

**THE ROLE OF THE ARCHITECT
IN THE PROCESS OF DEVELOPMENT**

A Thesis Presented for the
Master of Architecture
Degree
The University of Tennessee, Knoxville

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DEDICATION

To Remar Orphanage of Nicaragua who has inspired my interest in architecture and has fueled my drive to serve those unseen and unheard.

ABSTRACT

Population growth and cars have caused cities to sprawl from their downtown cores, resulting in a landscape of low density building. Far too often the empty lot at the edge of the city or along a highway attracts the next opportunity for development, furthering the gap between residential and commercial zones. The profession of architecture recognizes that urban site selection and mixed-use programming is vital to the social and financial health of a city, though it typically only participates in the design of the building. However, the visionary training and practice of architecture places the architect in a unique position to initiate successful projects on sites that are undervalued. That reality suggests that the architect's role in the process of development should be expanded in order to participate in programming and site selection. This expanded role will lead to more frequent and better quality urban development which is supported by financial incentives for cities, developers, and architects.

PREFACE

This thesis will examine the typical process of development and its impact on the city. It will question whether the assumed role of the architect within that process should be extended in order to take advantage of the profession's full spectrum of training. It will also explore development models in which the architect absorbs the role of the developer and other models in which the architect and developer work closely together during the entirety of the project. An investigatory building project will implement and further explore the advantages that become available when architects participate in the earliest stages of development.

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PART 1_INTRODUCTION

1_ Introduction

Today, most real estate development is motivated purely by economic concerns at the expense of many social issues. Many businessmen and some developers believe that the best opportunity for development lies at the next empty lot along the highway, a development strategy that continually expands the boundaries of the city. This tendency is evidence that the advantages of sprawl development are more visible than the complex benefits found in urban development. While many developers understand those benefits and initiate urban projects, there are conditions in the programming and site selection process that architects have been most appropriately trained to evaluate. Many urban sites are considered poor real estate because of preconceived notions about contextual issues. These conditions may include the vibrations of an adjacent railroad, the noise of the interstate, or an irregularly shaped lot. The architect has been uniquely trained to make the most of a site and turn a perceived negative into an amenity and the conceptual driver of a project's design. Unfortunately, in the typical development process architects are hired after the building program has been determined and the site has been selected. Therefore, the profession's creative vision is not fully implemented. A shifting of roles that allows the architect to become involved earlier in the development process would improve the project and contribute to a better urban landscape. One option that provides the architect with a greater scope of control and responsibility is to absorb the role of the developer, though it is important to recognize that developers operate with a separate set of skills that most architects do not possess. Therefore, a better option may be for architects and developers to work together as one entity that can more holistically find and analyze opportunities for projects.

These proposals allow for a more comprehensive design that would improve the social experience in the city. Not only have a positive impact on the city; several

opportunities would become available to the architects who take on the additional risk of assuming new responsibilities. Incentives would include increased political leadership, increased value as a profession, increased control of the design, and several financial opportunities. There are several architecture and development firms that utilize the architect's full range of skills. These models will be analyzed as options for architects to adapt and implement. Following this precedent study a case study project will investigate the potential benefits made possible when the architect assumes a greater role in the development process.

PART 2_THE ISSUE

2_ *Traditional Process of Development*

Most development is either initiated by a business' administration or by developers. Unfortunately many developers and most businessmen have no formal training in urban design. Therefore, and while there are many notable exceptions, the projects they often initiate are evidence of the more visible advantages of suburban development over the more complex advantages of urban development. Some of the benefits of suburban development include cheaper land, larger plots, and the perceived benefit of a lack of built context. In reality a built environment, even abandoned buildings, can provide opportunities to enhance a project's design and increase their economic viability. While there are many architects that understand the advantages of urban development, the traditional role of the architect only allows them to participate in the design of the building, leaving the general selection of site to the client. As mentioned many clients choose sites based on the economic qualities that they are aware of, often contributing to suburban development.

In the urban fabric of cities there tend to be gaps, void of program, that develop over time. They exist for a few reasons but some have major development potential. They exist partially because of the lack of appreciation of urban development by some developers as previously mentioned. They also exist because of a lack in the ability of development firms to imagine a successful project on a piece of land where existing conditions are atypical and undesirable. The traditional process of development does not support the development of these opportunistic gaps in the cities. A re-imagined role of the architect could mitigate the lack of urban mixed-use development by applying a more creative vision to land typically overlooked and undervalued.

Land use zoning is often considered another major cause of suburban, single-use development. This may actually only be an element of poor development, not the cause. There are two types of externalities that exist in urban land markets that cause land use zoning to exist (Boehm). The first is “zoning externalities” which exist because of fundamentally incompatible land uses. The solution is spatial separation. For example, residential and high pollutant industrial should probably not inhabit the same neighborhood for health and safety reasons. The second is “neighborhood externalities” which exists when two land uses may coexist in the same neighborhood, but can and usually do effect the land value and sense of community. Land use zoning can place certain restricts on these types of programs. Interestingly, we see in the case of Houston, Texas that land use zoning may not necessarily effect the growth of cities as we tend to think it does. Houston does not implement land use zoning laws and yet neighborhoods and commercial strips tend to develop just the same as cities with government intervention. Houston teaches us that the same factors used in land use zoning are the same factors that businesses and developers tend to use in determining locations for development (Boehm). Whether zoning laws are changed or even abandoned, cities will continue to grow in the same patterns unless another major change is implemented in the development process.

