CATALYZING URBAN REDEVELOPMENT ON WASHINGTON AVENUE - ST. LOUIS, MISSOURI

by

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A REPORT

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Abstract

In many urban redevelopment discussions, people often refer to a catalyst as the impetus for redevelopment. Unfortunately, no standard definition of an urban redevelopment catalyst exists, so liberal use of the term catalyst persists. As distinguished in Dr. Timothy Chapin's dissertation, Urban Revitalization Tools: Assessing the Impacts of Sports Stadia at the Microarea Level, the impacts of sports stadia (widely considered catalysts) are often overstated. In order to have valuable arguments over the impacts of presupposed catalytic activities, we need to understand the defining characteristics of an urban redevelopment catalyst and utilize a consistent process for examining them. This study identifies these characteristics and develops a methodology from which others may study catalysts. Included in the study are both narrative and tangible evidence from which researchers may decipher catalytic characteristics and events. In order to explore this analytic method, a case study was necessary.

The revitalization of Washington Avenue (in downtown St. Louis, Missouri) provided an excellent opportunity to implement and test the process. Washington Avenue went from decrepit in the early 1980s to receiving the honor of being a Great Street by the American Planning Association in 2011. By delving into the developmental history of Washington Avenue, the process verified urban redevelopment catalytic characteristics, the methodology and the presence of small-scale urban redevelopment catalysts. From these findings, (coupled with a preexisting, dominant discussion focused large-scale catalysts) we see the value of small, organic development. The study prompts further exploration of urban redevelopment catalysts, especially in regards to smaller catalysts. It also suggests a new line of thinking for urban redevelopment dynamics, thus guiding future research to focus on understanding the processes of urban redevelopment.

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Dedication

To my father, we miss you very much. Your work ethic and dedication to community improvement inspired me to follow your lead. To my mother and Ashley, whose love and support helped though out this process.

Chapter 1 - Introduction

To create better dialogue about urban redevelopment dynamics, people need a standardized methodological process for understanding the catalytic agents spurring urban redevelopment. Through analyzing many revitalization efforts, people can comprehend and formulate redevelopment strategies that better our urban areas. While this report focuses on one case study, it provides a starting point for future case studies by developing urban catalyst cognizance. As more researchers utilize the methodology employed in this report, people will grasp the specific ways that our developmental actions propel urban revitalization. For urban planners this information is necessary to guide future urban policy and plans, while developers and designers can confidently create developments with the power to positively change an area and generate a strong return on investment.

This report specifically explores how and in what ways urban catalysts played a role in the re-emergence of Washington Avenue. Washington Avenue is one of the most lively and appealing streets in downtown St. Louis, Missouri. However, this was not always the case. At a time, the street contained many vacant, decrepit buildings and a desolate atmosphere. Many point to its turn around as a great success, but there is little information documenting the cause of its revival. This is where urban catalyst theory comes into the equation. Urban redevelopment catalysts are physical developments that spur the redevelopment of urban areas. These positive occurrences guide future development. They do so in a way that facilitates development of place identity, increases desirability, and generates activity (social, physical and economic) in an area. As planners of cities it is our responsibility to utilize catalytic developments to prompt urban progress that betters the lives of those we serve. The lessons from the redevelopment of Washington Avenue bring us closer to understanding how we can engender that progress through urban redevelopment catalysts.

The transition of Washington Avenue from decrepit to unique, lively and charming suggests there was a catalyst or multiple catalysts spurring its resurgence. Testing this theory provides interested parties understanding about how and why Washington Avenue materialized

into a successful urban redevelopment case. This information assists planners, politicians, designers, builders, residents and business owners who seek to make positive impacts on the remergence of cities, districts and streets. Such knowledge provides deeper understanding of ways in which cities (particularly streets, corridors and districts) emerge and revitalize. This understanding enables those interested in developing new strategies to revitalize American cities.

In addition to addressing the lack of information regarding the redevelopment of Washington Avenue, this study also developed a methodology researchers can use to identify and study urban redevelopment catalysts. Doing so provides a strategy to address catalysts of varying sizes, with a diversity impacts. Currently, there is not only lack of a fundamentally sound analytic process, but there is deficiency of studies on smaller-scale urban catalysts. Through this methodology, researchers may further explore significance of smaller-scale urban catalysts. This is important, because as cities struggle with fiscal constraints, they must aim for higher returns on smaller investments and smaller scale catalysts can bring some resolve to this challenge.

The development of the methodology started by synthesizing and analyzing urban redevelopment catalyst theory, in order to define criteria used to identify urban catalysts. Comparison of this set of criteria against those used in other studies illustrated need for a case study methodology addressing urban catalysts at many scales, particularly focusing on the effects of smaller-scale catalysts on localized areas. Methodology development ensued by integrating of urban redevelopment catalyst theory, causal analysis theory and the methodology from an exemplary urban catalyst case study. The emergent analytic case study strategy applied to four blocks of Washington Avenue over a period ranging from 1980 to 2010. From this point, construction of the urban redevelopment history of Washington Avenue commenced. After creating a timeline, the researcher identified potential catalysts. These possible catalysts were subject to a series of criteria that proved or disproved their involvement in the revival of Washington Avenue. The development of this methodology addresses concerns over the absence of an analytic process to examine various levels of urban catalysts, allowing researchers to explore the possibilities of a range of urban catalysts. The findings from this report not only provide an account of the redevelopment of Washington Avenue, but also initiate research on the impacts of catalysts on the block scale.

Chapter 2 - Background

This section expresses the researcher's interest in the redevelopment of Washington Avenue. A narrative of research process explains why Washington Avenue is the chosen case study. The background then provides the theory for analyzing this redevelopment phenomenon. Next comes a discussion of comparable studies, which illustrates the need for this study. Finally, the background ends with a presentation of an example study, which serves as the basis for the development of the methodology for this report.

Washington Avenue

Streets are the most public of places. They mark our descent from the privacy of our homes to a world full of opportunity. As identified in *The Death and Life of Great American Cities*, Jane Jacobs discusses how streets are vital to the economic and communal strength of neighborhoods and districts. They are the foundation from which cities emerge and have the potential to re-emerge (Jacobs, 1993). The better the street, the better the livelihood of our cities.

Some cities and organizations have even tried to facilitate the creation of "great streets". While there is not a concrete definition, many think of great streets as the best streets. Determining what a great street is depends upon one's frame of reference. Some compare streets in their own city, while others compare streets nationally and internationally. Regardless of their perspective, there is some agreement they are places where people want to be and enjoy being. Allen Jacobs, in *Great Streets* (1999), states the physical design of a street, in part, determines its desirability. The physical characteristics are what make the street attractive, safe, and worth investing in, preserving, and policing (Jacobs 1999). Like other cities around the nation, St. Louis has begun its quest for creation of great streets with its Great Streets Initiative (East-West Gateway, 2007).

The choice of Washington Avenue as a study area derived through interest in great streets, as depicted on the appended mental/literature map in Appendix A. While studying great

streets, a strong interest in St. Louis great streets arose. In conversations with St. Louisians and in reading popular online blogs and discussion boards, many point to Washington Avenue as one of few great streets in St. Louis.

Further research showed that Washington Avenue was not always so "great", but historically it was an important part of downtown St. Louis. For the longest time, Washington Avenue was the gateway into downtown St. Louis connecting Illinois to St. Louis via the Eads Bridge (Downs, 2005). In order to enter or leave the city, many relied on Washington Avenue for mobility. In the 1870's, the area boomed as textile manufactures moved in and formed the Garment District (Powers). Erection of the buildings that exist today came into existence between the 1880's and 1920's (Powers). These buildings were mainly of the Chicago School of architecture and were designed by some of the greatest architects of the time (Downs, 2005). The City of St. Louis claims that in the late 19th century, the St. Louis Garment District was second only to the New York fashion industry (The Partnership for Downtown St. Louis n.d.). At this time, Washington Avenue contained many residents and workers. Window-shoppers traveled the street in search of shoes and clothes (St. Louis Front Page, 2010). The sheer volume of people made the street a lively place.

The prosperity of the street ended due to declines in textile manufacturing experienced throughout the United States and White Flight – a major population shift from the urban core to the suburbs. The lost of jobs and the increased desirability of the suburbs marked a decline for Washington Avenue. By the 1980's, the last of the businesses left, most of the buildings were boarded up and life on the street was nonexistent (Powers).

Starting in the 1990's, Washington Avenue was a major focus for redevelopment. The biggest push for redevelopment came in the form of the *Downtown Now! Development Action Plan*. As part of the effort to revitalize Washington Avenue, the City of St. Louis provided tax incentives and streetscape improvements, amongst other strategic mechanisms (Downtown Now!, 1999).

Today, people frequently cite Washington Avenue as one of the most successful downtown redevelopment efforts in St. Louis (St. Louis Front Page, 2010; Downs, 2005; The Partnership for Downtown St. Louis, 2010). Washington Avenue in many ways is the most livable and lively corridor in downtown St. Louis. It contains lofts, and retail, (particularly art and furniture galleries), notable restaurants, and nightclubs, making it one of the most entertaining places to live, work and play in downtown St. Louis (O'Brien, n.d.). It is also located in the district with the highest residential population of any district in the downtown core, as identified in the 2008 Housing Report Downtown St. Louis (The Partnership for Downtown St. Louis, 2008).

The transformation from abandoned buildings in the early 1980's to vibrant street in 2010 makes this street seem like a successful urban revitalization effort. Nevertheless, how did Washington Avenue become the street it is today? That question propelled desire to investigate what made Washington Avenue re-emerge from its decrepit state. Urban Catalyst theory could help answer this question.

Urban Catalyst Theory

Urban catalyst theory is the basis for analyzing the redevelopment of Washington Avenue. This theory was chosen based on the notion that the street revived due to a certain chain of events causing the street to develop in a particular way. Urban Catalyst theory grabbed my interest, because it provides a possible explanation for why Washington Avenue exists as it does today. This interest developed by reading the book *American Urban Architecture*. It was through reading this book that knowledge about urban catalyst theory developed.

The definition urban catalysts and their characteristics derive from *American Urban Architecture*. This book describes the characteristics of urban catalysts and provides examples of successful catalysts across the country. Attoe and Logan's provided their findings via descriptive case studies, where they analyzed different types of urban redevelopment in American downtowns and determined what prompted the development to occur.

Through the observations made in this study, the authors were able to define and identify characteristics of urban catalysts. Attoe and Logan state that an urban catalysts is:

"an urban element that is shaped by the city and then, in turn shapes its context. Its purpose is the incremental, continuous regeneration of the urban fabric. The important point is that the catalyst is not a single end product but an element that impels and guides subsequent development." They are "smaller elements – a building, a fragment of a building, a complex of buildings, or even a report or set of guidelines" (Attoe & Logan, 1989, pp. 45-46).

They then go on to define the characteristics of urban catalysts, which include:

Catalysts are the installation of a new agent that causes modification to other preexisting urban components. The effected surrounding elements gain positive value
(though not necessarily limited to economic gain). The reactionary effects occur in a
particular locale, but do not destroy or harm the context. These reactions are endemic,
rather than widespread. The reaction is determined by the response of elements in a
particular context, so no one catalytic effect may be replicated in the exact same way
anywhere else. The catalyst is sensitive to the context. It builds on the positive aspects of
a place, not reinvent its character. "Catalytic design is strategic...strategic design is a
web of opportunities that are created and seized upon rather than linear". The sum of the
reactive parts equals a greater whole. The catalyst can remain easily identifiable, though
it does not have to. (Attoe & Logan, 1989, pp 46-47.).

Another literary work also allowed the researcher to gain an understanding about urban catalysts. This work was What Makes Buildings Catalytic. Here, Ernest Sternberg builds upon Attoe and Logan's work, seeking to fine-tune their definition and characteristics of urban catalysts. Sternberg believes buildings can be catalytic in five ways. First, catalytic buildings increase pedestrian and vehicular traffic, which generate opportunities for new entrepreneurs and development. Second, they help shape the visions of planners, architects, developers and landowners concerning the potential of future development. Third, they draw people to the building by providing desirable services and pleasant aesthetics (Sternberg, 2002). Fourth, they

can provide hope and assure in the future of the locale. Lastly, they can build upon or take away from their surroundings (Sternberg, 2002).

The definition of urban catalysts and their characteristics provide guidelines for interpreting and analyzing potential urban catalysts. Part of the strategy to determine urban catalysts on Washington Avenue will come through comparing potential catalysts to these findings in American Urban Architecture and What Makes Buildings Catalytic.

Example Catalyst Studies

The next task in this research process was to find other studies that based their work on urban catalyst theory. Most of these focus on large-scale developments and their impacts on cities or downtowns as a whole. Some of these include affordable housing developments, stadiums, infrastructure improvements, entertainment venues, and museums. The following is a brief synopsis of each reading (in chronological order by date published).

American Urban Architecture: Catalysts in the Design of Cities

Attoe and Logan use many cities as case studies illustrating the catalytic effects of developments in downtown revitalization efforts. One of the main studies in this book focuses on the impacts of the Grand Avenue urban center on downtown Milwaukee, Wisconsin. Thanks to a study by Skidmore, Owings and Merril (SOM), a leading architecture firm, and funds generated by the Milwaukee Redevelopment Corporation (MRC), the Grand Avenue retail complex emerged. The catalytic effects stemming from this development were many, including a new hotel, skywalk system, riverwalk, theater district, new housing, and brewery district (Attoe & Logan, 1989). The book continues to talk about the different types and scales of urban catalysts along with their varying degree of effects. Through direct observation and recollection of the history of redevelopment, the authors indicate urban catalysts. They also state that many cities try to revitalize their downtowns through urban catalysts of varying scales, contradicting the notion that developments need to be large scale to be catalysts.

A Catalyst for Redevelopment: Durham, North Carolina

David Salvesen discusses the redevelopment of downtown Durham, North Carolina. The setting of this story is in many ways similar to the history of Washington Avenue. Downtown Durham used to be the home to many tobacco warehouses and Washington Avenue was the home to garment warehouses. Both witnessed decline as industries closed down production and moved out of Durham and St. Louis respectively.

Salvesen tells of the recent resurgence of the warehouse district, which transformed into popular lofts, offices and retail (Salvesen, 1999). He claims that many feel the catalysts for this redevelopment came in the form of historic preservation tax credits, restoration of the Carolina Theater, and creation of the Durham Bulls Ballpark. Regardless, Salvesen points to the Brightleaf Square redevelopment as the catalyst for redevelopment. The Brightleaf Square project transformed two old tobacco warehouses into 145,000 square feet of specialty retail (Salvesen, 1999). This project spurred two other large-scale redevelopment projects: West Village and City Place.

These developments mark the revival of many decrepit downtown buildings and their adaptation into mixed-use complexes. Salvesen recognizes the importance of these projects saying the buildings not only house a mixture of uses, but further add to the sense of place, while guiding the direction of future development (Salvesen, 1999). Inherently, these developments meet many of the criteria of urban catalysts, defined by Attoe and Logan.

