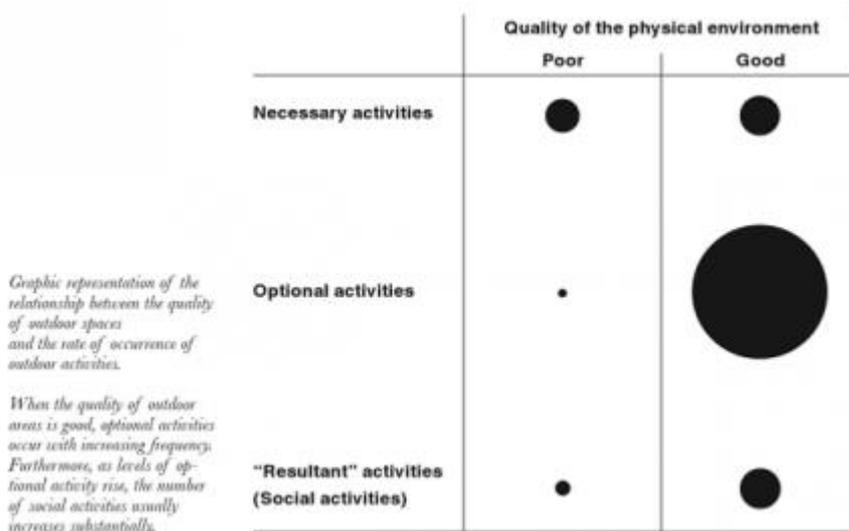
Optional activities are those voluntary activities such as recreational walking, sunbathing, or sitting and reading in public. These activities occur to a greater or lesser degree depending on the way in which a space is designed.

⁴⁴ 140 West Franklin Online, 2016

Social activities are those that involve an interaction between two or people, from low intensity interaction, such as people watching, to high intensity interaction, such as the interaction between close friends.

Gehl argues that the physical environment heavily influences the extent to which optional and social activities take place, and that these types of activities are interdependent. Furthermore, he proposes that the presence of more of optional and social activity in a space is an indicator of a successful, activated public space, and conversely that a lack of optional and social activity in a public space is an indication of failure.⁴⁵ (Figure 5 illustrates the relationship between the three types of behavior)

FIGURE 5: JAN GEHL'S CONCEPTUAL MODEL



Using this framework, we can ask: Is 140 West Franklin a successful public space? Does the physical environment support the activated optional and social activities that Gehl has defined as indicators of success, such as sitting, reading, and chatting with friends? In this report, we will explore three key questions to better understand the successes and failures of 140 West:

How do people use the space?

How does the built environment afford or prevent these uses?

How can the space be improved for increased activation?

⁴⁵ Gehl, *Life Between Buildings: Using Public Space*

Methodology

We used several qualitative and quantitative research methods to investigate our key questions, including behavior mapping, surveys, interviews, and archival research.

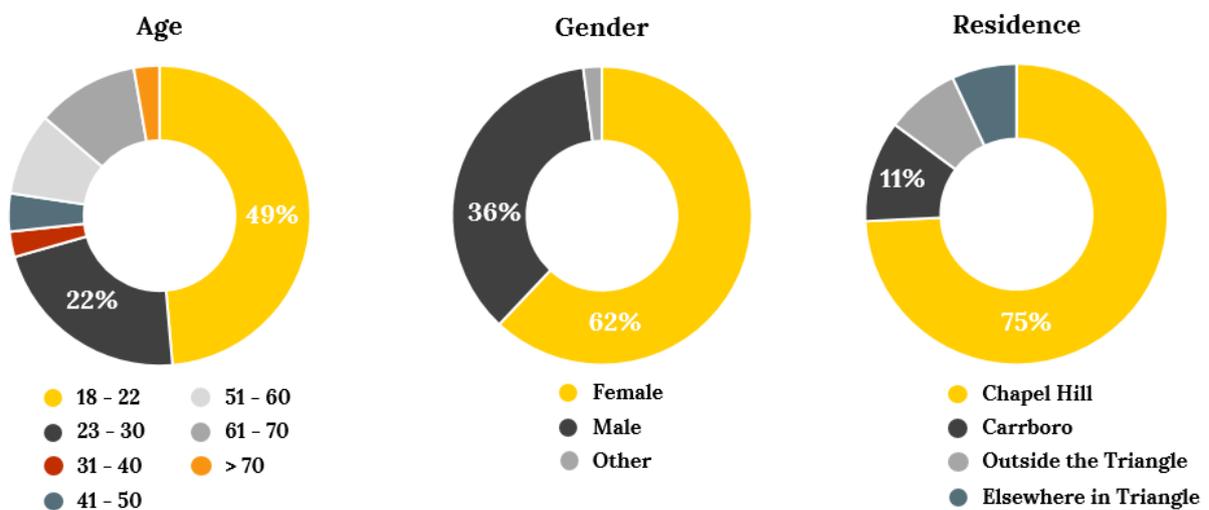
Behavior mapping

Behavior Mapping is a tool used to understand how people use a space. During behavior mapping, people's locations, actions, and other visibly observable characteristics are systematically recorded. This information can then be plotted on a map to see where people spend time in a space and what they are doing there. Therefore, it is a particularly useful method for understanding how a space is actually used compared to its planned uses.⁴⁶ Two sessions of behavior mapping were conducted at 140 West on the afternoon of Saturday, March 26, 2016 and the evening of Thursday, April 14, 2016. During the two behavior mapping sessions, a total of **253 observations** were recorded. Each observation included the person's age, gender, type of activity, and interaction with features in the space. Further detail regarding the behavior mapping methodology is presented in Appendix B.

Surveys

Surveys are used to understand people's self-reported beliefs, attitudes, values, and behavior.⁴⁷ We conducted a survey with closed- and open-ended questions about respondent's attitudes, use, and perceptions of 140 West. The survey was distributed electronically via Facebook and email, primarily to UNC students and residents of 140 West. The survey was completed by **152 people**. Of these respondents, 45 lived in the apartment building at 140 West, while 101 lived elsewhere. Figure 6 shows a more detailed breakdown of survey respondent demographics. Further detail regarding the survey methodology is presented in Appendix B.

FIGURE 6: SURVEY RESPONDENT DEMOGRAPHICS



⁴⁶ Sommer and Sommer, 2002, Ch. 5

⁴⁷ Sommer and Sommer, 2002, Ch. 9

Interviews

Interviews provide an opportunity for in-depth, qualitative exploration of people's attitudes, beliefs, and feelings. Interviews can also be useful for learning historical information that is not contained in written documents.⁴⁸ Unstructured and semi-structured interviews were conducted with several members of the Chapel Hill community, including students, parents, and public officials, to better understand both the history and current use of the space at 140 West.

Archival research

Archival Research is a useful research method when interviews cannot be conducted and behavior cannot be observed. For example, original design plans can provide insight into the rationale behind the design of a space if the designer herself cannot be reached. Newspaper coverage can reveal popular opinions on an issue that have long been forgotten.⁴⁹ We used archival research to better understand the historical narrative of the space at 140 West. Relevant archival documents included public meeting minutes, the development agreement for 140 West, news stories, and conceptual site design plans.

