CAPTURING THE BUZZ:
SOCIAL MEDIA AS A DESIGN INFORMANT FOR URBAN CIVIC SPACES

by

MITCHEL LEE LORING

A REPORT

Submitted in partial fulfillment of the requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Landscape Architecture/Regional and Community Planning
College of Architecture, Planning, and Design

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2014

Approved By
Major Professor:
Dr. Jason Brody
CAPTURING THE BUZZ
Social Media as a Design Informant for Urban Civic Spaces
Mitchel Loring | Master’s Report | 2014
CAPTURING THE BUZZ: SOCIAL MEDIA AS A DESIGN INFORMANT FOR URBAN CIVIC SPACES

by

MITCHEL LEE LORING

A REPORT

Submitted in partial fulfillment of the requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Landscape Architecture/Regional and Community Planning
College of Architecture, Planning, and Design

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2014

Approved By
Major Professor:
Dr. Jason Brody

COPYRIGHT
Mitchel Loring
2014
Abstract

BACKGROUND AND PURPOSE: Civic spaces are important nodes of community life. Especially in an urban context, civic spaces provide a necessary place that people can gather for events, meet others, and experience openness in an otherwise crowded environment. However, not all civic spaces are successful in providing these opportunities to city dwellers. Washington Square in Kansas City, Missouri is one such civic space that is currently underused and unsuccessful. Traditional methods of analyzing public spaces can be supplemented by a social media-based methodology of analysis. Analyzing social media posts submitted within the geographic boundaries of a civic space offers rich insights into the public perception and usage of these places. The application of a social media-based methodology to Washington Square results in the development of solutions for addressing this space’s dilemmas and Kansas City’s goals for the area. METHODS: Instagram and Twitter posts are collected within the geographic boundaries of Washington Square and three other civic spaces—which have been identified as exhibiting characteristics of Kansas City’s goals for Washington Square. Using thematic coding, geographic analysis, and textual analysis, these posts are analyzed to discover how people are using and perceiving these civic spaces. This data is synthesized to create solutions for the redevelopment of Washington Square. FINDINGS & CONCLUSION: This research demonstrates that a social media-based analysis can effectively inform planners and designers of the ways in which people use and perceive civic spaces. The application of this methodology to Washington Square has led to the creation of nine solutions. These solutions aim to improve Washington Square’s functionality, its identity, and its interaction with the surrounding urban environment.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>vi</td>
</tr>
<tr>
<td>List of Images</td>
<td>ix</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>xiii</td>
</tr>
<tr>
<td>Preface</td>
<td>xv</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>15</td>
</tr>
<tr>
<td>Methodology</td>
<td>25</td>
</tr>
<tr>
<td>Analysis</td>
<td>35</td>
</tr>
<tr>
<td>Application</td>
<td>62</td>
</tr>
<tr>
<td>Reflection</td>
<td>92</td>
</tr>
<tr>
<td>References</td>
<td>102</td>
</tr>
<tr>
<td>Appendix A: White Paper</td>
<td>104</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1.1: Washington Square Location (Author 2014)
Figure 1.2: Washington Square Site Plan (Adapted from Kansas City Design Center 2012)
Figure 1.3: Urban Design Element Checklist (Gallacher 2005)
Figure 1.4: Project Concept Diagram (Author 2013)
Figure 2.1: Kessler System Map (Adapted from Kessler Society of Kansas City 2014)
Figure 3.1: Jamison Square Location (Author 2014)
Figure 3.2: Jamison Square Aerial (Author 2014)
Figure 3.3: Civic Center Location (Author 2014)
Figure 3.4: Civic Center Aerial (Author 2014)
Figure 3.5: Rittenhouse Square Location (Author 2014)
Figure 3.6: Rittenhouse Square Aerial (Author 2014)
Figure 4.1: Twitter Query Example (Author 2014)
Figure 4.2: World.iam Screenshot (Author 2014)
Figure 4.3: Excel Spreadsheet Example (Author 2014)
Figure 4.4: Washington Square Population Density Map (Author 2014)
Figure 4.5: Washington Square Tweet Locations (Darrinward.com 2013)
Figure 4.6: Washington Square Tweet Hot Spots (Author 2014)
Figure 4.7: Jamison Square Population Density Map (Author 2014)
Figure 4.8: Jamison Square Tweet Locations Map (Darrinward.com 2013)
Figure 4.9: Jamison Square Tweet Hot Spots (Author 2014)
Figure 4.10: Civic Center Population Density Map (Author 2014)
Figure 4.11: Civic Center Tweet Locations Map (Darrinward.com 2013)
Figure 4.12: Civic Center Tweet Hot Spots (Author 2014)
Figure 4.13: Rittenhouse Square Population Density Map (Author 2014)
Figure 4.14: Rittenhouse Square Tweet Locations Map (Darrinward.com 2013)
Figure 4.15: Rittenhouse Square Tweet Hot Spots (Author 2014)
Figure 4.16: Content Analysis Diagram (Author 2014)
Figure 4.17: Experiential Analysis Diagram (Author 2014)
Figure 4.18: Washington Square Word Cloud (Adapted from Tagcrowd.com 2014)
Figure 4.19: Jamison Square Word Cloud (Adapted from Tagcrowd.com 2014)
Figure 4.20: Civic Center Word Cloud (Adapted from Tagcrowd.com 2014)
Figure 4.21: Rittenhouse Square Word Cloud (Adapted from Tagcrowd.com 2014)
Figure 4.22: Word Cloud Diagram (Author 2014)
Figure 5.1: Solutions Table (Author 2014)
Figure 6.1: #WSquareKC Campaign Page (Author 2014)
List of Images

*Cover image numbering reads from left to right on cover page*

Cover Image 1: @_tbo. Instagram. 7/2013.

Cover Image 2: @joaonoupi. Instagram. 9/2013.

Cover Image 3: @oreo11ross. Instagram. 3/2012.

Cover Image 4: @finzimb. Instagram. 5/2012.

Cover Image 5: @scoot_kims. Instagram. 4/2013.

Cover Image 6: @tigers. Instagram. 7/2013.

Cover Image 7: @syauu_buddy. Twitter. 4/22/2013.

Cover Image 8: @robertjpsiah. Twitter. 3/31/2013.

Cover Image 9: @ip patrol. Instagram. 11/18/2013.

Cover Image 10: @ibusin tucked. Instagram. 12/2013.

Cover Image 11: @ku_jung_oe. Instagram. 8/2013.

Cover Image 12: @byronback. Instagram. 6/2013.

Cover Image 13: @isuutiften. Instagram. 5/2013.

Cover Image 14: @ilidnje. Instagram. 9/2013.

Cover Image 15: @jerkgifts.toast. Twitter. 9/1/2013.

Cover Image 16: @iyinyed. Instagram. 11/13/2013.

Cover Image 17: @ilmatthiasmoto. Instagram. 11/12/2013.

Cover Image 18: @ilovando. Instagram. 7/2013.

Cover Image 19: @lifewats. Instagram. 5/2013.

Cover Image 20: @ishannonbemer. Instagram. 7/2013.

Image 1.1: @isara_nolen. Instagram. 5/2013.

Image 1.2: @islandgirl. Instagram. 10/2013.

Image 1.3: @ilof2011. Instagram. 9/2013.

Image 1.4: @jennyrymusic. Instagram. 8/2013.

Image 1.5: @ilisunashahi. Instagram. 10/2013.

Image 1.6: @ipatjrhuy. Instagram. 11/2013.

Image 1.7: @ilidamajj. Instagram. 9/2013.

Image 1.8: @ilbiggyerin. Instagram. 8/2013.

Image 1.9: @ilimheyc. Instagram. 7/2013.

Image 2.1: @ilbenan. Instagram. 12/2013.

Image 2.2: @ilmaynmannning. Twitter. 8/5/2013.

Image 2.3: @ilagode. Twitter. 10/1/2012.

Image 2.4: @ilurnadorwi. Instagram. 9/2/2013.

Image 2.5: @ilosamogops. Twitter. 8/31/2013.

Image 2.6: @iljerkmiss.in. Instagram. 8/1/2013.

Image 2.7: @ilsableaprin. Instagram. 6/2013.

Image 2.8: @ilidready. Instagram. 9/2013.

Image 2.9: @ilicho09. Instagram. 9/2013.

Image 3.1: @ilincr3dible0to5wook. Instagram. 7/2013.

Image 3.2: @ilmcnrummerman. Instagram. 10/2013.

Image 3.3: @ilodchapel. Instagram. 2/2013.

Image 3.4: @ilothikler. Instagram. 5/2012.

Image 3.5: @ilusinucked. Instagram. 12/2013.

Image 3.6: @ilscotubot. Instagram. 11/2012.

Image 3.7: @iligers. Instagram. 7/2013.

Image 3.8: @ilisunauten. Instagram. 5/2013.

Image 3.9: @ilsticky. Twitter. 5/4/2013.

Image 3.10: @ilbyronback. Instagram. 6/2013.

Image 3.11: @ilidbesillsk. Twitter. 9/6/2013.

Image 3.12: @ililifebeats. Instagram. 5/2013.

Image 3.13: @iljerry77. Instagram. 9/2013.

Image 3.14: @ilgbour. Twitter. 7/20/2013.

Image 3.15: @ilrachary_bass. Twitter. 7/30/2013.

Image 3.16: @ilgermain. Instagram. 11/2013.

Image 3.17: @ilomh310. Instagram. 10/2013.

Image 3.18: @ilalexisla. Twitter. 12/29/2012.

Image 3.19: @ilastinmic04. Twitter. 10/19/2012.

Image 4.1: @ilombr3llyn. Twitter. 8/17/2013.

Image 4.2: @ilormadels. Instagram. 10/2013.

Image 4.3: @iljanka300. Instagram. 8/2013.

Image 4.4: @ilrabenheimer. Instagram. 6/2012.

Image 4.5: @ilnamal623. Instagram. 9/2013.

Image 4.6: @ilradmontana. Instagram. 8/2013.

Image 4.7: @ilredigklozowki. Twitter. 11/2012.

Image 5.1: @ilernesz. Twitter. 8/21/2013.

Image 5.2: @ilhkrlertr. Instagram. 10/2013.

Image 5.3: @ilombendor. Instagram. 10/2013.

Image 5.4: @il_l_e_t_c_h. Instagram. 9/2013.

Image 5.5: @il_jeuaini. Instagram. 12/2013.

Image 5.6: @ilidwob363. Instagram. 7/2013.

Image 5.7: @ilmoxyy. Twitter. 6/22/2013.

Image 5.8: @iljerkfistost. Twitter. 9/1/2013.

Image 5.9: @il_2lbo. Instagram. 7/2013.

Image 5.10: @ilpsaimads. Twitter. 7/3/2013.

Image 5.11: @ilser. Instagram. 5/2013.

Image 5.12: @ilwukulum. Instagram. 6/16/2013.

Image 5.13: @ilshinyrussef. Instagram. 7/27/2013.

Image 5.14: @ilpizp. Instagram. 10/2012.

