DESIGNING AND PLANNING FOR THE ACTIVE USE OF PUBLIC SPACES IN DOWNTOWN KANSAS CITY, MISSOURI

by

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A REPORT

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Abstract

Kessler's 1893 parks and boulevards system was established to spur investment. The 1893 Report shaped the present city pattern and form of Downtown Kansas City by encouraging decentralized city and metropolitan growth. Today's system discourages pedestrian mobility and accessibility through the design and context of the public spaces. Since walkability contributes to successful public spaces, walking for transportation to encourage active use could improve today's open-space system. To address the present condition facing the system, the report analyzes the morphology of Kessler's parks and boulevards system within the 2010 Greater Downtown Area Plan boundary. For methods, stakeholder notes and professional interviews explain the planning process behind the 2011-2012 KCDC project to revitalize public space. The stakeholder notes and professional interviews assess the context of the Kansas City Design Center's vision to revitalize Kessler's parks and boulevards system. Using the StreetSmart™ walkability model, the design and context of public space can help revitalize Kessler's 1893 system and today's park system. The model can be used to measure and prioritize investment by assessesing the pedestrian mobility and accessibility of public spaces. The implication of the report is that if the design and context of public spaces addresses the public interest and walkability, public spaces will become connected, diverse, market-competitive, and actively used. Short-term pedestrian amenities and long-term infrastructure improvements provide different ways to prioritize pedestrian mobility and accessibility to create a walkable downtown, one of the goals of the Greater Downtown Area Plan.

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Chapter 1 - Introduction

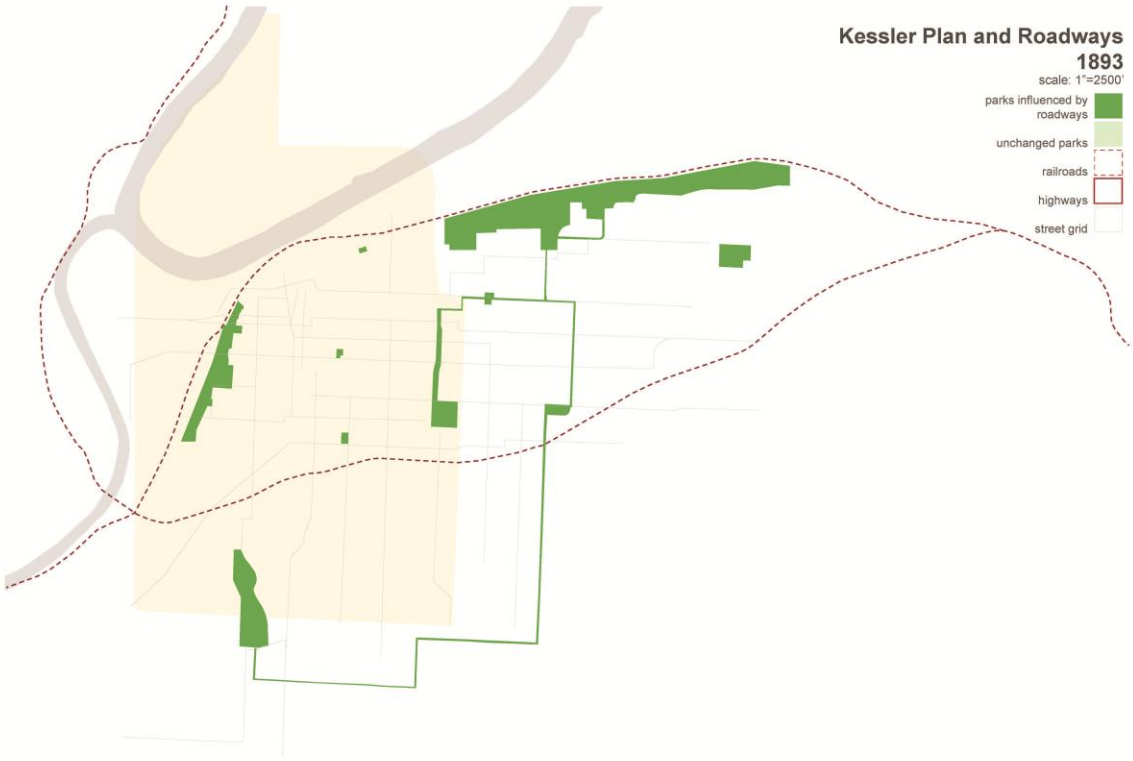
The publicly-funded 1893 Kansas City parks and boulevards system by landscape architect George Kessler were planned to spur private investment and encourage decentralized city and metropolitan growth (Rolley, forthcoming). As a result, design and context of public spaces primarily address automobile mobility and accessibility. To create successful places, public spaces should address pedestrian mobility, accessibility, and aesthetics to encourage walkability. Today, partnering with Kansas City Parks and Recreation and the Downtown Council Greenspace Committee, the Kansas City Design Center (KCDC) urban design studio seeks to revitalize the Kessler's parks and boulevards system through the vision plan and three park design proposals. Within this year's planning process, there is a responsibility of a planner to uphold the public interest while identifying opportunities to privately fund, public interest projects. Coordinating public and private funding provides an opportunity to reinvest in the design and context of public spaces in Downtown Kansas City, Missouri. Reinvesting in public spaces can add to successful, walkable places for future generations. By targeting pedestrian amenities and infrastructure improvements, the KCDC vision and three park design proposals can revitalize Kessler's parks and boulevards system by creating a more walkable downtown.

The report is organized into five chapters. This introduction provides a brief purpose of the report. The morphology of Kessler's parks and boulevards system describes the historical context, present adaptation, and future of public space as shown by the KCDC park design proposals. The third chapter, Planning Process, seeks to understand the present urban design project of KCDC by analyzing the involved organizations and stakeholders, the public interest, and successful planning practices. The fourth chapter, Improving the Active Use of the Public Realm, discusses how to create successful public spaces, how the StreetSmart^{TM} walkability model informs the design and context of public space, and the aesthetic considerations improve the quality and safety of the public space. Lastly, the conclusion provides a summary of the key findings from each chapter and offers professional recommendations to improve public space.

Overabundance of (Park)land

Park planning in Kansas City began with Kessler's 1893 report for parks and boulevards. As a plea to use public funds for parkland to improve built and natural beauty within the city, Kessler's parks and boulevards system planned the city to stabilize residential land values and enable the decentralized growth of the city – and later, the metropolitan area (Rolley, forthcoming). As shown in Figure 1.1, the original 1893 parks and boulevards city and metropolitan area growth were overshadowed by new land and parkland. By 2010, the land area of the city of Kansas City, Missouri was the twenty-third largest in the nation at 315 square miles for 459,787 people (U.S. Bureau of the Census, 2010). Similarly, for a low population density range, Kansas City, Missouri has 38.5 park acres per 1,000 residents as the ninth highest among cities with similar densities (Center for City Park Excellence, 2011). Today, the overabundance of both, land and parkland through annexation and acquisition requires more public funds than presently available. The insufficient public funds are unable to address the maintenance and design of Kessler's 1893 parks and boulevards system and today's open-space system. Both shape the identity and use of public space in Kansas City. Targeting funds through specific place-making measures for pedestrians prioritizes scarce public resources and identify opportunities for public/private partnerships (PPPs). Today, the scarcity of public funds has encouraged interest groups such as the DTC Greenspace Committee to request public funding on the behalf of Kansas City Parks and Recreation. In addressing the design and context of public space for pedestrians, the Kansas City Design Center (KCDC) urban design studio intends to revitalize Kessler's 1893 parks and boulevards system through public/private partnerships to spur reinvestment in Downtown Kansas City.

Figure 1.1: 1893 Kessler Parks and Boulevards System (Corbin, 2011)



The figure shows how the 1893 system shaped city and metropolitan growth.

The Need for Active Pedestrian Public Spaces

In city and park planning within Kansas City, Missouri, automobile transportation has been prioritized over pedestrian transportation (Wilson, 1964). A shift from moving cars to people can foster sustained active use of public space along with traditional passive park use. In the Pleasure Ground period, parks such as the ones designed by Kessler in 1893 were narrowly considered "only as a place to understand and relate to nature… [instead of recognizing the possibility] for social and cultural exchange" but today, parks are considered "only one part of a larger open space system that also includes town squares, plazas, greenways, and a variety of other types of spaces" including "everything in a city that is not a building or a road [and] suggests a wide range of benefits that parks can provide" within the public realm (Kent & Madden, 2006, 71). Parks should contribute to places by providing the user with "the experiences of the pattern and flow of urban life" in open-space system (Cranz, 1982, 138). With a new holistic interpretation of the parks system, public space should accommodate active uses, not only passive use. Today few parks are designed for active use. Parks lack amenities and events to "attract people no longer using the city's public open space" (Garvin, 2002, 38). Since today's open-space systems are characterized by the fluidity of "park… into city and city into park" (Cranz, 1982, 138), walkability serves as an effective evaluation of public space. Public space oriented to the needs and wants of pedestrians could improve place-making. Two core concepts for understanding the pedestrian use of public space are mobility and accessibility. Mobility is the "ability to move between different activity locations" while accessibility is the "number of opportunities or activity locations within a certain distance" (Hanson & Giuliano, 2007, 4). Historically, pedestrian mobility and accessibility have been compromised with the implementation of the highway system as a divider of the parks and the park system. By assessing public space through walkability, designers and planners can foster the active use and integration of public spaces into successful places for present and future generations.

Overview of KCDC Project

The KCDC urban design studio was contracted to revitalize Kessler's 1893 parks and boulevards system and improve the existing open-space system in Downtown Kansas City. With the assistance of Kansas City Parks and Recreation and the Downtown Council (DTC) Greenspace Committee, the KCDC vision intends to shape the future development pattern of Kanas City, Missouri through three park design proposals: anchor, infill, and corridor. By using public space as an "effective tool for

shaping [the development of] an American city" (Garvin 2000, 30), KCDC – first – conducted an inventory of the existing system and – second – adopted one park out the three concepts in an attempt to revitalize public space. While upholding the scholarship objectives of both the University of Kansas and Kansas State University, the 2011-2012 urban design studio project combined the efforts of the city, community organizations, business community, and academia to design public space. As a means to revitalize the 1893 and today's open-space system, the vision and three park design proposals intend to spur place-making in Kansas City.

Pedestrian-Scale Design and Context Encourages Place-Making

The existing open-space system faces barriers to pedestrian mobility, accessibility, aesthetics to spur place-making. Pedestrian mobility and accessibility components will be examined through the StreetSmart™ walkability model created by WalkScore™. Within the model, pedestrian mobility such as number of intersections and street block length measure the suitability of the walking environment. The model addresses pedestrian accessibility by measuring the distance to various amenities such as grocery stores, restaurants, and shops from where they live. Outside of the model, the design expertise from KCDC addresses ways to improve the aesthetics of the pedestrian experience. By examining how pedestrians would reach and experience the existing amenities from where they live, the destination-oriented model and KCDC's design expertise addresses the design and context of public spaces for active use. Public spaces designed and planned for people could unite the existing fragmented public spaces into successful places within Kansas City.

Kessler's original 1893 system and today's open-space system are in need of revival. Poor public funding has created a need and reliance on private interests, such as Community Improvement Districts (CIDs), PPPs, and fee-based membership organizations, to reinvest and improve collective goods in Downtown Kansas City. Far past the expectations of the business leaders advocating parks and boulevards for city growth in the 1893 Report, both the city of Kansas City, Missouri and the Kansas City Metropolitan Area continue to grow outward and city-wide funds thinly address the overabundant annexed and acquired land. In 1893, George Kessler intended to stabilize residential land values, provide parkland for all classes, zone the city, and preserve the natural beauty of Kansas City through park planning (Wilson, 1964). To accommodate city and metropolitan growth, 1893 boulevards compromised pedestrian aesthetics and facilitated the vacancy and blight of adjacent residential areas. Similarly, the first Kessler parks remain blighted and fail to address pedestrian mobility, accessibility,

and aesthetics. Despite the prioritization of the automobile, the Greater Downtown Area Plan seeks to create a walkable downtown (City of Kansas City, Missouri, 2010). In a decentralized Midwestern city and metropolitan area, how can city and park planning prioritize the pedestrian and counteract its strong historical trend? Who pays for these improvements in a budget-constrained, competitive environment? What role does academia play through KCDC to inform decision-making in the design and planning of public space? What is within the public interest of stakeholders within Downtown Kansas City? What is the role of the planner in representing those interests? The report outlines how Kessler's system changed, how the planning process of today's KCDC project can change the future of the system, and how to revitalize public spaces to enable place-making. Pedestrian mobility, accessibility, and aesthetic considerations integrated through the design and context of public space into successful places.

Report Methods and Purpose

The report uses qualitative methods to understand the contribution of Kessler's 1893 system to the existing open-space system, the planning process to improve public space, and propose future public space improvements in Downtown Kansas City. As a graduate planning student at KCDC, I participated in the development of the vision plan during the Fall 2011 semester and in design development of the corridor park design proposal during the Spring 2012 semester. To describe the morphology of Kessler's parks and boulevards system, I conducted an extensive literature review of parks, park design, and the growth of Kansas City. Over the 2011-2012 academic year, participant input and observation notes were taken at stakeholder, academic, professional, and public meeting reviews. Furthermore, notes from prior stakeholder meetings during the City Ecologies summer studio were reviewed for further background on involved stakeholders and organizations (Belanger, Brody, & Hahn, 2011). Throughout the academic year, professional interviews were conducted to understand the planning process and organizations behind the 2011-2012 KCDC project. The aforementioned qualitative methods show how to successfully design and plan for public spaces in Downtown Kansas City.

This report was compiled as a supplement to KCDC project to frame the history of Kansas City through Kessler's 1893 system to assist the studio's design and planning process. The report serves three purposes. First, it describes the morphology of the Kansas City parks and boulevards system. Second, the report examines and evaluates the planning process around the 2011-2012 KCDC project. Third, it outlines how pedestrian mobility and accessibility improves the active use of the public realm by analyzing the integration of the design and context of public space to create a successful place. To

demonstrate how to integrate the design and context of public space through active use, I used the StreetSmart^{TM} walkability model to map – first – Downtown Kansas City and – second – the corridor park along Beardsley Road and 3rd Street. Overall, the report analyzes the morphology of Kessler's 1893 system and offers active use strategies to revive both the 1893 system and today's open-space system.

Main Conclusions

The 1893 Report by landscape architect George Kessler used publicly funded parkland to stabilize land values and grow the city and metropolitan area (Rolley, forthcoming). Over time, the city and its parkland outgrew the available public funding. Today, Kessler's 1893 system and the existing open-space system needs additional funding for public space improvements. As a result of the unexpected success of Kessler's 1893 Report to grow the city and metropolitan area, the prioritization of automobile mobility and accessibility compromised pedestrian mobility and accessibility. To revitalize both systems today, the design and context of public spaces through active use could spur place-making. My supplementary report discusses the tools and implications of improving the active use of the public realm by analyzing the morphology of Kessler's 1893 parks and boulevards system as well as examining people and organizations involved in 2011-2012 KCDC project. The StreetSmart^{TM} walkability model and design expertise of KCDC demonstrates how to improve the active use of public space along the Beardsley / 3rd Street Corridor. To design and plan for today's open-space system, the morphology of Kessler's parks and boulevards system provides the historical background to design and plan for the active use of public space in Downtown Kansas City.

Chapter 2 - The Morphology of Kessler's Parks and Boulevards System

In Kansas City, George Kessler used park planning to shape the city pattern and form before Euclidean zoning (Rolley, forthcoming). Park planning used public funds to add parkland for each class and intentionally divided the city by land use. Kessler's pleasure ground parks utilized the existing natural beauty near the bluffs to add open space. The unification of the City Beautiful planning movement and Pleasure Ground park planning period prioritized built and natural beautification in Kansas City. While two movements united to shape the establishment and design of the 1893 system, the 1893 parks and boulevards failed to generate long-term investment due to the design and context deficiencies. After the City Beautiful movement, the shift to the Good Roads movement shaped the form and function of boulevards and parkways to automobile trafficways and highways. During the Good Roads Movement, the informal public/partnership between J.C. Nichols and George Kessler established the picturesque Kansas City parks, boulevards, and parkways (Worley, 1989). To revitalize the 1893 system and today's open-space system, the United States Park Design Periods by Cranz (1982) and the KCDC public space inventory and analysis establishes a foundation for the vision and three park design proposals. The morphology of Kessler's parks and boulevards system to Kansas City's open-space system demonstrates how public space has been designed, planned, and used in Downtown Kansas City.

The Past: Park Planning as City Planning

Kansas City's parks and boulevards system began with the 1893 Report for Kansas City Park and Boulevard Commissioners. Under the philosophy of "establish[ing] a comprehensive system that could shape the very character of city life" (Garvin, 2000, 33) George Kessler set out to affect the city pattern and form through a plan for the parks and boulevards system. To establish a steady funding source for the system, Kessler's 1893 Report was "a call for public funds to bolster private real estate values" (Worley, 1989, 56). From the 1893 Report, the first parks and boulevards system serves two purposes, to provide parkland and zone the city.

Since public approval was needed to levy taxes for the plan's parkland, the plan intentionally divided parkland by poor-working and middle-upper class in order to be politically sensitive (Worley, 1989). For the poor and working class, large urban parks provided an escape from the city to "rural amenities… [for] better health and sane social relationships" through spaces for recreation and relaxation (Wilson, 1964, 49). At the time, it was widely believed that parks could cure disease and

provide opportunities for "exercise compatible with psychic renewal" (Cranz, 1982, 9). The middle- and upper-classes enjoyed the visible green space and value-stabilizing boulevards assisted by informally zoning the city (Wilson, 1964). Along with establishing parkland by class, Kessler intended to divide the city into zones to improve livability in an era that predated Euclidean zoning.

Through park planning, Kessler zoned the city into residential, trade, and industrial functional uses to stabilize and guide city development (Wilson, 1964). Kessler intended to tame the volatility of informal settlements through parks. Since the "jumble of small villages [with]… unstable property values… spread[ed] their own blight over the rolling green hills", (Wilson, 1964, 49). While incapable of legally zoning through the Parks Board, Kessler preserved the natural beauty of Kansas City to stabilize residential land values (Wilson, 1964). Unfortunately, the City Planning Commission, not the Park Board, was the proper department to establish a zoning ordinance. Kessler's zoning through park planning continues to shape the land use pattern surrounding today's parks system in Downtown Kansas City.

City and Park Planning Movements Unite to Enhance Built and Natural Beauty

The unified interest in beauty from city and park planning movements established Kessler's parks and boulevards system. Driven by the business leaders August Meyer and Rockwell Nelson during the City Beautiful movement, the parks and boulevards system was to provide natural beauty to spur built beauty (Wilson, 1964). Business leaders believed a parks and boulevards system could shape and expand the geographic, demographic, and economic landscape of Kansas City. The Park and Boulevards Commission, guided by the business community, gave four reasons for the creation of a parks and boulevards system: beauty, duty, real estate, and precedent (Rolley, forthcoming). Each reason has economic development intentions by celebrating place, establishing civic pride, and raising land values. After examining other cities, business leaders were convinced the parks and boulevards system would improve land values, improve economic competiveness, and shape the development of Kansas City. Similar to New York, Chicago, and Boston, Kansas City business leaders established the Park and Boulevard Commission to work with George Kessler in designing an unrivaled parks and boulevards system (Rolley, forthcoming). Along with the emphasis on built beauty from the City Beautiful movement, Kessler planned the parks and boulevards system to preserve the natural beauty of Kansas City within the Pleasure Ground period.

Kessler designed the first parks and boulevards by utilizing The Pleasure Ground (1850-1900) period by focusing on natural beauty. The ornamental parks were to be admired for their beautiful landscapes (Cranz, 1982). Using the "unique opportunities and constraints of place" to minimize environmental impact, Kessler preserved the regional beauty of Kansas City (Rolley, forthcoming, 1). The "escape to the country" parks were "quiet and serene" to encourage personal reflection (Cranz, 1982, 4, 98). Park programming consisted of concerts, ice skating, zoological garden, museum, and art to serve the "double purpose of instruction and pleasure" though educational uses were largely prohibited while moralistic direction was encouraged (Cranz, 1982, 15). In regards to mobility and accessibility, the intent of the parks was to be "equally available to those on horseback, in a carriage, or on foot, whichever best suited the inclination or means of an individual" (Cranz, 1982, 9). Instead of pedestrian mobility and accessibility, Kessler made the parks and boulevards system primarily for horse and carriage. The traditional, pleasure ground parks such as Swope Park, North Terrace Park (Kessler Park), and the several parks that comprised of old West Terrace Park (Case, Mulkey Square, and Jarboe Park), have maintained their intended natural state. In preserving the natural beauty of Kansas City, Kessler retained regional site considerations in the park design.