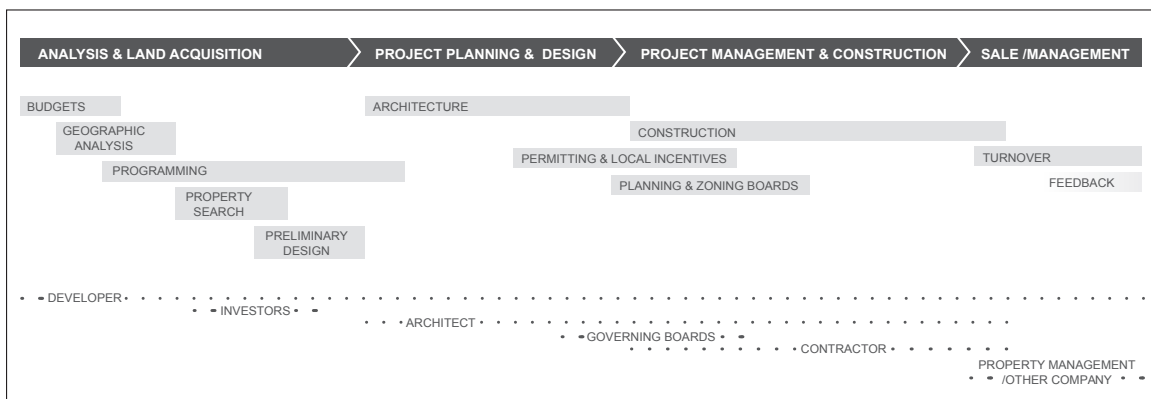


Figure 1_Traditional Process of Development

Source: Drawn by Author

2_ Urban Erosion

The density and mixed-use nature of downtowns allow the public to engage in a series of activities without driving from place to place. They also provide the conditions that allow for strange and interesting community events, such as farmer's markets or festivals that have local significance. Suburban development, on the other hand, does not possess the same qualities that encourage community engagement. In fact, suburban development can pull a city's population from its downtown, harmfully effecting its economy and vibrancy. Urban theorist, Jane Jacobs noted, "No neighborhood or district, no matter how well established, prestigious or well heeled and no matter how intensely populated for one purpose, can flout the necessity for spreading people through time of day without frustrating its potential for generating diversity" (Jacobs, 50). On that premise mixed-use communities are ideal because they allow the public to engage in their daily activities in a small proximity. There is also a relationship between the building and the street that suburban development does not tend to prioritize. Instead suburban development separates the home from the street to provide a larger front lawn, but in turn isolates the resident from the neighborhood.



Figure 2_Suburban landscape overtakes countryside
Source: National Geographic

2_ *Analysis of Downtown Knoxville and Turkey Creek*

A comparative analysis between Downtown Knoxville and Turkey Creek, a shopping center near Knoxville, provides a good fundamental comparison between urban mixed-use development and suburban commercial development. This comparison highlights the benefits of a dense community and provides a basis for the need to change from the traditional process of development. Downtown Knoxville, like the downtown in many other cities, has experienced a revitalization over the past two decades. What was once a dense, mixed-use downtown in the early 20th century had become largely devalued by the 1990's. The growth of the University of Tennessee supported new commercial growth along Cumberland Avenue, the beginning of the westward extension and depreciation of the downtown. As cars became the dominant form of transportation during the 20th century residential and commercial development was able to extend further west into Bearden. This westward trend of development was expedited by the introduction of the interstate during the late 1960's. The interstate system supported rapid transit to the North along Interstate 75 as well as to the East and West along Interstate 40. In 1972 the West Town Mall was established, taking advantage of the cheap undeveloped land that had become accessible to the consumer because of the interstate. Unfortunately, the interstate was superimposed through the city, wiping out



Figure 3_Comparative figure ground maps of Turkey Creek and Downtown Knoxville
Source: Drawing by Author

portions of neighborhoods and isolating them from the downtown. Driving downtown became a more viable option than walking. As a response many buildings were been torn down for surface parking lots. The density of downtown had largely dissolved and its streets had lost their definition. The charm that made Downtown Knoxville so appreciated was largely lost and the downtown became devalued. In 1995, Turkey Creek was established approximately 15 miles from Downtown Knoxville. The commercial shopping center experiences almost none of the many social benefits that mixed-use neighborhoods provide. Fortunately, Turkey Creek appears to have drawn business away from West Town Mall which has had a positive impact on Downtown Knoxville. Knoxvilleians now have the option of driving 15 miles to Turkey Creek or just a few miles to Downtown Knoxville. Enough consumers have chosen the latter that the downtown is now thriving and shows continued signs of growth. Downtown Knoxville and Turkey Creek are two opposite strategies of development that illustrate the economic and social benefits of a dense mixed-use development.



Figure 4_ Map diagramming the movement of the commercial centers in Knoxville's history
Source: Drawing by Author

Social Benefits

The Turkey Creek development was largely built over a ten year time period on undeveloped land. Downtown Knoxville on the other hand was slowly built over more than two centuries. It has been built on a historic context that provides a prescribed meaning to every new building or restoration. That context provides an opportunity to enhance every project and provides meaningful connections to a site's history. Responding to existing and historic conditions can ground a project in its community allowing the public to make meaningful and individual responses in the way they connect to something new. Since rural development, like Turkey Creek, has little historic context to respond to and are built within a limited time frame they are frequently homogeneous and do not create a sense of place. These types of development are built upon the need to draw cars into the complex. Turkey Creek has one boulevard that stretches through the two mile long development. Massive parking lots line each side of the boulevard with a cluster of shops sparingly separated. Walking from one shop to an adjacent building may be an unpleasant half mile walk through parking lots while a walk from one side of the boulevard to the other is comparable to real life Frogger. Aside from a lack of context and poor infrastructure, Turkey Creek's biggest problem is a programming issue. Turkey Creek was built strictly as a commercial shopping center with little office space and no residential buildings. Downtown Knoxville, however, is a mixed-use, walkable community.



