Design	Frameworks:	A Study	v of Kansas	City's P	ower & Li	ight District
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by

Tyler Tucker

A REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF LANDSCAPE ARCHITECTURE

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

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Abstract

The Power & Light District is a mixed-use, urban district in the heart of the central business district. The area has seen rapid revitalization since construction began in 2005, and become a popular destination. This project examined the area using a chosen design framework. Documentation and reflection on the application of the design framework was then used to judge its efficacy when applied at the district scale. To gain the desired outcome of this study, there is a two-part research question.

- 1. How is Kansas City, Missouri's Power & Light District viewed, and how well does the district score, when using the design framework created in *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions*?
- 2. How well does the *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* design framework work when applied to the Power & Light District in Kansas City, Missouri?

This project used several methods to research design frameworks and the Power & Light District. The literature review studies urban design and several design frameworks. GIS diagrams were used to study the Power & Light District. On-site surveys were used to provide public input. Finally, the chosen design framework was used to score the area. Documentation on the use of the design framework was used to reflect on the design framework's efficacy.

Chapter 4 Results and Chapter 5 Conclusions show the application of the design framework to the Power & Light District, and reflections on the efficacy of the framework. The district scores very well with an urban space value of 77%. While the design framework is very extensive, it is meant to judge sites at a smaller scale. For a more accurate scoring of the Power & Light District, the design framework could be adapted to better judge sites at a district scale.



A Study of Kansas City's Power & Light District



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Design Frameworks

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A report submitted in partial fulfillment of the requirements for a Master's Degree in Landscape Architecture from the Department of Landscape Architecture and Regional & Community Planning
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"We are the sum of all people we have ever met"
-Dirk Wittenborn

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Chapter 1

Introduction and Background

Figure 1.01 Howl at the Moon Power & Light District (Author, 2017)

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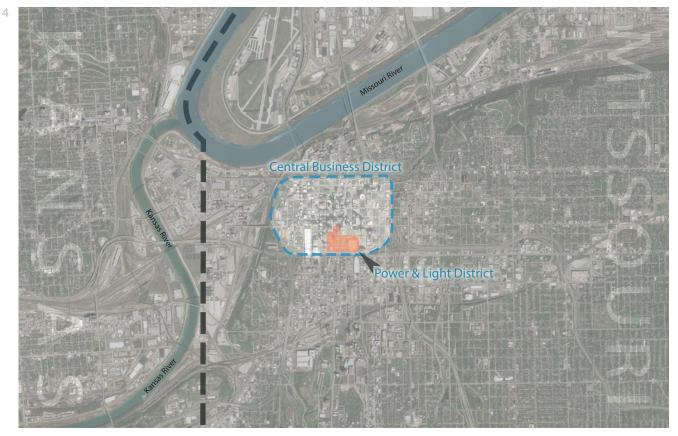


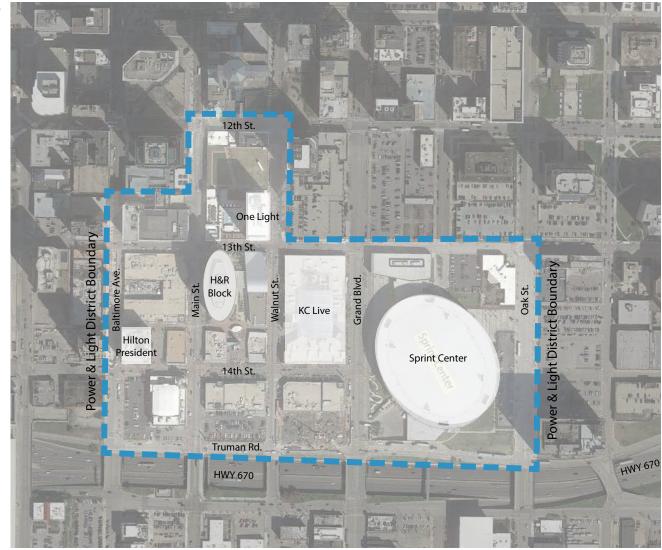
Figure 1.02
City Context of the Power & Light District (Author, 2017)

Background

"The global population has become increasingly more urban and concentrated over the course of the last few centuries." (Wall, Waterman, 2010, p. 9) This goes against the grain of previous generations' lifestyle shift to suburban sprawl, and the accommodation of the automobile. Suburban sprawl is defined as, "the spreading of developments (such as housing developments and shopping centers) into suburban or rural areas." (Webster, 2016) This shift is in large part due to the youth moving back into urban environments.

The United Nations has found that "the world is undergoing the largest wave of urban growth in history. More than half of the world's population now live in towns and cities, and by 2030 this number will swell to about five billion." (United Nations Population Fund, 2016) With this change in thinking from suburban sprawl to urbanization, contemporary landscape architecture has seen an increase in urban design projects. A goal for landscape architects, and all other designers, is to now create vibrant urban areas to accommodate all the wants and needs of these larger urban populations. "It is now widely accepted that quality public spaces are vital assets for a city's livability and sustainable development providing social health, environmental and economic short and long-term benefits." (Cho et al, 2015, p. 1)

The use of design frameworks for the creation, and redevelopment, of these urban areas could increase in the design profession. While design frameworks do have the capacity to create a beneficial study of any type of design in landscape architecture, or regional and community planning, this study will only examine them in the context of highly urban spaces. The specific urban site chosen for this exploration is the Power & Light District in Kansas City, Missouri. "It's located in the heart of downtown, between Grand Boulevard and Baltimore Street, and 12th Street and Truman Road. The District spans eight blocks of new restaurants, entertainment, nightlife and shopping." (Mission Media, 2016) This area has seen rapid revitalization since the start of its construction in 2005. The extensive revitalization efforts have been recognized. The Urban Land Institute gave the Power & Light District the Award of Excellence in 2009.



Stakeholders

This report could be used by several different agencies in the Kansas City and Manhattan area. The Power & Light District Office may use this tool to examine past, present, and future development opportunities in the area. The City Planning and Development Department of Kansas City could use this study as a tool to examine the Power & Light District, Westport, and further development opportunities in the Kansas City area. My master's committee, consisting of Laurence A. Clement, Jr., Blake Belanger, and Jason Brody, could also find valuable information for their teaching at Kansas State University and the Kansas City Design Center. The ultimate stakeholders are urban populations that may view this as an informative tool for the development of their cities and other urban areas.

Figure 1.03 Kansas City's Power & Light District (Author, 2017)

Literature Review

The literature review provides a strong foundation of knowledge for the methodology and study of Kansas City's Power & Light District. The literature review is divided into two broad topics of study. The first being modern urban design. The second half of the literature review will explore several design frameworks that relate to the development of urban spaces. To better understand the factors that affect urban design I conducted a careful reading of Jane Jacob's The Death and Life of Great American Cities, Kevin Lynch's Good City Form, Bentley et al's Responsive Environments, and Cho et al's Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions. The design framework chosen for this examination of Kansas City, Missouri's Power & Light District is presented in Cho et al's Re-Framing *Urban Space: Urban Design for Emerging Hybrid and High-Density* Conditions. This highly critical design framework examines three distinct factors groups that make up urban sites, and provides an Urban Space Value percentage score for urban spaces.

Research Question

- 1. How is Kansas City, Missouri's Power & Light District viewed, and how well does the district score, when using the design framework found in *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions*?
- 2. How well does the *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* design framework work when applied to the Power & Light District in Kansas City, Missouri?

Methods

Following the literature review, I conducted a site analysis of the Power & Light District using GIS data. This site analysis was used to examine information that was not readily present during site visits. The data for this study was acquired from Kansas City's GIS Parcel Viewer*. A series of site visits was used to conduct on-site surveys. These surveys

were used to gain public input on the Power & Light District. Following the on-site surveys, I studied the Power & Light District using the design framework provided by *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions*. The documentation of this method allowed for a site inventory and analysis of the site, while also providing the Urban Space Value percentage score for the district. Throughout the study the application and efficacy of the design framework was regularly examined to provide conclusions to the study.

Results

Kansas City's Power & Light District has revitalized the heart of downtown Kansas City. It has brought new business, entertainment, and living opportunities to the residents of the Kansas City area. Due to the success of the Power & Light District, I believed that the chosen design framework would produce a favorable "Urban Space Value" for the area. Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-density Conditions is a new reading, and was written with current design trends and conditions in mind. Due to these factors, and the specificity of the design framework, I believed that it was well suited to examine the Power & Light District. It provided an appropriate Urban Space Value, and clearly documents the process of how the Urban Space Value was determined. While it looked favorably on the Power & Light District, I believe that this study shows the need for an updated district scale design framework. The final product of this study is this report containing the literature review, survey results, application of the design framework, and reflections and conclusions on the efficacy of the design framework when applied to the Power & Light District.

Summary

This chapter introduces the reader to the study and its parameters. The Background section provides reasoning for the need of the study, while introducing the Power & Light District. The Stakeholders section allows the reader to understand the possible agencies that may use the results of this study. The Literature Review

and Methods sections identify the methods that were used to complete this examination of design frameworks and the Power & Light District. Finally, the Results section gives a glimpse of the conclusions produced from the study. Chapter 2 Literature Review provides the reader with information on modern urban design, several design frameworks, and their components.





Chapter 2

Literature Review and Research Question

Figure 2.01 Sprint Center (Author, 2017)

Modern Urban Design

Modern urban design began as a solution to a problem created by development. "The modern concept of urban design grew out of still familiar mid-twentieth-century concerns: urban sprawl at city peripheries and decay in aging central areas." (Krieger, Saunders, 2009, p. ix) Development is often viewed as a positive, but what happens when cities continue to expand, while the centers of the cities become deserts? Much of modern urban design is now geared towards the redevelopment of these city centers; instead of the continued growth of city limits.

"Today, inner-ring suburbs and municipalities offer a tremendous opportunity for urban growth and renewal. They are armed with an unprecedented understanding of the need to compete with other locales and to stimulate investment in their communities by creating exciting and unique place in which to live." (Cherry, 2009, p. 4) Now, urban designers are tasked with creating fully integrated areas of interest that may entertain all the wants and needs of their inhabitants. The two most common characteristics associated with urban design are places and people. *Public Places Urban Spaces* defines urban design as, "the making of places for people." (Carmona et al, 2006, p. 3) What does it take to create these "places for people"?

Modern urban design has created a task that is beyond the work of a single discipline. (Krieger, Saunders, 2009, p. ix) "It is not, for example, architecture, civil or highway engineering, landscape architecture, estate management, or town planning. Equally, it is both more and less than any of these long-established activities." (Carmona et al, 2006, p. 5) Each profession brings an area of expertise to urban design, including landscape architecture. (Wall, Waterman, 2010) With the need to view modern urban design as all-encompassing, "isn't the landscape the real glue of the modern metropolis?" (Krieger, Saunders, 2009, p. x) The following design frameworks could provide a tool for design and evaluation. "Perhaps better designed urban frameworks provide a way both to create a more vital and diverse urbanism and to incite more innovative architectural production across a broader spectrum of American design culture." (Krieger, Saudners, 2009, p. 210)

The Death and Life of Great American Cities

Jane Jacobs was a writer and urban activist. Though she did not have any education in urban design, she worked to identify the factors that could create a successful city. (Project for Public Spaces, 2016) *The Death and Life of Great American Cities* was written as an "attack on current city planning and rebuilding... and mostly, an attempt to introduce new principles of city planning and rebuilding." (Jacobs, 1961, p. 3) It is an examination of how cities operate, to create new principles of design for future development and revitalization. *The Death and Life of Great American Cities* is less a design framework, and more a call to reinvent the way in which designers view cities. (Jacobs, 1961)

The Death and Life of Great American Cities can be described in terms of four main themes: sidewalks, neighborhood parks, city neighborhoods, and diversity. Jane Jacobs examines these categories in the setting of highly populated urban areas. Each of these themes is further divided in the reading; with several overlapping principles. Each of these categories is vital to the revitalization of the city.

Sidewalks is divided into three separate principles: safety, contact, and assimilating children. "Streets and their sidewalks, the main public places of a city, are its most vital organs... to keep a city safe is a fundamental task of a city's streets and its sidewalks." (Jacobs, 1961, p. 29) To have successful streets, is to have areas that provide security from strangers and crime. "The bedrock attribute of a successful city district is that a person must feel personally safe and secure on the street among all these strangers." (Jacobs, 1961, p. 30) To accomplish this feat, Jane Jacobs lists three main qualities to allow streets to become safe:

- "1. There must be a clear demarcation between what is public space and what is private space. Public and private spaces cannot ooze into each other as they do typically in suburban setting or in projects."
- "2. There must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street. The buildings on a street equipped to handle strangers and the insure the safety of both residents and strangers must be oriented to the

street. They cannot turn their backs or blank sides on it and leave it blind."

"3. The sidewalk must have users on it fairly continuously, both to add the number of effective eyes on the street and to induce the people in buildings along the street to watch the sidewalks in sufficient numbers." (Jacobs, 1961, p. 35)

To establish this safety, there must be contact. "A good city street neighborhood achieves a marvel of balance between its people's determination to have essential privacy and their simultaneous wishes for differing degrees of contact, enjoyment or help from the people around." (Jacobs, 2016, p. 59) There must be an established trust between a community. This trust is not formed fast. There must be ample opportunity for contact, for this trust to grow. "Impersonal city streets make anonymous people, and this is not a matter of esthetic quality nor a mystical emotional effect in architectural scale. It is a matter of what kinds of tangible enterprises sidewalks have, and therefore of how people use the sidewalk in practical, everyday life." (Jacobs, 1961, p. 57)

The final sidewalk principle is the assimilation of children. Children are vulnerable. Children should be provided with a wide variety of opportunities for play, but "they need an unspecialized outdoor home base from which to play, to hang around in, and to help form their notions of the world... If children are moved from the street to a park or other location, the children have moved from under the eyes of a high numerical ratio of adults, into a place where the ratio of adults is low or even nil." (Jacobs, 1961, p. 81) While children do not have to only play near their "home base," they are safe when under the watchful eyes of a connected neighborhood.

The second theme examined is neighborhood parks. In highly dense, urban areas there is a stigma that abandoned parks are undesirable areas. "People do not use city open space just because it is there and because city planners or designers wish they would." (Jacobs, 1961, p. 90) Instead, these abandoned parks should have life forced onto them. Jacobs states that, "Parks are not automatically anything." (Jacobs,

The third theme is city neighborhoods. City neighborhoods have the capacity to become producers for only themselves. On many occasions, there is a clear dividing line between city neighborhoods. Jacobs argues to, "drop any ideal of neighborhoods as self-contained or introverted units... wide choice and rich opportunity is the point of cities" (Jacobs, 1961, p. 114) Neighborhoods cannot operate by themselves, and cities need neighborhoods to thrive. "The very fluidity of use and choice among city people is precisely the foundation underlying most city cultural activities and special enterprises of all kinds. Because these can draw skills, materials, customers or clienteles from a great pool, they can exist in extraordinary variety, and not only downtown but in other city districts that develop specialties and characters of their own." (Jacobs, 1961, p. 116) City neighborhoods offer the chance for areas of a city to take on their own identity and value. If these differing neighborhoods work together to provide the city with all its wants and needs, all will thrive. (Jacobs, 1961)

The final theme is diversity, which has already been brought up in multiple themes. Jacobs identified four conditions that allow for areas to generate diversity. "All four in combination are necessary to generate city diversity; the absence of any one of the four frustrates a district's potential." (Jacobs, 1961, p. 151) These conditions include:

"1. Primary mixed uses: The district, and indeed as many of its internal parts as possible, must serve more than one primary function; preferably more than two. These must insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common."

- "2. Small blocks: Most blocks must be short; that is, streets and opportunities to turn corners must be frequent."
- "3. Aged buildings: The district must mingle buildings that vary in age and condition, including a good proportion of old ones so that they vary in the economic yield they must produce. This mingling must be fairly close-grained."
- "4. Concentration: There must be a sufficiently dense concentration of people for whatever purposes they may be there. This includes dense concentration in the case of people who are there because of residence." (Jacobs, 1961, p. 151)

Good City Form

Kevin Lynch practiced urban planning, and was a definitive writer on urban design and planning. Lynch is credited with the authorship of several prominent publications, including *The Image of the City* and *Good City Form* (built upon elements of The Image of the City). Kevin Lynch wrote *Good City Form*, with the hopes of answering a single question. "What makes a good city?" Specifically, "to make a general statement about the good settlement, one relevant and responsive to any human context and which connects general values to specific actions." (Lynch, 1987, p. 1) To create a good city, it must be responsive to its inhabitants. This framework examines the connection between human values and the spatial, physical city. (Lynch, 1987)

In developing this framework Lynch realized that the standards of a city would change over time. Lynch states that the standards must be generalized. This allows for them to evolve over time and adapt with new design trends and city needs. He even goes far enough to say that the relationships in cities and his framework are circular. "Human life is a continued state of becoming. Continuity is founded on growth and development, and development is founded on continuity." (Lynch, 1987, p. 116) He believes this framework may be used to not only evaluate cities, but also the culture that inhabits it. To be sure the framework was generalized to the point that it could adapt, Lynch developed the following characteristic standards:

- "1. They should be characteristics which refer primarily to the spatial form of the city, as broadly defined above, given certain very general statements about the nature of human beings and their cultures."
- "2. Should be as general as possible, while retaining their explicit connection to particular features of form.
- 3. Should be possible to connect these characteristics to the important goals and values of any culture, at least through a chain of reasonable assumptions."
- "4. The set should cover all features of settlement form which are relevant, in some important way to those basic values."
- "5. Should be in the form of dimensions of performance, along which various groups in various situations will be free to choose optimum points or "satisficing" thresholds. In other words, the dimensions will be usable where values differ or are evolving."
- "6. Locations along these dimensions should be identifiable and measurable, at least in the sense of "more or less," using available data. They may be complex dimensions, however, so that locations on them need not be single points. Moreover, the data, while conceivably available, may for the present escape us."
- "7. Should be at the same level of generality."
- "8. Should be independent of one another. That is, setting a level of attainment along on dimension should not imply a particular setting on some other dimension. If we are unable to produce uncontaminated dimensions of this kind, we can settle for less, if the cross-connections are explicit. Testing for independence will require detailed analysis."
- "9. Measurements on these dimensions should be able to deal with qualities which change over time, forming an extended pattern which can be valued in the present day. More likely, however, the measurements will deal with present conditions, but may include the drift of events toward the future."

(Lynch, 1987, p. 113)

Good City Form uses these characteristic standards to develop a set of performance dimensions. Using the characteristic standards to develop the performance dimensions, allows for them to remain generalized; therefore, they will be able to adapt. Each of the performance dimensions work to follow the three main general preferences brought forth by Lynch. These are continuity, connection, and openness. These dimensions are not singular, but instead refer to a cluster of qualities that have a common basis. All of them can be defined, identified, applied, and improved upon. There are five, main performance dimensions, with two meta-dimensions that should be considered when evaluating the main dimensions. The performance dimensions are as follows:

Five Performance Dimensions:

- "1. Vitality the degree to which the form of the settlement supports the vital functions, the biological requirements and capabilities of human beings above all, how it protects the survival of the species, even where that does not contribute to our own survival."
- "2. Sense the degree to which the settlement can be clearly perceived and mentally differentiated and structured in time and space by its residents and the degree to which that mental structure connects with their values and concepts the match between environment, our sensory and mental capabilities, and our cultural constructs."
- "3. Fit the degree to which the form and capacity of spaces, channels, and equipment in the settlement match the pattern and quantity of actions that people customarily engage in, or want to engage in that is, the adequacy of the behavior settings, including their adaptability to future action."
- "4. Access the ability to reach other persons, activities, resources, services, information, or places, including the quantity and diversity of the elements which can be reached."
- "5. Control the degree to which the use and access to spaces

and activities, and their creation, repair, modification, and management are controlled by those who use, work, or reside in them."

Two Meta-Dimensions:

- "6. Efficiency the cost, in terms of other valued things, of creating and maintaining the settlement, for any given level of attainment of the environmental dimensions listed above."
- "7. Justice the way in which environmental benefits and costs are distributed among persons, according to some particular principle such as equity, need, intrinsic worth, ability to pay, effort expended, potential contribution, or power. Justice is the criterion which balances the gains among persons, while efficiency balances the gains among different values."

(Lynch, 1987, p. 118)

Vitality is the support of health and biological well-functioning of an area. Vitality includes three main qualities. These qualities are, "features of the environment which are conductive to health, good biological function, and survival." (Lynch, 1987, p. 121) These are sustenance, safety, and consonance. Sustenance is the adequate supply of food, energy, water, air, and a proper disposal of waste. Safety creates a good city when it is one in which hazards, poisons, and diseases are absent or controlled. Consonance relates to the spatial environment being in harmony with the basic biological structure of the inhabitants. While these are the main qualities, Lynch lists two more qualities: the present and future stability of the total ecological community, and the environment providing for other living things. (Lynch, 1987)

Sense is defined as, "the clarity with which it can be perceived and identified, and the ease with which its elements can be linked with other events and places in a coherent mental representation of time and space." (Lynch, 1987, p. 131) Sense contains a cluster of five qualities: identity, structure, congruence, transparency, and legibility. Identity is the ability of a place to be distinctive from another place. Structure is the sense of how something is put together. Congruence asks the

question, "does the abstract form of a place match the abstract form of its functions?" (Lynch, 1987, p. 138) Transparency is how one can see the operation of functions of the city. Legibility is the communication by the physical environment. Sense relates to the mental sense of connection. (Lynch, 1987)

Fit is the relationship between daily behavior and the physical environment. Can the physical setting accommodate the daily activities. Aspects that can change fit are compartmenting, user control, programming, and monitoring and tuning the physical environment. Future fit relates to manipulability and resilience. Manipulability is the "degree to which use and form can be presently changed under specified limits of cost, time, power and a sense of continuity, without narrowing the potential range of the next round of change." (Lynch, 1987, p. 186) Resilience relates to the operations that would need to occur to restore an environment. These both represent the ability to respond and recover. (Lynch, 1987)

Access relates to the inhabitants' ability to interact with people, activity, resources, place, and information. This contains three main qualities: diversity, equity, and control. Diversity relates to the variety of people, activities, and settings. "Variety among the available behavior settings means that it is easier for any individual to find one that is congenial to him." (Lynch, 1987, p. 191) Equity relates to the fair distribution of access to different groups of the population. Control relates to who is in power to grant the access.

"Space and the behavior associated with it must be regulated." (Lynch, 1987, p 205) Control relates to ownership and operation of space. There are five spatial rights given in an area: the right to be in a place, the right to behave freely, the right of appropriation of resources, the right to change a place, and the right to allow others control. Owners of the given place may decide the level of these spatial rights. Positive control is made up of three main qualities: congruence, responsibility, and certainty. The congruence of use and control is "the extent to which the actual users or inhabitants of a space control it." (Lynch, 1987, p. 208) Responsibility is having the motives, information, and power to control well. Certainty is the understanding of the control 32 system, its scope, and feeling secure with the system. "The continuity of any human society depends on good control of its living space, but responsible control is also critical to the development of the individual and of the small group." (Lynch, 1987, p. 220)

These five performance dimensions are Lynch's framework for developing and analyzing a good city. The framework does also contain to meta-performance dimensions. These should be taken into account when analyzing each of the first five performance dimensions. The meta-performance dimensions are efficiency and justice. Efficiency is the "level of achievement in some performance to a loss in some other." (Lynch, 1987, p. 221) For example, "an efficient city is one that offers a high level of access without any loss of local control." (Lynch, 1987, p. 222) Justice is "the way in which benefits and costs of any one kind are distributed between persons." (Lynch, 1987, p. 225) Is the way in which the performance dimensions are divided up between people just. According to Lynch, these, together with the performance dimensions, are the aspects that create a good city.

Responsive Environments

Responsive Environments was written collectively by five urban designers from Oxford Polytechnic. They are Ian Bentley, Alan Alcock, Paul Murrain, Sue McGlynn, and Graham Smith. Ian Bentley practiced architecture and urban design. He was also a senior lecturer at the Join Centre for Urban Design at Oxford Polytechnic, and partner in the urban design firm of Bentley Murrain Samuels. Alan Alcock practiced architecture. He formed his own practice; specializing in buildings for health care. Paul Murrain practiced landscape architecture and urban design. He was a founding member of Milton Keynes Urban Design Group, and a partner of Bentley Murrain Samuels. Sue McGlynn practiced in town planning and urban design. She worked in local planning in London, and was a planning officer at Reading Borough Council. Graham Smith was an artist, and design tutor, with specialist knowledge of geometries. (Bentley et al, 2005) This framework was created to be used as a design tool to create responsive environments. The authors became aware of designer's lack of attention to form, and

how this affected the sites that they were creating. "The tragedy of modern design, it seems to us, is that designers never made a concerted effort to work out the form implications of their social and political ideals. Indeed, the very strength of their commitment to these ideals seem to have led designers to feel that a concentration on form itself was somehow superficial." (Bentley et al, 2005, p. 9) Working out these ideals is not enough. "They have to be linked through appropriate design ideas to the fabric of the built environment." (Bentley et al, 2005, p. 9) The design of an urban area affects its inhabitants, but how can we design urban spaces to be responsive?