George Kessler enhanced the regional image of Kansas City, Missouri as "a city within a park" by preserving the natural features and topography through parks and boulevards. Throughout the nation, a lack of regionalism in park design persists (Cranz, 1982). Park design criteria with "little living relation to particular cultures, climates, or people" damages the purpose of the park (Cranz, 1982, 250). Contrary to park planning around the nation, Kessler considered regional environmental qualities. Today, the first parks and boulevards serve both functions of stormwater management and wildlife habitat by using drainage patterns and topography (Rolley, forthcoming). By preserving the regional environment, Kessler created a green infrastructure system that also serves as an aesthetic component to place-making. Unfortunately, Kessler did not address the local surrounding context or the park user. An example of the pleasure ground period, Kessler's park design retains regional character through topographical considerations. Overall, the parks and boulevards system shaped the city pattern and form by preserving the natural beauty as a means to encourage investment in the beautification of Kansas City's built environment.

Parks Shaped by Existing City Development

The locations for the first parks were shaped by the existing city pattern and form. The first parks added, West Terrace, North Terrace, and Penn Valley Park, "removed relatively little developable property from the tax rolls" for a cheap, $2.3 million (Garvin, 2002, 62). Unfortunately, the first parks were added after the development of the city, unable to shape the future city pattern or form. The placement of parks after the urbanization of the city created insurmountable design dilemmas for landscape architect, George Kessler.

The first parks of Kansas City were to be designed using standards similar to Fredrick Law Olmsted's three criteria: "convenience of shape, amplitude of dimensions, topographical conditions and the surrounding circumstances" (Garvin, 2002, 67). In addition to Olmsted's original three, Garvin suggests two criteria for park design used by Olmstead: programmatic flexibility and comprehensive programming arrangement (Garvin, 2002). Designing around the existing flora and topography to maintain the regional character of Kansas City, Kessler attempted to transform undevelopable building sites into successful parks. While the topography and views were preserved, the unusable "topography prevented Kessler from accommodating the variety of active and passive recreation facilities" similar to Olmsted's park designs (Garvin, 2002, 62). As a result, Kessler's first parks had "few of the level pedestrian paths, broad meadows, gentle wooded knolls, or ample playing fields that made Olmsted's parks so successful" (Garvin, 2002, 62) and "[in]sufficient level territory for a great variety of activities" (Garvin, 2002, 67). Overall, the first parks were aesthetically pleasing but unsuitable for active use through design because the context did not address pedestrian mobility and accessibility.

Since the parks were established after development, there was not consideration of the design and context of the public space would contribute to place-making. The criteria from Olmsted and Garvin evaluate the success of Kessler's first parks. The 1893 parks were "inherently unattractive for development… [and] fail to stimulate the desired market reaction" as parkland due to "proximity, access, and terrain… [along with] the inherent characteristics of neighboring land uses" (Garvin, 2002, 67). The poor design and context of the three 1893 parks underlines the importance of scale and location when seeking to attract a pedestrian-oriented market of active users. Overall, the three original parks fail to "generate any continuing market reaction… [because] their location, shape, and topography made it difficult for them to affect more than a limited amount of surrounding territory" (Garvin, 2002, 67). Since parks were established after city development, Kessler was unable to develop his philosophy to select viable parkland for the first parks to contribute to successful places.

As shown in the 1893 Report, the intended and selected locations for parks demonstrates the struggle between the philosophy and implementation of Kessler's 1893 system. Instead of "scenic parks", Kessler urged for public spaces integrated into the context, such as "public squares" and "local parks", near dense residential areas for the working class to meet the needs for green space in Kansas City (Wilson, 1964). In reality, Kessler was forced to accept "Olmsted's rhetoric and imagery without embracing his philosophy or design practices" for the parks and boulevards (Garvin, 2002, 61). Kessler's parks and boulevards system was unfortunately vastly different from Olmsted's work. As the first park system to replicate the Boston's Emerald Necklace, the parks and boulevards in Kansas City have little connection to each other, with exception to The Paseo and The Parade (Rolley, 1999). The proposed parks were placed on the edges of the city as primarily "scenic parks". Far from an escape, the parks reminded users of the noisy, busy, and smelly urban living in Kansas City (Wilson, 1964). Instead of providing mainly local parks and squares, Kessler provided open space on undevelopable land with scenic industrial views (Wilson, 1964). While Kessler intended to meet the green space needs for the poor, working, middle, and upper classes, the selected locations for parks from the 1893 Report could be attributed to political and financial pressure.

By determining the location and design of the 1893 system without the collaboration between numerous entities, the most desirable and adequate land was overlooked. As a result, the city limited parkland acquisition for parks and boulevards to either private, undevelopable land or public land within the right-of-way (Garvin, 2002). With a lack of political and financial will to acquire and design purposeful parkland, the 1893 system remains segregated from its context and unable to establish a sense of place. Instead of philosophy and design shaping the selection of parkland, the Kansas City parks and boulevards system was hampered by short-term political and financial pressure. The city, by settling for inferior land without the added controversy and cost, missed an opportunity to design the first park system "as a framework around which the city could grow and develop" (Garvin, 2002, 63).

Pre-Development Boulevards and Parkways Shape Decentralized City and Metropolitan Growth

Kessler designed the 1893 boulevards to stabilize residential land values and plan city growth by creating a "city within a park" (Wilson, 1964). While enhancing the built and natural beauty of Kansas City, the boulevards function as transportation corridors to efficiently move goods and services in a city with a "lack of density… [and] intensity" (Rolley, forthcoming, 1). As the city grew outward, the shift

from the City Beautiful to the Good Roads city planning movement demonstrates how the automobile shaped city and metropolitan growth. The future function of the boulevards for automobile use was first shaped by Kessler's design criteria for 1893 boulevards.

The design criteria by Kessler established a standardized form and site conditions for the establishment of the 1893 boulevards. To design the boulevards, Kessler used four criteria: "good grades", "located in a naturally slightly locality", "character satisfactory and suitable for good residences", and "no costly natural or artificial obstacles to remove to permit widening of the streets selected" (Board of Park and Boulevard Commissioners of Kansas City, Missouri, 1893). In choosing good grades, the cost of maintenance was lowered while creating a more enjoyable driving experience (Rolley, 1999). The selection of "a naturally slightly locality" ensures the location reflects the natural beauty found within the Kansas City region (Board of Park and Boulevard Commissioners of Kansas City, Missouri, 1893). By selecting land based upon ability to have character for residences places a limit on only developable land. The last criterion, avoiding the removal of natural or artificial obstacles, is both environmentally sensitive for the landscape architect and cost effective for the city. As demonstrated in the shift between city planning movements, the simplistic design criteria seamlessly integrated natural and built residential beauty but allowed for the boulevards to be later shaped by the automobile.

The modified form and function of the boulevard was influenced by the technological advances of the automobile. The influence of the automobile is demonstrated in the City Beautiful and Good Roads city planning movements. In Kansas City Both movements encouraged decentralized growth for economic development (Rolley forthcoming). During the City Beautiful movement, boulevards improved automobile mobility to empower decentralized city growth (Wilson, 1964). Later, during the Good Roads movement, boulevards improved automobile mobility to empower decentralized metropolitan growth (Wilson, 1964). From aesthetically-pleasing road connectivity to trafficways to highways, the unforeseeable advances of the automobile changed the form and function of the boulevards. The intended boulevard form and function began within the City Beautiful movement.

During the City Beautiful movement, the 1893 boulevards shaped the city pattern and form (Rolley, 1999). From the late 19th Century, the boulevards facilitated movement and connectivity to the scattered, established city settlements by roadway (Rolley, 1999). Serving as Kansas City's first primary intra-city transportation corridor system, the boulevards intentionally facilitated the connectivity and growth of the decentralized, low density developments around commercial centers such as Westport,

Plaza, and Brookside (Rolley, 1999). In an effort to lure residential development away from the streetcar suburbs, the first boulevards attempted to stabilize land values by attracting prestigious residential development to Kansas City (Wilson, 1964). Of the first boulevards, Janssen Place, a private boulevard, is the only census tract with high property values (Worley, 1989). While the 1893 public boulevards decentralized the city, they were unsuccessful at stabilizing residential values. The 1893 boulevards designed in the City Beautiful movement were, with exceptions The Paseo, "tree-lined, 100-foot-wide rights-of-way that in other cities would be called avenues" (Garvin, 2002, 62). By avoiding the controversy of additional land condemnation and acquisition, needed to adopt the standard boulevard dimensions, the first boulevards but were unable to differentiate themselves from wide streets (Garvin, 2002). While the first public boulevards and parkways of the City Beautiful movement failed to stabilize land values long-term, the public/private boulevards and parkways of the Good Roads movement were a success.

After the City Beautiful movement, the Good Roads movement was "a private attempt at [the] residential boulevard movement" (Worley, 1989, 57). During the Good Roads movement from the early 20th Century, community-scale design facilitated movement between cities and created a more connected metropolitan area (Rolley, 1999). The blurring of private and public funds helped establish the picturesque parks, boulevards, and parkways of Kansas City. With the integration of the restricted residential developments into the parks and boulevards system, such as Nelson's Janssen Place and Hyde Park, J.C. Nichols used "highly restricted, large-scale residential area that exploited rather than destroyed the existing terrain" to mesh natural and built beauty (Wilson, 1964, 130). While many attribute deed restrictions as the primary means of stabilizing residential land values, the informal public/private partnership between J.C. Nichols and George Kessler assisted in the success of the parks, boulevards, and parkways during the Good Roads movement.

The interdisciplinary relationship between two professional experts in real estate development and landscape architecture helped establish successful parks, boulevards, and parkways. By "fores[eeing] the important role of the boulevard system designed by Kessler in the nineteenth century would have for auto traffic in the twentieth century", Nichols coordinated with Kessler to interconnect residential and commercial areas with parks, boulevards, and parkways (Worley, 1989, 80). As the developer, Nichols knew "what the public expects in residential land, what the public will pay, what other land is being sold in competition, and how a selling campaign may be managed"; Kessler, as the landscape architect, used his "technical skill and the experience to produce from the land the maximum

of salable utility and beauty at the least cost" (Worley, 1989, 121). The wider parkways such as Ward Parkway stabilized and enhanced the surrounding land values. The stabilized and increased land values created an interest from entrepreneurial and civil servants to continuously invest in the future of their Kansas City neighborhoods (Garvin, 2002). The coordination between Nichols and Kessler can be seen in how the public parkways connect Nichols' private country clubs and the downtown section where most of Nichols' early residents worked" (Worley, 1989, 94). The parks, boulevards and parkways established during the Good Roads movement were partially successful because of the informal public/private partnership between J.C. Nichols and George Kessler. While the Good Roads movement boulevards, and parkways were successful, the technological advances of the automobile modified the form and function of both city planning movement boulevards.

Kessler's simplistic design criteria allowed for boulevards to accommodate to high-speed automobile accessibility and mobility (Wilson, 1964). Today, Broadway Boulevard, one of 1893 City Beautiful boulevards through Penn Valley Park, is a "street filled with big, noisy trucks and a crush of passenger cars… widened to the point of eliminating the tree-filled median which in earlier years separated trucks from motor cars… (Wilson, 1964, 128). Today, crossing high-speed trafficways with few intersections and large block lengths on Broadway Boulevard is dangerous.

Along with the City Beautiful movement boulevards, the prestigious boulevards and parkways of the Good Roads movement were affected. By 1917, increasing speeds along boulevards and parkways caused the "lots facing boulevards [to be] more difficult to sell [whereas]… they had been the most popular type and most expensive" (Worley, 1989, 105). While Kessler's boulevards and parkways seamlessly transitioned into trafficways, today's highways provide automobile mobility and accessibility for the surrounding Kansas City automobile dependent communities (Rolley, forthcoming). Like the City Beautiful and Good Roads boulevards and parkways, today's highways enable both the growth of the city and automobile industry (Rolley, 1999). While boulevards, parkways, and highways have kept Kansas City economically competitive by providing road connectivity for decentralized population growth, pedestrian mobility and accessibility remains unaddressed by park planning in Kansas City.

United States Park Design Periods and Downtown Kansas City

In the United States, parks can be classified into four separate park design periods: Pleasure Ground, Reform, Recreation Facility, and Open-Space System (Cranz 1982). Given the existing park amenities and programming, parks are classified into different periods. In Downtown Kansas City,

KCDC established a matrix of the existing park amenities to understand the current programmatic state of public space as shown in Table A.5. Using the amenities collected by KCDC, today's public space in Kansas City including parks and civic spaces were classified into park design periods. The park design periods created by Cranz (1982) demonstrate how the Kansas City green and civic spaces system is split between automobile mobility (i.e. the pleasure ground and recreation facility) and pedestrian mobility parks (i.e. reform and open-space system). As shown in Figure 2.1, the parks within Downtown Kansas City are classified by park design periods (Cranz, 1982). While Kessler designed the pleasure ground parks and the city designed recreation facility parks, effective reform and open-space parks designed to embrace city life are few within Kansas City's green and civic space system. Overall, the four separate park design periods show the differences in the mobility between the automobile and pedestrian.

Figure 2.1: Kansas City Parks Classified By Park Design Periods (Seaman, 2012)

The figure shows a majority of parks are the Pleasure Ground and Recreation Facility parks.

As the paradigm shifted from form in the Pleasure Ground to function, the second period, The Reform Park (1900-1930), was to be "noisy and organized, both visually and in terms of activity" in an embrace of city life (Cranz, 1982, 98). Parks were programmed for athletics and various educational activities, such as library branches, spelling bees, civic meetings, and lunchrooms (Cranz, 1982). To fill the new concept of leisure time, municipal governments provided facilities for organized play aimed at "children and adult men of the urban working classes" (Cranz, 1982, 61). Municipalities begin to control, supply, and develop activities as seen today's municipal park planning. Officials recognized "the choice of going hungry, or thirsty, or home" in parks and used "restaurant[s] [to] attract a broader clientele" (Cranz, 1982, 21). Reform parks addressed pedestrian mobility and accessibility by providing restaurants, libraries, and entertainment venues within parks. In Kansas City, there are two reform parks remaining with community centers: The Parade and Garrison Square. A component of reform parks, food and drink, is only served at Penn Valley Park within The National World War I Museum and previously at Barney Allis Plaza before the café closed. Overall, social, commercial, and civic programming characterized the reform park period.

During the Recreation Facility (1930-1965) period, park design mimicked the war effort of World War II (Cranz, 1982). By creating "a blend of minimal standards of appearance and the desire to keep maintenance and supervision costs to a minimum", parks "economiz[ed] function" (Cranz, 1982, 123). The standardized park programming addressed the paradigm of "new leisure", "the problem of finding something to do for every person to who idleness is an irksome and deadening problem", during the Great Depression (Cranz, 1982, 105). The war reflected the federal need for everything to relate back to the war in an efficient manner, including victory gardening, where adults grow vegetables in parks (Cranz, 1982). "The real design innovation of the era was the standardization of all the old elements into a basic municipal package, one that was used repeatedly, without regard to local site conditions" (Cranz, 1982, 122). While the recreation facility period standardized park programming for passive, recreational physical activity, the period primarily addressed automobile mobility and accessibility. The automobile-accessible, recreation facility parks in Kansas City such as Sheila Kemper Park, Observation Park, and Columbus Park are programmed as playgrounds or physical activity facilities for children and adults.

Today's park design period, The Open-Space System (1965-present), is characterized as having "fluidity at their perimeters" as the "park flow[ing] into city and city into park" (Cranz, 1982, 138). During this period, parks "had to be shocked back into life, via newly permissive programming and

[provide] the publicity to exploit it" as "adventurous, colorful, seductive, chic, hip, hot, and cool" spaces (Cranz, 1982, 139). Unfortunately, "neither funds nor personnel were sufficient to deal with the wear and tear" of the daily public space events (Garvin, 2002, 38). Elite cultural park programming such as art programs, operas, and movies exposed the general public to new interests (Cranz, 1982). Unfortunately, there are few parks in Kansas City with open-space system programming that addresses pedestrian mobility and accessibility characterized by the period. Overall, Kansas City parks lack coordination between different park design periods and are unable to effectively meet specific park design period criteria.

With four park design periods and public space roughly categorized, the Kansas City parks and civic space system should relate to one another. The "thoughtless eclecticism" of parks and boulevards oversimplified park design into "landscaping for beauty, field houses for indoor activity, parking lots and swimming pools with extra lighting for night use, kinetic sculpture" instead of designing with a local and regional purpose (Cranz, 1982, 244). While the green and civic space system of Kansas City is eclectic, it is important to understand how each park design period contributes to the overall system. Frequently, the "elements [of the parks] are picked without reference to their original meaning, and sit next to one another without creating a new meaning system" and the total composition of parks has lost "an inner tension and vitality" (Cranz, 1982, 244). By "layering" to "consciously preserving a park type associated with one era during a later one", the collection of the four park periods with one or more components of each period provides a collection of parks for a diversity of uses and users (Cranz, 1982, 244). Without a systemic understanding of how the public spaces relate to their context, the Kansas City parks system continues a vicious cycle of park decline: "parks… are banal; the public loses interest; the number of intended functions declines, the budget allocation is reduced; the park functions have even less to do with societal needs" (Cranz, 1982, 242, 249). Instead of strictly maintaining parks within a park design period, adaptations to the design and context could improve the use of the Kansas City parks and civic spaces system.

The Analysis of Today's Park System by KCDC

In an effort to adapt and revive Kessler's parks and boulevards system, KCDC urban design studio analyzed the geographic morphology of Kessler's parks and boulevards system from 1893 to 2011. An inventory and site analysis of the existing open-space system revealed the assets and opportunities for the future of the system. KCDC differentiated between parks and civic space within today's open-space system of Downtown Kansas City to include two types of public space. Upon designating the public spaces as park or civic, the urban design studio further analyzed the existing design and context of public space within the Greater Downtown Area boundary.

The urban design studio conducted a public space inventory and analysis each space within the open-space system. The design and context of public spaces were analyzed through amenities, land use, right-of-way (ROW), zoning, topography, viewshed, and vegetation factors. In light of the environmental dilemmas faced by the city, the studio emphasized stormwater management strategies to alleviate the overflow of the present combined sewer system similar to the existing green infrastructure created in Kessler's parks and boulevards. Along with environmental considerations, the Kansas City Design Center conducted demographics analysis based on age, race, population, and employment to develop a program for the selected park design proposals. Regional, city, and neighborhood classifications describe the scale of the public space as well as the primary user. Each of the three park design proposals demonstrate the possibility of implementation by coordinating with the on-going projects within the city. After conducting the public space inventory and analysis, the studio determined the Kansas City parks and civic spaces system was fragmented by the highways, lacks maintenance and design, and remains passively used for recreational purposes.

The design and context of Kessler's 1893 system and the existing parks system hampers the active use of public space. Today, the "simplification of use – meaning fewer users, with fewer different purposes and destinations at hand – feeds upon itself" created "border vacuums" out of parkland (Jacobs, 1961, 338-339). As a result, the 1893 boulevards are "lined with vacant and abandoned buildings and their once handsome trees have succumbed to disease" and the 1893 parks "appeared to be lovely landscapes enhanced by trellises and pergolas" but were "steep cliffs with relatively little flat land that was usable by large crowds" (Garvin, 2002, 63). Without diverse, accessible amenities supported by active pedestrian users, today's system remains underutilized throughout the day. To be used, parkland must have value to the surrounding community (Garvin, 2000). Due to the waning use and investment in

public space, there is a new demand from local residents to revive Kessler's 1893 system and activate the existing open-space system in Downtown Kansas City.

The Future: Three Types of Park Design Proposals by KCDC

After inventorying and analyzing the existing park system, KCDC sought to confront the problems with the existing design and context of public space within Downtown Kansas City. Today, as in Kessler's era, parks are planned after the development of the city. The purpose of the project was to revitalize Kessler's 1893 system to fit the needs of today's users. In addition to the four park design periods proposed by Cranz (1982), KCDC created three new park design concepts: anchor, infill, and corridor. Through the three new park concepts, KCDC sought to address the financial and environmental dilemmas of Kansas City Parks and Recreation. The vision and three park design proposals seek to improve the quality and use of public space for tourists and residents within Downtown Kansas City.