⁴⁸ Sommer and Sommer, 2002, Ch. 8

⁴⁹ Ziesel 2003, Ch. 13

Findings

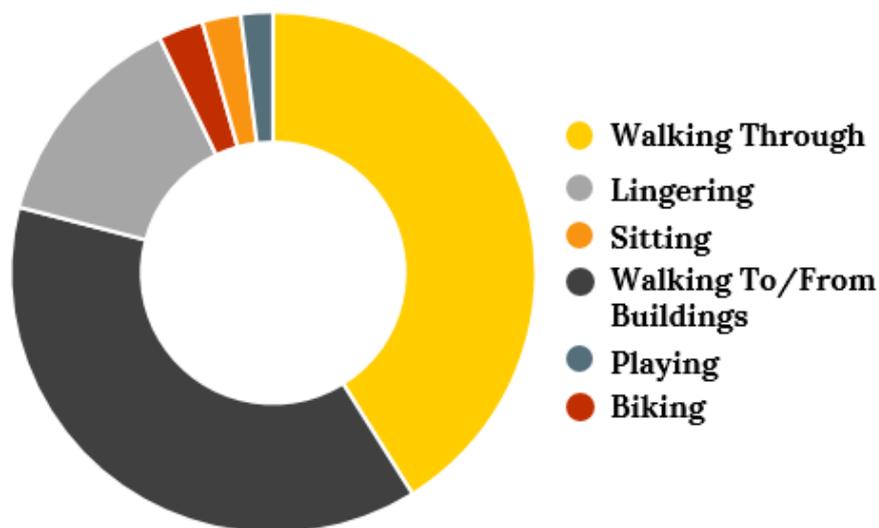
How do people use the space?

The first step in evaluating the public space at 140 West is to establish how the space is currently used. In this section of the report, we will explore how, when, and why people spend time at 140 West.

How People Use the Space: Primary Activities

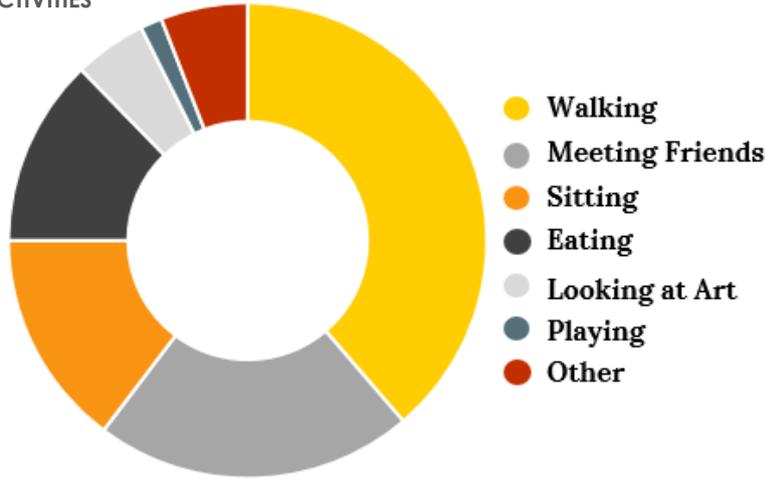
Figure 7 shows what activities were observed in the space during our two behavior mapping sessions. The results of the behavior mapping indicate that walking through and walking to or from buildings are the activities most often observed in the space. Very few people were observed conducting more optional activities, such as sitting, playing, and lingering. These observations indicate that the space primarily functions as a thoroughfare or shortcut.

FIGURE 7: OBSERVED ACTIVITIES



Our behavior mapping observations were limited to two sessions conducted on a spring weekday evening and a spring weekend afternoon. To supplement our observations and capture uses outside of these times, the survey also included a question asking people how they used the space. Figure 8 shows survey respondents' answers to this question. The responses indicate that while walking is still the primary use of the space, a sizeable proportion of people also use the space for sitting and meeting friends. During interviews, several UNC students indicated that the space is a good place to meet people because the sculpture acts as an easily identifiable landmark.

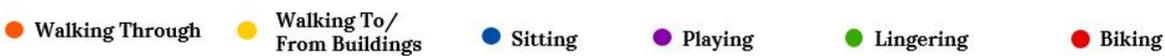
FIGURE 8: REPORTED ACTIVITIES



When People Use the Space: Day and Evening

Behavior mapping revealed distinct differences between the use of the space during the day and in the evening, as shown in Figure 9. While both behavior mapping sessions were conducted in similar weather (temperatures in the high 50s to low 60s with no rain) and for similar amounts of time (approximately 1-½ hours), there was a marked increase in observed users of the space during the evening. During the day, only 94 observations were made, but in the evening that number increased to 159. Additionally, there was a much greater variety of use during the evening; most notably, there was an increased amount of sitting and lingering. During the day, these more optional activities were rarely observed. Interestingly, much of the evening sitting and lingering occurred around the sculpture, which was emitting mist and light during our observation session. The behavior mapping also indicated that the courtyard and arcade were almost exclusively used for walking through the space or to or from buildings both during the day and in the evening.

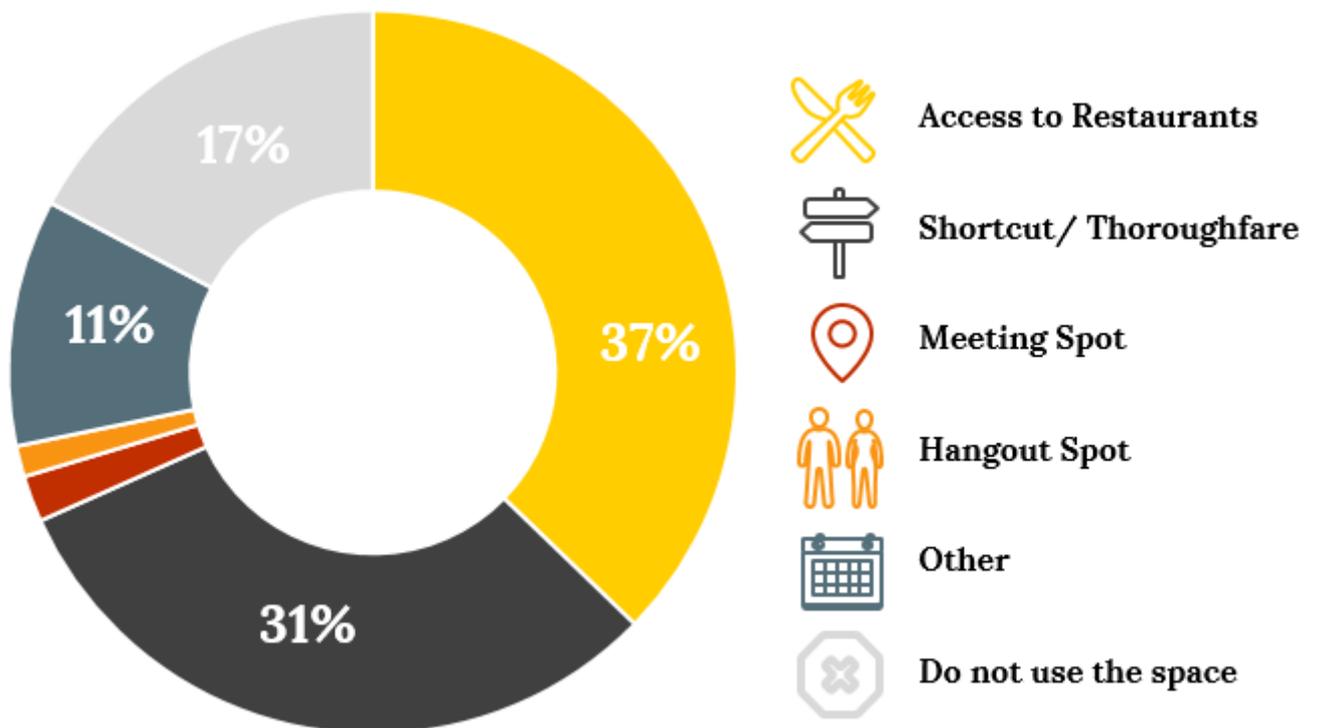
FIGURE 9: DAY VS. NIGHT OBSERVED ACTIVITY



Why People Use the Space: Primary Reasons

Using the survey, we were also able to get a better understanding not only of how, but why people use the space. People's reported primary use of the space is shown in Figure 10. These responses show that the predominant reasons that people use the space are to access restaurants within the development, or as a shortcut or thoroughfare. Very few people reported other uses, such as hanging out or attending programmed events, in much. These responses indicate that people tend to use the space as a means to an end, as opposed to as a destination.