"The built environment should provide its users with an essentially democratic setting, enriching their opportunities by maximizing the degree of choice available to them. We call such places responsive." (Bentley et al, 2005, p. 9) This states that the freedom, and opportunity, of choice in an environment, makes them responsive. If the user can participate in several different experiences, the area is a responsive environment to the needs of the user. The design of the urban environment can affect the user in seven different ways.

- "1. It affects where people can go, and where they cannot: the quality we shall call permeability."
- "2. It affects the range of uses available to people: the quality we shall call variety."
- "3. It affects how easily people can understand what opportunities it offers: the quality we shall call legibility."
- "4. It affects the degree to which people can use a given places for different purposes: the quality we shall call robustness."
- "5. It affects whether the detailed appearance of the place makes people aware of the choices available: the quality we shall call visual appropriateness"
- "6. It affects people's choice of sensory experiences: the quality we shall call richness."
- "7. It affects the extent to which people can put their own stamp

Bentley et al, 2005, p. 9)

Responsive Environments uses these seven factors as a method to design urban areas. In the given order, they start from the ground-up to form the urban design. Each factor provides more detail and order to the design. It becomes a step-by-step approach to urban design. The steps are presented as follows:

- "1. **Permeability**: designing the overall layout of routes and development blocks."
- "2. Variety: locating uses on the site."
- "3. **Legibility**: designing the massing of the buildings, and the enclosure of public space."
- "4. **Robustness**: designing the spatial and constructional arrangement of individual buildings and outdoor places."
- "5. **Visual Appropriateness**: designing the external image."
- "6. **Richness**: developing the design for sensory choice."
- "7. **Personalization**: making the design encourage people to put their own mark on the places where they live and work." (Bentley et al, 2005, p. 11)

While this was created as a tool for design, it can be easily altered to be used as an evaluation tool for urban design. Are the factors listed above present, and in what capacity? This design framework offers a quick and efficient method of study. This framework may also be applied to urban design at any scale, but is the most efficient when viewing district, or neighborhood, design. Each factor builds upon each other to create a fully realized design, or evaluation.

Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions

Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions was developed by three professors from the National University of Singapore (NUS). "Im Sik Cho is an assistant professor at the Department of Architecture, School of Design and Environment, NUS, where she serves as the leader for urban studies research and teaching." (Cho et al, 2015, p. i) Chye Kiang Heng, "is a professor, urban designer and planner. Currently, he is the dean of the School of Design and Environment at the NUS." (Ibid) "Zdravko Trivic is an assistant professor at the Department of Architecture, School of Design and Environment, NUS." (Ibid) The design framework was developed as a tool to examine highly urban design.

The framework's criteria are divided into three categories. These categories are HARDware, SOFTware, and ORGware. "The three components are interdependent and inevitably overlap on various levels, providing a holistic and comprehensive platform for understanding how new hybrid urban spaces in high-density contexts operate and perform." (Cho et al, 2015, p. 36) These categories are further divided into urban space values, attributes & evaluators, and criteria.

HARDware relates to the physical properties of urban spaces. This category is divided into nodal, spatial, and environmental. Nodal values "refer to an ability of space to provide an adequate number of physical and activity nodes and their connections, as well as to establish good and safe access for all users, including formal and informal, main and alternative entrances by different mobility means." (Cho et al, 2015, p. 37) These attributes are defined as accessibility, connectivity, and mobility means. Spatial values refer to "the morphological value of the urban space." (Ibid) These attributes are defined as legality & edges and spatial variety. Environmental Values refer to "the environmental benefits as well as human comfort achieved and experienced within the urban space." (Ibid)

"The SOFTware component encompasses the uses of a public space and its social and perceptual qualities." (Cho et al, 2015, p. 101) This category has a single urban space value: use & socio-perceptual value. "Its primary focus is on the positive relationships between the users and urban space as well as on social interaction among the users." (Cho et al, 2015, p. 101) These attributes are defined as diversity & intensity of use, social activities, and identity.

Finally, "ORGware refers to the operational and management aspects of public space, including the provision and maintenance of amenities and supporting services." (Cho et al, 2015, p.136) This category has a single urban space value: operational value. This relates to the ownership and operation of the site. These attributes are defined as provision of amenities & services, safety & security, and management & regulations. (Cho et al, 2015)

These three categories (HARDware, SOFTware, and ORGware), their attributes, and the criteria presented in each attribute, create the design framework. Each of the criteria have two qualifiers. This brings the grand total to ninety-four possible criteria. This sets up the qualitative analysis used by the design framework. Each of the ninety-four criteria receive a score. If the criteria is met, it receives a score of "1". If the criteria are not met, it receives a score of "0". These scores are then tallied and averaged to form the urban space value of the site. (Cho et al, 2015)

Framework Comparison

The design frameworks discussed in the literature review come from several different authors, during several different time periods. Kevin Lynch and Jane Jacobs represent a past generation of designers, while the authors of *Responsive Environments* and *Re-Framing Urban Space* represent current design trends and ideas. While they represent different times, they also represent different scales. *Good City Form* and *The Death and Life of Great American Cities* create frameworks that may be used at a city scale. *Responsive Environments* examines its framework at a neighborhood, or district, scale. Finally, *Re-Framing Urban Space* is

a site scale design framework. Despite these factors and each design framework being distinct from each other, there are clear comparisons that can be drawn between them. The following section will view comparisons between the framework presented in *Re-Framing Urban Space* and the design frameworks discussed in the other publications. Many of the factors discussed in the literature review overlap with these categories, but as a whole these are the connections between them.

The HARDware category presented in Re-Framing Urban Space relates to the physical and geometrical properties of urban spaces. Jane Jacobs discusses physical attributes of cities in her diversity category. This includes the use of mixed-use areas to create activity, small block sizes for safety and variety, aged buildings for a variation of use and economic yield, and dense concentrations of activity and people for safety. Responsive Environments discusses physical attributes in the permeability and legibility categories. These categories include attributes like block structure, linkage, and physical form. All of these attributes relate to the physical environment and their connections. While Lynch does not have a category that directly relates to the physical environment, he does mention a few factors that could overlap into the category. These could include congruence and structure. I thought congruence was the harmony between the form of the physical environment and its function for inhabitants. Structure is the sense of how something is put together, and how it connects to its surroundings.

"The SOFTware component encompasses the uses of a public space and its social and perceptual qualities." (Cho et al, 2015, p. 101) Jane Jacobs covers these attributes in neighborhood parks and city neighborhoods. These two categories relate to the activity and uses of an area, surrounding uses, the users, and the identity of an area. *Good City Form* closely relates in the sense and fit categories. Sense is clarity of how the environment can be perceived, and fit relates to the daily activity in an area. *Responsive Environments* relates to the SOFTware category in variety, robustness, and richness. Variety is the location of uses on a site, robustness is places which can be used for multiple purposes, and richness is having the ability to activate all senses through uses of the environment. (Bentley et al, 2005)

Finally, "ORGware refers to the operational and management aspects of public space, including the provision and maintenance of amenities and supporting services." (Cho et al, 2015, p. 136) Jane Jacobs discusses self-governing throughout The Death and Life of Great American Cities. This is the need for a city's inhabitants to watch over, and influence, their city and its inhabitants. It is mentioned the most in the sidewalk category. This calls for the sidewalks and streets of cities to be filled with the eyes of its inhabitants to watch over itself. Good City Form discusses the aspects of operation, management, and safety in the vitality, access, and control categories. Lynch's two metacriteria, efficiency and justice, can also be categorized in operation and management. Responsive Environments does not cover the operation and management aspect much. It does however discuss the ability for ownership to create an image that conveys the activity or uses of the environment. The factors presented in Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions and their comparisons to the other design frameworks can be viewed in figure 2.02, presented on p. 40.

Research Question

- How is Kansas City, Missouri's Power & Light District viewed, and how well does the district score, when using the design framework found in Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions?
- How well does the Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions design framework work when applied to the Power & Light District in Kansas City, Missouri?

Summary

This chapter provided insight into the world of modern urban design. It recounted Jane Jacob's attack on the city in The Death and Life of Great American Cities. Kevin Lynch's Good City Form provided a city-scale design framework. Responsive Environments investigated asuccessful district from the ground-up. Re-Framing Urban Space:

Urban Design for Emerging Hybrid and High-Density Conditions provided the study's design framework. Finally, a comparison of these frameworks was provided to show the similarities and differences. This comparison can be viewed in figure 2.02, presented on page 40. Chapter 3 Methodology shows the methods that were undertaken to study the research questions presented by this study.

Re-Framing Urban Space: Urban Design for **Emerging Hybrid and High-Density Conditions**

Chye Kiang Heng, Im Sik Cho, Zdravko Trivic

Death and Life of Great **American Cities**

Jane Jacobs



Good City Form

Kevin Lynch

Responsive Environments

Alan Alcock, Graham Smith, Paul Murrain, Sue McGlynn

HARDWARE

- Accessibility
- Connectivity
- **Mobility Means**
- Legibility and Edges
- **Spatial Variety**
- Environmentally Friendly Design
- User Comfort

SIDEWALKS

- Safety
- Contact
- Assimilation of Children

NEIGHBORHOOD PARKS

- Activity
- **Hours of Activity**
- Users
- Surrounding Uses

SOFTWARE

- Diversity & Intensity of Use
- **Social Activities**
- Identity

CITY NEIGHBORHOODS

- Identity
- Value
- Cooperation

ORGWARE

- Provision of Amenities and Services
- Safety and Security
- Management and Regulations

DIVERSITY

- **Primary Mixed-Uses**
- **Small Blocks**
- Aged Buildings
- Concentration

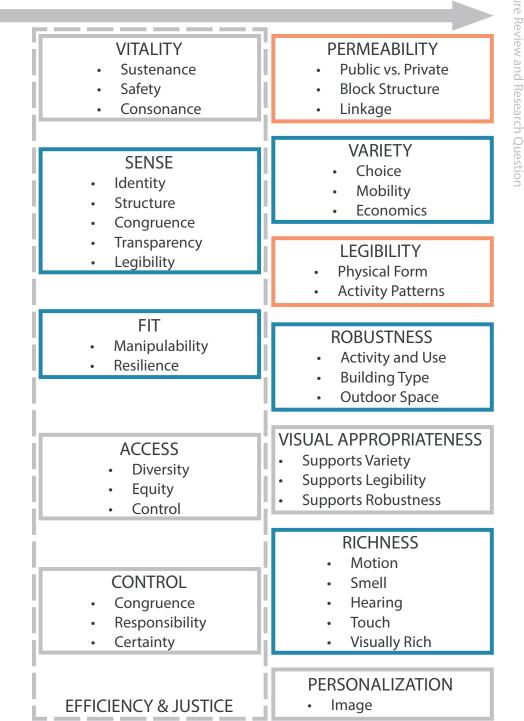


Figure 2.02

Framework Comparison (Author, 2017)



Chapter 3

Methodology

Figure 3.01 KC Live (Author, 2017)

Literature Review

- Urban Design
- Design Frameworks
- Framework Comparison

GIS Study of the KC Power & **Light District**

On-Site Survey

Responsive Environments

Site Inventory and Analysis

Re-Framing Urban Space

Design Framework Urban **Space Value**

• Re-Framing Urban Space

Reflection on the Application and Efficacy of the Design Framework

Analysis and Interpretation of Scoring System

Methods of Research

Figure 3.02

Methodology (Author, 2017)

This project used several research methods to examine and evaluate the Kansas City Power & Light District and the design framework. Each of these methods informed the final Urban Space Value of the Power & Light District. The initial literature review examined modern urban design factors and urban design frameworks. The literature review established the base knowledge for all other forms of research. The Power & Light District is then briefly introduced using a set of diagrams created using GIS data. On-site interviews provide perspective from Power & Light District visitors. Then, the design framework created in Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions, is used to evaluate the Power & Light District. This provided the site inventory and analysis, and Urban Space Value for the district. This step documented the application of the design framework. Finally, the efficacy of the design framework is examined in Chapter 5 Conclusions.

Literature Review

The literature review was the initial step of research for this study. This is the foundation of knowledge that the rest of the study was built upon. The beginning of the literature review used several sources to introduce modern urban design. Then, to better understand design frameworks I conducted a careful reading of Jane Jacob's *The Death* and Life of Great American Cities, Lynch's Good City Form, Bentley et al's Responsive Environments, and Cho et al's Re-Framing Urban Space: *Urban Design for Emerging Hybrid and High-Density Conditions.* These readings examined prominent viewpoints on key factors that create successful cities and urban design, but provided the viewpoints of their time. This literature review also studied the design framework created in Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions, and how these factors compare to those presented in the other readings. This reading provided the design framework that was used to score the Power & Light District.

⁶ GIS Diagrams

The initial site analysis and introduction of the site was conducted using the KCMO GIS parcel viewer. A link to this resource was provided by Gerald (Bo) Williams of Kansas City, Missouri's Department of City Planning and Development. These diagrams work to show the efforts put forth by Kansas City, its people, and developers to provide a successful revitalization of the downtown district. The final product of this task is a set of diagrams that display these efforts, and their benefits.

On-Site Survey

On-site intercept surveys were conducted with the participation of Kansas City Power & Light visitors. These results were used to gain the public's opinion of the district by completing a short survey. This survey was crafted using the factors presented in *Responsive Environments*. Each factor provided a scale of agreement that the survey respondent may choose on a scale from "strong no" to "strong yes". The factors included in the survey are permeability, variety, legibility, robustness, visual appropriateness, richness, and personalization. These factors are defined in *Responsive Environments* as the following:

Permeability: "the number of alternative ways through an environment"

Variety: "a choice of experiences... particularly variety of uses"

Legibility: "how easily people can understand its layout"

Robustness: "places which can be used for many different purposes"

Visual Robustness: "meanings help to make people aware of the choices"

Richness: "increase the choice of sense-experiences"

Personalization: "possible for users to personalize places" (Bentley et al, 2005, p. 10)

The results of this study are meant to provide public opinion, to back the final outcome of the design framework score. The survey was printed and produced in paper form. Each factor was displayed on the survey with a short question. These questions were meant to help the respondent understand the factors presented in *Responsive Environments*, and frame the values in relationship to the Power & Light District. The respondent then had the chance to circle one of seven values for each factor. These range from a "strong no" to "strong yes". Each survey required a maximum of five minutes to complete. Due to the interaction with visitors of the Power & Light District, this process required Institutional Review Board approval, or exemption. On several site visits to the Power & Light District, I was able to obtain thirty-five responses to the survey.

The use of the factors presented in *Responsive Environments*, instead of *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions*, were used for several reasons. A main reason was due to time constraints. The design framework presented in *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* contains ninety-four criteria. This could be a difficult task for a respondent to complete, and understand all the aspects presented in the framework. Using the seven factors in *Responsive Environments* allows there to be only seven survey questions. This cut down on the time required for the respondent to complete the survey, and increased the chance to receive a response.

The criteria brought forth in *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* also have the ability to affect the outcome of the response to the questions presented in the survey. For example, *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* presents the following criteria: "1A: At least two horizontal or one vertical access points are provided." (Cho et al, 2015, p. 202) The presence of this criteria in the Power & Light District has the ability to affect the outcome of the first survey question: Are all areas of the Power & Light District easily accessible? The on-site survey, utilizing these criteria, and the corresponding survey questions can be viewed in the upcoming pages.

48 Permeability: Are all areas of the Power & Light District easily accessible?



Variety: Do individual blocks in the Power & Light District offer several different uses?



Legibility: Is the Power & Light District easy to navigate to different areas of interest?



Robustness: Do individual buildings in the Power & Light District offer several different uses?



Visual Appropriateness: Is it easy to visually see the different opportunities you have in the Power & Light District?



Richness: Does the Power & Light District offer different forms of sense-experiences? (visual, motion, smell, audible, touch)



Personalization: Does each establishment in the Power & Light District have its own visual identity?



Figure 3.03 Survey (Author, 2017) Each survey question and the corresponding criterion presented in Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions can be viewed below.

Permeability: Are all areas of the Power & Light District easily accessible?

"1A: At least 2 horizontal or 1 vertical access points are provided.

1B: More that 2 horizontal or 1 vertical access points are provided.

Formal (main entrances) and informal access points are well distinguished.

2A: There is at least 1 universal access point when level changes occur.

2B: More than 1 universal access points are available when level changes occur.

3A: At least 2 types of universal access are available

3B: Universal access points are fairly and logically dispersed over the site.

4A: At least 2 direct and safe pedestrian access points, well separated from vehicular traffic are provided.

4B: Urban space is completely pedestrianized.

5A: Space is well connected to dominant external pedestrian route(s).

5B: Space provides well-interconnected internal pathways, without deadend situations.

6A: Space connects 2 or more activity nodes in its immediate surroundings.

6B: Space is a destination with facilities fro long-term activities.

7A: Majority of horizontal and vertical directions are visible from every entry point.

7B: Main entry/exit points are visible from both within and out of space.

8A: Bike stand facilities are available within space or in its vicinity.

8B: Designed cycling areas/lanes are provided, well separated from pedestrian walkways.

9A: Access to public transportation means is available in the vicinity of urban space.

9B: At least 2 types of public transportation are available.

10A: Parking facilities are provided in the vicinity.

10B: Parking facilities are integrated within space, without conflicting with pedestrian movement.

11A: Pick-up/drop-off points are available on site.

11B: Taxi stands are provided within space or in its proximity.

15A: Space has good visual connection with surroundings - edges are porous or see-through.

15B: Edges are visually rich and active when permeability is reduced.

32B: Space provides semi-permeable or adjustable barriers to reduce exposure.

43A: Space fosters inclusion and regulation rather than exclusion and restriction.

44A: Space is partially accessible 24 hours a day.

44B: Space is entirely accessible 24 hours a day.

47A: At least 1 public program, service or facility available in space is free of charge.

47B: All public facilities/services are free of charge or largely affordable." (Cho et al, 2015, p. 201-203)

Variety: Do individual blocks in the Power & Light District offer several different uses?

"16A: Space is divided into sub-spaces.

16B: Sub-spaces have different visual, aesthetic and/or experiential qualities.

17A: Space has capacity to adopt temporary programs

17B: Space has flexible layout or adjustable structural elements to create different spatial arrangements and conditions.

27A: At least 1 public amenity for specific active use(s) is available within urban space.

27B: At least 2 well-integrated public amenities for specific passive and active uses of different types are provided within urban space.

28A: At least 2 different activities are available in immediate surroundings of urban space.

28B: More than 2 different activities are available in immediate surroundings or urban space.

29A: Sufficient formal seating amenities are provided in space.

29B: Secondary/informal seating is available in space.

30A: Seating is available in both sun and shade.

30B: At least 2 different types of seating amenities are available in space.

31A: Space provides flexible, movable and/or adjustable seating amenities.

31B: Interactive elements are available in urban space.

32A: Both exposed and inward-looking seating arrangements are provided.

35A: Art and culture-oriented program(s) are provided.

35B: Space caters to alternative uses and/or user groups.

45A: Space is a setting of occasional events and programs.

45B: Space provides means to facilitate regular events and programs.

46A: Space allows, manages and facilitates non-designed activities with adequate permission.

46B: Informal activities occur without any permission."

(Cho et al, 2015, p. 201-203)

Legibility: Is the Power & Light District easy to navigate to different areas of interest?

"12A: Pedestrian networks are clearly differentiated from other activities.

12B: The hierarchy of pedestrian network is provided. Major and minor pedestrian routes are clearly differentiated.

13A: At least 2 legible nodes of different types of activities are provided within space.

13B: Nodes are visible from major access points.

14A: At least 1 visual landmark is provided.

14B: More than 1 visual landmark is provided.

15A: Space has good visual connection with surroundings - edges are porous or see-through.

15B: Edges are visually rich and active when permeability is reduced.

38A: Adequate lighting along main pathways and activity nodes is provided.

38B: Space provides ambient and/or adjustable lighting.

39A: At least 1 public communicational facility is available in space.

39B: Good signage and way-finding facilities are available."

(Cho et al, 2015, p. 201-203)

Robustness: Do individual buildings in the Power & Light District offer several different uses?

"16A: Space is divided into sub-spaces.

16B: Sub-spaces have different visual, aesthetic and/or experiential qualities.

17A: Space has capacity to adopt temporary programs

17B: Space has flexible layout or adjustable structural elements to create different spatial arrangements and conditions.

27A: At least 1 public amenity for specific active use(s) is available within urban space.

27B: At least 2 well-integrated public amenities for specific passive and active uses of different types are provided within urban space.

28A: At least 2 different activities are available in immediate surroundings of urban space.

28B: More than 2 different activities are available in immediate surroundings or urban space.

31A: Space provides flexible, movable and/or adjustable seating amenities.

31B: Interactive elements are available in urban space.

35A: Art and culture-oriented program(s) are provided.

35B: Space caters to alternative uses and/or user groups.

45A: Space is a setting of occasional events and programs.

45B: Space provides means to facilitate regular events and programs.

46A: Space allows, manages and facilitates non-designed activities with adequate permission.

46B: Informal activities occur without any permission." (Cho et al, 2015, p. 201-203)

Visual Appropriateness: Is it easy to visually see the different opportunities you have in the Power & Light District?

"13A: At least 2 legible nodes of different types of activities are provided within space.

13B: Nodes are visible from major access points.

14A: At least 1 visual landmark is provided.

14B: More than 1 visual landmark is provided.

15A: Space has good visual connection with surroundings - edges are porous or see-through.

15B: Edges are visually rich and active when permeability is reduced.

33A: Space is memorable for its unique feature(s).

33B: Space and its features are well-known to larger public.

39B: Good signage and way-finding facilities are available."

(Cho et al, 2015, p. 201-203)

Richness: Does the Power & Light District offer different forms of sense-experience?

"16B: Sub-spaces have different visual, aesthetic and/or experiential qualities.

18A: Greenery and/or water features are available in space.

18B: Space allows interaction with greenery and/or water elements provided.

19A: Greenery has diverse forms and patterns.

19B: Greenery appears at different locations of the urban space.

20A: Space emphasized the usage of local flora species.

20B: Space is linked to a larger ecosystem enabling ecological continuity.

21A: At least 1 environment-friendly strategy is employed in the design of urban space.

21B: More than 1 environment-friendly strategy is employed.

Environmental awareness and environmentally friendly usage of space is clearly promoted.

22A: Urban space respects and preserves existing natural environment.

22B: Space enhances natural experience through landscape design.

23A: Major pedestrian pathways are covered.

23B: Larger covered or enclosed areas are available in space.

24A: Space provides a variety of shaded and sunlit areas.

24A: Space provides a variety of shaded and sunlit areas.

24B: Flexible/adjustable shading means are provided in space.

25A: Space is not exposed to substantial air pollution and has good ventilation.

25B: The design employs techniques to improve or enrich air quality.

26A: Space is free from external and/or internal noises.

26B: Space employs techniques to improve or enrich the aural quality." (Cho et al, 2015, p. 201-203)

Personalization: Does each establishment in the Power & Light District have its own visual identity?

"33A: Space is memorable for its unique feature(s).

33B: Space and its features are well-known to larger public.

34A: Tangible traces of historical/cultural heritage are available on site.

34B: Design has clear associations with local history and culture.

36A: Space has unique natural features that substantially contribute to its visual identity.

39B: Good signage and way-finding facilities are available.

41B: Space appears safe due to approachable and inviting design." (Cho et al, 2015, p. 201-203)

These sections grouped the criteria presented in Re-Framing Urban Space, and placed them with their corresponding survey question.

Urban Space Value

The bulk of the study was completed using the design framework established in *Re-Framing Urban Space: Urban Design for Emerging Hyrbid and High-Density Conditions.* Through a series of site visits a site inventory and analysis of the Power & Light District was completed using the above design framework. Each criteria of the design framework was analyzed and given a grade of "1" or "0". The combination of these grades created the urban space value for the Power & Light District. The use of the framework, and reasoning for the grade given, is documented. Each criterion is paired with a diagram or photograph backing the grade given. This documentation was used to examine the application of the design framework when applied to a district. The results of this method can be viewed in Chapter 4 Results.