Figure 5_User experience in Turkey Creek
Source: Google Earth



Figure 6_User experience in
Downtown Knoxville
Source: southeasternt traveler

Economic Benefits

In addition to the social benefits that occur in Downtown Knoxville that do not and cannot occur in Turkey Creek there are several economic benefits that occur in urban development. These economic realities benefit both developers and the general public. While the land for Turkey Creek only cost its developers \$7 million, they spent an additional \$30 million on infrastructure and other site improvements, and then additional costs for buildings. As a response to the increased traffic \$50 million in public funding was spent in widening a portion of Interstate 40 and entrance and exit ramps. An additional \$5 million in city funding and \$1 million in county funding was spent in building the boulevard that acts as the primary spine through the development. All together \$56 million in tax payer's money was spent in improving infrastructure for Turkey Creek while \$37 million was spent by the developer (Harris). The \$93 million that was spent toward infrastructural improvements alone could have founded many projects in Downtown Knoxville where the appropriate infrastructure already exists. That infrastructure includes gridded blocks which provides flexibility for Downtown Knoxville to change over time. The infrastructure allows new buildings to be inserted or old buildings to be renovated without drastically improving roads. Since Turkey Creek only has one prominent road and is not segmented by similar walkable blocks of Downtown Knoxville it can never adapt to become something else such as a walkable community. The lack of flexibility limits future long-term options for its development.

PART 3_THE OPPORTUNITY

3_ Proposed Role of the Architect

Since the current process of development often leads to a built environment that is not socially or economically viable, an opportunity to correct these issues is to shift the role of the architect within that process. If architects have a more prominent role in the earliest stages design, they will be in a better position to apply their training in urban planning issues. Architects have been uniquely trained in urban design and programming. Therefore, the most effective way to apply their training is to become more involved in the development process. There are generally two models that can bring that goal to fruition. The first is for the architect to absorb the role of the developer and assume all responsibility for a project's success. Architect-Developer, Jonathon Segal, has adopted this strategy and has since designed several urban projects that have won AIA design awards. It is worth noting that developers possess a set of skills that most architects would need to learn prior to changing their business model. Perhaps a better option for most architects is to work directly with a developer. The developer brings a set of financial skills to the table while the architect brings the

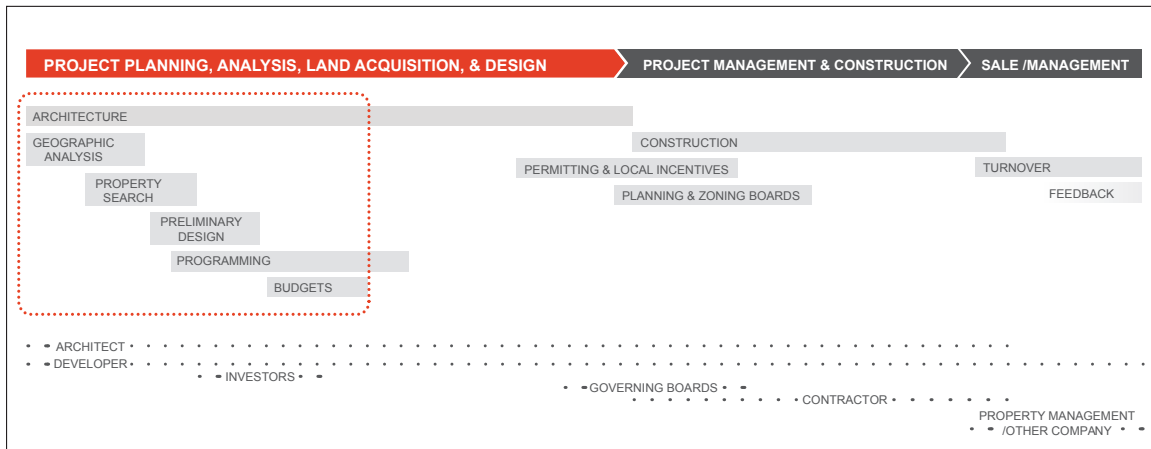


Figure 7_Proposed Process of Development

Source: Drawn by Author

creative vision to imagine a successful project on land that others may perceive as poor real estate. Therefore each profession brings a set of skills that improve the project's design and financial return. This development model would not impact all building projects or architectural typologies but nevertheless would carry a major impact on much of our built environment.

In order to explore the benefits associated with the proposed role of the architect I will propose a mixed-use building project that supports urban development of underutilized land. The proposed development will occur at 104 and 114 East Fifth Avenue Knoxville, Tennessee. Not only will the development support sustainable design and social interaction; it will also demonstrate a concern for the economics of good business and explore opportunities in real estate. The chosen site supports the revitalization Downtown North, a neighborhood that borders Downtown Knoxville. The site was selected because it provides the conditions that many developers would not consider ideal. The plot of land is irregular and sets adjacent to Interstate 40, but it also lies at the intersection of two major roads that enter the neighborhood. If those conditions can be overcome or turned into assets then the site will prove to be more valuable than its price. Due to the visibility of the site from I-40, the success of this project would be pivotal to the growth and continued revitalization of Downtown North.

3_ *Societal Concerns*

The most important aspect that would be impacted by the adopted role of the architect is that communities would experience improved social qualities. Since architects tend to prefer projects that contribute to the urban fabric, it stands to reason that the development they initiate would be urban projects. As outlined in the comparative analysis of Turkey Creek and Downtown Knoxville denser development results in a more walkable and social environment. Communities also benefit from projects that have publicly programmed components whether they be interior or exterior spaces. The profession of architecture, due to its education, tends to be philosophically inclined to encourage some degree of public engagement in urban projects, while not all developers have the same agenda. Therefore, the value architects provide to communities would be enhanced by gaining more control in the development process.

3_ *Economic Concerns*

The proposed process of development encourages urban density and therefore results in lower infrastructure costs and lower taxes for the community. The proposed process also places the architect in a unique position to apply their creative vision in finding the potential of a site that has a low monetary value due to a set of preconceived conditions. The land beside a rail yard may be less valued because of noise and vibrations an architect may have a particular vision about the way the project relates the rail yard, defining the character of the project. Irregularly shaped plots or existing buildings may also deter many developers from exploring the possibility of developing on that land. Those types of land provide the niche that allows architects to acquire cheaper land while developing more interesting projects. Developing these gaps in the city will establish a larger urban tax base and support a larger local economy.