Image 5.15: @ilharlanedlin. Twitter. 5/5/2013.
Acknowledgements

The development of this project and report would not have been possible without the help and guidance of several individuals. Firstly, my master’s report committee composed of dedicated K-State faculty: Jason Brody, Blake Belanger, and Michael Wesch. Stephanie Rolley, department head of Landscape Architecture/Regional and Community Planning, also provided helpful advice and supportive interest in this project. Vladimir Krstic, director of the Kansas City Design Center, offered his valuable opinion several times throughout this process. My co-worker, William Chernoff, provided important information on querying and downloading the social media data. My uncle, Burt Morey, assisted with Excel difficulties. Collaborative advice and discussions between myself and my fellow umbrella group members: Chase Johnson, Alyssa Butler, Ashley Schwemmer, and Olivia Pitt-Perez, were also critical to the development of this project—and mental well-being during the process.
Preface

This project and report is an effort to contribute meaningful information to aid in the redevelopment process for Washington Square, an urban civic space in Kansas City, Missouri. Kansas City Parks and Recreation hired the urban design firm Coen + Partners in November 2013 to prepare a redevelopment proposal for Washington Square. The Kansas City Design Center—an educational studio of urban planning and design students from The University of Kansas and Kansas State University—is also partnering in this work to provide site analysis and designs for the new Washington Square. Two groups of students from Kansas State University’s Department of Landscape Architecture/Regional and Community Planning have focused their capstone master’s reports on the Washington Square project in order to contribute meaningful research to Coen + Partner’s redevelopment efforts. These students are divided into two topical groups: “Civic Space in Urban Development” and “Civic Space in Urban Resilience.” This report is the product of Mitchel Loring, one member of the “Civic Space in Urban Development” group.
Introduction

Social media is a dynamic realm which informs people on a multitude of topics in their daily lives, brings breaking news to the masses during rapidly developing situations, and has proven itself informative for many scientific studies. This report describes how social media data can be utilized in a new methodology for analyzing urban civic spaces. This methodology yields rich, descriptive information about civic space usage and perception—quickly and without a high cost. This methodology has been applied to four civic spaces in order to contribute to Coen + Partner’s redevelopment proposal for Washington Square.
Washington Square

Context

Washington Square is located on the southern edge of downtown Kansas City. The main entrance to the park sits at the intersection of Grand Boulevard and Pershing Road. The park is adjacent to Union Station, Kansas City’s historic main train depot, which is now an exhibition space, science museum, restaurant and café, movie theater, and the city’s active Amtrak station. Large office buildings front Washington Square on the East and Northwestern sides. A hotel is adjacent to the south. To the southeast lies the Crown Center complex. Crown Center is a mixed-use district with a successful shopping center, offices, and residences. Crown Center also has its own outdoor plaza area which is more heavily used than Washington Square.

Major bus routes run along the eastern and western street boundaries of the park. The city’s new streetcar line, currently under construction, also runs along the western boundary of the park. A bike share station sits across the street from the park at Union Station. These transit modes all have stops along the edges of Washington Square.

Although these surrounding uses are not actively engaging the streets or Washington Square, the amount of shoppers, office workers, hotel guests, residents, and commuters—all immediately adjacent to Washington Square—should be considered potential park users. Washington Square is in an undeniably advantageous location to be a successful civic space. Despite these conditions, Washington Square is severely under-performing as a civic space. The park is rarely used and largely unknown to Kansas City and metro residents.

Should the issues in and around Washington Square be addressed, the park’s location carries great potential to become the anchor park of downtown and a beloved civic space for the city.
Civic Spaces

In order to fully understand the context of Washington Square, it is important to understand how it functions as a civic space, and more broadly, what a civic space is.

The civic space is a type of urban form that can greatly influence an individual’s experience in that setting. Civic spaces vary in terms of their physical form and use. Common examples of civic spaces include the “path, street, square, park, plaza, green,” and common uses can be described as “informal, civic, recreational, [or] commercial” (Great Britain 2000, p. 24). Although their form and use might differ, the primary purpose of a civic space is to provide a common place for the gathering of people. Images 1.8 and 1.9 illustrate two different types of civic spaces. These “places” are commonly public parks or squares, such as Washington Square, and they have always enjoyed a special status in cities.

Jan Gehl writes, “…for most people, streets and squares constitute the very essence of the phenomenon ‘city’” (Gehl 2011, p. 89). If squares, or other types of small civic spaces, are this important, then it is imperative that thoughtful attention be paid to their design in order for them to be amenities to the city rather than “a wasted resource” that “will detract from a place’s sense of identity” (Gehl 2011, p. 24). Gehl notes that the social activities that take place in a civic space are directly tied to the quality of the civic space.
William Holly Whyte, an urban theorist and researcher, discovered through his observations of small urban plazas and parks that “quite simple physical alterations can improve the use of the city space noticeably” [Gehl 2011, p. 34]. Successful civic spaces have certain attributes that lend to their ability to perform well.

The defining attributes found in well-used civic spaces are often basic urban design principles. One of these attributes, which tends to be a prerequisite for the others, is the ability to move comfortably around and through the space on foot. Gehl’s studies on the pedestrian-focused transformation of urban streets in Scandinavian cities led him to the conclusion, “quality improvement to daily and social activities in cities can be observed where… traffic-free zones have been established” [Gehl 2011, p. 46]. In these cases, “life between buildings” still remains intact, an active street scene is typically present. This condition is complex as it relates to the interaction between public space (the street) and private space (businesses and residences).

Gehl states that “sharply demarcated borders” between these two zones will make it “difficult… to move into the public environment” [Gehl 2011, p. 113]. As permeability becomes more complicated, the number of people in the public realm will decrease. Gehl recommends designing “flexible boundaries” or “transitional zones” to help people move from the private areas to the public areas [Gehl 2011, p. 113]. These areas can be thought of as miniature civic spaces themselves. They become a place to linger or meet people where the user does not feel uncomfortable doing so. This process is a self-beneficiating cycle because if people are comfortable moving through these transitional zones, business owners can expect to see more potential customers as they do not feel inhibited from entering or exiting the private realm.

Minimizing walking distance almost always ensures that another important attribute of urban design is realized—a healthy mix of land uses in close proximity to each other. Gehl speaks of the mid-20th Century shift from traditional city building, with a healthy density and mix of building uses, to a more functionalistic approach that silos certain land uses in separated zones.

He describes that this process assured “light and air” to city dwellers, “but also caused an excessive thinning of people and events” [Gehl 2011, p. 46]. According to Gehl, this shift “may have reduced the physiological disadvantages” of crowded city life, but it also “reduced the possible advantages of closer contact” [Gehl 2011, p. 46]. In these cases, “life between buildings has been phased out,” forcing people away from civic spaces they would typically stroll past in their daily routine and straight into their automobiles [Gehl 2011, p. 46].

In instances where the “life between buildings” still remains intact, an active street scene is typically present. This condition is complex as it relates to the interaction between public space (the street) and private space (businesses and residences). Gehl states that “sharply demarcated borders” between these two zones will make it “difficult… to move into the public environment” [Gehl 2011, p. 113]. As permeability becomes more complicated, the number of people in the public realm will decrease. Gehl recommends designing “flexible boundaries” or “transitional zones” to help people move from the private areas to the public areas [Gehl 2011, p. 113]. These areas can be thought of as miniature civic spaces themselves. They become a place to linger or meet people where the user does not feel uncomfortable doing so. This process is a self-beneficiating cycle because if people are comfortable moving through these transitional zones, business owners can expect to see more potential customers as they do not feel inhibited from entering or exiting the private realm.

The British Commission outlines successful urban spaces as being “defined and enclosed by buildings, structures and landscape” [Great Britain 2000, p. 21]. This urban edge, from the ground traveling up several floors, is distinctive of some of the best civic spaces in the country. Two of the four civic spaces studied in the analysis of this project exhibit this characteristic—Jamison Square and Rittenhouse Square. Besides framing the space, which allows people to feel a more personal connection to the place they are in, active urban edges also ensure greater safety in the neighborhood. The British Commission notes that “live edges, such as shopfronts, doors directly to the street, or residential upper floors, enable people to keep an eye on the public space and make it feel safer” [Great Britain 2000, p. 21]. This collection of watchful eyes and interaction between people helps create a distinct place.

The creation of a distinct and memorable place is another important attribute of successful urban design. The British Commission writes, “A sense of place often depends on the design of the public realm and its contribution to an area’s character and identity” [Great Britain 2000, p. 28]. Creating a sense of place is achieved through paying particular attention to “local circumstances” such as “landscape, building traditions and materials, [and] patterns of local life” [Great Britain 2000, p. 19]. For areas that have endured the functional shift described by Gehl, a “creative reconciliation of local practices” should take place to realign...
and reintroduce the “local distinctiveness” that has been lost (Great Britain 2000, p. 19). The British Commission includes an important point in its discussion on character: “New and old buildings can coexist happily without disguising one as the other” (Great Britain 2000, p. 19). The commission states that the key to achieving this stylistic blending is ensuring the designs are “a response to urban design objectives” (Great Britain 2000, p. 19).

These attributes of quality urban spaces are overarching themes that frame and enable the site-specific design elements in a civic space. Pauline Gallacher’s book, Everyday Spaces: The Potential of Neighbourhood Space, provides a checklist of the design elements often found in civic spaces with quality urban design (Gallacher 2005, p. 59). They are listed on the following page in Figure 1.3.

This discussion on the components of successful urban civic spaces is important for this project because these concepts are directly related to the vision Kansas City has for Washington Square and the surrounding area. To reach this vision of an enhanced urban character, this project uses social media as the defining feature of a new methodology which will help guide planners and designers to make decisions for the redevelopment of Washington Square.

- It would probably be hard, or mostly so.
- It would provide a focal point or punctuation mark in the local scene.
- It would have a self-evident program for active and/or passive use, but would not require an elaborate narrative.
- It would be distinctive; providing identity, both for inhabitants and to those from outside.
- It would be locally significant, commemorating or celebrating.
- It would simply be beautiful for its own sake – a highly designed urban object, e.g. a lighting installation or a fountain.
- It would be maintained to the highest specification – a standard bearer for the area.
- It would be linked, both visually and physically, with the rest of the area.
- It would be subject to passive surveillance from surrounding buildings.
- It would be animated in ways appropriate to its character.

Figure 1.3: Urban Design Element Checklist
This checklist identifies urban design characteristics and elements often found in civic spaces (Gallacher 2005, p. 59).
Social Media as an Analysis Tool

The technology of social media is not new, at least not in the rapid and continuously progressing sphere of technological developments. Ever since the advent of the World Wide Web, users have been sharing information with each other, although the original users were not quite as mobile as they are today. A September 2013 study out of George Mason University titled, "Geosocial Gauge: a system prototype for knowledge discovery from social media," characterizes social media as "modern reporting and storytelling mechanisms," that allows "individuals to communicate their impressions and interests to the general public" (Croitoru 2013, p.10). One aspect of social media, which is a more recent development, is its application by planners and urban designers to direct online discussions about topics related to the planning and design process.

Twitter is a social media network that focuses user content into 140 character-or-less posts, including pictures or videos. Twitter describes itself as follows:

"Twitter is a real-time information network that connects you to the latest stories, ideas, opinions and news about what you find interesting. Simply find the accounts you find most compelling and follow the conversations. At the heart of Twitter are small bursts of information called Tweets. Each Tweet is 140 characters long, but don’t let the small size fool you—you can discover a lot in a little space" [Twitter].

In addition to these standard features mentioned above, users can also ‘retweet’ another user’s tweet—a way to “amplify a voice and ensure that a specific concern has reached its target audiences” [Tayebi 2013, p. 91]. ‘Hashtags,’ symbols that look like a pound sign (#), are another feature of twitter that allow users to codify their content into specific topics. An example of the hashtag is “#OCW.” Utilizing this hashtag groups tweets relating to the Occupy Wall Street movement [Tayebi 2013, p. 91]. Users can elect to have their tweets carry the geographic coordinate of where the tweet was sent from, or a static geographic location that relates to where the user is from or lives. Ali Tayebi’s 2013 article, “Planning Activism: using social media to claim marginalized citizens’ rights to the city,” comments on the usefulness of Twitter for planners through the monitoring of twitter feeds when he states, “planning activists can address specific locations and specific interests” [Tayebi 2013, p. 91]. Although this information can indeed be useful to planners and designers, the fact that it is developed quickly and without much organization necessitates a system for collection and processing in order for the data to be analyzed.