FIGURE 10: PRIMARY REASONS FOR USE



How does the built environment afford or prevent these uses?

The results of our behavior mapping and survey show that the space is primarily used for more necessary activities. In Jan Gehl's paradigm, this would indicate that the physical environment of the space is not encouraging optional and social use of the space. This section of the report will delve more deeply into the question of how the built environment at 140 West affords and prevents certain uses.

Interaction with Features

Figure 11 shows observed interactions with features, such as benches, planters, and the sculpture during behavior mapping. Overall there was very little interaction observed; however, the most interaction occurred with the sculpture. Again to supplement our observations, survey respondents were also asked about their interaction with features in the space, as shown in Figure 12. These responses show that, even though little interaction was observed, people report the most interaction with benches of all the features in the space.

FIGURE 11: OBSERVED INTERACTIONS

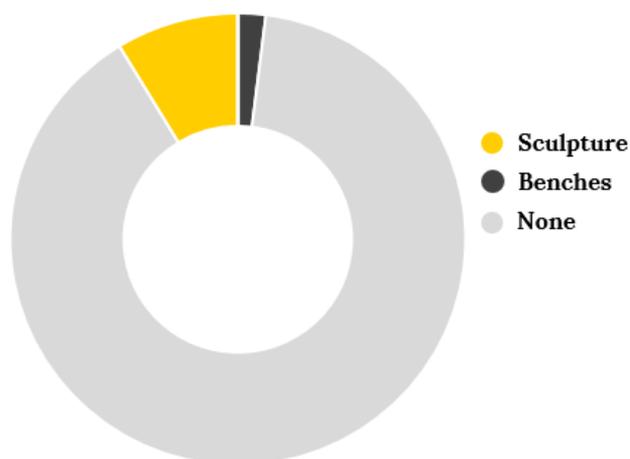
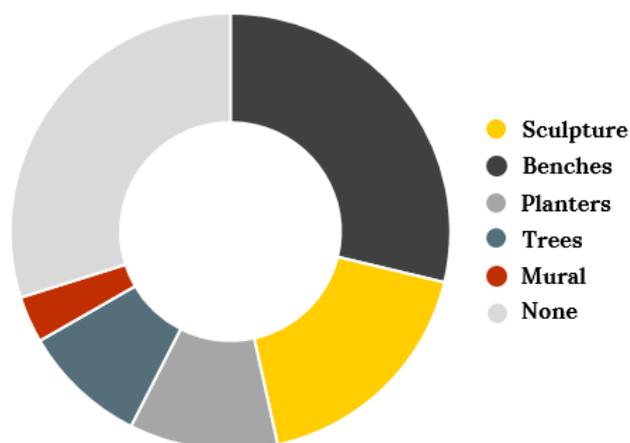


FIGURE 12: REPORTED INTERACTIONS

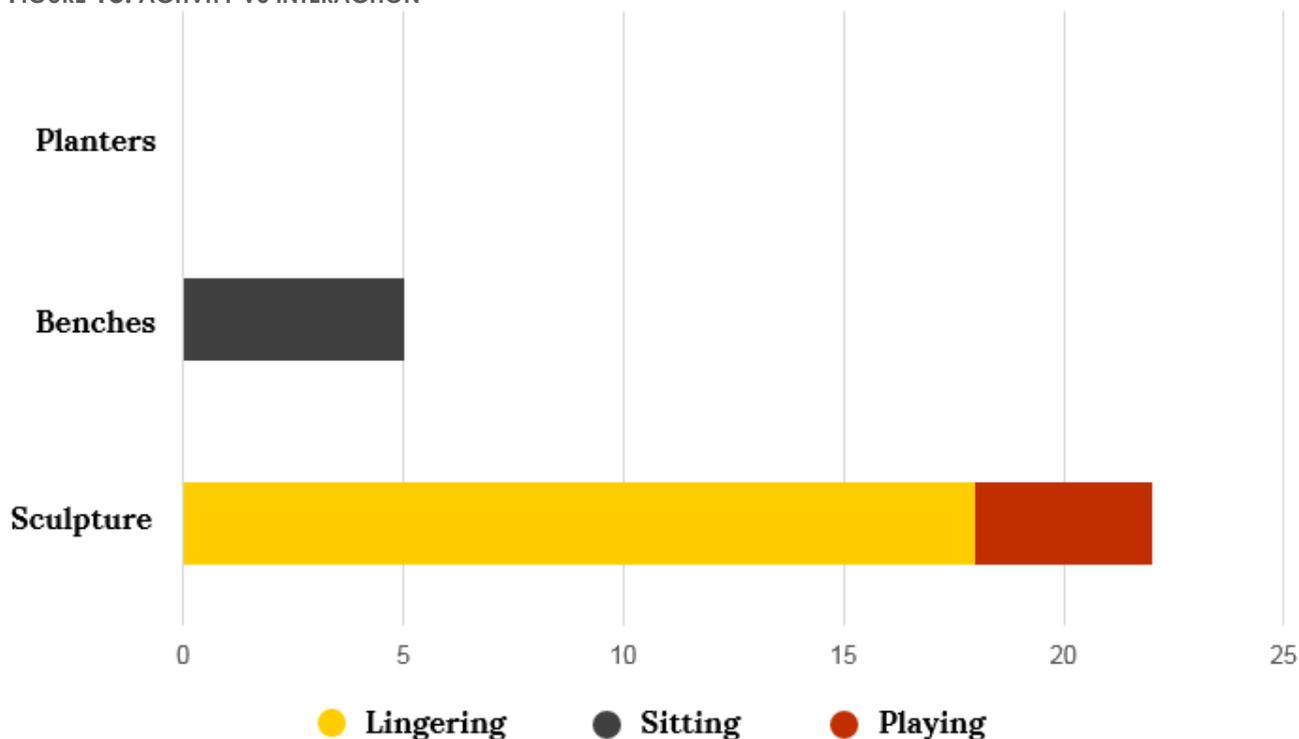


Affordances for Activities

Do certain features afford certain activities more than others? Figure 13 shows which activities were observed during interactions with features during behavior mapping. As expected, the benches most often afforded sitting. Interestingly, while the planters have a ledge around them that could afford sitting, this was not observed during our behavior mapping sessions. During other times in the space outside of our observation sessions, we observed people sitting on the planters, as well as children playing in the mulch around the trees. The sculpture most often afforded lingering and playing activities; especially in the evening, people were observed playing in the mist or taking pictures with the colorful lights.

Conversely, our interviews revealed some of the ways in which the built environment was preventing certain uses of the space. For example, many interviewees indicated that they did not know where to sit in the space; in fact some had not realized that the benches were actually benches. Additionally, several UNC students indicated that the space did not have any tables or chairs that would allow them to sit and do work in the space.

FIGURE 13: ACTIVITY VS INTERACTION



The Sculpture

Throughout our research, the sculpture was the most common feature associated with the space, but also the most divisive. Based on our interviews and open-ended survey questions, people's feelings towards the sculpture range from love to hate. Some people are confused by it, some are intrigued, and many think that it emits steam rather than mist. Similarly, the sculpture's role in affording or preventing activity is two-sided.

On one end of the spectrum is a Chapel Hill parent who cites the sculpture as the main reason his family comes to the space: "Were the mist sculpture not there, we'd never hang out there."⁵⁰ This statement captures an interesting element of the space that did not appear in our surveys or behavior mapping: families with children seem to like the space more than those without. The parent quoted here indicated that 140 West is one of the only public spaces in Chapel Hill where he feels that he can safely let his daughter run around. He also indicated that one of his favorite

⁵⁰ Interview with Chapel Hill Parent, April 2016

features of the sculpture is the mist, since it allows his daughter to play in the water without getting soaked.