Arts as Economic Catalyst

Judith Rubin explains the significance of The Theater Next Door in Berkeley, California as a critical element in the Addison Street Arts District, which helped revive Berkley. The Theater Next Door is a mid-scale development, which prompted development of the Arts District. It spurred community vision for district and made city invest seed money for further development. As the theater finished, more developers, businesses, and residents targeted the area causing a growing momentum for redevelopment in the district (Rubin 2001). With a more than typical organic approach to funding, (rather than typical funds tied to defined improvement

districts) this project illustrates a unique approach to urban revitalization. Although it seems clear that the theater was a major influential force, there are gaps in the story and the assumed causal relationships need a more thorough analysis.

Sports Facilities as Urban Redevelopment Catalysts

In this article from the Journal of the American Planning Association, Timothy Chapin discusses the ability of sports stadia to serve as urban redevelopment catalysts. Despite a lack of catalytic activity at the metropolitan scale, sports stadia tend to generate district level economic and redevelopment growth. These large-scale developments require infrastructure improvements, increase marketability and create specialization of districts. In some cases, a new stadium, in an area otherwise low in development potential, can create the critical mass needed to stimulate and support new development (Chapin, 2004). By defining three indicators of urban redevelopment and mapping out projects, their surrounding districts, and redevelopment trends in a GIS, Chapin was able to identify the impacts of Camden Yards in Baltimore, Maryland and the Gateway project in Cleveland, Ohio. This work not only provided a methodology for analyzing catalytic effects of large-scale development, but also proved the need to analyze developmental impacts at multiple scales.

Canal Street Catalyst

The Canal Street Apartments located in Huston, Texas provide affordable housing on a, once, decrepit site. The 133 –room complex responds well to its surroundings, especially since the design process included the local community. The medium-sized development complex generated interest in surrounding properties. As such, developers and business owners have come to the area, bringing new developments that further support the resurgence of the area. With an increase in activity, the local chamber of commerce decided to fund a plan called The Greater East End Strategic Vision Project. The vision includes streetscape improvements throughout the newly defined district and incorporation of new residential supportive amenities. Since the non-for-profit organization (NPO), New Hope Housing, Inc., created the Canal Street Apartments the story shows how valuable NPO's can be in urban redevelopment.

From Brew Town to Cool Town

This study, by Jeffery Zimmerman (2006), provided new insight to building up the image of a city through development of a brand based off both Richard Florida's creative class theory and the new addition to the Milwaukee (Wisconsin) Art Museum designed by renowned architect Calatrava. The efforts were to draw the creative class to Milwaukee's downtown in hopes of building an entrepreneurial city. Milwaukee also created a downtown master plan to further draw these desired people. Such projects as removal of the elevated, Park East freeway and the redesign of the Beerline neighborhood were part of the plans. The city hoped for widespread urban regeneration. Because of these projects, there was a boom in new residential units and real estate values in localized areas of the city core. While they were successful in drawing more of the creative class, their attempts failed to generate citywide socioeconomic impacts (Zimmerman, 2006). This study further propagates the idea that large redevelopment catalysts tend to only have localized impacts, despite false claims by city leaders.

Example Catalyst Studies Conclusions

The problem with most of these studies is they have no grounded methodology for determining causal relationships, nor do they look at smaller-scale development. Most of these studies merely make assumptive claims and those that have the empirical research are typically talking about stadiums or large venues as urban catalysts. In looking for ground up redevelopment approaches, there is little in the way of understanding how small-scale catalysts work in redevelopment efforts. Therefore, studying localized catalysts should make a significant contribution to studying smaller-scale catalysts by provide a methodology for studying urban catalysts and through a persuasive story about the abilities of small-scale catalysts.

Example Methodology

Despite the perceived flaws of these studies, two literary works act as example studies. The two works important to defining catalysts and creating a methodology for analyzing them are the book *American Urban Architecture: Catalysts in the Design of Cities* by Wayne Attoe and Donn Logan, and Timothy Chapin's dissertation *Urban Revitalization Tools: Assessing the*

Impacts of Sports Stadia at the Microarea Level. Since the Urban Catalysts section covered Attoe and Logan's work previously, we now explore the study developed by Chapin.

Timothy Chapin, in his dissertation, analyzes the ability of sports stadia to facilitate urban revitalization in American cities. Chapin's methodology provides a proven method on how to analyze localized effects of development thought to act as an urban revitalization tool. A published summary of his work is in the peer-reviewed Journal of the American Planning Association (Chapin, 2004). In the methodology section of this dissertation, Chapin states that most studies of this sort occur through use of a case study approach (Chapin 1999). He further goes on to determine his process in his comparative case study analysis. Overall, this dissertation describes the historic trends in stadium building, public investment in sports facilities, the public sector's role in the stadium-building boom, case study choices, methodology, the story of each case study, the impacts of new stadia on each city and lessons learned.

The introduction renders the state of most American cites, which have been subject to decline for many decades. Cities have tried to build their way out of this problem through the development of special activity generators, namely sports stadia (Chapin 1999). This is akin, in some ways, to the investment of cities in warehouse to loft conversions, as seen on Washington Avenue in St. Louis, Missouri.

Chapin explains that a litany of studies analyze the impacts of new stadia on the city or downtown as a whole, but there is little focus on the effects of new stadia, at the microarea level, e.g. neighborhoods or districts (Chapin 1999). This is comparable to research performed on urban catalysts. Most of the studies examined previously focus on large-scale development projects and their ability to regenerate downtowns or large districts. However, seemingly no reports discuss small-scale urban catalysts and their effects on individual streets or blocks. Both this report and Chapin's dissertation identify gaps in the research of these respective subjects, thus solidifying the need for such studies.

Chapin developed his methodology based on a paper on by Robertson Kent called "Downtown Revitalization Strategies: An end-of-the-century assessment." Kent (1995) states

special activity generators should do three things: generate spillover spending, generate new construction and facilitate district level revitalization. In order to study these three criteria Chapin chose the comparative case study approach. This allows the researcher to perform "indepth analysis... for a broader set of data, both quantitative and qualitative" and "go into great detail about a given case" or phenomenon (Chapin, 1999, p.117). Such methodology relies upon "collection and analysis of a broad range of data", which is vital to gaining a "more complete understanding of the phenomenon" (Chapin, 1999, p.118). Employing the same rationale, this study utilizes equivalent strategies.

Chapin would go on to use parcel level data, land use and zoning maps, aerial photographs, U.S. Census data, planning documents, stadium project documents, site visits, interviews, newspaper accounts and other project studies to collect data for the study. He then used this "wide array of data sources and data sets in an effort to attain the depth and comprehensiveness that is the hallmark of a successful and useful case study approach" (Chapin, 1999, p.119). In order to remain consistent, the data and sources for each case had to be comparable. Though Chapin describes his data source list, he does not delimit the specific data he sought to perform the analysis. Rather, he gathered all the information needed to describe the history of each case and enough information to respond to the criteria described below.

Part of the methodology was to define guidelines for choosing these particular case studies and defining the geographic area parameters. Chapin choose a smaller scale than most researchers, because, based on traditional location theory, the impacts of a development are generally most significant in the local context and diminish when moving farther away (Chapin, 1999). This also makes sense for the study of small-scale urban catalysts, as their impacts will likely be much concentrated to a particular area. This concentration theory is in accordance with Attoe and Logan's third characteristic of urban catalysts as mentioned before.

Chapin chose three sports stadia for his case studies, because they were often referred to as the best of their time. The definition of "best" was the ability of these stadia to provide a precedent for future stadium development, to fit within the local context aesthetically and receive lauding from the community (Chapin 1999). These requirements are analogous to those found in

American Urban Architecture by Wayne Attoe and Donn Logan, which provide the basis for analyzing Urban Catalysts.

The general outline for each of these case studies includes: showing why they are important, a brief history of the city they are situated in, why they needed urban revitalization, how they approached making revitalization happen and why the need/desire/support for a new stadium. In the concluding chapters for each case study, Chaplin provides details of the stadium and its development, identification of the surrounding area, and the impacts of the stadium. In the final chapter comes analysis on whether sports stadia can serve as urban revitalization tools. A comparable approach occurs in this study on Washington Avenue by presenting the history of both downtown St. Louis and Washington Avenue and revitalization efforts, to provide a comparative analysis. This analysis will help decipher differences and similarities in the events that led/are leading to urban revitalization on Washington Avenue.

Background Summation

The case of Washington Avenue is of interest due to its history. It was once the main corridor through St. Louis and home to the Garment District, one of the most successful garment manufacturing hubs in the United States. Its demise and re-emergence as one of the more notable streets in St. Louis makes it an interesting case of urban redevelopment. In order to understand this redevelopment phenomenon, I look to urban catalyst theory. This theory tells us about physical developments that have the capacity to catalyze redevelopment of urban areas. Many studies focus on large-scale development as the primary types of urban catalysts. Most of the studies reviewed, however, both neglect to consider the potential of smaller-scale developments and contain questionable methodologies. The work of Timothy Chapin provides an example of a fundamentally sound methodological approach to urban catalyst case study analysis, which is why it serves as a foundation for the methodology.

Chapter 3 - Methodology

Prologue

The report contains six major components: Introduction, Background, Methodology, Findings, and Conclusions. The Methodology tells about research strategies, the need for a case study approach and how the study proceeds after literature review. It includes the research question, criteria for answering the question, the chosen methodology, the data needed, the data collection techniques and the analytic procedures. In reading this section, other researchers should be able to develop similar studies.

The study focuses on four blocks of Washington Avenue in St. Louis, Missouri. It analyzes building vacancy, physical building improvements, resale values, land uses, occupancy permits and narrative accounts about Washington Avenue and the surrounding Garment District from 1980 to 2010. This data allows the researcher to construct a history of the urban redevelopment on Washington Avenue. This timeline supports identification of urban redevelopment catalysts based on characteristics of urban catalysts and a series of determining criteria developed by several researchers, including Wayne Attoe, Donn Logan, Timothy Chapin and Ernest Sternberg.

Geographical Context – Study Area/Sample

It is important to clarify that the entire street is not the focus of the study, but rather four blocks located in the heart of the Garment District in Downtown St. Louis. These four blocks are located on Washington Avenue between 10th Street and 14th Street. This area is the focus of the study because of its standing as one of the most vibrant areas in downtown St. Louis. These particular blocks also mark a distinctly different feel from the rest of the street. East of 10th Street marks the transition from entertainment, arts, historic buildings and lofts to the convention center district, hotels, primarily office uses and skyscrapers. West of 14th Street up until recently, the late 2000's, was slow to develop. There are also many areas west of 14th Street containing a large expanse of surface parking, which interrupt the urban fabric. This is unlike the

area between 14th and 10th Street. Identified below, in Figure 3.1, are the study area and Garment District.

Since part of this study was to see if anything other than the catalyst(s) on Washington Avenue spurred development, there was need to identify other areas to compare against these four blocks. Since the case study area falls within the Garment District neighborhood, it made logical sense for it to serve as a cross-reference. Moving up in scale it is important to compare both the study area and the Garment District neighborhood to downtown St. Louis. Analyzing data at a variety of scales helps to distinguish between trends and policies that occur at a variety of geographical levels and catalytic events in a particular locale.



Figure 3.1 Study Area & Garment District

Source: Modified from Google Earth, 2010

Case Study Development

The Findings portion of the study starts with an introduction of Washington Avenue as it stands today and its relation to the surrounding area. This narrative provides an account of life on

the street, the resident population, types of businesses and land uses that reside there. Data collection for the introduction included taking site photographs, performing field observations, reading reports and finding narrative accounts from newspapers and magazines. By developing an understanding of Washington Avenue today, an anchor point/frame of reference for the study emerges. This establishes an identity from which identification of catalysts commenced.

The next section provides a history of the redevelopment of Washington Avenue. This is the largest portion of the Findings section. For the purposes of this report, the detailed history ranges from 1980 to 2010. The timeline starts in 1980 because it was not until the 80's that Washington Avenue first started redeveloping. Up until that time, there was no street life present and the current identity of the street was absent (Powers, n.d.).

The information for the history section is not only important for telling the story of Washington Avenue, but also identifying potential urban catalysts and determining if development occurred after the presumed catalyst(s). Table 3.1, below, conveys criteria for identifying urban catalysts and showing whether development preceded the catalyst. The timeline includes information on building vacancy, physical building improvements, resale values, land uses, and occupancy permits that identify number of occupants and types of businesses, as well as other factors concerning the Washington Avenue study area. This data comes directly from multiple City of St. Louis departments and is both qualitative and quantitative. The information providing details on street livelihood, feel of the street and impressions of the street come from written accounts in journals, magazines, newspapers, websites, brochures and books. There is also information about public policies and investments, found in public documents. Collectively, the history comes in the form of a written narrative, photographs, maps and graphs of the compiled data.

Table 3.1 Urban Catalyst Characteristics

Catalyst	Data that Identify	Determining Development Preceding
Characteristics	Catalysts	Catalyst
Modification of	Building permits should show existing buildings are rehabbed not	Building permit boom comes after catalyst.
Existing Elements	tore down.	
Positive Value	Sales data should show increased land value. Written accounts	Positive increases in land value and image of
Gained	should show a positive image of study area.	community chronologically come after
		development of catalyst.
Context Sensitive	Occupancy permits for businesses should show "appropriate"	Not Applicable
	uses for the area.	
Reaction Localized	The amount and type of developments should occur within the	Not Applicable
	study area, with little impact regionally.	
Does Not Reinvent	The history of the area remains intact. This data comes through	Not Applicable
Character of Area,	written and photographic documentation.	
Instead Builds on		
Positive Character		
Increases Activity	Building occupancy and permit increases show increased activity.	Activity came after arrival of catalyst.
	Written accounts also show historically how the street became	
	more lively.	

After the history of Washington Avenue and identification of possible catalysts comes the Comparison section. This section presents an exploratory analysis cross-referencing potential catalysts against data, policies, investments and trends found in the study area, the Garment District and Downtown St. Louis. This essentially determines whether the catalyst(s) could have caused the redevelopment of Washington Avenue. A summary concludes the Findings section.

The next portion of the report, the Conclusions section, simply provides the answer to the research question. It tells if there was/were catalyst(s) and if so, how they facilitated the creation of Washington Avenue. If there were not catalysts, then this section tells what other elements caused the redevelopment of Washington Avenue.

Analytic Strategy

The vehicle for delivering an answer to the research question comes in the form of a case study. A case study is a useful methodology because it responds to how and why something happened (Yin, 1989). The research question for this report asks specifically how and why Washington Avenue revived from its decrepit state. The question arose in part due to an interest in urban catalysts, but also because people have diverse perspectives on what facilitated its revival and the creation of its identity. Some feel that it was inevitable because the city was bound to revive itself, while others think it is because of investments through tax incentives and abatements. I believe it was possible that catalysts played an important role in its re-emergence. To identify what caused the revival, an exploratory method was necessary. In an exploratory case

study, the researcher poses questions about why something happened and compares them to multiple explanations (Yin, 1989). In the end, the case study should identify the reason or reasons why this phenomenon occurred.

Case studies are useful because they consider multiple variables, whereas inferential statistical approaches may contain a few choice variables. To disregard variables that play a factor in the phenomena can cause for a study not rooted in realistic settings and thus contain useless findings. The case study requires the researcher to incorporate a variety of variables. They allow for analysis of both qualitative and quantitative data. Thus, a case study makes sense, especially considering that it looks at the phenomena in real world situations (Yin, 1989). This is very important for analysis of catalysts, as we have to note that there is development happening (quantitative Information) and we have to know if the ensuing development had characteristics embodied by the catalyst (qualitative data).