The second social media network described in this report is Instagram. Instagram describes itself as follows:

"Instagram is a fun and quirky way to share your life with friends through a series of pictures. Snap a photo with your mobile phone, then choose a filter to transform the image into a memory to keep around forever. We’re building Instagram to allow you to experience moments in your friends’ lives through pictures as they happen. We imagine a world more connected through photos” [Instagram].

The primary difference between Instagram and Twitter is that Instagram is image-focused with text available for photo captions, while Twitter is text-focused with media available for illustrating the textual thought. Instagram also allows the use of hashtags in order to codify the photographs. Like Twitter, Instagram also has a geographic feature. The service allows users to tag a certain location for their photos and view them on a map. This is essentially the same feature as when Twitter users opt to provide a geographic location for their tweets.

Utilizing social media as a tool for community engagement allows individuals who may be too busy, or simply lacking sufficient interest to actually attend a physical meeting, to still contribute to the conversation concerning the development of a place. Tayebi’s article, “Planning Activism: using social media to claim marginalized citizens’ right to the city,” emphasizes this point by stating, “an empire of image producers” are currently controlling “the codes, flows, and information” of mass media. Tayebi claims that social media “is challenging this equation worldwide” by establishing “local networks of local activists and active citizens to reach grassroots populations” [Tayebi 2013, p. 91]. Tayebi continues his praise of social media when he says, “Planning activists can use Social Media in establishing and expanding location-based networks to call for direct actions on the streets, spread the word, and obtain public attention for their causes” [Tayebi 2013, p. 92]. Although social media can be used in this manner, to direct citizens’ thoughts about certain subjects, information can also be drawn from social media by studying what is already being said about a place.
The previously mentioned study from George Mason University notes that, “A key characteristic of social media is that much of the information that can be derived from it is implicit and has to be extracted through analysis” (Croitoru 2013, p. 3). Social media networks, such as Twitter, reach user input levels as high as 270,000 tweets per minute (Croitoru 2013, p. 1). This level of usage lends itself to produce a vast array of people’s opinions on an unlimited number of topics. Planners and designers can obtain a wealth of implicit and explicit information about the public’s perception and use of a place from this data. Twitter and Instagram are utilized in this project as methods of collecting this user data from the four civic spaces. Twitter and Instagram are important tools for planners and designers because they both facilitate the sharing of images with accompanying text to describe situations or places. Images can often express much more than words, Sarah Flynn, a graduate of the landscape architecture program at Kansas State University, focused her 2013 master’s report on the use of volunteered imagery to inform the redesign of a public space on Kansas State’s campus. Flynn’s thoughts on photography, expressed in the quote below, are applicable to this project. “Photography, as an act of discovery can influence the design of aesthetics and ecology. Photography also is appreciated and ultimately controlled by the human realm. People choose to use photography to help identify with, perceive, or change an aspect of the landscape.” (Flynn 2013, p. 36).

Analyzing the images and text from Twitter and Instagram results in the synthesis of these user perceptions and usages. It is this synthesis process that help planners and designers develop strategies and designs to improve urban civic spaces. To fully understand the analysis process and solutions for this project, additional background information must be shared. These topics concern the history of Kansas City parks, future plans for the Washington Square area, and why urban design is an important component of urban civic spaces.

Figure 1.4: Project Concept Diagram
Background

Background information is necessary to fully understand the context of Kansas City’s park history and the planned future of the Washington Square area. These topics are critical to consider when drawing conclusions, as the social media data being analyzed cannot be most-effectively comprehended without accompanying site context.
The History of Kansas City Parks

Kansas City has a strong legacy of park design. The city’s Parks and Boulevards system, crafted by George Kessler, has been an integral part of the city’s landscape since the end of the 19th Century.

Kessler was a European-trained landscape architect, forester, botanist, and civil engineer. He came to Kansas City via a contract to design a railway amusement park in nearby Merriam, Kansas (Mobley 1991, p. 5). Around the same time, civic leaders such as the founder of the Kansas City Star newspaper, William Rockhill Nelson, were garnering support for the city to develop urban parks. Kessler saw a great opportunity to develop scenic and functional parks, using the relatively extreme topography of Kansas City to his advantage. He was hired by the newly formed Park Board in 1889 (Mobley 1991, p. 5). By 1893, Kessler had developed a comprehensive plan to create several parks across Kansas City and connect them with broad, winding, tree-lined boulevards. Jane Mobley notes in her book A City Within a Park: One Hundred Years of Parks and Boulevards in Kansas City, Missouri, “Kessler’s aim was not to dazzle, but to make this a more livable city, but what has been created does dazzle” (Mobley 1991, p. 9).

Most historians will agree, Kessler created a unique and meaningful parks system for Kansas City. However, as one historian writes, “not all of Kansas City’s plans were achieved” (Lee 1995, p. 7). This historian continues, “Kessler was unable to extend the parks and boulevards far into the existing Central Business District” (Lee 1995, p. 7). This was the most important failure of Kessler’s system. Without some sort of anchor park downtown, residents that could afford to move left the central city for a more pastoral lifestyle along the new fashionable parks and boulevards. These areas still largely represent some of Kansas City’s wealthiest and most enduring residential neighborhoods—this fact is certainly a testament to the importance of quality civic spaces. A few parks were developed in downtown through Kessler’s guidance, but they were not of the same character as those that were developed in the original plan. One such park was Washington Square.

Kessler and others had visions for grand a civic center in the area of Union Station and Washington Square, but those visions never materialized. As noted earlier, Washington Square sits adjacent to Union Station, which was completed in 1914 (Mobley 1991, p. 23). The city’s original plans for the area surrounding Union Station was to create a civic center comprised of grand buildings housing governmental and cultural institutions. Unfortunately, the plans for the civic center never became a reality. Mobley writes, “By the time Kansas City’s magnificent new Union Station opened in 1914, the nationwide City Beautiful movement was waning” (Mobley 1991, p. 23). Civic leaders’ and citizens’ interest in grand structures for the city were fading. Had this not been the case, there is reason to believe that activity from Union Station as the center of a grand civic district would have been the catalyst to make Washington Square the iconic, high-performing civic space the city now desires it to be.
Washington Square’s first design was implemented in 1926 [Lee 1995, p. 145]. Hare and Hare, a Kansas City based landscape architecture firm, created additional improvement plans in 1928, yet they appear to never have been implemented [Lee 1995, p. 145]. More trees and landscaping were added to the park around 1938 through the Works Progress Administration program [Lee 1995, p. 145].

Hare and Hare created another two improvement plans for the park in 1950 and during the 1980’s [Lee 1995, p. 145]. The 1980’s update brought about the most drastic changes to the site plan of Washington Square; the current pathways were installed and changes were made to the statue. In 1987, the statue received a new pedestal and was re-sited to its current location. A small plaza and seating area were also constructed around the base of the statue [Lee 1995, p. 146]. The latest addition to the park is the construction of a Korean War Memorial in 2011.

Images 2.8 and 2.9 illustrate Washington Square’s current conditions. A September 2013 document created by the city’s parks and recreation department characterizes the site as follows:

“The existing character of the park is an abundance of mature linden trees, decorative concrete paver sidewalks, the Korean War Memorial, and a large bronze sculpture of George Washington. The “Link” provides pedestrian access to the park via a skywalk that connects Crown Center to Union Station” [Parks and Recreation 2013, p. 9].

Kessler and other decision makers’ nearly one hundred-year struggle to transform Washington Square into a grand civic space is finally being prioritized by the city. Several planning documents have been created to guide the city’s efforts in redeveloping the park and the surrounding area. These efforts are also important to understand in order to create effective solutions for Washington Square’s dilemma—based on the social media analysis.
Looking to the future, Kansas City is building a streetcar line adjacent to Washington Square. This line is to be operational by mid-2015, running down Main Street, with its southern terminus at Union Station. Additionally, the city is studying the realignment of north-south downtown bus routes to run almost exclusively along Grand Boulevard. Guidelines in the British Commission for Architecture and the Built Environment’s book, By Design: urban design in the planning practice: towards better practice, reinforces the notion that Washington Square is well sited to be a successful civic space based on these transit improvements. The guidelines state, “Higher density commercial and mixed-use developments, civic buildings and developments likely to generate large numbers of visitors are best located within close walking distance of public transport interchanges” (Great Britain 2005, p. 27). The combination of the current uses, with the addition of the streetcar on the western edge and the high frequency bus corridor on the eastern edge, are elements that can raise Washington Square’s user population. These reasons further support the notion that this park is well suited to become a high performing civic space.

The British Commission notes, “Civic and community buildings, located around public spaces, provide symbols of community identity and a focus for civic life” (Great Britain 2005, p. 28). Jan Gehl, comments that civic spaces have, “throughout the entire history of human habitation... formed focal points and gathering places” (Gehl 2011, p. 45). Union Station is indeed a civic building as evidenced by the city’s original plans for the area surrounding the train station, and the grand scale of the building itself. Even though the original master plans for the area went unrealized, many prominent public events still take place within the building and at the adjacent Crown Center and Washington Square today. Notable functions, such as the Waddell & Reed Kansas City Marathon and the Kansas City Irish Fest, use the Union Station-Washington Square-Crown Center area to gather people for these events.

Kansas City’s parks and recreation department released a request for proposals and qualifications for architectural and design services to redevelop Washington Square in September 2013. This document gives an overview of the area, as well as outlines what the city envisions for the area. The parks and recreation department notes that Washington Square’s “close proximity to Crown Center and downtown” has made it a popular location for gathering people during “festivals, parades, and other civic events such as the start/finish line for the Kansas City Marathon and the City of Fountains Bicycle Tour” (Parks and Recreation 2013, p. 5). The Greater Downtown Area Plan (GDAP), adopted in 2010, lists the redevelopment of Washington Square as a “Catalyst Project.” The GDAP defines catalyst projects as having the “potential to trigger redevelopment in the surrounding area” (City of Kansas City 2010, p. 104).

Decision makers in Kansas City have come to the realization that Washington Square is in a fantastic position to become the grand civic space, anchoring a vibrant urban neighborhood, it was originally planned to be.
The city’s parks and recreation department, and local architectural firm BNIM, created a document in 2012 titled, “Grand Boulevard Streetscape Plan.” This plan focuses on transforming Grand Boulevard, the eastern boundary of Washington Square, into a pedestrian-friendly urban boulevard. These improvements would provide an urbane, walkable route from Crown Center to Berkley Riverfront Park on the Missouri River—traversing the entire north-south length of downtown Kansas City (City of Kansas City 2012, p. 21). This corridor would connect the highest density areas in the city, with further urban treatments in the vicinity of civic spaces, such as Washington Square. The Grand Boulevard plan details its relationship to an improved Washington Square as follows:

The GDAP also outlines several goals that could be achieved through the redevelopment of Washington Square. The downtown area land-use plan indicates Crown Center as a location for the highest level of density in the city (City of Kansas City 2010, p. 11). The other location for the highest level of density is the downtown loop area. The Crossroads neighborhood sits between the Loop and Crown Center, it has been indicated as an area for the second-highest level of density. The GDAP promotes connecting downtown’s neighborhoods by “fill[ing] in the gaps in the urban fabric.” The plan promotes the removal of “vacant lots, surface parking lots, and suburban style development,” a goal that can be partly achieved through a redevelopment plan for Washington Square (City of Kansas City 2010, p. 23). The GDAP states, “When the urban environment has a high level of connectivity and spatial definition, people will be naturally drawn to it” (City of Kansas City 2010, p. 23). Focusing on Washington Square “is a good way to build on downtown’s strengths and create momentum” (City of Kansas City 2010, p. 23).