3_ Professional Incentives

While there are risks that architects assume in adopting new roles in the development process there are also several incentives that become available. When an architect fully assumes the role of the developer the financial risk may increase but the potential rewards increase as well. Sharing responsibilities with a partner developer may mitigate some risks while still allowing many of the incentives to exist.

Increased Control

Perhaps the most obvious and important incentive that would present itself to the architect would be an increased level of design control. Architects would have the rare ability to make initial design decisions such as program, scale, and site selection. This degree of input in the initial stages of the development would have a substantial and continual impact on all subsequent design decisions. Frequently an architect's client will acquire land prior to hiring that architect. Occasionally certain assumptions about the integrity of an existing building or the area of the land needed for a project are poorly estimated. The architect may have to design within certain conditions that prevent the project from reaching its full potential. If architects have input about the scale and location of a project they will be able to design within the constraints that they determine. A larger concept about the relationship between the building and the site will carry through all stages all the project, from decisions about whether a building should be a high-rise or low-rise to detailing decisions.

The increased level of control will also include making budgetary decisions in which architects may currently disagree with their clients. While there are critical design decisions that do not interfere with budgetary constraints, many decisions

are limited within the traditional client-architect relationship. However, when architects have complete control or a degree of control in defining a project's budget they are able to make decisions about what aspects of the project are most important, such as public components, sustainable concerns, and materials. The architect is then able to apply preferences and observations regarding the decisions that they believe will yield the best possible project and hopefully a better return on investment.

Political Leadership

With increased responsibility of determining site selection and program, architects must understand the urban planning initiatives that many developers base their decisions upon. Architects should work with city planners and be aware of other development that has an impact on site selection and programmatic decisions. Reinforcing other urban development tends to have a positive impact on all projects involved and should contribute to the improvement of that neighborhood. Therefore, it is important to be educated in all studies and plans produced by local planning organizations such as the local metropolitan planning commission. Ultimately, this increased level of communication and exposure will translate into greater influence on the development of the city and its communities. The greater degree of responsibility will lead to a greater level respect and increase influence on city growth.

Increased Value As a Profession

Some developers think of the profession of architecture as just another cost that they need to minimize as much as possible. Developers that team with architects in the initial stages of a project find that the planning and permitting process is shortened. Shortening the process of development improves the speed at which a project begins generating profit. While architects traditionally only participate

in building design, their participation in site selection and programming take advantage of their architectural training. Architectural education requires a degree of the curriculum to explore urban planning and programming. Involvement in the earliest stages of development simply applies that training to become an asset that architects are uniquely trained to analyze.

Financial Incentives

There are several financial opportunities that become available for architects who initiate their own development. Absorbed roles translate financially into absorbed fees, yielding profit for one business instead of two. More importantly the project owner has the ability to sell or lease the completed project. Rentable income could help to alleviate the financial impact of a down-turned economy on the profession of architecture. There is also the financial opportunity that becomes available when architects have more control in the project's design. There is improved marketability in the power of good design that clients may not always agree with but may still yield a better financial gain. Architects can take advantage of the opportunities that many developers ignore. Among these opportunities include the possibility of a successful project on a site that is undervalued, as previously mentioned.

PART 4_REFERENCES

One opportunity that repositions the architect in the development process is to become the architect-developer, assuming a greater degree of risk and responsibility. San Diego architect Jonathan Segal operates within this model allowing him to selectively define the aspects of every project he designs. The model also provides him with the opportunity to gain a greater level of control by acting as the general contractor for every project. He is able to eliminate the inefficiencies and mis-communications that can exist between the owner, the architect, and the contractor. This model is economically efficient because it allows him to eliminate the disbursement of payments to several entities. It also presents the financial opportunities that developers experience as the project owner. He outlines this business model in his online seminar “Architect as Developer” in the hope and belief that other architects should adopt the same development model. In the seminar he explains how the architect-developer model can bring a greater social value to the community than the traditional process of development. He grounds this development model in his belief that, “Design matters and design sells.” He also states, “You don’t want the income. The income is a taxable event. What you want to make is rental income and the rental income is offset by the depreciation of the building” (Architect). Therefore, if the economic goal is to make rentable income, and equity, then the construction integrity needs to be of a high quality in order to withstand years of abuse and the design needs to be marketable. An architect’s control of the balance between budget and design should lead to better buildings and a better city. As evidence for the success of Segal’s model, the National AIA has awarded Segal several architectural design awards over the years.

4_ *Dewhirst Properties*

Another model that allows the architect to become involved in the earliest stages of the development process is for the architect to work directly with a developer. There are a few business models that allow that to happen. A business could have two separate legal entities, the development company and the architecture firm, that work solely together. Another option is for the architect to work in-house for a development company, a model well implemented by Dewhirst Properties. The development company has renovated many of Knoxville's downtown buildings, contributing to a large segment of the downtown's revitalization. One of the firm's partners, architect Mark Heinz, has a major influence on the projects they take on as well as the typical architectural responsibilities such as a building's image and atmosphere. When discussing the late 1900's erosion of Downtown Knoxville, Heinz stated "This left a tremendous opportunity to rehabilitate a modest city with dozens of fantastic architectural jewels relatively intact" (Revitalizing). Heinz works with developer David Dewhirst who understands the value and financial opportunity of urban development. This allows Heinz to apply his vision and work on projects that he believes best serve the community.

PART 5_INVESTIGATION

5_Site Selection

The key to a successful investigatory case study project relies upon determining a good location for the project. A location for the case study is appropriate if it is urban, undervalued, and has the potential to host a project that supports the local economy and community in a neighborhood. Having explored a comparison between Downtown Knoxville and Turkey Creek, I have determined that Downtown Knoxville or its immediate first-ring neighborhoods are the best neighborhoods to support with more development.

