IMPLEMENTATION ASSESSMENT OF THE KANSAS CITY DESIGN CENTER PROPOSED RAIL PARK

by

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A REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

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

> KANSAS STATE UNIVERSITY Manhattan, Kansas

> > 2012

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Abstract

From start to finish, implementing large public infrastructure projects, like a park, can be challenging. Funding shortages, public opposition, and physical limitations are all potential problems that can halt a project's development. This study explores the complexities of implementation by using a proposed park designed by the Kansas City Design Center as a case study for examination. The visioning process, or first stage of implementation, is explored by examining the factors that influenced the design. Through interviews, this report then examines how the actors and processes of project implementation work together or against each other in project development. Applying the learned knowledge of implementation to the proposed park of the Kansas City Design Center presented multiple challenges, as well as opportunities for the park. After understanding implementation and its application to the Rail Park, three main strategies are proposed to move the Kansas City Design Center's proposed park past the visioning stage. The three strategies are: to collaborate between actors, garner public support, and project phasing. General conclusions about implementation in this study found that there will be challenges and not all can be anticipated, but it is important to plan for those that can be. Being flexible and persistent to move a project forward is necessary in order to accommodate stakeholders' concerns and unforeseen problems. Knowledge of implementation and its complexities will assist actors, developers, and students to advance visions into reality.



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Acknowledgements

To my parents who continuously supported me, my sisters who continuously made me laugh and to all of the faculty of LARCP who continuously pushed me to do better, thank you.

Chapter I. Introduction

The implementation process to develop a project is complex and can be difficult because of the divided interests and interdependent decision-making. Understanding the process can lead to a better knowledge of what those interests might be and how to best work with those actors. Not all proposed projects get implemented due to funding, divided interests and bureaucracy that complicate the process. Understanding how actors work within an implementation process, and anticipating individual actor's interests and goals can lead to a smoother and better implementation attempt.

The students at the Kansas City Design

Center (KCDC) have been working within Kansas

City to create a master plan for the park system
in the Greater Downtown Area. I have worked in
this studio, developing the design proposals for
the city and stakeholders. As a participant in the
design process, it was not always clear what to
expect when stakeholders would comment on our
designs. Since the studio was encourage to think
outside of the limits at first, it was difficult to field
questions about the practicality of the project. The
studio works to make visions that are futuristic,
but reaches to be within reality. Learning about the
challenges that stakeholders have experienced, may
lead to a better understanding of their concerns.

It also became clear that there were multiple and complex issues that make project development challenging. Many projects are proposed, but not all or implemented. In this report I will examine implementation beginning with the visioning stage of KCDC and looks at the actors, the processes and how they can influence the challenges and opportunities for a proposed project.

I have found that the implementation process can vary depending on which actors participate and the different barriers affecting the process. Finding an interest for each actor in the project will assist in finding supporters, but overcoming concerns with creative design and negotiation is important to aligning those interests. There will be major challenges for the KCDC proposal that range from the functional capacity of the park, the ability to acquire land for the park and the public opinion of the park. For the Rail Park coordinating processes between departments, gaining public support and phasing the project are strategies that may be used to overcome the greatest challenges of creating the Rail Park. Strategies and general conclusions about implementation are presented inform those beginning the process, or those with little experience to beginning thinking about their own barriers and opportunities. It also presents

knowledge of the complexities of implementation to inform student groups of stakeholder concerns or points of view. The report outline is diagramed in figure 1-1. The diagram gives a general outline of the report and what will be covered in the report.

Implementing a project can appear to be a losing battle without an understanding of what you might be up against. Using the KCDC proposed park, the challenges to implementation will be explored. Understanding the basics of how the actors and processes come together to develop a project may provide a better chance of completing a project. Understanding these processes will also help student groups and others to develop proposals with the challenges in mind and provide them with the knowledge that they can be overcome.

Flow of the Report Structure

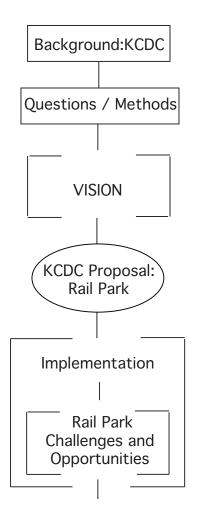


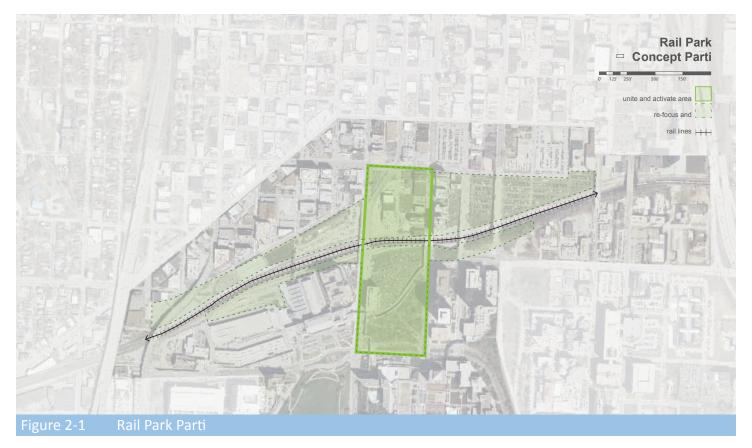
Figure 1-1 Report structure

Chapter II. Background

Kansas City Design Center

The Kansas City Design Center (KCDC) is a type of civic organization that serves the city as a creative and collaborative resource. Its main component is an interdisciplinary studio funded by grants, to work on redesigning or reimagining Kansas City's public realms. This studio is a collaboration between the University of Kansas and Kansas State University. Both Kansas University and Kansas State University students work on a design problem in Kansas City to help create a vision for the particular design challenge they work on each year. The goal of KCDC is not only to provide students with an

education, but to also serve the city. KCDC provides the city a forum to freely discuss architecture and urban issues, as well as the opportunity to brainstorm and envision the possibilities within Kansas City. By developing projects without restrictions and funding limits the studio is able to open possibilities of what could be. It raises awareness about public spaces and the character of those various realms, as well as the endless possibilities in the city. The studio works as a civic and college organization, tackling various urban projects and envisions how the city can optimally





function and be served.

The studio is a unique experience for students by providing an opportunity to engage the public and stakeholders. The studio works with professionals to learn from real life situations.

KCDC combines public visioning with educational opportunities to mix student, professional, faculty and public vision.

This year the Public Improvement Advisory

Committee has funded KCDC to look at the current
park system in the Greater Downtown Area (GDA)
and reimagine how the parks serve downtown. The
studio is working with the Department of Parks

and Recreation of Kansas City to create a master plan for the parks in the GDA. The master plan we developed as a studio includes three different elements, anchor parks, smaller fill-in parks, and corridors that connect people and parks and encourage circulation. This frame work was meant to incorporate important park typologies within Kansas City, as well as introduce new ones. The anchor parks served as the large recreation centers provide district and city identity. The network of infill parks are small parks that can be permanent or temporary and used to fill in vacant lots or unused parking lots to increase the public spaces



Figure 2-3 Rail Park Master Plar

and greenery. The corridors work to encourage pedestrian and bicycle transportation by improving the design of those facilities on streets. Each of these elements is currently being investigated in detail to create physical designs. As a part of this studio, I have worked to help analyze and study current issues in Kansas City as well as relevant case studies.

The focus of this report is the Rail Park. Rail
Park is a new park proposed as part of the anchor
park scheme. The Rail Park began as an interest to
create a linear park along the railroad tracks that
would serve the Crossroads area. The parti of the
park is shown in figure 2-1. The parti displays the
linear aspect of the park that follows the railroad,
as well as the expansion of space out into the city.
The parti also displays the connection and inclusion
of Washington Square Park. Figure 2-2 displays
the placement of the park in the city, compared to
Crown Center and Union Station. The park has been

developed to contribute solutions to current area problems with stormwater and city barriers. Figure 2-3 shows the master plan for the park created as of March 19, 2012. The master plan takes the concept elements in the park, and attempts to map out their placement within the park. Public space and water management areas are displayed, along with lawns and buffer zones.

KCDC has already begun the process of project development by creating the idea for the park, or the visioning. This report will investigate the process and factors that influenced the vision for the Rail Park, then move on to investigate the following processes and actors involved in the project's possible development. Strategies are then proposed that account for major challenges and opportunities that may lead to a possible implementation plan or provide guidance for any project struggling to understand the development process.

Chapter III. Methodology

The objective of this study is to better understand the complete implementation process for a proposed public space, as well as offer guidance to implementation strategies for the KCDC Rail Park or other general public space proposals. The Rail Park was used as a case study for the implementation process possibilities. In order to understand these things, the following questions were used as guidance in the investigation of the Rail

Park:

- What part of the process has been completed already for the Rail Park?
- •What influenced the visioning process?
- •What would the process to implementation be?
- •Who were the actors in the process?
- •How do the actors influence the process?
- •What are the barriers/ opportunities to implementation?

Department/Organization	Work	Information on
Water Services: KCMO	Stormwater Utility	Project implementation (Stormwater, personal
		communication, February 22, 2012)
Parks and Recreation:	Park Management	Project implementation and works with parks
ксмо	& Improvements	(Parks and Rec., personal communication,
		February 22, 2012)
Kansas City Star	Journalist	Work on infrastructure and project development
		(KC Star, personal communication, February 20,
		2012)
Downtown Council	Green Space	Work with Crossroads districts, Green Space
	Committee	Committee and urban projects and parks (Green
		Space Committee, personal communication,
		February 22, 2012)
Kansas City Planning	Long range	Worked on Greater Downtown Area Plan and
Department	planning	project development (Planner, personal
		communication, February 29, 2012)
Mid-America Regional	Sustainable and	Promotion of sustainable methods for
Council	environmental	environmental protection (MARC, February 14,
	work	2012)
Kansas State University	Professor working	Works frequently in Kansas City and student
	with KCDC	projects with KCDC (Professor, personal
		communication, March 19, 2012)
Kansas State University	Student in KCDC	Working on design and development of the Rail
		Park (Student, personal communication, March 19,
		2012)

Table 3-1 Interview Descriptions

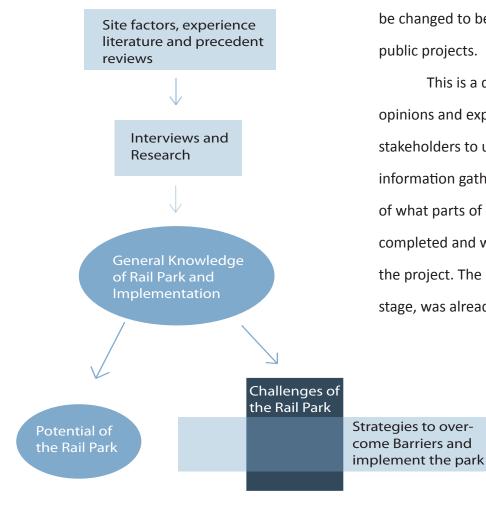
To answer these questions, participant observation, interviews, research and general working knowledge of the City were used to analyze the various actors and factors of implementation.