The case study is also necessary because there are many unforeseen variables the catalyst may affect and many variables lead to identifying a catalyst. Until data collection, field observation and interviews begin, accounting for all variables is nearly impossible. Case studies are flexible enough to allow unforeseen variables to enter the equation (Campbell, 2003). Because the phenomena takes place in an urban setting, many of these variables are spatially and context sensitive.

Case studies are also valuable outside the inner workings of this report. Case studies are one of the most common research approaches used in the analysis of causal, spatial phenomenon in urban planning (Campbell, 2003). Throughout the field, this is a known and accepted research methodology and one that many can understand. This is particularly true in regards to those who study urban redevelopment catalysts. As seen in the Background section, many studies focusing on catalysts of the urban environment utilize case study strategies. In order for others to compare the findings and methodology in this study to other urban catalyst studies, it must follow a similar approach.

How to Answer the Question

The research question is "how and in what ways, if any, did urban catalysts play in the reemergence of Washington Avenue in St. Louis, Missouri?" To make the case for a causal
relationship between the suspected catalyst(s) and the re-emergence of Washington Avenue,
three things must be evident. These three criteria derived from an outline of necessary findings
for causal relationships by Celia Reaves in the book *Quantitative Research for the Behavioral Sciences* (1992). First, the effects generated by the presumed catalyst must have come after its
existence. Second, a positive correlation between the catalyst and the development must exist.
Finally, nothing else could have caused the revitalization to occur as it did.

To determine the catalytic ability of a development the methodology also utilizes a strategy developed by Timothy Chapin, which focused on reuse of existing buildings, new construction, and emergence of a new district identity (2004). Chapin's approach was to investigate the ability of sports facilities to promote redevelopment in the surrounding area. Since this report focuses on smaller catalysts within a localized context, the methodology was fine-tuned to include new construction or rehabilitation efforts, creation of a new identity and increased property value.

New construction and rehabilitation projects are important because they identify a willingness to invest in the community. This often signals increased economic growth and pride in the community, both of which are characteristics of catalytic phenomena. Such indicators derive from building permit data gleaned from the Building Division of St. Louis. When viewed on a timeline this data shows spikes in re-investment, which may represent responses to a possible catalyst.

The second indicator of catalytic events was the emergence of new community identity and activity. Recognizing such events requires a diverse amount of information. Occupancy permits provide insight on the number of occupied units, which indicates increased presence of residents and businesses (an activity component). It also helps delineate types of businesses on Washington Avenue (an identity component). Aside from permits, there is also incorporation of written and photographic accounts of activity on and the character of Washington Avenue. This

knowledge stems from reading narrative accounts in journals, magazines, newspapers, and books. These accounts, in conglomeration with occupancy data, help ascertain the character and activity of the street along with possible catalysts.

The last of the three criteria was increased property value. Rising values often indicate an improving area. Since this portion of Washington Avenue was undesirable and not producing any revenue to the city before the 1990s, increased land value points to urban revival. Positive redevelopment is a characteristic of urban redevelopment catalytic effects as determined by Attoe and Logan. In order to discern increased property value, information obtained from the City Assessor's Office on property sales data was very important. In viewing this data on a timeline, the researcher may identify or discredit likelihood of present catalysts.

Finally, by providing a descriptive and exploratory chronology of the development of Washington Avenue and the surrounding downtown area, and by analyzing causal relationships according to the three criteria above, the report determined whether catalysts exist on Washington Avenue.

Stopping Procedure

As a means of limiting the report from containing too much information, the focus directed toward answering the research question. Any more than that and the report would have become overwhelming to the reader and loose meaning. To judge this stopping point, solicitation of other reviewers proved helpful. The main issue was stopping before reaching a saturation point.

Summary

This case study identifies potential catalyst(s) of development and explores the likelihood that development occurred because of the perceived catalyst(s). The study also determines whether redevelopment stages occurred after creation of the assumed catalyst(s) via a history of development. Additionally, it provided chronological evidence determining whether these effects could have come from policies, regional/national movements or developments in the surrounding downtown area, thus solidifying claims of on street catalysts.

Analytic Summation

The contents of the report include an abstract, table of contents, list of illustrations, introduction, literature review, methodology, findings, conclusions, a bibliography and appendices, and a literature/mental map.

The study focused on four blocks of Washington Avenue that are nearly fully redeveloped, lively and sought after. Necessary data for this area comes from a period between 1980 and 2010. This time span marks the transition of Washington Avenue from decrepit to vibrant. The information collected includes building vacancy, physical building improvements, resale values, land uses, and occupancy permits, as well as narrative accounts of the character and livelihood of the street. To identify the potential catalysts I constructed a timeline of redevelopment events. Next, potential catalysts were identified utilizing this timeline, which included new construction, emerging identity and activity, and increased property values. After the potential catalyst(s) surfaced, cross-referencing against the characteristics of urban catalysts (Figure 3.2) commenced. When the potential catalyst passed these criteria (depicted on the next page), it was cross-referenced against policies and trends in the surrounding area. When these requirements were met, a catalyst surfaced. To conclude, the presence of this catalyst answers the research question.

IDENTIFIERS OF POTENTIAL SUPPORTIVE **ELEMENTS CATALYSTS EVIDENCE** Maps of Demolitions **Modifies Existing** Buildings renovated/rehabbed/converted, not tore RBAN REDEVELOPMENT and change of uses/ **Elements** improvements. Maps of transactions after Positive Value Property transactions and building permit dollar improvements and total value Gained estimates show increase. of improvements. CATALYST Buildings maintain original facade elements and uses Maps of suitable and **Context Sensitive** supportive land uses and support downtown mixed-use composition. photos of buildings over time. Maps indicate demographic Reaction Localized Development trends are contained to particular areas. zones throughout downtown and the Garment District. Photographic evidence nd uses indicate character elements through time. **Builds on Existing** History/character/aesthetic of the place remains in Character tact/evident. Maps and graphs indicate building and occupancy permit trends, as well as property transactions. Building improvements, occupancy and street activity **Increases Activity** increase.

Figure 3.2 Urban Redevelopment Characteristics and Supportive Evidence

Chapter 4 - Findings

Overview

In telling the developmental story of Washington Avenue, we have to look at the street as it is today and compare it to its historic, decrepit and revival states. After a walking tour of these

Figure 4.1 Refurbished 1228 Washington Avenue



four blocks, reading articles pertaining to life on Washington Avenue, compiling a database, and performing exploratory maps, the site history and catalytic characteristics become apparent.

In a portion of downtown, once home to many vacant, poorly maintained buildings and streets devoid of life after the workday, Washington Avenue stands today as a part of the city that maintains a steady stream of energy. Here the classic building articulation is clean, detailed and ornate (Figure 4.1). The posh ambience draws patrons into repurposed, historic buildings that once housed companies from the second largest fashion district in the United States. The creativity displayed in these buildings, once fashion industry warehouses, still exists today as seen though the windows of art galleries, clothiers and in the general decor of restaurants, residential common areas and retail shops.

The atmosphere that draws many people, today, is in stark contrast to that of the 1970's to mid 1980's when the street contained little life. Rather, the street modestly resembles Washington Avenue in its prime, a period from 1880 to 1960. The history and character of the street has evolved from a high fashion garment district, to urban decay and finally to a corridor

of mixed uses and vitality. In studying the history of the street and its redevelopment, we seek to identify urban catalysts.

A Glimpse of the Past and Renewed Vitality

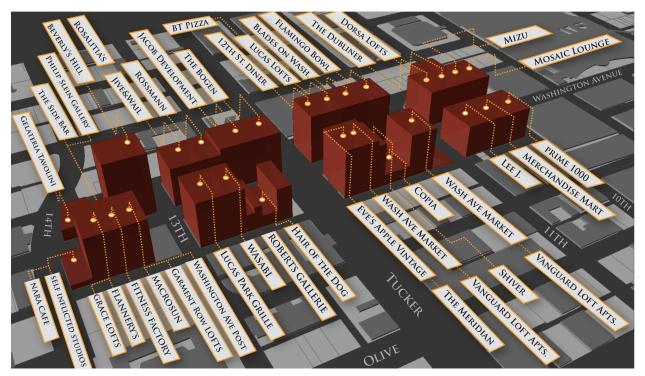
Despite such an extreme difference in activity and occupancy over the last 30 years, today Washington Avenue still contains a few vacant floors (Figure 4.2) and some structures that have not received the reinvestment and refurbishment found in so many others. These parts of Washington Avenue remind people of a not too distant time when destitution plagued the street.

Figure 4.2 Some Redevelopment Still Possible



Even during a period with a few stores closing and some vacancy, the street still maintains residential, retail and office uses. Figure 4.3 illustrates the businesses on the first floor of every building in the study area. This represents the relative strength of commerce on Washington Avenue and denotes a street that rebounded to again become one of the most popular streets in St. Louis. The energy and activity today speaks more to the historic past of the thriving district rather than its period of decay.

Figure 4.3 The Number of 1st Floor Businesses Represents a Thriving Street

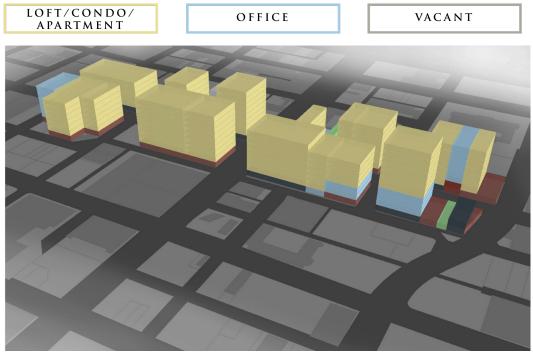


Getting Acquainted: A Point of Reference

Like many mixed-use streets, this portion of Washington Avenue contains residential uses that account for a majority of the floor area. The residential uses include both rental units and owner occupied loft condominiums. Some of these buildings contain a mixture of both. All of the residential uses are above the first floor, which is primarily composed of offices and retail. A few buildings have office uses occupying floors above the first.

From the street level (as seen in Figures 4.4 & 4.5), it is difficult to distinguish the difference between buildings primarily used for offices or residence (Figure 4.6). Regardless of the primary use, the collective mixture facilitates life on the street at most periods of the day.

Figure 4.4 Building Use by Floor, Looking Southeast



Source: Modified from City of St. Louis, 2010

Figure 4.5 Building Use by Floor, Looking Northwest



Source: Modified from City of St. Louis, 2010

Figure 4.6 Once Warehouses, These Buildings
Now Have a Mixture of Tenets and Owners

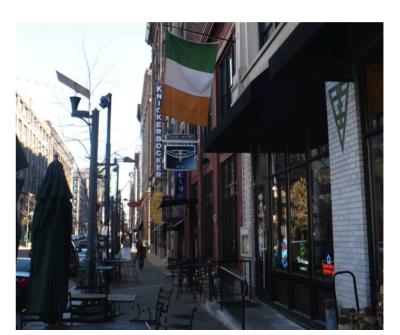


Figure 4.7 Flamingo Bowl
Provides Unique Entertainment



While primary uses help form the street character, other elements are also important. The historic architecture, stature of the buildings (some reaching 11-stories), and diverse first floor businesses contribute to the street identity (Figure 4.7). For those who visit Washington Avenue, rather than live or work there, the architecture and first floor businesses are the main draw. The restaurants, bars, clothiers, art galleries and offices intermingle in a way that forms no distinct patterns. Instead, each block contains businesses that cater to a variety of interests.

A component that distinguishes one area from another is the streetscape found starting from Tucker heading west toward 18th Street. Here the street itself has a unique pavement pattern, architectural streetlights, street trees and widened sidewalks, which provide interesting pedestrian zones. The increased sidewalk width allows for outdoor dining, which further increases the prominence of street life.

Collectively the street works well to maintain a cohesive, unique, historic, artistic and eclectic feel. As such, the street is one of the most well known and visited throughout the city.

Finding Catalysts

The construction of a historic timeline of development in database, graphic and narrative forms helped with comprehension of the dynamic redevelopment within the Washington Avenue study area (Figure 4.8) and identify urban catalysts that spurred such development.

Figure 4.8 Washington Avenue Study Area

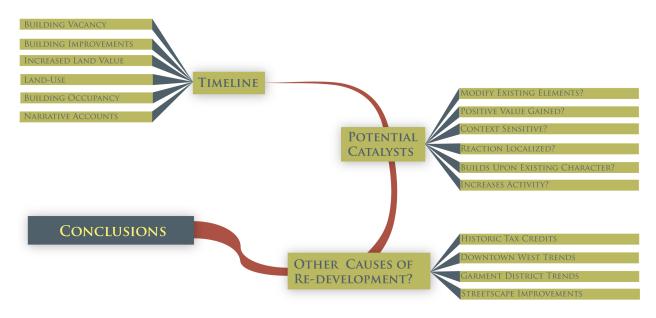
Source: Modified from City of St. Louis, 2010

The Figure 4.9 diagram presents the strategy for carrying out the "Findings" chapter. By starting with a timeline, people can see the many transitions made throughout the developmental history. These transitions indicate changing patterns in the reemerging area. Such patterns can signify the presence of catalysts. The researcher then focused on these areas, searching for unique events that correlated to catalytic characteristics. When these characteristics were present, the researcher identified and named the potential urban catalyst.

After denoting potential catalysts, cross-examination of the catalyst and other causes of redevelopment commenced. When there be no other reasons for the redevelopment phase(s), then an urban catalyst existed.

To present this process and findings, the chapter begins with an overview of the area today. It then tells the narrative and data story of Washington Avenue. Finally, the chapter denotes potential catalysts and explains which ones were or were not catalytic, while also ruling out other causes for revitalization.

Figure 4.9 Methodological Diagram of Proceeding Process



The Old Garment Districts: Bustling

Washington Avenue (also called "Wash Ave") was once one a main artery traversing downtown St. Louis. Terminating at the Eads Bridge, it was the chief connection linking St. Louis to Illinois. It was along this corridor, Carolyn Toft of the Landmarks Association claims, "small jobbers began selling millinery and clothing" during the 1870's (Prost, 1983, p.1). By 1880, Washington Avenue housed one of the greatest garment manufacture and warehousing hubs in all of the United States. The street was full of high-rises and horse-pulled streetcars, says Nancy Gotler (1981) of the St. Louis Globe-Democrat. Electric Streetcars emerged on the street by 1900 (Figure 4.10).

In the 1940's, Washington Avenue held the nickname "The Street" (in reference to downtown St. Louis); because of its wide spread popularity and success (Prost, 1992). So many people continued to use and visit Washington Avenue that, during the 1960's, city officials referred to Washington Avenue one of the busiest streets in St. Louis (Gotler, 1981).

VG

Figure 4.10 Washington Avenue & 6th St. Looking West

Source: Emil Boehl- Courtesy of the Missouri Historical Museum, 1900

Washington Avenue: From Dying to a Pulse

Ultimately, the downturn of the street came shortly after. High energy costs, aging buildings, and mass suburban migration forced businesses out of the district (Gotler, 1981). By the 1970's, Washington Avenue no longer maintained vibrancy and the district identity as one of the best for shoes, hats and clothing drastically declined.