“The Kansas City Parks and Recreation Department plans to redevelop Washington Park as a better utilized civic space. Tree canopy within the park will need to be thinned and pedestrian connections improved to encourage more use of the park. A large area of parking at the railroad track elevation has negatively affected Washington Park... this area should be considered for redevelopment, raised to the elevation of the park and developed with housing and other 18-hour uses to activate the park. By integrating the asymmetrical streetscape concept with additional tree cover along the boulevard and a wider amenity zone on the east side, users will feel as though they are moving through the park, further increasing visibility into the Park.”

“These various plans for Washington Square all point to an ameliorated future for this site as a civic space. In order to achieve this future, the planners and designers working on the Washington Square project must obtain an understanding of how people use this civic space, and how successful civic spaces are being used. The social media-based methodology presented in the next two chapters is the conduit to understanding civic space use and perception at a deep level. From this analysis process, solutions are created that will guide the redevelopment agenda for Washington Square.”
Methodology

This project is an effort to describe how planners and designers can analyze civic space usage and perception through Twitter and Instagram data, and how these professionals can use this information to inform their designs and plans.
Why Social Media?

The social media services used in this methodology are Twitter and Instagram. As noted in the Introduction chapter, both of these services act as “modern reporting and storytelling mechanisms,” that allow “individuals to communicate their impressions and interests to the general public” (Croitoru 2013, p. 10). The high level of user content on these two services lends itself to produce a vast array of peoples’ opinions on an unlimited number of topics. The previously mentioned study from George Mason University notes that, “A key characteristic of social media is that much of the information that can be derived from it is implicit and has to be extracted through analysis” (Croitoru 2013, p. 10). When the scope of observation is narrowed to those Tweets and Instagram posts being uploaded from inside the boundaries of a civic space, the implicit and explicit information about the public’s perception and usage of that civic space is then available for analysis.

As Jan Gel writes in “How to Study Public Life,” observations of public space users must be primarily done without active questioning [Gehl 2013, p. 3]. Instead, “activities and behavior [are] mapped in order to better understand the needs of users and how city spaces are used” [Gehl 2013, p. 3]. He continues that these “direct observations help to understand why some spaces are used and others are not [Gehl 2013, p. 3].” Studying the social media data which the civic space users are uploading is a technology-aided method of the “observation” described by Gehl. These social media users are already documenting their activities and thoughts, retrieving this information from Twitter and Instagram allows the researcher to bypass long hours of data collection.

In this methodology, social media data from Washington Square (the underperforming civic space) is compared with successful case study civic spaces. Comparing and contrasting the social media data from these different civic spaces allows for the development of solutions for Washington Square.

Site Selection

Case study civic spaces are chosen as model civic spaces which Washington Square could become. Kansas City has set its own goals for Washington Square’s redevelopment. Therefore, the case study civic spaces are not to be thought of as perfect examples of a future Washington Square, but instead as demonstrating characteristics which Washington Square could incorporate to achieve the city’s goals. These comparison civic spaces are chosen because each one is highly used in its respective city as well as represent traits that Kansas City Parks and Recreation has identified as desired in a redeveloped Washington Square. Studying these spaces’ social media data, along with the data from Washington Square, allows the researcher to analyze how people are using these successful civic spaces. This process is integral to the creation of informed solutions for Washington Square’s dilemma. A key feature of this methodology is that the analysis process can be performed remotely, saving money and time spent traveling to various sites as well as countless hours of observation at each site. The three case study civic spaces are described on the following pages.
Jamison Square is a neighborhood park located in the Pearl District of downtown Portland. Mixed-use, urban buildings frame Jamison Square. Portland’s streetcar runs alongside this civic space. Jamison Square’s most popular feature is the large waterfall and rocks in the center of the site. Most of the site is some form of hardscape, while a small grass area sits at the western edge of the park.

Jamison Square
Portland, Oregon

Jamison Square is located in the Pearl District of downtown Portland. This aerial map of Jamison Square shows that the space is primarily hardscape, with a number of trees and a small grassy area.

Figure 3.1: Jamison Square Location

This aerial map of Jamison Square shows that the space is primarily hardscape, with a number of trees and a small grassy area.

Figure 3.2: Jamison Square Aerial

Jamison Square has a large water feature. The park is ringed with trees.

Image 3.8: Jamison Square Water Feature

Jamison Square’s water feature is popular with families. Mixed-use buildings surround the park.

Image 3.9: Splashing in Jamison Square

The Portland Streetcar has a stop at Jamison Square.

Image 3.10: Portland Streetcar

The edges of Jamison Square allow the park to interact with the adjacent street and sidewalk.

Image 3.11: Jamison Square Edge
Civic Center
Denver, Colorado

Civic Center is the iconic anchor park of downtown Denver. The Colorado State Capitol, Denver County Courthouse, and several other civic institutions surround this civic space. The city hosts a large number of its major annual events at Civic Center. However like Washington Square, there is not a large residential population immediately surrounding this civic space.

Civic Center is located in downtown Denver, just south of the central business district.

This aerial map of Civic Center shows that the space is primarily grass, with two paved plazas connected by walkways. An open lawn dominates the western half of the space.

Civic Center has a great view of the Denver skyline.

The Denver County Courthouse frames the western edge of Civic Center.

Events in Civic Center can be held on the grassy lawns.

Events in Civic Center can be held on the hardscape surfaces.

Civic Center Food Trucks

Image 3.12: Denver Skyline

Image 3.13: Denver County Courthouse

Image 3.14: Civic Center Lawn Performance

Image 3.15: Civic Center Food Trucks
Rittenhouse Square
Philadelphia, Pennsylvania

Rittenhouse Square is a neighborhood park in downtown Philadelphia. This civic space serves as a favorite relaxation area for locals, as well as a popular and iconic “Philadelphia” destination for tourists. A high level of urban residential and commercial activity surrounds Rittenhouse Square.

Figure 3.5: Rittenhouse Square Location
Rittenhouse Square is located in the southwest quadrant of downtown Philadelphia.

Figure 3.6: Rittenhouse Square Aerial
This aerial map of Rittenhouse Square shows the park is primarily covered in grass with several walkways. There is a significant number of trees in this park, although not in bloom during the time of this photo.

Image 3.10: Rittenhouse Square Character
Classically designed greenery and structures dot Rittenhouse Square.

Image 3.11: Rittenhouse Square Lights
The holiday lights are a popular feature of Rittenhouse Square.

Image 3.12: Rittenhouse Square Edge
Wide sidewalks ring Rittenhouse Square, allowing the park to interact with passersby.
Analysis

The methodology presented in this report is critical to understand when implementing the analysis so the researcher maintains a watchful eye for the rich information existing within the social media posts. The process described in this Analysis chapter has helped produce solutions for the redevelopment of Washington Square. Data is analyzed through population density maps, tweet location maps, a content analysis, an experiential analysis, and word cloud diagrams.
Data Collection

The data used in this analysis are Twitter and Instagram posts which have been geographically tagged inside the boundaries of the four civic spaces. Twitter posts, dated since the launch of Twitter service, are collected. Instagram posts are collected in a range from as far back as 2011 for Washington Square, to about May of 2013 from Rittenhouse Square. This disparity in Instagram image collection is due to the internet service that allows a place name search function, Worldc.am. Places with more Instagram uploads can not load images as far back as those with fewer uploads due to Worldc.am’s server capacity. More information about this limitation can be found in the Reflection chapter.

A random sample of fifty tweets and fifty Instagram posts is selected within a range of October 1, 2012 to October 1, 2013 from the entire data collection for each site. This sample represents the primary data for the content and experiential coding analyses. The other methods of analysis utilize all of the data collected as they are automated processes.

Tweets are collected through the Twitter Application Programming Interface [API]. The API is the tool developers use to manipulate the Twitter system to find specific information [Twitter]. In order to find geolocated Twitter data, the following query is entered into the Twitter search bar: “geocode:[latitude],[longitude],[search radius] [measurement unit].” Figure 4.1 shows the Twitter query used for obtaining Washington Square Twitter data.

Instagram data is collected through the use of a website called Worldc.am. Worldc.am is utilized by searching for a specific place name, “Washington Square,” “Jamison Square,” “Civic Center Park,” and “Rittenhouse Square,” within a particular city. The most recent Instagram photos for these places are then displayed. Scrolling to the bottom of the page and clicking the “more” button will continue to load more photos until the server’s capacity has been reached. Figure 4.2 shows the search fields to obtain the Instagram data from Worlc.am for Washington Square.

Figure 4.1: Twitter Query Example
This Twitter geocode query is structured based on the search for Washington Square data.

Example of Washington Square Twitter Query:
geocode:39.084767,-94.5825,0.1mi

geocode:[latitude],[longitude],[search radius],[measurement unit]

Figure 4.2: Worldc.am Screenshot
To access Worldc.am data the city is entered first, followed by the specific place name.
Data Organization

Once the tweets and Instagram photos have been downloaded, and their accompanying text recorded, Excel spreadsheets are created to organize this data. The essential information categories to create in the Excel spreadsheet are the date, the post’s text, the URL for the accompanying media, and the geographic coordinates of the post. An identifying number should be created for each tweet to track the individual posts as they are moved between different spreadsheets and analyses. Doing so will produce extra data from adjacent areas. To rectify this, the area search function in the Twitter API is based off of a circle. Therefore, some oblong-shaped civic spaces will require a circle much larger than the size of the civic space to capture all of their area. To utilize “IF” functions, the researcher must identify the geographic coordinates of each corner of the civic space. Next, an excel formula is written to exclude all data north, south, east, or west of that point by using the “<” or “>” symbols. Properly using the “IF” function will exclude all data not in the true boundary of the civic space.

The area search function in the Twitter API is based off of a circle. Therefore, some oblong-shaped civic spaces will require a circle much larger than the size of the civic space to capture all of their area. To rectify the data, trigonometric “IF” functions are used in excel to exclude tweets with geographic coordinates greater than or less than the geographic boundaries of the civic space. To utilize “IF” functions, the researcher must identify the geographic coordinates of each corner of the civic space. Next, an excel formula is written to exclude all data north, south, east, or west of that point by using the “<” or “>” symbols. Properly using the “IF” function will exclude all data not in the true boundary of the civic space.
Data Analysis

The first stage of the analysis consists of a perceptual exploration of the Instagram photos, and their accompanying captions, as well as the visual and textual content of the tweets. This exploration is done by observing the data and writing a few sentences to describe the content and available context. This form of analysis is important because it allows a level of thoughtful scrutiny that sets the stage for the later qualitative and quantitative coding. The book Visual Anthropology states that using this type of open observation in the initial stages of a photographic analysis can help to guide the analysis process in the following stages (Collier 1986).

After the data has been combed through several times, write down the main experiential themes that emerge from the perceptual exploration statements. Enter these themes as the header of new columns and sort through the data by coding each tweet and Instagram photo into one of these themes by placing a “1” in the corresponding cell. Assess the totals for each theme and attempt to consolidate themes that are similar and have low frequencies.

Repeat this process for the content analysis by listing the repeated physical elements or activities seen in the photos or referenced in the text. In the same manner as the experiential analysis, column headers are created with the elements that are being repeatedly observed in the photos or text. After totals have been calculated for each element, delete the columns containing very few frequencies and attempt to re-code these into a new consolidated column.

After all coding, different types of data visualizations are produced to help decipher the information. For this project, tweet locations are mapped for each park, the frequency of quantitative elements are displayed in bar graphs, experiential themes are displayed in pie charts, and word clouds are created from all tweet and Instagram caption text. These visualizations help the researcher make sense of the vast amount of information contained in social media data. By looking at several types of analyses, conclusions can be made from observations being repeatedly noticed, or drastically different, across the various analyses.
Tweet Maps & Population Density

The latitude and longitude of tweets for each site is plotted on maps to determine the physical location of Twitter hotspots in each civic space. Cross checking this information with the content of the social media posts allows the researcher to identify what it is about these spots within the civic space which make it more popular than others.