The interviews were done with an employee of the water services department, Parks and Recreation Department, Mid-America Regional Council, the Kansas City, Missouri planning department, a Kansas

City Star reporter, a member of the Green Space

Committee and a Kansas State University professor
and student. An explanation of their work and the
type of information gathered from each interviewee
in table 3-1. Memos were made for each interview
were and summarized to the main points or
repeated points. The memos were summarized into
one document with main points from all interviews
to be used in the analysis. The analysis will combine
the information into a better understanding of the
actors, their roles and motivations, and how it might
be changed to better implement the park, or other
public projects.

This is a qualitative study that uses the opinions and experience of the various actors and stakeholders to understand the processes. The information gathered led to a general understanding of what parts of implementation had been completed and what was left to do to implement the project. The creation of the park, the visioning stage, was already completed for the Rail Park.



igure 3-1 Diagramed Methods

From participant knowledge and research, the visioning process is analyzed for contributing factors and information that led to the implementation strategies. The interviews, literature reviews and general knowledge provided the information to analyze who the actors are and processes in the rest of the implementation process. All of the

gathered knowledge was used to formulate the potential implementation and concerns about the Rail Park. Figure 3-1 displays the methods of gathering knowledge in order to identify the barriers and opportunities, and from those opportunities and knowledge formulate the strategies for the implementation of the Rail Park.

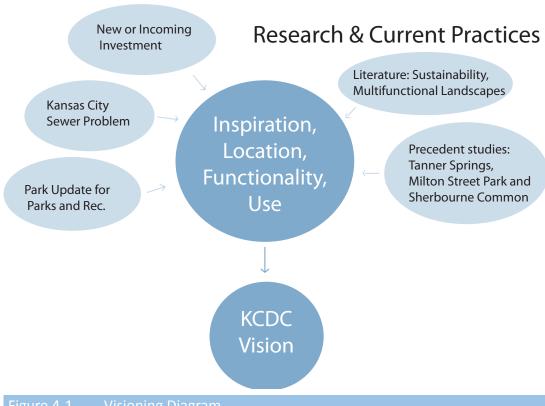
Chapter IV. KCDC Visioning Process for the Rail Park

KCDC's process is the attempt to take what currently exists and imagine what there could be. At this stage KCDC is examining the situation and developing concepts that take advantage of the opportunities, and improve current issues. Kansas City Design Center has created a vision for what the park system could be in Greater Downtown Area of Kansas City. KCDC took the city specific factors, as well as precedent studies and literature reviews, to create the Rail Park vision. Figure 4-1 shows the accumulation of information into the considerations for the ultimate concept of the Rail Park.

Site Analysis and Factors

The site factors are those circumstances that currently or will later influence the city development in some way. These factors, in turn, affect the vision for the future of Kansas City. The three main site factors influencing the Rail Park design are the current park situation, the sewer system overhaul, and the new investment activity. These problems or opportunities influenced the design studio in determining the location and justification for the park proposal.

Site Factors



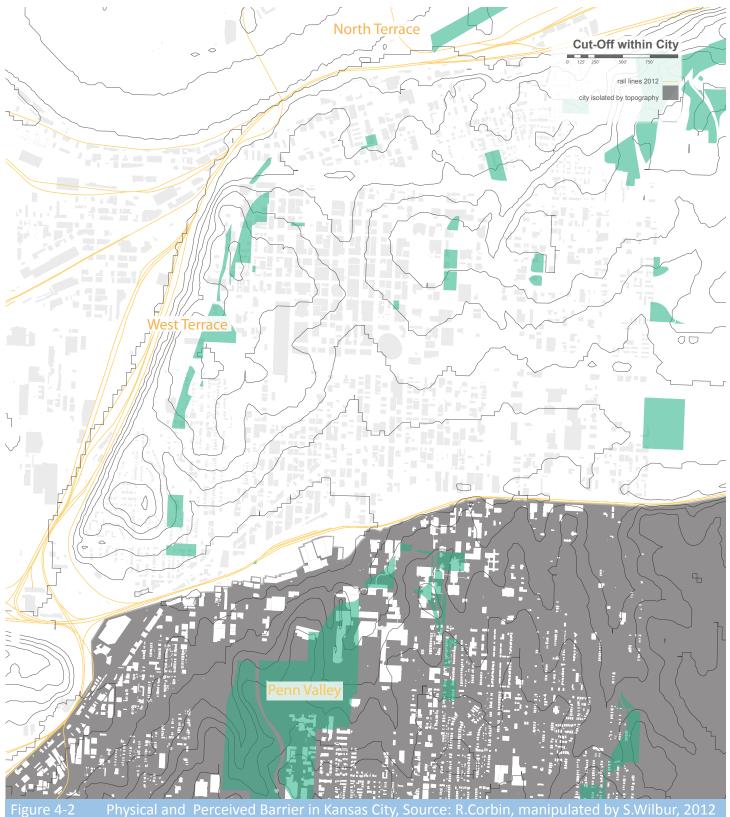
Downtown Park System

Kansas City's park system came from the vision of George Kessler in the early 1893 park board report (Kessler Society of Kansas City, 2012). He envisioned a series of boulevards and parkways that would connect the three main parks of Kansas City: West Terrace, North Terrace and Penn Valley. The parks were selected from sites with dramatic topography that made development difficult or near impossible. Although the parks contained beautiful views and interesting topographic features, they also lacked meandering paths or open space for recreation. The automobile later overtook the boulevards because the wide streets were ideal for automobile travel, but inner open space between lanes was often too narrow for recreation (Garvin, 1996). The parks were designed for the future of Kansas City in 1915, but struggle to serve the populations open space and recreational needs almost a century later. The park system has since added more properties, but recently has it started to reexamine the parks in the downtown.

To understand how the public feels about the downtown park system, KCDC took surveys in the parks, as well as distributed surveys via social media and email. In addition, public comments were written on the window space of the KCDC studio. The responses varied greatly, but the answers were clear that the public's needs were not

being adequately met. There was a mix of positive feedback about the parks, but many comments provided suggestions of improvements or listed problems with the parks. People had concerns about safety, maintenance, and appropriate programming. Some participants even noted that the lack of neighborhood amenities, such as kid-friendly parks, kept them from moving downtown.

The park system has not been updated or re-evaluated on its effectiveness to serve the communities in the Downtown area. Although there have been improvements and amenities added to parks, things such as poor location, visibility, and access may limit their use and functionality. The Crossroads, a district south of the central downtown loop of Kansas City, is a growing residential area that lacks green or public space. The one green space in the area is the formal lawn in front of the Kauffman Center for the Performing Arts or the DST Reality community gardens. The Kauffman Center for the Performing Arts is an opera and theater that was developed by the Kauffman Foundation and other sponsors (Kauffman Center, 2010). DST Reality, part of DST System Inc., is a realestate and development company in Kansas City (DST System Inc., 2012). The Kauffman Performing Arts Center offers a green lawn, but the public is restricted to the paths and the space is not conducive to public gatherings. The DST gardens are



privately owned and may not always be a permanent fixture if DST decides to develop the gardens. There are parks like Penn Valley and Washington Square Park near the Crossroads district, but both of these parks are separated from the Crossroads area by the visual and physical barriers like the railroad tracts, topography, and heavy traveled streets. The two sides of the tracks feel like two different parts of the city because of the railroad track and topography barriers. The diagram in figure 4-2 shows the division in the city. The difference in shading represents the two areas of the city that are separated by topography and the railroad.

The Crossroads area has a unique identity and character expressed by the artist and grass roots communities, as well as the businesses in the area. Not all of the parks that serve the Crossroads share it's unique character. Some spaces like the DST garden fit the unique community character, but this garden may not be a permanent feature. An event that characterizes the Crossroads is First Fridays. On First Friday's, local businesses and art galleries open for people to wander in and see work on display. The event attracts street performers and food vendors to the area. The groups are usually pushed to the streets and empty lots, but in the future, these spaces might be lost to development or an increase in traffic. The Crossroads lack a public space that is

representative of its identity and that supports the activities desired by visitors and residents.

KCDC has been analyzing the park system and has become interested in finding those areas that may need public spaces. There is an opportunity to improve the park system by filling the voids and distributing new spaces. The Crossroads area has a lack of green, open, or public space that is needed to handle the events and future needs for residents. The area is a good opportunity to further distribute park amenities in a growing area to better enhance the park system. The lack of pervious or green surfaces presents another problem with stormwater runoff, which has caused problems and flooding for the outdated sewer systems in Kansas City.

Stormwater and Sewer Issues in Kansas City

Kansas City has been functioning with combined sewer system that must now be repaired to meet both EPA standards and the excess capacity of the growing city. The system was originally built for a city of a much smaller size and now cannot handle the current capacity. Some parts of the sewer system that were built 150 years ago are still in use today. It is time to update the system to meet new pollution standards. The Environmental Protection Agency (EPA) mandated that Kansas

City start implementing its Overflow Control Plan (OFCP) which finalized in 2009. The OFCP is the plan outlining all infrastructural improvements needed to be made in each water basin of Kansas City in order to reduce the combine system overflows (Wet Weather Solutions Program, 2009).

The E.P.A. has been mandating cities all over the United States to begin retrofitting their combined sewer systems so as to reduce the pollution overflows. This mandate came from the Clean Water Act (1972), which made it illegal to dump unregistered pollutants into navigable water. Since the overflow of combined sewer systems includes the wastewater, and wastewater (which is considered a pollutant) the overflows are illegal. The way combined sewer systems work is that they combine both the stormwater runoff from the streets or buildings into the same pipe as the raw sewage. In dry weather, the system takes all of the combined sewage and stormwater to the water treatment plants. The problem comes in wet weather conditions; the excess stormwater entering the system overwhelms the outdated system and is forced to overflow into lakes, rivers, and estuaries. This overflow carries with it raw sewage and harmful bacteria. It also takes the sediment and pollutants that the stormwater runoff picked up on the streets and carries it to the waterways. These overflows can impact not only the wildlife, but also

the water quality for the cities downstream (U.S. Environmental Protection Agency, 2012). Kansas City's combined sewers have an overflow estimated at 6.4 billion gallons, which enter estuaries and lakes, causing environmental problems and property damage. These overflows can bring with them E. Coli bacteria. The count of the concentration of E. Coli bacteria can be a measure for the possible water contamination levels. E. Coli contamination of the waterways is one of the primary contamination concerns for the combined sewer system overflows (Water Services Department, 2009). Other problems exist due to the outdated sewer systems that typically cause flooding and extensive property damage. The old systems are over capacity and may have leaks and connection problems that lead to flooding. In wet weather conditions, the sewer can spew onto the street or on to private and public properties, bringing the raw sewage and waste with it. Industrial waste, including chemicals and possibly toxic waste, can be part of the overflow (U.S. Environmental Protection Agency, 2012).