While the sculpture seems to afford play activity, it also acts as a barrier to certain activities. As a UNC undergraduate student stated in an interview, "the cheese grater in the middle prevents it from being a gathering space."⁵¹ This sentiment was reflected by Amanda Fletcher, the Town of Chapel Hill's Supervisor for Festivals and Community Celebrations, who indicated that whenever the Town hosts an event in the space, it can sometimes prove difficult to work around the sculpture.⁵²

Overall, the features of the space's built environment seem to promote little interactive use and do not encourage people to stay in the space, with the primary exception of young families whose children play in the mist of the sculpture.

⁵¹ Interview with UNC student, March 2016

⁵² Interview with Amanda Fletcher, Town of Chapel Hill, April 2016

Recommendations

How Can the Space be improved for Increased Activation?

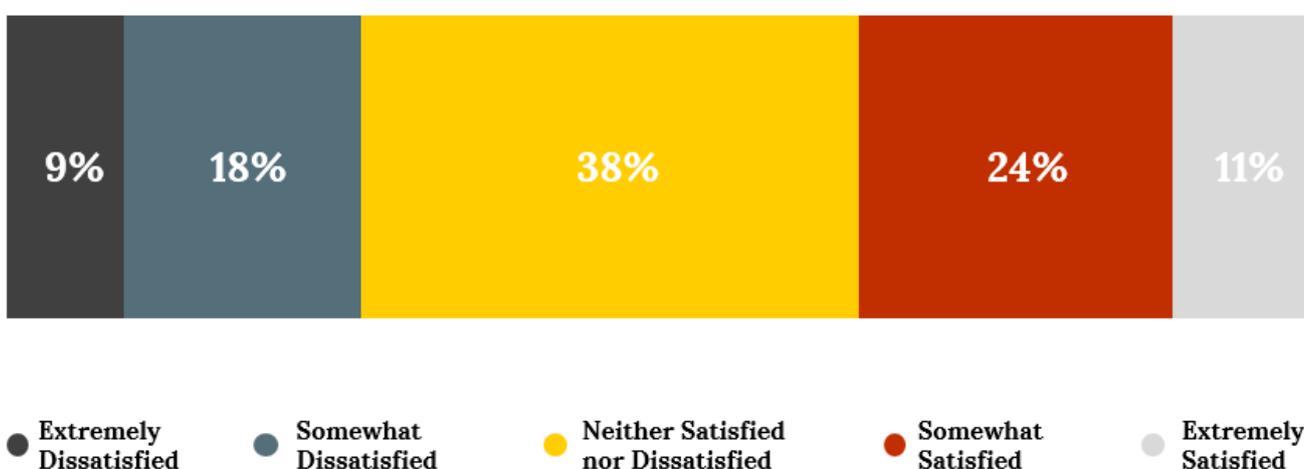
It is clear that the plaza at 140 West Franklin does not function as it was originally intended, that is, as downtown Chapel Hill's premier public space. In the final section of this report we use the data collected to make recommendations for how the space might be improved to reach the levels of activation envisioned by the designer, developer, and city officials.

Community Satisfaction

In formulating a plan for improvement it is essential to understand not only how the community currently uses the spaces, but also how they perceive and feel about the space. Collecting community input about what is working, and what changes would increase their enjoyment of the space, is essential if the recommended interventions are to effectively address the challenge of under-utilization.

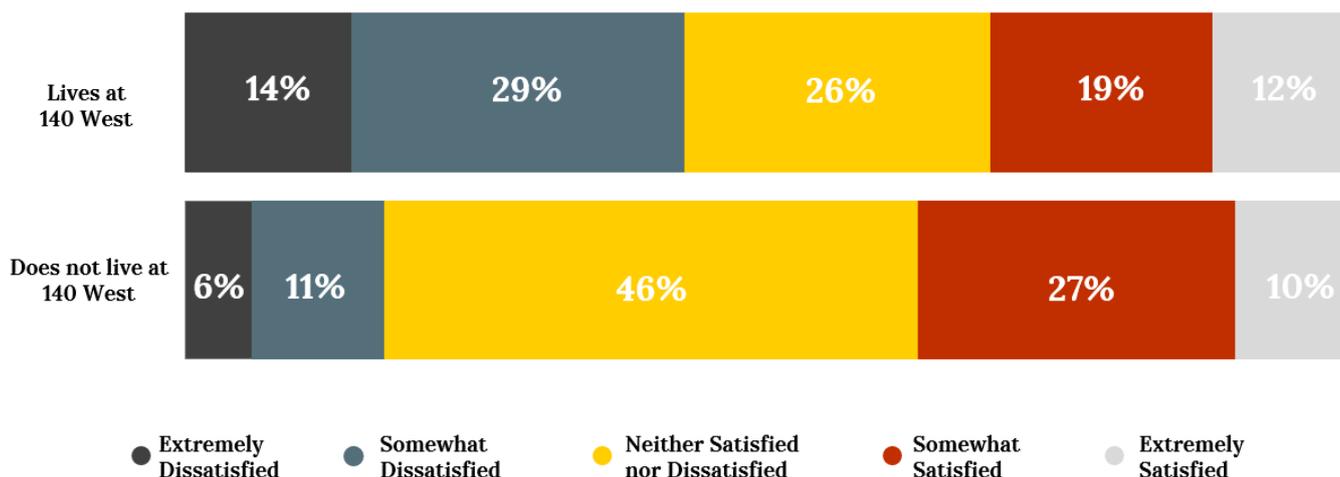
Figure 14 shows how survey respondents feel about the space. The data indicates that 27% of respondents were either somewhat or extremely dissatisfied with the space. A further 38% were neither satisfied nor dissatisfied. The implication is that 65% of respondents have either negative feelings towards the space or are indifferent. If 140 West Franklin is to function as downtown's premier public space, this level of dissatisfaction and disinterest is a strong indication that urgent intervention is needed.

FIGURE 14: COMMUNITY SATISFACTION



Survey responses also indicated differences in satisfaction between those respondents that live at 140 West Franklin, and those who do not. Figure 15 shows that residents of 140 West feel more strongly about the open space than non-residents, with only 26% reporting that they feel indifferent, compared to almost half of the non-residents. An important difference to note is that overall, residents of the development are less satisfied with the space than non-residents. 31% of residents are either somewhat or extremely satisfied, compared to 37% of non-residents. A large portion of residents – 43% - indicated that they are either somewhat or extremely dissatisfied with the space, compared to only 17% of non-residents. Open ended survey questions revealed that resident dissatisfaction can be attributed to noise emanating from the plaza, particularly during programming. A number of residents reported extreme frustration with the volume of the live music performances.

FIGURE 15: RESIDENT VS NON-RESIDENT SATISFACTION



Community Desires

The survey also provided open ended questions that gave community members an opportunity to describe the changes that they felt would improve their experience, and increase their frequency of use. Figure 16 shows community desires relating to the space. Overwhelmingly respondents indicated a desire for more seating (particularly benches and tables), more greenery (including grass, flowers and trees), increased shade (particularly from umbrellas), and more restaurants and stores. Many respondents requested the removal of the sculpture, and others wanted more art in the space. Overall, it is clear that users of the space want a more visually and socially vibrant space, that is engaging and comfortable.

elements. They do not allow for dual activities such as **sitting** and working, sitting and eating, or sitting and reading. Above all else, users would like more comfortable and usable seating.

During the summer months there is a robust **programming** schedule for the space including live music and a farmers market. Existing programming makes the space a destination, but during the winter months the space is severely neglected and underutilized.

Recommended Interventions

These six take-aways were used to formulate recommendations for interventions in the space. Interventions should aim to address the existing limitations of the space, as well as build on those elements that are currently working. We believe that the solution to increasing activation lies at the intersection of both intentional design, and targeted policy interventions.