When comparing the population density maps for each site, it is interesting to note that Rittenhouse Square and Jamison Square both have a large amount of residents living within a quarter mile of those civic spaces, justifying their high usage. Civic Center and Washington Square have a much lower population density within a quarter mile. The discussion presented earlier in this report on urban density suggests that Civic Center should have lower usage because of a lack of residential properties immediately adjacent. However, it is obvious from the social media data that Civic Center plays host to many large events throughout the year, meaning that the majority of the Civic Center users are traveling there from elsewhere.

Key Findings

- Rittenhouse and Jamison Squares’ large surrounding residential population drive usage of these spaces.
- Civic Center’s low population density would suggest the park is not used frequently. However, the concentration of events in this space creates more usage.
- Washington Square has a low residential population surrounding the park and does not host near as many events as Civic Center. Increasing the number of events in Washington Square will bring an immediate increase in park usage.

Washington Square
Kansas City, MO

Figure 4.4: Washington Square Population Density Map
The relatively small residential population surrounding the park is one reason why Washington Square is not heavily used.

Figure 4.5: Washington Square Tweet Locations
190 Tweets have been uploaded from Washington Square as of November 2013.

Figure 4.6: Washington Square Tweet Hot Spots
The current structures in the park and the area with a view of the downtown skyline are the primary places people are using Twitter in Washington Square.

Washington Square’s hotspots occur at the statue of George Washington, the southeast and southwest entrances to the park, the Korean War Memorial, along the balustrade with a view towards the downtown skyline, and near the bus stop on Grand Boulevard.
Jamison Square
Portland, OR

Jamison Square has a healthy level of residential activity fueling regular usage of this civic space.

Figure 4.7: Jamison Square Population Density Map
Jamison Square has a healthy level of residential activity fueling regular usage of this civic space.

Figure 4.8: Jamison Square Tweet Locations
1,262 Tweets have been uploaded from Jamison Square as of November 2013.

Figure 4.9: Jamison Square Tweet Hot Spots
Jamison Square’s hotspots occur in the center of the space around the water feature, at the northeast corner, at the southwest corner of the square (a streetcar stop), and a shady spot under the trees near the water feature.

Civic Center
Denver, CO

Similar to Washington Square, Civic Center has a small residential population immediately surrounding the park. The plethora of events held in this space make up for the lack of nearby population.

Figure 4.10: Civic Center Population Density Map
Civic Center has a small residential population immediately surrounding the park. The plethora of events held in this space make up for the lack of nearby population.

Figure 4.11: Civic Center Tweet Locations
3,135 Tweets have been uploaded from Civic Center as of November 2013.

Figure 4.12: Civic Center Tweet Hot Spots
The central axis of Civic Center, as well as the open lawn, generate the most Twitter usage in this civic space.

Civic Center’s hotspots occur in the center of the space, in the grass lawn near the courthouse, along the central axis with a good view of the downtown skyline, in front of the colonnade and fountain, the eastern edge of the park, and outside the McNichols Art Building in the northwest corner of the park.
Rittenhouse Square
Philadelphia, PA

Rittenhouse Square has a large population density surrounding the park.

9,823 Tweets have been uploaded from Rittenhouse Square as of November 2013.

The center of the park and the walking areas in and around the edge of Rittenhouse Square are the primary Twitter usage areas of this civic space.

Rittenhouse Square’s hotspots occur in the center of the space near a gazebo, along the eastern edge of the park where several cafés sit just across the street, along the northern and western edge sidewalks of the park, and where the main diagonal paths intersect the circular path at the northeast and southwest corners of the circular path.
The content analysis is used to determine the frequency at which different features in each civic space are being documented in the social media posts. Figure 4.16 shows three different categories of features: social, natural, and structural. Similar to the population density maps, Washington Square and Civic Center tend to display comparable characteristics while Rittenhouse Square and Jamison Square are also somewhat similar. Civic Center and Washington Square’s social media both show many elements related to events or the socializing of people. Rittenhouse Square and Jamison Squares’ social media focus more on the permanent features of those civic spaces. These observations indicate that people are typically using Washington Square and Civic Center for planned events and gatherings, not in their day-to-day lives. The social media users in Rittenhouse Square and Jamison Square use those spaces more casually or spontaneously, visiting for a myriad of reasons related to their own personal desires.

Key Findings
- People in Washington Square and Civic Center are uploading social media concerned with social interactions more than the other civic spaces.
- People in Jamison Square and Rittenhouse Square are uploading social media concerned much more with the physical features of those spaces.
- Washington Square should elevate its status as a place for planned events, but the inclusion of more designed features will help the park be used even when events are not taking place.

Figure 4.16: Content Analysis Diagram

The content of the social media posts indicate people are documenting more social interactions in Washington Square and Civic Center, compared to more of the physical elements in Jamison Square and Rittenhouse Square.
The experiential analysis focuses on facets of how the social media users are spending their time in the civic spaces. After initial coding, and re-coding several times, the social media data is sorted into seven themes: Event/Activity, Relaxing, Posing, Aesthetic, Children, Meeting Friends, and Other. Most of these are self-explanatory, however Posing, Aesthetic, and Other require more explanation. The Posing category refers to individuals or groups taking a posed picture, normally in front of a sign or iconic feature of that civic space. The Aesthetic category refers to social media posts which may have a particular subject, but their high artistic quality indicates that the photo was taken primarily for aesthetic purposes. The Other category refers to any photos which did not fit in the other six categories and were not observed at a high enough frequency to merit their own category.

As noted with the previous two analyses, a dichotomy is evident between Washington Square/Civic Center and Rittenhouse Square/Jamison Square. As highlighted by the second set of pie charts in Figure 4.17, a significant difference in experiential use of the civic spaces is only seen in the Event/Activity and Relaxing categories. Washington Square and Civic Center have many social media posts which fall under the Event/Activity category and very few in the Relaxing category. This situation is reversed in the case of Rittenhouse Square and Jamison Square. This difference indicates that Washington Square and Civic Center are used for planned events. Rittenhouse Square and Jamison Square are used in people’s daily lives when they want to relax or take a break from their routine.

One other notable discrepancy in the civic space usage is the high frequency of the Children category at Jamison Square. The water feature in Jamison Square is a popular place for parents to bring their children to play on the rocks and splash in the water. The other civic spaces show no apparent evidence that people regularly bring children to these spaces.

Key Findings

- People are documenting events and activities at a higher rate in Washington Square and Civic Center.
- People in Jamison Square and Rittenhouse Square are spending more time relaxing.
- Washington Square should balance its event usage with more “relaxed” usage to ensure the civic space is being used as much as possible.

Figure 4.17: Experiential Analysis Diagram

The primary categories which change in the four civic spaces is Event/Activity and Relaxing. Washington Square and Civic Center have more Event/Activity usage whereas Jamison Square and Rittenhouse Square have more Relaxing usage.
Word Cloud Analysis

Word clouds are diagrams that relate variance in word usage frequency to the physical size of the word. To produce these diagrams, all text from tweets and Instagram image captions for each site are input into the website Tagcrowd.com. URL text is removed, as well as text relating to the location or name of the civic space, e.g. “Kansas City” or “Washington Square.” The thirty words with the highest frequency from each civic space are displayed. This analysis allows the researcher to see what people are talking about in each civic space. These word clouds can also give a sense of each civic space’s character. The four civic spaces’ word clouds are presented in Figures 4.18 to 4.21.

Figure 4.22 separates the words from each cloud into three categories: Activities, Descriptors, and Features. Although some of the words do not seem to necessarily fit in the category, such as “cure” from Washington Square’s Activities bubble, the words relate to the activities taking place in the civic space. “Cure” relates to the Susan G. Komen Race for the Cure 5K race. It is evident from this diagram that people in Civic Center and Washington Square are more often talking about the happenings in these spaces. In contrast, people at Rittenhouse Square are describing the place they are in, indicating a more pensive use of that park. These differences are illustrated by the size of the bubbles.

Key Findings

• People in Washington Square and Civic Center are talking about what is happening in these civic spaces.

• People in Rittenhouse Square are describing the characteristics or qualities of this civic space.

• Washington Square should become more comfortable so people can relax and reflect on their surroundings.

• Distinctive structures, aesthetic elements, or spaces in the Washington Square can draw attention and be a common way people describe or remember this civic space.

Washington Square
Kansas City, MO

american beautiful bike blood blue blood bay center cross crown
cure drink face fest greater irish kc century
kcirish fest komen love morning multiblazer race
state states station statue tonight union united view

Washington Square’s world cloud makes it very apparent that the Kansas City Irish Fest is the reason most people use Washington Square. A few other events show importance from their size. The Susan G. Komen Race for the Cure, KC Century bicycle race, and words relating to the Fourth of July are all apparent. Many users are talking about Union Station, Crown Center, and the Blue Cross Blue Shield office building while at Washington Square, indicating visiting those buildings might be their primary intent while in the area. The word “love” does show a medium frequency level—indicating that people in this area, though few, are enjoying their time here.
Jamison Square
Portland, OR

Jamison Square’s word cloud indicates that a lot of food is consumed in this civic space. A local ice cream shop adjacent to the park allows people to enjoy their ice cream in the sunlight and fresh air of Jamison Square. The words “café” and “coffee” indicate people like to relax and have a bite to eat or sip on drinks while relaxing in this park. Another word that indicates people enjoy coming to Jamison simply to relax is the very large “cloud.” Taking the time to look up at the clouds is not something one usually does in their busy day, unless they have a space to sit down and relax. “love” is seen again at Jamison Square at a medium frequency level.

Figure 4.19: Jamison Square Word Cloud

Civic Center
Denver, CO

Civic Center’s word cloud is laden with words indicating the various events taking place there. The Taste of Colorado, Colorado Pride, bicycle races, marathons, and other events occupy Civic Center on many days out of the year. People like to eat food at Civic Center, as is common at big events. However, regularly occurring events including food happen at Civic Center too; Denver’s food trucks park at Civic Center every week throughout the summer. Office workers and others in and around downtown flock to the park for the atmosphere and food provided by the concentration of the food trucks. As noted in the previous two civic spaces, “love” occurs again, at about the same frequency, in Civic Center.

Figure 4.20: Civic Center Word Cloud
Rittenhouse Square
Philadelphia, PA

Rittenhouse Square’s word cloud emphasizes social media users’ admiration for the leafy beauty of this park. The fall and winter particularly attract many people to view the picturesque scene of this tree-filled, classically designed civic space. The holiday lights are one reason people visit this park so often at night during the coldest months of the year. The fact this park is filled with greenery, yet situated in a dense urban environment, allows people to appreciate taking the time to sit and think in Rittenhouse Square. The word “love” is noticed as well in Rittenhouse Square’s word cloud, but much larger than the other civic spaces.

Figure 4.21: Rittenhouse Square Word Cloud
Application

This social media-based methodology has been applied to the four civic spaces in order to derive solutions for the Washington Square project. These solutions are developed through the analyses presented in the previous chapter. The solutions attempt to improve the park’s functionality, identity, and interaction. Additionally, a white paper related to this report is developed for two purposes. The first purpose is a way to quickly inform the key Washington Square project stakeholders about this report. The second purpose is a way of succinctly describing this report and the social media-based methodology to those practicing in related fields.
Solutions

From the synthesis of the social media data, solutions are formulated to assist in the redevelopment of Washington Square. The solutions presented address the primary themes Washington Square appears to be lacking—Functionality, Identity, and Interaction—based on the analysis of the social media data. These solutions range from specific design elements, to strategies the city must promote to neighboring property owners or community organizers to implement themselves. Figure 5.1 presents the goals from the three themes and specific solutions to achieve these goals. Each solution is discussed in further detail in the following pages. Photographic examples from the actual social media data studied is provided to illustrate each solution.