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Efficacy of the Design Framework

The efficacy of the design framework will be examined throughout the application of it to the Power & Light District. The documentation of the design framework presents evidence of how well the *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* framework performs when applied to the Power & Light District. The design framework was crafted to provide urban space values at a smaller urban scale. Therefore, some of the criteria are more difficult to assess when applying it to an entire district. Chapter 4 Results and Chapter 5 Conclusions will cover these criteria, the efficacy of the design framework, and how the design framework might be adapted to be more efficient at the district scale.

Summary

This chapter described the methods that were undertaken to address the research questions that are proposed by this project. The literature review established a foundation of knowledge on modern urban design and design frameworks. A series of GIS diagrams introduced the Power & Light District, while offering the incentives that were crafted for the revitalization of the area. The grouping of framework criteria into a manageable survey set was shown through several sections. On-site surveys were used to gain public opinion of the area. Finally the application and efficacy of the design framework was tested through use, documentation, and reflection. Chapter 4 Results will show what came of these methods.

L





Chapter 4

Results

Figure 4.01 Power & Light (Author, 2017)

GIS Diagrams

Using the data provided by Kansas City, Missouri's GIS Parcel Viewer* the following diagrams introduce the Power & Light District, while working to show some of the incentives that are offered to participate in the revitalization of the downtown area. These diagrams could also be used by other city organizations that wish to implement similar means of development. Below the reader will find all of the mixed-use opportunities available in the Power & Light District. This information was gathered from the Power & Light District website.*

*KC GIS Parcel Viewer can be found at: http://maps.kcmo.org/apps/parcelviewer/

RESTAURANTS & BARS

801 Chophouse	Chipotle Cleaver & Cork	Insomnia Cookies	McFadden's Sports Saloon
Bar Louie	Drunken Fish Sushi	Johnny's Tavern	MeMa's Bakery
BRGR Kitchen+Bar	The Dubliner	Kaldi's Coffee	The Mixx
Bristol Seafood Grill	Flying Saucer Draught Emporium	The Kill Devil Club	No Other Pub by Sporting KC
The Chesterfield	Gordon Biersch Brewery	Leinenkugel's KC	Pizza Bar
ProteinHouse	Providence New American Kitchen	The Drum Room	Whopper Bar
1			

Yard House

NIGHTLIFE & ENTERTAINMENT

Alamo Drafthouse Mainstreet Cinema	PBR Big Sky	Shark Bar	Living Room/KC Beer Garden
Arvest Bank Theatre at the Midland	Angels Rock Bar	The Gallery	Howl at the Moon
Mosaic Ultra Lounge	Elements Courtyard	Indie Bar	Kansas City Live

SHOPPING & SERVICES

Bare Med Spa	Posh Blow Dry Bar	GNC	T-Mobile
Garment District Boutique	Rally House	Onelife Fitness Center	Zafar Salon
Polished Edge Fine Jewelry	Sprint Studio	Polished Nail Salon	Rooftop Park
Cosentino's Market Downtown	Visit KC	Public Safety Office	Ios A Banks

RESIDENTIAL

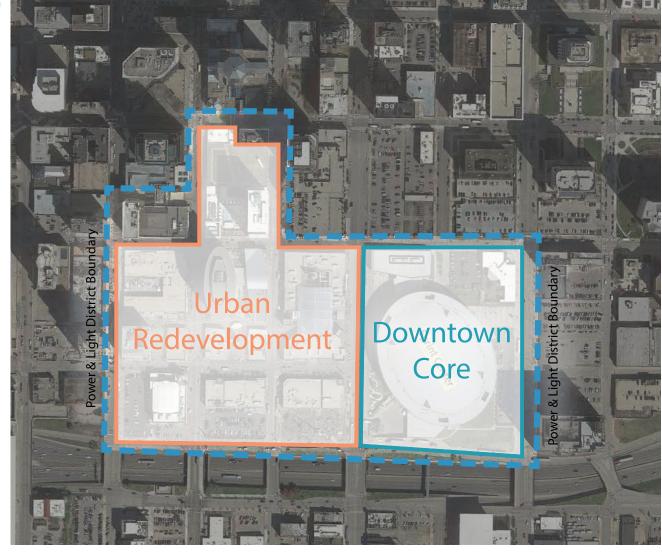
One Light Luxury Apartments Two Light Luxury Apartments Two Light Leasing Center

HOTELS

Aladdin Holiday Inn Hotel Phillips Hiltop Presidential Hotel

Crowne Plaza Hotel Ambassador Hotel Marriott Downtown

*Power & Light District website: http://www.powerandlightdistrict.com



Zoning

The Power & Light District is zoned into two separate areas. The Sprint Center is contained in "Downtown Core", while the other half of the area is zoned as "Urban Redevelopment." The Urban Redevelopment area houses prominent areas of the Power & Light District; such as Kansas City Live, the Power & Light District Fountain, One Light Luxury Apartments, and several other entertainment opportunities.

Figure 4.03 Zoning (Author, 2017)

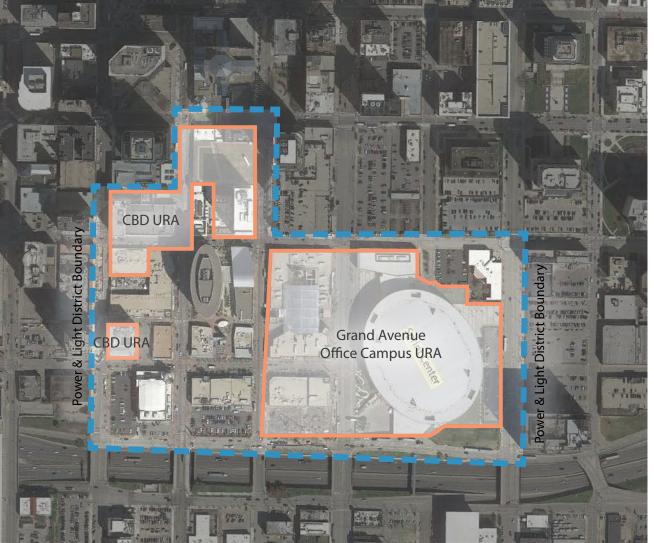


Figure 4.04 Urban Renewal (Author, 2017)

Urban Renewal

Urban renewal incentives are offered by the Land Clearance for Redevelopment Authority (LCRA). These incentives were established to "reclaim embattled neighborhoods by encouraging investment and remove blighted conditions." (EDCKC Staff, 2014) The incentives provided include "100% real property tax abatement for up to 10 years, bond financing, and the power of eminent domain to help encourage new development." (EDCKC Staff, 2014) The Sprint Center, Kansas City Live, Two Light Luxury Apartments, and several other businesses are located in the Grand Avenue Office Campus Urban Renewal Area. The One Light Luxury Apartments, Hilton President Hotel, and other businesses are housed inside the Central Business District Urban Renewal Area.

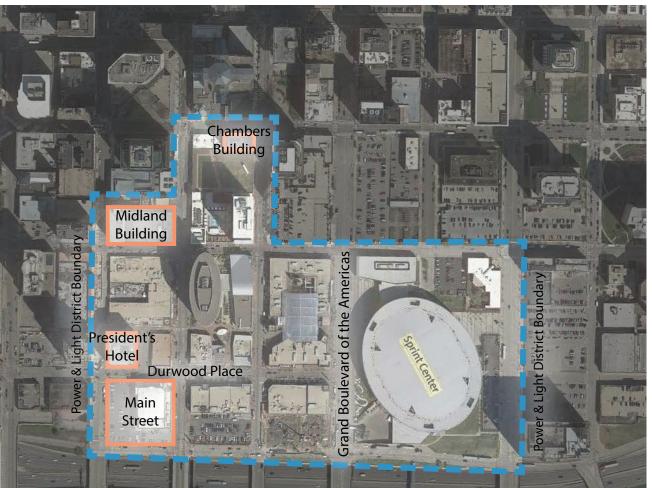


Figure 4.06 History (Author, 2017)

Historical Sites

The Power & Light District contains several recognized historical sites. These include the Midland Building, Chambers Building, Hilton President's Hotel, and the Main Street Building. The Midland Building houses several stages with entertainment and theatrical opportunities. The Chambers Building contains an art gallery amongst other activities. The Hilton President's Hotel is a historical site that has been renovated for a luxury hotel experience. The Main Street Building houses the popular Alamo Drafthouse Theatre. The Power & Light District also recognizes two honorary street names. The Grand Boulevard of the Americas runs parallel to the Sprint Center; while Durwood Place is located right outside the Main Street Building.

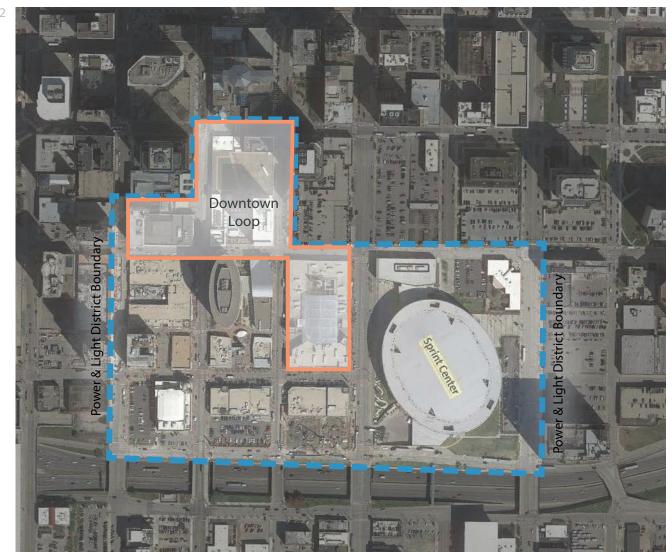
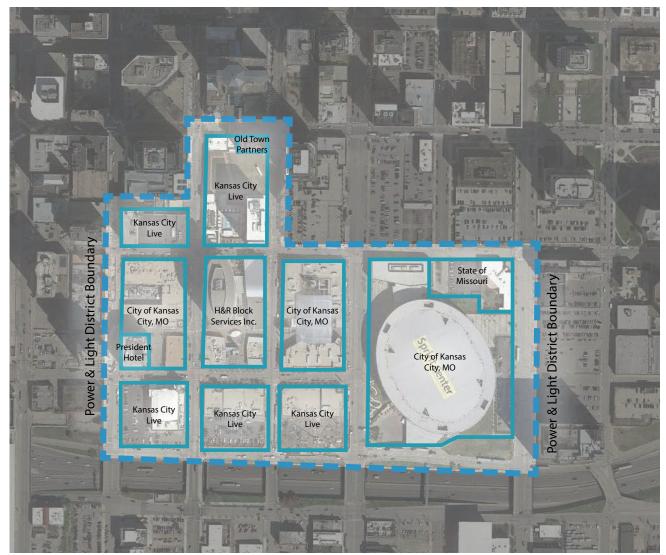


Figure 4.05

PIEA (Author, 2017)

PIEA

Northern areas of the Power & Light District, and Kansas City Live, are located inside the Downtown Loop PIEA planning area. These areas are offered incentives by the Planned Industrial Expansion Authority (PIEA). These incentives include "up to 25 years tax abatement, sales tax exemption on construction materials during construction process, and the power of eminent domain."



Plot Ownership

The above diagram displays the ownership of plots in the Power & Light District. Much of the area is owned by the city, state, or Kansas City Live. The exceptions being H&R Block Services Inc. ownership of the Power & Light District Fountain area, the Hilton President Hotel, and the Chambers Building being owned by Old Time Partners.

GIS Diagrams

The Power & Light District is also located in the Northland Enhanced Enterprise Zone, the Downtown Kansas City Community Improvement District, and the 1200 Main/South Loop TIF. These are not shown as diagrams, due to the entire district being located inside of

Figure 4.07 Plot Owners (Author, 2017)

The Northland Enhanced Enterprise Zone "encourages job creation and investment by providing state tax credits and local property tax abatement to new or expanding businesses located in the Enhanced Enterprise Zone." (Economic Development Corporation of Kansas City, 2017) To be approved as a project in an Enhanced

the respective redevelopment opportunities.

invest a minimum of \$100,000, and create a minimum of two new, full-time jobs." (Economic Development Corporation of Kansas City, 2017)

Enterprise Zone you must be "located in an Enhanced Enterprise Zone,

Community Improvement Districts "help improve the community by bettering conditions for existing businesses, and attracting new growth." (Economic Development Corporation of Kansas City, 2017) Investments can be made in community safety, beautification, business retention, economic growth, and capital improvements. These investments are funded by pubic money through sales tax. The Power & Light District is located inside the Downtown Kansas City Community Improvement District. (Economic Development Corporation of Kansas City, 2017)

Finally, the area is located in the 1200 Main/south Loop TIF. "Tax Increment Financing (TIF) is a financing and development tool that encourages the development of blighted, substandard and economically under utilized areas that would not be developed without public investment." (Economic Development Corporation of Kansas City, 2017) To qualify, a cost-benefit analysis must be performed, it must be approved by the TIF Commission and City Council, and the area must be a blighted, conservation, or economic development area. (Economic Development Corporation of Kansas City, 2017)

These incentives brought development into the heart of Kansas City, Missouri. The Power & Light District is now a successful downtown area that has high amounts of pedestrian traffic. The incentives that Kansas City offered could be replicated in other cities. These efforts have been proven to work, and have to chance to work in other locations. The next section will cover the results compiled from the on-site surveys.



Figure 4.08 Survey Results (Author, 2017)

On-Site Survey

On-site surveys were conducted to gather the public's opinion of the Power & Light District. The surveys were crafted using the design values presented in Responsive Environments. The comparisons between these design values and the criteria presented in Re-Framing Neutral Strong Yes Urban Space: Urban Design for Emerging Hybrid and High-Density *Conditions* for can be viewed in Chapter 3 Methodology. These surveys were printed and distributed throughout the Power & Light District. Through a series of site visits, Power & Light Visitors were asked to complete the survey to the best of their ability. Any questions or Strong Yes concerns could be asked during the time taken to complete the survey. The surveys took a maximum of five minutes for each respondent to complete. Following the completion of the site visits, thirty-five completed surveys were collected. These surveys can be viewed in the

Strong Yes

The diagram displays all the information provided in the survey. Each design value presented in Responsive Environments is presented with their accompanying survey question. All available responses to the survey are located below these questions on a scale of "strong no" to "strong yes." Each of the response areas contain a percent score. These represent the percentage of the thirty-five responses given by the responders. The highest percentage response is represented with an orange indicator, while the rest of the responses are left grey.

appendix. A diagram of the data collected can be viewed to the left.

While the opinions of the Power & Light District vary; there were small percentages of negative responses to the survey. The visitors of the Power & Light District view it as a successful revitalization of the downtown area. The average grade of each of the design value questions presented in the survey correlate with the final urban space value given by the design framework. While the Power & Light District is not a perfect area, it offers several positive attributes that the visitors of the area look on favorably. The next section documents the application of the design framework to the Power & Light District, and how the final urban space value for the site was produced.



Personalization: Does each establishment in the Power & Light District have its own visual identity?

Neutral

Strong No

Urban Space Value:

The following pages show the application of the design framework to the Power & Light District area. The Urban Space Value results sheet can be seen in figure 4.08 to the right. It is divided up into the three categories presented in Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions. These categories are then combined to form the final score percentage at the bottom.

The design framework is shown in its entirety throughout the rest of this section. First, the criteria shows the site inventory and analysis attribute. Each of these are then given a passing score of "1", or a failing score of "0." The accompanying diagram/photograph visually backs the scoring of the criteria. Underneath each of these diagram/ photographs the reader will find text explaining the scoring. This section ends with the urban space value of the Power & Light District. This section and Chapter 5 Conclusions, reflects on the efficacy of the design framework.

HardWARE

01A - 26B: ?/52

SoftWARE

27A - 36B: ?/20

OrgWARE

37A - 47B: ?/22

Final Score

01A - 47B: ?/94

A. Accessibility

1. Pedestrian Access Points

At least two horizontal or one vertical access points are provided.





The Power & Light District spreads throughout several blocks of Kansas City. Therefore, all roads and sidewalks in the area (not closed for construction) lead into the site. At the heart of the Power & Light District is Kansas City Live. This is the core of nightlife, restaurants, and activity in the district. This area has two primary entrances on the East and West sides, and an elevator from the parking garage located below.

Figure 4.10

Multiple Access Points (Author, 2017)

Legend



Primary Access



Street/Sidewalk Access



Elevator Access



More than two horizontal or one vertical access points are provided. Formal and informal access points are well distinguished.



Figure 4.11 **Several Access Points** (Author, 2017)

Legend



Highlight Area

The Kansas City Live area contains three primary entry ways (See Figure 4.09). The Eastern entryway and access to the second level are shown above. The area also houses stairs and elevator access to the second level of entertainment.

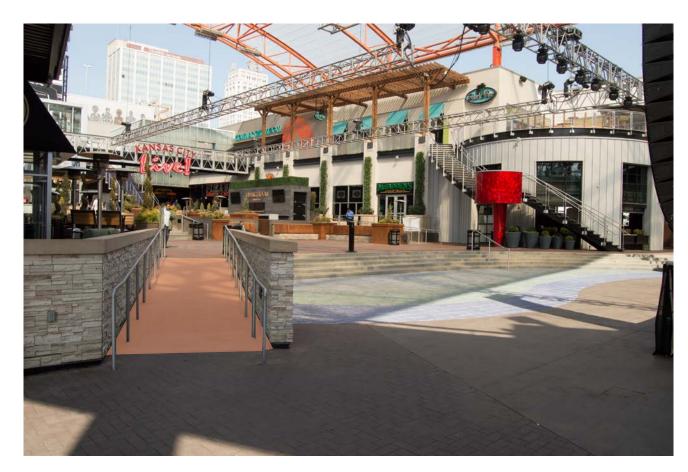
pter 4 Res **B**

⁷² A. Accessibility

2. Universal Access

2A There is at least one universal access point when level changes occur.





The Kansas City Live area contains several level changes. Each of these level changes is accompanied by ramp or elevator access.

Figure 4.12 Universal Access Point (Author, 2017)

Legend

Highlight Area



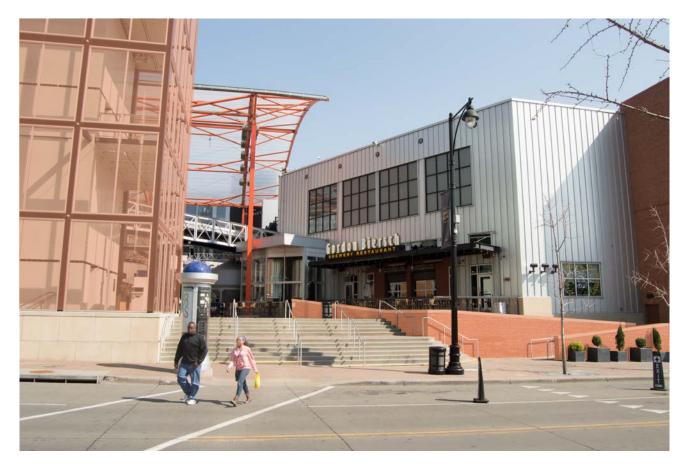


Figure 4.13 Multiple Universal Access Points (Author, 2017)

Legend

Highlight Area

The Western entryway to the Kansas City Live area is shown above. This level change houses a ramp and elevator access. The Western entryway contains elevator and ramp access, while the Eastern entryway has elevator access.

⁷⁴ A. Accessibility

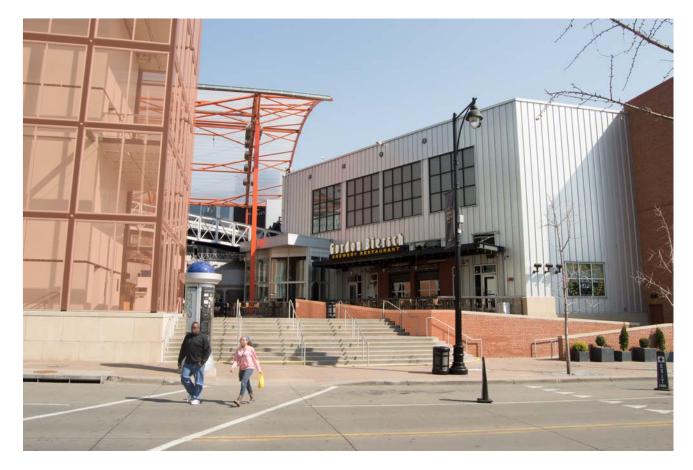
3. Types and Distribution of Universal Access

At lease two types of universal access are available.



Universal access points are fairly and logically dispersed over site.

3B



The Kansas City Live area houses elevator and ramp access.

Figure 4.14 Multiple Universal Access Types (Author, 2017)

Legend

Highlight Area



Figure 4.15 **Universal Access Point Locations** (Author, 2017)

Legend



Universal Access Point

The Power & Light District has universal access points scattered throughout the area. This allows for all public spaces and businesses to be universally accessible.

⁷⁶ A. Accessibility

4. Prioritizing the Pedestrians

At lease two direct and safe pedestrian access points, well separated from vehicular traffic are provided.





Sidewalks through the Power & Light District are protected by planters, bollards, lighting, utilities, or parallel parking lanes. Main entry ways into the Kansas City Live area are well separated from major traffic.

Figure 4.16 **Pedestrian Access Points** (Author, 2017)

Legend

Highlight Area

Urban space is completely pedestrianized.





Figure 4.17 KC Live (Author, 2017)

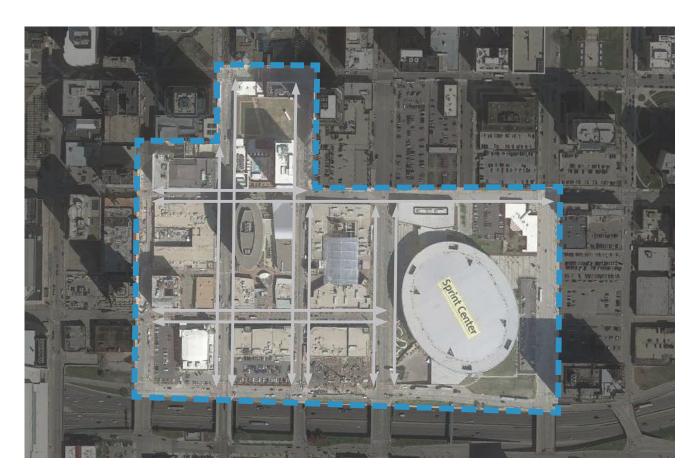
While the Power & Light District does allow traffic through the area, the main public gathering spaces, Kansas City Live and the Power & Light District Fountain, are completely separated from traffic. The surrounding buildings and walkways offer a buffer area for any visitors. The picture above shows the interior of Kansas City Live.

B. Connectivity

5. Movement Patterns

Space is well connected to dominant external pedestrian route(s).





The Power & Light District is laid out on a grid pattern. Therefore, the sidewalks are on a grid pattern through the site, and offer quick and easy connection out of the Power & Light District.

Figure 4.18 **Pedestrian Connection** (Author, 2017)

Legend

Sidewalk

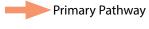






Figure 4.19 Internal Pathways (Author, 2017)

Legend



Secondary Pathway

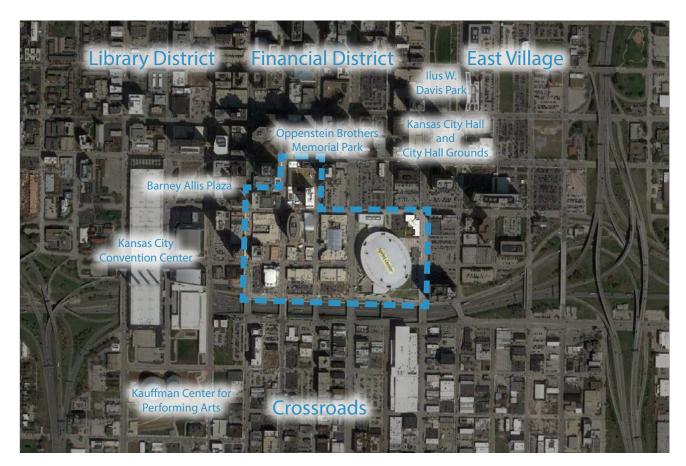
The secondary pathways (sidewalks) grid pattern is well connected through the site. The primary pedestrian pathway stretches throughout the center of the Power & Light District. This path runs from the Sprint Center to the President's Hotel to the East. This connects the President's Hotel, Power & Light District Fountain, Kansas City Live, and the Sprint Center through a single walkway. It is also connected to several of the secondary pathways.