The problems created by the combined sewer systems are not conducive to future growth and sustainable development. They need to be fixed even without the EPA mandate. However, fixing the combined sewer system will not be cheap. The city plans to implement its OFCP to try and remedy the

problem. The plan includes spending \$2.4 billion by 2034. This long process will reduce the overflows from 6.4 billion gallons a year to 1.4 billion gallons a year. This process will also raise the water bills for Kansas City residents up to 13% (Water Services Department, 2009).

Of the different water basins the OFCP is working on, Turkey Creek /CID water basin produces the greatest amount of overflow and contains the highest percentage of impervious surfaces. This basin captures the least amount of stormwater on site and forces much of the stormwater into the sewer system (Water Services Department, 2009). The Turkey Creek/CID basin where the Greater Downtown Area and the KCDC studio are located. The studio has considered how the park system concept can affect the stormwater management in the area, as well as how the OFCP may provide an opportunity to fund any stormwater management proposal.

The location and investment in to water systems management could be leveraged by the Kansas
City Design Center. Tapping into the OFCP funding to build more sustainable infrastructure for Kansas
Cities stormwater management is a possible source to fund the potential Rail Park. Incorporating water management strategies to reduce flooding and problems in the area will help both the residents and provide more environmentally friendly solutions.

Incoming investments and New City Center

The Greater Downtown Area has already seen a lot of change in the past ten years. The downtown has seen over \$6 billion in investment and is continues to attract more (Downtown Council of Kansas City, 2012). An upcoming area for investment is near the Crown Center Shopping area and Union Station, located at Main Street and Pershing Road. There are new attractions and new transit investments that will make the area a major node within the city.

There are two new transit lines that plan to stop in the same area. The North-South Street Car Line on Main Street and the commuter rail, which would run to either the Eastern Suburbs along I-70 in Missouri, or the Southeastern suburbs along the Rock Island Corridor are the two potential transit lines. The streetcar has been moved further along and is set in motion to be developed, while the commuter rail is still in developmental stages (Mid-America Regional Council, 2012). If both of these lines come to meet in the same area, there would be a great opportunity for further development at the transfer of these routes.

Some investments have already come into the area to take advantage of not only the growing area, but the growing city as well. Kansas City is becoming a larger tourist destination. The new

attractions soon to open are the Legoland Discovery Center and Sea Life Aquarium, which will move into Crown Center. The project cost \$15 million and Crown Center Redevelopment Corporation plans to share the cost with the developers of the two attractions without any public funding. These two projects anticipate attracting over 250,000 visitors annually (Hawley, 2011). These two projects will bring increase traffic and investment to the area around Crown Center and Union Station. The KCDC studio desired to take advantage of the upcoming center by improving the public space and providing public amenities in the area for future increased activity.

These investments and incoming infrastructure will revitalize the area into a city center. There is an opportunity to take advantage of this growth, not only for public amenities, but for private investors as well. This area could potentially support future Tax Increment Financing districts that would support different public infrastructures.

Literature Review

The literature review and the case studies also have incited knowledge and vision, as they inform the studio of what has been done in other areas in order to inspire ideas for the Kansas City area. This section looks at sustainability and its importance; then it examines how sustainable landscapes can be achieved through multifunctional landscapes. These landscapes combine land uses to improve functionality. Next, it looks into case studies of multifunctional landscapes that include stormwater management and public space. These spaces range from high stormwater management functionality and high public recreation space to lower functionality and public space. Finally, there is a description about sustainable implementation in practice and policies that influence those practices. This information helped develop the vision of the KCDC studio.

Sustainability and Multifunctional Landscapes

Green infrastructure and green methodologies have been shown to be beneficial to the health of residents of a city and to have a positive impact on the mood of its citizens. Green infrastructure can be described as a network of natural landscape throughout the city, or it can be used to describe how natural systems are

used to improve resources or function as types of infrastructure for the city. Alexandra Dunn has described green infrastructure as applying to the following:

Natural systems, or to designed or engineered systems, that use soil and vegetation to capture water, reduce ambient temperatures, and otherwise protect and enhance both environmental quality and public health. Urban green infrastructure in this Article refers to trees, rain gardens, vegetated swales, pocket wetlands, constructed wetlands, open areas of impervious surfaces and reduced open space, contribute to heat island effects and reduce air quality. (Dunn, 2010)

These can be described as Best Management Practices (BMPs) as well. Natural features and open spaces can have an impact on the way people feel about the places, such as developing feelings of attachment toward the place or encouraging interactions with people in the place. Likewise, if the open spaces or greenery is overgrown, the feelings can be negative (Tzoulas, et al., 2007). There have also been studies showing the significance of trees and adjacent greenery that contribute to better physiological wellbeing and lessening fatigue (Tzoulas, et al., 2007).

Green infrastructure is often described as sustainable development because it is beneficial to both the environment and people. Sustainability is typically understood to have three main components: environmental, economic, and socialpolitical sustainability. Hubert, Muller, Werner, and Helming are all authors who describe sustainability as focusing "economic action and social balancing endeavors towards the conservation of functions of ecological systems. Therefore, politics have to be able to determine a development strategy, which does equal justice to reciprocal dependencies of economic social, and environmental development components." (Hubert, Muller, Werner, and Helming, 2003). Sustainability is becoming more important to the longevity of our cities and is slowly infiltrating private and public practices. Implementing sustainable programs will be difficult due to a lack of information and ability needed to set performance standards and measurements. More information, research and standards are being introduced as more BMPs are implemented and measured to find the challenges of sustainable solutions (Mei Yuan and Jay Yang). Specifically with green infrastructure, there is a lack of knowledge about reliability. This lapse stunts the full use and potentiality of these systems (Interviews). Coupling sustainable solutions with other uses and proving its functionality may encourage more acceptance of these practices.

Multifunctional landscapes are a concept more commonly used in agriculture as a way to gain economic value from the land, while still allowing it to function naturally for ecological purposes. For these Multifunctional Landscapes, all demands are considered equally important and all demands are considered simultaneously (Hubert, Muller, Werner, and Helming, 2003). Rosenburg and Nijamp explains the spatial land market and how land uses can be related to the location and size of land needed, but land uses can be in competition to acquire the same land, which is suitable for multiple purposes. This land demand and continuing consumption limits the future availability of land for functional uses. Rosenburg and Nijamp begin to define multifunctional landscapes using another definition from Lagendijk and Wisserhof. This definition states the following four possible conditions of multifunctional landscapes:

Intensification of the land use (an increase in the efficiency of the land use by a function);

(2) Interweaving of the land use (which they define as the use for the same area for several functions); (3) using the third dimension of the land (the underground along with the surface area); (4) using the fourth dimension of the land (use of the same area by several functions within a certain time-frame)."(p. 7)

They critique the concept of simply attempting to intensify the land use, and pose that the intensity of the landscapes comes from process and outcome of the remaining three conditions of multifunctional landscapes. They also critique interweaving land uses, and prefer land uses diversity. They believe that increasing diversity will increase the number of functions on the site (Rodenburg & Nijkamp, P., 2002). Boheman connected this concept to infrastructure and more urban setting examples to make more use of commonly unused land.

Boheman presented the argument for combining infrastructural and art to incorporate living systems. Boheman argues that incorporating all of these together can improve human and natural environments to be more aesthetically pleasing and sustainable. Additional benefits can be achieved as well, such as increasing vegetation around a city. This can not only help people psychologically, but it can also increase the air quality, serve as an ecological benefit, and help absorb stormwater. Integrating art into infrastructural systems may also help stimulate creativity and provide more opportunity for viewing. He presents the ideas of Thayer, who spoke of "visual ecology." Thayer defines the idea of "visual ecology" as "a new sort of aesthetics that will teach people about the value of nature and the possible symbiotic relationship between culture,

nature, and design" (Thayer Jr., 1976). This concept argues that natural systems should be exposed and comprehensible so people can understand and see the natural processes and value. By interweaving land uses, landscapes can support multiple functions and infrastructures and help mitigate negative effects of different infrastructure (Van Bohemen, 2002).

Conclusion

These concepts and findings influenced how the studio proceeded with design decisions. It was important to make sustainable public spaces that were functional for the residents and for the city as a whole. The literature review provided ideas of how to incorporate these functions into one public space.

Precedent Studies

Multifunctional landscapes similar to the proposed park are places that incorporate water management with public space and recreation.

Three case studies are presented: Sherbourne

Commons (Toronto, Canada), the proposed Milton

Street Park (Culver City, CA), and Tanner Springs

(Portland OR). All of these places incorporate stormwater management, but they each handle it differently. Although all have public spaces at different scales and types, each has relevance to the proposed rail park.

Tanner Springs Park

Tanner Springs, in the Pearl district of
Portland, Oregon, is a highly designed urban
wetland that acts as a stormwater detention pond as
well as public space, shown in figure 4-3. The project
is relevant to the proposed park project because
of the location and process of implementation of
Tanner Springs.

The Park is located in the Pearl District - a popular multifunctional area with high real estate value and that also happens to be located in the Downtown area. To acquire the 0.93 acres site, the city had to pay approximately \$1.25 million in 2003. To build the site, the city spent \$2.3 million more (Korn, 2009). The developmental process included extensive community involvement in which



Figure 4-3 Aerial View of Tanner Springs

programming decisions. The designers would continuously go back and forth with community leaders and stakeholders to revise and agree on one vision and design for the park. Later, public upset in the process signaled that there might have not been a diverse range of public members and stakeholders at the meetings. This highlights Tanner Springs as an example of the importance of designing for the whole public (Hagerman, 2007).

This park has a capture and filtering system that takes rainwater from the street and filters and cleans it in a small-scale urban wetland (Figurski). The park is a sustainable and attractive small urban wetland, but it also provides public space. Despite the extensive public involvement, there have still been concerns from citizens that the park was a waste of money because of its lack of public space and enjoyment. The park has paths and rest areas,

but in a city of interactive public spaces, having to stay on the dedicated path is not really a public space. Most of the grasses are natural grasses that are not conducive to play and lounging. The park does have open lawn space, but it is a small component to the entire site. The park is more of a park of sculptures and green space to be viewed in the city (Korn, 2009).

Like the perceived needs and uses of the proposed park in Kansas City, the need for open space for full public use is necessary. The area has little public space besides the streets and empty lots. It would not be served well by something that allows minimal use to the residents (Korn, 2009).

Milton Street Park

Milton Street Park is a proposed park located along the Ballona Creek near Los Angeles, California. The park proposal includes a linear park of various activities and a variety of different ecologies from one side of the park to the other. The plant life would surround the paths that allow for recreation or leisure. The park also helps to manage the water with natural filtration systems (Hung, et al., 2011).