Design Interventions

Vegetation

Installing more vegetation, particularly flowers and grass, would keep people in the space via increased comfort and aesthetics. Both types of vegetation would inject the space with color, and visual and tactile stimulation that are currently absent in the space. Vegetation is also a useful noise absorbent⁵³ that could potentially mitigate traffic noise in the space, and noise from the space that travels to the apartments above. Examples of successfully landscaped urban parks, and landscaping on parking deck roofs, are provided in (Appendix C, Figures 1 - 4).

Because the space is predominantly used in the evening, it is important that any vegetation added does not increase overhang, which will make the space darker and less safe at night. We do not recommend adding more trees for shade, but rather installing temporary shade mechanisms that can be removed at night.

Wayfinding & Signage

Privately owned public spaces can suffer from underutilization if people are not aware that the space is available for public use. We recommend adding signage to the space indicating that people are welcome to use the space, even if they are not frequenting the restaurants or stores. An additional step could be to officially name the space to give it a stronger sense of identity and thereby make it more memorable in the local collective conscience (See Appendix C, Figure 8 for concept).

Additional wayfinding signage may draw people to the back courtyard that many people currently do not know exists, and draw pedestrians in from the Rosemary St. entrance. There is an existing map at the courtyard entrance (Appendix C, Figure 5) but its small size means it is almost entirely unnoticeable. The current signage plaque for the sculpture is small and difficult to find (Appendix C, Figure 6). A larger sign providing more detail about the history, design, and artistic

⁵³ Georgia Forestry Commission, 2008

vision behind the sculpture could go a long way to reduce negative feelings and confusion about the sculpture (See Appendix C, Figure 7 for concept).

Seating & Shade

In order to encourage people to stay in the space for extended periods of time, their needs to be seating that affords varied sitting activities. If people can sit while eating, doing work, reading, or having meetings, this will increase activation in the space during the day. We recommend inserting moveable tables and chairs, an elemental design intervention that has been implemented with wide success across the world⁵⁴. Tables and chairs can be multicolored, adding visual stimulation to the space. They are also easily moved for programming and events. These kinds of tables and chairs are amenable to umbrella fittings, which would provide shade during the day without obstructing vision or creating shadows at night. Examples of successful urban plazas that utilize this table/chair/umbrella combination are available in Appendix C Figures 9 & 10.

Art and Light

The original artistic vision for the space conceptually combined the elements of light and water. Many of the design features, including the sculpture, the concrete patterns, and the benches, are the result of this vision, to varying degrees of success. The sculpture has both water and light emissions, which, while controversial, certainly engage passersby and animate the space. It is also the only feature that does so. The sculpture needs to be better contextualized within broader artistic animation in the space. We believe that it is possible to build upon the original artistic vision to increase activation in the space.

We recommend a number of specific interventions relating to art and light in the space. First, the mural in the back courtyard could be creatively illuminated, adding animation in that zone and drawing attention to the artwork. The second is the installation of string lights in the arcade to create a convivial feeling, rather than the feeling of being inside an "airplane hanger" as one of our interview respondents stated. This strategy has been successful in similar alleyways across the country, as illustrated in Appendix C, Figures 11 & 12. Finally, simply adding lighting to the trees in the wintertime would make the space more welcoming. It is possible that local artists could be commissioned to produce temporary light installations in the space that contextualize the existing sculpture.

Policy Interventions

While design interventions would keep people in the space for longer periods of time, policy level interventions would serve to make the space a destination in and of itself.

Retail and Commercial Activity

It is essential that the vacant commercial and retail spaces are filled. The existing business that fronts the space brings traffic to 140 West and during the summertime, the outdoor private seating

⁵⁴ Project for Public Spaces, "Moveable Seating"

associated with that business increases the feeling of activation in the space. Filling the vacant storefronts will create ground floor activation, and ensure there are eyes on the space. Careful selection of businesses so that they attract a variety of local residents and different times of day is important. Ideally the businesses located at 140 West would not only bring residents to the space, but also benefit from existing users of the space, especially during times of programming. This interdependent relationship is key if the space is to be actively used by residents at all times of day and throughout the year.

Commercial activation should also be considered in the context of the broader area. The completion of Carolina Square development across the road will hopefully draw large numbers of people to the general area. 140 West should capitalize on this increased activity by offering complementary, but also diversified types of stores and restaurants.

Programming

There is a robust summertime programming schedule at 140 West, funded by the property developer as part of the development agreement with the town. Summertime programming includes weekly live music, a farmer's market series, and other activities such as arts and crafts. We recommend building on the success of existing programming by introducing more year-round events and activities. Particularly, creative wintertime programming would activate the space in the colder months. The Project for Public Spaces has written about how cities across the world successfully provide outdoor activities for residents, even in the coldest climates⁵⁵. These activities can include holiday markets, and the sale of hot cider and coco. Wintertime programming also requires creative lighting, which fits well with our recommendation for dynamic light installations.

We also recommend targeting programming to those populations that currently enjoy the space the most, as well as those that never come. Families, and especially parents with young children would benefit from events such as storytelling, organized games, and face painting. Programming could also be targeted towards the student demographic that populate the area in large numbers, but don't often use the space. Film screenings, or bake sales during exam time, are a couple of examples that might attract this demographic.

A Tech-Friendly Space

Capturing the student demographic could also be achieved by retrofitting the space to be more technology friendly. Technology interventions can range from simply providing free Wi-Fi in the space, to installing charging stations. Charging stations can be simple wall/floor outlets, or could be associated with tables and umbrellas. A good example of solar charged umbrellas that provide outlets are available on UNC Chapel Hill's campus (Appendix C, Figure 13) More complex technology such as art installations that allow users to interact using their smartphones should be considered if there is funding for that level of intervention. Even without the complexity of tech-art, simple Wi-Fi and places to charge electronics, combined with tables and chairs, would offer

⁵⁵ Project for Public Spaces, "Winter Cities"

an outdoor study area of students, currently nonexistent in Chapel Hill. Our data shows high demand for this kind of space in downtown.

Broader Implications

The challenges currently faced by the open space at 140 West, and or recommendations for improvement are not limited to this particular site. There is an increasing trend in the United States towards these kinds of mixed use, urban developments that integrate privately owned public spaces into their development agreements⁵⁶. One example is directly across the street - Carolina Square will provide retail, office and commercial space, as well as a centrally located public plaza. Similar developments are likely to spread across North Carolina cities, especially in Raleigh, Durham, Cary and Charlotte. Our findings indicate that developers, planners and designers need to think more carefully about how privately owned public spaces are designed, programmed and used to maximize activation and a strong sense of place.