Anchor Parks: Rail Park as Infrastructure

The philosophy behind anchor parks is to use large parks to capitalize on the regional character of Kansas City. Similar to Kessler's 1893 parks, an anchor park must contribute to the history, topography, natural features, and regional character. Anchor parks meet the programming criteria of imageability, health and recreation, context/intent, and sustainability established by KCDC. For specific users, the parks first serve the city and then serve the neighborhood or regional scale. Similar to Kessler's Pleasure Ground parks, the anchor park design concept uses environmental and regional character factors. The map below in Figure 2.2 shows the series of anchor parks in Downtown Kansas City.

Figure 2.2: Anchor Parks of Downtown Kansas City (Brown, 2011)

The figure shows the spatial distribution of anchor parks within Downtown Kansas City.

As the new anchor park, the Rail Park manages stormwater and provides passive recreation by converting surface parking to park identifying surface parking, deindustrialized space, and valleys in the city. The park serves as stormwater management and adds to Kessler's existing green infrastructure by addressing the stormwater overflow into the present combined sewer system of Kansas City, Missouri. In the Rail Park, there is an opportunity to demonstrate sustainability by replacing surface parking lots with an added a tree canopy and bioswales. The overarching dilemma of the overabundance of surface parking is problematic for Kansas City as the park would remove over 3,000 parking spaces. The underlying strategy is to replace the parking through parking garages to accommodate the new infrastructure park.

The addition of the Rail Park to the current system of green and civic spaces presents fiscal concerns for the financially burdened Kansas City Parks and Recreation. The maintenance cost of the existing park system appears an adequate reason to avoid annexing a new space. By only taking into account one factor in creating new parks, we dismiss the opportunity to systemically address multiple concerns to manage the combined sewer system. Along with the current stormwater management plans, there are plans for the Kansas City Streetcar on Main Street to intersect the Rail Park. Infrastructure improvements for the Streetcar could provide a window of opportunity to implement the Rail Park (DeBauche, personal communication, February 29, 2012). One of the challenges of the Rail Park is identify how to address pedestrian mobility when overcoming topographic change. The Rail Park has an opportunity to address pedestrian mobility and accessibility by providing amenities and aesthetics through park design.

Infill Parks: Parks as Temporary Use

The philosophy behind the infill parks is to provide a temporary use while encouraging future development through a set of smaller parks. The parks are strategically located in "identity centers" in the districts within a five-minute walking distance from anywhere downtown. As temporary spaces, infill parks have the catalytic power to spur development by serving as placeholders for the future. The kit of parts standardizes park programming for infill parks similar to the recreation facility period by addressing today's sustainable practices. Infill parks serve to collect energy and water while providing an urban amenity. The map below in shows the series of infill parks within Downtown Kansas City.

Figure 2.3: Infill Parks of Downtown Kansas City (Brown, 2011)

The figure shows the spatial distribution of infill parks within Downtown Kansas City.

To select infill parks, the group used population density, employment density, location of parking lots, location of vacant land, space character, location within the Downtown Loop and Crossroads districts. In the selection process, surface parking lots were identified and suggested to be removed, retained, or stacked to accommodate a temporary park use. The primary user and programming were identified by analyzing the land use, zoning, and parcel ownership. As a programming strategy, the kit of parts provide physical additions to the parks to improve aesthetics and provide infrastructure including living walls, benches and tables, pervious surfaces, tree canopy/vegetation, shade and solar structures, bioswales / stormwater management, wind, play areas, and dog parks. Along with generic elements to these spaces, extra components include trellises, green terraces, recreation fields, food trucks, projection screens, and gardens. Overall, infill parks seek to temporarily activate private space to spur future development.

One major programming hurdle is how a property owner in the future will want to develop an infill park to maximize their return on investment. As the first temporary use park in Kansas City, the 18 Broadway Community Garden owned by DST Systems, Inc. provides a public good to the Crossroads district. DST Systems, Inc. may face community opposition against the development of their property. Since the temporary use of the site as a garden lacks a temporary use timetable, there is a possibility the 18 Broadway Community Garden is the permanent use of the site (Long, personal communication, March 12, 2012). By establishing a temporary use timetable to specify how long the site intends to be a garden, there would be transparency about inevitable future development of the site. To catalyze redevelopment in Kansas City, the infill parks seek to provide temporary parkland on parking lots by turning an aesthetic blight into a present and future asset for Downtown Kansas City.

Corridors: Beardsley / 3rd Street as Linear Parks

The philosophy underlying the corridor is to use linear park space as multi-modal transportation corridors to spur reinvestment in disinvested areas and connect districts and circulate people. The corridor approach to public space uses streets to establish a dialogue by address the historic, multi-generational disinvestment between districts. District fragmentation, as a result of the highways, has exacerbated socio-economic and cultural differences. Different from other parks, efficiency through active use is given priority over passive use. The negative or insignificant relationship between parks and walking for transportation exposes to the dissonance between the built environment and societal values (Moudon et. al., 2006). For this reason, the design seeks to create streets adaptable for active use.

In order to select corridors during the visioning phase, the corridor group conducted district analysis on age and race, land use, schools, vegetation, residential areas, and commercial destinations. The analysis provided primary background information on the potential park user and the culturally-rich districts within Downtown Kansas City. Secondly the analysis provided the foundation to reinvest in the disinvested and fragmented districts. Thirdly the corridor group evaluated streets by their grade changes, street continuity, proximity to commercial areas, accessibility and safety for cyclists, ability to spur investment, street widths, and nearby catalytic projects. In an effort to stitch the districts through circulation space, local residents can travel through the seven corridor parks as shown in **Error! Reference source not found.**: 12th Street, 18th Street, Beardsley / 3rd Street, Charlotte, Southwest Boulevard, 31st Street, and The Paseo.

Figure 2.4: Corridor Parks of the Downtown Kansas City (Kubas, 2012)

The figure shows the spatial distribution of corridor parks within Downtown Kansas City.

The selected corridor, Beardsley / 3rd Street, was chosen for a multitude of reasons. While the corridor has the weakest connection to the underlying philosophy of corridors, the both streets have been overlooked for generations. In regards to the Beardsley / 3rd Street Corridor selection, a majority of our stakeholders value natural features, historic preservation, topography, views, minimal congestion, and the proximity to Kessler's original West Terrace park. Largely ignored over the years, the Beardsley / 3rd Street Corridor offers a unique opportunity as an implementable streetscape and trail project to revitalize Kessler's parks and boulevards system. The Beardsley / 3rd Street Corridor with street continuity, "good grades" for walking and cycling, provides direct connectivity between four districts: Westside, West Bottoms, River Market, and Columbus Park. From our demographics analysis, Westside is both racially and age diverse, with a mix of White, Latino, and African American singles and families. West Bottoms consists of primarily old railroad and manufacturing buildings with few people living within the district. a majority of residents in River Market are young White singles. Columbus Park is racially and age diverse, with a mix of White, Asian, African Americans singles and families.

Currently, there are few amenities along Beardsley Road until reaching the River Market district. Instead of efficiently passing by amenities through active use, the Beardsley section of the overall corridor will primarily be used for passive recreation as circulation space as further addressed in Chapter 4. 3rd Street in the River Market and Columbus Park district will improve the existing pedestrian mobility and accessibility by focusing investment on where amenities exist to support active use.

Main Conclusions

Kessler's parks and boulevards system has dramatically changed since the initial 1893 design. Under the City Beautiful and Pleasure Ground movements, the parks and boulevards system was established to enhance the built and natural beauty of Kansas City. Kessler's philosophy was unable to be fully realized due to political and financial pressure. Without collaboration and coordination in the placement of the first parks, early efforts resulted in parks that were difficult to reach and away from walkable amenities. While public spaces were not pedestrian friendly by design, the technological advances of the automobile further degraded the boulevards to accommodate the high speeds and volume needed as trafficways and highways. While parks were provided for each class and informally zoned the city, the parks and boulevards system remains fragmented from a lack of active pedestrian use.

To address the fragmented parks and boulevards system, the Kansas City Design Center's vision and three park design concepts seek to revive Kessler's parks and boulevards system for pedestrians. As large scale public spaces, the anchor park design concept intend to enhance the identity of Kansas City that reach audiences inside and outside of the city. Infill parks, as temporary spaces, intend to encourage future urbanization through pedestrian amenities and aesthetics. Like boulevards, corridors use transportation to encourage future investment. All three park design concepts seek to raise awareness about the fragmented status of Kessler's parks and boulevards system and offer implementable solutions in the public interest.

Chapter 3 - Planning Process

The KCDC urban design studio projects are chosen based upon the enhancing the dialogue regarding public issues with stakeholder, academic, and professional input. In the past, KCDC projects have raised support around the city. In budget-constrained and competitive times, shovel-ready plans are needed to show a present demand for funding. To further assist in funding, CIDs and PPPs are private means to improve collective goods in the public interest. Today, KCDC provides a niche role by representing the public interest and bridging the gap between academic and professionally implemented projects. By understanding the public interest, planners can be better equipped to represent the voiceless, the underrepresented and future generations. With public issues, it is important to represent the public interest and recognize the ethical dilemmas of funding, project prioritization, gentrification, and the definition of public space. Overall, the role of the planner is to demonstrate when and how to plan in the public interest. The 2011-2012 KCDC project serves as a collaboration and coordination platform for public and private funds to support the public interest.

Overview of KCDC and Project

KCDC is an academic urban design studio of graduate students from the University of Kansas and Kansas State University. Embedded in Downtown Kansas City, KCDC serves to define and raise city issues through interdisciplinary collaboration, bridge the gap between theory and practice, provide a service learning opportunity for students, and most importantly, to contribute to the vitality of the city (Krstic, personal communication, February 10, 2012, Stockman, personal communication, February 29, 2012). One of the roles of KCDC is to provide fresh ideas and outside-of-the-box design proposals from aspiring design professionals (Lossing, personal communication, February 22, 2012). By having students sort through ideas and present viable design solutions, KCDC assists professionals in project implementation (DeBauche, Stockman, personal communication, February 29, 2012). In the future, KCDC is to be an academic center for urban design that provides advanced research on urban environments similar to other universities throughout the United States (Krstic, personal communication, February 10, 2012). With each project, there are a series of stakeholder, academic, and professional reviews to provide input to the project. The selected KCDC projects continue to begin where the public interest of the city, academia, and stakeholders intersect.

The Kansas City Design Studio has proven itself capable of raising public issues, providing new ideas, and supporting the city. As the reputation of KCDC has built up, the studio has taken on more complex projects within the city. The previous KCDC projects such as Triangle Park and the West Bottoms plan have spurred action within the city (Lossing, personal communication, February 22, 2012). The design by KCDC for Triangle Park showed what was possible and allowed for the architecture firm, el dorado incorporated, to further design the park (DeBauche, personal communication, February 29, 2012). Furthermore, last year's studio project, "Reframing the City: A Vision for the West Bottoms" spurred national interest by being selected for the Rose Fellowship through the Urban Land Institute (ULI) (Krstic, personal communication, February 10, 2012). The work of the Kanas City Design Center has helped surface the West Bottoms as a unique development opportunity in a previously unexplored area of Downtown Kansas City. The two projects are examples of how KCDC focuses attention on pressing public issues. Past KCDC projects raised awareness about the future of the West Bottoms, how to transform abandoned and underutilized public space into a park, and other projects to reimagine the future of Kansas City, Missouri.

The 2011-2012 KCDC project began with the Downtown Council (DTC) Greenspace Committee requested and obtained Public Improvements Advisory Committee (PIAC) funds (Lossing, personal communication, February 22, 2012). After the funds were granted, Kansas City Parks and Recreation became the contract agency of the 2011-2012 KCDC project (Lossing, personal communication, February 22, 2012). After examining how the KCDC project came together, an explanation of the organizations and departments involved provides is a better understanding of design and planning process.

The DTC Greenspace Committee was established two and half years ago to improve the quality of open space in Downtown Kansas City. As a subcommittee within the fee-based membership organization of the Downtown Council, the DTC Greenspace Committee members understand the need for supporting amenities for Downtown Kansas City neighborhoods (personal communication, February 29, 2012). As a public/private partnership, the DTC Greenspace Committee serves to prioritize open space within Downtown Kansas City by applying for public funds (Stockman, personal communication, February 29, 2012). When the committee was established, one of the first projects was to survey the existing parks system in Downtown Kansas City (Stockman, personal communication, February 29, 2012). The 2011-2012 KCDC project builds upon the past work of the DTC Greenspace Committee.

Under the fee-based membership organization of the Downtown Council, the DTC Greenspace Committee is a valuable private partner to assist in acquiring public funds for public projects.

Kansas City Parks and Recreation has been overseen by a board of five rotating commissioners since 1898 (Lossing, personal communication, February 22, 2012). The department manages 219 parks, consisting of over 12,000 acres of parkland ("About Parks & Recreation", 2011). As Project Manager for Kansas City Parks and Recreation, Jimmi Lossing is responsible for taking what the citizens want and implementing their ideas within parks (Lossing, personal communication, February 22, 2012). As the contract agency, Kansas City Parks and Recreation holds KCDC accountable to produce professional quality work in budget-constrained times. As the first dedicated studio project contract between Kansas City Parks and Recreation and KCDC, Parks and Recreation treats KCDC similar to a professional contractor with a list of deliverables. Since the deliverables for an urban design studio are different from a contracted professional firm, a general unease between Kansas City Parks and Recreation and KCDC could be credited to both entities' inexperience working together (Lossing, personal communication, February 22, 2012). As the first of its kind for all entities involved, including the DTC Greenspace Committee, the uncertainty around the results plays a large role in the participation and expectation of the groups. Along with assisting Kansas City Parks and Recreation and the DTC Greenspace Committee, the 2011-2012 KCDC project can help achieve the overall goals of the city.

In city planning today, there is an attempt to keep the 2010 Greater Downtown Area Plan (GDAP) relevant by shaping the funding and prioritization of public projects (DeBauche, personal communication, February 29, 2012). Historically, city plans have been shelved after their adoption. As a member of the GDAP Implementation Committee, John DeBauche, AICP, 4th District Planner, examines the KCDC project from the perspective and how their current plans inform the KCDC vision and three park design proposals. The City of Kansas City, Missouri is focused on how the Streetcar along Main Street will affect the city growth and how regional rail will affect the metropolitan growth (DeBauche, personal communication, February 29, 2012). Both transportation projects affect the funding prioritization of the two KCDC park design proposals, the Rail Park and the Beardsley / 3rd Street Corridor Park. The long term goals for the city are to fulfill the five GDAP goals by improving cooperation between districts (DeBauche, personal communication, February 29, 2012). In an effort to assist the city and represent the public interest of stakeholders, the 2011-2012 KCDC project provides an opportunity to explore the history, design, and context of public space in Downtown Kansas City, Missouri.

Analysis of the Planning Process

An understanding of the project from the perspective of supporting organizations, stakeholders, and professionals can shape the success of the 2011-2012 KCDC project. A series of qualitative methodologies are used to explain, analyze, and gauge the planning process behind the project. The planning process behind the project was documented through notes and professional interviews. Stakeholder observation and participation was documented at each project review to understand their perception and involvement in shaping the project. The 2011-2012 project reviews occurred on October 13, October 31, November 30, December 14, February 1, March 7, April 4 at the Kansas City Design Center. Furthermore, student notes from the City Ecologies summer studio leading into the KCDC project from June 21-24 were analyzed to provide depth to existing stakeholders and their interests in the project (Belanger, Brody, & Hahn, 2011). To provide further depth to organizations and processes affecting the 2011-2012 KCDC project, professional interviews were conducted with Vladimir Krstic, Director of KCDC, Douglas W. Stockman, Principal Architect, AIA of el dorado incorporated, John DeBauche, AICP 4th District Planner for the City of Kansas City, Missouri Department of City Planning, Jimmi Lossing, Project Manager for the City of Kansas City, Missouri Department of Parks and Recreation, and Robert Long, Economic Development Finance Professional (EDFP) for the Economic Development Corporation of Kansas City.

In addition to professional interviews, meetings with professionals and professors provided additional input and feedback to the studio project. The professional reviews included design professionals from Confluence, Gould Evans, Vireo (formerly Patti Banks Associates), and BNIM. Group meetings with BNIM employees, John DeBauche of the City of Kansas City, Missouri Department of City Planning, Terry Leeds of the City of Kansas City, Missouri Department of Water Services, Sherry McIntyre of the City of Kansas City, Missouri Department of Public Works, and Robert Long of the Economic Development Corporation of Kansas City have provided professional expertise and advice to shape the visioning and design of the 2011-2012 KCDC project. Academic reviews included professors within the disciplines of architecture, landscape architecture, and planning from Kansas State University and the University of Kansas. The diverse sources of input and feedback into the 2011-2012 KCDC project helped move the design and planning process towards an implementable reality.

The Planning and Process Perception around the KCDC Project

The first stakeholder meeting of the 2011-2012 KCDC project demonstrated the disconnection between KCDC and project stakeholders. At the first meeting on October 13th, KCDC presented their assessment of the present conditions within the "policy" phase. Despite being in the "policy" phase of the planning process, many stakeholders voiced financial and implementation concerns at the first stakeholder meeting from a "strategy" perspective. The studio was encouraged to "think big" while maintaining perspective on the possible. A series of questions regarding the maintenance, cost, implementation, future use, and sustainability were asked prior to a full understanding of the existing condition of the green and civic space system. Similarly, stakeholders mentioned park precedent studies from the Midwest and more conservative markets instead of larger cities in nationally or internationally. The stakeholders demonstrated slow understanding of the project, pragmatism and interest in implementation (Stockman, personal communication, February 29, 2012). The short-term "strategy" focus and mentioned types of park precedents reflects the practical values of our stakeholders and further highlights the need for KCDC to remain focused on long-term objectives within planning processes. To offer guidance, university professors refocused the perspective on the planning process with questions regarding the "policy" and "vision" planning phases. An understanding how organizations and stakeholders perceived the first meeting of the project demonstrates how KCDC and project stakeholders view the 2011-2012 project.

The Public Interest

With the term "public interest", there is a need to precisely define what it is and how to maintain it throughout the planning process. It could be characterized as the "opposite of organized special interests" but Hopkins (2001) believes the public interest can be more fully understood on a situational basis than through the definition of the term (Hopkins, 2001, 148). Since the public interest deals with collective goods that have non-rival consumption and infeasible exclusion, representing the unrepresented or underrepresented in park and civic space could be within the public interest (Hopkins 2001). For public space, there is a lack of competition for space and excluding populations from using it. The 2011-2012 KCDC project provides a situational basis to determine the public interest.

Within the planning process, two primary stakeholders represent the public interest. Linda Allen and Guy Merola are voices for the public interest since they raise issues above themselves for those not present at the table. Linda represents the interests of Westside families by discussing parenting,

childhood obesity, crime, and how to make public spaces for everybody, residents, tourists, and homeless. Guy represents the interests of Columbus Park families by discussing the use of Columbus Square Park by outsiders, the community upkeep of the park vegetation, the cultural diversity, and the need for more balanced investment for family-oriented neighborhoods within downtown Kansas City. Overall, a stakeholder clearly represents the public interest when they express a targeted opinion or viewpoint regarding their neighborhood.

When determining the public interest, other stakeholder interests are less clear. Many tend to cite economic development as a reason for improving public space. There is less of an understanding of who would directly benefit, what the strategy achieves, and if it meets the wants or needs of the local residents of the neighborhood. Many discuss how a public space would benefit their private interests without discussing how it alleviates problems. With private interest stakeholders, the planning process is an "arena" to fight for their interests instead of the interests of those unable to represent themselves (Innes & Booher, 2010). While the concept public space is considered a collective good, there needs to be a demand from the public interest instead of creating an endless supply as Kansas City has previously shown in the recreation facility and open-space system periods (Cranz, 1982). Jacobs (1961) warns about creating a back-supply of open space and how quantity degrades quality. Overall, private interests should be checked by the public interest to guide reinvestment in public space.

With the term "public interest", planners can interpret it to mean "objective interests" with the planner as the expert and the community as the servant. This dangerous interpretation overlooks the purpose of planning and the invaluable local knowledge from the community (Innes & Booher, 2010). By assuming the expert has all the answers to the questions, planners dismiss the opportunity for plans to represent the public interest. Unfortunately, plans only create commitment and cannot solve the dilemma of collective goods (Hopkins, 2001). On the other hand, the private interest is primarily concerned with the "economic vitality of the city" by seeking to "enhance the value of their fixed assets by attracting mobile capital to the city" (Hopkins, 2001, 123). Since both public and private interests are beneficial, planners must be cognizant of the public interest when providing professional guidance within the planning process.