The park is designed to reestablish ecologies in an old concrete embanked channel. The park is designed for a variety of users and would connect to an adjacent park with playing fields. The linear park would include walking, running and biking paths for

park-goers. The park has a variety of nooks for other activities like bird watching and panoramic viewing (Hung, et al., 2011).

The park's water management includes a complex system that uses natural systems to filter the water and retention basins to allow for the water to soak into the ground. The system first diverted from the storm drains into a hydrodynamic separator that removes trash and debris. The water is then pumped into a vegetated swale where the water filters through the plants and percolates to the detention basin underneath the vegetation. The water slowly soaks into the ground water table (Hung, et al., 2011).

This park shows the ability to mix stormwater management with recreation and activities into a similar area. The park has not been

built, but the master plans provide an interesting solution to traditional concrete embanked creeks (State of California Baldwin Hills Conservancy, 2010). The retrofitting of old infrastructure into new sustainable practices is necessary because it is more environmentally conscious.

Sherbourne Common

This new park is on the waterfront of Ontario Lake and is 3.7 acres. It integrates stormwater collection with urban public space and amenity. The pavilion and park is displayed in figure 4-4. The park has also attracted \$800 million in investment revenue to the surrounding area (Waterfront Toronto, 2012).

The park services the surrounding neighborhood by offering public space and art in



the infrastructure. The collected water is displayed in fountains and sculptures. A total of \$1.9 million was spent on the public art and sculpture in the park. In the winter, the park is frozen to create a public ice-skating arena. The park also serves the neighborhoods stormwater management needs (Waterfront Toronto, 2012).

The park is able to collect, store, and clean the stormwater from the neighborhood and release it back into the lake. The system has an advanced Ultra Violet cleaning system common in wastewater treatment facilities. The UV rays are sent through the water and kill the majority of bacteria within the water. Once the water has been cleaned, it is released back into the lake (Waterfront Toronto, 2012).

The park is an example of efficient and effective stormwater management, while adding open public space and amenity. The cost of the project totals \$30.6 million. The federal government in Canada paid 28.7 million of that cost and the city paid the additional \$1.9 million for the public art. The project displays the balance between functionality and practicality in cost. The cost of this type of project in Kansas City may not be welcomed unless it had the capacity to handle enough stormwater to be cost effective (Waterfront Toronto, 2012).

Conclusion

All three of the precedent studies offer different levels of functionality and public amenity. The balance of cost effectiveness, functional use, and public enjoyment is difficult to decide, but it is still dependent on the needs of the surrounding area. With public discourse and governmental support, large projects in popular real estate areas are possible; however, they are dependent on the support of the city, the government, and the public. The projects must fit the needs and desires of both the residents the level of functionality.

Vision for the Rail Park

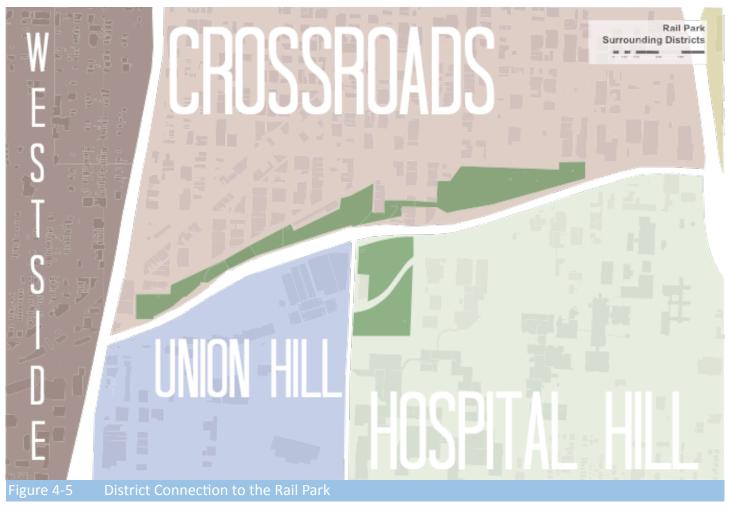
Based on the preceding analysis and research, KCDC developed a proposal for a park located in the South end of the Crossroads district shown in figure 4-5. This proposal takes into consideration site factors, literature reviews, and precedent studies needed to design a park that addresses the difficult issues plaguing the area and the city. The park addresses the need for additional public spaces, assists in managing stormwater, and leverages upcoming investments in the area. It also address issues of sustainability and land use raised in the case studies and literature by

creating a multifunctional landscape that is both a public area and functional infrastructure. This final proposal is the vision KCDC has developed for the area. The following will outline how the park will specifically address the parks, sewers and upcoming investments in the area as part of the vision, and the questions that still remain.

Current Downtown Park System

The proposed Rail Park will provide the Crossroads district with a new urban park and public space that will accommodate its needs.

The park will be designed to provide space for



open gatherings, performances and parking for food vendors. The park will supply the area with green space and playgrounds, as well as a path for walking and jogging. The full design of the park is still being finalized, but the vision is to provide the neighborhood with the amenities and spaces it doesn't currently have, or to protect it from losing any of the little space it does have. The activities and events that would occur in the park are also part of the district's identity. The park will be used to strengthen the district's individuality and community atmosphere.

The proposed park includes Washington

Square Park into the design and attempts to
revitalize it to become a center for the area. The
connection from the Rail Park to Washington

Square Park over the Railroad tracks will provide an
additional pedestrian connection, in an attempt to
bridge the two parts of the city. The park provides
additional access and mobility to the area for
pedestrians.

Stormwater and Sewer Issues in Kansas City

The park appears to be functional in not only providing additional access, but it also works to capture stormwater in order to reduce the amount of water entering the sewer systems. The less water entering the combined sewer systems, the smaller

or less frequent the overflows will be. The park's location is in the valley where OK Creek used to flow. It now is channeled underneath the ground. This area has seen previous flooding because of the location and the natural flow of water to the area. The proposed park attempts to capture some of the water flowing to the area naturally before it enters the sewer system.

The stormwater holding capacity of the proposed park may be limited by the amount of space available for the park. The park plans to use sustainable practices to capture the stormwater and cause it to either filter into the soil or evaporate, a practice that takes a lot of space and maintenance. There are other practices that would allow water to be stored without as intensive use of space of maintenance, but the level of sustainable practices associated with the park may lower as well.

Depending on the park's level of capacity, there may be an opportunity to find support for funding from the OFCP. This would require the Parks and Recreation Departments who might attempt to implement the park to collaborate with the Water Services Department. It could provide opportunities for a joint project which might win more support needed to implement it.

Incoming investments and New City Center

The proposed park would be located in a changing area that has already seen an increase in investment and may soon be further developed. There is an opportunity to attain land in the area now and develop another attraction for the area. Parks can be useful investment tools and the city could leverage the proposed park as an instrument to attract tourism and additional investments. Because of the Park's proximity to the incoming transit lines, it would be easily accessible to a wide range of the public. Using this land for a park will not only provide the area a needed public space and investment incentive, but it will also reveal the importance of green space and quality of life to the city.

Rail Park Proposal

The design has presented a vision for the park, but the specifics elements are yet to be determined. The issue is mainly deciding what level of stormwater management the park could be designed to handle while still maintaining public, green space. This ultimate decision could determine the willingness for Water Services as a collaborative partner. If the park water management is significant enough to influence the stormwater management of the whole water basin, Water Services may be more

inclined to support the project.

Specific design decisions on the set programming and the look of the proposals are all in the conceptual stage, but the literal design is in progress. More focus has been drawn to Washington Square Park because of its growing importance in the project. Understanding and determining the role of the Rail Park and the role of Washington Square Park is still to come. The importance of each park is changing and morphing as the project vision moves forward in the design process.

Design Decisions to be Determined

The Rail Park would address problematic issues in the city and attempt to take advantage of upcoming opportunities. The visioning process takes the numerous factors connected by location in order to bring together a proposal for something that can address the various aspects. At times, it can be difficult to balance the issues and solutions in the process. It takes time and numerous reiterations that can be difficult for a city or organization to focus on. The KCDC studio or any student group can take the time and energy to do the research and investigate things that were out of reach for the city. The visioning of what could be may lead the way for new ways of thinking about particular issues. Often a project from these student groups is not fully implemented, but some concepts can

be like Triangle Park- a concept originally created in a previous KCDC studio that was given to another architecture firm in Kansas City to finish being designed and implemented. The design may have changed, but the concept and the intent remain influential in the final product.

Chapter V. Moving from Vision to Reality

The proposed park was developed to improve the area and city, but getting this concept past the visioning stage is difficult. To understand how the rest of the implementation process works, a break down of the current processes used by the Departments of the Parks and Recreation, as well as the Department of Water Services is described. Following the processes are descriptions of the actors at play in the implementation processes. This understanding of the actors and processes will lead to a discussion of what the Rail Park may encounter if it were to be developed. The Rail Park would face challenges such as actors, functionality disputes, property owners, and public and interest disputes. Despite the variety of challenges in each there are opportunities to engage new solutions or opportunities. These opportunities relate to the ultimate vision of the Rail Park harking back to the reasons for developing it in the beginning.

Actors

The analysis of the Actors looks at the various actors' roles and their interests in the implementation process. The actors identified are those that may be most pertinent to the proposed

Rail Parks implementation. The roles and interests are taken from an analysis and understanding learned throughout the investigation of this study. Once their general roles and interests are understood, these actors are further classified into participatory and influential actors in implementation. This classification is done to help understand how some actors affect the project development process.

Some actors' roles have greater influence over the project implementation. The interest of those actors can determine their level of involvement in a project, either in support or in opposition. Some with strong interests may not have the opportunity to be part of the development process. Although not all actors can directly be a part of the implementation process, they can still influence the progression. In this way, all actors have an opportunity to be a part of the process, but the way they do is mainly divided by those who participate in the implementation and who influence the implementation.