The street reached its worst conditions in the 1970'and early 1980's. During that period, Washington Avenue was desolate; buildings were in poor aesthetic and, in some cases, structural condition. Most structures were vacant, few had tenets, and some had squatters. In 1981, a

newspaper article came out telling of two local developers' interest in rehabilitating buildings on Washington Avenue (Prost, 1981). Then, in 1983, the St. Louis Post-Dispatch released a plan made by five firms, called the Washington Avenue Redevelopment Corporation, which targeted redevelopment on 14-blocks in and around Washington Avenue from Tucker Street to 7th Street. The total redevelopment efforts were to take 12 years and cost \$225 Million dollars (Prost, 1983).

For all the plans made, only the Merchandise Mart at 1000 Washington Avenue received any noteworthy reinvestment efforts during the 1980s. The owners struggled financially and the office building was only partially complete at the end of the decade (Koman, 1988). Like the Merchandise Mart, plans for the Curlee (1001 Wash Ave) and Dorsa building (1007 Wash Ave) also failed to develop.

There was a glimmer of hope going into the 1990s, as the owner of the Merchandise Mart was publicly explaining his plans to convert the building to parking, offices and a hotel (Prost, 1989), but efforts stalled in 1992 when the owner changed plans and tried to have the building razed (St. Louis Post-Dispatch, 1992).

In 1986, the Lucas Park Apartment, at 507 N. 13th Street, building renovation completed and provided nearly 60-rental units (DiMario, 1986 & Prost, 1994). (Later, the building received further investment and converted to condominium units by 2000.) At around the same time (1985), Richard Deutsch successfully converted a building at 1709 Washington Avenue into lofts and art galleries, which filled up immediately (Flannery, 1993). (This building later converted to condominium units, after substantial reinvestment around 2003.)

There was also excitement generated by up-and-coming art galleries that dotted Washington Avenue, including the Mossa Center at 1214 Washington Avenue that opened in 1984 and 2 galleries between 17th and 18th streets (Faust, 1989). The four-story Mossa gallery (Figure 4.11), primarily modern style furniture and lighting, was one of the first of its kind in St. Louis. The owner, Dwight Reum, said business "increased tenfold since we opened", which painted a rather optimistic picture for art galleries on Washington Avenue (Sauer, 1989, P.1S).

In 1990, five of the galleries agreed to work together to put on art shows throughout the year (E.F. Porter, 1990). These efforts continued for many years and helped bring life to Washington Avenue. While the 1980s were not the most prosperous times for Washington Avenue, Downtown St. Louis benefited from its largest office development boom, which doubled office space (Stanford, 1989). Some called this building boom a revival of downtown St. Louis.

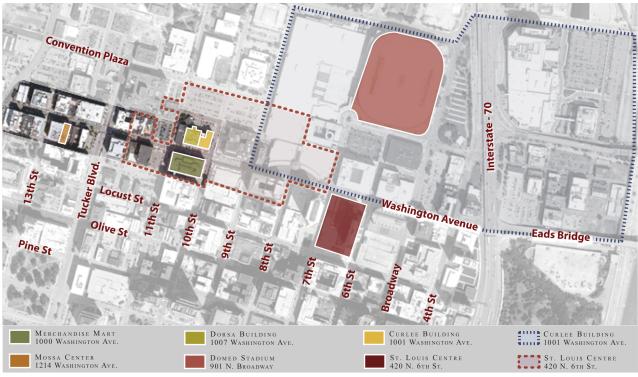


Figure 4.11 Areas Targeted for Redevelopment

Source: Modified from Google, 2011

Washington Avenue: Planning Renewal

At the same time, planning for a light rail line (MetroLink) began - it would eventually connect downtown St. Louis to the Lambert Airport to the North, and east into Illinois (Eardley, 1988). Downtown also saw development of a major shopping mall between 6th and 7th streets on Washington Avenue in 1985 (Stanford, 1989). While the mall, St. Louis Centre, received considerable attention when it first opened, mere years later the mall was only a third full and later closed.

In 1989, St. Louis announced completion of its downtown development plan. Part of the plan was to create a Convention Center Zone (Figure 4.12) as part of the Cervantes Convention Center expansion and creation of the domed football stadium. The zone ranged from 9th Street to Laclede's Landing at the Mississippi riverfront (E.F. Porter, 1989). The plan called for hotels and entertainment, but according to the Director of Development for the City of St. Louis, Christopher Grace, said that the zone would not "help alleviate the vacancy rate in the gracefully rehabbed commercial buildings along the street" (E.F. Porter, 1989, p. B1). Yet, some would say the convention center expansion was a reason for loft developers to storm the street for redevelopment opportunities.

During the 1980s, plans to rejuvenate parts of Washington Avenue developed. Whether it was the Washington Avenue Redevelopment Corporation or landowners, a positive mind-set emerged towards Washington Avenue after decades of decline. With art galleries sprouting up, the creative class began its arrival downtown. Tenets began finding homes in the newly renovated Lucas Park apartments. It seemed there was hope for Washington Avenue because of this positive direction.

Figure 4.11 Wash Ave in the 1990s



Source: Courtesy of Jeff Vines

In the early 1990s, there was some activity and development on Washington Avenue (Figure 4.12), but it was vastly different from the days of "The Street". Yet, the nineties marked a transition to the street Washington Avenue would become in just a short period.

The Loft District: Moving Forward

The year 1991 was the beginning of a movement. The city awarded four developers nearly \$5000 per moderately priced, live/work loft units (Prost, 1991). Judy and Larry Deutsch, the owners of 1007-1015 Washington Avenue, received \$65,000 for 13 units (Prost, 1991). The grant money coupled with a request for loft development proposals from the city, and creation of "The Loft District" (Figure 4.13) further sparked interest in lofts (Prost, 1992).

According to Charlene Prost, the district was to range from 9th to 22nd Street. The plan noted 11 art galleries on Washington Avenue and the need to provide residential units for a downtown predominantly composed of office use. Planners specifically called for residential units between Tucker and 14th Street, while Tucker to 9th Street should focus on office and mixed-use redevelopment (Figure 4.13) (1992).

By 1993, there were estimates that nearly 100 people lived on Washington Avenue and more were waiting for lofts on the street, according to loft developer and Mossa Center owner Dwight Reum (Flannery, 1993). Reum was part of a group, with Ginny Stewart and Rand Juliano, who sought to convert 1517 Washington Avenue into loft condos, making the building the first of its kind in downtown (Berger, 1993). Unfortunately, building renovation was not complete until 2003 (Downtown St. Louis Partnership, 2008).

In 1994, lead developer Timothy Boyle announced plans to rehabilitate 1531 Washington Avenue into a 63 unit, low-income, live/work, complex for artists called ArtLoft (Prost, 1994). With the help of federal and state tax credits, the \$5.3 million project concluded in 1996 (Prost, 1995 & Downtown St. Louis Partnership, 2008).

The completion of 1531 Washington Avenue was the first large scale loft development near the study area. Only Lucas Park Apartments compare in size, with 53 units (Prost, 1995). According to Michelle Duffe, the head of real estate for the city, most loft buildings "have been minimally renovate to keep the rents on lofts low" (Prost, 1994, p. B1). Despite

targeting low-income residents, the ArtLoft building renovation price tag was the highest on Washington Avenue at that time, suggesting it might be a catalyst.

A newspaper article came out in 1993 that provided insight into the revival of Washington Avenue. William Flannery (1993) of the Post-Dispatch heard from many land owners who claimed a central location, the creation of the MetroLink, expansion of the convention center, the emerging art scene, demand for loft living, and cheap space were all reasons for redevelopment. The owners were however concerned about the lack of cheap parking and the negative stigma of crime downtown (Flannery, 1993). Despite these potential issues, demand for loft living outpaced production.

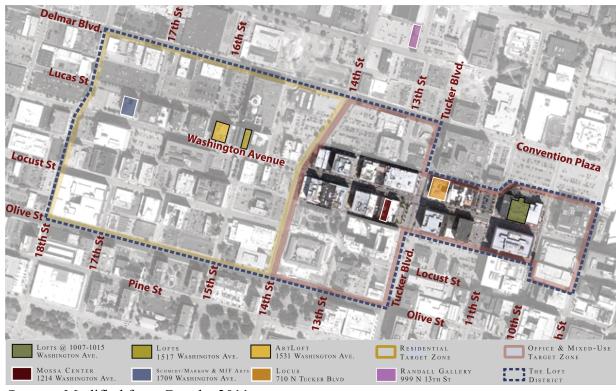


Figure 4.12 Loft Buildings & Art Galleries

Source: Modified from Google, 2011

Washington Avenue: The Revival?

By the mid-1990s, Downtown St. Louis witnessed a boom in restaurants and nightclubs (many located on Wash Ave) (Futterman, 1993). It also witnessed creation of MetroLink light rail line (Tipton, 1993), convention center expansion, and building of two sports stadiums

(Flannery, 1993) (Figure 4.14). These elements coupled with new lofts and art galleries added of life to downtown streets, despite St. Louis Centre Mall only a third full (Prost, 1998).

While the mall was largely a failure, 1997 marked the opening of a new icon, City Museum. Located at 701 N. 15th Street (Figure 4.14), the museum features interactive art that draws visitors from near and far. City Museum is a major draw for downtown St. Louis. The owner also planned loft living in part of the building and adjacent structures (Prost, 1998).

That same year, Missouri Governor Mel Carnahan signed a bill providing historic tax credits to developers that renovate buildings on the National Register of historic places or those within a local historic district (Prost, 1997). Before the tax-credits were officially available, developers lined up seeking their use. With the credits covering up to 25 percent of the rehabilitation costs, redeveloping the old warehouses on Washington Avenue became feasible and desirable. Nations Bank further helped the cause by committing \$100 million in loans to downtown landowners. They also invested \$425,000 towards a new downtown plan that would help guide future growth (Prost, 1998).

In 1998, the *Plan for Downtown Living* came out, targeting the Washington Avenue Loft District as one of four areas for growth. Washington Avenue could absorb 84 residential units annually (Parish, 1998). The report suggested the area could support upper and middle-income residents, in addition to the lower-income residents who were the main tenets downtown. A mixture of rental and for sale units would supply the growing demand (Parish, 1998).

Washington Avenue

St. Louis
Centre

Dome

St. Louis
Centre

Centre

Convention
Centre

Centre

Market St

Mar

Figure 4.13 New Downtown Attractions

Source: Modified from Google, 2011

Downtown: Making Improvements

A year later, this information resounded in the *Downtown Now!* Plan, adopted by the City of St. Louis. The plan specifically called attention to the Loft District, citing it as a major area of focus. The objectives included study of streetscape improvements, emphasizing residential units, and creation of a new Community Improvement District (CID) (which includes all of the Loft District) to facilitate street maintenance, activity programming, redevelopment coordination and marketing the district (Downtown Now!, 1999). Implementing the plan, covering downtown St. Louis, would to cost nearly \$1.2 billion over six years (Prost, 1999).

A part of the plan specifically focused on redesigning the Washington Avenue streetscape. The Partnership for Downtown St. Louis, the City of St. Louis and design firm Wallace, Roberts and Todd, devised a plan to widen sidewalks, reduce the number of lanes from four down to two lanes, plus a turn lane. The streetscape improvement also called for allowance of outdoor cafes, planting street trees, placing street furniture, and adding new lighting. The \$17 Million dollar plan was to be complete by 2003 (Schlinkmann, 1999).

While the public sector made plans for infrastructure improvements, the private sector focused on rehabbing warehouses, bringing in commercial uses, and drawing residents. Collectively the public and private sectors anticipated a flock of new residents over the next few years. In 1998, a market study done by Zimmerman/Volk Associates, anticipated the downtown housing market could handle 469 market-rate units every year over the course of the next decade (Parish, 1998). As the area continued to grow it was crucial to add land uses that support new growth.

One important addition was the first grocery store, at 1216 Washington Avenue, called Bodega (Figure 4.15) (Goodwin, 1999). While not a full-scale grocer, Bodega provided much needed goods to local residents. Another project, long talked about but not yet reaching fruition, was the 1,000-room Marriott Renaissance Hotel at 800 Washington Avenue. The total project cost estimated at \$172.5 million (Freeman, 1998). The project would provide needed spaces for convention visitors and bring business to Washington Avenue. Some developers hinged their successes to the overflow business created by the hotel and, as such, more projects along based on these assumptions.

Between 1998 and 1999 there were eight, publicly discussed, private development ventures in the Loft District (Figure 4.15). The first was 1224 Washington Avenue. Developer William Stallings planned to spend \$2 million on the rehab, creating a two-story nightclub, some offices and 13 lofts. The second building, the Merchandise Mart Annex, projected to hold 34 lofts at 415 N. 10th Street (Prost, 1998). The third was 703 N. 13th Street, where 22 lofts would cost \$1.9 Million (Prost, 1999). While 1115-1123 Washington Avenue was slated for lofts and retail. 1110 Washington Avenue was the fifth project and projected to have 70 loft condominium units, with a total project cost of \$8 million (Stamborski, 1999). The sixth, seventh and eighth buildings were all managed by Downtown Properties of St. Louis, which acted on behalf of a real estate investment team. The group owned 1511 Washington Avenue, the Knickerbocker Clothing Co. building and the Lucas Park Apartments. They planned to convert all three buildings into 90-condo units (Prost, 1999).

These projects would pave way for substantial population growth over the decade. The City of St. Louis estimated 8,100 people living in downtown St. Louis by the end of 1999. In addition, they projected a 2,000 resident boom with in two years (Franklin, 1999). With momentum gaining, prospects for momentous growth on Washington Avenue were promising. Some thought the importance of the street was so great that the future of downtown hinged on its success (Prost, 2001) and one developer even tried to create a new loft district just up the street from the Loft District (Prost, 2001).

Some developers and city officials thought the downtown/streetscape plans, the hotel, and historic tax credits were catalysts for development. Others in the same fields partially disagreed with this notion. Tim Tucker was not sure whether the streetscape project was beneficial at the time (Duffy, 2000). Many businesses suffered because construction of the street lasted over two years due to delays. His concerns echoed from small business owners on the street. Tucker however thought the convention center hotel would be a "silver bullet for success" of the downtown, helping to spur even more growth (Duffy, 2000, p. B1).

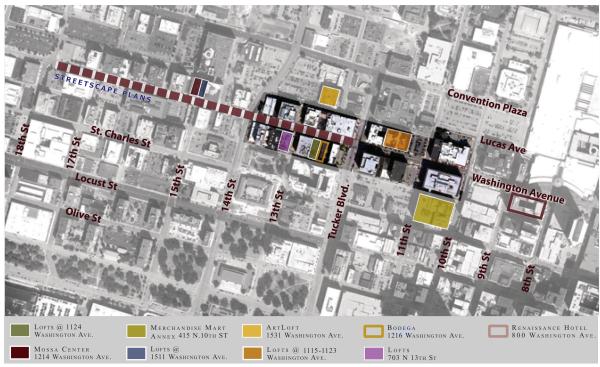


Figure 4.14 Centralized Redevelopment Efforts

Source: Modified from Google, 2011

One of the more prominent developers of Washington Avenue provided an opposing line of thought. Kevin McGowan, of McGowan Brothers Development, - a group with \$20 million invested (the most from any private sector group at the time) into downtown - said his company "can use them (historic tax credits) anywhere. But it is much smarter to spend them where there is an existing plan in place" (Duffy, 2000, p. B1). McGowan was referring to the plan for downtown and the streetscape plan.