B. Connectivity

6. Node Connectivity

Space connects two or more activity nodes in its immediate surroundings.





The Power & Light District lies directly in downtown Kansas City, Missouri. This places it central to many of the amenities offered by the city. It is surrounded by the Library District, Financial District, East Village, and Crossroads areas. These house many of the gathering and entertainment spaces in Kansas City, including the Kansas City Convention Center, Kauffman Center for Performing Arts, and the Barney Allis Plaza.

Figure 4.20 Activity Nodes (Author, 2017)



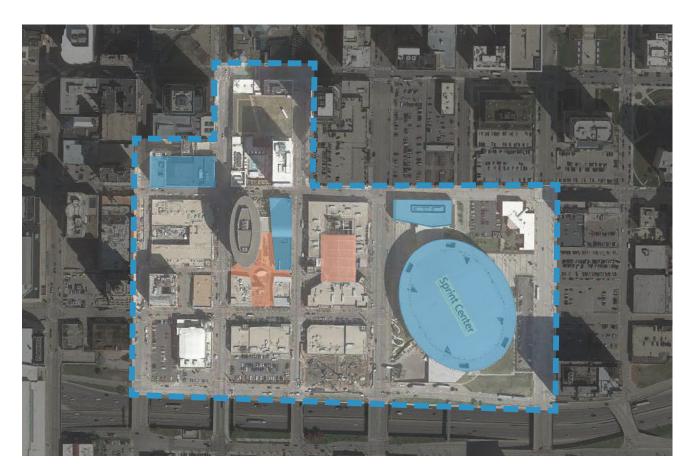
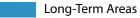


Figure 4.21 Destinations (Author, 2017)

Legend





The Power & Light District houses two gathering spaces (Kansas City Live and the Power & Light District Fountain). These are popular destinations for visitors of the area, and can be altered to house shortterm activities. The area also has three locations that house long-term activities. These include the Sprint Center and College Basketball Experience, the Midland, and the Kansas City Repertory Theatre. The street level also contains several activities for entertainment, shopping, and nightlife.

B. Connectivity

7. Sightlines and Way-finding

Majority of horizontal and vertical directions are visible from every entry point.





Upon entering Kansas City Live all paths of direction are visible. The photo above is taken from the Western entryway to Kansas City Live.

Figure 4.22 Entry Points (Author, 2017)







Figure 4.23 Visible Entry (Author, 2017)

Legend

Highlight Area

The entry points to Kansas City Live are large and easily visible from both within and out of the area. The photo above displays the Eastern entryway from the center of Kansas City Live. The Western entryway mirrors the entryway displayed above, and the Northern entry elevators are on the center axis of Kansas City Live.

⁸⁴ C. Mobility Means

8. Bicycle-friendly Design

Bike stand facilities are available within space or in its vicinity (up to two hundred meters).



After multiple site visits and research of the Power & Light District there are not bike stands visible to visitors of the area. These could be housed in parking garages or the apartment areas, but are not visible or prominently displayed.



riding in the streets without separation from traffic.

The Power & Light District has not implemented cycling areas or lanes that are separated from pedestrian walkways. Many cyclist can be seen

⁸⁶ C. Mobility Means

9. Public Transport

Access to public transportation means is available in the vicinity or urban space.

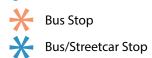




The KCATA (Kansas City Area Transportation Authority) has multiple transportation stops in the Power & Light District. These include several Ride KC bus stops and KC Streetcar stops.

Figure 4.24 Transportation Stops (Author, 2017)

Legend



At least two types of public transportation are available.



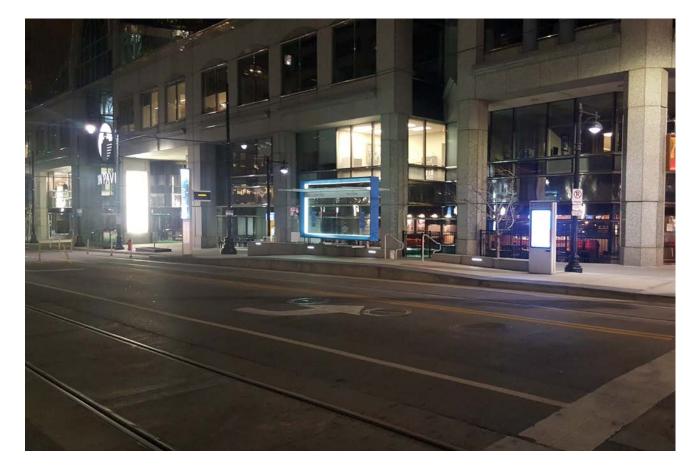


Figure 4.25 KC Streetcar (Author, 2017)

The Power & Light District houses Ride KC bus stops and KC Streetcar stops. A KC Streetcar stop is shown above.

Chapter 4

88 C. Mobility Means

10. Vehicular Access

10A Parking facilities are provided in the vicinity (up to four hundred meters).





The Power & Light District has several parking garages for visitors. These have minimal fees, and are accessible if attending events in the area. Several of the streets in the Power & Light District also contain on-street parking. There are few street level parking lots, but several parking lots and parking garages surround the area.

Figure 4.26
Parking Facilities (Author, 2017)

Legend



Parking Garage Entry



On-Street Parking



10B



Figure 4.27 Garage Entry (Author, 2017)

Legend



Highlight Area

The above parking garage leads visitors below Kansas City Live. Many of the parking garages in the area are prominently displayed within neon signs similar to the one seen above.

⁹⁰ C. Mobility Means

11. Drop-off and Taxi Stands

11A Pick-up/drop-off points are available on site.





On-street parking is utilized as pick-up/drop-off visitors of the area. Minimal traffic in the area also allows for safe pick-up/drop-off in many areas of the Power & Light District. There are also valet services available surrounding Kansas City Live.

Figure 4.28 Pick-up/drop-off (Author, 2017)

Taxi stands are provided within space or in its proximity (up to four hundred meters).

While the Power & Light District does allow for ease in pick-up/dropoff situations, there are not areas for commercial vehicles to gather for visitors of the site to use.

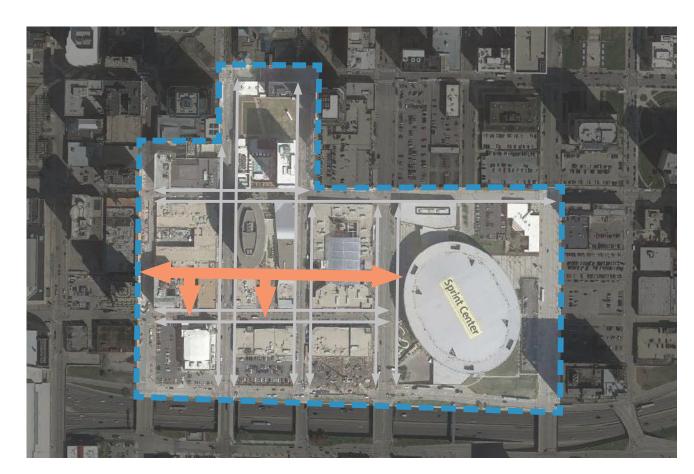
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⁹² D. Legibility and Edges

12. Spatial Layout

12A Pedestrian networks are clearly differentiated from other activities.

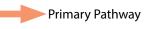




While the primary pathway in the Power & Light District travels through the Power & Light District Fountain and Kansas City Live, it is clear where gathering/activities may occur, and where there must be room for pedestrians to travel through the site. The secondary pathways follow the street network and are separated from gathering/activity spaces in the site.

Figure 4.29 Pedestrian Networks (Author, 2017)

Legend



Secondary Pathway

The hierarchy of pedestrian network is provided. Major and minor pedestrian routes are clearly differentiated.

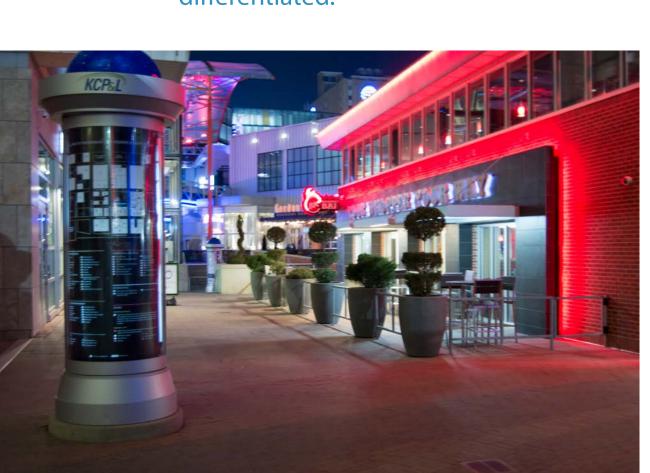


Figure 4.30 Network Hierarchy (Author, 2017)

The primary pathway through the Power & Light District is separated from the area's traffic, and offers a clear axis through the site. Secondary pathways are street-side and offer minimal separation from traffic. The above photo shows the primary pathway near the Power & Light District Fountain.

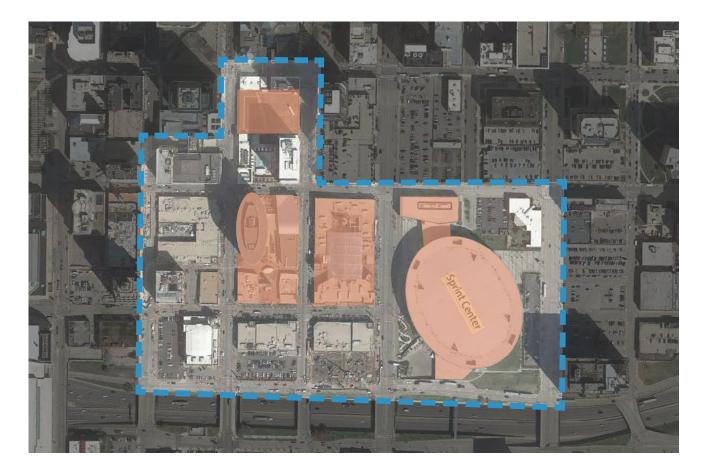
12B

⁹⁴ D. Legibility and Edges

13. Focal Points of Activity

13A At least 2 legible nodes of different types of activities are provided within space.





The Power & Light District is a mixed-use area with several types of activity available. The four main nodes of activity are the Power & Light District Fountain, Kansas City Live, Rooftop Park and The Sprint Center (also houses the College Basketball Experience). Kansas City Live contains many bars and nightlife activities. The Power & Light District Fountain has many retail/dining options and a large gathering space. The Sprint Center hosts several sporting and entertainment events. The Rooftop Garden provides a gathering space with views of Kansas City.

Figure 4.31 **Nodes of Activity** (Author, 2017)

Legend

Highlight Area





Figure 4.32 Visual Nodes (Author, 2017)

The Power & Light District's nodes of activity are all visible when entering the area. This can be viewed in figure 4.30 to the left. Many of the Power & Light District's activities also have several signs that are especially visible at night. This is shown above.

⁹⁶ D. Legibility and Edges

14. Visual Landmarks

14A At least one visual landmark is provided.

1

1 More than one visual landmark is provided.

14B ‡





The Power & Light District has several signs throughout the district.

Two of these signs can be viewed above. The Sprint Center (also College Basketball Experience) and Kansas City Live may also be viewed as visual landmarks for their design and size.

Figure 4.33 District Signs (Author, 2017)

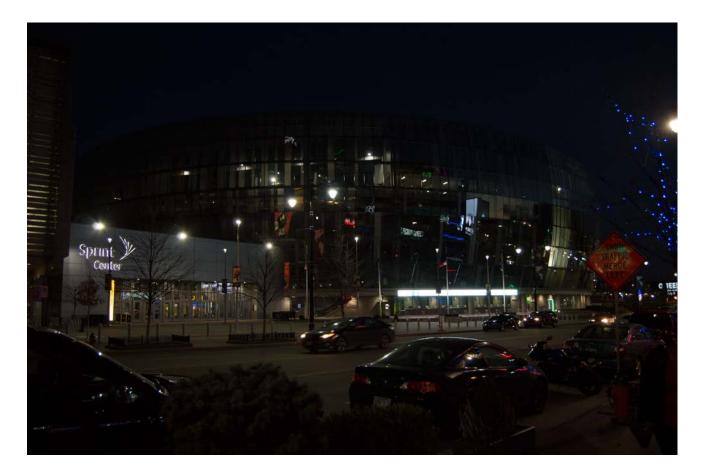


Figure 4.34 Sprint Center (Author, 2017)

The Sprint Center and College Basketball Experience take up a large portion of the Power & Light District. The building itself is recognizable, and the size and design of it causes it to be an easy landmark for the Power & Light District.

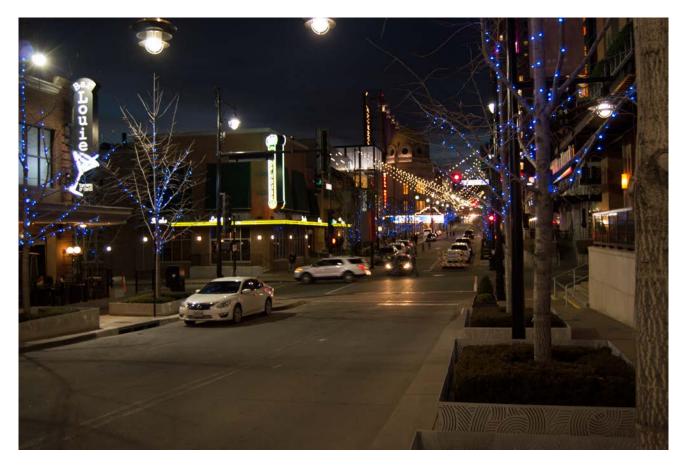
9

⁹⁸ D. Legibility and Edges

15. Permeability

15A Space has good visual connection with surroundings - edges are porous or see-through





The Power & Light District is porous around the edges of the district due to traffic and pedestrian travel through the area. The redevelopment of the Power & Light District has allowed it to create its own visual identity. The mixed-use area has several signs and activities visible from the edges, and is especially noticeable during the nightlife hours. The above photo was taken from the edge of the Power & Light District viewing inward.

Figure 4.35 Visual Connection (Author, 2017)







Figure 4.36 KC Live Entrance (Author, 2017)

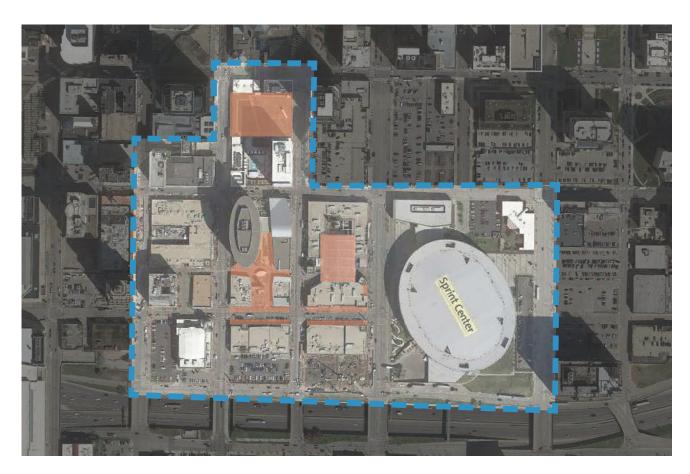
Few areas of the Power & Light District are reduced in their permeability. The areas that are more enclosed are very active and draw visitors into the site. The above picture shows the Eastern entryway into Kansas City Live. This shows how active and enticing the exterior of the less permeable areas are designed.

¹⁰⁰ E. Spatial Variety

16. Spatial Variety

16A Space is divided into sub-spaces.





The Power & Light District has several sub-spaces. These spaces include Figure 4.37 Kansas City Live, the Power & Light District Fountain, and the Power & Light District Rooftop Park. Many of the dining and bar options in the Power & Light District also offer small outdoor gathering spaces.

Sub-Spaces (Author, 2017)

Legend

Highlight Area

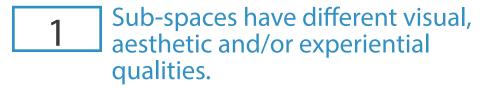






Figure 4.38 **Sub-Space Qualities** (Author, 2017)

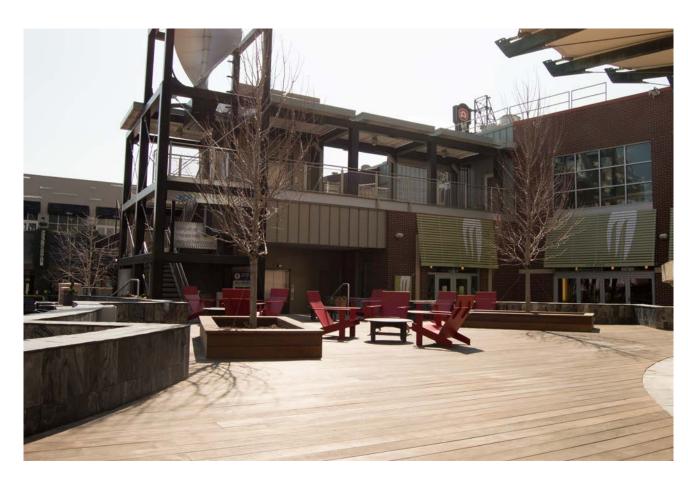
Each establishment in the Power & Light District works to create its own visual identity. This allows for the sub-spaces developed in the Power & Light District to all have their own identity and qualities. These areas are also geared towards gathering and entertainment, while the rest of the site is designed to be pass-through spaces.

¹⁰² E. Spatial Variety

17. Spatial Adaptability

17A Space has capacity to adopt temporary programs.





Three spaces in the Power & Light District can adopt temporary programming at a larger scale. These are the Power & Light District Fountain, Kansas City Live, and the Rooftop Park (seasonal). The Power & Light District Fountain is shown above.

Figure 4.39 **Temporary Programs** (Author, 2017)

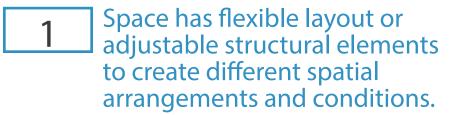






Figure 4.40 Flexible Layout (Author, 2017)

The Power & Light District has three areas that have flexible layouts that may be changed to meet temporary needs. Kansas City Live has a large open area with a removable stage that is shown above. The Power & Light District fountain has moveable tables and chairs and has the capacity to adopt smaller changes. The Rooftop Park (seasonal) also has a large gathering space that can house any temporary programming for events or gatherings. Many events are also held in the Sprint Center. Kansas City Live is shown above.

104

F. Environmentally Friendly Design

18. Greenery and Water-Availability and Access

18A Greenery and/or water features are available in space.





The Power & Light District houses two fountains: the Power & Light District Fountain and the Sprint Center Fountain. Much of the greenery in the Power & Light District comes in the form of street trees or small planters. However, the Rooftop Park and Sprint Center contain designed vegetative spaces.

Figure 4.41 Greenery and Water Features (Author, 2017)

Legend

Highlight Area

Space allows interaction with greenery and/or water elements provided.





Figure 4.42 Rooftop Park (Chris Rochford, 2012)

While there is limited access to water/vegetation, it does exist in the Rooftop Park, Sprint Center, and the Power & Light District Fountain. The Power & Light District Rooftop Garden is shown above.

19B

¹⁰⁶ F. Environmentally Friendly Design 19. Greenery - Form, Pattern and Diversity 19A Greenery has diverse forms and patterns.

There are few vegetative areas that are designed with diverse forms and patterns. Street trees and planters line the roadways and sidewalks to provide safety and shade to visitors of the area, but are not diverse in form or pattern. The Rooftop Park houses most of the vegetation, but is designed more as a gathering space than a space of diverse vegetation. The Sprint Center and the Power & Light Fountain do have areas of vegetation that are diverse in form and pattern, but I do not believe this is enough to attribute the entire district with this attribute.

Greenery appears at different locations of the urban space (such as ground level, roof, or vertical greenery, for instance).

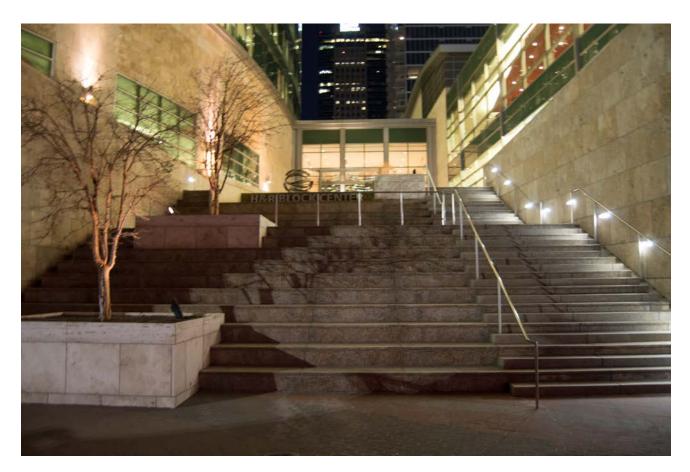


Figure 4.43 H&R Block (Author, 2017)

The Power & Light District has four areas of designed vegetation. These include the Rooftop Park, H&R Block Center (North edge of Power & Light District Fountain), Sprint Center, and a small gathering space in Kansas City Live.

Chapter 4 Resu

F. Environmentally Friendly Design

20. Biodiversity

20A Space emphasizes the usage of local flora species.

0

The area is sparse with designed vegetative areas, therefore I do not believe this quality can be attributed to the district as a whole.

20B Space is linked to a larger ecosystem enabling ecological continuity.



The Power & Light District is a highly urban area, and does not contain any linkage to a larger ecosystem.

21. Environmentally Friendly Strategies

1 At lea

At least one environment-friendly strategy is employed in the design of urban space.



Figure 4.44 Rooftop Park (Chris Rochford, 2012)

While vegetation is minimal in the Power & Light District the area does contain the Rooftop Park and garden area.

¹¹⁰ F. Environmentally Friendly Design

21. Environmentally Friendly Strategies

21B More than one environmentfriendly strategy is employed. Environmental awareness and environmentally friendly usage of space is clearly promoted.



The Power & Light District does not contain multiple environmentally friendly strategies. Environmental awareness and friendly usage is also not promoted through the site.

22. Environmental Integration

Urban space respects and preserves 22A existing natural environment.

The Power & Light District is a redevelopment of an existing urban area, and does not work to preserve a natural environment or ecosystem.

O Space enhances natural experience 22B through landscape design.

The highly urban area does not have a natural experience. While it does contain the Rooftop Park, the design of the area is orthogonal with hard angles and sits below several skyscrapers.

¹¹² G. User Comfort

23. Protection from Weather Conditions

23A Major pedestrian pathways are covered.



The Power & Light District offers several areas of shade, but most of these areas are gathering spaces. The only shade received on pathways is due to the large buildings surrounding the area. 1 Larger covered or enclosed areas are available in space.

23B



Figure 4.45 Covered Areas (Author, 2017)

Legend



Many of the outdoor gathering spaces provided by retailers in the Power & Light District offer some form of coverage. This could come in the form of umbrellas or overhangs. The two main gathering spaces (Kansas City Live and the Power & Light District Fountain) do offer larger areas of coverage. The Power & Light District Fountain offers an overhang for its moveable tables and chairs, and Kansas City Live is entirely covered with a large rooftop. Kansas City Live is shown above.

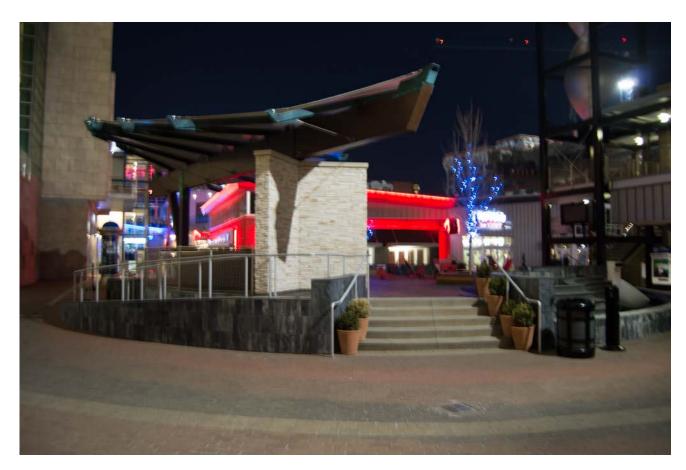
Chapter 4 Resul

G. User Comfort

24. Shade and Sunlight

24A Space provides a variety of shaded and sunlit areas.