I first did an analysis of the sector map in Knoxville in order to determine where mixed-use, residential, and institutional neighborhoods are located. Since I-40 awkwardly cuts right through the downtown I then created a map showing all of the major traffic roads and right-of-ways as darkened voids in order to understand which neighborhoods were spatially separated from the downtown and in order to determine if there were opportunities to improve that relationship. This analysis helped me to key in on a particular neighborhood, Downtown North, and find a few lots that were either vacant or used for surface parking. I was then able to select a property that had the conditions I was specifically looking for, and others would tend to not develop.

The selected site lies along the southern edge of Downtown North and I-40. Due to the property's location, it has great potential to become a gateway into the neighborhood and bridge the border created by the superimposed interstate. The interstate is both a physical and symbolic division between Downtown and the Downtown North. Buildings and blocks were relentlessly destroyed to make way for the development of the interstate system which came through Knoxville in the late 1960's. The block that is our site was cut diagonally in half; some of the building destroyed to make room for the construction of the raised interstate

and entrance ramp. That event left a disorganized and destroyed block, lowering its property value due to its irregular shape and proximity to the interstate. The site consists of city owned land including parcels 104 and 114 East Fifth Ave, a small lot behind 104 East Fifth Ave, and a segment of Lamar St which is abruptly ends at the I-40 right-of-way. The total area of land consists of approximately 21,350 square feet in an awkwardly configured fashion that lines both East Fifth Ave and North Central St.

The estimated value of the land is \$53,000 which is based on the land value per square footages of adjacent parcels. If the land was open for bid by the city, the actually buying price may be lower than its estimated value because of its irregular shape. The project will also include parcel 104 East Fifth Ave and its 2-story 9,800 square foot commercial building which is estimated at a cost of \$284,350 for a total cost of \$337,350 for all land and existing buildings for the project. The ideal program for the project will be mixed-use leasable space. Since there is no specific client, programming a degree of flexible is important for the long-term use of the building. The majority of Downtown North is a C-3 general commercial district, requiring a degree of parking specific to the program and a building height restriction of 45 feet except for office buildings which is 90 feet. The appropriate scale of the building in contributing to a consistent urban fabric is only 3 or 4 stories in the Downtown North neighborhood.

Downtown Knoxville and First-Ring Neighborhoods

Source: Drawn by Author

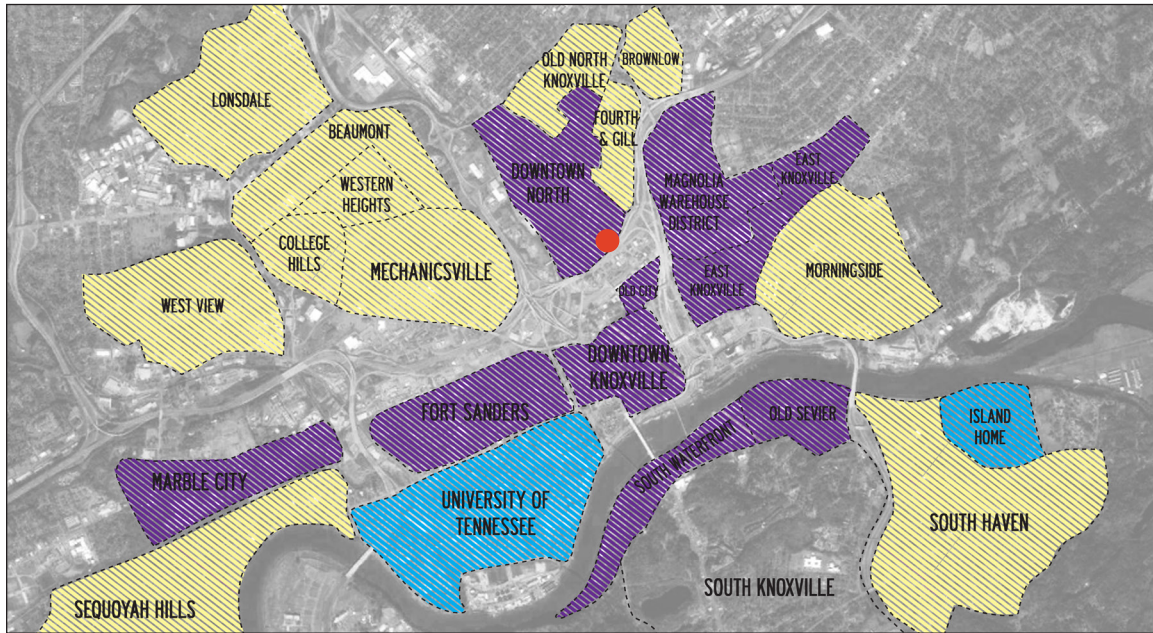


Figure 8_Knoxville Sector Map



Figure 9_Unintentional Spatial Separation of Neighborhoods by Major Traffic Infrastructure