Tony Thompson, of the Kwame Building Group, thought the hotel was a major factor in the redevelopment efforts. He also placed some emphasis on the fact that other projects were in the works as well. Matt O'Leary, of Pyramid Construction, said his company was also looking forward to the spill-over effects of the hotel and other projects. In addition, the thriving economy in the late 1990s certainly helped as well. Whether these events were catalysts, they receive consideration as potential urban catalysts.

Washington Avenue: A Quick Start to the Decade

In 2000, two more government undertakings, focusing on Washington Avenue and downtown, received attention. The state passed a bill raising funds to revitalize downtown in the tune of \$400 million over the course of seven years (Bell, 2000). The increased funds would ideally help continue the growth of Washington Avenue and downtown, by luring even more developers, businesses, residents, and workers to the area.

The city also worked to lay fiber optic lines on Washington Avenue as part of the streetscape improvements (Price, 2000). This would serve as foundational infrastructure for businesses heavily relying on the internet. Kevin McGowan said the fiber optics line would be the "single most important element to the resurrection of the city" (Duffy, 2000, p. B1). While McGowan help lofty aspirations, the line would eventually facilitate a boom of dot-com businesses on Washington Avenue and help maintain retail stores as they weathered economic decline in the late 2000s by expanding their reach to clientele.

Around the same time, a quality of life, and urban amenity project came to fruition. The Partnership for Downtown St. Louis made plans to close off a portion of 13th Street in order to connect Washington Avenue and Lucas Park (Prost, 2000). The new public space would be the future site of outdoor events and sidewalk cafés. Discussion of this link coupled with insistence of neighborhood residents and developers led to the acceptance of a downtown dog park, by the city three years later, for Lucas Park, in part lead by the McGowan Brothers (Moore, 2003).

Once again, drawing on the artistic nature of the area, art lofts were in the works. Washington University worked to rehabilitate 1627 Washington Avenue for students of the School of Art. The 26-unit building would have affordable rents and space to display student's work (Prost, 2000). Another educational effort came to Washington Avenue the same year. The Downtown Children's Center performed a capital campaign to raise \$1.2 million. They needed the capital to renovate the first floor of the Lucas Park Apartment building, to provide space for its 30 teachers and 114 children (Bower, 2000). While these projects required heavy financial investment, the Merchandise Mart would be the largest projected investment on Washington Avenue. After the city found a developer (Historic Restoration, Inc.) for the large building, plans to renovate the structure ran at a cost of \$44 million (Prost, 2000).

The projects mentioned above were not the only ones in progress at the time. Slated for revival were a large number of buildings, primarily focused on lofts units with retail use on the ground floor. Many of the developers relied on tax abatements, the historic tax credit, and other forms of public financing. (Those targeted structures depicted in Figure 4.16.) A report from the Partnership for Downtown St. Louis stated, "490 (residential units) are already under construction, and 803 are in the planning stage" (Prost, 2000, p. B1). The shear number of downtown residential units forecasted for 2000 was astounding. A year later, they released another report showing employment gains of 67 businesses and 2,902 employees downtown since 2000 (Prost, 2001).



Figure 4.15 2000-2001 Redevelopment

Source: Modified from Google, 2011

The year 2001 marked the availability of one of the largest real estate packages on Washington Avenue. The package included 11-12 buildings (Figure 4.17) at a price of \$37.5 million (Prost, 2001). The original price paid for the properties was \$16.5 million (Shinkle, 2001). The owners of the package included several names associated with the redevelopment of Washington Avenue. The sale of this package would indicate substantial increase in property value on Washington Avenue. The higher rents were reason nightclubs and lower-income residents were on their way out of the area. This period also marked the start of rehabbed lofts including high-end finishes and amenities. Some of these amenities include valet parking, pools, exercise rooms, rooftop gardens and hotel like services (Tomich, 2005). Living in lofts was more luxurious than in the beginning.

Figure 4.16 A Large Real Estate Package

Source: Modified from Google, 2011

EAST BANK 1511 WASHINGTON AVE.

Monkey Building 1430 Washington Ave

Despite all the positives that accompany redevelopment, there was an issue for some calling Washington Avenue home. Rents and sales prices of the newly rehabbed Washington Avenue buildings kept climbing. This forced past lower-income tenets to move out. While this was a negative for many, the city found it encouraging that these tenets were finding homes in new areas of the city, previously under developed or vacant. The city and some landlords were happy to see business owners who previously used the low square foot cost of Washington Avenue as means to store goods they did not need to access quickly. As those groups moved, industrial areas of the city started gaining new tenets (Heisler, 2005).

MARY MUFFET 1527 WASHINGTON AVE

Arts & Crafts 1635 Washington Ave King Bee 1709 Washington Ave.

The new popularity of urban amenities and lofts also started spillover development projects in areas like Clayton, Grand Center and the Central West End. Some consider Washington Avenue as a catalyst for development in downtown St. Louis and surrounding areas. The positive benefits of these redevelopment efforts still resound today.

Figure 4.17 Merchandise Mart at 1000 Wash Ave Refurbished



With so many renovations completed or in progress, an estimated \$400 million in investments would befall Washington Avenue over a two-year period. Some of the enterprises included completion of the long awaited Merchandise Mart (Figure 4.18), with 213apartment capacity, and its adjoining structure. A block down, at 901 Washington, the McGowan Brothers figured on investing \$15 million (Prost, 2002), later the project transferred to Pyramid Construction (Peterson, 2004). Another businessmen, Kenneth Nuernberger, sought to redevelop two buildings on the 1100 block of Washington Avenue. At 1204 Washington, Kwame Building Group looked to invest \$6 million to create loft and office space, plus a first floor club (Prost, 2002). With all of these projects in progress by the summer of 2002, Washington Avenue looked like it would continue its robust redevelopment trend.

Washington Avenue: Developing Quickly

The abundance of projects continued to climb in 2003 (Figure 4.19). Rothschild Development Limited planned a \$3.5 million rehab of a hotel at 1133 Washington. Outside of the study area, 1619 Washington, Pyramid Construction started creating 41 loft condominiums (Berger, 2003). In addition, the long awaited redevelopment of the Old Post Office began construction after nearly \$70 million in financing came through (Prost, 2003). Another large-scale hotel project, slated for 1300 Convention Plaza, was under the McGowan Bother's control after the city sold the property to them (Moore, 2003). They also teamed up with David Jump for a \$20 million project at the Fashion Square building at 1301 Washington Avenue (Prost, 2003).

The McGowan Brothers continued to be the leaders of development in the study area and the surrounding landscape. This company could be a catalyzing factor in the redevelopment of Washington Avenue and should be considered a in the urban catalyst discussion.

In 2004, another real estate package became available. This time the properties centered on the convention center. The owner, Larry Deutsch, was offering four building and a large number of parking spaces for around \$10-15 million. The real estate portfolio included 901, 1001, 1009, and 1015 Washington Avenue (Tucci, 2004). This would be the second largest collection of properties to change ownership on Washington Avenue.

The same year, downtown residents gained access to two sought-after grocers. The larger of the two was City Grocers, located 902 Olive Street. This grocery became the largest downtown. The other grocery was much smaller and located in the Rudman building at 1228 Washington Avenue (Prost, 2004). The McGowan Brothers finished rehabbing the building in 2003 for \$12 million dollars (David Mason & Associates, 2012). This was a sign that downtown had reached critical mass for drawing primary use services. In Jane Jacob's work *The Death and Life of Great American Cities*, she argues that diverse (high functioning) streets and districts need primary land uses (1993). Primary services are those drawing people to the place at various times of the day. It would seem Washington Avenue had reached a high enough stature to draw primary uses.

There was also an influx of restaurants on Washington Avenue. In the summer of 2004, there were more than six restaurant entrepreneurs looking to open for business. Even a bakery came into the equation (Brown, 2004). With these openings and the dog park moving forward, citizens were getting even more services they desired.

While businesses and amenities came to Washington Avenue, there were fewer projects compared to the prior two years. There were however some sizable projects in the works during 2004. At 1133 Washington, where an old Day's Inn existed, Bill Bruce planned to rehab and reface the building into a 126 apartment building (Tucci, 2004). The same developer planned to convert 1110-1120 Washington into 80 more apartments (Prost, 2004). Some blocks away, the

Orchard Development Group wanted to convert 1520 Washington, Ely Walker building, into 180 condominiums (Evans, 2004).

Washington Avenue

Octive St

Pine St

Developments
In 2002

Developments
In 2004

Figure 4.18 Projects from 2002-2004

Source: Modified from Google, 2011

Washington Avenue: Reaching Its Apex

At this stage in the redevelopment process, sales prices and rents were at an all time high. Loft apartments cost between \$120,000 and \$700,000. This was the highest range to date. Rents for lofts ranged from \$400 to \$2,000 per month (Riley, 2004). Rosmarie Reum, owner of the Mossa Center, saw a drastic rise in walking traffic. She estimated that half of those people were downtown residents and the others were from outside the area (Prost, 2004). The Downtown St. Louis Partnership verified the residential growth in a 2004 report claiming 1,400 units arrived to the market since 1999 and another 1,000 were on the way (Prost, 2004). In 2005, the city projected its biggest construction boom in the St. Louis metropolitan area in over two decades (Van Der Werf, 2005).

The economy and real estate market had favorable conditions for developers. The downtown construction boom was in large part contributed to the federal tax credits developers used to justify high development costs. The state of Missouri had the largest use of historic tax credits throughout the entire country at \$357 million (Evans, 2005). A large portion of that spending occurred in downtown St. Louis.

As Washington Avenue redeveloped, it transitioned from warehouses, to art galleries and nightclubs. Then it moved from nightclubs to restaurants and other uses. As the street gained a diversity of activities and services, more people moved to and patronized the street. While the developmental history of Washington Avenue continues after 2005, development reached its apex. Since the purpose of this document is to explore urban catalysts, the narrative account found in newspapers ceases at this point. For any urban catalyst(s) would have occurred before this juncture in the revival of Washington Avenue.

Cross-Examining Contents: The Data Story

While the narrative timeline describes events throughout the redevelopment of Washington Avenue, there is always need to verify information. Some reasons illustrating the need for verification include:

- The requirements for reporting theories and deductions vary across research and journalism fields. There needs to be an equalized standard across the study, so to avoid favoring any type of input.
- Many of the articles utilized in this study describe publicly shared plans and visions. Not all
 of these projects actualized. Thus, face valuations can be inaccurate.
- There is also the chance for untold stories. This could happen because an editor did not see the value in a particular story, or it could be that private actors preferred not to make their plans public. Those reasons should not detract from their value to this study.

Regardless of the reason, we have to make sure the study takes into account as much of the redevelopment story as possible. Some of this includes the already presented narrative account. It also includes the need to explore empirical data yet to develop. In addition to accuracy, identifying urban catalysts requires recognition of catalytic characteristics. The narrative accounts covered some of these characteristics. The proceeding portion of the Findings chapter covers provides additional information to supplement the narrative. This includes exploration of the amount of money put towards revitalization efforts, the dynamics of ownership on Washington Avenue, as well as building and occupancy permit data. These types of information should speak to the nature of urban redevelopment.

For an urban catalyst to exist on Washington Avenue, there is need to focus on occurrences that modify existing elements, increase the value of the area, build on the existing character, respond to that character in respectful and localized ways, while generating an increase of activity in the area.

The following data derived from public records. These findings were complied into a database and transmitted into an understandable graphic format that allows for spatial-temporal, cross-examination and comparative study. After explaining the data, the end of the chapter provides a compilation of the narrative and empirical data into an infographic timeline used to visualize and identify the potential and actual urban catalysts.

Reinvestment in Historic Buildings

Building permit reinvestment estimates identify positive value gained on Washington Avenue. The following patterns delineate periods where increases occurred. As seen in Figure 4.20, and in Figure 4.22, most redevelopment efforts came during the 2000s. This is consistent with trends in metropolitan St. Louis and the United States, which indicates the influence of the economy on development patterns (US Census Bureau, n.d. & Federal Reserve Bank of St. Louis, 2012). Despite growth in the 2000s, Washington Avenue trends differed in terms of consistency and steepness of linear climb (see appendix Figure A.2 & A.3). Reinvestment in Washington Avenue saw a much more dramatic rise in investment when compared to the metropolitan and national trends, which suggests a localized dynamic. Only eight percent of investment came throughout the 1980s and 1990s. The reason being, in 1998, Missouri enacted a law that allowed for "an investment tax credit equal to 25 percent of approved costs associated with qualified rehabilitation" (Missouri State Historic Preservation Office, n.d., p.1). This Historic Tax Credit allowed developers to re-coupe some of the rehabilitation costs for historic buildings on Washington Avenue. After establishment of that credit, Washington Avenue experienced a boom in spending that consistently and sharply inclined and declined as seen in Figure 4.20. This was completely different from national and metropolitan trends that held a consistent rise in spending until 2006 (US Census Bureau, n.d. & Federal Reserve Bank of St. Louis, 2012).

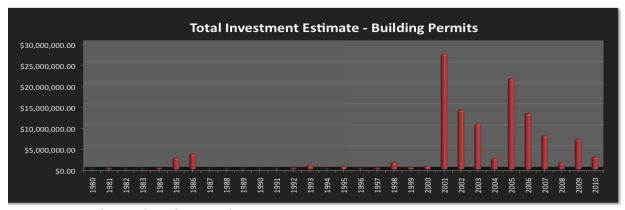
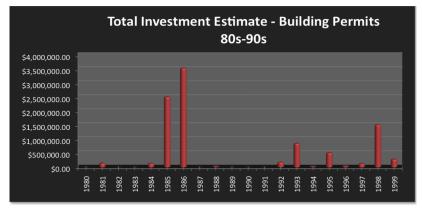


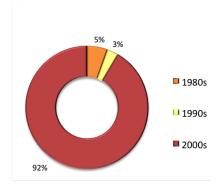
Figure 4.19 Total Rehabilitation Investment Estimates

Source: Data from City of St. Louis 2010

Figure 4.21 Building Permits Dollars From 1980s-1990s

Figure 4.20 Building
Permits Dollars per Decade





Source: Data from City of St. Louis 2010

From 2000 to 2009, building investments totaled an estimated \$106 million, as compared to \$9.8 million invested from 1980 - 1999. It is likely that the Historic Tax Credit was a major reason for redevelopment, but there was some development prior. In the 1980s, investment estimates totaled \$6.3 million. A majority of that came in 1985 and 1986. During 1985, 1000 Washington Avenue received \$2.5 million in interior renovations for office use. Then in 1986, the building owners invested \$3.43 million for more interior renovations. Since this was the first major rehabilitation of a building on Washington Avenue, it is important to consider this as a catalyst. It is worth noting that 1000 Washington is near the downtown employment district, which could be a significant reason for its redevelopment. This empirical data however neglects to mention the investments made to the Lucas Park Apartments at 507N. 13th Street in 1986, as noted in the narrative. By adding 60 residential units to the area, this building too could be an urban catalyst. The year before, 1079 Washington Avenue was converted to a few art lofts and galleries, which need consideration.