⁵⁶ Mazzara, Benjamin. Bisnow Online, 2015

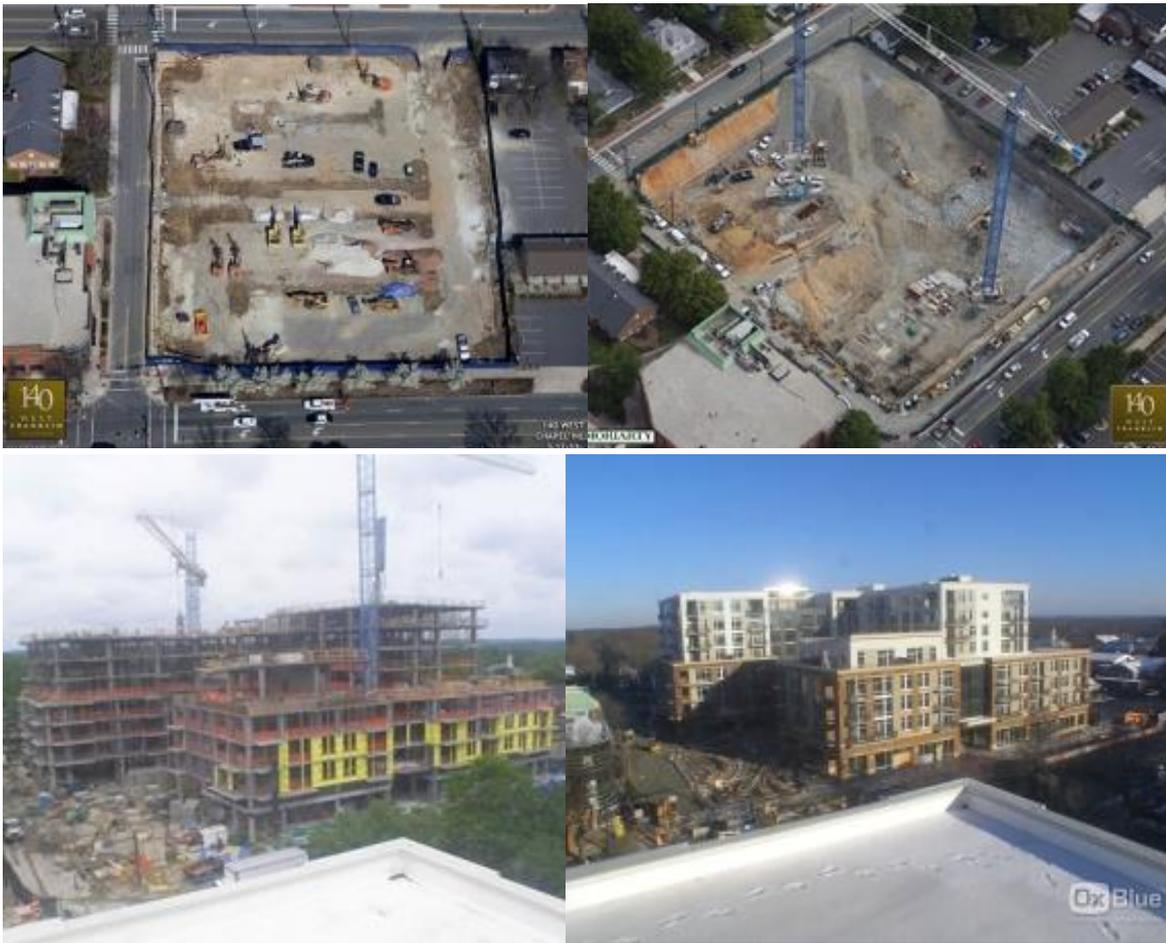
Appendix A: Context

Figure 1: Surface Parking Lot #5



Source: <http://www.140westfranklin.com/construction/>

Figure 2: Demolition of parking lot #5 and construction of 140 West Franklin Street (2011-2013).



Source: <http://www.140westfranklin.com/construction/>

Figure 3: Rendering of developer's vision for 140 West Franklin Street.



Source: Chapel Hill Lot 5: Arts Masterplan Presentation.

Figure 4: Photo from the grand opening ceremony of the 140 West Franklin Street development.



Source: <http://chapelboro.com/news/development/chapel-hill-celebrates-140-west-grand-opening>

Figure 5: Plaza in the open space at 140 West Franklin Street development.



Photo credit: Erin Convery

Figure 6: Arcade in the open space at 140 West Franklin Street development.

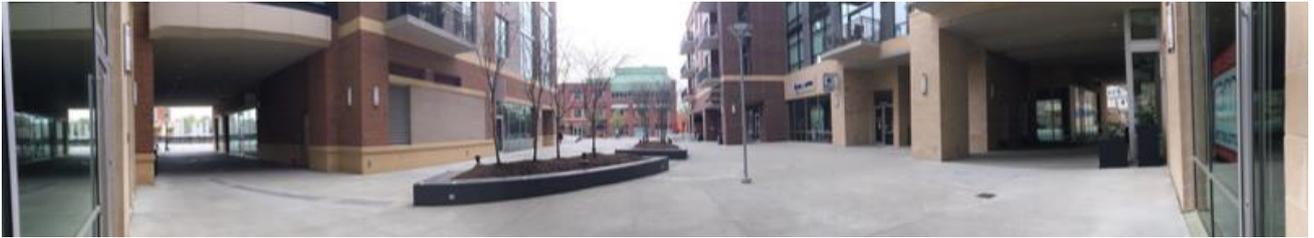


Photo credit: Erin Convery

Figure 7: Courtyard in the open space at 140 West Franklin Street development.