Patterns of Growth and Infrastructure in Downtown Knoxville

Source: 2014 Central City Sector Plan

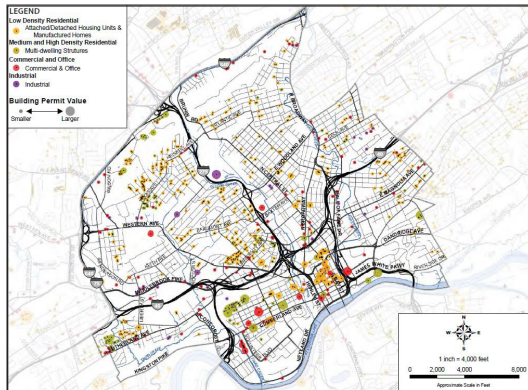


Figure 10_New Construction
January 2003 - December 2013

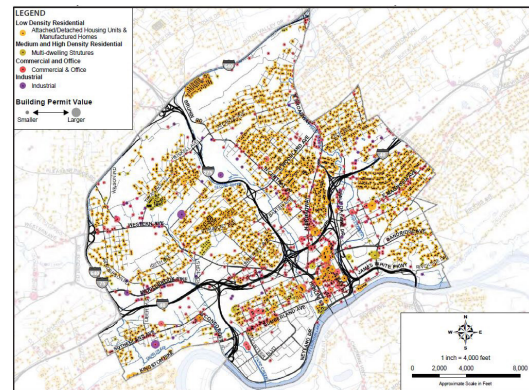


Figure 11_Renovations, Alterations,
Additions - January 2003 - December 2013

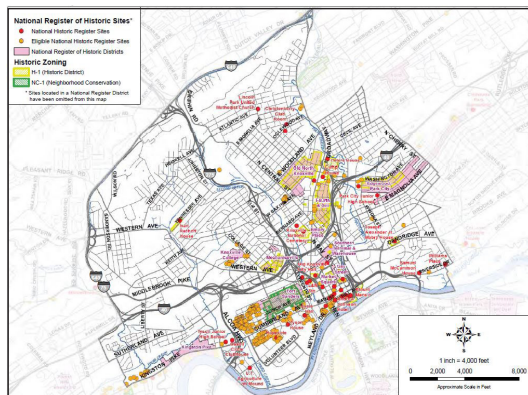


Figure 12_Historic Resources

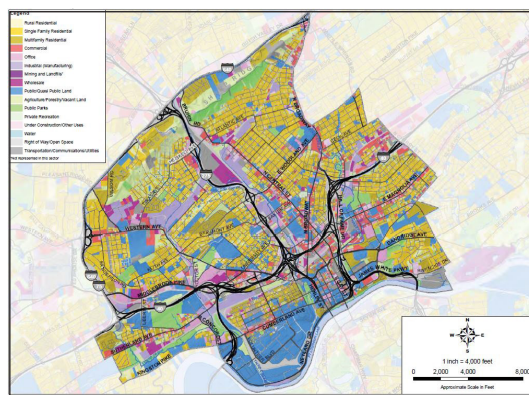


Figure 13_Existing Land Use

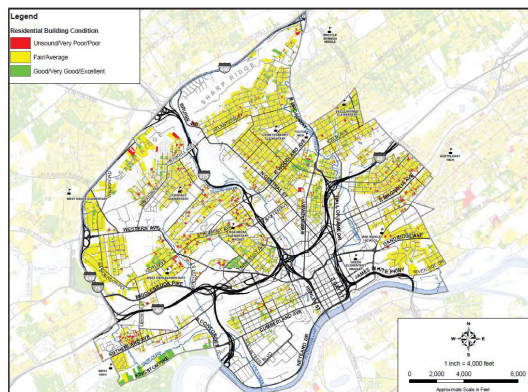


Figure 14_Residential Building
Conditions

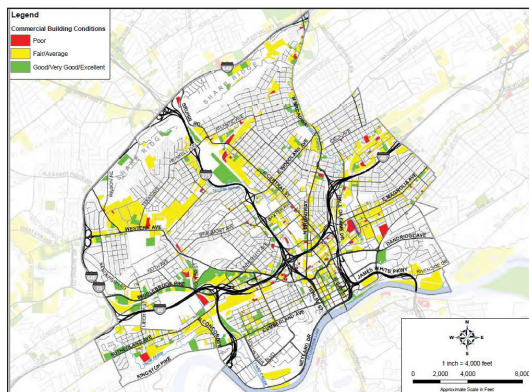


Figure 15_Non-Residential Building
Conditions

Local Inventory and Plan for Downtown North

Source: 2007 Broadway-Central-Emory Place Small Area Plan

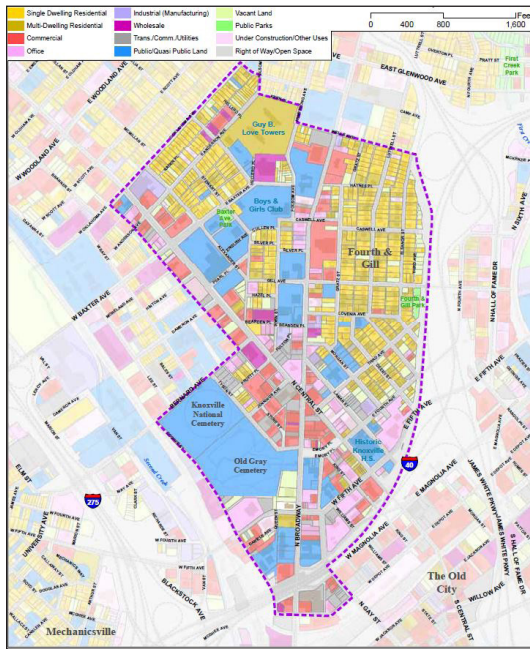


Figure 16_Existing Land Use

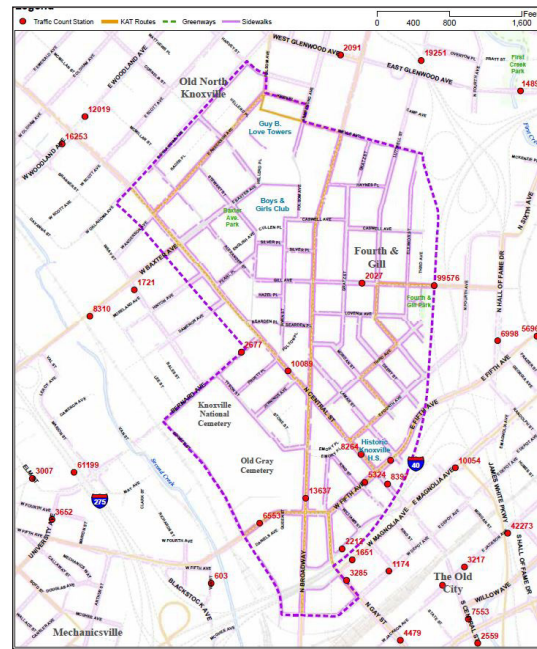