In the 1990s, development was sporadic, as evident in the bar graph below. This was not consistent with metropolitan and national trends. As a whole, the investments in the nineties were about \$2.9 million less than the eighties. While no building had as much invested as 1000 Washington in the eighties, three did have investments significantly larger than other buildings. In 1993, there was \$800,000 in interior alterations performed in 1228 Washington Avenue for a

mixed commercial/residential use. The use is indicative of those seen on Washington Avenue today and thus makes the building worth considering as a catalyst. This project was not included in the narrative. In 1995, 1133 had multiple building permits totaling \$455,958, which helped transition the building into a hotel. Since the building is no longer a hotel and hotels are absent from the study area, the redevelopment efforts do not indicate the presence of an urban catalyst. The final building with significant reinvestment was 1224 Washington Avenue. In 1998, the Building had interior alteration totaling \$1.2 million, used to create a nightclub.

Investment reached pinnacle achievements in 2001, which was earlier than national and regional apex in 2005-2006. This contrast indicates that Washington Avenue trends were independent of larger influence. Substantial investments came during the 2000s. Two buildings accounted for the largest ventures during the year. The Merchandise Mart, at 1000 Washington Avenue, received \$19.5 million, making it the largest project on the block, while 1228 Washington had investment totaling \$7.8 million. These projects denote the beginning of the building boom on Washington Avenue, making them potential catalysts. While projects followed suit, any period up until this time could have catalytic presence. The time during the boom or proceeding would not provide conditions optimal for catalytic events given trends already set in motion.

Mounting Building Permit Activity

Building permits help identify potential catalysts by indicating increases in building activity. They also help determine whether development builds on existing character and modify existing elements. These are important characteristics of urban catalysts. To discern catalysts, we look at building trends, particularly focusing on permit booms and periods of increase.

As evident in Figure 4.23 and 4.24, most applications for building permits occurred during the 2000s, forming a bell-shaped curve. The national and local trends each have different overall trends as seen in appended Figures A.4 & A.5. The peak occurred in 2005 and 2006, meaning a catalyst would occur before this happening. The beginning of the curve was between 1996 and 2000. If a catalyst resides in this bell pattern, it would likely occur during the uptick in permits, beginning from 2001 or earlier. While the St. Louis metropolitan trends are more

comparable than national ones in the 2000s, in that they share peak years with Washington Avenue, they are much less consistent in the late 1990s. Therefore, once again the local economy played a role in the Washington Avenue trends, but was not entirely indicative of the patterns occurring there. The patterns found in the 1990s tell of the unique and localized trends found on Washington Avenue, meaning building momentum was more indicative of event occurring at the block level.

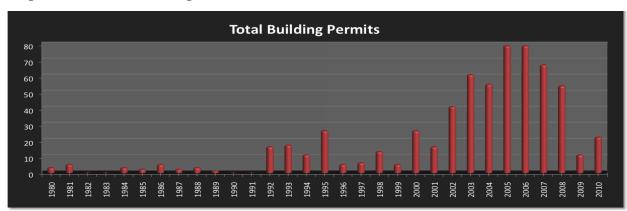
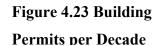
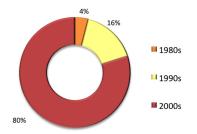


Figure 4.22 Total Building Permits

Source: Data from City of St. Louis, 2010





While the 2000s produced a strong majority of the building permits on Washington Avenue (80%), there was surge of building during the 1990s. The majority during that decade occurred from 1992 to 1995. This precursor to the boom also has potential in the realm of urban redevelopment catalysts. Though the direct association is harder to define, some of the predevelopment trends could serve as a foundation for future events. The same could also be true of events during the 1980s, though the association would be even more difficult to identify.

The highest permit years of the 80s were low compared to the 1990s. While there were few permits in the 1980s, some years contained a greater proportion of permits than others. Building permits in the 1980s were both sparse and sporadic, there was a cluster formed between 1984 and 1989. The year 1986 contained the most permits of the decade.

Overall, building permit patterns indicate that building in the 1990s might have spurred development in the 2000s since there was a substantial increase in building activity after that period. The lack of building activity in the 1980s, suggests the period was unlikely to produce an urban catalyst that could have facilitated an increase in building permits in the following decades. However, the evidence against a 1980s catalyst is not enough to rule out its existence.

It is also worth noting that developments during these three decade generally contained efforts that brought building facades closer to their original appearance. Previously many of these structures had owners who covered the existing facades in favor of new, modern designs. Most of these modern facades detracted from the historic character of the buildings. As a result, generally speaking, the most recent building improvements helped strengthen the community identity. They also modified the existing elements rather than creating new construction, which is an urban redevelopment catalyst characteristic.

Growing Occupancy Levels

The use of occupancy permits in the quest to identify urban catalysts helps determine the level of activity on Washington Avenue. Because catalysts cause an increase of services and people, periods of activity advances after an event can lead to the belief that a catalyst is present. They also allow use to explore the change in land uses over time and see how well proceeding uses fit with the surrounding context.

On Washington Avenue, the street life and building activity predominantly increased over the study period. In comparison to the other data analyzed, occupancy permits reached their redevelopment climax during the 2000s (Figure 4.25). Unlike the previous data, a greater share of the permits was during the 1990s and 1980s (Figure 4.26). This tells us buildings maintained occupancy before the major redevelopment upswing.

While the buildings were occupied, it does not necessarily mean that buildings were full. This was especially true in the 1980s where narrative accounts document the frugal use of buildings on Washington Avenue. The permit patterns during this time speak more to efforts at

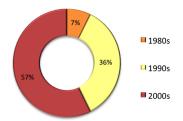
1000 Washington where the property changed ownership frequently (as indicated later). The permit patterns also depict a focus on offices and clothiers (as seen Figure 4.27). In reflecting on the narrative timeline, we know that most of these tenets were paying relatively low rents. Overtime, these tenets were forced to relocate do to rising land values. With only 12 permits submitted (Figure 4.28), the 1980s only accounted for seven percent of the permits during the study period. No major upswing in permits during the 1980s means that any potential catalyst during this period would not have generated a quick change in redevelopment momentum.



Figure 4.24 Occupancy Permits

Source: Data from the City of St. Louis, 2010

Figure 4.25 Occupancy
Permits per Decade



The 1990s, however, marked a period of increased activity on Washington Avenue. With 36% of the permits, the 1990s saw a rise of activity that was not on par with the amount of money invested into the area. This in large part was due to the arrival of more tenets paying lower rents than seen today, which would suggest that tenets in the 1980s required areas of less refinement than those in the following decades.

In terms of land use, the 1990s increases came via art galleries, nightclubs, restaurants, offices, and some retail. This boom in occupancy permits accounted for a greater percentage than

seen in building permits or investment capital. This rise in occupancy permits and new land uses coming to the area signify an elevated desire to locate and be on Washington Avenue. This all transpired despite the area not seeing as much investment until the 2000s.

With the land uses more closely resembling those seen on Washington Avenue today, it is fair to consider the impact events in the 1990s had on the street during the 2000s and beyond. It is also worth noting that building and occupancy permit activity both started elevating during the 1990s. Considering all that was happening during the 1990s, there is a strong likelihood that a catalyst exist during this period.

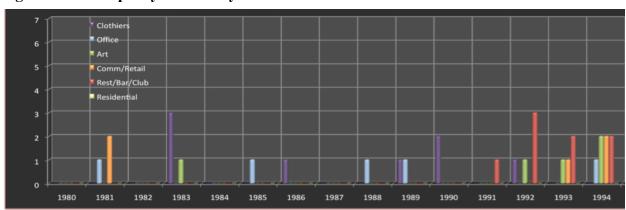
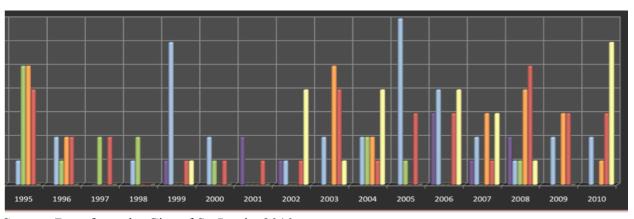


Figure 4.26 Occupancy Permits by Use

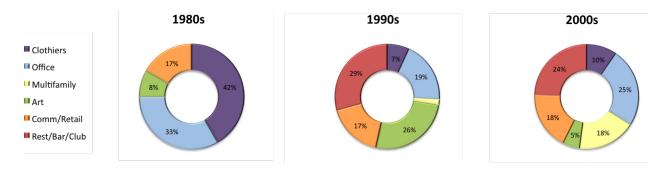


Source: Data from the City of St. Louis, 2010

In the 2000s, buildings on Washington Avenue started filling up immensely. Whereas the 1990s brought some activity to first floor storefronts and minimal occupancy in remaining

stories, the 2000s brought tenets to all building levels. As a result, street dynamism reached new highs and started resembling the days of "the street".

Figure 4.27 Occupancy Permits by Use per Decade



There was also some notable changes in land use during this time. The emergence of residential as a major use came in swift fashion. Within ten years, Washington Avenue went from one residential permit to 17 permits. While this might seem like a large number, it is worth noting that only one permit is necessary for a building full of residential units. Therefore, as many as 17 buildings contained new residents for which there is no known count.

Occupancy for other permits grew as well. The restaurants and bars category rose 35.5%, while general commercial and retail grew 70%. The largest gains, aside from residential, were clothiers at 125% and Office at 109.1%. These increases signify a greater intensity of uses, in addition to wider diversity of uses. There was however a decline of 66.7% for the arts category. This might be due to the increase of in real estate values. As rents continued to inflate fewer galleries opened, some moved, and others closed shop. Yet, until this day, Washington Avenue retains its textile and artistic roots.

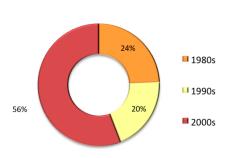
The 2000s were an obvious period of rebirth, but could events in the 1980s and 1990s cause this drastic rise in activity? Alternatively, was there a catalytic event at the beginning of the 2000s? Could there be different catalytic event for specific increases in use activity? All these questions provide direction to the urban redevelopment catalyst search.

Ownership Shifts

While transfers of ownership were supposed to help distinguish the change in real estate values, the data collected lacked the costs associated with each transaction. Thankfully, the

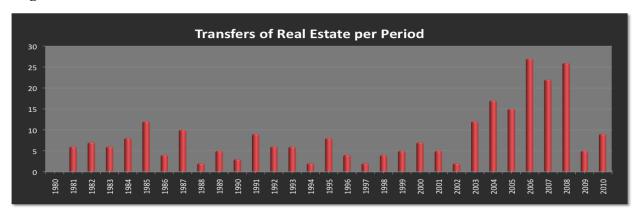
narrative sources explored earlier provided this information. The improvements made to these buildings also show where increases occur. Through the data and narrative discussions, we see growing land values every decade.

Figure 4.28 Transfers of Real Estate per Decade



This transfer of ownership does however serve some use. One pattern depicted in Figures 4.29 and 4.30 is the boom in transactions during the 2000s. A major reason for this trend is the sale of condominiums. There were also two large real estate packages available in 2001 and 2004 for large sums of money. Coupling this information with the transfers allows us to see the rising demand for property on Washington Avenue during the 2000s.

Figure 4.29 Transfers of Real Estate



Source: Data from the City of St. Louis, 2010

Delving into the Catalyst

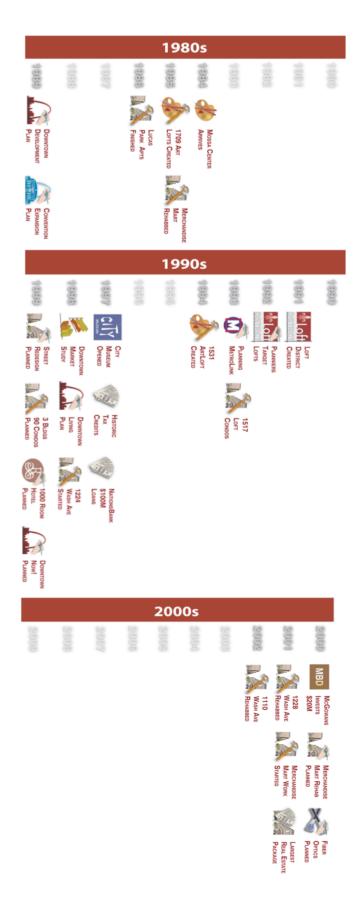
Receiving an American Planning Association award for being a "Great Street", Washington Avenue has come along way over thirty years. What events played the most critical roles in this re-emergence? While the developmental history of Washington Avenue provides a detailed history of the street, one still wonders whether a particular event unleashed a wave of renewed energy on the street.

As identified throughout this chapter, there are a number of potential catalysts. After indicating these, the list needs parsing. As a means of seeing all the potential catalysts and to pair down the group, we start with a graphic illustrating types of redevelopment events and where they occurred in time. The next two pages provide graphics needed to comprehend this information.

Potential Catalysts

Figure 4.32 denotes all of the potential catalysts on Washington Avenue as discussed in the narrative and data history. By understanding where these occur in relation to development trends and activity around the study area, a synthesis of actual catalyst becomes possible. To discern all of the complex data necessary to identify urban redevelopment catalysts, utilization of an infographic occurs. As seen on the next page, many elements are distinguishable in an easy to see graphic.

Figure 4.30 Timeline of Potential Catalytic Events



Catalytic Analysis

The featured infographic (Figure 4.33) shows the relationship of redevelopment events and patterns. Immediately noticed is the explosion of growth during the 2000's. This increase follows a group of events occurring between 1997 and 2002.

One event during that time stands out as having the greatest impact. The emerging availability of historic tax credits paved the way for a substantial redevelopment phase on Washington Avenue. Without this money, as some developers noted, few would have been able to rehabilitate buildings on Washington Avenue.

OCCUPANCY BY USE 1980s 1984 \$2.5M \$3.5M 1990s 2000s 2004 2006 2009

Figure 4.31 Summary of Redevelopment of Washington Avenue and Potential Urban Redevelopment Catalysts

A quick look at *Geo St. Louis* (the city's website containing property records) shows that most of the properties on the street received tax abatements. Therefore, the tax credit program was heavily utilized for revitalization. Despite program success, its not likely this program was catalytic by the definition provided earlier. As one developer noted, tax credit utilization could occur anywhere in Missouri. The effects of the program felt all over the state, including metropolitan areas like St. Louis, Kansas City, Springfield and Jefferson City. If the tax program were catalytic, it should have caused a localized reaction. A statewide impact is far from local. This, however, does not demean the value of the tax credits. They played a critical role in the success of Washington Avenue.

A developer also made another point for using the tax credits on Washington Avenue. Kevin McGowan of McGowan Brothers Development said the tax credits made projects financially feasible, but the company targeted Washington Avenue for redevelopment because of the improvements already made and the plans for what was to come (Duffy, 2000). Other developers echoed these comments, as discussed in the preceding narrative. With this in mind, some questions arise. What events caused people to target the area and what caused those initial events in the first place?

There were many events in the late nineties and the first few years after the millennium. During this period, Washington Avenue became a focal point for public improvements including a new streetscape and fiber optic lines. There were also plans for a large hotel and other redevelopment projects. These prospects certainly appealed to developers. Although, there was already activity on the street before this period.