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Identity</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold more events in Washington Square and encourage anytime-usage of the park.</td>
<td>Make Washington Square an iconic, distinctive, and memorable part of Kansas City.</td>
<td>Increase interaction between the street and Washington Square so people utilize the space in their daily activities through or around the park.</td>
</tr>
<tr>
<td>Create a hardscape for flexible uses.</td>
<td>Design unique and aesthetic new structures in Washington Square.</td>
<td>Enhance the sidewalk environment along the edges of Washington Square.</td>
</tr>
<tr>
<td>Incorporate movable seating in the park.</td>
<td>Enhance and highlight an area for viewing the downtown skyline.</td>
<td>Develop residential infill within 0.25 miles of Washington Square.</td>
</tr>
<tr>
<td>Incorporate aesthetic and unique lighting features.</td>
<td>Create distinctive entrances to Washington Square.</td>
<td>Develop ground floor commercial space surrounding Washington Square.</td>
</tr>
</tbody>
</table>

Figure 5.1: Solutions Table
FUNCTIONALITY
Solution 1: Create a hardscape for flexible uses.

If more events are to take place in Washington Square, a hardscape should be designed to accommodate different types of events. As seen in the Tweet Maps of Jamison Square and Civic Center, social media hot spots occur in the hardscape areas of those civic spaces. In the Content Analysis, hardscapes were the second most frequent type of structural element being documented by social media users from the four civic spaces. Because events normally require a stage, tents, or a display area of some kind, a hard, even surface is typically required to properly utilize these objects.

Some sort of paved area within the park will allow more events to take place at Washington Square. Although grass is nice to sit on when it is dry, allergies, insects, and the uneven surface can prevent many people from utilizing grass for their events. Incorporating a hardscape will allow for consistent usage with a greater variety of purposes. Coen + Partners can implement a hardscape as part of the design proposal for redeveloping Washington Square.

Image 5.10: Jamison Square Event
The hardscape in Jamison Square allows for this community social event to take place.

Image 5.11: DJ & Hardscape
The DJ is setting up his equipment for a block party on the hardscape in Civic Center.

Image 5.12: Civic Center Hardscape
This man brought his dog to the Denver Pridefest. The tents are set up on a hardscape in Civic Center.
FUNCTIONALITY
Solution 2: Incorporate movable seating in the park.

To allow for people to use Washington Square comfortably when no events are occurring, improvements must be made to the seating elements in the park. The content analysis from Rittenhouse Square shows that seating is documented frequently in that civic space. Movable, café-style seats are seen in the social media data from Rittenhouse Square and Jamison Square, as well as traditional park benches. The advantage of movable seating is that a person can adjust the seat to where they are most comfortable. The experiential analysis supports this statement. The significant frequency of social media posts showing people relaxing in Rittenhouse Square and Jamison Square is due in part to the availability of movable seating.

Movable seating should be located on the hardscape so park users can sit where they feel most comfortable to enjoy their time in Washington Square. Coen + Partners can implement a hardscape as part of the design proposal for redeveloping Washington Square.

Image 5.13: Rittenhouse Chairs
Movable seating allows the civic space user to create a comfortable spot for themself and their dog at Rittenhouse Square.

Image 5.14: Working Outside
These seats and tables allow people to set up their computers and work in the fresh air of Jamison Square.

Image 5.15: Café in Jamison Square
The seating at this café overlooks Jamison Square so people can enjoy their food in the park.
FUNCTIONALITY
Solution 3: Incorporate aesthetic and unique lighting features.

As evidenced in the Content Analysis and word cloud from Rittenhouse Square, unique lighting can attract people to visit a civic space. Holiday lighting installments at Jamison Square and Civic Center were also documented frequently in the Content Analysis. Because Washington Square is already sparsely used, people might feel unsafe walking through or spending time in the space at night. Incorporating unique and highly aesthetic lighting features in Washington Square will create a greater sense of safety in the space at night. If the lighting is unique enough to draw people just to see the park lit up at night, the space will become even safer as there will be more people in and around the civic space. Coen + Partners can incorporate new lighting features as part of the design proposal for redeveloping Washington Square.

Image 5.16: Holiday Lights
Rittenhouse Square’s holiday lights bring people to the park every winter.

Image 5.17: Floating Lights
Lighting in the tree branches creates overhead illumination that appears to be floating and does not require additional construction.

Image 5.18: Tree Lights
Paths become illuminated by wrapping lights around the trees in Jamison Square.
Figure 5.19: Denver Skyline from Civic Center

Figure 5.20: Rittenhouse Square Gazebo
IDENTITY

Solution 1: Incorporate unique and highly aesthetic design for new structures in Washington Square.

The Content Analysis demonstrated that the iconic buildings and structures in and around the civic spaces have a high frequency of being documented. People enjoy photographing these structures because they represent the civic space, marking their presence by posing for a picture at that particular place to share with their friends and followers.

Statues and classical structures are common features in each of the civic spaces studied. These elements draw people as they are often icons or central points of the civic space. Washington Square does not necessarily need to incorporate classical design for new structures in the park. Much like the Bloch addition to the Nelson Atkins Museum of Art in Kansas City, modern and unique structures in Washington Square will nicely contrast against the monumental scale and classical beauty of Union Station. Bold, highly aesthetic designs must be incorporated for new structures as a way to make Washington Square an iconic civic space in Kansas City that will be easily distinguished and remembered. Coen + Partners can incorporate bold and unique architecture for new structures as part of the design proposal for redeveloping Washington Square.

Image 5.21: Civic Center Colonnade
The classical colonnades at Civic Center are unique in comparison to the adjacent areas in downtown Denver.

Image 5.22: Totem Poles
The artistic totem poles are an iconic image of Jamison Square. These sculptures also hold support structures for the Portland Streetcar’s overhead wires.

Image 5.23: Denver County Courthouse
The Denver County Courthouse is an iconic building which sits as a backdrop for events on the great lawn of Civic Center.
IDENTITY
Solution 2: Enhance and highlight an area for viewing the downtown skyline.

Washington Square, Rittenhouse Square, and Civic Center all have great views of their respective city skylines. The content analysis for each of these civic spaces demonstrates that people often use the skyline to frame their images of the park. Because city skylines are highly representative of that city's identity, tying the civic space to the skyline in a photograph helps solidify the status of that park’s importance to the city.

This is particularly true for Washington Square as the entirety of the central business district’s skyline is visible from the park. This is one of the primary reasons people visit Washington Square now. To remove this feature would eliminate one of Washington Square’s current strengths and iconic features. Instead, an area specifically designed for capturing this view should be enhanced and highlighted within the park to promote Washington Square as an iconic place in Kansas City. Doing so will encourage locals and visitors of the city to visit Washington Square in order to memorialize their time spent in Kansas City. Coen + Partners can incorporate an enhanced area for viewing the downtown skyline as part of the design proposal for redeveloping Washington Square.

Image 5.24: Denver Skyline
The central axis of Civic Center offers a great view of the Denver skyline.

Image 5.25: Philadelphia Skyscraper
A few skyscrapers are visible from Rittenhouse Square.

Image 5.26: Denver Skyscrapers
The collonade at Civic Center creates a stunning foreground for viewing Denver’s skyscrapers.
IDENTITY
Solution 3: Create distinctive entrances to Washington Square.

The Tweet Maps for each civic space identified entrances as frequent places people are documenting in the civic spaces. Many photographic examples from the Content Analysis supported this observation as well. Similar to the solution concerning unique design for new structures in Washington Square, the entrances should be thought of as opportunities for making Washington Square memorable and iconic of Kansas City. The entrances to Washington Square should be designed in such a way that frame the space, easily identify Washington Square, and do not physically separate the inside of the park from the outside. Coen + Partners can incorporate the design of distinctive entrances as part of the proposal for redeveloping Washington Square.

Image 5.27: Colonnade Entrance
The colonnades create a grand entrance to Civic Center from the north and south. These structures frame the space and allow for visible permeability into the park.

Image 5.28: Colonnade Entrance II
The colonnades create a distinct entrance to Civic Center with lighting elements at night.

Image 5.29: Rittenhouse Square Views
Wide axes allow for views across Rittenhouse Square at the entrances, drawing visual interest into the space.
INTERACTION

Image 5.30: Picnic in Jamison Square

Image 5.31: Rittenhouse Square Sidewalk
INTERACTION
Solution 1: Enhance the sidewalk environment along the edges of Washington Square.

The Tweet Maps from all the civic spaces indicate that people spend time along the edges of these parks. In the case of Jamison Square and Rittenhouse Square, the Content Analysis and Word Clouds show that people appreciate the setting of these civic spaces as they are making their way past them in their daily commutes. Jamison Square and Rittenhouse Square both give special treatment to the sidewalk environment along the edges of those civic spaces. Jamison Square utilizes a boardwalk material along its eastern edge. Rittenhouse Square has a low decorative fence and mature trees lining its edges. These treatments increase the interaction of the civic space with the street. Doing so makes the civic space seem to spill outward and meet the city. This characteristic invites passersby to feel like they are in the civic space even though they may simply be walking past to reach their actual destination.

Allowing the civic space to interact with the street allows more people to identify with the space, rather than only those who physically have time to spend within the space. As public identification with the civic space increases, more people will remember the space and wish to return. The transit system improvements along the eastern and western edges of Washington Square make an even stronger case to allow the civic space to spill over its edges. As people sit waiting for the streetcar or bus, they will be able to feel like they are in the park, rather than being unfortunately stuck outside of it during their commute. Coen + Partners can incorporate an enhanced sidewalk environment as part of the design proposal for redeveloping Washington Square.
As evident in the population density maps, Jamison Square and Rittenhouse Square have a relatively large number of people living immediately surrounding those civic spaces. It is probable that these two civic spaces are highly used by the people in those nearby neighborhoods. The Experiential Analysis and word clouds from these two civic spaces support the idea that it is neighboring residents that use these civic spaces. The focus from these two analyses on relaxation, and people using descriptive words about the spaces, imply that the residents are naturally drawn to these public green spaces because it gives them a chance to experience an escape from the city.

Increasing the amount of residential buildings in the Washington Square area will make Washington Square the go-to green space that these new residents will seek out. Additionally, more people using the space will encourage the residents already in the area to use Washington Square more frequently, as there will be a greater number of people in the park. This will contribute to a stronger sense of community and safety. The first steps to achieving this strategy have already been implemented in the form of the Greater Downtown Area Plan. City leaders must continue to create incentives and promote the return on investment of building residential properties in this area.
INTERACTION

Solution 3: Develop ground floor commercial space surrounding Washington Square.

Jamison Square and Rittenhouse Square are both surrounded by mixed-use buildings with ground floor commercial uses. As observed in the Content Analysis, many of these are food establishments, either restaurants with patio seating overlooking the civic spaces or shops where people purchase an item and take it to the civic space to enjoy. The word cloud for Jamison Square—with large words like "café," "coffee," and "ice cream"—particularly indicates that people appreciate the convenience of these food-related commercial spaces surrounding the park.

As discussed in the Introduction chapter, ground floor commercial spaces act as transition zones between the fully public civic space, and the fully private uses above the ground floor. These commercial uses activate the civic space by providing a constant stream of people in and around the civic space, visiting for reasons other than simply spending time in the park. Kansas City must encourage this type of building form through incentives and promoting the return on investment of locating businesses adjacent to Washington Square.