Actor		Role	Interest	
Federal, State		Regulatory, policy makers,	Advancing their jurisdiction and comprehensive	
and County		funders	planning	
governments	EPA	This federal agency focuses on	Seeing sustainable practices implemented where	
		the protection of the	possible to better the environment, but also to see	
		environment, by regulating	main environmental threats like combined sewer	
		practices and contribute to	systems controlled.	
	In all and Compare	environmental degradation		
	Jackson County	Regional government to control and maintain county wide	Current interest in increasing transportation from suburban cities to Downtown. In all to improve th	
		functions, including regulation	counties economy and quality of life for residents.	
		and policy	counties economy and quarry of the for residents.	
	Missouri	Set regulations and protect	Maintaining those resources like the water quality	
	Department of	resources and prevent the	in the Missouri River for cities south of Kansas City	
	Natural Resource	degradation of the environment	in Missouri	
		at a state level		
City		Policy makers and decision	Providing for the public both socially, economically	
government		makers, supportive or	and environmentally, wining public favor	
and planning		incentive/disincentive projects.		
	City Council	These elected officials can be	To represent the public opinion, but this can make	
		champions and strong	the decisions difficult due to the diverse public	
		supporters of projects in the	opinions.	
	City Managar	city. The city manager controls the	To maintain a well running city, while maintaining	
	City Manager	budget and interactions with	the budget. Their interests may be inline with the	
		the various city departments.	city council.	
		The city manager may serve as	city council	
		a link between the elected		
		officials and the city		
		departments.		
	Planning	To provide informed advising	The city planners are interested in the long-term	
	Department	and decision making to the	development of the city.	
		planning commission, as well as		
		develop plans for future city		
	Public Improvement	development. Fund public infrastructure	Supporting public wants and infrastructure	
	Advisory Committee	projects in Kansas city	improvements for the city, provide the public with	
	Auvisory Committee	projects in Kansas city	an opportunity to make a difference.	
	Water services	To maintain and provide	To bring sustainable solutions to Kansas City, but	
	Water Services	infrastructural solutions for	also cost effectively reduce the combined sewer	
			overflows	
		water management	overflows	
	Parks and	water management Developer and project manager	In providing the public with open green space and	
	Parks and Recreation	Developer and project manager for the project	In providing the public with open green space and recreational facilities for Kansas City.	
MARC		Developer and project manager for the project Regional planning and	In providing the public with open green space and	
		Developer and project manager for the project Regional planning and comprehensive planning.	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City.	
Civic		Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as	
Civic Organizations		Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future	
Civic Organizations and		Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as	
Civic Organizations and Neighborhood		Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future	
Civic Organizations and	Recreation	Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods.	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents.	
Civic Organizations and Neighborhood		Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods. Support downtown	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents. To see the downtown grow and become a new	
Civic Organizations and Neighborhood	Recreation	Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods. Support downtown revitalization and development.	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents. To see the downtown grow and become a new national destination, as well as a residential and	
Civic Organizations and Neighborhood	Recreation	Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods. Support downtown revitalization and development. This group works both in the	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents. To see the downtown grow and become a new	
Civic Organizations and Neighborhood	Recreation	Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods. Support downtown revitalization and development.	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents. To see the downtown grow and become a new national destination, as well as a residential and	
Civic Organizations and Neighborhood	Recreation	Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods. Support downtown revitalization and development. This group works both in the political advocacy side and	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents. To see the downtown grow and become a new national destination, as well as a residential and	
Civic Organizations and Neighborhood	Recreation	Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods. Support downtown revitalization and development. This group works both in the political advocacy side and technical assistance in	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents. To see the downtown grow and become a new national destination, as well as a residential and	
Civic Organizations and Neighborhood	Downtown Council	Developer and project manager for the project Regional planning and comprehensive planning. To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods. Support downtown revitalization and development. This group works both in the political advocacy side and technical assistance in development	In providing the public with open green space and recreational facilities for Kansas City. To improve the metropolitan are of Kansas City. To represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents. To see the downtown grow and become a new national destination, as well as a residential and business destination.	

		non-profit organizations in Kansas City to assist in technical finance and business work or advising.	
	KCDC	To assist in research, analysis and visioning for the city and organizations	To improve the city they work in, but also to learn and push the boundaries of what can be done.
Public		The reason for the project is for the public so public approval	Their interest is in the quality of life.
	Philanthropists	Aid in the revitalization and advancement in Kansas City by investing in public projects	To better Kansas City as well as create a legacy within the City.
	Property owners	To provide property for the project, as well as agree to the new project in the area.	To keep functionality of their businesses and properties, or be fully compensated for property.

Table 5-1 Actors Roles and Interests

Influencing and Participant Actors

Actors may play different roles for different projects. There are those who drive the project and are strongly invested in the development of the project - these would be described as Participant actors. There are also the actors that influence the development by supporting or fighting the project implementation. These actors can be described as influencing actors. Which actors are participants and influencers depends on the project presented and the issues at hand. Nonetheless, interests and roles of actors in the project development can often change. The difference between participant and influencing actors is in the level of knowledge and authority over the project.

Influencing Actors

Influencing actors may impact decisions or even help fund the project, but these actors do not make the ultimate decisions. These actors may present opinions or support for or against

the project, but may not have direct power in the project development. They influence the design and development through forums, surveys, lobbyist or even basic communication methods. Some examples of influencing actors are neighborhood or district associations, community groups or individuals or the public.

Participant Actors

Participant members have the power to change the project design and are consulted in the decision making process. If an organization decides to partner with the Rail Park as it gains more support from other influencing actors, then it will become a participant actor who is playing a more dominant role. Participant actors may include a project champion, a development group, principle design team, and primary financers. A champion of a project is someone who serves as the head figure of the project development and works to gain attention and support for the project as well. For the

proposed Rail Park, the participatory actors might be the Parks and Recreation Department, and possible Water Services and the DTC, but more could join in partnership.

Often the public is an influencing actor, but in some cases, members of the public can become participants. It may seem like ordinary citizens lack the resources to motivate or develop a project, but there are outlets such as the PIAC grants. By gaining support with neighbors, then they can gain attention and funding from the PIAC grants. Although it is more difficult, anyone could potentially become a champion of the project who is willing to work for it. Gillham Park is an example of an individual citizen becoming the champion of improvement. This member of the public was able to gain support, find funding, and push for new improvements in the park (Pflaum, 2009).

Conclusion

Actors who participant or influence all play a role in the implementation process, but how they work together and interact may determine the outcome of the project. If their decisions are interdependent, then they are making decisions based off the decisions of others (Hopkins, 2001). This can be beneficial if actors begin to support the project, but when the decisions cross each other negatively or in opposition to the park, the

actors can be faced with various dilemmas. In some cases actors may have varying interests, but similar goals. Actors can join sides or support the project and reach their goal, despite their different motivations to do so. For the Rail Park it will be important to present a goal that satisfies multiple interests to better coordinate between actors. Finding ways to align decision-making processes with more collaborative methods may better offset the complexity of interdependent decisions (Innes & Booher, 2010).

One Challenge the Rail Park will face is identifying the actors' interests. It can be difficult to tell what position the actors will take in implementing the Rail Park. One can understand why it might benefit the city, but there are citizens who may believe the park is too costly and that it is imposing on private property. Portney brings up the reasons why projects that are labeled as public space and sustainable can be difficult to find support for. Sustainable goals can sometimes play against individualistic ideals of private property rights and are fought by citizens who oppose anything that is too far from the norm. There are few incentives to make decisions based on the good of the community, as opposed to individual interests (Portney, 2003). It is important, then, to identify the possible arguments against the proposed park, and to identify potential ways to approach these actors.

Societal norms are changing and it is possible that more people are willing to accept sacrificing private rights for the larger good. Various actors will be opportunities and challenges, but they are also any parks greatest resource.

Process

To understand the potential project development of the Rail Park, the current implementation processes of the Parks and Recreation Department and the Water Services Department were examined. The processes of the Departments of Water Services and Parks and Recreation are displayed as described in the interviews with employees from each department. The two processes are diagramed in figure 5-1. The current processes provide two areas of overlap in which each department or the same committees may review the plans. The two processes may overlap but at different stages of implementation. The greatest differences are in the outreach to the public and other departments and organizations. The parks and recreation services extends to other departments, organizations and governmental agencies in order to access funding for capital improvements more often than the Water Services Department.

The implementation process can vary depending on the actors and situation, but the processes commonly follow the described

structures. Both processes for these departments follow similar structures that begin with the idea or vision. An analysis is followed to determine the functional capacity and cost of the project. This information is synthesized and formulated into a plan for the project. For Water services, they may develop the plan and later hire a firm to design the actual structure, whereas the Parks and Recreation Department may hire a firm to begin a Master plan of their new project. Both processes must find funding in order to begin the design and construction process, but funding sources can vary. Separate departments must review the plans in order to be approved. Once all plans are approved and funding is found, the construction process may begin and then the project is compete (Stormwater, personal communication, February 22, 2012 & Parks and Rec., personal communication, February 22, 2012).

The Department of Parks and Recreation, in order to fund their park improvements, must reach out to other departments for assistance for funding opportunities. The Parks and Recreation Department has used various sources for funding including Tax Increment Financing for improvements, gained state level grants from Missouri Department of Transportation, as well as received funding aid from the City Manager's office. They process includes more stakeholder and public input. The Water services depends more on technical feasibility than

public input.

The Department of Water Services focuses on the cost benefit relationship of a project. The Water Services Department has a separate budget that uses the water bills to support the department, which is opposed to the Parks and Recreation. Their budget comes from the general fund. The water department may have more capital in order to preform analysis and plan production within the department and may only need to access outside funds for design and construction costs. They do have to submit their plans to committees for review before they find funding, but often times there is little public knowledge or concern about the water services. This could be due to the technical and necessary nature of water services (Stormwater, personal communication, February 22, 2012 & Parks and Rec., personal communication, February 22, 2012).

The Water Services and Parks and Recreation are different, but both have the end goal to serve the public. The challenges in the implementation of the Rail Park process could be the separated nature of the Water Services and Parks and Recreation departments and insufficient overlap of their processes. Coordinating between departments may also present conflicts in strategies and interests that can cause distrust or frustration. The Stormwater Management focus on the technical functionality

of their projects, while the Parks and Recreation must focus on the public input and funding sources (Stormwater, personal communication, February 22, 2012 & Parks and Rec., personal communication, February 22, 2012).. These varying interests are all important considerations for the Rail Park. If these issues are anticipated the variety of interests in the departments could be leveraged to assure the park has the full analysis and considerations it needs, technically, publicly, and with funding. Both departments can work together to reach the same goal of serving the public.

Funding is also a challenge encountered during the process of implementation. Without funding, the process halts. Funding is required for not only the acquisition of property and construction costs but also the design and administrative costs associated with the project. Funding can relate to the time requirements. If the project implementation process takes too long, people lose interest and motivation. Inflation can also play a role in a project that expands a long period of time. If the project finds problems and only half the funding is acquired, that sum of money must sit unused until the problem is resolved or more funding is attained. If this takes a number of years, the overall costs of the project may rise. For this reason, the speed at which the project can be implemented is important. The park is flexible

enough to be produced in stages or sections at a time, without detracting from its design. There is an opportunity to gain support; by proving it's worth one section at a time.

Conclusion

There are other opportunities as well to funding, such as partnerships, smaller grants and even donations. Complying funds from multiple sources can b difficult and time consuming, but without large grants it is necessary to accumulate funds. Relying on one large grant to fund the whole project may mean missed opportunities. Donations can come from fundraisers, businesses, or philanthropist. Convincing actors that the park will benefit them, can open doors to alternatives in funding. Donations and techniques for funding show the interplay between actors and the implementation process.