While large investments in building rehabilitation did not occur until after the historic tax credit program started, hope for Washington Avenue emerged much earlier. Visions for the street began developing with the first waves of loft buildings, plus the arrival of art galleries, restaurants, and clubs.

The loft-building trend that exploded in the 2000s gained momentum in the early to midnineties when two buildings on Washington Avenue opened with loft units. The first was at 1517 and the second, the larger of the two, opened at 1531 called ArtLoft. The ArtLoft was better known, and possibly influential. It is also worth noting that the Loft District was formed before the establishment of 1517 and 1531 as lofts, meaning the developers were carrying out a vision already founded.

Despite being two of the earliest loft buildings, art lofts at 1709 Washington, which opened in 1985, were the first on the street. Around the same time, the Merchandise Mart received rehab attention, but was not fully finished. A year later, the Lucas Park Apartments opened. This was the largest creation of residential units on Washington Avenue at the time. While the lofts at 1709 Washington were the first, Lucas Park Apartments were in the works at the same time and had the greatest impact on the study area, because of the shear number of residents brought to the street and due to the size of the investment.

Urban living was crucial to the success of Washington Avenue, but when reflecting on the development of the street it was the combination of art galleries, art lofts and clubs that first generated any sort of activity and momentum on Washington Avenue. The club scene has waned since the nineties and is less a part of the identity of the study area than at its beginning. However, the entertainment scene evolved, from primarily grungy nightclubs to more elegant restaurants and bars, and continues to maintain a strong presence within the study area.

The presence of art remains on Washington Avenue and was one of the major draws early during revitalization efforts. The Mossa Center was one of the first main art galleries on Washington Avenue. After its arrival, more galleries and art lofts followed suit. Some might claim that as the galleries moved in, so did the clubs. Whether there is a direct relationship between the two remains unknown, but it is interesting that both came after the arrival of the Mossa Center.

Given the progression of development following the gallery's arrival, the Mossa Center is likely a catalyst of urban redevelopment. As noted before, a catalyst is not a silver bullet for urban renewal. Rather it sparks a series of processes and events providing a starting point for redevelopment. This is true even if their impact seems small on the surface or if they lack

prominence. They also generate activity on the street, as the Mossa Center did with its daily business and frequent open houses. It also modified the existing use, while still maintaining the historical presence of the building on the street. The birth of art galleries within the surrounding area also signifies a localized reaction. All of these characteristics speak to those identified by Attoe, Logan and Sternberg.

Epilogue of Findings

The Mossa Center certainly was not able to, single-handedly, propel developers or the city to invest in the area. Yet, the center likely instigated the desire for others to start up or move their galleries to Washington Avenue; as such, the creation of art lofts followed. With a growing desire to live, work and play on the street, the city became interested in making Washington Avenue a loft district. When funds to support the district became available, redevelopment was already set in motion, creating growing value in the area. So, while other events kept the process going and without them the street wouldn't be where it is today, the Mossa Center provided an agent of change that spurred a chain of events making Washington Avenue what it is today.

Chapter 5 - Conclusions

Urban Redevelopment Catalysts

There are multiple take home points that derived from this study. Some focus on the process and language of research and academic studies. Others provide insight into urban dynamics, thus helping give direction to future redevelopment efforts. Some resultant strategies might include a change in policy and belief structure. Regardless, of these conclusions, the study provides another lens from which we may analyze urban redevelopment catalysts, urban dynamics and redevelopment practices.

By analyzing the definition of an urban redevelopment catalyst from multiple sources and defining a set of associative characteristics, researchers and urbanists can speak a common language. This is important because the use of the word catalyst to describe urban redevelopment processes has often been vague, perhaps over used, and likely misunderstood. Simply developing a universal definition provides a base from which discussions and analysis of urban catalysts can emerge. Similarly, there needs to be a process we can use to provide well developed theories and evidence, further strengthening discussions.

In developing a methodology for studying catalysts, in addition to defining catalytic characteristics, others may investigate the presence of catalysts in particular areas of interest. They may also critique and improve the process, making for a stronger research strategy. The resultant information from these studies will help make better-informed decisions. This is especially true if our discussions move from subjective to objective. This is possible when we change the dialogue from opinionated and feeling based to depending upon tangible evidence that allows for clear delineation of events and processes causing urban redevelopment patterns and trends.

Studying urban redevelopment catalysts also provides some insight into the ways that our cities revitalize. In the literature review, there were many examples of large-scale urban catalysts, but little mention of the possibility of smaller catalysts. There is also some proclamation by developers, media, and city officials, over the years, that "silver bullet" projects

are a critical component of urban revitalization. Yet, this study shows that smaller events and developments can have a strong influence on development trends at microarea scale.

It is also important to note the impacts of larger catalysts have often been overstated, as seen in the works of Timothy Chapin (1999 & 2004), especially at broad scales. The identification of smaller catalysts, in addition to realizing the overstating of benefits of larger ones, should cause us to consider focusing on the threads of urban fabric, during implementation of larger scale goals, rather than the whole piece of cloth. This should not read that we are to neglect regional, city or district plans. Rather, to carry out the visions, goals and objectives found in these plans, actors in urban redevelopment should design implementation strategies at a diversity of scales. The microarea is one such scope that needs attention. It also requires strategies that directly address the strengths, weaknesses, character and potential of a specific place and situation.

Washington Avenue

In the case of Washington Avenue, multiple elements created and continued interest in redeveloping the area. Some government involvement included creating plans, making infrastructure improvements and providing public funds for stimulus. All of these strategies drew developers, workers, residents and visitors to Washington Avenue. While these events were not necessarily catalysts, they built upon previous events and guided future development.

Similarly, private investment, visioning, and diligence carried out desires of the community. Whether this was by providing residential units, space for businesses or supportive amenities, developers, citizens and business owners worked hard to make Washington Avenue a success. Together, the public and private sectors worked in congruence to provide incentive at key moments, which drew individuals for a diversity of reasons. Obviously, no one event or sector enticed everyone to the area. Instead, a series of unique events motivated members of the urban community at various times.

Surely there is much to learn from the redevelopment of Washington Avenue and Urban Redevelopment Catalysts. The lessons here are likely to only point out a few discoveries. I hope

that as others make their own findings, they will share their knowledge gained to further enhance our urban environments.

Redevelopment Strategies and Recommendations

Keeping in mind the developmental history of Washington Avenue and the principle characteristics of an Urban Redevelopment Catalyst, there are a few recommendations for stakeholders involved in urban revitalization. This advice pertains to both the private and public sectors.

Develop district and other specialized, plans. As evident in this study, plans have the ability to provide vision for an area, while also drawing investment. Comments from multiple developers and business owners indicated their interest in Washington Avenue because of the public investments already made or those coming in the near future. These investments included infrastructure explicitly delineated in the Downtown Now! Plan for downtown St. Louis. As elements of the plan carried out, redevelopment momentum further grew. While this plan was by far the most ambitious of those relating to Washington Avenue, it was also the most implemented. That does not negate the impacts of prior plans. The plan that forged the Loft District certainly solidified a foundational vision for Washington Avenue to serve as a place for those interested in loft living. This type of residential living further solidified the ability of the street to maintain steady supply of businesses. It is important to note that some plans, both public and private, were unimplemented. Yet, by making efforts to execute these plans and by ensuring these attempts were highly visible to the public, people saw interest in the developmental potential of the area. As these plans gained publicity, the desires and visions of developers also became public, which further propelled citizen thinking and involvement.

Though these plans were not urban redevelopment catalysts, they strengthened the catalytic affects of the catalyst, by acknowledging its affects and constructing strategies to build upon the momentum created. This is important because urban planners have a few tools that they utilize. Plans are one of the most well known and widely used of these tools. While plans frequently seem to "gather dust on bookshelves", a common expression made by those

frustrated with failed plans, this case study shows why well crafted and utilized plans serve as an excellent tool for planners. It also shows why understanding and identifying urban redevelopment catalysts is a necessary skill for urban planners. In constructing some of our plans, we should not strive to create catalytic developments, but rather maintain and bolster their impacts when they exist. In that regard, plans can provide the support system that allows an urban redevelopment catalyst to exist. In the case of the Mossa Center, the development generated catalytic impacts, but could this impetus continue without the support of publicly created plans and the resultant investments? Chances are that Washington Avenue would not be as successful without their existence and, thus, we reaffirm value in and need for creation of plans.

- Develop comprehensive, adaptive strategic plans supporting both small business owners and
 developers of varying capacities. Small business owners initially carried redevelopment
 efforts in the study area, but eventually developers took over as land values increased. Some
 of these developers were first starting their ownership and development portfolios. Targeting
 and assisting these up-and-comers can stimulate redevelopment trends, potentially at
 relatively low expense.
- Continue to focus on infrastructure that supports redevelopment efforts. In the case of Washington Avenue those improvements were the streetscape improvements and fiber optic lines on Washington Avenue. Infrastructure improvements can build the belief that the area is turning around and going to be a success for a long time. It certainly helped that downtown St. Louis had a convention center expansion and MetroLink creation only a few blocks away from the Loft District. People like to see improvements near their projects that add another positive attribute to their locale appeal.
- Continue to utilize Historic Tax Credits, because they allow developers to rehabilitate
 buildings/areas otherwise financially dissuasive. Most of the structures rehabilitated on
 Washington Avenue have tax credits tied to them and developers claim they would not have
 developed without them.

Study Limitations

While this study provided a wealth of knowledge on Washington Avenue and Urban Redevelopment Catalysts, there were some challenges and imperfections.

- The data collection, sample size (while large in context of other redevelopment studies in St. Louis) for Washington Avenue might have been too small given the redevelopment history of the street as a whole. There were obviously some positives in selecting a manageable sample size, but not having data for some of the blocks caused for a heavy reliance on narrative data. It is difficult to validate this information with statistical evidence. It is also challenging to find specific development patterns outside the study area without an information buffer. Without the ability to analyze the surrounding areas, it is difficult to see the relationships between trends inside and outside of the study area. As an example, some of the first art galleries and artist lofts fell outside of the study zone and while the researcher was able to validate the arrival of these important redevelopment elements, the absence of a few sources would have made this a much bigger issue by creating gaps in the data.
- Another associated task was figuring out the areas needed to compare the dynamics of four blocks on Washington Avenue with the dynamics of other areas that might influence the focus area. While there was some direction provided by initial research, it was not until the development of the Findings chapter that the researcher firmly grasped some of the possible dynamic processes affecting development trends in and around the area. The ability of a researcher to incorporate all of these dynamics into a study is difficult given the wide array of potential influences. In the future, periods of reflection and additional information collection need inclusion in one's schedule.
- While data sample size and fundamental understanding of related dynamics pose a challenge and could be improved with a longer timeline, the period of time required to perform the study posed problems. A governmental department, organization, academic or private sector firm would have to either account for the time required to adequately complete the project or tweak the methodology to produce quicker results, without diminishing the quality of the study. This could prove problematic, because some circumstances will arise with little

anticipation. A major hurdle of this study was the time spent waiting for completion of a Sunshine Request for information. Like many documents made before the use of electronic cataloging systems, the building and occupancy permits from the City of St. Louis were on old micro film stored away in an area not easily accessible to the public. While City workers did their best to process this data in a prompt manner, it still took over two months to obtain. Should the researchers of future redevelopment studies work in cities that keep electronic records of historic data, this process will take much less time.

• Finally, getting a sense of impacts of larger trends or events on a study area are difficult to decipher. There is no scientific method to studying these relationships. Rather the researcher(s) rely on their best judgment, which always leaves room for doubt in one's findings. Regardless, these occurrences are important to consider, as they can depict larger moving forces and trends at hand.

Further Research

- This report and other precursory studies noted in this report establish a starting point for studying Urban Redevelopment Catalysts. Now that there is a documented process for exploring urban redevelopment catalysts and a series of defining characteristics, others may test these and fine-tune them. Some researchers might be interested in finding quantitative based approach to identifying urban redevelopment catalysts.
- Future studies may also identify other types of redevelopment catalysts. Some areas of potential exploration might include analysis of impacts stemming from performing arts venues, retailers, firms, hotels, urban parks, waterfront promenades, streetscape improvements and other revitalization/regeneration projects. While this list is not inclusive, it provides an example of the range of scales and types of projects that might be worth exploring.

References

- Attoe, W., & Logan, D. (1989). American Urban Architecture: Catalysts in the Design of Cities. Californa: University of California Press.
- Berger, J. (April 9, 2003). Developer has Plans to Remake Days Inn as Short-term Hotel. St. Louis Post-Dispatch, p. B2.
- Berger, J. (February 12, 1993). Downtown Will Get Residential Condos. St. Louis Post-Dispatch, p. 1F.
- Berger, J. (April 13, 2003). Steffen Strikes Again, with More Lofts Set to Open on Washington Avenue. St. Louis Post-Dispatch, p. C2.
- Bill Bell, J. (February 9, 2000). State Senate Panel Endorses Sales Tax to Revive Downtown. St. Louis Post-Dispatch, p. B2.
- Bower, C. (July 31, 2000). Center Stays Committed to Child Care. St. Louis Post-Dispatch, p. C1.
- Campbell, S. (2003). Case Studies in Planning: Comparative Advantages and the Problem of Generalization. Working Paper Series. Ann Arbor, Michigan.
- Chapin, T. (2004). Sports Facilities as Urban Redevelopment Catalysts. Journal of the American Planning Association, 70 (2), 193-209.
- Chapin, T. (1999). Urban Revitalization Tools: Assessing the Impacts of Sports Stadia at the Microarea Level. University of Washington.
- David Mason & Associates. (2011). Rudman Building Renovation. Retrieved January 15, 2012 from David Mason & Associates: http://www.davidmason.com/structural/Rudman%20Building%20Renovation.pdf
- DiMario, J. (February 3, 1986). Rebirth of Washington Ave. caps comeback of downtown St. Louis. St. Louis Globe-Democrat.
- Downs, P. (2005). First Lofts, Then... Retrieved September 24 2010 from Real Estate Management: http://www.stlcommercemagazine.com/archives/november2003/realestate.html
- Downtown Now! (June 1999). Downtown Now! St. Louis Downtown Development Action Plan. Retrieved September 10, 2010 from City of ST. Louis: stlouis.missouri.org/downtown-now/june/ExcScrn1.pdf

- Downtown St. Louis Partnership. (July, 2008). St. Louis Downtown Residential Inventory July 2008. Retrieved August 15, 2011 from DowntownSTL: http://www.downtownstl.org/Libraries/Documents/DowntownResidential_InventoryJuly 2008.sflb.ashx
- Duffy, R. W. (June 25, 2000). Buildings Nobody Wants Pay Off for Downtown Loft Dweller. St. Louis Post-Dispatch, p. B1.
- E.F. Porter, J. (August 6, 1989). Shoemehl Confident in Downtown Plan. St. Louis Post-Dispatch, p. 4C.
- Eardley, L. (August 13, 1988). Bi-State Approves Light Rail. St. Louis Post-Dispatch, p. 1A.
- East-West Gateway. (February 13, 2007). Great Streets Initiative. Retrieved September 21, 2010 from What is the St. Louis Great Streets Initiative? : http://www.greatstreets-stl.org/content/view/527/1613/
- Evans, T. (November 18, 2004). Developer will Dress Up Downtown, Lafayette Sites. St. Louis Post-Dispatch, p. B1.
- Evans, T. (April 20, 2005). Developers Take Credits for Revival. St. Louis Post-Dispatch, p. D1.
- Faust, F. (December 11, 1989). Drawing Buyers...Galleries Enjoying Business for Art's Sake. St. Louis Post-Dispatch, p. 16.
- Federal Reserve Bank of St. Louis. (2012). Total Construction Spending (TTLCONS). Retrieved March 20, 2012 from FRED: http://research.stlouisfed.org/fred2/series/TTLCONS?cid=32436
- Flannery, W. (January 11, 1993). Revival Stirring on Washington Avenue. St. Louis Post-Dispatch, p. 12.
- Franklin, D. E. (September 25, 1999). Living Downtown Attracts Professionals. St. Louis Post-Dispatch, p. 13.
- Freeman, G. (March 3, 1998). New Hotel, Loft Living is Hot, Activity on the Rise. St. Louis Post-Dispatch, p. B1.
- Futterman, E. (March 15, 1993). Raving Madness: All-Night Dance Parties Catch on in St. Louis. St. Louis Post-Dispatch, p. D1.
- Goodwin, C. (July 8, 1999). Washington Loft District Finally Gets a Grocery Store. St. Louis Post-Dispatch, p. C1.
- Gotler, N. (February 19, 1981). Painful Trip Down Washington Avenue. St. Louis Globe-Democrat.