Within the 2011-2012 KCDC project, the public interest from Westside and Columbus Park provides targeted strategies to improve their community. Safety, obesity, and poorly-maintained public space are the primary concerns from the two district representatives. On the other hand, the private interests from developers, businesses, and individuals provide blanketed strategies such as economic

development. The Beardsley / 3rd Street Corridor park design proposal serves the public interest along Beardsley Road as an overlooked area of Kansas City with no residences along the road and the public interest from Westside to improve the public space. The planning process is about understanding is affected by planning decisions. Within the planning process, the role of the planner is to identify and represent the public interest. At the core of all plans, a strategy for coordination and collaboration between decision-makers regarding the public interest is as important as changing policy.

Equity Dilemmas: Funding, Prioritization, and the Definition of Public Space

As an academic institution, KCDC has the opportunity to shape the discussion about equity issues by keeping stakeholders notified on what was said, where the process is at, and serving as a moderator to shape public dialogue (Innes & Booher, 2010). For KCDC to lead in this process framework, the perception of urban design studio must be changed from the future personal wants of young, creative individuals to a more objective, academic examination in the public interest to create lasting places for future generations. KCDC could improve its leadership within the community to shape the dialogue about current equity issues. Our narrow stakeholder representation from the Downtown Loop, Crossroads, Main Street/Union Hill, Beacon Hill, and Westside districts and molded the vision to the middle of the Greater Downtown Area of Kansas City. By focusing primarily on the central districts, the studio misses an opportunity to help the disinvested areas of Kansas City on the east and west side. While reinvestment begins to occur in districts around Kansas City, planners must maintain a concern for gentrification and the unrepresented interests of future generations and the voiceless.

Different from Kessler's time, planners must be held responsible for actions leading to population displacement. In 1893, Kessler's attempt to provide more open space for the working class as well as the middle- and upper-classes resulted in the removal of shantytowns as a necessary component of creating the first parks and boulevards system for Kansas City (Wilson, 1964). Whether successful or not, the intent was to expanding the accessibility and use of the space for the poor and working class. The 1893 plan involved the removal of shantytowns and there are parallels to how the homeless population was treated then and now. Many were living within the proposed parks and boulevard system and now, many live within the existing parks and boulevard system. In recent events, an assault in Mulkey Square Park drew attention to the amount of trash illegally dumped within the park. When the trash was seen, so were the encampments themselves which shed light on the homeless living there. After a threat to "arrest for trespassing, building fires and accumulating piles of trash on city property"

from the Kansas City Police Department, the homeless population was asked to vacate the public space (Hendricks, 2012). With no specific implementation plan for Mulkey Square Park, removing today's shantytowns is not a necessary component for expanding the accessibility and use of the space itself. The removal and exclusion of people from a collective good such as the parks and boulevards system is a contentious topic. As spaces need to maintain the image of Kessler's parks and boulevards system and the City of Kansas City, Missouri, planners should consider the increasing competition to privatize public space and displace people.

Today, it is worth reflecting on what public space means to Kansas City, Missouri. Regardless of the intent of the actions taken, the removal of the homeless population presents a dilemma of selective enforcement when others are allowed to encamp in parks for an extended period of time. Without a permit, the Occupy Wall Street movement in Penn Valley Park was allowed to stay while the four-year-old homeless encampments were asked to leave after an isolated incident (Hendricks, 2012). In Kessler's time, similar concerns were raised about parks and were used as the basis for the creation of parkland (Wilson, 1964). While departmental prioritization of resources is difficult to politically and financially manage, it is important to maintain the definition of public space and the public interest to provide a benefit everyone.

Private Funds for the Public Interest: CIDs and PPPs

Public spaces can be funded by private sources while maintaining the public interest. Since Kansas City, Missouri has a largest geographic footprint, city funding is spread too thin to adequately fund public spaces and rarely is downtown Kansas City prioritized. Instead of a city-wide initiative, the tax-adverse environment has spurred the creation of CIDs to target funding for streetscape and security improvements within a narrow geographic area (DeBauche, personal communication, February 29, 2012). Instead of downtown residents demanding more quality open space through city-wide taxes, the Downtown Council applies for PIAC funds on behalf of the public (DeBauche, personal communication, February 29, 2012). The Downtown Council, as a private sector interest group, prioritizes downtown by using membership fees to promote projects in the interest of Kansas City land owners (Stockman, personal communication, February 29, 2012). The fee-based financial support of organizations and districts has increased targeted funding for public space.

Similarly, CIDs, such as Main Cor CID can drastically change the perception of area through strategic investing in pedestrian mobility and accessibility improvements. Establishing CIDs allows for a

community to competitively apply, prioritize, and manage funding (DeBauche, personal communication, February 29, 2012). These types of incentive districts are used to stabilize neighborhoods (Long, personal communication, March 12, 2012). Today, there is a need for PPPs since the funding of Kansas City Parks and Recreation has limited their maintenance purview to mowing grass and trimming trees (Stockman, personal communication, February 29, 2012). Private interest groups are capable of lobbing for public funds such as the DTC Greenspace Committee and Main Cor CID (Stockman, personal communication, February 29, 2012). While public funding constraints have increased the need for CIDs and PPPs, it has also increased the need for KCDC and the collaboration across multiple organizations and departments.

In budget constrained times, there is an on-going need from the City of Kansas City, Missouri for shovel-ready projects such as the 2011-2012 KCDC project. Since many plans are created and shelved until funding is available, Kansas City Parks and Recreation focuses on realistic and implementable master plans (Lossing, personal communication, February 22, 2012). In today's economic and political environment as shown through the American Recovery and Reinvestment Act of 2009, there is constant pressure for shovel-ready plans as those are more likely to receive funding (Lossing, personal communication, February 22, 2012). At the end of the contract, Kansas City Parks and Recreation would like a shovel-ready project for a professional design firm to implement when funding is available. Unfortunately, the shovel-ready projects tend to compete with the interests of other departments within the city.

Interdepartmental competition within the city damages the ability for Kansas City Parks and Recreation to obtain funding from the general public funds or coordinate funding between departments. As budgets tighten for all public departments within the city, Kansas City Parks and Recreation competes for public resources against other departments to finance park maintenance and labor costs. Similar to other cities, Kansas City "sell[s] bonds and repay[s] the money in the form of regular debt-service payments [to bond holders]" by competing against other departments for funding (Garvin, 2002, 67). As low priorities compared to other city departments, "park systems… are starved for funds and continue to deteriorate because they have a great difficulty competing for operating funds" and tend to be financed by external sources (Garvin, 2002, 67). A dedicated tax revenue source, like the cities of Minneapolis and Boulder, could create more investing certainty for bond holders (Garvin, 2002). Unfortunately, it is not unlikely for five city departments of the City of Kansas City, Missouri to submit separate requests for funding to the Missouri Department of Transportation with Kansas City Parks and

Recreation at the lowest funding priority compared to other departments (Lossing, personal communication, February 22, 2012). Internal collaboration, instead of competition, could improve public funding allocation between departments to achieve similar goals. Without internal collaboration, external collaboration between organizations and businesses stagnate. Overall, improving the coordination between departments and adding a dedicated funding source could provide opportunities to improve funding for Kansas City Parks and Recreation. While competition for funding between departments remains problematic, there is a need to improve the funding and management of Kessler's 1893 system and today's parks system.

Financial stability is an on-going dilemma for parks and recreation departments. In Kansas City, with the public funding and park use waning, the primary focus for Kansas City Parks and Recreation should be on maintaining and improving public space while strategically adding space (Garvin, 2000). While budgets are arguably tighter each year, parks departments can justify new parks for two reasons: lower land acquisition costs and increased surrounding property taxes (Garvin, 2002). Due to the cost of inflation every year, investing public money today is cheaper than waiting to invest in the future (Garvin, 2002). Park departments "should be seeking and exploiting [opportunities to buy cheap land]… to enhance the public realm" similar to how private developers operate (Garvin, 2000, 38). Resources by public agencies should be "better administered, repaired, rehabilitated, retrofitted, and repositioned" (Garvin, 2000, 32). Various programs and partnerships such as the Parks Inspection Programs, Partnerships for Parks, Business Improvement Districts, SF Pavement to Parks Program, and NYC Green Street Program are ways to monitor parks and also find private funding (Garvin, 2000). By understanding the available public funds and private interests in Kansas City, PPPs can be negotiated.

PPPs offer an opportunity for Kansas City Parks and Recreation to find cost effective ways to maintain and improve the open-space system in Downtown Kansas City. In the past, Kansas City Parks and Recreation has negotiated PPPs with Children's Mercy for Hospital Hill Park and Ronald McDonald House for Longfellow Park (Lossing, personal communication, February 22, 2012). The present success of the PPP between Kansas City Parks and Recreation and MainCor CID to negotiate funding for Penn Valley Park improvements shows how PPPs can improve public space. The MainCor CID in Midtown, through Diane Burnette, a Friend of the Penn Valley Conservancy and the Executive Director, negotiated funding with Kansas City Parks and Recreation to help implement the previously shelved Master Plan for Penn Valley Park (Lossing, personal communication, February 22, 2012). The

public/private partnership between Kansas City Parks and Recreation and the MainCor CID allowed for a private organization to help fund a public interest project.

Main Conclusions

The 2011-2012 KCDC project brings the public together to discuss the past and present state of public space within Downtown Kansas City. As an academic urban design studio, KCDC provides a service learning opportunity for graduate students to work together with stakeholders from the DTC Greenspace Committee and Kansas City Parks and Recreation to revitalize Kessler's 1893 system and today's parks system. By following the 2011-2012 KCDC project, through stakeholder observation, participation, and professional interviews, it is important to know when to plan, how to plan, as well as how to address broad ethical dilemmas of funding, project prioritization, gentrification, and the definition of public space. Most importantly, planners should understand how to identify the public interest since public spaces need to ultimately serve present and future generations. The lack of public funds due to the overabundance of land and interdepartmental competition has created a need for targeted private funding for Downtown Kansas City. By establishing CIDs and PPPs, both the private and public interests can be met. Along with internal competition for funding, there is a need for pragmatic, implementable, shovel-ready projects, like 2011-2012 KCDC project to demonstrate a need for funding. The scarce public funding strengthens the role of KCDC to provide services to assist in the future development and implementation by professional design firms within Downtown Kansas City. To improve the quality of public space, reinvestment strategies and programs offer opportunities to fund maintenance and labor costs.

Chapter 4 - Improving the Active Use of Public Space

To improve the active use of the public realm, market demand, location, design, and financing factors are components of successful public spaces (Garvin, 2002). For public space to contribute to active use, the design and context of public space needs to address pedestrian mobility, accessibility, and aesthetics. A pedestrian environment easy and enjoyable to pass through with supporting amenities improves the likelihood of pedestrian use. To measure pedestrian mobility and accessibility, a walkability model, StreetSmart™. Apart from measuring the integration of the design and context of public space, the model displays how the context addresses the pedestrian and where money is being invested. In a corridor strategy like along Beardsley / 3rd Street, the model provides a way to prioritize investment by identifying nodes and circulation spaces for areas that receive high and low StreetSmart ™ scores. By improving the active use of public space through the design and context, public space can contribute to place-making.

Successful Public Spaces Encourage Place-Making

Market demand, location, design, and financing factors contribute to successful public spaces (Garvin, 2002). As discussed in Chapter 3, private investment and financing shapes the design and maintenance of public spaces. While public space is a collective good, the context and placement of public spaces remains heavily reliant upon private market demands. The la

Since market demand keeps cities in constant flux, a successful public space must be acquired and managed as a market-competitive, private investment (Garvin, 2002). The thriftily bought and managed 1893 parks and boulevards system were and continue to be accommodating to the present property tax base (Garvin, 2002). A lack of market analysis for public spaces in Kansas City has created blight and vacancy-prone neighborhoods (Garvin, 2000). As the present competition for leisure time increases and public spending declines, there is a need to examine how the market shapes people's residential selection. Since "any attempt to expand or enhance the public realm will fail if it is not responsive to market demand", Kansas City needs to adjust their strategy (Garvin, 2000, 38). Through an understanding of the market forces that shape people's residential selection, public spaces imbedded a mixed-use context in Downtown Kansas City can to contribute to the active use of public space. By examining the market, public space can serve to stabilize an existing market and change the land use

patterns for new markets (Garvin, 2002). As a stabilizing and enhancing market force, the proper design of the boulevards, the wider parkways, such as Ward Parkway, empowered and encouraged the creation of informal PPPs and community stakeholders that value their neighborhood (Garvin, 2002). To change land use patterns, public spaces for pedestrians can catalyze private investment by "attract[ing] people who will spill over into those areas" with an understanding of the "symbiotic relationship between park and retailing" (Garvin, 2002, 67). By accounting for spillover effects as the result of pedestrian activity, the mobility, accessibility, and aesthetics of the public space and context should to be market competitive. A market analysis of Kessler's parks and boulevards should be conducted to maximize the potential of the present and future of public space in Downtown Kansas City. Public spaces with improved mobility through compact development and improved accessibility through amenity diversity can create vibrant and unique places. To create walkable places in Kansas City, park and city planning must shift from a historically automobile-scale to a pedestrian-scale open-space system. Overall, individual public spaces must generate revenue by addressing pedestrian mobility, accessibility, and aesthetics.

Intertwined with the market demand, the location of the public space is another important component of successful public spaces. As a "creature of its surroundings and of the way its surroundings generate mutual support from diverse uses", public spaces are highly reliant on the surrounding land uses (Jacobs, 1961, 128). While the context of public space can foster active use, the design of public space has been used in "altering land use patterns in surrounding locations" (Garvin, 2002, 53). To attract an active pedestrian user, the design and context of the public space should the pedestrian accessibility to a diversity of amenities. Adjacent land uses, such as residential and commercial support pedestrian amenities such grocery stores, coffee shops, and restaurants. In Kansas City, there is a lack of supporting land uses with amenities and pedestrian mobility as limited by the built environment to leverage economic support for places. The placement of the 1893 parks and boulevards within the Greater Downtown Area of Kansas City were near residential and industrial land uses, instead of commercial land uses. In the following quote, The Project for Public Spaces describes public spaces as plagued with singular uses for a singular age and demographic.

> "Many of today's urban parks provide space for few activities other than traditional forms of recreation. Neither do they make much effort to attract people such as seniors or children, or people who are just looking for a good place to sit or walk on a daily basis. Sometimes, they

> don't even include sidewalks or places of shade – or places where one might buy a sandwich or cup of coffee. The danger here is that when there are too few reasons for people to go to parks, fewer people use them, and they cease to be valued" (Kent & Madden, 2006, 71-72).

Successful places accommodate pedestrian mobility through amenities, aesthetics, and accessibility. As demonstrated in the quote above, there should be multiple reasons to go to public spaces. To determine whether a public space successfully contributes to a place, the Project for Public Spaces evaluates public space based upon four criteria: (1) activity and use, (2) accessibility, (3) comfort and image, and (4) sociability (Kent & Madden, 2006, 72). The "design and operation is responsive to user demand" (Garvin, 2000, 46). The design and operation should be inclusive to the surrounding local residents. Successful public spaces accommodate multiple users and uses by providing a diverse mixture of pedestrian amenities. Strategies to establish and improve pedestrian accessibility in public space include day-care facilities, community gardens, restaurants, museums, and other attractions (Cranz, 1982). Supporting amenities should be provided to promote the active and passive use of public space.

Along with providing amenities, there should be "clear understanding about what parks can and should do for cities and their populations" (Cranz, 1982, 249). Successful public spaces "belong to their communities" and "work for their communities – as economic incubators, as environmental centers, as places of social interaction" (Kent & Madden, 2006, 73). Overall, people enjoy being where other people are. Pedestrian aesthetics can influence the pedestrian friendliness and memory of the space (Kent & Madden, 2006). By understanding how people inhabit and use spaces through the design and context of the public spaces encourages the further use of the space.

Historically, Kansas City through Kessler's 1893 system encouraged low-density development. The placement of the highway system separated Kansas City into districts and created unfriendly pedestrian environments. The location of Kessler's three 1893 parks near industrial areas away from downtown Kansas City on the high elevations made it difficult to integrate into the context. Planners and designers must coordinate with communities to provide localized solutions that reflect regional, city, and neighborhood scales. Overall, public spaces retain their importance by adapting from their original designed passive use to the present needs of active pedestrian use. Along with location, consistent financing enables public space success as discussed in Chapter 3. While market, location, design, and financing ingredients create successful public spaces (Garvin, 2002), a walkability model can assess how successful public spaces contribute to successful places.

Walkability Measures Pedestrian Mobility and Accessibility

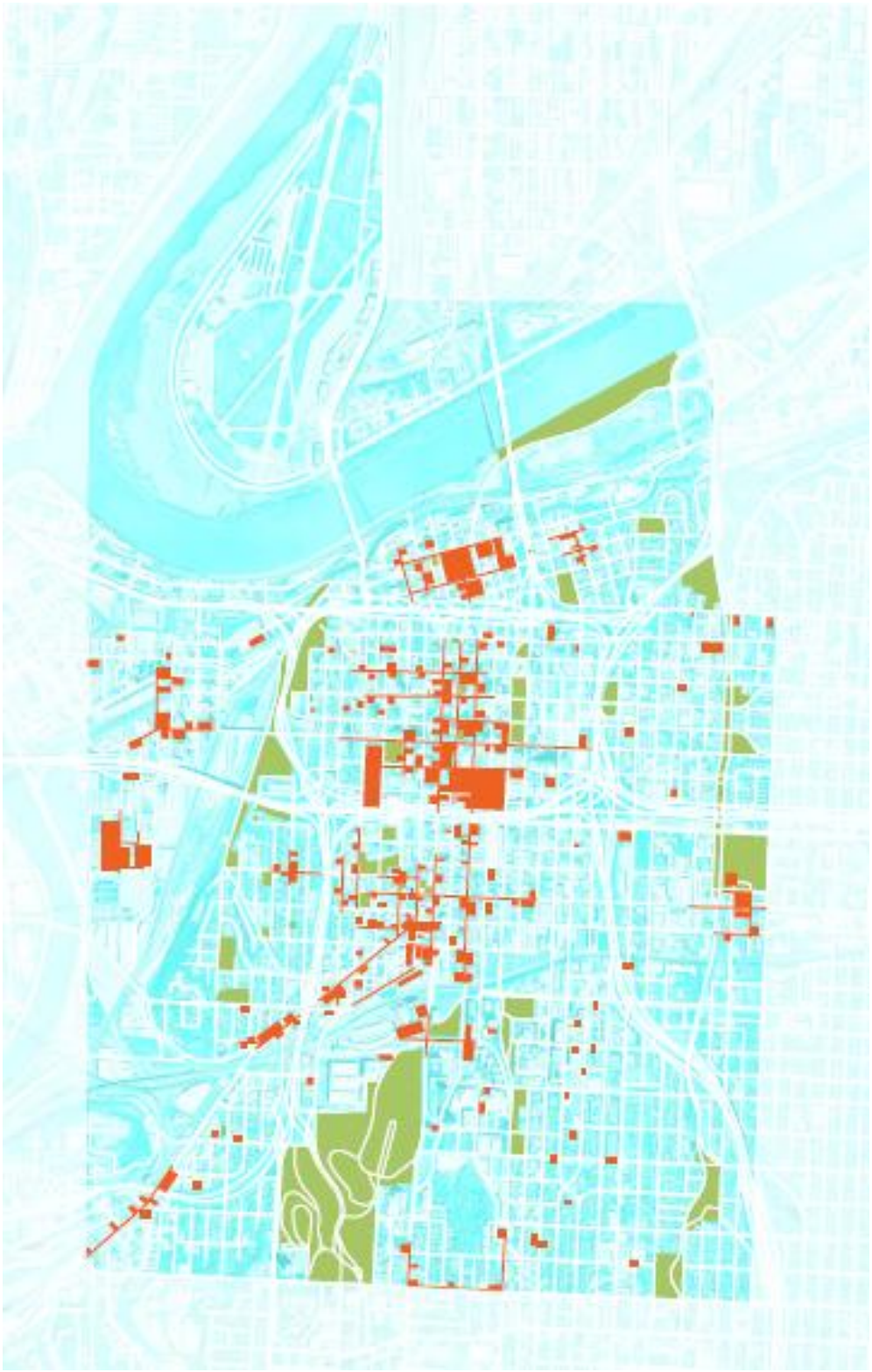
Walkability is one component of a place-making strategy that evaluates public spaces based on pedestrian mobility, accessibility, and aesthetics. Instead of small walkable districts by themselves or pedestrian islands, walkability must be comprehensively addressed from a land use and transportation focus to address pedestrian mobility and accessibility considerations between districts (Cervero & Kockelman, 1997). Many areas in Kansas City are pedestrian islands but there is a lack of comprehensive concern for pedestrian mobility, accessibility, and aesthetics. To contribute to place-making, walkable areas within cities must be connected to one another and scaled between regional, city, and neighborhood form. Of the two types of walking trips, recreation and transportation, this report focuses on walking for transportation to reactivate public spaces.