Figure 17_Transportation

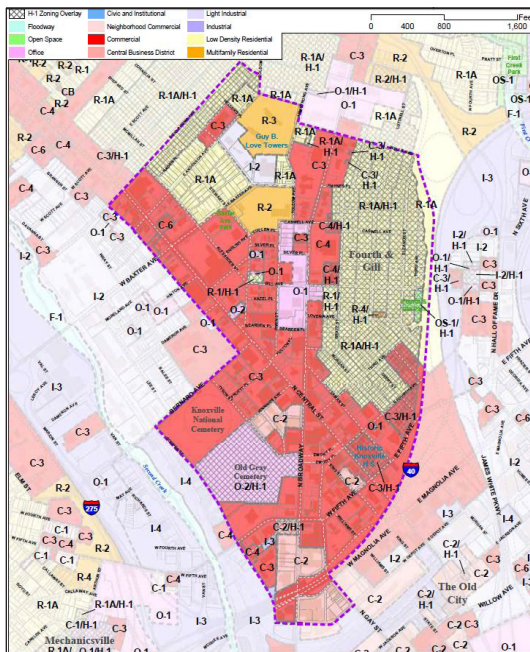


Figure 18_Zoning

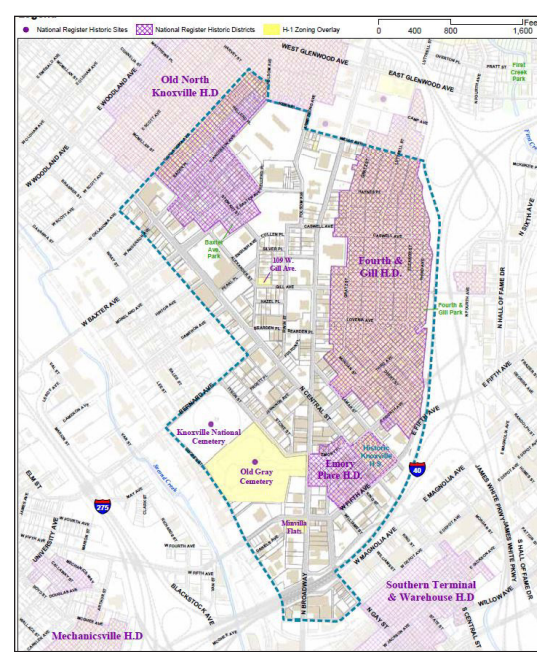


Figure 19_Historic Districts and Landmarks

Local Inventory and Plan for Downtown North

Source: 2007 Broadway-Central-Emory Place Small Area Plan

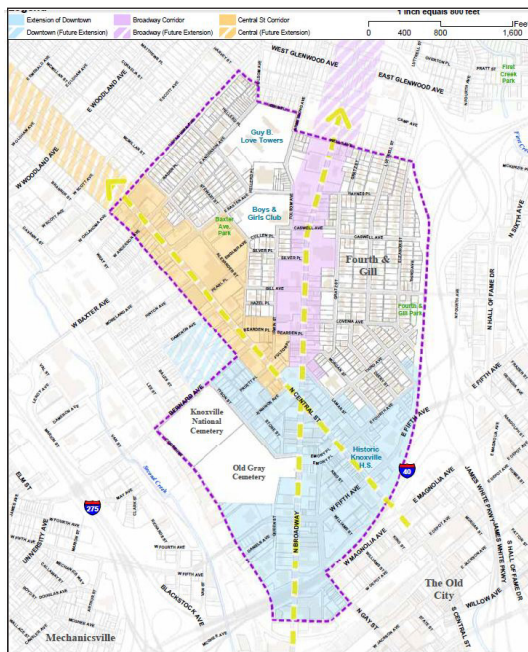


Figure 20_Development Concepts

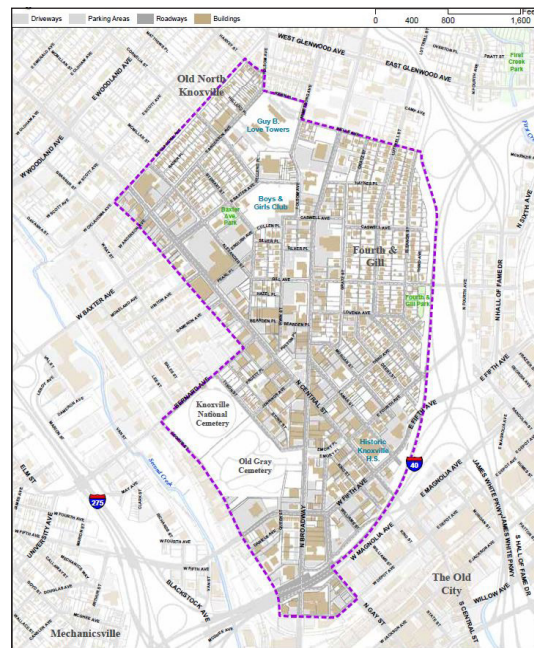


Figure 21_Study Area BaseMap

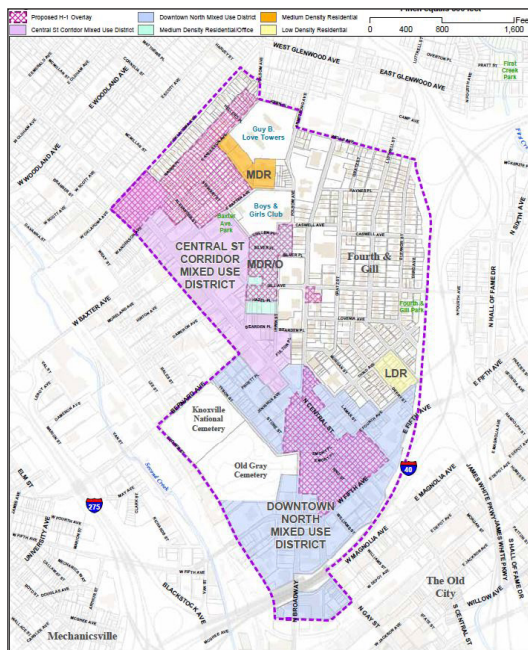


Figure 22_Land Use Plan &
Historic Zoning Overlay Proposals

5_Problems and Consequences

Interstate 40 as Divider

The interstate is both a physical and symbolic division between Downtown and the Downtown North. Buildings and blocks were relentlessly destroyed to make way for the development of the interstate system which came through Knoxville in the late 1960's.