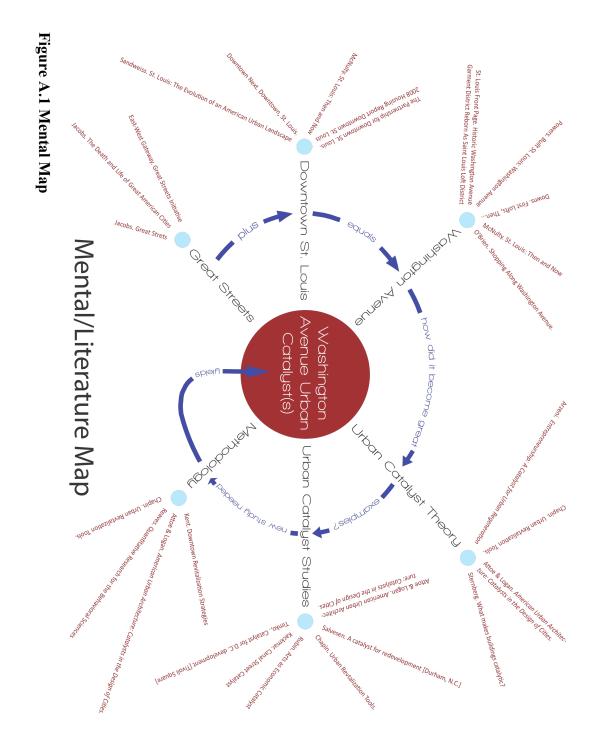
- Heisler, E. (May 13, 2005). Loft Movement is Filling Other City Buildings. St. Louis Post-Dispatch, p. C4.
- Jacobs, A. B. (1999). Great Streets. Cambridge, Massachusettes: The MIT Press.
- Jacobs, J. (1993). The Death and Life of Great American Cities. New York, New York: Random House, Inc.
- Jr., S. B. (July 27, 2004). Washington Ave. has Lofty Hopes for Vibrant Future. St. Louis Post-Dispatch, p. B1.
- Kacmar, D. D. (2007). Canal Street catalyst. Urban Land, 57 (2), 28-33.
- Kent, R. (1995). Downtown Revitalization Strategies: An end-of-the-century assessment. Journal of the American Planning Association, 61 (4), 429-437.
- Koman, K. L. (December 26, 1988). Merchandise Partnership Sells Other Building. St. Louis Post-Dispath, p. 17.
- Missouri State Historic Preservation Office. (n.d.). Rehabilitation Tax Credits for Historic Buildings. Retrieved July 22, 2001 from Missouri Department of Natural Resources: http://www.dnr.mo.gov/shpo/TaxCrdts.htm#taxcreditforhistory
- Moore, D. (August 24, 2003). Loft District Residents Want a Place for Pooches to Romp. St. Louis Post-Dispatch, p. C1.
- Moore, D. (October 1, 2003). Spantastic. St. Louis Post-Dispatch.
- Noguchi, Y. (November 25, 1998). City Gets Federal Grants and Loans to Finance Hotel. St. Louis Post-Dispatch, p. B3.
- O'Brien, D. (n.d.). Shopping Along Washington Avenue. Retrieved September 27, 2010 from About: http://stlouis.about.com/od/shopping/tp/Washington_Avenue_Shopping.htm
- Parish, N. (January 28, 1998). Downtown-Living Plan Emphasizes Apartments. St. Louis Post-Dispatch, p. B1.
- Peterson, D. (April 15, 2004). Permium Condos are Coming to Newly Sold 901 Washington. St. Louis Post-Dispatch, p. C2.
- Powers, R. (n.d.). Built St. Louis: Washington Avenue. Retrieved September 22, 2010 from Built St. Louis: http://www.builtstlouis.net/washington/index.html
- Price, H. (June 3, 2000). Washington Avenue is set to become a High-Tech Spot. St. Louis Post-Dispatch, p. 1.
- Prost, C. (September 26, 2003). "Aristocrat" Awaits a Grand Return to Washington Avenue. St. Louis Post-Dispatch, p. C7.

- Prost, C. (April 18, 2003). A rehabbed Old Post Office Could Open in January '05. St. Louis Post-Dispatch, p. C2.
- Prost, C. (September 20, 1994). A View of the Room: Loft Living Offers "Enchanted Space". St. Louis Post-Dispatch, p. 1B.
- Prost, C. (November 2, 1995). Artists' Lofts Now Under Construction . St. Louis Post-Dispatch, p. 12A.
- Prost, C. (October 20, 2000). City Picks Merchandise Mart Renovator. St. Louis Post-Dispatch, p. C11.
- Prost, C. (December 20, 2001). Developer Proposes a New Downtown Loft District. St. Louis Post-Dispatch, p. B1.
- Prost, C. (May 25, 1995). Developers of Downtown Lofts Get Good News on Financing. St. Louis Post-Dispatch, p. 17A.
- Prost, C. (March 19, 2004). Downtown Bags Two Hungrily Awaited Groceries. St. Louis Post-Dispatch, p. B1.
- Prost, C. (January 8, 1999). Downtown Loft Project Revived: New Team Takes Over 13th Street Building. St. Louis Post-Dispatch, p. C1.
- Prost, C. (August 20, 2004). If you Rebuild it they will come. St. Louis Post-Dispatch, p. B1.
- Prost, C. (December 15, 1991). Loft Projects Receive Grants... Washington Avenue Targeted. St. Louis Post-Dispatch, p. 1D.
- Prost, C. (February 25, 2001). Lofty Hopes Pinned on Washington Avenue. St. Louis Post-Dispatch, p. E1.
- Prost, C. (July 7, 1998). More Downtown Lofts are Planned. St. Louis Post-Dispatch, p. C6.
- Prost, C. (June 12, 1998). More Lofts are Planned for Washington Avenue. St. Louis Post-Dispatch, p. C1.
- Prost, C. (September 2, 1999). More Than 200 Units Could Open within a Year. St. Louis Post-Dispatch, p. B1.
- Prost, C. (April 7, 1998). Nations Bank Pledges \$100 Million Toward Downtown Revival. St. Louis Post-Dispatch, p. A1.
- Prost, C. (January 25, 2000). New Lofts Enjoy and Artistic Touch. St. Louis Post-Dispatch, p. D1.
- Prost, C. (September 9, 1998). Old Sporting News Site will Become Lofts. St. Louis Post-Dispatch, p. C1.

- Prost, C. (May 17, 1992). Project Seeks to Revive Washington Avenue's Bustle . St. Louis Post-Dispatch, p. 1D.
- Prost, C. (May 17, 1992). Project Seeks to Revive Washington Avenue's Bustle. St. Louis Post-Dispatch, p. 1D.
- Prost, C. (September 3, 1981). Rebirth of Washington Ave. caps comeback of downtown St. Louis. St. Louis Post-Dispatch.
- Prost, C. (December 13, 1983). Restoring the Sole of "Shoe Street U.S.A.". St. Louis Post-Dispath.
- Prost, C. (November 19, 1997). State is Hurrying to Finish Tax Credit Rules . St. Louis Post-Dispatch, p. C1.
- Prost, C. (July 14, 1998). The Arts Play a Key Role in Planned Lofts. St. Louis Post-Dispatch, p. C6.
- Prost, C. (June 25, 2000). The Downtown Now Plan Faces Obstacles. St. Louis Post-Dispatch, p. B1.
- Prost, C. (April 12, 1998). This Downtown Plan Aims to Work. St. Louis Post-Dispatch, p. B1.
- Prost, C. (December 1, 1994). Warehouse is Envisioned as a Lofty Goal for Artists. St. Louis Post-Dspatch, p. 1B.
- Prost, C. (July 29, 2002). Washington Avenue is on its way back. St. Louis Post-Dispatch, p. 10.
- Rubin, J. J. (2001). Arts as Economic Catalyst. Urban Land, 60 (2), 56-60.
- Salvesen, D. D. (1999). A catalyst for redevelopment [Durham, N.C.]. Urban Land Europe, 58 (11/12), 76-81.
- Sauer, G. (April 30, 1989). Thoroughly Modern Mossa. St. Louis Post-Dispatch, p. 1S.
- Schlinkmann, M. (June 7, 1999). Washington Avenue Spruce-Up Aims to Lure Residents. St. Louis Post-Dispatch, p. A1.
- Shinkle, P. (July 8, 2001). Lofty Rents Bring Grumbles on Washington and at City Hall Real Estate Investor Raises Some Prices, Gains Some Supporters. St. Louis Post-Dispatch, p. E1.
- St. Louis Front Page. (2010). Historic Washington Avenue Garment District Reborn As Saint Louis Loft District. Retrieved September 24, 2010 from ST. Louis Front Page: Washington Avenue: http://www.slfp.com/WashingtonAve.htm

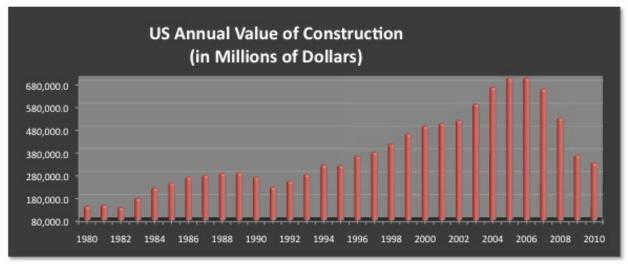
- St. Louis Post-Dispatch. (August 5, 1992). Mart Building Owner Again Seeking OK for Its Demolition . St. Louis Post-Dispatch, p. 3A.
- Stamborski, A. (July 10, 1999). 2 Washington Avenue Buildings Sold For Redevelopment. St. Louis Post-Dispatch, p. 24.
- Stanford, R. (June 11, 1989). 3-Decade Building Boom Reshapes Downtown . St. Louis Post-Dispatch, p. 4.
- Sternberg, E. E. (2002). What makes buildings catalytic? : how cultural facilities can be designed to spur surrounding development. Journal of Architectural and Planning Research, 1, 30-43.
- The Partnership for Downtown St. Louis. (2008). 2008 Housing Report Downtown St. Louis. Retrieved September 25, 2010 from Downtown, St. Louis: http://www.downtownstl.org/Libraries/Documents/2008HousingReport.sflb.ashx
- The Partnership for Downtown St. Louis. (n.d.). Washington Ave / Historic Garment District. Retrieved November 15, 2010 from Downtown, St. Louis: http://www.downtownstl.org/Live/Explore/DistrictsNeighborhoods/WashingtonAve.aspx
- Tipton, V. (July 25, 1993). MetroLink the Fastest Track in Town. St. Louis Post Dispatch, p. 8.
- Tomich, J. (May 27, 2005). For Lofty Appreal, Builders Add Amenities to the Mix. St. Louis Post-Diapatch, p. B4.
- Tucci, L. (March 30, 2004). Developer's Vision for Day's Inn is an Apartment Building. St. Louis Post-Dispatch, p. D1.
- Tucci, L. (January 27, 2004). Larry Deutsch Puts Washington Avenue Properties on the Block. St. Louis Post-Dispatch, p. C1.
- United States Census Bureau. (n.d.). New Privately Owned Housing Units Authorized by Building Permits in Permit-Issuing Places. Retrieved March 20, 2012 from Census: http://www.census.gov/construction/pdf/bpann.pdf
- United States Census Bureau. (February 2012). New Privately Owned Housing Units Authorized, Adjusted Data for the United States. Retrieved March 20, 2012 from Census: http://www.census.gov/construction/pdf/bpann.pdf
- Werf, M. V. (March 31, 2005). Building Boom Takes Effect Across St. Louis Area. St. Louis Post-Dispatch, p. B1.
- Yin, R. K. (1989). Case Study Research: Design and Methods. Newbury Park, California: Sage Publications, Inc.
- Zimmerman, J. (2008, July 15). From brew town to cool town: Neoliberalism and the creative city development strategy in Milwaukee. CITIES, pp. 230-242.

Appendix A - Literature/Mental Map



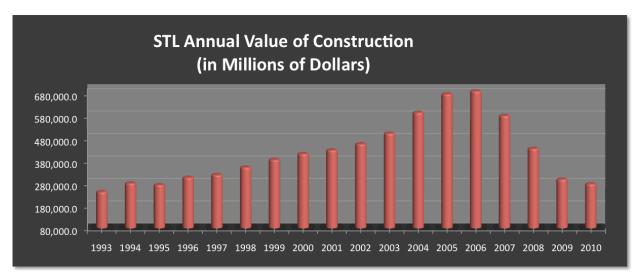
Appendix B - Comparison Graphs

Figure B.1 Annual Value of Construction Projects in the United States



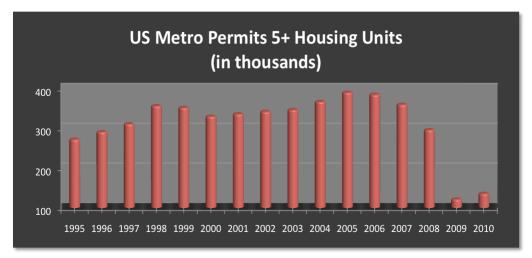
Source: United States Census Bureau, n.d.

Figure B.2 Annual Value of Construction Projects in the St. Louis Metropolitan Area



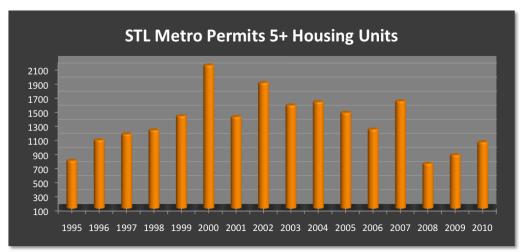
Source: Federal Reserve Bank of St. Louis, 2012

Figure B.3 Annual Value of Construction Projects in the United States



Source: Data from U.S. Census Bereau, 2012

Figure B.4 Annual Value of Construction Projects in the St. Louis Metropolitan Area



Source: Data from U.S. Census Bereau, 2012