Bringing Actors and Process Together

The interdependent decisions of the actors and how those decisions translate into actions display the multitude of possible outcomes for any project. Since the acquisition of funds and overall public support is uncertain, actors may chose to pick less controversial routes to implementation. It could also be that actors believe that the public will support the park, and if the property is not acquired now it may become too expensive to acquire later. The actors affect the process, and the process can help lead the actors. They work within the same arena as shown in figure 5-2. The actors all have their own interests that can diverge, but the process helps keep them moving forward to guide them. As the actors and project moves forward they meet hurdles along the way that can slow the project down. These barriers are not always clear or anticipated, but to reach project completion they must be overcome.

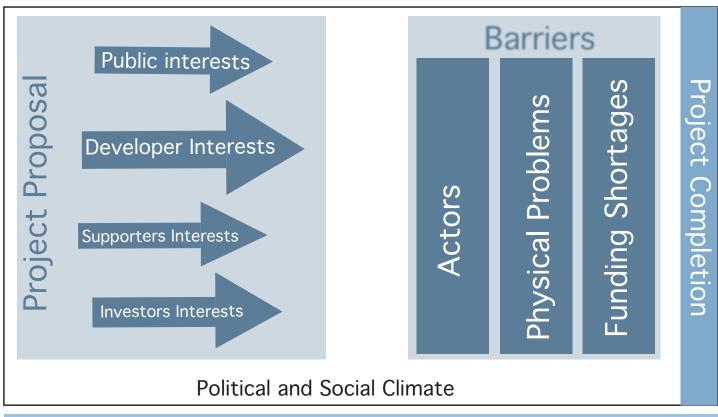


Figure 5-2 Actors and Process Implementation

Application to Rail Park

These issues are the most pertinent to the implementation of the Rail Park and have the potential to be the greatest barriers or opportunities. Although there are numerous opportunities and challenges, the most evident are the functionality, current property owners, and the public opinion. Most anticipated concerns could be overcome by finding the opportunity in the situation.

Functionality

Water Services has outlined the expected changes and costs of repairing the combined sewer systems in the OFCP. The solutions are the best for

the area with the highest effectiveness and lowest cost. The OFPC will attempt an area of BMPs as a pilot area, but even this was done for cost effective reasons. The specific area would have been as costly to implement underground techniques than to attempt total stormwater management with green solutions (Stormwater, personal communication, February 22, 2012). With water bills projected to raise around 13%, it could be difficult to convince the public to spend more for different BMPs that don't have the same proven record as other methods (Water Services Department, 2009).

The Rail Park concept currently would not be able to handle the amount of stormwater coming to the area to be useful to the OFCP. Using the Rail Park

as a major stormwater management feature, it will require more interventions separate from the park up the valley. The EPA and Water services would like to use BMPs that keep water on the surface out of the sewer system, but this also requires a broader scope than what the park is currently designed for (Student, personal communication, March19, 2012). Water services would most likely perform or ask for a cost benefit analysis of the project. In order to convince the Water Services to transfer money that is being used to fix the combined sewer systems, the functionality must be up to their standards to find a benefit (Stormwater, personal communication, February 22, 2012).

If the studio were to design the project to handle the stormwater to the level desired, then there is opportunity to develop parks as functional pieces of infrastructure. Increasing the sustainable functions in parks may also increase the visibility and importance of green infrastructures. Joining sustainable practices and recreational parks will help proliferate the two throughout the city by promoting each other. This is an opportunity to educate the public, provide amenities and serve the city (MARC, personal communication, February 14, 2012).

Property Owners

The boundaries of the Rail Park currently affect about 11 properties, and are adjacent to over 20 different property owners shown in figure 5-3. The park design currently would be acquiring frequently used parking lots to use as space in the park. These include the parking lots for employees of Children's Mercy Hospital and patron parking for the restaurants of the freight house district, as well as the parking for the Western Auto Lofts. The park would force the shipping dock for the building to move to the side in order to make room for the park. One building would actually be taken out in order to connect the park to the street. Although this seems excessive, eminent domain has been used in the past to take even more properties for transportation improvements (Planner & Green Space Committee, personal communication, February, 29, 2012). The property owners would be compensated, but with the area possibly growing in value, accepting the current market value of their property may be a challenge.

Property owners will most likely be aware of the potential price they could acquire for their land, making them not want to sell until the market price increases. A property with a 47,642 sq. ft. newly renovated office building three blocks north of the proposed park was listed for \$3 million (Historical Office Sale Listing - Completely Renovated

Crossroads Office Building, 2012). Other office buildings in the area of 18,600 sq. ft. are listed for \$525,000 (18600 Square Foot Warehouse, 2012). Acquiring these properties will be costly since the park is nearly 27 acres. Although not all of that land will need to be purchased, a large amount will come from currently used parking facilities. If the parking facilities were to be built elsewhere for these businesses, the costs in parking garage construction must be considered as well (K.C. Star, personal communication, February 20, 2012). The average cost of constructing a parking garage in Kansas City is \$15,878 per parking space. (Victoria Transportation Policy Institute, 2012). The price will

need to be made by funding solutions, but even getting property owners to sell their land may be a challenge.

All of the properties are functioning, and some are popular destinations. For this reason, the park would be in a good area, but it also would require those property owners to sell land. These property owners may be unwilling to leave the area or their properties. Other organizations such as the Crossroads Community Association may fight the park to protect its members and property owners (Green Space Committee, personal communication, 2012).



Figure 5-3 Rail Park Ownership

Although it may be difficult to take these properties, the benefits for other surrounding properties could make other property owners more willing to compromise. The lofts and studios might enjoy having the additional public space to have near by. The additional traffic the park could create may encourage businesses to work with alternatives for their parking needs. The solutions to the parking lots, such as reducing parking or building garages may benefit the city as a whole for the long run as well (planner, personal communication, 2012). With the new transit lines coming in, the amount of parking required for businesses can be reduced. This is acceptable because people can come into the area without cars, or park in other locations and take the transit to their destinations.

The studio has also presented an alternative garage that will increase the parking in the area for both visitors and employees. This garage would be located on a current parking lot north of Washington Square Parks and south of the Railroad tracks. This addition may easy business's tensions about losing their parking, while also creating a new multimodal transportation center in the city.

Public Opinion

The tax paying public could be difficult to predict. Their feelings towards the park is unclear at this point. As they can fight against issues that,

on surface level, are beneficial, the real issue may be the tax burden or lack of representation. For example, in Portland, Oregon, the city known for biking, found opposition to using excess sewer repair money to build bike lanes. Portland, like Kansas City, is in the process of repairing the combined sewer systems. In order to support the \$1.4 billion dollars, it would cost the residents a 64% increase to their water bills. The project was able to find savings in the project of about \$20 million. The city council decided to use the savings on bioswales and bike lanes in the city. Hearing that the residents were paying some of the top rates in the nation, and that the excess money was to be used for another cause that it was not initially intended for, led to a public outcry. The media fueled the issue, but the reason for the outcry was not solely on the use of funds for the bike lanes. Rather, it was on the repeated use of public funds for unintended uses without public consultation (Har, 2010). Similar to this situation is the use of OFCP funding for the proposed park along with other proposed tax increases.

The water bills for Kansas City will not increase as drastically as Portland's, but the public has also experienced more tax increases due to other improvements. One reason the Crossroads is unable to start a CID in the area is the fight against more taxes (Green Space Committee, personal

communication, February 29, 2012 & K.C. Star, personal communication, February 20, 2012).

Another special taxing district in the same area has been proposed along the Main Corridor to pay for the incoming Streetcar. Bank of America, acting as trustee for a surface parking lot downtown, is fighting the imposed tax because it puts a tax on both properties and surface parking lots (Twiddy, 2012). With special tax districts looming, the area may fight the park, though not because it doesn't desire a park, but because they fear paying additional taxes on their properties.

The public may also see the benefit, or desire a new public center for the city to come visit and enjoy. The area is already popular and with all the additions coming the public may want to continue growing the area for their own enjoyment, but also the additional tourism it may bring (Professor, personal communication, . Businesses and the public are more willing to accept sustainable or green amenities. Kansas City has been increasing as a tourist destination, but also increasing it's sustainable practices, like with the incoming bike share program (Planner, personal communication,

February 29,2012). The private corporations and businesses are some of the ones leading the way in sustainable practices. This shows that people are ready and may be more willing to accept a large urban project that was built for them and the environment (MARC, personal communication, February 14, 2012).

Conclusion

These major challenges to the project can be daunting but with thought-out strategies and a plan, the challenges can be overcome. The opportunities entangled in the challenges can be difficult to see, but offer a new perspective of how to approach the problem. If the challenges are framed with the opportunities, then more might be willing to support and aid the project. In order to do this, strategies and plans must show people that the problems have been considered and there are solutions and alternatives to most issues. The rail park can employ creative strategies and thoughtful design to overcome challenges and gain support for the Rail Park proposal.

Chapter VI. Rail Park Strategies

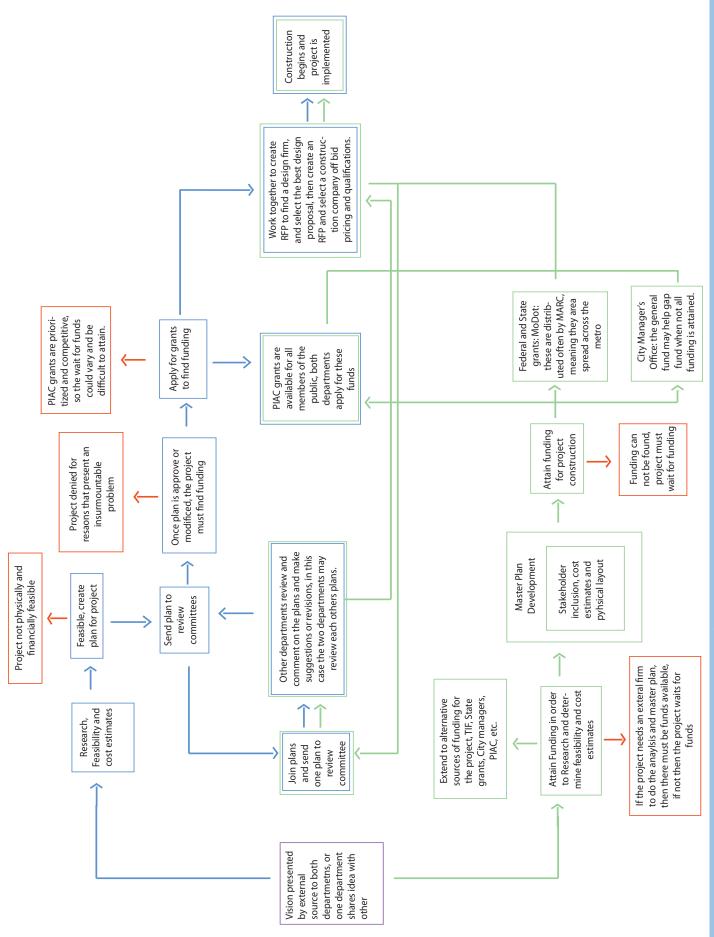
The rail park will be a challenge to implement, but coordinating governmental departments and a positive, strong public interest may rise above the hurdles. There are multiple strategies to take when implementing the Rail Park, but the three highlighted in this discussion are partnering processes, public participation and phasing. These three broad strategies may lay a foundation to build a more involved strategy plan implementation or, perhaps, provide a base for other projects.