As destination-oriented mode of travel, walking for transportation addresses pedestrian mobility and accessibility. An active use or walking for transportation emphasis assumes the pedestrians will utilize the quickest route to restaurants, grocery stores, cafés, and other amenities. The measurable features of the built environment correlated to walking for transport are increased residential density (Frank et al., 2005; Frank et al., 2006; Leslie et al., 2007; Cerin et al., 2007), intersection density (Frank et al., 2005; Frank et al., 2006; Moudon et al., 2006; Lee & Moudon, 2006b), land use mix (Frank et al., 2005; Frank et al., 2006; Leslie et al., 2007; Cerin et al., 2007), and types of amenities (Moudon et al., 2006; Lee & Moudon, 2006a). The correlates of walking for transportation show how public space should be located and integrated into a person's daily routine to allow for active use. A focus on walking for transportation attempts to modify the cultural and literature bias towards the passive, recreational use of public space. Overall, walking for transportation has been overlooked within public spaces in Kansas City and could provide a solid argument for changes to encourage place-making.

Public space can provide supporting amenities that support walking for transportation. Among planners and designers, public space is generally believed to enhance the quality of city life. The poor use and condition of green and civic spaces today provides evidence to re-examine the preconceptions surrounding public spaces to improve the use of these spaces. The assessment of the design and context of public spaces is necessary to recommend programmatic changes to the public space, improved diversity of amenities adjacent to the public space. In Figure 4.1, a map of the walkable commercial amenities shows a concentration within River Market, Downtown Loop, and Crossroads, away from many of the existing parks. To contribute to place-making, ROW, vacant lots, and parking lots provide an opportunity to support the design and context of public space. Bringing public space closer to

residential and commercial activity or vice versa recognizes the spillover effects that contribute to successful public spaces (Garvin, 2002). Improved pedestrian aesthetics can improve the integration of the design and context of public spaces by shifting the transportation mode choice from automobile to pedestrian (Leslie et al., 2005). Overall, the walkable design and context of the public space informs park programming to accommodate pedestrian amenities. Instead of designing and planning for only the passive uses of public space for recreation and tourism, providing a pedestrian amenity and surrounded by pedestrian accessible amenities could increase the active use of public space by utilitarian walkers.

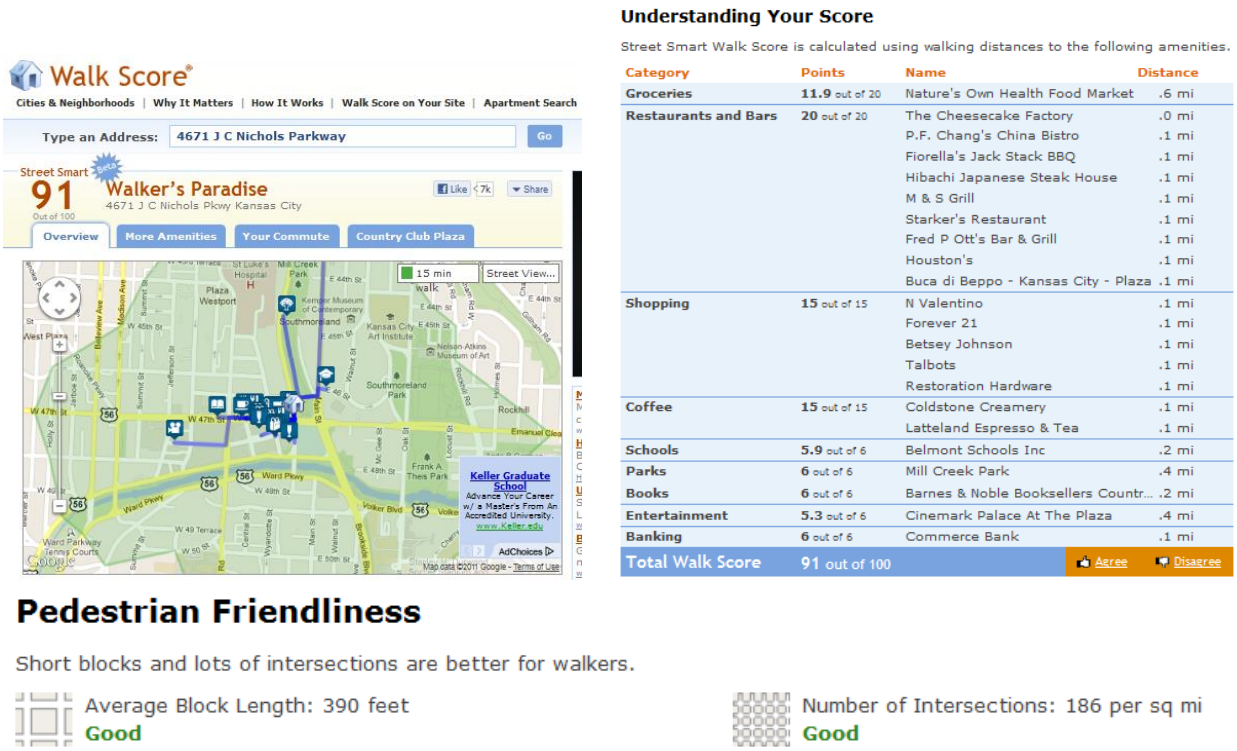
Figure 4.1: Walkable Commercial Amenities Compared to Parks (Kubas, 2011b)



The figure shows the disconnect between commerical activity and parks.

To assess the relationship between the design and context of public spaces, StreetScore™ measures the walking distance and access from a fixed point to the surrounding mix of amenities using the most efficient walking route along the street network. StreetSmart™ is a new route or network-based model created by WalkScore.com, publicly viewable and transparent dataset steered by the research of Dr. L. Frank, a professor at the University of British Columbia and funded by the Robert Wood Foundation (WalkScore, 2011a). By typing in an address, a StreetSmart™ score is assigned from 0-100 to a location, with 100 being the highest as shown (WalkScore, 2011b). Measuring the quickest route to amenities from home, the model applies weights to the scores based upon the type and proximity of the amenity. The StreetSmart™ walkability model assumes amenities can encourage everyday walking trips (WalkScore, 2011b). In coordination with J.C. Nichols and George Kessler, the proximity of Mill Creek Park to the Country Club Plaza provides the ideal example of addressing the design and context of the public space for pedestrian mobility and accessibility as shown in Figure 4.2.

Figure 4.2: StreetSmart™ Score at Mill Creek Park, Country Club Plaza (WalkScore, 2011a)



The figure above shows the symbiotic relationship between commerical activity and park use.

By using the distance to pedestrian amenity groups to measure pedestrian accessibility, the walkability model assigns higher StreetSmart™ scores to areas with a diversity of amenities. Through the walkability model, mixed residential and commercial uses are encouraged. StreetScore™ amenities, like Jacobs' "primary uses", "bring people to a specific place because they are anchorages [within a community]", such as grocery stores, restaurants, shopping, coffee, banks, parks, schools, books, and entertainment (Jacobs, 1961, 209). Based upon the proximity of and access to a specific mix of amenities that attract people, areas receive higher StreetScore™ scores. The diversity of amenities is important because "if we look at the parts of the cities most literally attractive – i.e., those that literally attract people in the flesh – we find that these fortunate localities are seldom in the zones immediately adjoining massive single uses" (Jacobs, 1961, 338). A successful public space has diverse users, events, and an individual identity. Overall, pedestrian mobility and accessibility contributes to the success of public spaces. From examining the precedent study parks and civic spaces examined by KCDC as shown in Appendix A, fifteen of the twenty successful parks and civic spaces received StreetSmart™ scores higher than 85 (WalkScore, 2011a). "The more successfully a city mingles everyday diversity of uses and users in its everyday streets, the more successfully, casually (and economically) its people thereby enliven and support well-located parks that can thus give back grace and delight to their neighborhoods instead of vacuity" (Jacobs, 1961, 145). A focus on walking for transport targets active pedestrian users travelling between home and amenities to improve place-making.

Along with pedestrian accessibility measures, higher intersection-density and lower average block length improves pedestrian mobility to public spaces by decreasing automobile speeds. By decreasing automobile speeds, both improve the pedestrian friendliness of the environment by addressing pedestrian mobility and accessibility. Short blocks are safer for pedestrians and provide a psychological advantage of walking more than long blocks. Higher intersection densities allow for improved pedestrian mobility at street crossings. The model applies penalties to a low density of intersections per square mile and high average block lengths to provide quantitative evidence for surrounding environments inaccessible to pedestrians. By assuming all walking is to destinations using the sidewalks along road network, the StreetSmart™ score takes into account a barrier such as a body of water and physical design that encourages pedestrian activity such as intersection-density and average block length (WalkScore, 2011b). The detailed data inputs (Table A.3) and the pedestrian amenity weights (Table A.4) used in the StreetSmart™ model are detailed in Appendix A. Unfortunately, StreetSmart™ lacks the ability to quantify street design, street-level aesthetics, and/or topography

(WalkScore, 2011b). Overall, StreetScore™ walkability model focuses on the design and context of public spaces to address pedestrian mobility and accessibility.

The StreetSmart™ walkability model uses the theoretical construct of the New Urbanism planning movement to improve pedestrian mobility and accessibility. By shortening the distance to walkable amenities and by measuring two built environment factors that lower automobile speeds, walkability measures the design and context of public space to create successful places. The StreetSmart™ walkability model identifies the fragmentation between the design and context of the public space. In doing so, the gaps in pedestrian mobility and accessibility short-term and long-term solutions to improve the active use of public space. Parks, vacant lots, parking lots, and rights-of-way are "volatile spaces" capable of short-term reprogramming to encourage place-making (Jacobs, 1961, 116). In underinvested areas where a less diverse mixture of amenities exist, utilizing cheap, inner-city vacant land could support walkability. Available parkland could be reprogrammed for urban agriculture or a farmer's market where an adjacent grocery store is missing. Where public spaces exist in unfriendly pedestrian areas, the average block length by feet and number of intersections per square mile are long-term infrastructure strategies to improve pedestrian mobility and accessibility. By using the StreetSmart™ walkability model, pedestrian mobility and accessibility gaps are revealed at the GDAP and Beardsley / 3rd Street Corridor scale.

Introduction to the GDAP StreetSmart™ Case Study

The StreetSmart™ walkability model measures the pedestrian mobility and accessibility in Downtown Kansas City, Missouri within the GDAP boundary. In Figure 4.3, a preliminary case study provides the StreetSmart™ score of locations on a 500-foot grid. After gathering addresses from Google Maps and placing the scores into a spreadsheet, the addresses were geocoded and matched to the street location using geographic information systems (GIS). For the preliminary study, there were problems geocoding points placed at 500-feet intervals along Beardsley and in the West Bottoms using the Address Locator through ArcGIS and addresses were unable to be correctly matched. The results from the preliminary case study shows the east and west side of Downtown Kansas City receive lower StreetSmart™ scores. The findings further support the hypothesized claim that traditionally disinvested areas of Kansas City are also less walkable. Thus, continual reinvestment leads to successful places. The model highlights the need for temporary uses for underutilized land to encourage walking where low StreetSmart™ scores are prevalent. The built environment heavily influences the active use.

Figure 4.3: StreetSmart™ Scores within the GDAP Area (Seaman, 2012)

The figure shows StreetSmart™ scores show mobility and money differences.

Preliminary GDAP Study Results of StreetSmart™ Scores

StreetSmart™ Measures Mobility

The StreetSmart™ model assesses pedestrian mobility by examining intersections and city blocks. Within and surrounding Penn Valley Park in the Main/Union Hill district, the few intersections and a high average block length caused by the park disrupts pedestrian mobility as shown in Figure 4.3 (WalkScore, 2011a). With the context containing too few amenities within walking distance to activate park use and accommodate different users, the only opportunity for food or drink at The National World War I Museum at Penn Valley Park. Similarly, Southwest Boulevard in the Westside district receives low StreetSmart™ scores for poor pedestrian mobility with few intersections and high average block lengths given the context of industrial land use (WalkScore, 2011a). While low StreetSmart™ scores identify barriers to pedestrian mobility, high StreetSmart™ scores identify where investment and reinvestment is happening within the city.

StreetSmart™ Measures Money

As seen in Figure 4.3, areas with the least amount of investment receive the lowest StreetSmart™ scores. On the East side of Kansas City, the context of The Parade has few amenities to provide pedestrian accessibility with more disinvestment is apparent from the red and orange (WalkScore, 2011a). Poor StreetSmart™ scores are not just found traditionally disinvested areas, but also in places receiving reinvestment. All four districts connected to the Beardsley / 3rd Street corridor are beginning to receive investment, the West Pennway Streetscape Design in Westside by el dorado incorporated, the Rose Fellowship in West Bottoms by the Urban Land Institute, the Main Streetcar in River Market, and Guinotte Manor Phase III Redevelopment in Columbus Park. When reinvestment occurs in historically disinvested areas of the city, it is important to consider the implications and actions of how planning efforts will shape people's lives. While the Westside district is demographically diverse, the investment differences between the north and south should be understood and addressed.

With reinvestment opportunities, there is concern for gentrification. Along the Beardsley / 3rd Street Corridor, the northern portion of Westside is less suitable for pedestrians from east to west. The 17th Street and Summit commercial activity is starkly different from Southwest Boulevard and Summit commercial activity. Heading west to east in River Market, the pedestrian environment greatly improves as the StreetSmart™ scores begin from 54 to 77 (WalkScore, 2011a). As pedestrian amenities increase, pedestrian mobility increases within the River Market district. Due to River Market to the west,

Columbus Park is a primarily residential district with few commercial amenities and poor pedestrian mobility. Spill over reinvestment from River Market affected the StreetSmart™ scores in the west compared to the east. To understand the corridor, further analysis was conducted was to measure the walkability changes along the Beardsley / 3rd Street Corridor.

StreetSmart™ Case Study for the Beardsley / 3rd Street Corridor

The purpose of the StreetSmart™ model along the corridor is to focus investment at nodes, where pedestrian mobility and accessibility is highest. Along the corridor, StreetSmart™ scores divide areas into two categories: nodes and circulation spaces. The highest StreetSmart™ scores serve as nodes to develop further pedestrian mobility and accessibility strengths while other StreetSmart™ scores are circulation spaces with aesthetic and safety improvements through streetscape design. Using the StreetSmart™ model, points will be taken at intervals of 50 (ex. 1700, 1650, 1600 Beardsley Rd) along the Beardsley / 3rd Street Corridor park. For address estimations, I will utilize Google Maps and where Google Maps lacks address estimations or there are no addresses along the corridor, I will an adjacent street to the left or right to estimate an address number. With no addresses, numbers along Summit Street were used for Beardsley Road. After compiling all addresses along the corridor into a spreadsheet, I accessed StreetSmart™ report website on February 13, 2012 and ran the scores individually by placing the addresses into the search bar. Since the website is reliant on user feedback and still within the beta testing phase, it was essential to save the website as accessed. Upon receiving a score, the copy of the website as displayed on February 13th was saved to be capable of analyzing the StreetSmart™ scores based upon the date accessed.

Using the images saved from the websites themselves, I manually plotted points in ESRI's ArcGIS due to geocoding dilemmas with no addresses on Beardsley Road as aforementioned. Duplicate points were aggregated to address dilemmas with address number ranges in Google Maps. Lastly, the point data in ArcGIS was joined to the Excel spreadsheet. Along with measuring pedestrian mobility and accessibility, the aesthetics of park design as evaluated by KCDC, can assist in creating a comfortable pedestrian environment. Building on the StreetSmart™ analysis of pedestrian mobility and accessibility, the pedestrian aesthetics are addressed through a series of destinations designed by KCDC along the Beardsley / 3rd Street Corridor. As a long-term intervention strategy, the measure of pedestrian mobility provides guidance on increasing the number of intersections and lowering the average block length to foster successful place-making. Along the Beardsley / 3rd Street corridor, there are very few nearby

amenities between the West Bottoms and Westside districts. Further details on each StreetSmart™ score are contained within the Excel spreadsheet in Appendix A.

High StreetSmart™ Scores as Nodes

To augment pedestrian mobility and accessibility, areas receiving higher StreetSmart™ scores should be treated as assets as shown in Figure 4.4. Along the corridor, there are areas where StreetSmart™ scores are higher near intersections and amenities what could be referred to as nodes. While pedestrian mobility improvements are long-term infrastructure investments, each node should be targeted to increase pedestrian accessibility by strategically adding amenities.

Figure 4.4: StreetSmart™ Scores Along the Beardsley / 3rd Street Corridor (Seaman, 2012)

The figure shows StreetSmart™ scores to classify nodes and circulation spaces.

Along Beardsley Road, the average of each of the walkability categories along Beardsley Road, with exceptions to parks (5.49) and entertainment (3.39), are below fifty percent (WalkScore, 2011a). Due to poor pedestrian mobility and accessibility on Beardsley Road, amenities should be concentrated at 17th Street (64) and 12th Street (69) (WalkScore, 2011a). At 17th Street and Beardsley Road, KCDC proposes adding a learning landscape next to Primitivo Garcia Elementary School and Jarboe Park (West Terrace Park) to build on the surrounding context. A learning landscape would include in native plants and butterfly garden while incorporating the historic Kersey Coates Drive north of 17th Street and Beardsley Road. At the middle deck of the 12th Street Viaduct, KCDC proposes creating an event space, a destination along the corridor. While adding a pedestrian amenity, the stairs will also improve pedestrian mobility from the middle deck to the top of the 12th Street Viaduct by connecting the West Bottoms to the Downtown Loop across Beardsley Road.

In River Market, the numerous high StreetSmart™ scores from 75 to 82 indicate the entire district could be a multiple nodes, in need for pedestrian mobility and accessibility improvements (WalkScore, 2011a). City Market, with the highest StreetSmart™ score (82) should be further built as a node by enhancing pedestrian accessibility (WalkScore, 2011a). For City Market Park, KCDC proposes urban agriculture to complement the character of City Market. While not a specified pedestrian amenity needed from the StreetSmart™ analysis, urban agriculture provides an opportunity to encourage walking on 3rd Street. To improve accessibility, amenities should be added to the below average walkability categories, such as shopping (8.64), schools (.95), parks (3.59), books (4), and entertainment (3.14) (WalkScore, 2011a). While StreetSmart™ measures, such as the number of intersections and average block length, are long-term infrastructure investments to improve pedestrian mobility, the River Market district could improve the streetscape along 3rd Street to encourage infrastructure improvements towards more compact development.

Streetscape improvements help improve the quality of the pedestrian environment. Along 3rd Street / Northeast Trafficway, truck traffic presents a safety problem for pedestrians and cyclists. Designed aesthetics can prioritize and improve the pedestrian and cycling experience along the street. Since 3rd Street / Northeast Trafficway is the "Spirit of Kansas City" scenic byway to celebrate the founding of the town of Kansas, there is a need for design to preserve heritage. By adding scenic byways to boulevards and parkways in Kansas City, truck drivers could receive tickets from the Kansas City Police Department if caught taking them instead of the highway. Where public funds are not available to enforce actions, it is important for design to curb aesthetically and physically harm. Part of the

streetscape design is to provide traffic calming features to slow down traffic through road diets, curb extensions, bicycle lanes, added sidewalk width, street trees, among other pedestrian-scale features. KCDC proposes enhancing the streetscape to bring the streets back to the public by making it uncomfortable for trucks to cut through River Market. To meet the walkability and goals of the GDAP, the 17th Streetscape Plan, 20th Streetscape Plan, and future 18th Streetscape Plan seek to improve pedestrian friendliness by connecting activity centers (DeBauche, personal communication, February 29, 2012). Streetscape plans for arterial and collector streets may be a component to shifting public perception of the districts and accessibility between them such as along the Beardsley / 3rd Street Corridor.