The pass-through areas of the site offer minimal shade from sunlight. Most of the shade provided in these areas come from the buildings. However, the gathering spaces do offer shading opportunities for visitors. The Power & Light District Fountain is shown above.

Figure 4.46 Variety of Shade (Author, 2017)

O Flexible/adjustable shading means are provided in space.

Some street side businesses offer adjustable shading methods through the use of umbrellas, but I do not believe that this is enough to attribute this factor to the entire site. While the gathering spaces do have shade, the overhangs and rooftops are permanent and not adjustable.

116 G. User Comfort

25. Air Control and Optimization

25A Space is not exposed to substantial air pollution and has good ventilation.



The Power & Light District houses several downtown streets. This allows for traffic to consistently be near visitors of the site. The lack of vegetation throughout the district also allows for the pollution of the air through large amounts of vehicular traffic.

25B The design employs techniques to improve or enrich the air quality.



There is not enough vegetation throughout the Power & Light District to attribute this quality to the district as a whole.

26. Noise Control and Optimization

0

Space is free from external and/or internal noises.

26A

26B

The Power & Light District spans several blocks and almost always has vehicular traffic moving through the site. While there are areas of the site that offer separation from traffic, the sound of external internal and external noises spread through the site.

O Space employs techniques to improve or enrich the aural quality.

Traffic throughout the Power & Light District is a constant reminder that the site is a highly urban area with large amounts of vehicular traffic and construction.

Chapter 4 Resu

H. Diversity & Intensity of Use

27. Diversity of Activities Within Urban Space

27A At least one public amenity for specific active use(s) is available within urban space.





Kansas City Live offers a large open space for all visitors. During the day, visitors of all ages can gather for free to watch live sporting and entertainment events seen above.

Figure 4.47 Active Use (Author, 2017)

At least two well-integrated public amenities for specific passive and active uses of different types are provided within urban space.

27B



Figure 4.48 KC Living Room (Author, 2017)

The Power & Light District offers several public amenities for its visitors. Kansas City Live offers a multitude of chances to view live entertainment and sporting events on television, or to gather with friends. The Power & Light District Fountain offers a space to meet with other visitors and enjoy the fountain and flexible seating arrangements. The Rooftop Park has a large open space for active uses. Finally, the district houses several shops, dining options, nightlife, and entertainment opportunities for interested visitors.

H. Diversity & Intensity of Use

28. Choice of Activities Around Urban Space

28A At least two different activities are available in immediate surroundings of urban space.





The Power & Light District is neighbor to several parking lots and garages to the East, and lies North of Interstate 670. North of the area is the Oppenstein Brothers Memorial Park and several retail and dining options. To the West of the site lies several hotels/apartments and the Kansas City Convention Center.

Figure 4.49 Surrounding Activities (Author, 2017)

Legend

Highlight Area







Figure 4.50 Multitude of Activities (Author, 2017)

The area is neighbor to multiple areas of activity. While the East Village houses several parking areas and government buildings, the Financial District offers retail and dining options and the Oppenstein Brothers Memorial Park. The Barney Allis Plaza and Kansas City Convention Center are directly West of the area. While being slightly separated by Interstate 670, the Crossroads District houses several retailers, housing/dining options, nightlife/entertainment and the Kauffman Center for Performing Arts.

I. Social Activities

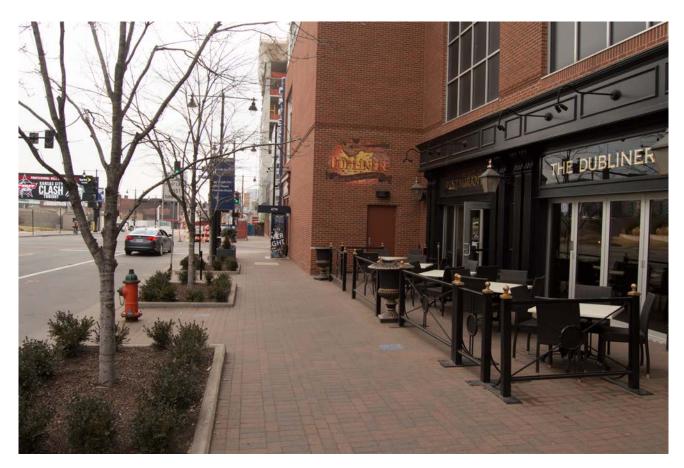
29. Seating Amenities

29A Sufficient formal seating amenities are provided in space.



Secondary/informal seating is available in space.





As seen through several photos already, the Power & Light District offers formal seating options in all of the gathering spaces found on site. Many of the street-side dining and nightlife options also have small gathering spaces directly in front of the business. These areas often house moveable seating options for outdoor gathering and dining.

Figure 4.51 Formal Seating (Author, 2017)



Figure 4.52 **Secondary Seating** (Author, 2017)

The Power & Light District offers secondary seating options in Kansas City Live, the Power & Light District Fountain, and Rooftop Park. Kansas City Live offers several large bench seating and ledges. The Power & Light District Fountain has a large secondary seating area that can be viewed in figure 4.42. Fountain ledges in the area may also be utilized as informal seating. The Rooftop Garden contains a large gathering lawn that can be viewed in figure 4.41. Secondary seating in Kansas City Live can be viewed above.

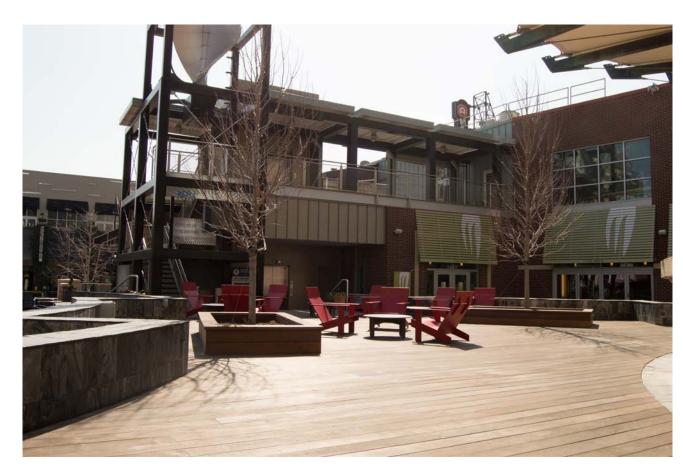
124

I. Social Activities

30. Seating Condition and Variety

30A Seating is available in both sun and shade.





While Kansas City Live offers a large shaded area for seating, the Power & Light District Fountain and the Rooftop Park offer several opportunities for seating in the sun. Moveable seating in the Power & Light District Fountain can be viewed above.

Figure 4.53 Seating Conditions (Author, 2017)

1 At least two different types of seating amenities are available in space.

30B

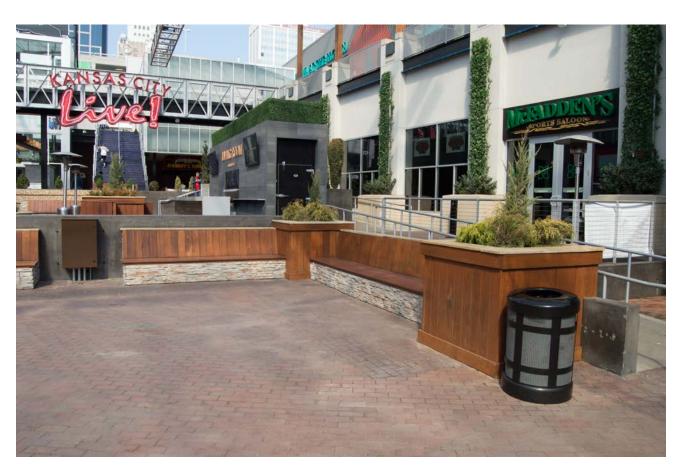


Figure 4.54 Seating Amenities (Author, 2017)

This framework has displayed the several seating amenities that are available throughout the site. Kansas City Live, the Power & Light District Fountain, and the Rooftop Garden house most of the seating amenities in the Power & Light District. More Kansas City Live seating options can be viewed above.

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I. Social Activities

31. Interactivity

31A Space provides flexible, movable and/or adjustable seating amenities (and/or tables).



The Power & Light District Fountain, Kansas City Live, and several street-side businesses offer moveable seating options. The Power & Light District Fountain and its moveable tables and chairs are shown above.

Figure 4.55 Moveable Seating (Author, 2017)

1 Interactive elements are available in 31B urban space.



Figure 4.56 Interactive Elements (Author, 2017)

The Power & Light District has interactive fountains and a few vegetative areas. The area has several other features that visitors may interact with. A scale model of the solar system offers information on the system's planets and its scale (seen above). The Sprint Center and Kansas City Live offer live entertainment events. Kansas City Live also offers local visitors of the Power & Light District a space for fans of local sporting events to gather together and enjoy their favorite teams.

¹²⁸ I. Social Activities

32. Intimacy and Exposure

32A Both exposed and inward-looking seating arrangements are provided.





The Power & Light District offers many seating opportunities throughout the site.

Figure 4.57 Seating Arrangements (Author, 2017)

1 Space provides semi-permeable or adjustable barriers to reduce exposure.

32B

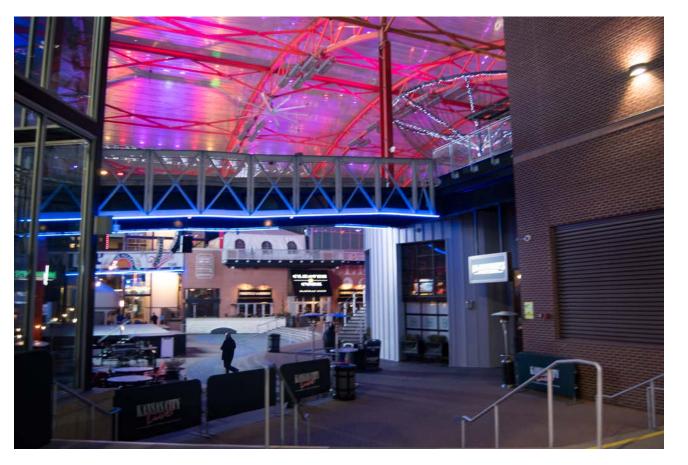


Figure 4.58 Barriers (Author, 2017)

While the Power & Light District is open to all ages and groups throughout the day, Kansas City Live does house nightlife options that require an age restriction. Moveable fences and security offer a barrier during the nightlife hours of the area.

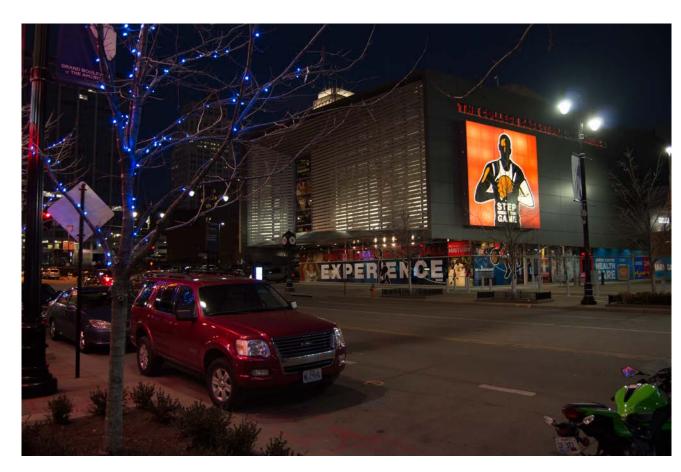
J. Identity (Image and Character)

- 33. Imageability
- 33A Space is memorable for its unique feature(s).



Space and its features are well-known to larger public.

33B



The Power & Light District is a mixed-use area with several sources of entertainment and leisure. The area has created its own identity from the Kansas City area, due to its wide range of entertainment options, structures, signage and lighting, and the area being largely pedestrianized. These factors create a memorable site for visitors.





Figure 4.60 VisitKC (Author, 2017)

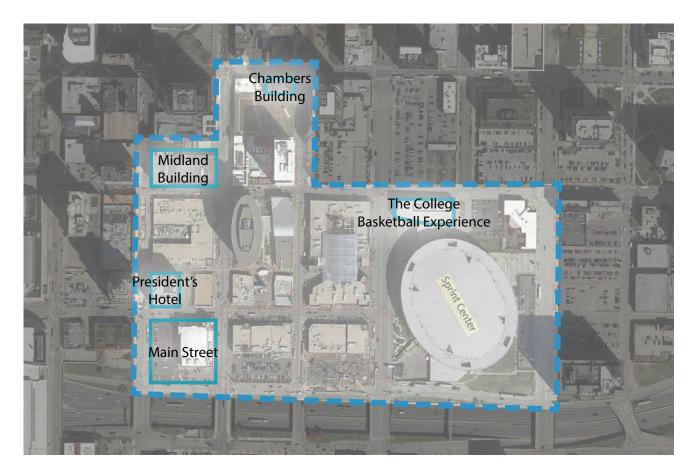
The Power & Light District is a destination for many visitors of the Kansas City area. This can be attributed to its engaging gathering spaces, retail and dining options, the Sprint Center and its events, and nightlife and entertainment options.

34. History and Symbolic Value

34A Tangible traces of historical/cultural heritage are available on site.

J. Identity (Image and Character)





The Power & Light District houses several historical landmarks of the Kansas City area. These include the Midland, President's Hotel, Main Street Building, and the Chambers Building. These buildings offer visitors the experience of Kansas City's long cultural heritage. The College Basketball Experience also displays the history of the Big XII Conference and the College Basketball Hall of Fame.

Figure 4.61 Heritage (Author, 2017)



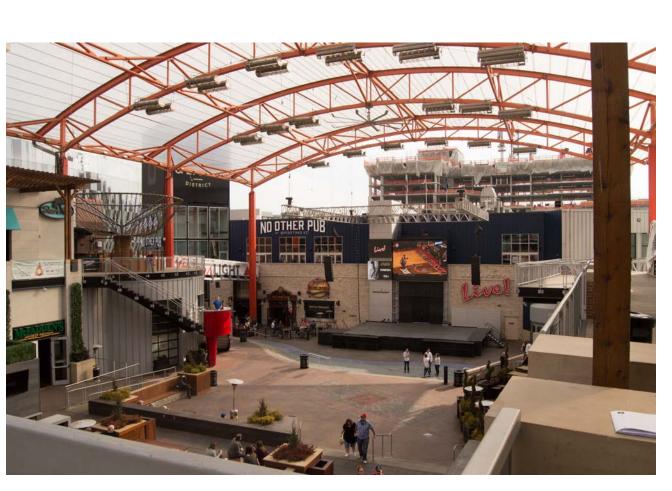


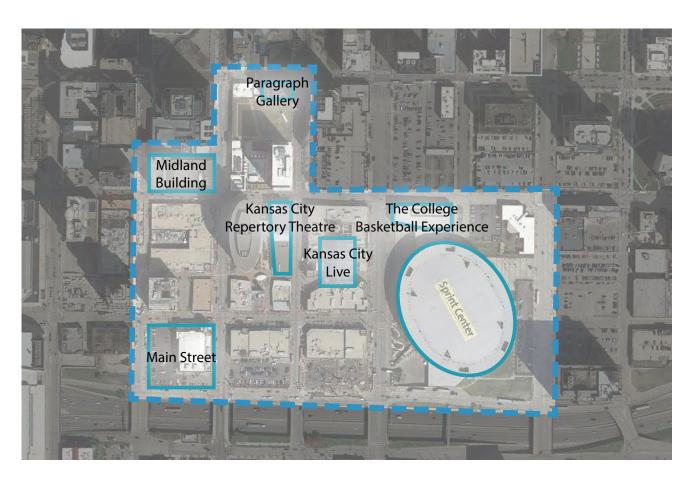
Figure 4.62 Local Culture (Author, 2017)

While the historic buildings of the Power & Light District offer a glimpse of Kansas City's heritage, Kansas City Live is a melting pot of the local culture. This area is designed for visitors to enjoy their local sports franchises and entertainment options with countless other fans. The mixed-use area houses a young adult demographic; therefore, the entertainment options display the wants and needs of this culture. This includes the high amount of local and national sporting events that are offered to be viewed and enjoyed at Kansas City Live.

34B

35A Art and culture-oriented program(s) are provided.





The Main Street building houses the Alamo Drafthouse Cinema. The Midland Building has several stages to experience acts and music. The Chambers Building houses the Paragraph art gallery. The Kansas City Repertory Theatre is directly north of the Power & Light District Fountain. Kansas City Live offers several chances for live music and entertainment. The Sprint Center and College Basketball Experience offer many sporting events, concerts, and other entertainment. Many bar venues also offer the chance for local talent to be enjoyed.

Figure 4.63 Art and Culture Programs (Author, 2017)





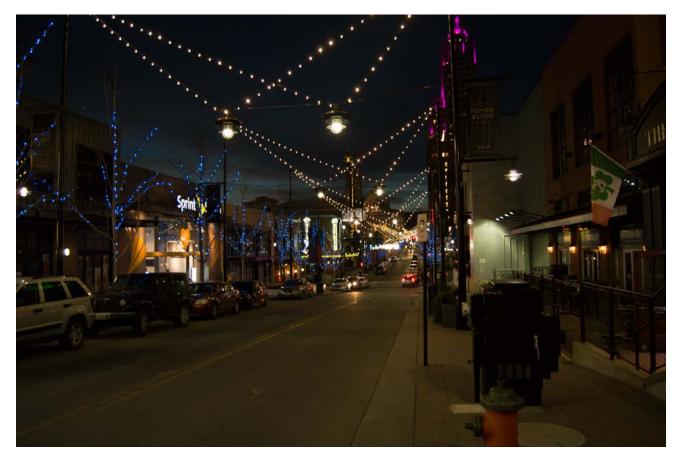


Figure 4.64 Open to All (Author, 2017)

The Power & Light District offers activities and gathering spaces for all groups and a large variety of uses. The area is inclusive to all groups and several spaces are available to be reserved or rented for any activity.

J. Identity (Image and Character)

36. Unique Nature

36A Space has unique natural features that substantially contribute to its visual identity.



The Power & Light District is a highly urban area that, while it does contain its own visual identity from the Kansas City area, does not house natural features that can contribute to this attribute.

36B Natural elements have strong links to preservation, history or religion.



While there is a strong link to the cultural heritage of the Kansas City area, the Power & Light District does not contain any natural elements.



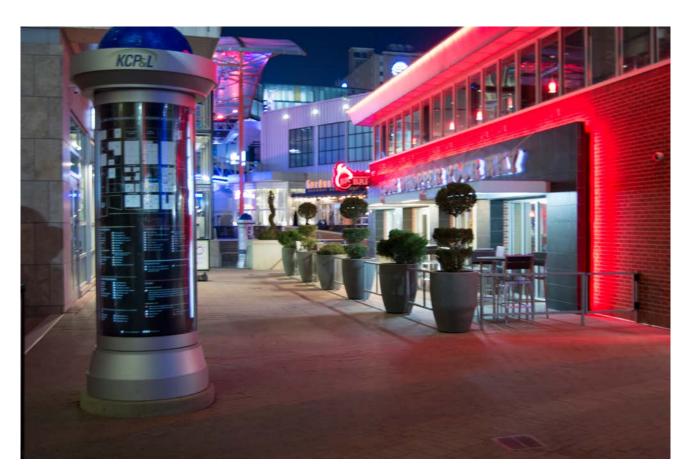
Figure 4.65 Urban Area (Author, 2017)

¹³⁸ K. Provision of Amenities & Services

37. Hygiene Facilities

37A Space is clean and kept in good physical condition.





Despite some construction in the Power & Light District, all areas are kept very clean and maintained.

Figure 4.66 Clean Space (Author, 2017)





Figure 4.67 Hygiene Amenities (Author, 2017)

Legend

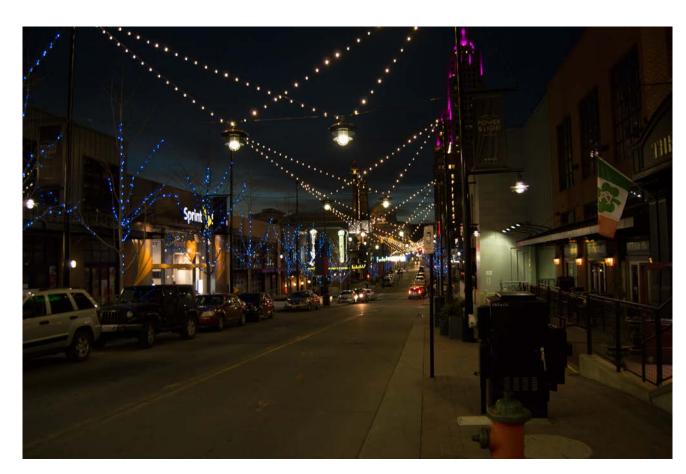
Public Safety Offices

The main hygiene amenities are located in the Public Safety Offices. These are located in the Northern part of Kansas City Live (shown above). Secondary amenities can be found at any of the businesses in Kansas City Live. While these are local businesses, the restrooms are open for the visitors of Kansas City Live.

38B

38A Adequate lighting along main pathways and activity nodes is provided.





The Power & Light District is well lit throughout the site. This can be viewed in the image above and through other site photos presented in the design framework. All streets have street lighting, and in some cases also contain overhead lighting. The gathering spaces are also well lit from overhead lighting and light from nearby businesses.

Figure 4.68 Lighting (Author, 2017)



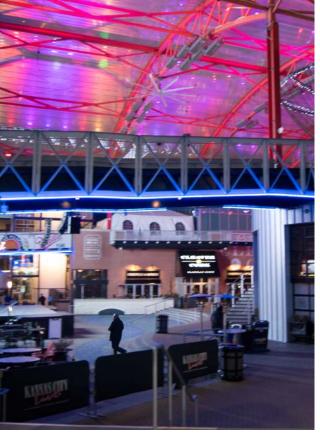




Figure 4.69 (Left) Ambient Light KC Live (Author, 2017) Figure 4.70 (Right)

Ambient Light P&L Fountain (Author, 2017)

While the Power & Light District doesn't not have adjustable lighting, ambient lighting creates a safe atmosphere in major gathering areas.

39A At least one public communicational facility is available in space.





The Power & Light District houses two public communicational facilities. The first being the Public Safety Office (see figure 4.66) and the VisitKC offices on the Western border of the Power & Light District.

Figure 4.71 VisitKC (Author, 2017)





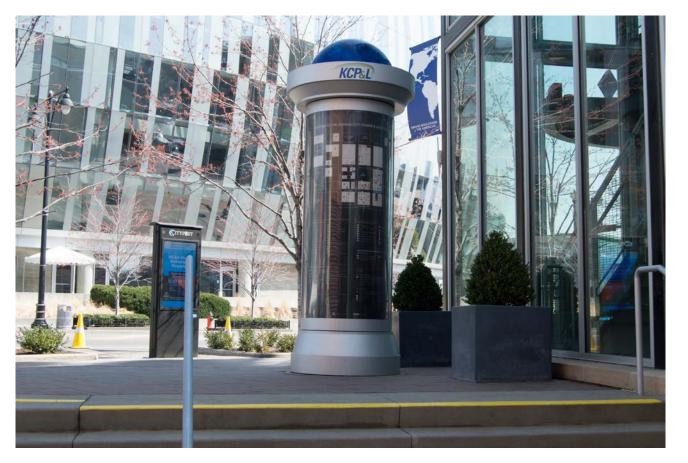


Figure 4.72 Signage (Author, 2017)

The Power & Light District is scattered with signs for the local businesses, and houses two public communication facilities for visitors in need (VisitKC and Public Safety Office). The area also contains scattered signage with maps of the entire area (shown above). These house a easily legible map of the Power & Light District and a list of all the experiences offered.

40. Healthcare and Social Services

40A Affordable general health care service for all age groups is available within urban space or in its vicinity.





Sprint Center Health Care offers a solution health care to downtown Kansas City. While Sprint Center Health Care is by appointment, it does offer urgent care for walk-ins who are sick or have minor injuries.

Figure 4.73 Sprint Center Health Care (Author, 2017)

Legend





Services for vulnerable user groups (elderly, children, the disabled, etc.) are available within urban space or in its vicinity.

40B



Figure 4.74 Child Care (Author, 2017)

While there are not services for vulnerable user groups on site, there are options for child care just outside the Power & Light District. Kansas City Head Start and Corporate Kids Child Development are just East of the area.