Partnering Processes

The first strategy to implementing the Rail
Park is to have both the Water Services and the
Parks and Recreation Department partner to jointly
implement the park. The implementation process
must be altered between the two departments to
involve collaboration. Collaboration can be difficult
when weighing the opportunities costs. If the time
spent to coordinate is greater and more costly than
the time spent pushing the project through, the
willingness to coordinate is dampened (Stone, 1997).
The ideal strategy would be to create a team with
members of each department that could meet and
develop the plan and then implement the park. Due
to time restrictions and other demands, this may

be difficult because it could be hard to coordinate schedules and find time to meet and work on the plan, not to mention other obligations. For this reason, I propose a solution that brings the two departments together by combining their efforts during certain steps of the process. The diagram in figure 6-1 shows an altered version of the previous processes described. This proposed process shows more opportunities to coordinate.

This process, like the previous ones, begins with a problem or inciter. For the proposed park, it is KCDC who identifies the problems and the potential in the area and creates a vision. That vision would then be shared with both departments to begin the partnership agreements. They can begin their own visioning of what they wish to happen in the area and possibly adjust the idea for the park if necessary. At that point, a focus group or gathering of the public to inquire about their feelings, ideas, and possible concerns about the park could be held. This would be to gauge the relevance or necessity of the park for the Parks and Recreation Department, while the water services analyzes the possible functionality of the park. If the meetings and analysis lead to positive outcomes, then both Water Services can move forward with their designs of the water management proposal. The park can then begin the



implementation process.

These two groups must coordinate on the designs and plan the entry into the review boards and PIAC grants. The departments need to communicate enough to complete one final plan and design. The proposed way the two departments would coordinate is to work together on parts of the process that require developing plans or Requests for Proposals (RFPs) or Request for Qualifications (RFQs). RFP and RFQs are documents that inform firms of a job opportunity and then those firms may provide their proposals for the project or describe their qualifications to apply for the job. In order to submit one plan and design, the two departments will collaborate to jointly create one project. By jointly working on the plan, and RFP or RFQs there will be a consistency and collaboration in the project.

The departments might find that integrating their processes to complete jointly complete the project could be more effective. Having the only requirement of the two departments be to create one plan and RFP or RFQ allows the two departments to decide how best to collaborate. Allowing for departmental control and flexibility when requiring departments to collaborate on a project like the Rail Park may allow more buy-in and less resistance from the departments. The opposite may also be true that either department will not

voluntarily coordinate, and they find it more difficult to create a single project from two departments. This is a possibility, but finding any methods to improve interdepartmental communication will improve the effectiveness of a multifunctional project. The political climate and other projects under construction or consideration will effect how the two departments decide how to implement the project. If the two departments were able to share resources, knowledge and labor costs on a project, then the project may have a better chance of being implemented.

Public Participation

Parks were created for the people, so involving them from the beginning and gaining their feedback will be an important element. The public can include residents and businesses adjacent to the area, Kansas City and metropolitan-wide residents and businesses. Tanner Springs in Portland involved extensive public participation that led to a design. The trouble was that not all citizens agreed with the design (Hagerman, 2007). The park was still implemented and many people still use and enjoy walking near the space. With so many diverse opinions, it is important to keep the public in the implementation process and create the best place possible from the input.

One strategy similar to Tanner Springs is

to have multiple focus groups with citizens from all areas of the city (Hagerman, 2007). These focus groups will provide a diverse mix of needs and desires to guide the design. These sessions might also lead designers to understand the importance of the park and better understand how to communicate with possible leaders, funders, and most importantly, the public at large. More understanding of the concerns of the public and surrounding property owners will create better communication and less confusion and frustration.

Clear communication and participation will also create buy-in for the public to accept the project as their own and gain pride out of its implementation. If members of the public, especially the property owners adjacent to it, do not feel involved, then they might feel as if the government is not concerned about them. (Chapin, Kaiser, & Godschalk, 1995) This is the opposite of what the park is supposed to represent. It is a peoplefocused area that looks at the longevity of the social environment as well as the physical environment (Parks and Rec., personal communication, February 22, 2012). Gaining members of the public's support is vital and can be done if there is accurate and frequent communication and opportunities for input.

Phasing

Although many project implementers become frustrated when a project time line becomes stretched out, purposefully doing so with phasing may be a strategy to gain public acceptance and find funding for the Rail Park. By phasing the project, it allows for the public to see more immediate results. The funding goals are less severe, and there is more time to gain partnerships and supporters. The phasing plan can start with the existing Washington Park and build, connecting features and parts of the Rail Park after that.

Washington Park is an existing park in Kansas City that currently serves as an overflow type of space for events or festivals. It is mostly programmed for walking and relaxing. It may see a lunch crowd from surrounding office buildings and Crown Center, but it is not used to its full potential. The redesign could elevate it to an urban center and a public space in which the whole city could congregate. The benefits in updating Washington Square Park first are that the land is already there (Planner & Green Space Committee, personal communication, February 29, 2012). The only parcel that would need to be acquired is a parking lot, but the proposed design includes an improved parking garage. This would be great incentive for the property owner to lease or donate land for the addition of a new parking garage.

The city and other organizations are already interested in Washington Square Park, as it is already centrally located and adjacent to the incoming streetcar and possible commuter route. The park also borders Crown Center, a popular shopping center with the new additions of the Legoland Discovery Center and aquarium. Once people visit and enjoy the park, expanding it to accommodate the new activity in the area may be encouraged (Planner & Green Space Committee, personal communication, February 29, 2012).

The next phase would bridge a pedestrian bridge over the railroad tracks from the north to south side. This will help eliminate the barrier to better connect the two parts of the city. Then the phasing would move on to attempt to implement

parts of the Rail Park if previous attempts were successful.

The benefit of phasing relieves the funding pressure and presents more opportunity for smaller wins along the way. If the park were split into stages, the funding goals would be smaller and more achievable. Providing separate cost benefit analysis for each phase that displays the advantages of each section may be more manageable than attempting a cost benefit analysis for the park as a whole. The costs may appear too great to be overcome as a whole project, but it might be more feasible in smaller portions. The time span of the project could also be shortened for brief sprints of effort from volunteers or participants, in contrast to drawing out the process.

Chapter VII. Conclusion

Implementing a project takes persistence and support. Persistence pushes the project past barriers, while support creates momentum for the project. Not all barriers are anticipated, but some can be preempted. Identifying challenges and creating strategies to overcome the barriers will help move the project farther and gain support.

One general strategy applicable to all projects is to accommodate stakeholder concerns and unforeseen complications by being flexible with the design. Whether adjusting to physical constraints or a neighborhood concerns, flexibility improves the chances of a project moving forward. Moreover, it shows stakeholders and the public that the designers have their best interest in mind. Embracing stakeholder and public input in the design will display a genuine concern for their opinions. KCDC did well adapting their designs with every stakeholder meeting to better incorporate their ideas and concerns.

To adjust designs to stakeholder interests, it is imperative to obtain early and continuous feedback. If the public and stakeholders are part of the process, they will invest more into the project and be more supportive. This also is important in aligning interests. Stakeholder input can lead to mutual understandings in the conception

stage, which aids in aligning visions and creating opportunities for collaborations and integrated decision-making.

It also is important to include all beneficiaries in a project. A park, or public infrastructure may provide amenity for multiple interests and identifying those benefits will better justify the construction of the park. Focusing on one group of actors may damage the project, as it will hinder the advancement with other actors. Communicating the benefits to each individual actor will garner overall public support.

Even with public support, funding is a major barrier. Financial barriers can be overcome with creative solutions and support. Funding can come from numerous sources, not just governmental grants. Public-Private partnerships are becoming more common and benefit both parties.

Furthermore, collecting grants and other small sources should not be underestimated. However, do not rely on large grant sources to fund the entire project. Funding is a great challenge, but can be overcome with persistence and the use of multiple sources and/or partners.

Student groups can be good partners
because they are dedicated, creative, and are willing
to provide their services with education as their

payment. Student projects can be catalysts for improvement and work to identify specific issues or problems. KCDC has done this by identifying issues and creating innovative solutions. For instance, the concept of the Rail Park was grounded in the growth specific to the location and its outdated infrastructure that cannot support the influx of residents.

Partnering student groups like KCDC and other local design firms may provide greater opportunities for project implementation. This type of partnership could take the developed designs and create a new studio focused on possible implementation or design-build strategies. The partnership would allow students to work alongside professionals in changing vision to reality. Student projects create a vision, but they also present real solutions that could be further explored and

possibly implemented. KCDC has had past projects picked up by design firms and further developed into real projects. Allowing students to follow their designs to implementation would provide invaluable educational opportunities.

This report explained KCDC and its process for creating a vision. Further, the report outlined the implementation process and other factors in order to fully understand the challenges and opportunities ahead for the Rail Park. From that analysis, strategies and basic concepts were presented that may provide understanding of the implementation process for other students and groups. Although this report provides concrete ideas, it should in no way limit any future designs. Innovative projects often alter the implementation processes, improving both the city and its implementation processes.