In Columbus Park, there are higher StreetSmart™ scores starting at 71 and ending 19 (WalkScore, 2011a). The western portion of Columbus Park has average pedestrian accessibility with amenities but lacks pedestrian mobility. To add to the pedestrian accessibility, the below average walkability categories should be increased in shopping (4.04), coffee (8.7), schools (1.4), books (1.23), and entertainment (.46) should be addressed (WalkScore, 2011a). In Columbus Park, the highest StreetSmart™ score (72) along 3rd Street should be developed as a node at Highway 9 (WalkScore, 2011a). An underpass skate park for nearby residents would bring activity and entertainment to an underutilized between the River Market and Columbus Park districts. Adjacent to the skatepark, the bike kiosk and café at the intersection of Highway 9 and 3rd Street would address the needs of bicyclists using the route. A pit stop for bicyclists for a quick fix, food and drink, and/or rest would build on the existing bicycle infrastructure and culture. For cycling around the city, dedicated cycling lanes are being included in the various streetscape plans in downtown and BikeShare, sponsored by Blue Cross Blue Shield, will shape the city along with our corridor design (DeBauche, personal communication, February 29, 2012).

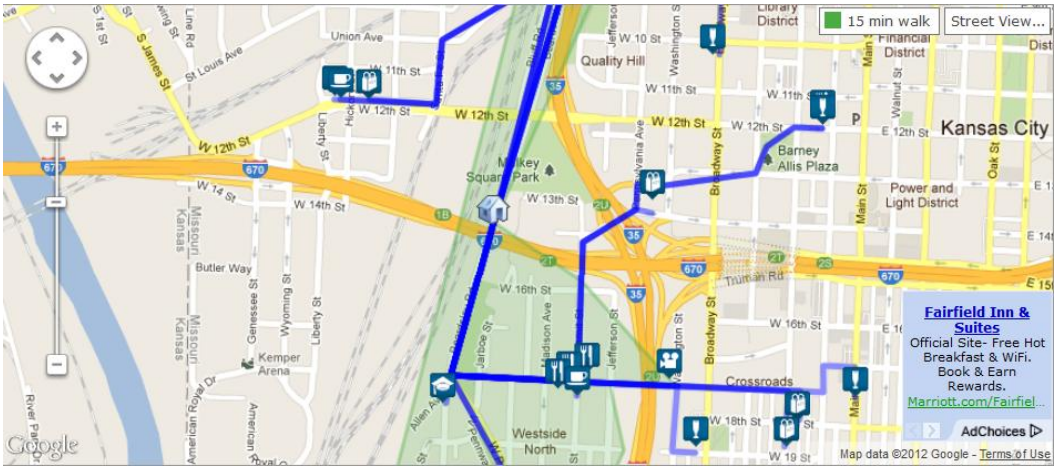
Along the corridor, there are long-term mobility investments, such as increasing the number of intersections and lowering the average block length, with the Guinotte Manor Phase III Development project under the Columbus Park Urban Renewal Plan by the Land Clearance for Redevelopment Authority of Kansas City, Missouri (LCRA). The building, parking, and streetscape design guidelines call for keeping the residential character at the intersection of 3rd and Charlotte. The Columbus Park Area Plan updated in 1999 plans to continue Gillis Street from 5th Street to 1st Street. Both plans will improve the pedestrian mobility through an increased number of intersections and a decreased average block length around 3rd Street.

Overall, high StreetSmart™ scores should be identified and improved for pedestrian accessibility as amenity assets along the corridor. For Beardsley Road, there are three nodes at 17th, 12th, and Riverbluff Park. River Market should improve the streetscape along the existing node at City Market while developing other future nodes at 3rd and Grand. In Columbus Park, the nodes on 3rd Street at Highway 9 and Charlotte Street should be further developed.

Low StreetSmart™ Scores as Circulation

The corridor approach to parks is about the circulation between nodes. For areas that lack high StreetSmart™ scores, the spaces between nodes should be enhanced for safety to improve pedestrian mobility. Areas receiving StreetSmart™ scores from 26 to 56 should be considered for circulation spaces (WalkScore, 2011a). While StreetSmart™ scores measure the number of intersections and average block length for long-term pedestrian mobility, StreetSmart™ scores can identify how to strategically invest in areas with poor pedestrian mobility and accessibility through small aesthetic improvements. At the location of 1350 Beardsley Road, shown in Figure 4.5, the lowest walkability categories at 1350 Beardsley Road are groceries, shopping, coffee, schools, books, entertainment, and banks as documented in Table 4.1. The poor pedestrian friendliness is a result of the high average block lengths and few intersections along Beardsley Road. To improve the safety through aesthetics, KCDC proposes adding a 12-foot pedestrian and cycling lane, a vegetation buffer, and other pedestrian amenities.

Figure 4.5: Location of 1350 Beardsley Road (WalkScore, 2011a)



The figure displays the point the StreetSmart™ score was taken from along Beardsley Road.

Table 4.1: StreetSmartTM score of Beardsley Rd at 1350 (WalkScore, 2011a)

Score	G	R&B	Shop	Coffee	Schools	Parks	Books	Entertain	Banks	Ped Friendly	Avg Blk Lngth	# of Intersects
33	1	8.9	1.5	5.6	5.3	5.6	2.9	2.2	0.3	-0.7	482	115

While parks are included in StreetScore^{TM}, a green and civic space with a low score could add a missing amenity, not found within the surrounding environment. Parks and civic spaces within areas with high StreetSmart^{TM} scores should transition from "generalized park", a park with natural features and little facilities, to a "specialized park", a specific amenity-oriented park (Jacobs, 1961). The full list of the points, subdivided into pedestrian mobility and accessibility scores are included in Appendix A. The parks data, drawn from Open Street Map, is not updated since many parks are not labeled and present a less accurate "walkability category" for the parks. While StreetSmart^{TM} is easy to use, implement, calculate, and update at any time, dual and/or misclassified business entries remain problematic. Other dilemmas with StreetSmart^{TM} scores occur with categorized, missing, or non-existent amenities. Overall, the StreetSmart^{TM} walkability model is a tool for planners to use to understand the pedestrian design and context of public spaces to create successful places.

City and Park Planning Unite Movements Through Walkability

The potential unification of the Open-Space System park planning period and The New Urbanism planning movement could improve the public space through walkability. Founded in 1997, The Congress of The New Urbanism (CNU) is non-profit organization "promoting walkable, mixed-use neighborhood development, sustainable communities and healthier living conditions" ("What is CNU?", 2011). Similarly, the Open-Space System period is described as having "fluidity at their perimeters" through the "park flow[ing] into city and city into park" (Cranz 1982, 138). The fluidity between the public space and context could be achieved through walkability. The Congress of The New Urbanism supports mobility and accessibility for all types of transportation modes. "Transit, pedestrian, and bicycle systems should maximize access and mobility throughout the region while reducing dependence upon the automobile" ("Charter of the New Urbanism", 2011). Public space designed for pedestrian mobility and accessibility can encourage place-making.

Both park and city planning movements believe public space plays a role in shaping the surrounding land uses. CNU believes "cities and towns should be shaped by physically defined and universally accessible spaces" ("Charter of the New Urbanism", 2011). Planning around public space

can address the public interest of the community, improve regional park design, and provide a collective good to all people. "Public gathering places require important sites to reinforce community identity and the culture of democracy" ("Charter of the New Urbanism", 2011). As previously discussed, the Open-Space System period intends to increase park programming diversity but lacks insight to sustain diversity provided by CNU. Mixed-use land uses improve the use and walkability of public space. "Concentrations of civic, institutional, and commercial activity should be embedded in neighborhoods and districts, not isolated in remote, single-use complexes" ("Charter of the New Urbanism", 2011). Uniting two movements through walkability could improve the active pedestrian use of public spaces to encourage place-making.

Main Conclusions

For the active use to occur, market demand, location, design, financing, and walkability must be considered in the design and context of public spaces. Presently, the historical singular land uses around public spaces separate supporting commercial land uses that promote walkability. A diversity of land uses would foster active pedestrian use through walking for transportation while also accommodating passive recreational use. Furthermore, there is a need to prioritize funding for pedestrian mobility over automobile mobility. Reinvestment strategies and programs in other cities have improved the pedestrian-scale environment. Where pedestrian mobility and accessibility is poor, streetscape design can catalyze and guide future development similar to Kessler's boulevards and parkways. Design can raise awareness of long-term infrastructure and policy dilemmas. Streetscape improvements designed can improve the pedestrian-friendliness of an area. Along the corridor, StreetSmart^{TM} analysis can prioritize where and how to spend public funds. For areas that receive high StreetSmart^{TM} scores by addressing pedestrian mobility and accessibility, should receive higher prioritization for public funds as nodes.

For the KCDC corridor group, the StreetSmart^{TM} analysis established the location of the nodes and circulation spaces along the Beardsley / 3rd Street Corridor. Established from the high StreetSmart^{TM} scores, the nodes are located at 17th and Beardsley, 12th Street Viaduct, the entirety of River Market along 3rd Street, City Market Park, Underpass Skatepark, and Bike Kiosk/Café. The circulation spaces with low StreetSmart^{TM} scores are along Beardsley Road and the streetscape design addresses pedestrian aesthetics to improve safety. By identifying mobility and money, the StreetSmart^{TM} analysis can prioritize funding for pedestrian improvements. Overall, the design and context of public spaces for active use can encourage place-making.

Conclusions & Recommendations

In 1893, George Kessler planned the City of Kansas City, Missouri through the parks and boulevards system. The system provided parks to each class, divided the city into zones, stabilized residential land values, and encouraged the decentralized growth of the city and metropolitan area of Kansas City, Missouri. Unfortunately, the legacy of Kessler's parks and boulevards system was not sustained as originally designed due to the prioritization of automobile mobility and accessibility. The design and context of both the parks and boulevards by Kessler did not account for pedestrian mobility, accessibility, or an active user as Fredrick Law Olmstead considered in his successful park design criteria. To revitalize Kessler's 1893 system and today's park system, KCDC partnered with Kansas City Parks and Recreation and the DTC Greenspace Committee to adapt park programming and provide new parks to meet today's demands by local residents. Overall, the 2011-2012 KCDC project through the vision and the three park design proposals address walkability, the public interest, stormwater management, and today's budget constraints.

Past, Present, and Future Coordination of Interests over Competition

Under the city planning movement, City Beautiful, business leaders established the Park and Boulevards Commission and later, the parks and boulevards system for four reasons: beauty, duty, real estate, and precedent (Rolley, forthcoming). Aesthetic and economic development concerns were paramount in stabilizing residential land values and growing the city. The natural beauty of Kessler's parks and boulevards system under the park planning period, Pleasure Ground, was necessary to encourage built beauty and investment. Both beautification priorities, built and natural, established Kessler's 1893 parks and boulevards system in Downtown Kansas City.

The open-space system seeks to revitalizes public space through programming diversity and walkability. The pedestrian design and context of public spaces would allow for the "park flow into the city and city into park" (Cranz, 1982, 138). The placement of public space within a mixed-use and compact environment would enable the active pedestrian use of the public space. The New Urbanism, today's city planning movement, seeks to create walkable places by influencing the form of the built environment. Similar to reform park programming, commercial use, such as pop-up shops, food trucks, and food carts, within or along the edges of public spaces could augment the active pedestrian use of the

public space. Overall, the shared collective interest in walkability from two separate planning movements could spur reinvestment in the Kessler's parks and boulevards system. By using the number of intersections and average block length to measure pedestrian mobility, the walkability model penalizes areas with a low number of intersections and high average block length.

Throughout history, PPPs have shaped the success of Kessler's parks and boulevards system. During the Good Roads movement, the informal public/public partnership of real estate developer, J.C. Nichols and landscape architect, George Kessler, helped establish the later successful parks, boulevards, and parkways. As the developer, Nichols knew the economics behind the residential and commercial market and Kessler, as the landscape architect, knew the technical and aesthetic skills to utilize the land to the fullest (Worley, 1989). By collaborating and coordinating their efforts, the parks and boulevards system stabilized land values and grew the city.

Today, the success of PPPs with Children's Mercy for Hospital Hill Park and the Ronald McDonald House for Longfellow Park allow for improved park design and maintenance. The most important partnership has been with the MainCor CID for providing funding for Penn Valley Park (Lossing, personal communication, February 22, 2012). Incentive districts and private organizations, such as the Downtown Council allow for funds to be targeted to a specific geographic area, instead of generalized public funds spread city-wide by taxes. Along with targeted private investment potential, fee-based incentive districts and organizations, improve the maintenance and design quality of the public realm. In the future, as public budgets continue to shrink, PPPs are vital to provide financial support for public services. PPPs offer an opportunity assist the city in the present overabundance of land and parkland. Increased private funding could improve regionalism in park design. In the past, Kessler preserved the natural landscape of Kansas City when designing the first pleasure ground parks. Today, a grassroots approach to park and civic space design "could introduce regional character into the line of park design options" (Cranz, 1982, 250). The KCDC design proposals address the need for PPPs to implement the three park concepts.

By coordinating between departments, organizations, and businesses, more could be accomplished than competing against interests. A coordination of efforts and funds between departments would bring together common interests and prioritize projects based on shared timing and values. As an example, the interdepartmental competition for federal transportation funding creates animosity between departments. Historic conflict of interests between the transportation system and the parks system must be overcome through collaboration.

Morphology of Kessler's Parks and Boulevards

Park planning in Kansas City Kessler began with the 1893 Report. The parks and boulevards system was established when city and park planning movements united for beauty to spur economic development. Kessler's 1893 parks were limited by the existing development of the city while 1893 boulevards shaped the future development of the city. Kessler's 1893 system became disinvested due to the surrounding single uses around the parland. The history of park design in the United States through Cranz (1982) shows how Kansas City parks are represented through the four periods: the pleasure ground, the reform park, the recreation facility, and the open-space system. Today, Kansas City has primarily automobile scale periods (i.e. the pleasure ground and recreation facility) rather than pedestrian scale periods (i.e. reform and open-space system). The fragmentation of Kessler's 1893 system and today's park system is partially attributed to the technological advances of the automobile.

As transportation corridors for the middle and upper classes, the first boulevards were established to stabilize residential land values and expand the city footprint during the City Beautiful movement. The lack of collaboration and coordination in establishing the first boulevards failed to stabilize residential land values in the long-term because they lacked the street width and center median needed to characterize a boulevard. Seeking preserve the natural beauty, the simplistic boulevard design criteria by George Kessler allowed for the eventual degradation of form for function as the technological advances of the automobile through the Good Roads movement to today. Higher speeds and increased volume degraded Kessler's aesthetically pleasing roadways into trafficways and highways. Unfortunately, boulevards assisted in the overabundance of land and parkland by enabling decentralized city and metropolitan growth. The success of the later boulevards and parkways stemmed from the informal public/private partnership between real estate developer, J.C. Nichols and landscape architect, George Kessler. Overall, boulevards were created to encourage urbanization.

As undevelopable land for the poor and working classes, first parks were established to provide recreation and relaxation areas as pleasure ground parks. Kessler preserved the natural topography of the Kansas City region under the Pleasure Ground park design ideal. By implementing scenic parks over usable public parks, the Kessler's 1893 parks remain unable to spur use. The location of the original parks today fail to address market demand, design, and financing factors to contribute to successful public spaces similar to the five part design criteria from Olmsted and Alexander Garvin: shape, dimension, topography, context, flexible program, and program arrangement (Garvin, 2002). Overall, parks were created after urbanization.

StreetSmart™ Analysis Assists Decision-Making

StreetSmart™ analysis can help planners and designers identify areas of disinvestment, prioritize projects, and provide an overall design strategy. The analysis shows four overall findings. First, pedestrian mobility and accessibility is heavily reliant on continuous investment for pedestrian accommodating places to provide amenities to walk to. Instead of only locating public spaces in residential areas, planners should seek to bring or further enhance public spaces adjacent to commercial areas. Second, areas receiving low StreetSmart™ scores, with poor pedestrian mobility and accessibility, will primarily be used for passive use. On Beardsley Road, pedestrian mobility through walking for transportation is unfavorable along the corridor due to the low number of intersections Third, areas receiving high StreetSmart™ scores should be developed as nodes. Building on the existing pedestrian mobility and accessibility promotes walkability. Lastly, StreetSmart™ analysis can pinpoint short-term and long-term improvements. Short-term amenities and long-term infrastructure strategies demonstrate how to address walkability at the neighborhood level. Updating the StreetSmart™ data sources would improve the accuracy and reliability of the scores. The StreetSmart™ walkability model can track and prioritize city development as well as monitor its resources over time.

Clarifying the Planning Process

In planning processes, planners need to maintain perspective on the specific component within the five components of plans. Each of the five components of plan making (agenda, policy, vision, design, and strategy) provides an understanding of what is supposed to be occurring and what where the process is headed (Hopkins, 2001). To avoid confusion about the planning process, planners need to layout the planning process at the beginning and remind stakeholders at each meeting there they are within the process. The unease and anxiety of stakeholders and organizations would be averted or dampened through upfront reminders. Furthermore, planners should keep notes regarding stakeholder input and feedback to send out to the group of stakeholders to review and remind them of the importance of their role in the planning process. Analyzing the roles of organizations and how the project began helps frame how each group interacts within each other within the process.

Identifying and Representing the Public Interest

The responsibility of the planner is to uphold the public interest and represent the voiceless. By representing a collective good, the public interest in public space has non-rival consumption and

infeasible exclusion (Hopkins, 2001). Specific stakeholders from Westside and Columbus Park represent the public interest by raising issues above themselves. Since planners uphold the public interest, planners need to retain sensitivity to gentrification, funding prioritization, and equity throughout the planning process. As reinvestment occurs within the districts along the Beardsley / 3rd Street Corridor, the planners must remain focused on the public interest and represent the interests of the underrepresented and voiceless future generations. The professional guidance of planners should be prioritized to the public interest over special private interests for economic development.

Private funds within the public interest can spur reinvestment in today's parks system. PPPs can coordinate efforts in budget-constrained times. The informal public/private partnership between real estate developer, J.C. Nichols and landscape architect, George Kessler assisted in the success of the later parks, boulevards, and parkways (Worley, 1989). Today's public/private partnership between businesses, such as Children's Mercy and the Ronald McDonald House, as well as CIDs, such as MainCor, offer private funding for public interest projects (Lossing, personal communication, February 22, 2012). Further collaboration between public and private sectors will become commonplace as public budgets continue to wane in the future. The intermixing of professional and personal contacts allow for departments, organizations, businesses, and universities to collaborate with and on pressing city issues.

Final Conclusions & Recommendations

By understanding the morphology of Kessler's 1893 parks and boulevards system, the 2011-2012 KCDC project has an opportunity to learn from the past and revitalize today's open-space system. The vision plan and three park design proposals intend to accent the regional character, provide temporary uses in between development cycles, and allow people to move through parks on their daily commute or at their own leisure. All three design proposals seek to address the public interest in walkability, parkland as a collective good, and tackle the depleting public funding for infrastructure and parkland through PPPs. To meet the GDAP goal of creating a more walkable downtown, StreetSmart™ analysis could inform decision-making for pedestrian mobility and accessibility by moving the conversation past the quarter-mile radius standard and to the specific amenities and built environment needed to encourage walkability. Focusing on pedestrian amenities and enhancing pedestrian mobility could position the Greater Downtown Area of Kansas City into a viable location to live and work for young professionals. As complex problems continue in the future, departments, professions, universities, businesses, and organizations will need to further collaborate on projects, provide expertise and

information, offer funding, and coordinate individual projects to address the financial, environmental, and market constraints. Today, KCDC provides a forum for the public interest to meet around a specific issue. KCDC should continue to mediate and distill the public interest among public and private sectors by providing students an opportunity to grapple with the pressing issues of professional practice.

References

About Parks & Recreation. (2011).*City of Kansas City, MO*. Government. Retrieved April 4, 2012, from http://www.kcmo.org/CKCMO/Depts/ParksandRecreation/AboutParksRecreation/index.htm

Belanger, B., Brody, J., & Hahn, H. (2011). *City Ecologies: LAR 646 Summer 2011*. Manhattan, Kansas: College of Architecture, Planning and Design, Kansas State University

Board of Park and Boulevard Commissioners of Kansas City, MO. (1893)."Report of the Board of Park and Boulevard Commissioners." Kansas City: Hudson-Kimberly Publishing Co.