¹⁴⁶ L. Safety and Security

41. Safety and Image

41A Design prevents physical injuries.

0

While the Power & Light District is safe and provides universal access points, most of the materials used in the design of the area do not work to prevent injury. There are many level changes throughout the site, and most of the ground surfaces are concrete or asphalt.

1 Space appears safe due to approachable and inviting design.

41B



Figure 4.75 Approachable Design (Author, 2017)

The Power & Light District has an open design, with few to no intimate areas. The open design a maintenance of the area shows visitors of the area that it is safe and inviting. Even at night, the Power & Light District is full of light, security, and local police officers.

Chapter 4 Re

¹⁴⁸ L. Safety and Security

42. Security

42A Space employs security measures.

1

The Power & Light District employs several measures to ensure the safety of the area's visitors. All nightlife areas have security at the entry ways, local police officers patrol the area, emergency flood lights are placed in large gathering spaces, almost all areas are well lit at all times, and businesses employ self surveillance.

42B Security measures are employed in non-intrusive manner.

1

Security measures in the Power & Light District are non-intrusive and offer a safe environment for visitors. The most interaction a visitor may have with any security is entering a nightlife area during evening hours.

43. Rules and Regulations

Space fosters inclusion and regulation rather than exclusion and restriction.

M. Management & Regulations

The Power & Light District is open to all people during daytime hours. During evening hours, areas that offer nightlife options are closed visitors under the age of twenty-one. The Rooftop Park is also seasonal and not available for entry during the winter months. Few activities are discouraged to protect foot traffic in the area (i.e. biking on sidewalks).

1 Active users' participation in space 43B management is encouraged.

The Power & Light District is well maintained and clean. Users of the area are encouraged to clean up after themselves. This is easy, due to the disbursement of waste utilities throughout the site.

M. Management & Regulations 44. Access Regulation and Management 44A Space is partially accessible 24 hours a day (passing through).

The area is accessible to through-traffic twenty-four hours a day. The only areas that are inaccessible is Kansas City Live after 3:00 AM and access to local businesses that follow their own set business hours.

44B Space is entirely accessible 24 hours a day.

Kansas City Live closes after 3:00 AM. Local businesses also follow their own set hours of operation.

45. Time & Program Regulation & Management Space is a setting for occasional events and programs.

Kansas City Live offers occasional outdoor events and programming.

Space provides means to facilitate regular events and programs. 45B

> Kansas City Live, the Sprint Center, and other theater spaces in the area offer regular events and programs.

² M. Management & Regulations

46. Permissions and Management

46A Space allows, manages and facilitates non-designed activities with an adequate permission.

0

The spaces provided in the Power & Light District are designed for specific uses. This does not allow space for non-designed activities.

46B Informal activities occur without any permission.



Informal activities are not encouraged in the Power & Light District.

47. Affordability and Equality

At least one public program, service 47 or facility available in space is free of charge.

Kansas City Live, the Power & Light District Fountain, and the Rooftop Garden are all free to enter. These areas are surrounded by entertainment opportunities that are not free of charge, but entrance and passive activity in these areas is free.

O All public facilities/services are free 47B of charge or largely affordable.

The Sprint Center and Kansas City Live hold events that are not free to attend. Businesses can also choose to charge covers to enter.

HardWARE

71%

01A - 26B: 37/52

SoftWARE

27A - 36B: 18/20

90%

OrgWARE 37A - 47B: 17/22

77%

Final Score

01A - 47B: 72/94



Research Question

1. How is Kansas City, Missouri's Power & Light District viewed, and how well does the district score, when using the design framework found in *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions*?

The design framework of *Re-Framing Urban Space* scored the Power & Light District with a 77%. (Figure 4.76) The following sections will generalize the design framework using the questions crafted for the survey. The reader is reminded that the following sections do not contribute to the final score, but work to generalize the findings into manageable readings.

Permeability: Are all areas of the Power & Light District easily accessible?

The Power & Light District is a highly permeable area. The site covers several city blocks, and is easily accessible on all sides. The streets/sidewalks of Kansas City's Central Business District follow a grid pattern. This allows for easy access into and out of the area. Views from in and out of the site are not obstructed on the edges, and it is easy to see all the activity in the area. While there are some areas that are meant to be more secluded for gathering, most areas of the Power & Light District offer safe, visible movement throughout the site.

Variety: Do individual blocks in the Power & Light District offer several different uses?

The Power & Light District is a mixed-use redevelopment of downtown Kansas City. The area offers housing, nightlife, entertainment, food, and retail options. All of these opportunities are spread out throughout the area. While walking down single blocks, there is the opportunity to pass by any number of these establishments. For example, the West side of the Power & Light District houses The Midland Theatre, dining, nightlife, and retail options all within a few doorways. Each block in the Power & Light District offers several different uses and opportunities for the visitors to enjoy themselves.

Figure 4.76 Final Results (Author, 2017)

Legibility: Is the Power & Light District easy to navigate to different areas of interest?

The Power & Light District is located on a grid network of streets and sidewalks. These act as secondary pathways through the site, while a main pedestrian pathway provides an axis of navigation from The Hilton President Hotel, through the Power & Light District Fountain and Kansas City Live, all the way to the Sprint Center. Coupled with big, vibrant signage from local businesses and site maps dispersed through the site, the Power & Light District is easy to navigate to any of its mixed-use amenities.

Robustness: Do individual buildings in the Power & Light District offer several different uses?

Most of the uses in the area are spread out over blocks, instead of single buildings, but there are a few gathering spaces that offer multiple uses. Kansas City Live houses several bars, dining, and nightlife options, The Power & Light District Fountain is surrounded by several amenities, and the Main Street building offers a cinema and dining options. These areas offer highly robust buildings.

Visual Appropriateness: Is it easy to visually see the different opportunities you have in the Power & Light District?

Most businesses in the Power & Light District offer large signs, or neon lights to signify what is available at the establishment. Gathering spaces and high traffic areas are well lit and open to show what is available. The easiest opportunity to view what is available in different areas comes from the high amounts of pedestrians that visit the site. The open design allows for visitors to see what other people are participating in, which allows them to view the different opportunities in the area.

Richness: Does the Power & Light District offer 157 different forms of sense-experience?

While the Power & Light District does offer small areas of designed vegetation and water features, there is not much opportunity for visitors of the area to experience different forms of sense-experience. The area does offer a seasonal rooftop park, but I do not believe for the size of the district this allows for the district as a whole to be viewed as having richness.

Personalization: Does each establishment in the Power & Light District have its own visual identity?

The Power & Light District as a whole has its own identity from the city. Most areas are very well lit with neon signs, or large logos and screens. Each of the establishments in the Power & Light use this identity to display their own identity. This could be done with signs, screens, outdoor dining, large open windows, or color schemes. When visiting the Power & Light District everything catches your eye and begs for you attention. All of the techniques used by each establishment call for visitors of the area to come in and have a good time.

Summary

Chapter 4 displays the results of the methodology. The GIS Diagrams introduced the Power & Light District, while showing the incentives developers received for doing redevelopment projects in the area. On-Site Surveys provided public opinion of the area. The design framework displayed the application of the framework to the Power & Light District, and the final Urban Space Value. Following the design framework, a generalization of the design framework is shown using the questions crafted for the on-site survey. Chapter 5 Conclusions will reflect on the efficacy of the design framework, and what I took away from the study as a designer.



Chapter 5

Conclusions

Research Question

The second research question is as follows:

2. How well does the *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* design framework work when applied to the Power & Light District in Kansas City, Missouri?

Efficacy of the Design Framework

Following the analysis of the Power & Light District, using the design framework presented in *Re-Framing Urban Space: Urban Design for Emerging Hybrid and High-Density Conditions* provided an Urban Space Value of 77%. The application and documentation of this method can be viewed in Chapter 4 Results. The framework required an exhaustive effort of site inventory and analysis. It covered a wide range of design criteria, including physical and geometrical properties, use of public space, and operational and management aspects. The application of the design framework, in its entirety, creates a well documented analysis of a reinvigorated downtown area. While the design framework did look on the Power & Light District favorably, there were drawbacks to the use of it at the district scale.

The design framework was crafted to allow practioners to perform site inventory and analysis of urban areas much smaller than district scale. Many of the criteria presented by the design framework are at a site-specific scale. While the design framework could be used at a slightly larger than site scale, there are aspects that force the designer to make a judgment call on the scoring of the criteria presented. In Chapter 4 Results these judgment calls and their reasoning can be viewed. For example, the design framework has several criteria related to greenery and access to greenery. While the Power & Light District does contain a few areas of designed landscape, most of the district only contains street trees and planters. This causes the designer to provide a score for the criteria, while backing up their claims and providing reasoning for the score. Due to the above factors, I believe that the most accurate Urban Space Value scores would be provided if the design framework were adapted to be completed at the district scale.

62 Adaptation of Design Framework

For more accurate results at the district scale, the design framework might be adapted to this scale. While this should be completed in a study of its own, I have provided a few suggestions for how this could be accomplished:

- 1. The larger scale creates unneeded two-part criteria:
- 1A: At least two horizontal or one vertical access points are provided.
- 1B: More than two horizontal or one vertical access points are provided. Formal and informal access points are well distinguished.
- 1: Multiple horizontal or vertical access points are provided at more than one point around the district.
- 2. The scale of criteria could be increased to district scale:
- 11A: Pick-up/drop-off points are available on site.
- 11B: Taxi stands are provided within space or in its proximity.
- 11A: Pick-up/dop-off points are available throughout the district.
- 11B: Taxi stands are provided within the district.

3. Criteria may be combined for district scale:

16A: Space is divided into sub-spaces.

16B: Sub-spaces have different visual, aesthetic and/or experiential qualities.

16: District is divided into sub-spaces that have different visual, aesthetic and experiential qualities.

4. Areas of interest may be adapted:

4A: At least two direct and safe pedestrian access points, well separated from vehicular traffic are provided.

4B: Urban space is completely pedestrianized.

4A: Major gathering spaces have direct and safe pedestrian access points, well separated from vehicular traffic.

4B: Major gathering spaces and primary pathways are completely pedestrianized.

5. Additional district scale criteria could be added:

#A: District contains mixed-use amenities. Such as housing, entertainment, dining, and nightlife options.

Limitations

While an Urban Space Value and evaluation of the Power & Light District were completed, this study contained limitations. The Power & Light District is located in Kansas City, Missouri. This required travel from Manhattan, Kansas to Kansas City, Missouri. The study was contained into a single spring semester. This caused many of the site visits to be conducted during the winter months. This could have caused less Power & Light District visitors to be out on site. The time of these visits were mostly conducted during the week, or daytime hours. This did not allow me to view the district during prime weekend, nightlife hours. On-site construction limited the access to a few areas of the district. This included the construction of Two Light Luxury Apartments and street/sidewalk construction throughout the site. Much of the application of the design framework is documented through photography. My abilities as a photographer are best described as beginner. Finally, additional GIS data from the city came with a large price tag, and was deemed unaffordable for this project.

Future Research

This study was contained to the scoring of the Power & Light District by a chosen design framework, and reflection of the application and efficacy of that design framework. There are several areas of possible research this study could lead to. A recreation of this study could be performed following the completion of construction in the Power & Light District. The design framework could be completed using several other districts, and these scores and applications could be compared. A future study may also use research gathered here to create an updated district scale framework. This could be done by compiling the urban values brought forth in all the readings discussed in this study, to create a unified design framework. The scale of the design framework could also be increased further to city scale. All of these suggested studies could utilize the findings of this study in efforts to further the research of design frameworks and modern urban design.

Use of Study

While this study could be used to further knowledge on modern urban design, design frameworks, and the creation of further research, there are several other areas in which this study could prove beneficial. This study could be used to analyze other design frameworks, and help in the craft of new design frameworks. The information provided in this study could be used by Kansas City, and other urban areas, for the redevelopment or establishment of old and new districts. Finally, this study displays the benefits of design frameworks, and promotes their use in the design process.

Impact of the Study

I crafted this study to serve my interests in urban design and design frameworks. I am a young designer entering the work force. I believe that I could play a part in the creation of vibrant urban areas, and work to revive the city center as a destination. I am also very interested in the further use of design frameworks in my career.

The literature review increased my ability to simplify a reading to a collection of design values. I was then able to present a comparison of these design values. The study of these design frameworks increased my confidence in the application of the design framework to the Power & Light District, and my ability to apply my judgment to the evaluation of a design or site.

This study has illustrated the benefits of using design frameworks. A framework could be used on an existing site to establish its needs, during the design process to create a vibrant urban space, and during post-occupancy evaluations. The Power & Light District is a successful redevelopment, and this study has shown the incentives and attributes that created it. This knowledge could be applied to further urban design projects. This study has broadened the scope in which I evaluate my own designs. Designs must not just take the physical and geometrical properties into account, but investigate the possible uses of a site and the operational and management aspects as well. Most important, this study causes me to ask, "are my designs memorable?"





Figure 6.01 Closing Time (Author, 2017)

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Image Citations

All figures created by author, unless otherwise noted.

Figure 4.42 - Rochford, Chris. Photo Sphere. Jan, 2012. Obtained under open source from Google Street View.

Figure 4.44 - Rochford, Chris. Photo Sphere. Jan, 2012. Obtained under open source from Google Street View.

Data for the GIS diagrams provided by Kansas City GIS Parcel Viewer Base map imagery provided by Google.





Figure 7.01 Appendix (Author, 2017)

Design Frameworks: A Study of Kansas City's Power & Light District

This study is being conducted as a research method to complete fulfillment of requirements for graduation from Kansas State University, with a Masters of Landscape Architecture. Results of this study will be available after the Spring Semester on the Kansas State Research Exchange (K-REx) website. If you have any questions in the future, feel free to contact myself at twtucker@ksu.edu, or the University Research and Compliance Office at comply@ksu.edu.

By participating in this survey, you consent to provide the information that is requested. At any time, you may end and terminate this survey. All respondents of this survey will remain anonymous.

Please circle the appropriate bubble on the scale that corresponds to your experience of the design factors, or qualities, in the Power & Light District.

References

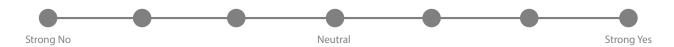
lan Bentley, Alan Alcock, Paul Murrain, Sue McGlynn, and Graham Smith. 1985. Responsive Environments: A Manual for Designers. 12th Printing. Oxford, UK: Elsevier.



Permeability: Are all areas of the Power & Light District easily accessible?



Variety: Do individual blocks in the Power & Light District offer several different uses?



Legibility: Is the Power & Light District easy to navigate to different areas of interest?



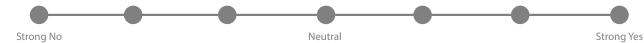
Robustness: Do individual buildings in the Power & Light District offer several different uses?



Visual Appropriateness: Is it easy to visually see the different opportunities you have in the Power & Light District?



Richness: Does the Power & Light District offer different forms of sense-experiences? (visual, motion, smell, audible, touch)

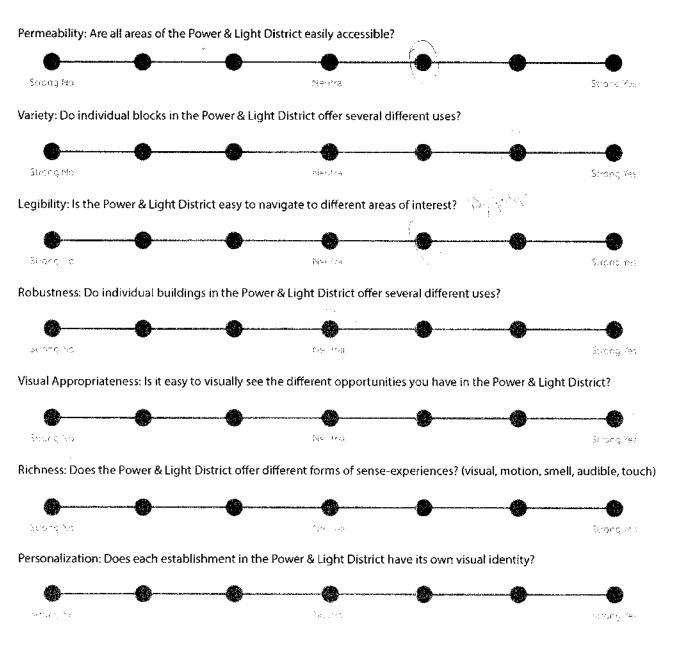


Personalization: Does each establishment in the Power & Light District have its own visual identity?



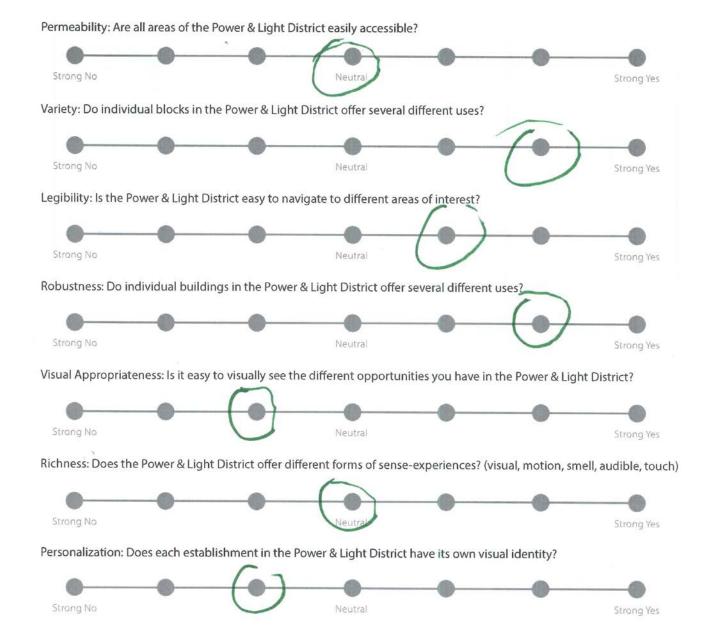
¹⁷⁴ Appendix B - Survey Results

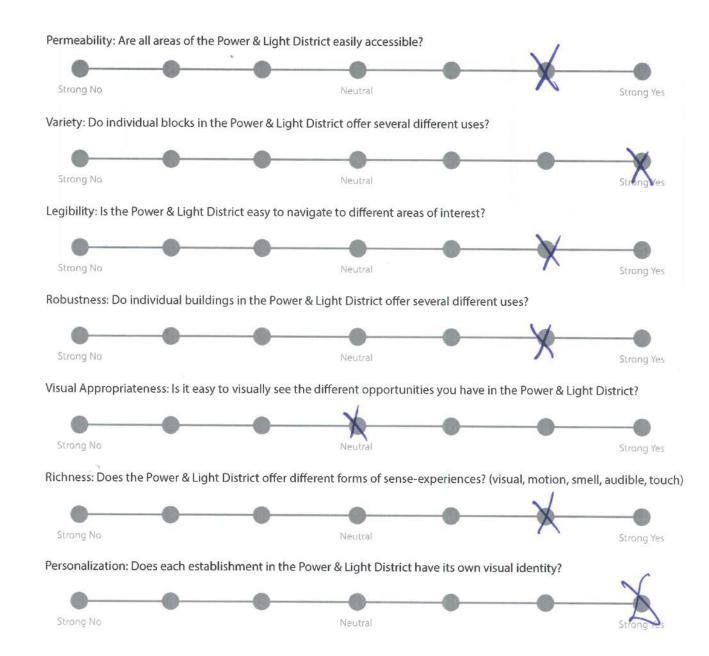


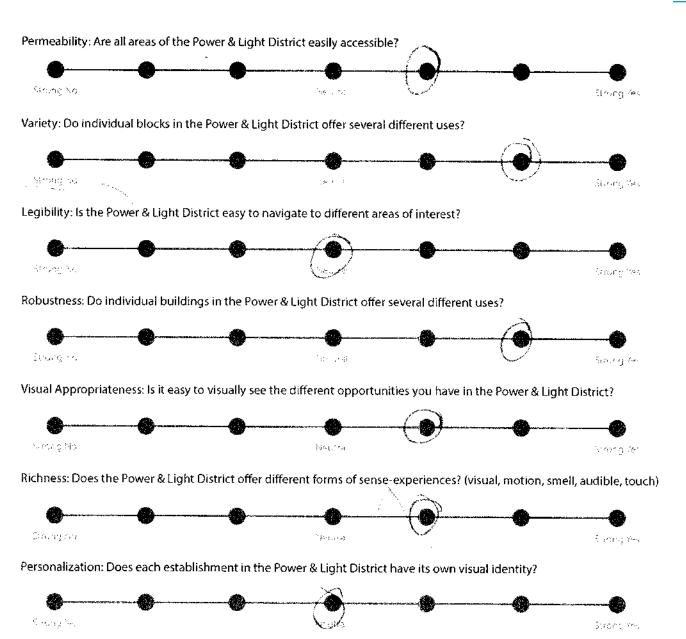


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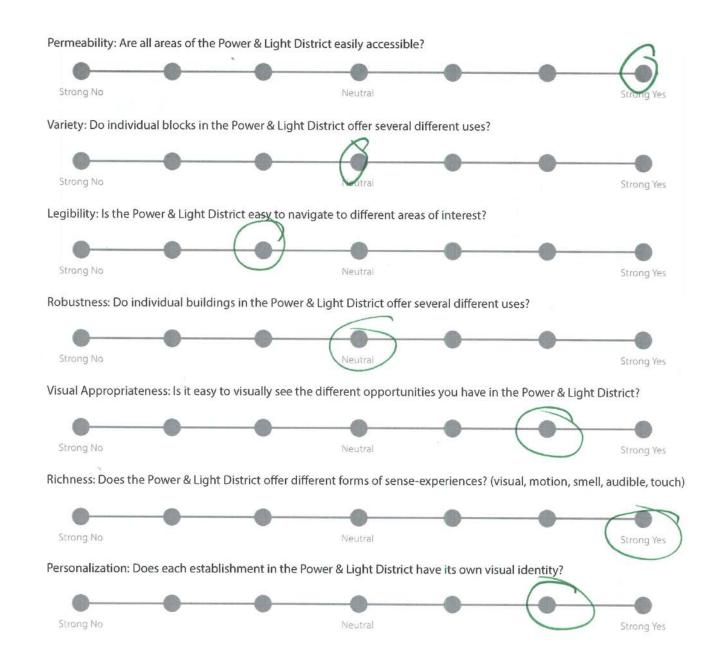


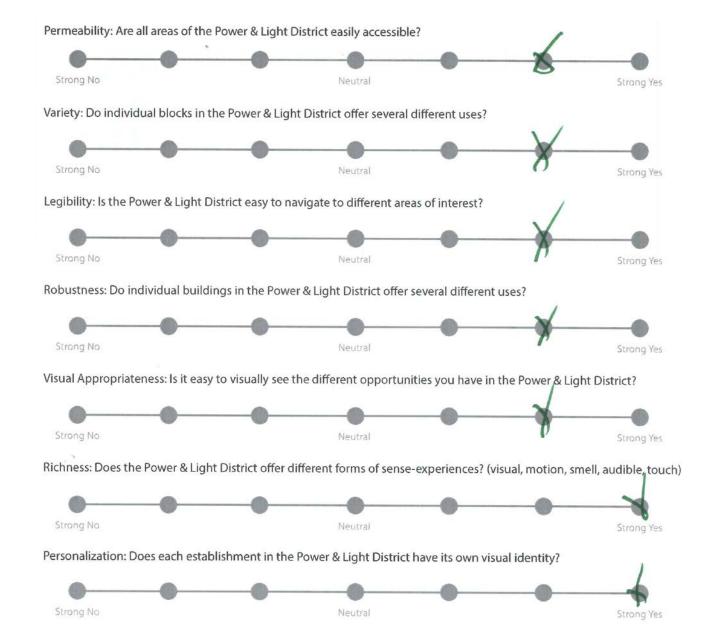


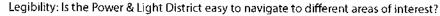


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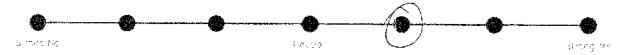
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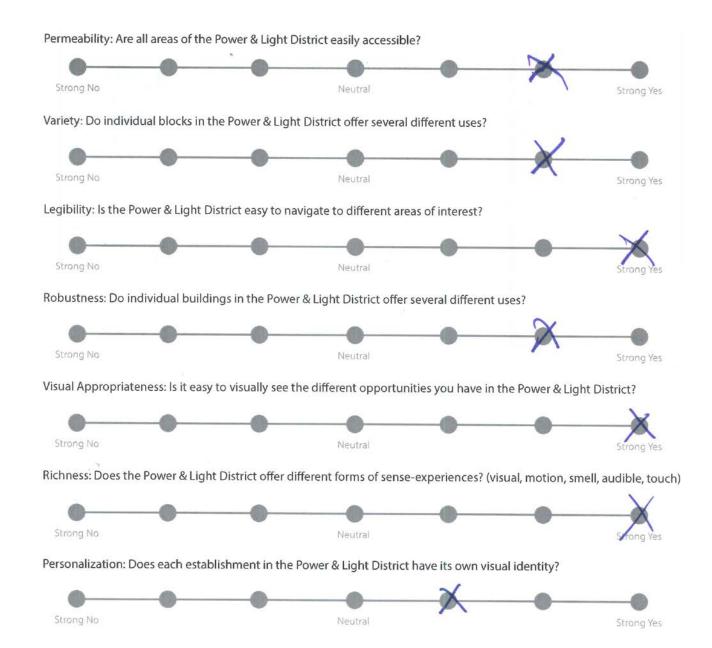


Richness: Does the Power & Light District offer different forms of sense-experiences? (visual, motion, smell, audible, touch)



Personalization: Does each establishment in the Power & Light District have its own visual identity?