References

- 18600 Square Foot Warehouse. (2012, March 9). (L. Inc., Producer) Retrieved March 20, 2012, from Loopnet: http://www.loopnet.com/Listing/17566271/1720-Cherry-Street-Kansas-City-MO/
- Chapin, F., Kaiser, E., & Godschalk, D. (1995). Urban Land Use Planning (4th Edition ed.). IL: University of Illinois Press.
- City of Portland. (2012). Tanner Springs Park. Retrieved February 23, 2012, from Portland Parks and Recre ation: http://www.portlandonline.com/parks/finder/index.cfm?PropertyID=1273&action=ViewPark
- Downtown Council of Kansas City. (2012). Downtown Council. Retrieved October 20, 2012, from Downtown Council of Kansas City: http://www.downtownkc.org/about/downtown-council/
- DST System Inc. (2012). DST Realty. Retrieved March 14, 2012, from DST Systems Inc.: http://www.dstsystems.com/cp/cp_affiliates_dstrealty.htm
- Dunn, A. (2010). Siting Green Infrastructure: Legal and Policy Solutions To Alleviate

 Urban Poverty and Promote Healthy Communities. Environmental Affairs , 37, 41-66.
- Figurski, J. (n.d.). Tanner Springs Park: A Case history for Sustainable Stormwater Solutions. Retrieved March 11, 2012, from 34th Annual Water Envirionment School: http://depts.clackamas.edu/wet/Stormwater/STORMTanner_Springs_Case_Study_for_Sustainable_Solutions.pdf
- Garvin, A. (1996). The American City: What Works, What Doesn't. New York: McGraw-Hill Companies.
- Hagerman, C. (2007). Shaping Neighborhoods and Nature: Urban Political Ecologies of urban waterfront trans formations in Portland, Oregon. Cities , 24 (4), 285-297.
- Har, J. (2010, March 27). Potland sewer, water rates lack third-party check. Retrieved March 12, 2012, from The Oregonian: http://www.oregonlive.com/portland/index.ssf/2010/03/portland_sewer_water_rates_lac.html
- Hawley, B. (2011, September 28). Kansas City Business Journal. Retrieved January 10, 2012, from

 Legoland Discovery Center breaks ground in Kansas City: http://www.bizjournals.com/kansascity/

 news/2011/09/28/legoland-discovery-center-breaks.html
- Historical Office Sale Listing Completely Renovated Crossroads Office Building. (2012). Retrieved March 1, 2012, from LoopNet: http://www.loopnet.com/Listing/17282038/1726-Holmes-Kansas-City-MO/

- Hopkins, L. (2001). Urban Development: The Logic of Making Plans. Washington D.C.: Island Press.
- Hung, Y., Aquino, G., Waldheim, C., Czerniak, J., Geuze, A., Skjonsberg, M., et al. (2011). Landscape Infrastructure: Case Studies by SWA. (T. I. SWA, Ed.) Germany: Birkhauser.
- Innes, J., & Booher, D. (2010). Planning with Complexity: An Introduction to Collaborate Rationality for Public Purpose. New York: Routledge.
- Kauffman Center. (2010). Kauffman Center for the Performing Arts. Retrieved March 21, 2012, from Support: http://www.kauffmancenter.org/support/
- Kessler Society of Kansas City. (2012). Kansas City's System. Retrieved February 29, 2012, from George E. Kessler: http://www.georgekessler.org/index.php?option=com_content&view=article&id=65&Itemid=58
- Korn, P. (2009, Oct. 30). Visit, But Don't Play. Retrieved March 1, 2012, from Portland Tribune: http://www.portlandtribune.com/news/story.php?story_id=115284872587675200
- Mid-America Regional Council. (2012). Retrieved january 15, 2012, from Smartmoves: Kansas City Regional Transit Vision: http://www.kcsmartmoves.org/
- Pflaum, N. (2009, July 23). It takes more than green to improve Kansas City's public spaces seeing red helps.

 The Pitch.
- Rodenburg, C., & Nijkamp, P. (2002). Multifunctional Land Use int he City. Research Memorandum, Vrije Uni versiteit, Economics and Business Administration, Amsterdam.
- State of California Baldwin Hills Conservancy. (2010). Projects. (S. o. Calirfornia, Producer) Retrieved February 12, 2012, from Baldwin Hills Conservancy: http://www.bhc.ca.gov/projects.html
- Stone, D. (1997). The Art of Political Decision Making. New York, NY: W.W. Norton and Company.
- Thayer Jr., R. (1976). Visual Ecology: Revitalising the Esthetics of Landscape Architecture. Landscape , 20 (2), 37-43.
- Twiddy, D. (2012, March 28). Bank of America challenges Kansas City's streetcar tax district plan. Retrieved March 29, 2012, from Kansas City Business Journal: http://www.bizjournals.com/kansascity/news/2012/03/28/bank-of-america-kansas-city-streetcar.html
- Tzoulas, K., Korpela, K., Venn, S., Yli-Pelkonen, V., Kazmierczak, A., Niemela, J., et al. (2007). promoting Eco system and Human Health in Urban Areas using Green Infrastructure: A Literature Review. Landscape and Urban Planning, 167-178.
- U.S. Environmental Protection Agency. (2012, February 16). Combined Sewer Overflows. Retrieved November

- 20, 2012, from National Pollutant Discharge Elimination System (NPDES): http://cfpub.epa.gov/npdes/home.cfm?program_id=5
- Van Bohemen, H. (2002). Infrastructure, Ecology and Art. Landscape and Urban Planning, 187-201.
- Victoria Transportation Policy Institute. (2012, February 22). Transportation Cost and Benefit Analysis II-Parking Costs. Retrieved March 13, 2012, from Victoria Transportation Policy Institute: http://www.vtpi.org/tca/tca0504.pdf
- Water Services Department. (2009, June 30). Overflow Control Plan. Retrieved November 15, 2012, from City of Kansas City, Missouri: http://www.kcmo.org/idc/groups/water/documents/ckcmowebassets/plan_full.pdf
 Waterfront Toronto. (2012). Sherbourne Common. Retrieved February 5, 2012, from Waterfront Toronto: http://www.waterfrontoronto.ca/sherbourne common
- Wet Weather Solutions Program. (2009, January 30). Kansas City, MIssouri Overflow Control Plan Overview

 Retrieved December 2011, from City of Kansas City, Missouri: http://www.kcmo.org/idc/groups/water/

 documents/ckcmowebassets/plan overview.pdf

Appendix A.

Actor		Role	Interest	Opportunity	Barrier
Federal, State and County governments		Regulatory, policy makers, funders	Advancing their jurisdiction and comprehensive planning	To provide funding for the park and create or change policy to enable collaboration between different actors	Bureaucracy in regulations and working with policies, or if there is a lack of available funds or grants.
	EPA	This federal agency focuses on the protection of the environment, by regulating practices and contribute to environmental degradation	Seeing sustainable practices implemented where possible to better the environment, but also to see main environmental threats like combined sewer systems controlled.	Support sustainable water management and park.	Need for wider area of intervention to handle stormwater. Cost effectiveness of the park vs. outlined in OFCP
	Jackson County	Regional government to control and maintain county wide functions, including regulation and policy	Current interest in increasing transportation from suburban cities to Downtown. In all to improve the counties economy and quality of life for residents.	Support or encourage the park development to encourage the commuter rail.	May not assist in any funding or see it more as a physical restriction to possible commuter rail.
	Missouri Department of Natural Resource	Set regulations and protect resources and prevent the degradation of the environment at a state level	Maintaining those resources like the water quality in the Missouri River for cities south of Kansas City in Missouri	Support sustainable practices in water management.	Find similar problems with methods to manage stormwater, like EPA.
City government and planning		Policy makers and decision makers, supportive or incentive/disincentive projects.	Providing for the public both socially, economically and environmentally, wining public favor	To provide support, and gain a new public space and attraction. Political and departmental support to gain funding and partners.	Regulations or interest variation between departments or officials.
	City Council	These elected officials can be champions and strong supporters of projects in the city.	To represent the public opinion, but this can make the decisions difficult due to the diverse public opinions.	Support the park, or gain a champion for project development.	Disagreement among the council can lead to tie ups and slow downs. May side with citizens, if there is a lack of public support.
	City Manager	The city manager controls the budget and interactions with the various city departments. The city manager may serve as a link between the elected officials and the city departments.	To maintain a well running city, while maintaining the budget. Their interests may be inline with the city council.	May assist in funding gaps or in administrative assistance, as well as help coordinate departments.	May not be an option for gap funding or can not find agreements between departments.
	Planning Department	To provide informed advising and decision making to the planning commission, as well as develop plans for future city development.	The city planners are interested in the long-term development of the city.	Find value in park for the comprehensive plan, assist in zoning or ordinance changes to make park possible, or assist in partnerships.	May fear the funding and maintenance burden on the city, as well as it's integration into the area. They also may side with the wills of the public.
	Public Improvement Advisory	Fund public infrastructure projects in Kansas	Supporting public wants and infrastructure improvements for the city,	Could be a funding source for the park.	Funds are spread out over numerous applications and

	Committee	city	provide the public with an opportunity to make a difference.		those applications are prioritized, so it can be competitive
	Water services	To maintain and provide infrastructural solutions for water management	To bring sustainable solutions to Kansas City, but also cost effectively reduce the combined sewer overflows	Assist in transferring OFCP funds to proposed park. Assist in technical requirements and design.	Mismatch of OFCP requirements and park capabilities. Need for proven solutions and unwilling to risk funds on untested solutions.
	Parks and Recreation	Developer and project manager for the project	In providing the public with open green space and recreational facilities for Kansas City.	To support the park and work to apply for grants and funding, as well as work with the public to gain support.	Without a budget to use on capital projects, all funding must be external from the department and dealing with not only construction, but also long-term maintenance
MARC		Regional planning and comprehensive planning.	To improve the metropolitan area of Kansas City.	Assist in grant applications.	MARC serves all of the metro area, and must consider all applications for grants.
Civic Organizations and Neighborhood Associations		To start, develop and support city improvements. To build consensus and represent organization members and neighborhoods.	TO represent the neighborhoods wishes, as well as improving neighborhoods and areas for future investments and residents.	Supporter and fundraisers of the park and consensus builders.	If these organizations disagree on one any one issue it can cause division in the project momentum.
	Downtown Council	Support downtown revitalization and development. This group works both in the political advocacy side and technical assistance in development	To see the downtown grow and become a new national destination, as well as a residential and business destination.	To build support and assistance with administrative, advocacy or fund raising support.	Alignment with member interests is a concern, as well as a project that may hinder current businesses or other investments.
	Economic Development Council	Support economic development and health. EDC staff often works with government and non-profit organizations in Kansas City to assist in technical finance and business work or advising.	To help establish Kansas City as a self-sustaining economy that is resilient, growing and supportive to businesses and residents.	Assisting in financing ideas and administrative assistance for the park. This group could also assist in the producing a cost benefit analysis that weighs the monetary costs and the social and environmental benefits.	Finding financing options that are available may be difficult or an ability to find support in the business community if they are not in favor. If the cost benefit analysis did not produce findings in the parks favor.
	KCDC	To assist in research, analysis and visioning for the city and organizations	To improve the city they work in, but also to learn and push the boundaries of what can be done.	To tailor the design to best fit the needs of the area, but also advocating for the project.	Losing the design or control of the project, to something less visionary and more realistic.
Public		The reason for the project is for the public so public approval	Their interest is in the quality of life.	To provide approval and support the project.	If the public does not find favor in the proposed park, then it will be difficult to continue.
	Philanthropists	Aid in the revitalization and	To better Kansas City as well as create a legacy	Could provide funding for the park.	Getting someone to donate to the park. It

	advancement in Kansas City by investing in public projects	within the City.		will mean less control for the city over the project design.
Property owners	To provide property for the project, as well as agree to the new project in the area.	To keep functionality of their businesses and properties, or be fully compensated for property.	To sell properties or assist in support.	If property owners lose functionality or value from the sale of their property.