Photo credit: Erin Convery

Appendix B: Methodology

Behavior Mapping

Figure 1: Behavior Mapping Zones and Stations

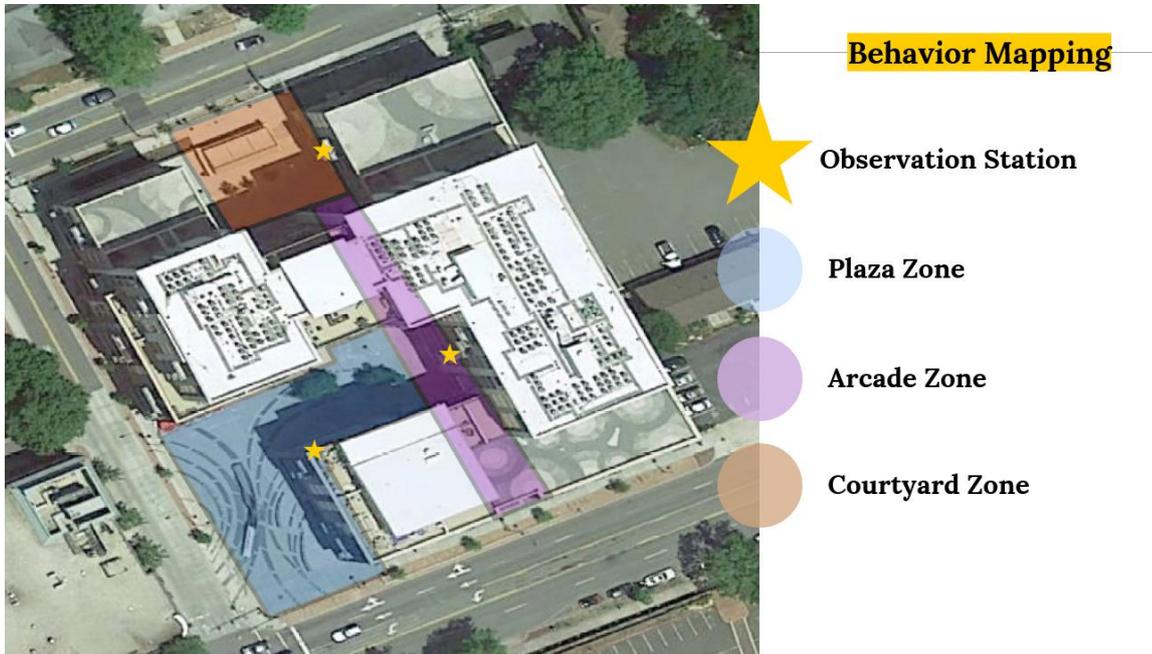


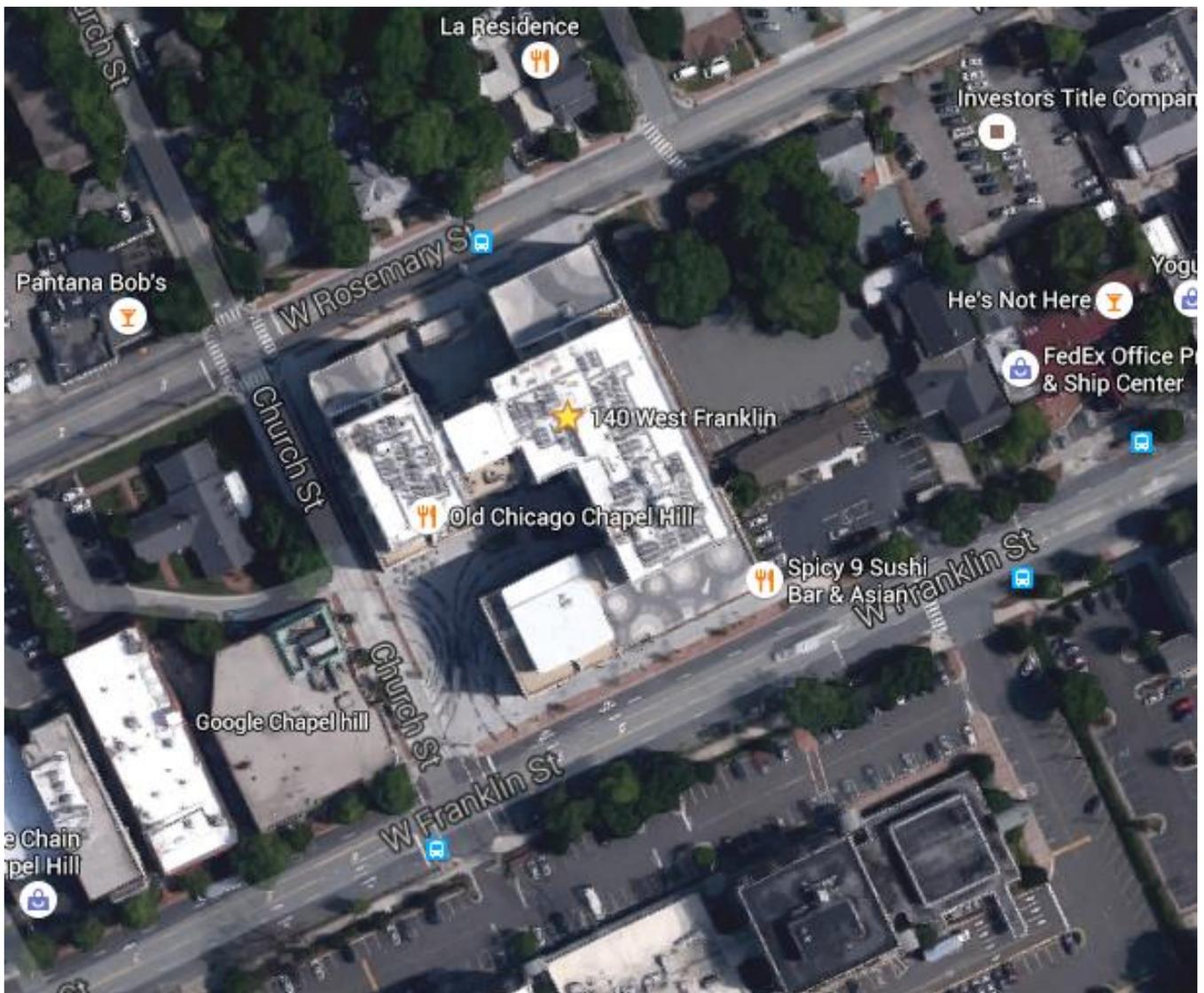
Figure 2: Behavior Mapping Attributes

Attribute	Descriptive Indicators
Time	Date and Time
Gender	Male
	Female
	Other
Age	Child
	Teenager
	Young Adult
	Adult
Activity	Sitting in Public Space
	Walking Through
	Walking To or From Building
	Lingering
	Playing
	Skateboarding
	Biking
	Running
Social Behavior	Interacting with others
	Not interacting with others
Element Interaction	Sculpture
	Planters
	Benches
	Mural

Survey

Introduction

We are conducting a survey regarding the outdoor public space at the 140 West Franklin Street mixed use development in Chapel Hill, NC (see photo below for location). The public space includes the plaza at the corner of Franklin and Church Street, the arcade connecting Franklin Street and Rosemary Street, and the courtyard on Rosemary Street. Throughout the survey, we will refer to this area as "the space." The space does not include private outdoor restaurant seating. The survey should take about 3-5 minutes to complete. Thank you for your time, we appreciate your input!



Survey Questions

Q1 How old are you?

- < 14
- 14 - 17
- 18 - 22
- 23 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- > 70

Q2 What is your gender identity? (Choose all that apply)

- Male
- Female
- Other
- Choose not to respond

Q3 Which of the following describes your occupation? (Choose all that apply)

- Full-time student
- Part-time student
- Employed part-time
- Employed full-time
- Unemployed

Q4 Where do you live?

- Chapel Hill
- Carrboro
- Durham
- Hillsborough
- Elsewhere in the Triangle
- Outside the Triangle

Q5 Do you live at 140 West Franklin?

- Yes, I currently live at 140 West Franklin
- No, but I have lived at 140 West Franklin in the past
- No, and I have never lived at 140 West Franklin

Q6 How far is the space from your home (in walking time)?

- less than 5 minutes
- 5 - 10 minutes
- 10 - 20 minutes
- 20 - 30 minutes
- more than 30 minutes, or the space is not within walking distance of my home

Q7 What is your primary use of the space?

- as a hangout spot
- as a meeting space
- as a place to access restaurants
- as a shortcut thoroughfare
- other (please specify) _____
- I do not use the space
- I have never been to the space

→ If “I do not use the space” is selected, then skip to Q20.

→ If “I have never been to the space” is selected, then skip to End of Survey.

Q8 How do you get to the space? (Choose all that apply)

- Walk
- Bike
- Drive
- Bus
- Other (please specify) _____

Q9 How often do you go to the space?

- every day
- 2 - 3 times a week
- once a week
- once a month
- less than once a month
- I have only been once or this is my first visit

Q10 What time of day do you use the space? (Choose all that apply)

- Morning
- Lunchtime
- Afternoon
- Evening
- Late night/early hours of the morning

Q11 How often do you stay in the space, as opposed to walking straight through?

- Never
- Rarely
- Sometimes
- Most of the time
- Always

→ If "Never" is selected, proceed to Q12. If not, skip to question Q13.

Q12 When you stay in the space, as opposed to walking straight through, how long do you typically stay? Please do not include time spent inside or in private outdoor restaurant seating areas.

- less than 5 minutes
- 5 - 10 minutes
- 10 - 30 minutes
- 30 - 60 minutes
- more than 60 minutes

Q13 When you go to the space, what size group are you in? (Choose all that apply)

- Alone
- In a pair
- In a group (3+)

Q14 Who do you go to the space with? (Choose all that apply)

- Alone
- Family
- Friends
- Romantic partners
- Colleagues

Q15 What do you usually do in the space? (Choose all that apply)

- Walk
- Sit
- Meet friends
- Eat
- Read
- Play
- Look at art
- Work
- Other (please specify) _____

Q16 What physical features of the space do you use/interact with? (Choose all that apply)

- Benches
- Sculpture
- Planters
- Trees
- Murals
- Other (please specify) _____
- None

Q17 On a scale from 1 to 10, how much do you enjoy the space? (with 1 being the least level of enjoyment and 10 being the greatest)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Q18 How would you rate your overall satisfaction with the space?

- Extremely satisfied
- Somewhat satisfied
- Neither satisfied nor dissatisfied
- Somewhat dissatisfied
- Extremely dissatisfied

Q19 If you could change anything about the space, would you?

- Yes
- No

→ If “Yes” is selected, proceed to Q20. If not, skip to End of Survey.