Permeability: Are all areas of the Power & Light District easily accessible?



Variety: Do individual blocks in the Power & Light District offer several different uses?



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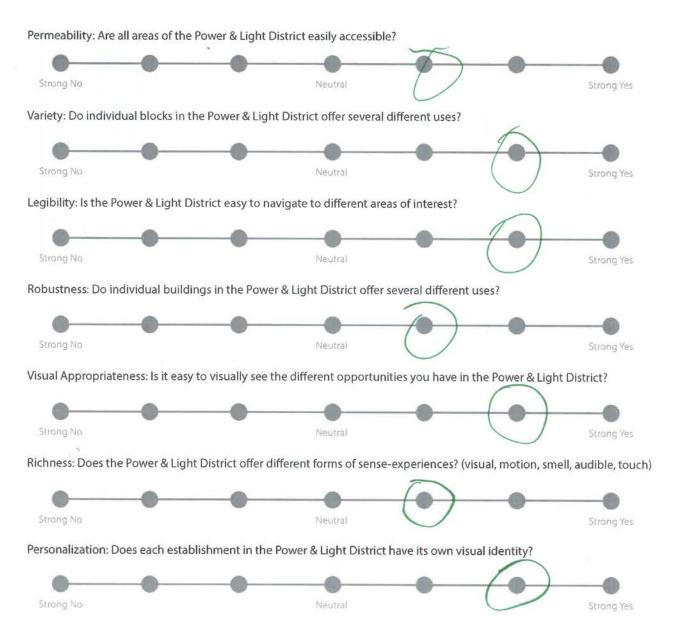
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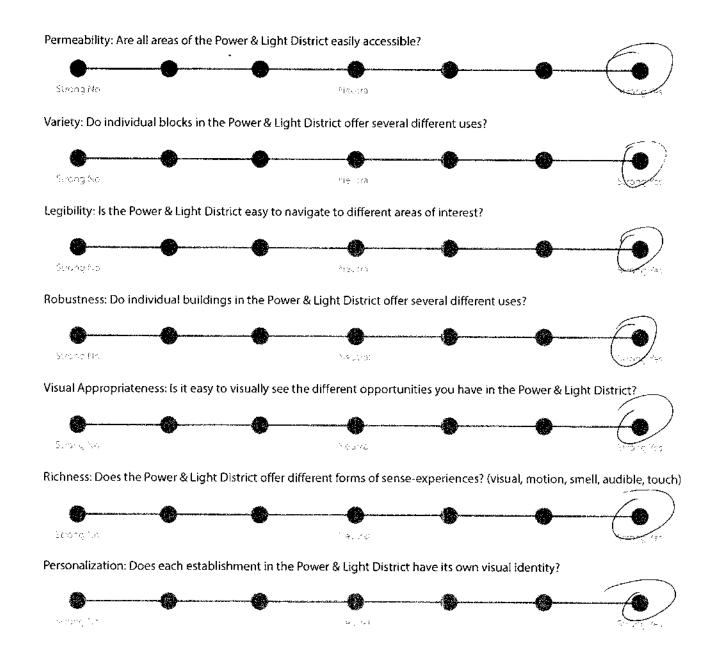


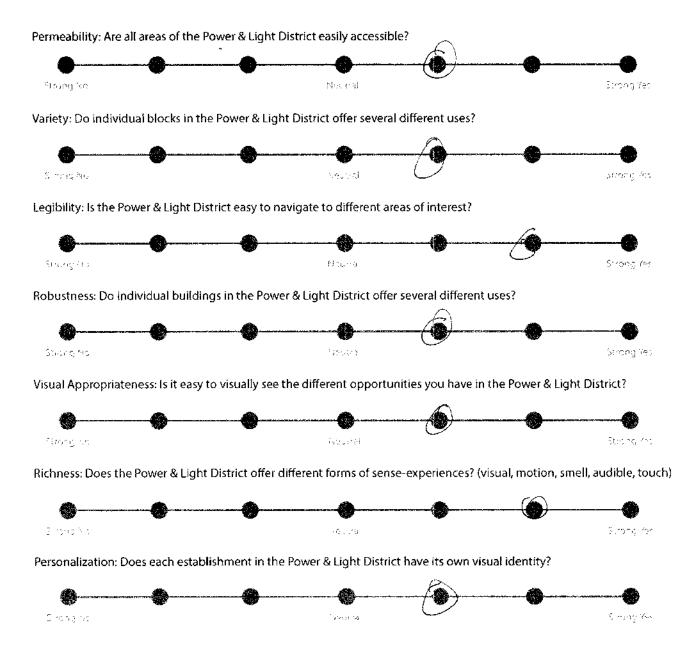
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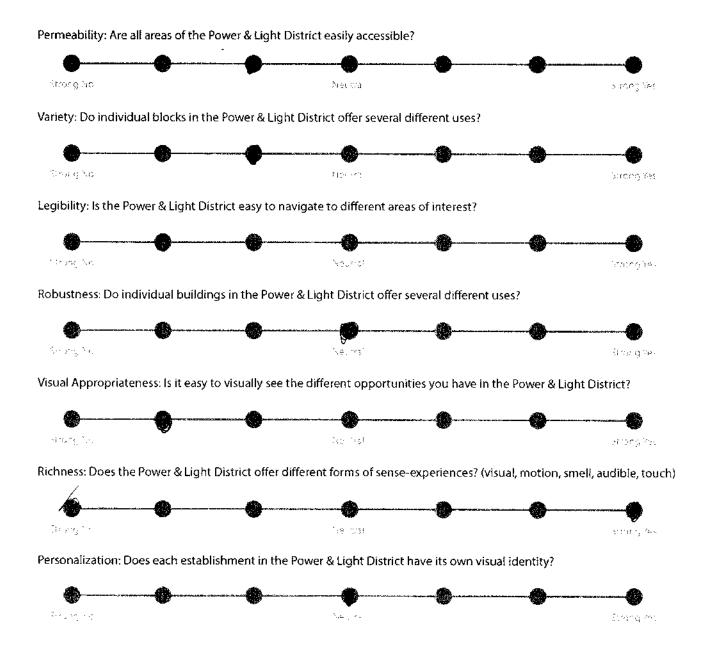
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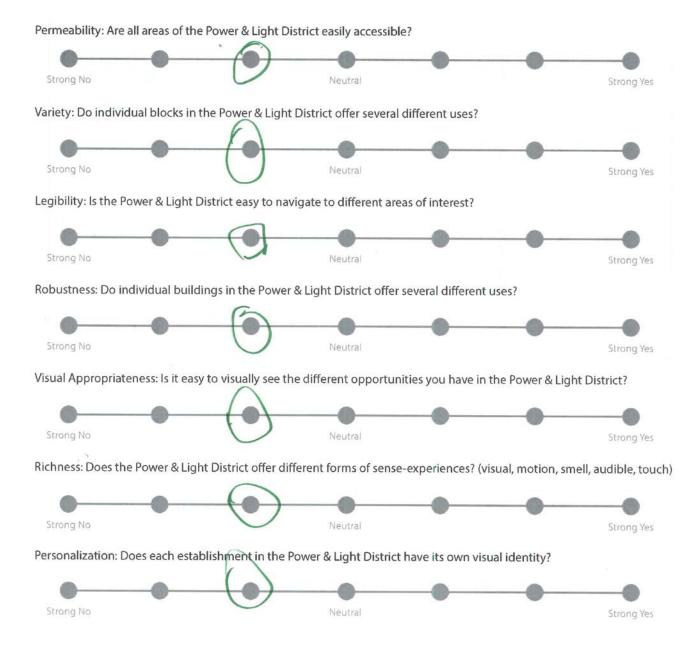


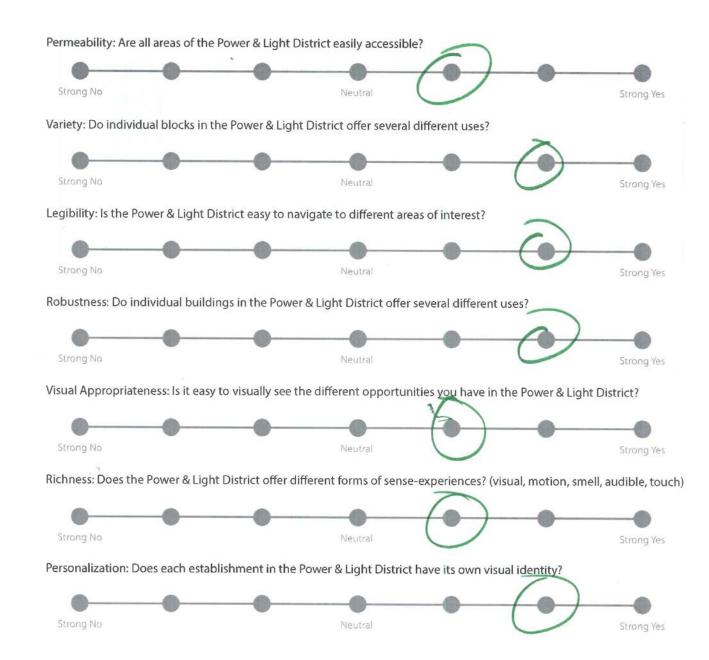


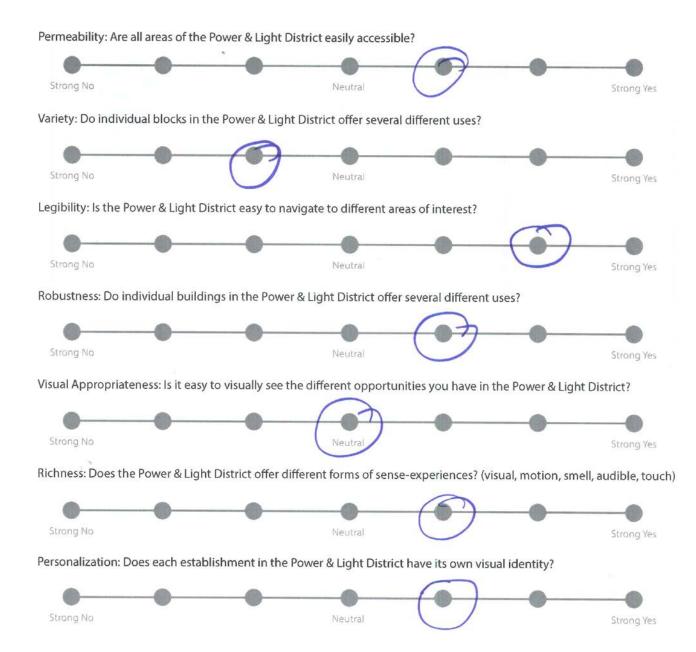
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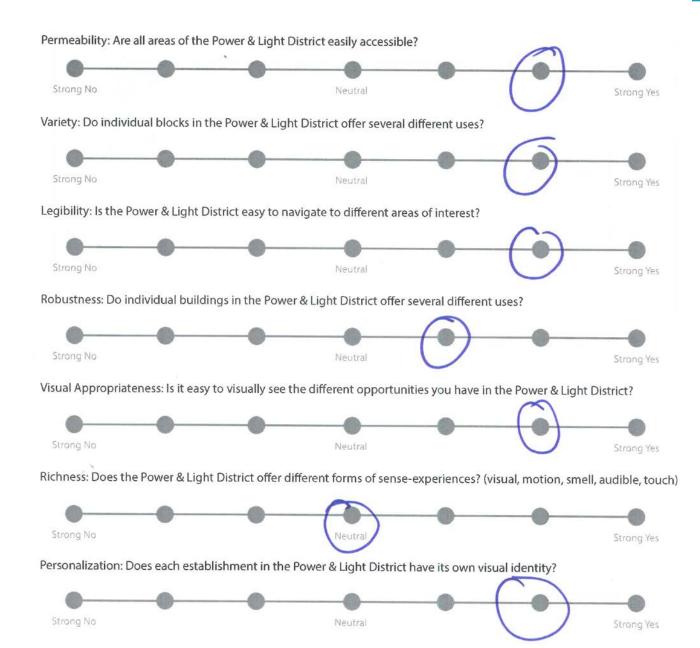
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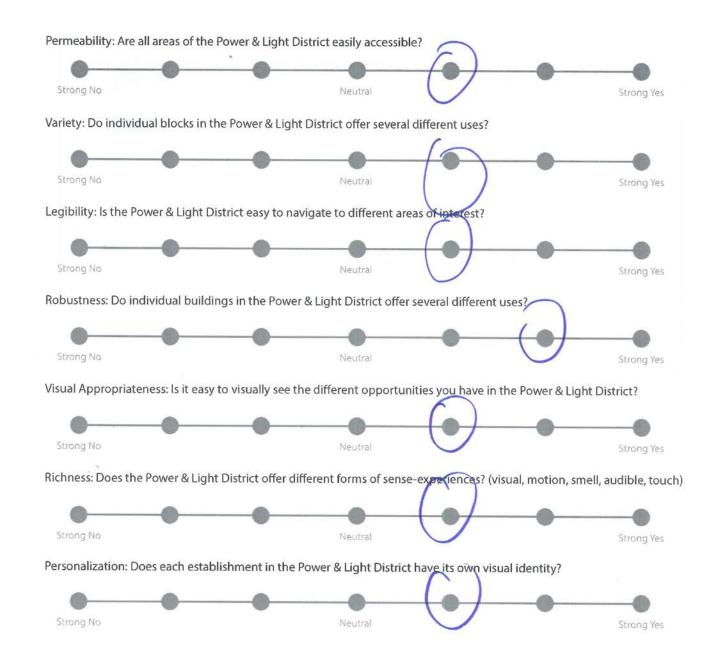


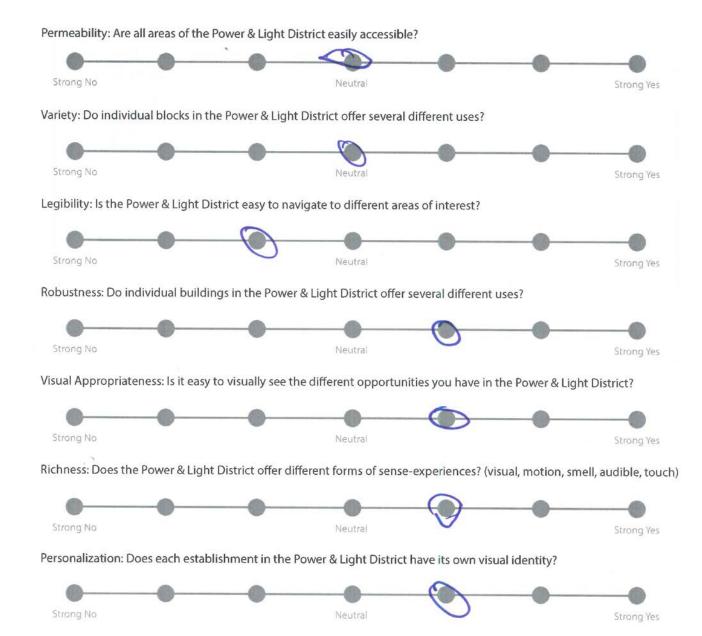


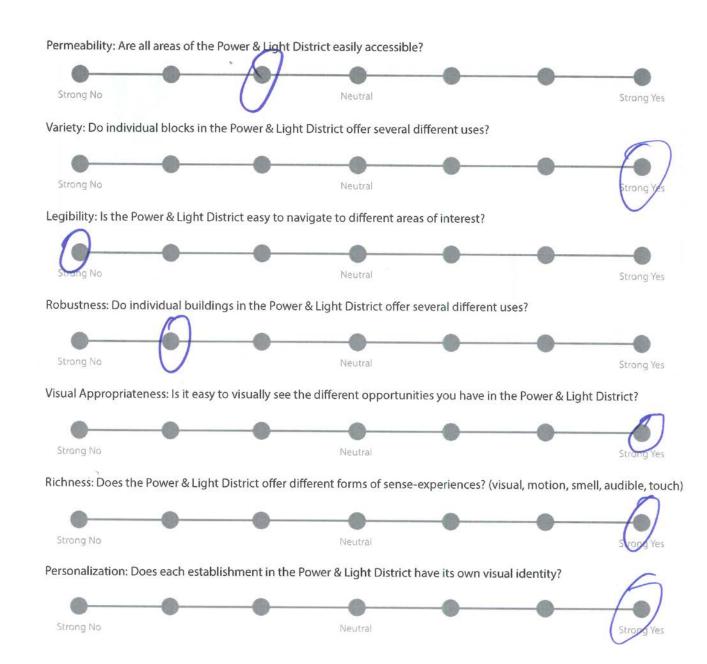


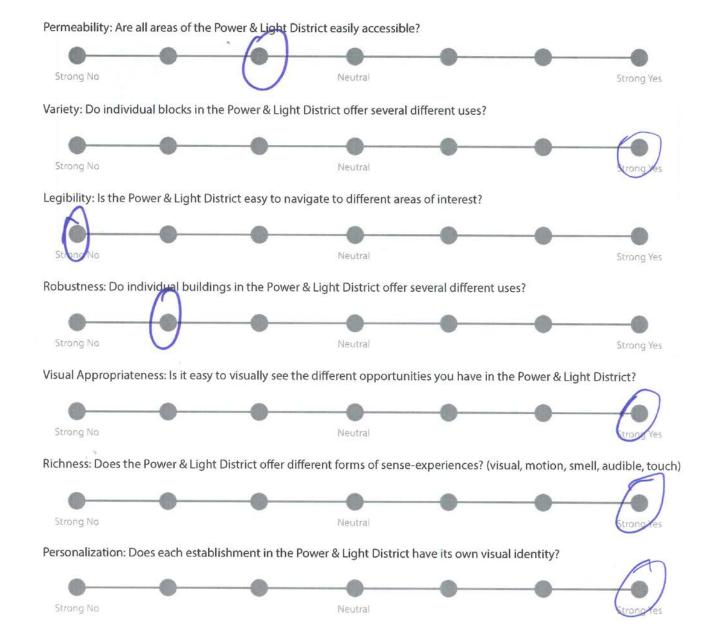




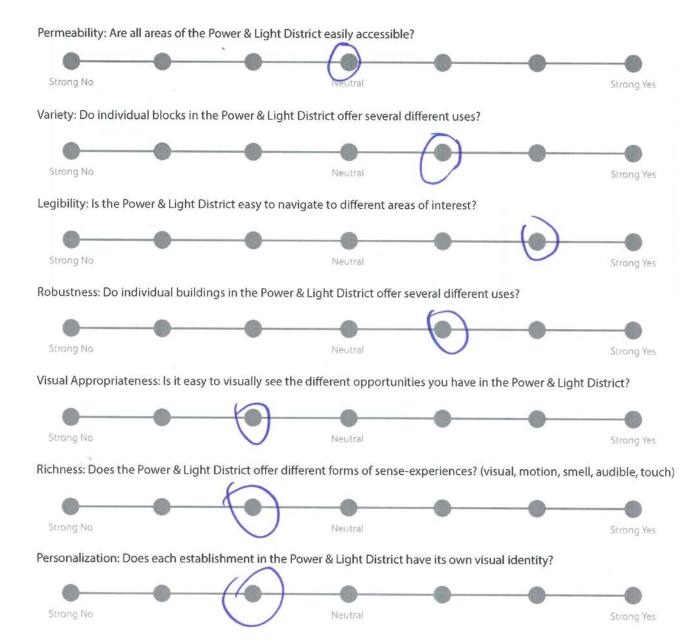


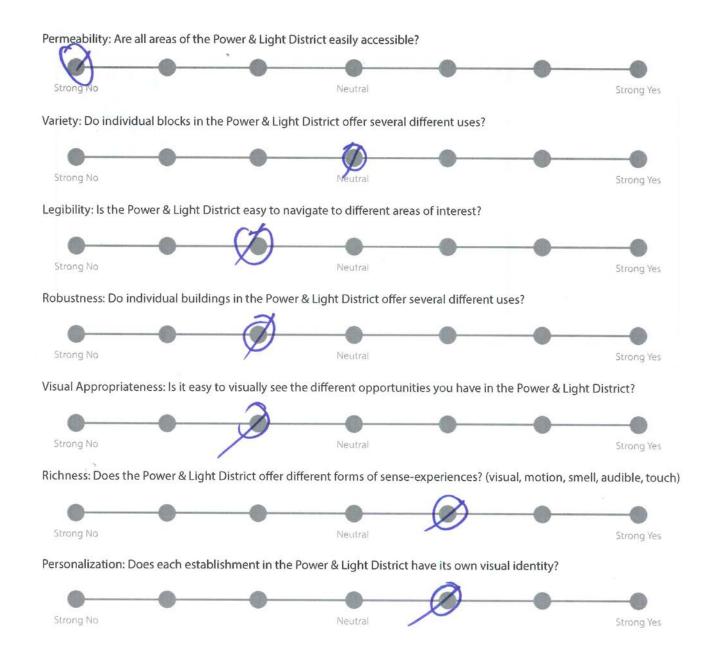


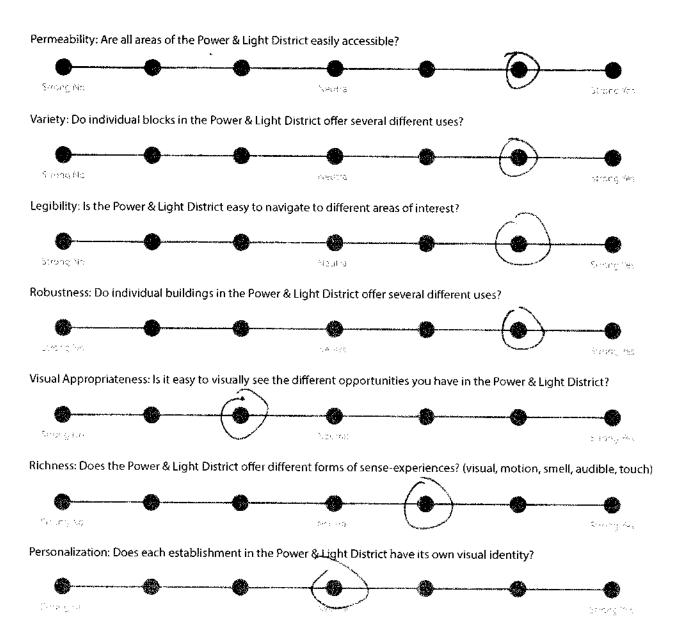


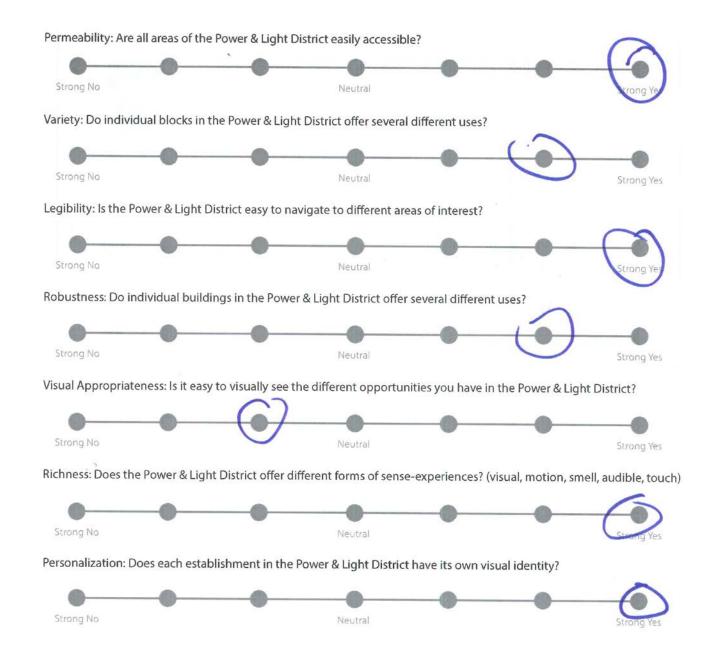


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Appendix C - IRB Application

KANSAS STATE
UNIVERSITY
University Research
Compliance Office

Committee for Research Involving Human Subjects (IRB)

Application for Approval Form

Please send your completed application to comply@k-state.edu

Application Received:

Training Complete:

INSTRUCTIONS

FOR OFFICE USE ONLY: IRB Protocol #

Be sure to save the application PDF to your computer before you begin completing the form. You may not be able to save your changes if you edit this form in a web browser.