Image 5.38: Coffee in the Park
A coffee shop next to Rittenhouse Square gives customers the ability to enjoy their drinks in the park.

Image 5.39: Ice Cream in the Park
An ice cream shop next to Jamison Square allows people to enjoy their ice cream in the park.

Image 5.40: Rittenhouse Square Café
This café overlooks Rittenhouse Square. Diners can enjoy the scenes of the park while eating and drinking, providing watchful eyes and additional activity for the area.
White Paper

The white paper is a summary of this project presented in a manner to quickly inform stakeholders of the Washington Square project, as well as the broader field of planning and design practitioners, of the methodology developed in this project. The white paper is a separate 8.5 x 11 inch document, primarily textual with graphics to aid in delivering its message. This white paper will be given to Coen + Partners as an abbreviated version of this report. The firm will be able to use this document to quickly understand, reference, and share this project internally and with the key stakeholders in the Washington Square redevelopment process. The white paper directs readers to this report for further clarification of the methodology and overall project. This white paper can be found in Appendix A.
Reflection

This project provides a new methodology for utilizing social media data in place-based research. Although successfully used in the application of Washington Square, this methodology is not without its limitations. Understanding these limitations is imperative to the improvement of the techniques described in this report. As others utilize and improve these techniques, the planning and design professions—as well as any researcher working with social media data—will increase their general understanding about the rich and informing nature of social media content.
Utilizing social media data to study civic spaces is presented as a favorable method of analysis in this report. However, there are no perfect methods and this process possesses its own certain flaws. The most important limitation of social media data is the select group which chooses to use, and has access to, these services in a mobile context. Largely, the users of social media are young adults and teenagers, particularly those with the means to purchase relatively expensive mobile devices and data plans. Although the range of user ages and the affordability of mobile devices have both increased, the average user is still not representative of the whole population which uses any particular civic space.

A second limitation of social media data in this methodology is the subjective nature of some of the analyses. The text which accompanies the photographs used in this study is helpful when determining the intent of the social media post. However, the specific tone which the social media user intended for the post may be impossible to infer from simply reading the text. An interesting observation made during the deciphering of the text was the helpful role emojis played in understanding the text of the social media posts. Emojis are small images which take the space of one character of text. Many mobile devices now support emoji keyboards and many mobile applications allow users to input emojis instead of solely alphanumeric characters. Emojis showing smiling faces or a thumbs-up in the social media post’s text, for example, allows the researcher to better assess the mood and tone the social media user intended. It is plausible to assume further developments in tone-related text entry will continue to arise in social media posts as the technology is further enhanced.

Another important limitation of this methodology concerns the amount of social media data available. In the case of Washington Square, only 190 separate tweets had been uploaded from the boundaries of the civic space at the date of collection (November 2013) since Twitter began operation in 2006. In contrast, Rittenhouse Square had 9,823 tweets uploaded from 2006 to the date of collection. Although the small amount of data from Washington Square would pose a significant problem if being studied alone, the comparison of this data to the data from civic spaces that are strategically chosen for comparative analysis helps alleviate the issue. This is an important factor to consider when designing a study using geo-located social media data.

The retrieval of the social media data used in this project transpired fairly smoothly. However, the site used for the retrieval of Instagram data, Worldc.am, proved to be more problematic than originally planned. Because of the site’s limited retrieval capacity, it is currently impossible to retrieve all of the Instagram photos from every civic space using Worldc.am. The original intent for data retrieval from this site was to select a random sample of 50 posts in the range of October 1, 2012 to October 1, 2013.

For Washington Square, this task was easily accomplished as there were only 66 individual Instagram posts geo-tagged to Washington Square since the service launched in 2010, through the date of collection (December 2013). However, since the other civic spaces have a much higher level of activity, scrolling back through Worldc.am’s archive of Instagram posts from each location is not possible as far back as October 2012 because the server reaches its capacity before that date is reached. For example, the Worldc.am query for Rittenhouse Square retrieved far more posts than Washington Square (1,693), but the oldest post in this set was only from April 2013. This issue was communicated to the Worldc.am team and they could not provide a workaround, but they stated that they are improving their service. It is very likely that if this process was repeated in the near future, Worldc.am might be able to reach much further back in time. Additionally, application developers are advancing the querying capabilities of their services through Instagram every day. This means an even better service for retrieving location-based Instagram posts may already exist, and certainly will before long.
Another difficulty experienced—although it was expected—was the laborious process of downloading each individual photograph and recording all of the important pieces of metadata from the social media posts. This process was not overly intensive for the one student researcher performing this study; however, it can be done much more efficiently. Someone with a standard knowledge level of computer programming would be able to automate this process to be done rapidly.

The final limitation of this methodology is actually more of an opportunity to take this research further. Instagram and Twitter both support the uploading of videos, but all video posts were disregarded in this project to simplify the data analysis and reporting process. However, user videos of their time in the civic spaces can potentially provide even richer information about these users’ perceptions and usage of the civic spaces. Future replications of this methodology should attempt to incorporate video social media posts as well, in order to enhance the processes presented in this report.
The Abandoned Social Media Campaign

One component of this project, which was not carried through to its final stages, was a social media campaign aimed at creating more social media data for Washington Square. A Twitter account was created (@WSquareKC) to facilitate additional conversation over the usage and desires of Washington Square. Figure 6.1 shows the @WSquareKC Twitter page. Using the broad base of Kansas City-based Twitter accounts which the author interacts with from his own personal account, @WSquareKC was supposed to elicit responses about Washington Square from those already engaged in discussions about development in Kansas City.

Several questions were posed regularly from the @WSquareKC account in the winter of 2013-2014. However, the response rate from these questions was much lower than anticipated. Eventually, this component of the project was abandoned because of its lack of informing social media posts. A stronger connection with Kansas City discussion leaders was needed to advertise and support the effort of @WSquareKC. In hindsight, the author does wonder if this type of campaign is truly what this particular project is about.

A key argument of this project is that by studying what people are doing and saying in the civic spaces—without direct questioning or interaction—the information being studied is free of outside influences. In many cases, the things people post on their social media accounts are their truest thoughts, which they might not be inclined to verbally express. In this sense a Twitter or Instagram account is like a diary, full of the user’s internal thoughts and opinions. By studying those thoughts that were generated while at a civic space, the researcher can understand the social media user’s true thoughts about that civic space.

The social media campaign worked against this key argument of the project. Although the information was still being supplied through social media services, by directly asking people a question about the civic space, the original intent of the project became lost. Mixing the campaign data with the data which was collected from the queries would have distorted the full data set. Abandoning the social media campaign allowed the content analyzed to reflect those thoughts and opinions which were unsolicited, original thoughts of the social media users.
Next Steps for the Washington Square Project

This project began in September 2013. At this same time, Kansas City Parks and Recreation posted their Request for Qualifications/Proposals for the Washington Square project. Coen + Partners was selected in November 2013, but substantial collaboration between the Kansas State University researchers and the firm did not begin until February 2014. Although the development of this project and report operated under an ultimate deadline of April 2014, the actual Washington Square redevelopment project will continue for many months after the submission of this report.

Coen + Partners will synthesize the findings of this report, the other seven Kansas State University research projects, and the work of the Kansas City Design Center students. The firm will utilize the information created by the student researchers as they develop their proposal for Washington Square. Although a majority of the student researchers will be graduating from their degree programs in May 2014, it is expected that communication with Coen + Partners may continue through the duration of the firm’s contract with Kansas City Parks and Recreation.

Contribution to the Profession

Being a service learning effort, the directive for this project was to support the collaborative redevelopment process for Washington Square. In attempting to achieve this goal, a new methodology was created concerning the use of social media data for planning and design professionals. It is probable that the solutions presented for Washington Square will not seem revolutionary to those in these professional fields, but they are effective and appropriate as they address Kansas City’s vision. The fact that these solutions were created using an entirely new process is a significant contribution to this professional realm. As this methodology is applied to other cases in an expanded analysis process, it is probable that even greater insight into how people use and perceive civic spaces will emerge from the methodology presented in this report.

An additional contribution to the planning and design professions is the speed at which this methodology can be implemented. Gathering the social media data and analyzing it can be done relatively quickly. If someone wanted to compare the civic spaces used in this project with traditional methods, they would most likely need to spend significant time and money traveling to each of the civic spaces, as well as countless hours sitting and observing people using each civic space. In a distilled description, this methodology is a technologically savvy version of the observation processes William H. Whyte championed in his seminal work “The Social Life of Small Urban Spaces.”

In the literature review performed at the beginning of this project, an evident gap in place-based social media research was noticed. While many scholars have focused on the implications of social media metadata as an informant for where certain things are happening on the neighborhood or city scale, there is an apparent lack of research focusing on the actual content of the posts. This type of information focuses on what is being said about places in social media data. As described throughout this report, this type of analysis can provide the planning and design professions with a rich understanding of people’s true and unprompted perceptions and usage of a place. It is to be hoped that this report will be an additional piece of literature in the expanding domain of social media research—specifically one which facilitates a deeper understanding of the usefulness of social media data content.
References


Mobil, Jane. American Society of Landscape Architects, and Kansas City (Mo.). A City Within a Park: One Hundred Years of Parks and Boulevards in Kansas City, Missouri. 1st ed. Kansas City, Mo: Published by American Society of Landscape Architects and the Kansas City, Missouri Board of Parks & Recreation Commissioners, 1991.


Appendix A

White Paper

CAPTURING THE BUZZ

Social Media as a Design Informant for Urban Civic Spaces

Mitchel Loring | Master’s Report | 2014
Utilizing social media as a means of informing design can provide planners and designers with convenient and useful information for analysis. Twitter and Instagram are two social media services which can supply rich photographic and textual observations of a place. The methodology presented in this project uses data from Twitter and Instagram to assess the usage and perceptions of four civic spaces. This analysis assists in the development of solutions for improving Washington Square—an urban civic space in Kansas City, Missouri. The application of this methodology proves that social media data is effective for informing the design of urban civic spaces.

EXECUTIVE SUMMARY

Civic spaces are public areas in cities that provide people with a place to convene outside of their homes or work places. These spaces can take the form of a “path, street, square, park, plaza, or green” (Great Britain 2000, p. 24). In many cities, the main civic space is the first image visitors associate with that city, and quite often the lasting image after they have left. Times Square in New York City, Piazza San Marco in Venice, and Millennium Park in Chicago are all examples of different types of civic spaces that identify their respective cities.

BACKGROUND

The city of Kansas City, Missouri desires to redevelop an urban park in its downtown, Washington Square, to become its iconic civic space—loved by residents and warmly remembered by visitors. Additionally, Kansas City’s Greater Downtown Area Plan (GDAP) lists the redevelopment of Washington Square as a “Catalyst Project.” The GDAP defines catalyst projects as having the “potential to trigger redevelopment in the surrounding area” and help achieve the city’s urban vision for downtown (Parks and Recreation 2013, p. 8). However, Washington Square is currently underutilized as a civic space, and without intervention, will not achieve the city’s vision or goals. This white paper describes how social media can be used to study and improve civic spaces. The example of Washington Square will be used as an application of this new methodology. Solutions, derived from this methodology, are presented which will lead towards achievement of the city’s goals for the park.

The social media services used for this analysis are Twitter and Instagram. Twitter and Instagram are both services which act as “modern reporting and storytelling mechanisms,” that allow “individuals to communicate their impressions and interests to the general public” (Croitoru 2013, p. 10). The high level of user content on these two services lends itself to produce a vast array of peoples’ opinions and experiences on an unlimited number of topics. When the scope of observation is narrowed to those Tweets and Instagram posts being uploaded from inside the boundaries of a civic space, a wealth of implicit and explicit information about the public’s perception and use of that civic space is then available for analysis.