Brown, J. (2011a). *Anchor Parks of Downtown Kansas City*, [Adobe Illustrator]. Accessed March 30, 2012.

Brown, J. (2011a). *Infill Parks of Downtown Kansas City*, [Adobe Illustrator]. Accessed March 30, 2012.

Center for City Park Excellence. (2011). *2011 City Park Facts* (p. 36). Washington, D.C.: The Trust for Public Land.

Cervero, R. & Kockelman, K. (1997). Travel demand and the 3Ds: Density, diversity, and design. *Transportation Research Part D: Transport and Environment 2(3),* 199-219. doi: 10.1016/S1361-9209(97)00009-6

Charter of the New Urbanism. (2011).*Congress for the New Urbanism*. Organization. Retrieved March 26, 2012, from http://www.cnu.org/charter

City of Kansas City, Missouri. (2010). *Greater Downtown Area Plan* (p. 119). Kansas City, Missouri.

Corbin, R. (2011). *1893 Kessler Parks and Roadways*, [Adobe Illustrator]. Accessed March 30, 2012

Cranz, G. (1982). *Politics of Park Design*. Cambridge, Massachusetts: The MIT Press.

DeBauche, J. (2012, February 29). Personal communication.

Downtown Council. (2009). DTC *Greenspace Committee Park Analysis* (p.135). Kansas City, Missouri.

Frank, L. D., Schmid, T. L., Sallis, J. F., Chapman, J., & Saelens, B. E. (2005). Linking objectively measured physical activity with objectively measured urban form: Findings from SMARTRAQ. *American Journal of Preventive Medicine, 28*(2), 117-125. doi:10.1016/j.amepre.2004.11.001

Frank, L. D., Sallis, J. F., Conway, T. L., & Chapman, J. E. (2006). Many Pathways from Land Use to Health. *American Planning Association. Journal of the American Planning Association, 72*(1), 75-88.

Garvin, A. (c2002). *The American city : what works, what doesn't* (2nd ed.). New York, New York: McGraw-Hill Professional Publishing.

Garvin, A. (c2000). *Parks, recreation, and open space : a twenty-first century agenda* (No. 497/498) (p. 72). Chicago, IL: American Planning Association.

Hanson, S., & Giuliano, G. (Eds.). (2004). *The Geography of Urban Transportation* (3rd ed.). New York, New York: The Guilford Press.

Hendricks, M. (2012, January 31). Kansas City police shut down homeless camp. Kansas City Star. Kansas City, Missouri. Retrieved from http://www.kansascity.com/2012/01/31/3402296/moving-day-for-homeless-camp.html

Hopkins, L. D. (2001). *Urban development: the logic of making plans*. Washington, DC: Island Press.

Innes, J.E., & Booher, D.E. (2010). *Planning with complexity : an introduction to collaborative rationality for public policy*. New York, NY: Routledge

Jacobs, J. (1961). *The Death and Life of Great American Cities* (Modern Library Edition.). New York, New York: The Modern Library.

Kent, F. & Madden, K. (2006). "Creating Great Urban Parks". *Places 15*(3), 71-73

Krstic, V. (2012, February 10). Personal communication.

Kubas, N. (2011a). *KCDC Existing Park Amenities Inventory*, [Adobe InDesign]. Accessed March 30, 2012

Kubas, N. (2011b). *Walkable Commercial Amenities Compared to Parks*, [Adobe Illustrator]. Accessed March 30, 2012

Kubas, N. (2012). *Corridor Parks of Downtown Kansas City*, [Adobe Illustrator]. Accessed March 30, 2012

Leslie, E., Coffee, N., Frank, L., Owen, N., Bauman, A., & Hugo, G. (2007). Walkability of local communities: Using geographic information systems to objectively assess relevant environmental attributes. *Health & Place 13*, 111-122. doi: 10.1016/j.healthplace.2005.11.001

Long, R. (2012, March 12). Personal communication.

Lossing, J. (2012, February 22). Personal communication.

Rolley, S. (1999). "Fading Green to Grey: George Kessler's Impact at the Kansas-Missouri State Line," Perspectives in Landscape History, pp 51-60, The Center for Studies in Landscape History, Pennsylvania State University Press.

Rolley, S. (forthcoming).Green to gray: George Kessler's impact on metropolitan Kansas City. In Herron, J. and J. Sheppard (Eds.), *Heartland Green: An Environmental History of Kansas City.* Urban Environmental History Series. University of Pittsburgh Press.

Seaman, Z. (2012). *StreetSmart^{TM} Scores with the Downtown Area*, [Adobe Illustrator]. Accessed April 16, 2012

Seaman, Z. (2012). *StreetSmart^{TM} Scores along the Beardsley / 3rd Street Corridor*, [Adobe Illustrator], Accessed April 16, 2012

Stockman, D. (2012, February 29). Personal communication.

U. S. Bureau of the Census (2010). *2010 census of population and housing, summary tape file 3A* [Excel]. Washington, DC: Bureau of the Census.

WalkScore. (2011a). About Walk Score. *WalkScore*. Business, Retrieved from http://www.walkscore.com/about.shtml

WalkScore. (2011b). *Walk Score Methodology White Paper* (White Paper) (p. 8). Seattle, WA: WalkScore. Retrieved from http://www.walkscore.com/professional/methodology.php

What is CNU? (2011).*Congress for the New Urbanism*. Organization. Retrieved April 10, 2012, from http://www.cnu.org/who_we_are

Wilson, W. 1964. *The City Beautiful Movement in Kansas City*. Kansas City: Lowell Press, Inc.

Worley, W. 1990. *J. C. Nichols and the Shaping of Kansas City*. Columbia, MO: University of Missouri Press.

Appendix A - StreetSmart™ Model Background and Data

Table A.1: StreetSmart™ Score by KCDC Precedent Studies (WalkScore, 2011a)

Name	City	State	StreetSmart™ Score
CityGarden	St. Louis	Missouri	94
Paley Park	New York	New York	98
Pioneer Square	Portland	Oregon	99
Jamison Square	Portland	Oregon	97
Brooklyn Bridge Park	New York	New York	94
Olympic Sculpture Park	Seattle	Washington	96
Central Park	Playa Vista	California	59
Curtis Hixon Waterfront Park	Tampa Bay	Florida	98
The High Line	New York	New York	86
The City. The Arch. The River	St. Louis	Missouri	43
Bagley Bridge	Detroit	Michigan	62
Campus Martius Park	Detroit	Michigan	65
Hypar Pavilion	New York	New York	95
PSU Urban Center Plaza	Portland	Oregon	97
Director Park	Portland	Oregon	92
Ira Keller Fourcourt Fountain	Portland	Oregon	98
The City Deck	Green Bay	Wisconsin	85
Discovery Green	Houston	Texas	90
Civic Space Park	Phoenix	Arizona	94
Governor's Island Park	New York	New York	6

Table A.2: StreetSmart™ Results for Beardsley / 3rd Street Corridor (WalkScore, 2011a)

Area	Sub Areas	Address	City	State	Zip Code	StSm Total	G	R&B	Shop	Coffee	Schools	Parks	Books	Entertain	Bank	Ped Friendliness	Avg Blk Lngth	Avg Blk Lngth Qual	# of Intersects	# of Intersects Qual
Beardsley	School	1700 Beardsley Rd	Kansas City	Missouri	64105	64	11	15.3	4.8	10.3	6	6	5.4	4.7	2.7	-1.3	463	Good	98	Poor: -2%
Beardsley	School	1650 Beardsley Rd	Kansas City	Missouri	64105	54	7.3	14	2.3	9.1	6	5.9	4.7	4.1	2.1	-1.1	476	Good	104	Poor: -2%
Beardsley	Beardsley	1600 Beardsley Rd	Kansas City	Missouri	64105	37	0.9	10.8	1.2	7.2	5.8	5.4	3.8	3.2	0.3	-1.2	499	Fair: -1%	106	Poor: -2%
Beardsley	Beardsley	1550 Beardsley Rd	Kansas City	Missouri	64105	33	1	8.9	1.5	5.6	5.3	5.6	2.9	2.2	0.3	-0.7	482	Good	115	Poor: -2%
Beardsley	Beardsley	1500 Beardsley Rd	Kansas City	Missouri	64105	33	1	8.9	1.5	5.6	5.3	5.6	2.9	2.2	0.3	-0.7	482	Good	115	Poor: -2%
Beardsley	Beardsley	1450 Beardsley Rd	Kansas City	Missouri	64105	33	1	8.9	1.5	5.6	5.3	5.6	2.9	2.2	0.3	-0.7	482	Good	115	Poor: -2%
Beardsley	Beardsley	1400 Beardsley Rd	Kansas City	Missouri	64105	33	1	8.9	1.5	5.6	5.3	5.6	2.9	2.2	0.3	-0.7	482	Good	115	Poor: -2%
Beardsley	Beardsley	1350 Beardsley Rd	Kansas City	Missouri	64105	33	1	8.9	1.5	5.6	5.3	5.6	2.9	2.2	0.3	-0.7	482	Good	115	Poor: -2%
Beardsley	12th Street Viaduct	1300 Beardsley Rd	Kansas City	Missouri	64101	69	17	13.2	11	10.8	1.5	5.8	2.9	4	4.6	-1.4	449	Good	118	Poor: -2%
Beardsley	12th Street Viaduct	1250 Beardsley Rd	Kansas City	Missouri	64101	69	17	13.2	11	10.8	1.5	5.8	2.9	4	4.6	-1.4	449	Good	118	Poor: -2%
Beardsley	12th Street Viaduct	1200 Beardsley Rd	Kansas City	Missouri	64101	69	17	13.2	11	10.8	1.5	5.8	2.9	4	4.6	-1.4	449	Good	118	Poor: -2%
Beardsley	12th Street Viaduct	1150 Beardsley Rd	Kansas City	Missouri	64101	69	17	13.2	11	10.8	1.5	5.8	2.9	4	4.6	-1.4	449	Good	118	Poor: -2%
Beardsley	12th Street Viaduct	1100 Beardsley Rd	Kansas City	Missouri	64101	69	17	13.2	11	10.8	1.5	5.8	2.9	4	4.6	-1.4	449	Good	118	Poor: -2%
Beardsley	Beardsley	1050 Beardsley Rd	Kansas City	Missouri	64101	35	6	6	5.3	5.4	2.8	6	0.7	3.3	0.3	-0.4	449	Good	121	Fair: -1%
Beardsley	Beardsley	1000 Beardsley Rd	Kansas City	Missouri	64101	35	6	6	5.3	5.4	2.8	6	0.7	3.3	0.3	-0.4	449	Good	121	Fair: -1%
Beardsley	Beardsley	950 Beardsley Rd	Kansas City	Missouri	64101	39	7.9	6.7	6.7	6.8	1.3	6	0.3	3.9	0.3	-0.4	430	Good	122	Fair: -1%
Beardsley	Beardsley	900 Beardsley Rd	Kansas City	Missouri	64101	39	7.9	6.7	6.7	6.8	1.3	6	0.3	3.9	0.3	-0.4	430	Good	122	Fair: -1%
Beardsley	Beardsley	850 Beardsley Rd	Kansas City	Missouri	64101	39	7.9	6.7	6.7	6.8	1.3	6	0.3	3.9	0.3	-0.4	430	Good	122	Fair: -1%
Beardsley	Beardsley	800 Beardsley Rd	Kansas City	Missouri	64101	43	12	7.1	6.6	6.7	1	6	0.5	4	0.6	-0.9	436	Good	120	Poor: -2%

Beardsley	Beardsley	750 Beardsley Rd	Kansas City	Missouri	64101	26	5.2	2	5.6	6.5	0	3.5	0.2	3.1	0.3	-0.5	443	Good	107	Poor: -2%
Beardsley	Beardsley	700 Beardsley Rd	Kansas City	Missouri	64101	26	5.2	2	5.6	6.5	0	3.5	0.2	3.1	0.3	-0.5	443	Good	107	Poor: -2%
Beardsley	Beardsley	650 Beardsley Rd	Kansas City	Missouri	64101	26	5.2	2	5.6	6.5	0	3.5	0.2	3.1	0.3	-0.5	443	Good	107	Poor: -2%
Beardsley	Riverbluff Park	600 Beardsley Rd	Kansas City	Missouri	64105	56	17	11.9	5.3	11.3	0.3	6	1.6	2	1.8	-1.2	427	Good	101	Poor: -2%
Beardsley	Riverbluff Park	550 Beardsley Rd	Kansas City	Missouri	64105	56	17	11.9	5.3	11.3	0.3	6	1.6	2	1.8	-1.2	427	Good	101	Poor: -2%
Beardsley	Riverbluff Park	500 Beardsley Rd	Kansas City	Missouri	64105	56	17	11.9	5.3	11.3	0.3	6	1.6	2	1.8	-1.2	427	Good	101	Poor: -2%
Beardsley	Riverbluff Park	450 Beardsley Rd	Kansas City	Missouri	64105	56	17	11.9	5.3	11.3	0.3	6	1.6	2	1.8	-1.2	427	Good	101	Poor: -2%
Beardsley	Riverbluff Park	400 Beardsley Rd	Kansas City	Missouri	64105	63	19	14	5.9	12.7	0.3	5.7	2.2	2.2	2.5	-1.3	410	Good	107	Poor: -2%
River Market	Riverbluff Park	550 W 4th St	Kansas City	Missouri	64105	63	19	14	5.9	12.7	0.3	5.7	2.2	2.2	2.5	-1.3	410	Good	107	Poor: -2%
River Market	Riverbluff Park	500 W 4th St	Kansas City	Missouri	64105	63	19	14	5.9	12.7	0.3	5.7	2.2	2.2	2.5	-1.3	410	Good	107	Poor: -2%
River Market	Riverbluff Park	450 W 4th St	Kansas City	Missouri	64105	69	20	15.4	7.4	13.9	0.3	3.5	2.9	2.9	3.2	-0.7	427	Good	122	Fair: -1%
River Market	Riverbluff Park	400 W 4th St	Kansas City	Missouri	64105	69	20	15.4	7.4	13.9	0.3	3.5	2.9	2.9	3.2	-0.7	427	Good	122	Fair: -1%
River Market	Riverbluff Park	2 Woodswether Rd	Kansas City	Missouri	64105	65	20	14.9	6.4	14	0.3	2.9	2.4	2.4	3.7	-1.3	443	Good	107	Poor: -2%
River Market	West of City Market	400 W 3rd St	Kansas City	Missouri	64105	75	20	17.6	8.4	15	0.4	3.9	3.4	3.3	4.6	-1.5	390	Good	118	Poor: -2%
River Market	West of City Market	350 W 3rd St	Kansas City	Missouri	64105	75	20	17.6	8.4	15	0.4	3.9	3.4	3.3	4.6	-1.5	390	Good	118	Poor: -2%
River Market	West of City Market	300 W 3rd St	Kansas City	Missouri	64105	75	20	17.6	8.4	15	0.4	3.9	3.4	3.3	4.6	-1.5	390	Good	118	Poor: -2%
River Market	West of City Market	250 W 3rd St	Kansas City	Missouri	64105	75	20	17.6	8.4	15	0.4	3.9	3.4	3.3	4.6	-1.5	390	Good	118	Poor: -2%
River Market	West of City Market	200 W 3rd St	Kansas City	Missouri	64105	81	20	18.6	9.9	15	0.6	4.4	4	4.1	5.2	-0.8	381	Good	124	Fair: -1%
River Market	West of City Market	150 W 3rd St	Kansas City	Missouri	64105	81	20	18.6	9.9	15	0.6	4.4	4	4.1	5.2	-0.8	381	Good	124	Fair: -1%
River Market	West of City Market	100 W 3rd St	Kansas City	Missouri	64105	81	20	18.6	9.9	15	0.6	4.4	4	4.1	5.2	-0.8	377	Good	138	Fair: -1%
River Market	West of City Market	50 W 3rd St	Kansas City	Missouri	64106	81	20	18.6	9.9	15	0.6	4.4	4	4.1	5.2	-0.8	377	Good	138	Fair: -1%
River Market	West of City Market	300 Main St	Kansas City	Missouri	64106	81	20	18.6	9.9	15	0.6	4.4	4	4.1	5.2	-0.8	377	Good	138	Fair: -1%

River Market	City Market	50 E 3rd St	Kansas City	Missouri	64106	82	20	19.6	9.8	15	0.7	3.5	4.2	4	5.7	-0.8	371	Good	144	Fair: -1%
River Market	City Market	100 E 3rd St	Kansas City	Missouri	64106	82	20	19.6	9.8	15	0.7	3.5	4.2	4	5.7	-0.8	371	Good	144	Fair: -1%
River Market	City Market	150 E 3rd St	Kansas City	Missouri	64106	77	20	19.3	8.6	14.6	1	2.4	4.6	2.7	5.7	-1.6	390	Good	118	Poor: -2%
River Market	3rd & Grand	200 E 3rd St	Kansas City	Missouri	64106	77	20	19.3	8.6	14.6	1	2.4	4.6	2.7	5.7	-1.6	390	Good	118	Poor: -2%
River Market	3rd & Grand	250 E 3rd St	Kansas City	Missouri	64106	77	20	19.3	8.6	14.6	1	2.4	4.6	2.7	5.7	-1.6	390	Good	118	Poor: -2%
River Market	3rd & Grand	300 E 3rd St	Kansas City	Missouri	64106	77	20	19.3	8.6	14.6	1	2.4	4.6	2.7	5.7	-1.6	390	Good	118	Poor: -2%
River Market	3rd & Grand	350 E 3rd St	Kansas City	Missouri	64106	74	20	18.5	7.6	14	1.2	2.8	4.1	2.3	5.4	-1.5	394	Good	120	Poor: -2%
River Market	3rd & Grand	400 E 3rd St	Kansas City	Missouri	64106	74	20	18.5	7.6	14	1.2	2.8	4.1	2.3	5.4	-1.5	394	Good	120	Poor: -2%
River Market	3rd & Grand	450 E 3rd St	Kansas City	Missouri	64106	75	20	18.4	6.8	13.3	2.2	4	3.8	1.9	5.1	-0.8	400	Good	126	Fair: -1%
River Market	3rd & Grand	500 E 3rd St	Kansas City	Missouri	64106	75	20	18.4	6.8	13.3	2.2	4	3.8	1.9	5.1	-0.8	400	Good	126	Fair: -1%
River Market	3rd & Grand	550 E 3rd St	Kansas City	Missouri	64106	75	20	18.4	6.8	13.3	2.2	4	3.8	1.9	5.1	-0.8	400	Good	126	Fair: -1%
Columbus Park	Phase III Project	600 E 3rd St	Kansas City	Missouri	64106	71	20	18.1	5.1	13.1	2.3	4.1	2.9	1.2	5.3	-1.4	413	Good	118	Poor: -2%
Columbus Park	Phase III Project	650 E 3rd St	Kansas City	Missouri	64106	71	20	18.1	5.1	13.1	2.3	4.1	2.9	1.2	5.3	-1.4	413	Good	118	Poor: -2%
Columbus Park	Phase III Project	700 E 3rd St	Kansas City	Missouri	64106	71	20	18.1	5.1	13.1	2.3	4.1	2.9	1.2	5.3	-1.4	413	Good	118	Poor: -2%
Columbus Park	Phase III Project	750 E 3rd St	Kansas City	Missouri	64106	72	20	18.1	4.7	12.9	3.4	5	2.6	1	5.8	-1.5	420	Good	120	Poor: -2%
Columbus Park	Phase III Project	800 E 3rd St	Kansas City	Missouri	64106	72	20	18.1	4.7	12.9	3.4	5	2.6	1	5.8	-1.5	420	Good	120	Poor: -2%
Columbus Park	Phase III Project	300 Charlotte St	Kansas City	Missouri	64106	72	20	18.1	4.7	12.9	3.4	5	2.6	1	5.8	-1.5	420	Good	120	Poor: -2%
Columbus Park	Phase III Project	800 Northeast Industrial Tfwy	Kansas City	Missouri	64106	72	20	18.1	4.7	12.9	3.4	5	2.6	1	5.8	-1.5	420	Good	120	Poor: -2%
Columbus Park	Phase III Project	850 Northeast Industrial Tfwy	Kansas City	Missouri	64106	72	20	18.1	4.7	12.9	3.4	5	2.6	1	5.8	-1.5	420	Good	120	Poor: -2%
Columbus Park	Phase III Project	900 Northeast Industrial Tfwy	Kansas City	Missouri	64106	40	14	12.2	2.4	7	0.5	1.5	0.7	0.3	2.8	-1.2	453	Good	89	Poor: -3%
Columbus Park	Phase III Project	950 Northeast Industrial Tfwy	Kansas City	Missouri	64106	40	14	12.2	2.4	7	0.5	1.5	0.7	0.3	2.8	-1.2	453	Good	89	Poor: -3%
Columbus Park	Near Gillis	1000 Northeast Industrial Tfwy	Kansas City	Missouri	64106	56	19	14.5	3.2	10.6	1.3	2.9	0.8	0.3	5.2	-1.7	482	Good	88	Poor: -3%