The KSU IRB is required by law to ensure that all research involving human subjects is adequately reviewed for specific information and is approved prior to inception of any proposed activity. Consequently, it is important that you answer all questions accurately. If you need help or have questions about how to complete this application, please call the Research Compliance Office at 532-3224, or e-mail us at comply@ksu.edu.

Please provide the requested information in the outlined text boxes. The text boxes are designed to accommodate responses within the body of the application. As you type your answers, the text boxes will expand where appropriate and as needed. After completion send your application by e-mail to comply@k-state.edu.

You may sign this form using a digital signature. DO NOT sign the form until it has been completed. You cannot edit the form entries once the form has been digitally signed. If you are making revisions to a previously signed form, right-click the digital signature and select Clear to remove the signature (this can only be done by the person who originally digitally signed the form).

Forms that have not been signed will not be accepted.

Additional material is requested with this application. Be sure to provide electronic copies of the following documents (if applicable) and submit them to comply@k-state.edu along with your application:

Consent Form (see Administrative Information, IX. Informed Consent A.)

Sponsor's grant application or contract as submitted to the funding agency. (See Administrative Information)

Surveys, instruments, etc used for data collection (see V. Design and Procedures C. and X. Project Information P.)

Debriefing statement to be utilized (see IX. Informed Consent E.)

FAILURE TO PROVIDE ALL INFORMATION REQUESTED MAY LEAD TO A DELAY IN PROCESSING YOUR REQUEST.

Please proof read and check spelling BEFORE submitting the form.

To use Acrobat spelling check, press F7 or select EDIT, CHECK SPELLING

PLEASE CONTINUE TO THE NEXT PAGE TO BEGIN COMPLETING THE FORM

Last Revised: 08/02/2016

IRB Application			Pag	ge 2			
ADMINISTRATIVE	INFORMATION:						
Title of Project/Course:	Design Frameworks: A Study of t	he Power & Light	t District / LAR 700 A				
Type of Application:	✓ New / Renewal	Revision (to a	a pending new application)				
(check one box)	Modification to an existing approved application #:						
Principal Investigator Det	tails: (must be a KSU faculty member	r):					
Name:	Laurence A. Clement, Jr.		Degree/Title: Associate Professor				
Department: Landscap	be Architecture and Regional & Com	munity Planning	Campus Phone: 785-556-1556				
Campus Address:	311 Seaton Hall						
E-mail:	lacjr@ksu.edu		Fax #. n/a				
Responsible Graduate Stu	ident: (Person to contact for question:	s/problems with th	ne form):				
Name:	Tyler Tucker		Campus Phone: 316-616-7374				
E-mail:	twtucker@ksu.edu						
coordination and approva			(projects with non-KSU collaborators may require addition				
	Note: Class Projects should use	the short form app	plication for class projects.				
Copy of the Consent Form			The same and the s				
Funding Source:	✓ Internal External	application or con	You will also need to provide a copy of the sponsor's gra ontract as submitted to the funding agency. This should be apply@ksu.edu with your application.)				
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OBJI Briefl The confirmed inventional legibith the st	con of each factor for the Power ECTIVE by state the objective of the research objective of this study is to appropriately and analysis of the Power and analysis of the Power and the power and analysis of the Power and the power and analysis of the Power and the powe	er & Light District. The what you hope to learn from the ply the chosen design frame urban design. The factors der & Light District, to provide priateness, richness, and per Power & Light District. Source (Source) (So	om the study). Ework to the Power & Light I liscussed in Responsive Envir de additional insights. I will be sonalization of the district. To blan for study) bility, Robustness, Visual Appropriate must submitted to co	District, and judge the efficacy of this conments will be used to conduct on-site in judging the permeability, variety, the survey will provide public input to propriateness, Richness, and

E. List all biological samples taken: (if any)

RB A	Application	n Page 4
		n/a
	F.	Debriefing procedures for participants:
		Each subject will be informed of the desired use of the survey, and given the information on where they may find the final report at the conclusion of the study.
'I.	RESE A.	ARCH SUBJECTS: Source:
		Visitors of Kansas City's Power & Light District
	B.	Number: (provide a brief rationale for your sample size)
		50+ visitors of the Power & Light District. This provides an adequate range of demographics and ages of visitors.
	C.	Inclusion criteria: (List any unique qualifiers desirable for research subject participation)
		Visitors of Kansas City's Power & Light District, above the age of 18, able to provide consent of participation
	D.	Exclusion criteria: (list any unique disqualifiers for research subject participation)
		visitors below the age of 18, visitors unable to provide consent of participation, visitors that I am unable to inform of the survey
	E.	Recruitment procedures: How will subjects be identified?
		All visitors of the Power & Light District could be subjects
		How will subjects be recruited (advertisement, associates, etc.)?
		I will attempt to recruit subjects on-site by a polite request for assistance in completing the provided survey, and informing the subjects of the its educational value.
		How will subjects be enrolled?
		All subjects that participate are automatically enrolled
		Describe any follow-up recruitment procedures: (reminder emails, mailings, etc.)
		n/a
/II.	must de benefit	PROTECTION - BENEFITS: The answers for the three questions below are central to human subjects research. You emonstrate a reasonable balance between anticipated risks to research participants, protection strategies, and anticipated is to participants or others. Risk for Subjects: (check all that apply) Exposure to infectious diseases Use of confidential records Exposure to radiation Manipulation of psychological or social variables such as sensory deprivation, social isolation, psychological stressors Examining for personal or sensitive information in surveys or interviews Presentation of materials which subjects might consider sensitive, offensive, threatening, or degrading Invasion of privacy of subject or family
	r	Social or economic risk

IRB A	pplica	tion Page
		Risk associated with exercise or physical exertion Legal risk Review of medical records Review of criminal records HIV/AIDS or other STD's Employment/occupational risk Others – Please explain below (Indirect risks, risk to individuals who are not the primary subjects):
	В.	Minimizing Risk: (Describe specific measures used to minimize or protect subjects from anticipated risks.) All subjects will be kept anonymous. No personal information, or identifiers, will be taken during the survey.
	C .	Benefits: (Describe any reasonably expected benefits for research participants, a class of participants, or to society as a whole The opinions collected could increase the utility of the design framework being applied, and help improve tools for the analysis and design of urban districts.
	D.	More than Minimal Risk? In your opinion, does the research involve more than minimal risk to subjects? ("Minimal risk" means that "the risks of harm anticipated in the proposed research are not greater, considering probability and magnitude, that those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.")
VIII.	relat with	NFIDENTIALITY: Confidentiality is the formal treatment of information that an individual has disclosed to you in a ionship of trust and with the expectation that it will not be divulged to others without permission in ways that are inconsistent the understanding of the original disclosure. Consequently, it is your responsibility to protect information that you gather from an research subjects in a way that is consistent with your agreement with the volunteer and with their expectations.
		ain how you are going to protect confidentiality of research subjects and/or data or records. Include plans for maintaining record completion.
	All	subjects will be kept anonymous.

IRB Application

IX. INFORMED CONSENT: Informed consent is a critical component of human subjects research - it is your responsibility to make sure that any potential subject knows exactly what the project that you are planning is about, and what his/her potential role is. (There may be projects where some forms of "deception" of the subject is necessary for the execution of the study, but it must be carefully justified to and approved by the IRB). A schematic for determining when a waiver or alteration of informed consent may be considered by the IRB is found at http://www.hhs.gov/ohrp/policy/checklists/decisioncharts.html#c10

Even if your proposed activity does qualify for a waiver of informed consent, you must still provide potential participants with basic information that informs them of their rights as subjects, i.e. explanation that the project is research and the purpose of the research, length of study, study procedures, debriefing issues to include anticipated benefits, study and administrative contact information,

Answer tl ✓ Yes	he following	g questi A.	ons about the informed consent procedures. Are you using a written informed consent form? If "yes," include a copy with this application.
		1,000	If "no" see B.
Yes	✓ No	В.	In accordance with guidance in 45 CFR 46, I am requesting a waiver or alteration of informed consent elements (see section VIII above). If "yes," provide a basis and/or justification for your request.
Yes	✓ No	C.	Are you using the online Consent Form Template provided by the URCO? If "no," does your Informed Consent document have all the minimum required elements of informed consent found in the Consent Form Template? (Please explain)
✓ Yes	☐ No	D.	Are your research subjects anonymous? If they are anonymous, you will not have access to any information that will allow you to determine the identity of the research subjects in your study, or to link research data to a specific individual in any way. Anonymity is a powerful protection for potential research subjects. (An anonymous subject is one whose identity is unknown even to the researcher, or the data or information collected cannot be linked in any way to a specific person).
✓ Yes	☐ No	E.	Are subjects debriefed about the purposes, consequences, and benefits of the research? Debriefing refers to a mechanism for informing the research subjects of the results or conclusions, after the data is collected and analyzed, and the study is over. (If "no" explain why.) Copy of debriefing statement to be utilized should be submitted to comply@k-state.edu with your application.
		F.	Describe the Informed Consent Process:

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IRB Application

X.

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			Who is obtaining the consent? (i.e. Principle Investigator, Graduate Stu	dent, etc.)						
			Graduate Student							
			When and where will consent be obtained?							
			Consent will be obtained on-site, during the interview							
			If assent (for minors) is required, please describe who will obtain the as child's affirmative agreement to participate in research)	ssent? (Ass	sent mea	ns a				
			n/a							
			If assent (for minors) is required, when and where will assent be obtain	ed?						
			n/a							
			How will consent be obtained from non-English speaking participants? orally, identify the name and qualifications of the individual providing			en form,				
			n/a							
nformed Co	onsent C	hecklist								
tems				YES	NO	N/A				
oes the title	appear a	t the top	o of the consent/assent form?	1						
s the consen	t/assent f	orm writ	tten toward the subject?	1						
s there a stat	ement the	at explai	ins that the study is research?	4						
s there a stat	ement th	at explai	ins the purpose of the research?	1						
are the proce	edures to	be follo	wed explained clearly and adequately?	V	П	一				
oes the consessarch?	sent docu	ıment de	escribe risks or discomforts to subjects as a result of participating in the			✓				
s the consen	t/assent f	orm wri	tten in the native language of the potential subject?	1						
Are participa	nts comp	ensated:	?		1					
f the subject naintained?	s' identity	y is knov	wn to the PI, does the form detail how confidentiality of records will be			✓				
s contact inf	ormation	for both	n the PI and the URCO/IRB office included?	V						
oes the convroject witho			dicate to the participant that he/she can withdraw at any time from the sof benefit?	✓						
	bable cir	cumstan	ices which would require the PI to terminate a subject's participation		✓					
s the consen	t docume	nt writte	en in lay language (Recommended 8th grade level)?	1						
PROJECT aragraphs al		RMATI	ON: (If you answer Yes to any of the questions below, you should explain	n them in	one of th	ie				
Yes	✓ No	A.	Deception of subjects? If "YES" explain why this is necessary.							
Yes	✓ No	В.	Shock or other forms of punishment							
	✓ No	C.	Sexually explicit materials or questions about sexual orientation, sexua	l experienc	ce or sex	ual abu				
Yes	✓ No	D.	Handling of money or other valuable commodities							

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	Yes	✓ No	E.	Extraction or use of blood, other bodily fluids, or tissues (if "yes', you must comply with facility and handling protections detailed in the 5th Edition of the Biosafety in Biomedical Laboratories (BMBL))
	Yes	✓ No	F.	Questions about any kind of illegal or illicit activity
	Yes	✓ No	G.	Questions about protected health information as defined by HIPAA
	Yes	✓ No	H.	Purposeful creation of anxiety
	Yes	✓ No	I.	Any procedure that might be viewed as invasion of privacy
	Yes	✓ No	J.	Physical exercise or stress
	Yes	✓ No	K.	Administration of substances (food, drugs, etc.) to subjects
	Yes	✓ No	L.	Any procedure that might place subjects at risk
	Yes	✓ No	M.	Will there be any use of Radioactive materials and/or use of Radioactive producing machines
	Yes	✓ No	N.	Any form of potential abuse; i.e., psychological, physical, sexual
	Yes	✓ No	Ο.	Is there potential for the data from this project to be published in a journal, presented at a conference, etc?
	✓ Yes	☐ No	P.	Use of surveys or questionnaires for data collection. Copies should be submitted to comply@k-state.edu with your application.
ΧI.	CLID IEC	T INEOD	MATI	ON. (If you appropriate any of the questions below you should supplie them in one of the
11.	paragraph		MATI	ON: (If you answer yes to any of the questions below, you should explain them in one of the
	paragrapin	s above)		
	Yes	✓ No	a.	Under 18 years of age (these subjects require parental or guardian consent)
	✓ Yes	□ No	b.	Over 65 years of age
	Yes	✓ No	C.	Minorities as target population
	Yes	✓ No	d.	Physically or mentally disabled
	Yes	✓ No	e.	Economically or educationally disadvantaged
	Yes	✓ No	f.	Unable to provide their own legal informed consent
	Yes	✓ No	g.	Pregnant females as target population
	Yes	✓ No	h.	Victims
	Yes	✓ No	i.	Subjects in institutions (e.g., prisons, nursing homes, halfway houses)
	Yes	✓ No	j.	Are subjects likely to be vulnerable to coercion or undue influence
	Yes	✓ No	k.	Is this international research? If yes, provide details as to if OHRP regulations apply in or near the area you intend to conduct research or if you have contacted individuals for applicable regulations to human subject research.
	Yes	✓ No	1.	Are research subjects in this activity students recruited from university classes or volunteer pools? If so, do you have a reasonable alternative(s) to participation as a research subject in your project, i.e., another activity such as writing or reading that would serve to protect students from unfair pressure or coercion to participate in this project? If you answered this question "Yes," explain any alternatives options for class credit for potential human subject volunteers in your study. (It is also important to remember that: Students must be free to choose not to participate in research that they have signed up for at any time without penalty. Communication of their decision can be conveyed in any manner, to include simply not showing up for the research.)
	Yes	✓ No	m.	Is audio from the subjects recorded? If yes, how do you plan to protect the recorded information and mitigate any additional risks?
	Yes	✓ No	n.	Are research subjects' images being recorded (video taped, digitally recorded, photographed)? If yes, how do you plan to protect the recorded information and mitigate any additional risks?
XII.	FDA AC	TIVITIES	S: Ansv	wer the following questions about potential FDA regulated activities:
	Yes	✓ No	a.	Is this a Clinical Trial?

IRB Ar	plicatio	m				Page 9
iras i q	Yes		b.	Are you using an FDA approved drug/de	vice/diagnostic test?	rage
	Yes		c.	Does this activity involve the use of FDA food additives, human drugs, etc.)		? (biological products, color additives
	Yes	s ✓ No	d.	Has the protocol been submitted to the Fl	DA, or are there plans	s to submit it to the FDA?
	Yes	ĭ No	e.	Have you submitted an FDA form 3454 of	or 3455 (conflict of in	iterest)?
XIII.	of hum financi affect t interest	an research sub al interests caus he welfare of h is may be neces	pjects. Fin se Conflict uman subjects sary to pro	f: Concerns have been growing that final ancial interests are not in them selves pro of Interest (COI) or harm to human subjects in research, IRB's, institutions, and interest human subjects. Please answer the form	hibited and may well cts. However, to the nvestigators must con- ollowing questions:	be appropriate and legitimate. Not a extent that financial interests may sider what actions regarding financial
	Ye:	s ✓ No	a.	Do you or the institution have any propri including patents, trademarks, copyrights		
	Yes	s 🗸 No	b.	Do you have an equity interest in the resecompany)?	earch sponsor (public	ly held or a non-publicly held
	Yes	✓ No	C.	Do you receive significant payments of cand/or honoraria from the sponsor of this	research?	
	Yes	v No	d.	Do you receive payment per participant of	5700	
			e.	If you answered yes to any of the above of so the IRB can assess any potential COI is		ride adequate explanatory information
KIV.	A. I		ntors: List	ORS: anyone affiliated with KSU who is collect estigators, undergraduate and graduate stu Department:		: (list all collaborators on the project, Campus E-mail:
	H	Blake Belanger		Landscape Architecture and Regional & Community Planning	785-323-7917	belanger@ksu.edu
	J	ason Brody		Landscape Architecture and Regional & Community Planning	785-532-5961	jbrody@ksu.edu
		A 11 D	I D	lete Description		
		Add Row	De	elete Row		
	b	elow. KSU has	s negotiate	List all collaborators on your human sub d an Assurance with the Office for Human f research involving human subjects. Organization:		

Add Row

Delete Row

IRB Applic	ation Page 10
C.	Does your non-KSU collaborator's organization have an Assurance with OHRP? (for Federalwide Assurance listings of other institutions, please reference the OHRP website under Assurance Information at: http://ohrp.cit.nih.gov/search).
	Yes No If yes, Collaborator's FWA #
	Is your non-KSU collaborator's IRB reviewing this proposal?
	Yes No If yes, IRB approval #
XV. <u>IR</u>	B Training:
A.	The URCO must have a copy of the Unaffiliated Investigator Agreement on file for each non-KSU collaborator who is not covered by their own IRB and assurance with OHRP. When research involving human subjects includes collaborators who are not employees or agents of KSU the activities of those unaffiliated individuals may be covered under the KSU Assurance only in accordance with a formal, written agreement of commitment to relevant human subject protection policies and IRB oversight. The Unaffiliated Investigators Agreement can be found and downloaded at http://www.k-state.edu/research/comply/irb/forms
	Online Training
	TRAINING REQUIREMENTS HAVE RECENTLY CHANGED
The IRB	has mandatory training requirements prior to protocol approval. Training is now offered through th
Collab	orative Institutional Training Initiative (CITI) Program. Instructions for registration and access to training are on the URCO website http://www.k-state.edu/research/comply/ .
Collab	training are on the URCO website http://www.k-state.edu/research/comply/ . the check boxes below to select the training courses that apply to this application. If you have any questions about training, contact URCO at comply@ksu.edu, or (785) 532-3224.
Collab	orative Institutional Training Initiative (CITI) Program. Instructions for registration and access to training are on the URCO website http://www.k-state.edu/research/comply/ . the check boxes below to select the training courses that apply to this application. If you have any questions about training, contact URCO at comply@ksu.edu, or (785) 532-3224. Mandatory Training
Collab _Use	orative Institutional Training Initiative (CITI) Program. Instructions for registration and access to training are on the URCO website http://www.k-state.edu/research/comply/ . the check boxes below to select the training courses that apply to this application. If you have any questions about training, contact URCO at comply@ksu.edu, or (785) 532-3224. Mandatory Training Required for all Principal Investigators, research staff and students
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Use ☐ Respon ☐ Export (orative Institutional Training Initiative (CITI) Program. Instructions for registration and access to training are on the URCO website http://www.k-state.edu/research/comply/ . the check boxes below to select the training courses that apply to this application. If you have any questions about training, contact URCO at comply@ksu.edu, or (785) 532-3224. Mandatory Training Required for all Principal Investigators, research staff and students sible Conduct of Research e modules Required (Provost-mandated) for all full-time K-State employees Compliance Required procedure-specific training (check all that apply to this protocol): onal Research
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Use ☐ Respon ☐ Export (☐ Internat ☐ Researc ☐ Researc	orative Institutional Training Initiative (CITI) Program. Instructions for registration and access to training are on the URCO website http://www.k-state.edu/research/comply/ . the check boxes below to select the training courses that apply to this application. If you have any questions about training, contact URCO at comply@ksu.edu, or (785) 532-3224. Mandatory Training Required for all Principal Investigators, research staff and students
Collab _Use Respon IRB cor Internat Researc Researc Gender	orative Institutional Training Initiative (CITI) Program. Instructions for registration and access to training are on the URCO website http://www.k-state.edu/research/comply/ . the check boxes below to select the training courses that apply to this application. If you have any questions about training, contact URCO at comply@ksu.edu, or (785) 532-3224. Mandatory Training Required for all Principal Investigators, research staff and students sible Conduct of Research e modules Required (Provost-mandated) for all full-time K-State employees Compliance Required procedure-specific training (check all that apply to this protocol): onal Research Research in Public Elementary and Secondary Schools Research with Children with Prisoners Internet Research Vulnerable Subjects - Research Involving Workers/Employees

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IRB Application INVESTIGATOR ASSURANCE FOR RESEARCH INVOLVING HUMAN SUBJECTS

(Print this page separately because it requires a signature by the PI.)

. Name: Laur	rence A. Clement, Jr.
le of Project:	Design Frameworks: A Study of Kansas City's Power & Light District
VI. <u>ASSURA</u>	NCES: As the Principal Investigator on this protocol, I provide assurances for the following:
A.	Research Involving Human Subjects: This project will be performed in the manner described in this proposal, and in accordance with the Federalwide Assurance FWA00000865 approved for Kansas State University available at http://www.hhs.gov/ohrp/assurances/forms/filasurt.html , applicable laws, regulations, and guidelines. Any proposed deviation or modification from the procedures detailed herein must be submitted to the IRB, and be approved by the Committee for Research Involving Human Subjects (IRB) prior to implementation.
В.	Training: I assure that all personnel working with human subjects described in this protocol are technically competent for the role described for them, and have completed the required IRB training accessed via the URCO website at: http://www.k-state.edu/research/comply/irb/training . I understand that no proposals will receive final IRB approval until the URCO has documentation of completion of training by all appropriate personnel.
C.	Extramural Funding: If funded by an extramural source, I assure that this application accurately reflects all procedures involving human subjects as described in the grant/contract proposal to the funding agency. I also assure that I will notify the IRB/URCO, the KSU PreAward Services, and the funding/contract entity if there are modifications or changes made to the protocol after the initial submission to the funding agency.
D.	Study Duration: I understand that it is the responsibility of the Committee for Research Involving Human Subjects (IRB) to perform continuing reviews of human subjects research as necessary. I also understand that as continuing reviews are conducted, it is my responsibility to provide timely and accurate review or update information when requested, to include notification of the IRB/URCO when my study is changed or completed.
Е.	Conflict of Interest: I assure that I have accurately described (in this application) any potential Conflict of Interest that my collaborators, the University, or I may have in association with this proposed research activity.
F.	Adverse Event Reporting: I assure that I will promptly report to the IRB / URCO any unanticipated problems involving risks to subjects or others that involve the protocol as approved. Unanticipated or Adverse Event Form is located on the URCO website at: http://www.k-state.edu/research/comply/irb/forms . In the case of a serious event, the Unanticipated or Adverse Events Form may follow a phone call or email contact with the URCO.
G.	Accuracy: I assure that the information herein provided to the Committee for Human Subjects Research is to the best of my knowledge complete and accurate.
You cannot edit	on this form using a digital signature. DO NOT sign the form until it has been completed. the form entries once the form has been digitally signed. If you are making revisions to a previously signed form, right-click the digital signature and select the signature (this can only be done by the person who originally digitally signed the form). Forms that have not been signed will not be accepted.
P.I. Signatu	re: Date:

²²⁰ Appendix D - IRB Approval



TO: Laurence Clement, Jr.

LARCP Seaton Hall

FROM: Rick Scheidt, Chair

Committee on Research Involving Human Subjects

DATE: 12/19/2016

RE: Proposal Entitled, "Design Frameworks: A Study of Kansas City's Power & Light District"

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written – and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Proposal Number: 8575

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, 45 CFR §46.101, paragraph b, category: #2, subsection: ii.

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.

203 Fairchild Hall, Lower Mezzanine, 1601 Vattier St., Manhattan, KS 66506-1103 | 785-532-3224 | fax: 785-532-3278 | k-state.edu/research/comply | comply@ksu.edu

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