As the acclaimed urban researcher Jan Gehl writes in “How to Study Public Life,” observations of public space users must be primarily done without active questioning. Instead, “activities and behavior [are] mapped in order to better understand the needs of users and how city spaces are used” (Gehl 2013, p. 3). He continues that these “direct observations help to understand why some spaces are used and others are not” (Gehl 2013, p. 3).
To draw conclusions from these civic spaces, Twitter and Instagram data is captured from inside each civic spaces’ boundaries. For Twitter, this data is captured by using a geographic search query in the Twitter Application Programming Interface. Instagram data is captured using the website Worldc.am by searching for each civic spaces’ specific place name. Figures 1 and 2 show examples for both of these collection processes, respectively. After finding the data for the civic spaces, the data is downloaded and organized into Microsoft Excel spreadsheets. Utilizing Excel spreadsheets allows the researcher to codify the data by themes in order to quantify the physical and experiential details of the social media posts. After the data has been codified it can be analyzed in several ways. Geographic, content, experiential, and textual analyses of the data are used in this application of this methodology. These analyses are presented in Figures 3 through 21 on the following pages.

METHODOLOGY

For this analysis, social media data from Washington Square is compared with data from Jamison Square in Portland, Oregon; Civic Center in Denver, Colorado; and Rittenhouse Square in Philadelphia, Pennsylvania. These comparison civic spaces were chosen because each one is highly used in its respective city as well as represent traits that Kansas City Parks and Recreation has identified as desired in a redeveloped Washington Square.

To draw conclusions from these civic spaces, Twitter and Instagram data is captured from inside each civic spaces’ boundaries. For Twitter, this data is captured by using a geographic search query in the Twitter Application Programming Interface. Instagram data is captured using the website Worldc.am by searching for each civic spaces’ specific place name. Figures 1 and 2 show examples for both of these collection processes, respectively. After finding the data for the civic spaces, the data is downloaded and organized into Microsoft Excel spreadsheets. Utilizing Excel spreadsheets allows the researcher to codify the data by themes in order to quantify the physical and experiential details of the social media posts. After the data has been codified it can be analyzed in several ways. Geographic, content, experiential, and textual analyses of the data are used in this application of this methodology. These analyses are presented in Figures 3 through 21 on the following pages.

Example of Washington Square Twitter Query
geo:39.084767,-94.5825,0.1mi

Example of Jamison Square Twitter Query
geo:45.528179,122.676928,0.1mi

Example of Civic Center Twitter Query
geo:39.739299,-104.968849,0.1mi

Example of Rittenhouse Square Twitter Query
geo:39.900245,-75.166238,0.1mi

Table of Contents

1. Introduction
2. Literature Review
3. Methodology
4. Data Collection
5. Data Analysis
6. Results
7. Discussion
8. Conclusion
9. Appendix

Acknowledgments

References

Appendix
The frequencies of the social, natural, and structural features of each civic space are quantified to determine which of these elements are being documented most often in the social media data.

### Washington Square

<table>
<thead>
<tr>
<th>Feature</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td>2</td>
</tr>
<tr>
<td>Grass</td>
<td>3</td>
</tr>
<tr>
<td>Sky</td>
<td>5</td>
</tr>
<tr>
<td>Water Feature</td>
<td>9</td>
</tr>
<tr>
<td>Buildings</td>
<td>1</td>
</tr>
<tr>
<td>Seating</td>
<td>2</td>
</tr>
<tr>
<td>Skyline</td>
<td>5</td>
</tr>
<tr>
<td>Statue/Monument/Art</td>
<td>3</td>
</tr>
</tbody>
</table>

### Civic Center

<table>
<thead>
<tr>
<th>Feature</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td>6</td>
</tr>
<tr>
<td>Grass</td>
<td>7</td>
</tr>
<tr>
<td>Sky</td>
<td>8</td>
</tr>
<tr>
<td>Water Feature</td>
<td>10</td>
</tr>
<tr>
<td>Buildings</td>
<td>12</td>
</tr>
<tr>
<td>Seating</td>
<td>8</td>
</tr>
<tr>
<td>Skyline</td>
<td>2</td>
</tr>
<tr>
<td>Statue/Monument/Art</td>
<td>5</td>
</tr>
</tbody>
</table>

### Jamison Square

<table>
<thead>
<tr>
<th>Feature</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td>1</td>
</tr>
<tr>
<td>Grass</td>
<td>2</td>
</tr>
<tr>
<td>Sky</td>
<td>3</td>
</tr>
<tr>
<td>Water Feature</td>
<td>4</td>
</tr>
<tr>
<td>Buildings</td>
<td>5</td>
</tr>
<tr>
<td>Seating</td>
<td>6</td>
</tr>
<tr>
<td>Skyline</td>
<td>7</td>
</tr>
<tr>
<td>Statue/Monument/Art</td>
<td>9</td>
</tr>
</tbody>
</table>

### Rittenhouse Square

<table>
<thead>
<tr>
<th>Feature</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td>1</td>
</tr>
<tr>
<td>Grass</td>
<td>2</td>
</tr>
<tr>
<td>Sky</td>
<td>3</td>
</tr>
<tr>
<td>Water Feature</td>
<td>4</td>
</tr>
<tr>
<td>Buildings</td>
<td>5</td>
</tr>
<tr>
<td>Seating</td>
<td>6</td>
</tr>
<tr>
<td>Skyline</td>
<td>7</td>
</tr>
<tr>
<td>Statue/Monument/Art</td>
<td>9</td>
</tr>
</tbody>
</table>

### Figure 15: Content Analysis Diagram

- **Social**
  - 1. Performance Event
  - 2. Food/Dine
  - 3. Temporary Use/Gathering
  - 4. Feet Selfie
  - 5. Bicycles
  - 6. Children
  - 7. Picnic

- **Natural**
  - 8. Trees
  - 9. Grass
  - 10. Sky
  - 11. Water Feature
  - 12. Flowers

- **Structural**
  - 13. Buildings
  - 14. Seating
  - 15. Skyline
  - 16. Status/Monument/Art
  - 17. Hardscape
  - 18. Street
  - 19. Carts
  - 20. Path
  - 21. Holiday Decorations
  - 22. Tables
  - 23. Public Transit
The frequencies of the experiential categories—"Event/Activity," "Relaxing," "Aesthetic," "Children," "Meeting Friends," "Posing," and "Other"—from the social media data of each civic space are quantified to determine what people are doing in the civic spaces most often.

**EXPERIENTIAL ANALYSIS**

All text found in the social media posts is aggregated into word clouds for each site to determine what people are talking about in each civic space.
WORD CLOUD DIAGRAM

The words from each civic space’s word cloud are categorized into “Activities,” “Features,” and “Descriptors” to provide a further level of synthesis and comparison of what people are talking about in each civic space.

Figure 21: Word Cloud Diagram

SOLUTIONS

From these analyses, solutions for achieving Kansas City’s goals for Washington Square are developed. These solutions are derived from observations of how and what Twitter and Instagram users are documenting from their time in Jamison Square, Civic Center, and Rittenhouse Square, and are then analyzed against the realities, context, and social media data of Washington Square. The solutions presented address the primary themes Washington Square appears to be lacking from this analysis—Functionality, Identity, and Interaction. These solutions range from specific design elements, to strategies the city must promote to neighboring property owners or community organizers to implement themselves.

Figure 22, on the following page, presents the goals from the three themes and specific solutions to achieve these goals. Images 1.1 to 1.6 are photographic examples of these solutions from the social media data studied.

CONCLUSION

These solutions will help Kansas City achieve its goals for Washington Square and vision for downtown by setting an agenda for the planners and designers working on this project. Utilizing this social media-based methodology for site analysis brings additional information to the planning and design process than traditional methods alone. By studying what civic space users are already doing in a space, rich context is supplied to the analysis. Social media users’ habit of documenting their activities and internal thoughts through services such as Twitter and Instagram allow researchers to assess opinions and information which might otherwise go unrecorded. This process can be performed remotely, saving money and time spent traveling to a site as well as countless hours of observation. For these reasons, planners and designers should begin employing this methodology. The allied architectural professions stand to richly inform their designs by utilizing this social media-based methodology. To gain a deeper understanding of the concepts and examples presented in this white paper, read “Capturing the Buzz: Social Media as a Design Informant for Urban Civic Spaces” by Mitchel Loring.
### FUNCTIONALITY

**Goal**: Hold more events in Washington Square and encourage anytime-usage of the park.

**Solution**: Create a hardscape for flexible uses.

**Solution**: Incorporate moveable seating in the park.

**Solution**: Incorporate aesthetic and unique lighting features.

Incorporate moveable seating in the park.

Enhance the sidewalk environment along the edges of Washington Square.

Create distinctive entrances to Washington Square.

Create a hardscape for flexible uses.

Design unique and aesthetic new structures in Washington Square.

Enhance and highlight an area for viewing the downtown skyline.

Incorporate aesthetic and unique lighting features.

*Hold more events in Washington Square and encourage anytime-usage of the park.*

*Create a hardscape for flexible uses.*

*Incorporate moveable seating in the park.*

*Incorporate aesthetic and unique lighting features.*

*Make Washington Square an iconic, distinctive, and memorable part of Kansas City.*

*Increase interaction between the street and Washington Square so people utilize the space in their daily activities through or around the park.*

*Enhance the sidewalk environment along the edges of Washington Square.*

*Develop residential infill within 0.25 miles of Washington Square.*

*Develop ground floor commercial space surrounding Washington Square.*

---

### REFERENCES

Croitoru, Arie, Andrew Crooks, Jacek Radzikowski, and Anthony Stefanidis. “Geosocial Gauge: a System Prototype for Knowledge Discovery from Social Media.” *International Journal of Geographical Information Science* 0, no. 0 (0) 1–26, doi:9/6/2013.


---

### FIGURES

- **Figure 1**: Twitter Query Example (Author 2014)
- **Figure 2**: Worldc.am Screenshot (Author 2014)
- **Figure 3**: Worldc.am Screenshot (Author 2014)
- **Figure 4**: Washington Square Tweet Locations (Adapted from Darrinward.com 2014)
- **Figure 5**: Washington Square Tweet Locations (Adapted from Darrinward.com 2014)
- **Figure 6**: Jamison Square Population Density Map (Author 2014)
- **Figure 7**: Jamison Square Tweet Locations (Adapted from Darrinward.com 2014)
- **Figure 8**: Jamison Square Tweet Locations (Adapted from Darrinward.com 2014)
- **Figure 9**: Civic Center Population Density Map (Author 2014)
- **Figure 10**: Civic Center Tweet Locations (Adapted from Darrinward.com 2014)
- **Figure 11**: Civic Center Tweet Hot Spots (Author 2014)
- **Figure 12**: Rittenhouse Square Population Density Map (Author 2014)
- **Figure 13**: Rittenhouse Square Tweet Locations (Adapted from Tagcrowd.com 2013)
- **Figure 14**: Rittenhouse Square Tweet Hot Spots (Adapted from Tagcrowd.com 2013)
- **Figure 15**: Quantitative Analysis Diagram (Author 2014)
- **Figure 16**: Qualitative Analysis Diagram (Author 2014)
- **Figure 17**: Washington Square Word Cloud (Adapted from Tagcrowd.com 2013)
- **Figure 18**: Jamison Square Word Cloud (Adapted from Tagcrowd.com 2013)
- **Figure 19**: Civic Center Word Cloud (Adapted from Tagcrowd.com 2013)
- **Figure 20**: Rittenhouse Square Word Cloud (Adapted from Tagcrowd.com 2013)
- **Figure 21**: Word Cloud Diagram (Author 2014)