Columbus Park	Near Gillis	1050 Northeast Industrial Tfwy	Kansas City	Missouri	64106	56	19	14.5	3.2	10.6	1.3	2.9	0.8	0.3	5.2	-1.7	482	Good	88	Poor: -3%
Columbus Park	Near Gillis	1100 Northeast Industrial Tfwy	Kansas City	Missouri	64106	55	19	13.3	3.7	10.4	1.2	2.8	0.8	0.3	5.1	-1.1	492	Good	90	Poor: -2%
Columbus Park	Industrial Tfway Ramp	1150 Northeast Industrial Tfwy	Kansas City	Missouri	64106	45	17	10.5	2.6	8.5	0.7	1.9	0.4	0.3	4.4	-1.4	495	Fair: -1%	93	Poor: -2%
Columbus Park	Industrial Tfway Ramp	1200 Northeast Industrial Tfwy	Kansas City	Missouri	64120	40	15	9.9	3.7	7.3	0.5	1.4	0.3	0.2	3.8	-2.1	548	Poor: -2%	71	Poor: -3%
Columbus Park	Industrial Tfway Ramp	1250 Northeast Industrial Tfwy	Kansas City	Missouri	64120	34	13	8.7	3.4	5.8	0.3	0.9	0.3	0	3.1	-2.2	568	Poor: -3%	64	Poor: -3%
Columbus Park	Industrial Tfway Ramp	1300 Northeast Industrial Tfwy	Kansas City	Missouri	64120	29	11	8.4	4.1	4.6	0.3	0.6	0.3	0	2.5	-2.9	669	Poor: -5%	48	Poor: -4%
Columbus Park	Industrial Tfway Ramp	1350 Northeast Industrial Tfwy	Kansas City	Missouri	64120	29	11	8.4	4.1	4.6	0.3	0.6	0.3	0	2.5	-2.9	669	Poor: -5%	48	Poor: -4%
Columbus Park	Industrial Tfway Ramp	1400 Northeast Industrial Tfwy	Kansas City	Missouri	64120	29	11	8.4	4.1	4.6	0.3	0.6	0.3	0	2.5	-2.9	669	Poor: -5%	48	Poor: -4%
Columbus Park	Lydia Ave	1400 E 1st St	Kansas City	Missouri	64120	24	5.3	8.3	4.4	4.4	0.3	0.6	0.3	0	2.4	-2.3	781	Poor: -5%	47	Poor: -4%
Columbus Park	Lydia Ave	50 N Lydia	Kansas City	Missouri	64120	29	11	8.4	4.1	4.6	0.3	0.6	0.3	0	2.5	-2.9	669	Poor: -5%	48	Poor: -4%
Columbus Park	Lydia Ave	100 N Lydia	Kansas City	Missouri	64120	19	3.4	7.7	4.4	3.1	0.3	0.3	0.2	0	1.7	-1.9	823	Poor: -5%	32	Poor: -4%
Columbus Park	Lydia Ave	150 E Front St	Kansas City	Missouri	64120	19	3.4	7.7	4.4	3.1	0.3	0.3	0.2	0	1.7	-1.9	823	Poor: -5%	32	Poor: -4%

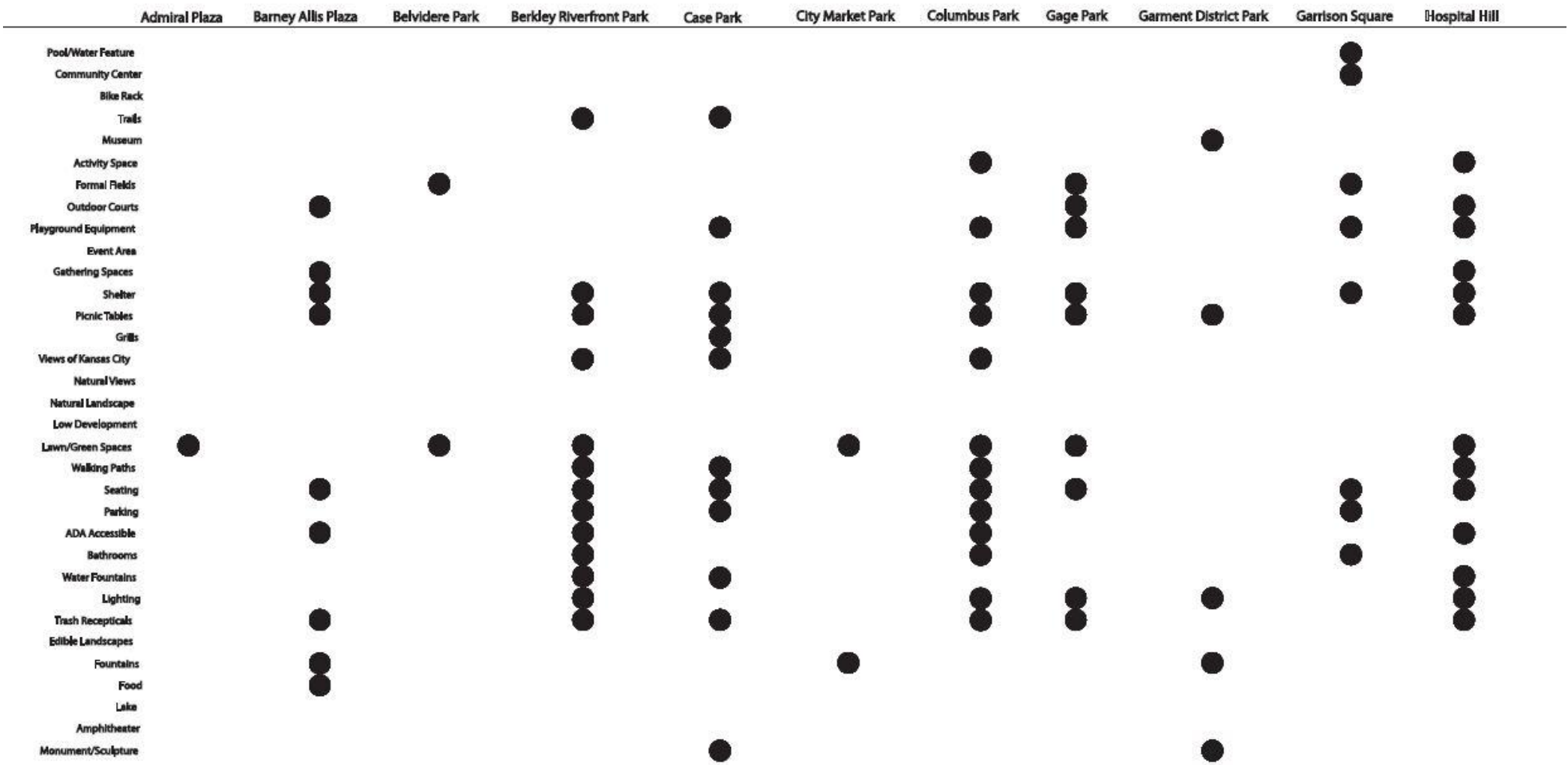
Table A.3: StreetSmart™ Measures and Inputs (WalkScore, 2011b)

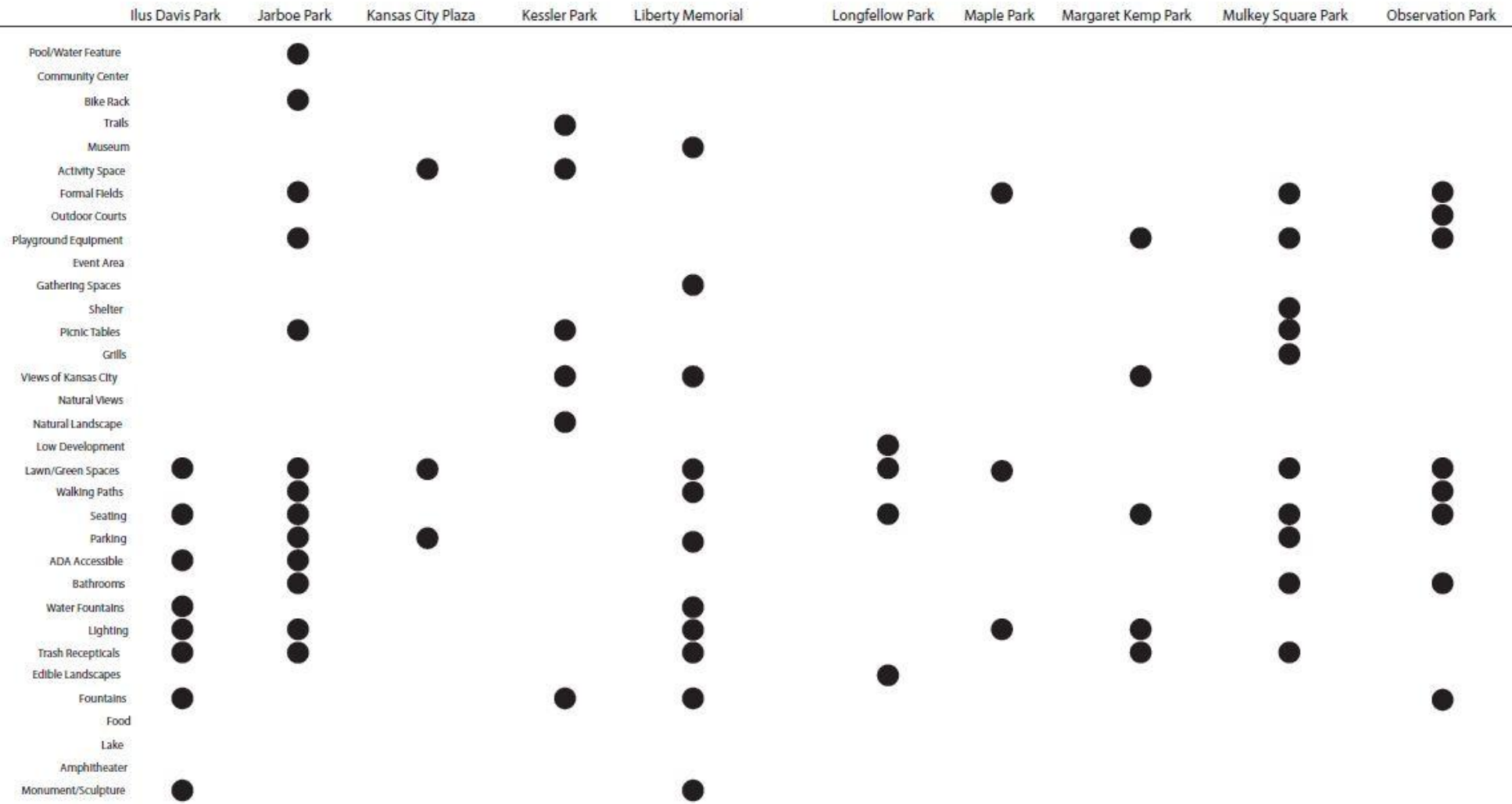
Measure	**Data Input**
Businesses	Google, Localeze
Road network and park data	Open Street Map
School data	Education.com

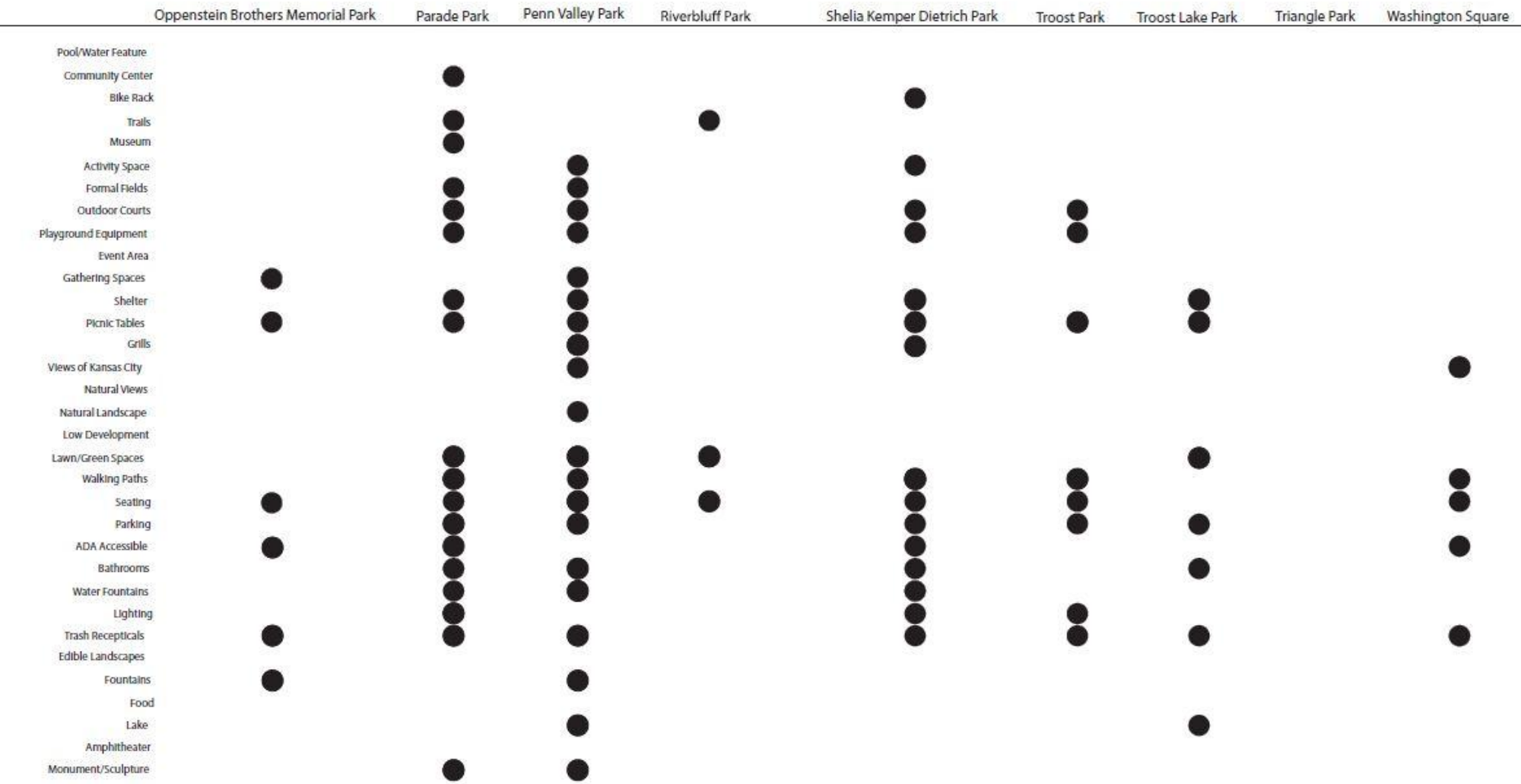
Table A.4: Nine Types of Amenities (WalkScore, 2011b)

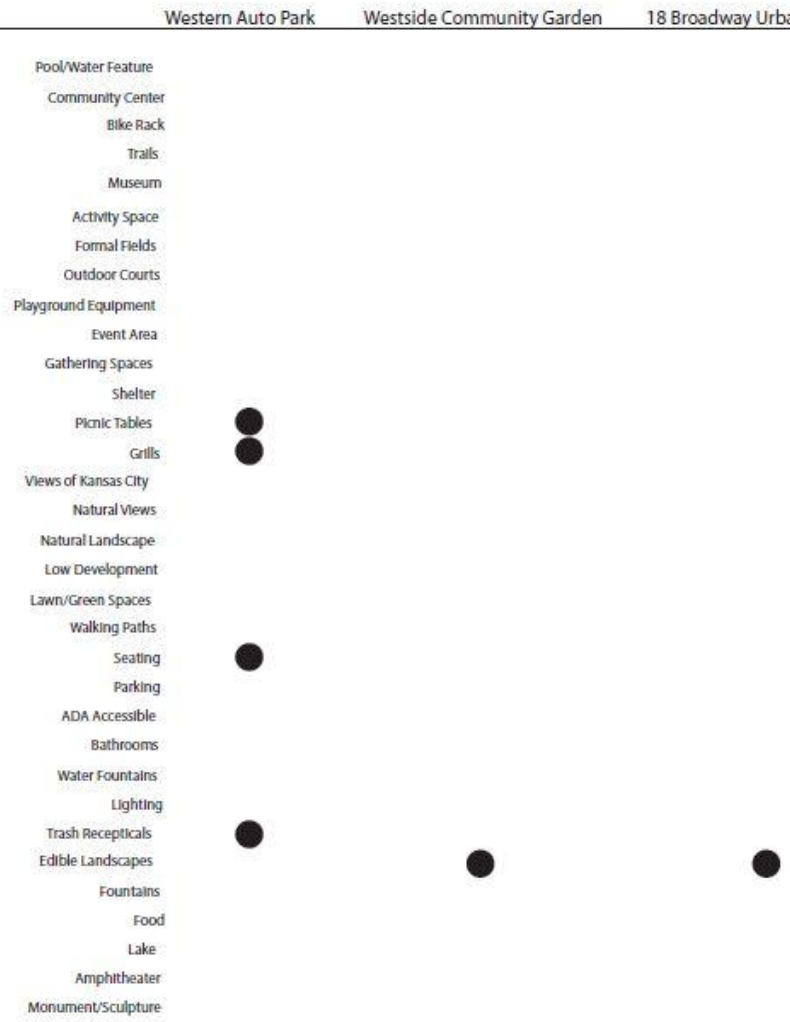
Walkability Category	**Amenity Weights**
Grocery (g)	[3]
Restarants & Bars (r&b)	[.75, .45, .25, .25, .225, .225, .225, .225, .2, .2]
Shopping (shop)	[.5, .45, .4, .35, .3]
Coffee	[1.25, .75]
Banks	[1]
Parks	[1]
Schools	[1]
Books	[1]
Entertainment (entertain)	[1]

Table A.5: KCDC Existing Park Amenities Inventory (Kubas, 2011a)




Ilus Davis Park
Jarboe Park
Kansas City Plaza
Kessler Park
Liberty Memorial
Longfellow Park
Maple Park
Margaret Kemp Park
Mulkey Square Park
Observation Park
Pool/Water Feature
Community Center
Bike Rack
Trails
Museum
Activity Space
Formal Fields
Outdoor Courts
Playground Equipment
Event Area
Gathering Spaces
Shelter
Picnic Tables
Grills
Views of Kansas City
Natural Views
Natural Landscape
Low Development
Lawn/Green Spaces
Walking Paths
Seating
Parking
ADA Accessible
Bathrooms
Water Fountains
Lighting
Trash Recepticals
Edible Landscapes
Fountains
Food
Lake
Amphitheater
Monument/Sculpture


Oppenstein Brothers Memorial Park
Parade Park
Penn Valley Park
Riverbluff Park
Shelia Kemper Dietrich Park
Troost Park
Troost Lake Park
Triangle Park
Washington Square
Pool/Water Feature
Community Center
Bike Rack
Trails
Museum
Activity Space
Formal Fields
Outdoor Courts
Playground Equipment
Event Area
Gathering Spaces
Shelter
Picnic Tables
Grills
Views of Kansas City
Natural Views
Natural Landscape
Low Development
Lawn/Green Spaces
Walking Paths
Seating
Parking
ADA Accessible
Bathrooms
Water Fountains
Lighting
Trash Recepticals
Edible Landscapes
Fountains
Food
Lake
Amphitheater
Monument/Sculpture


Western Auto Park
Westside Community Garden
18 Broadway Urban Garden
Pool/Water Feature
Community Center
Bike Rack
Trails
Museum
Activity Space
Formal Fields
Outdoor Courts
Playground Equipment
Event Area
Gathering Spaces
Shelter
Picnic Tables
Grills
Views of Kansas City
Natural Views
Natural Landscape
Low Development
Lawn/Green Spaces
Walking Paths
Seating
Parking
ADA Accessible
Bathrooms
Water Fountains
Lighting
Trash Recepticals
Edible Landscapes
Fountains
Food
Lake
Amphitheater
Monument/Sculpture