Q20 What would you change about the space if you could? (Open-ended)

End of Survey

Appendix C: Concept Images

Vegetation

Figure 1: Landscaping in Bryant Park, New York City



Source: https://upload.wikimedia.org/wikipedia/commons/a/a6/New-York_-_Bryant_Park.jpg

Figure 2: Rendering of City Plaza in Raleigh, NC



Source: <http://www.raleighmsa.com/images/projects/DowntownRaleigh/CityPlaza/CityPlaza-RaleighNC-1m.jpg>

Figure 3: Cambridge Center Rooftop Garden



Source: <http://www.powerhousegrowers.com/wp-content/uploads/2014/07/cambridge-center-rooftop-garden-parking-garage.jpg>

Figure 4: Parking Deck Rooftop Landscaping



Source: <http://i.imgur.com/JT4slho.jpg>

Wayfinding and Signage

Current Signage

Figure 5: Directory of the Space

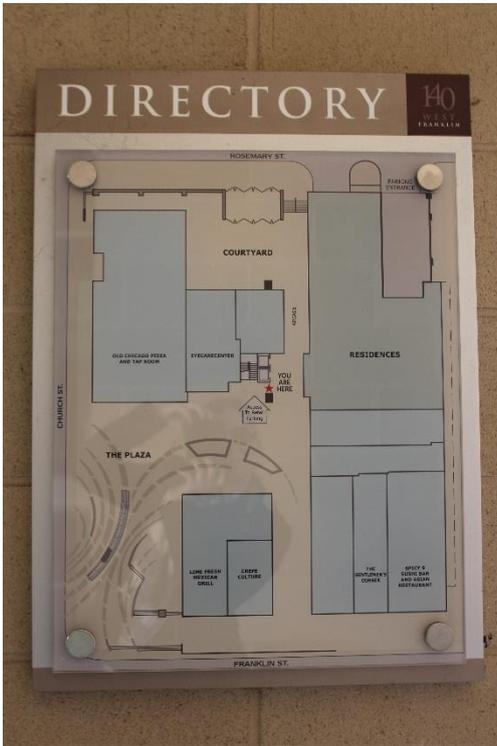


Photo credit: Mia Candy

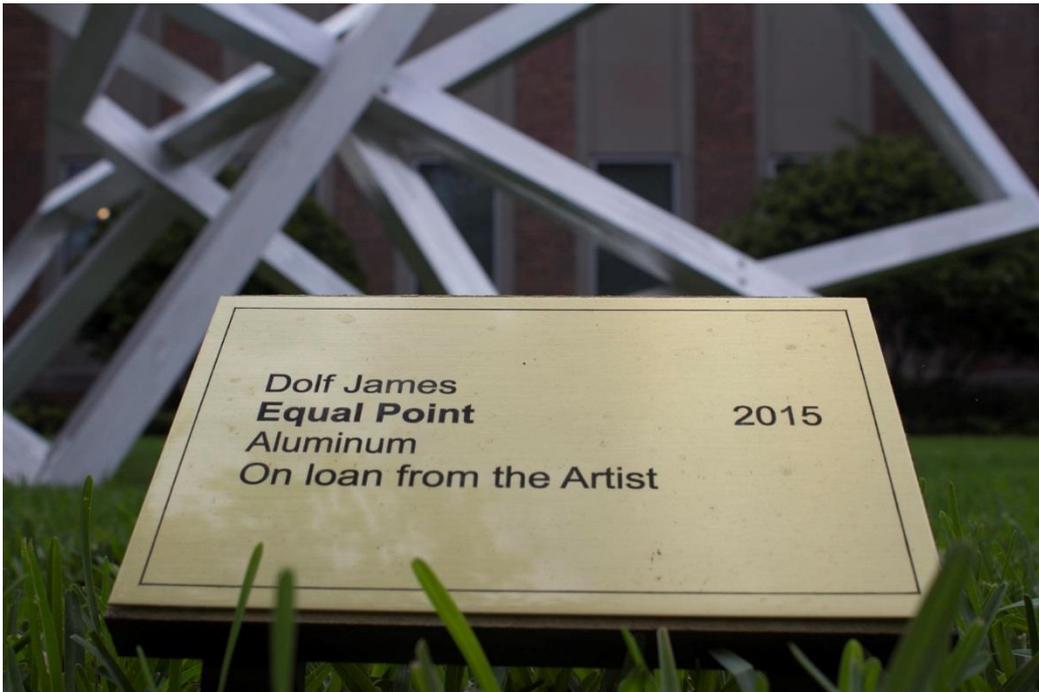
Figure 6: Current sculpture signage



Photo credit: Mia Candy

Signage Concepts

Figure 7: Concept for Sculpture Signage



Source: http://mediad.publicbroadcasting.net/p/wjct/files/styles/x_large/public/201504/DolfJames-EqualPoint_94.JPG

Figure 8: Concept for Public Space Welcome Signage



Source:

<http://static1.squarespace.com/static/56218723e4b021dd851d8488/t/5660f5b8e4b001cfdd5a50f8/1449194940328/>

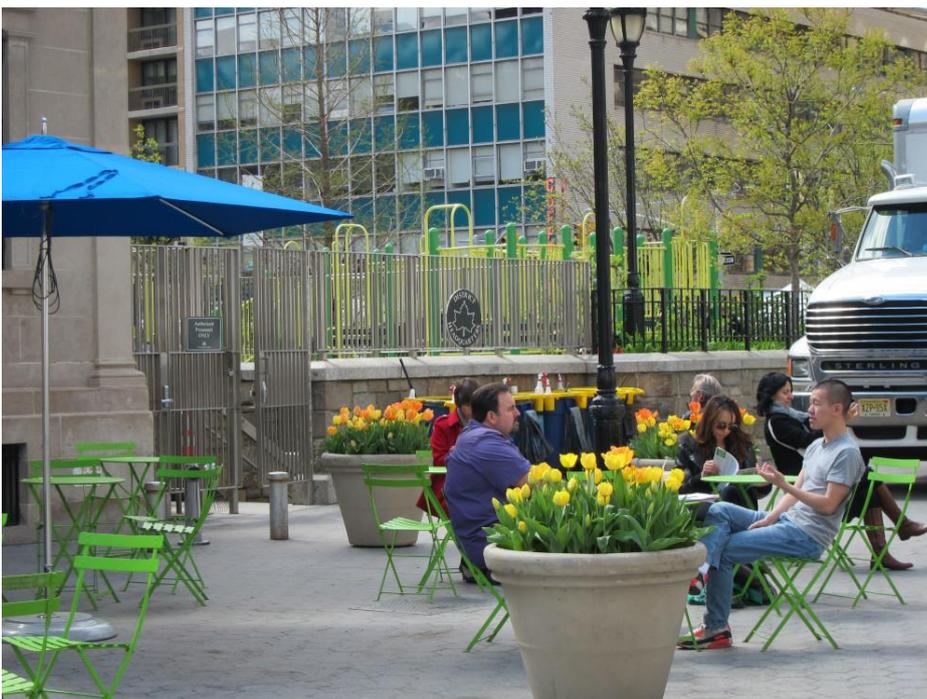
Seating and Shade

Figure 9: Moveable Furniture in Travis Park, San Antonio



Source: <http://bettercities.net/sites/default/files/travispark-sanantonio.jpg>

Figure 10: Moveable Furniture in Union Square, New York



Source: https://unionsquareblog.files.wordpress.com/2012/04/img_3718.jpg

Art and Light

Figure 11: Arcade Lighting



Source: <https://s-media-cache-ak0.pinimg.com/736x/86/c2/4a/86c24a2461b0b8fbb6394fb05a21e467.jpg>

Figure 12: Starry Night Underpass, Boston

Source: <http://img->



cache.oppcdn.com/img/v1.0/s:8346/t:QkxBTksrVEVYVCHRVJF/p:12/g:tl/o:2.5/a:50/q:90/1640x830-aUKhp7pCw3Ge1BQc.jpg/1106x830/2fb1dac61e56c43d3bc87d55001dee6c.jpg

Tech- Friendly Spaces

Figure 13: Solar powered umbrella charging stations at UNC Chapel Hill



<http://interactives.wspa.com/photomojo/gallery/37708/641036/unc-using-umbrellas-to-charge-phones/unc-using-umbrellas-to-charge-phones/>

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