Lowered Property Values

The block that is the selected project site was diagonally cut in half. Some of the buildings on the block were destroyed to make room for the construction of the raised interstate and entrance ramp. That event left a disorganized, destroyed block, lowering the property value due to its irregular shape and proximity to the interstate.



Figure 23_Superimposed I-40 on 1917 Sanborn Map with Project Site
Source: Knoxville Sanborn Map, 1917



Figure 24_1917 Knoxville Sanborn Map Prior to Interstate 40
Source: Knoxville Sanborn Map, 1917

Interstate 40 as Overarching Conduit

The interstate has become the primary artery through the city. It dwarfs Downtown North in significance and speed, and it does so in an overarching fashion as it raises above the ground nearly thirty feet. The primary focal point is now the raised platform of the interstate, not Emory Place, the center core of the neighborhood.

5_Potentials

Crucial Intersection

The site lies at the corner of two major roads, Fifth Avenue which connects the east Knoxville neighborhoods to the downtown and North Central Street which connects the Old City to Emory Place, the center of Downtown North. This intersection should and will become a significant intersection as the Old City and Emory Place become revitalized.



Figure 25_Potential Connection between Downtown North and The Old City
Source: Drawn by Author

Neighborhood Gateway

As North Central Street connects the Old City to Downtown North it passes under Interstate 40 creating an ideal physical and symbolic gateway between the two neighborhoods. Traveling under the raised interstate platform is an opportunity to make an interesting experience traveling from one side to the other.

Programmatically North Central Street could become more vibrant with retail and restaurants along a walk from Old City to Emory Place.

Community Center

As the site is located between two growing neighborhoods and is located at a major intersection it becomes the ideal location for a community center that has the power to bridge the gap between the two neighborhoods. The community center would provide social and economic benefits as it provides the platform for business owners, residents, and commuters to farther improve the neighborhood.

5_Activation

Right-of-way Landscape

As a part of a larger landscaping connection, the incorporation of Tennessee wildflowers will transform these large patches of unused, ugly grassy areas into interesting visual connections to be enjoyed by the area. Existing fences would be removed from their outermost limits and repositioned immediately along the interstate, creating a softer transition from the hard-scape in the city to the vegetation of the landscape.

Transportation

The current plan for the Knoxville bus rapid transit system has a route that barely misses the Downtown North neighborhood. The first major design element is



Figure 26_Interstate 40 Right-of-way as Proposed Wildflower Landscape

Source: Drawn by Author

to reconfigure the route and allow better transportation into the community. The project site will contain a bus rapid transit stop and bike storage area beside the new community meeting room. 5th Avenue is also the primary east-west connection through Downtown North. Turning this portion of 5th Avenue into a boulevard with trees, street parking, and better sidewalks will encourage pedestrian traffic past the building site.

Underpass Park

Currently a large unused parking lot occupies the space adjacent to the project site and underneath the interstate. The neighborhood currently has few activities for children and teens, but a playground and skate park will make this an attractive area for families. The shade from the interstate and the gentle slope create a unique condition that should be utilized. The new program encourages use from both sides of the interstate, destroying the symbolic barrier.



Figure 27_Urban Site Plan with Proposed Design
Source: Drawn by Author

Event Venue

In addition to the skate park and playground design the interstate underneath will contain a venue space for concerts and markets. The steep slope that leads from the sidewalk up to the structure of the interstate will be made into an amphitheater, ready to support the crowd that shows up for the weekly concert event. The North Central Street will shut down for car traffic, and pedestrians will fill the space enjoying cuisine from the food trucks, parked in the AAA parking lot, eating and enjoying the concert from the amphitheater seating, and engaging with the proposed building which will boast a terrace with a great view of downtown and a restaurant.

Reactive Form

The building responds to urban conditions of the neighborhood as shown in Figure 28 and Figure 29. The bus stop, existing building, terminated street, and commercial programming along the street each informs the design of the building and creates a successful language and economy in the community.

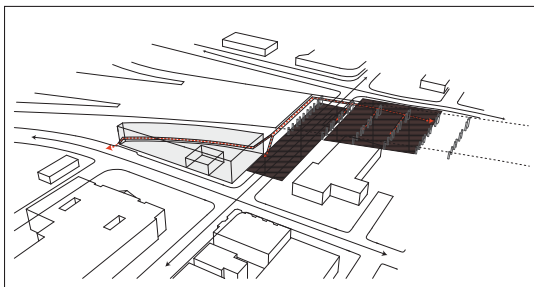


Figure 28_Building and Urban Context Relationship Diagram
Source: Drawn by Author

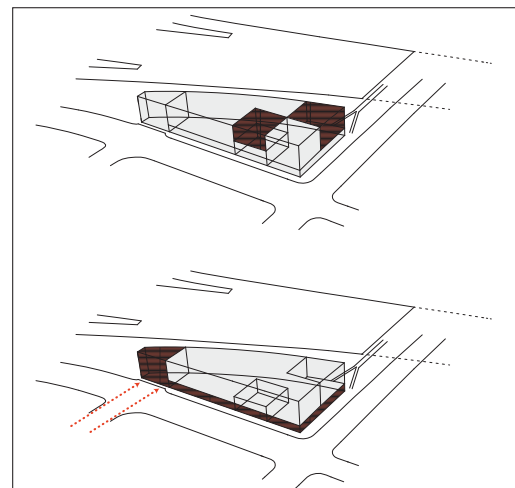


Figure 29_Building Form Diagram
Source: Drawn by Author

5_User Experience

The success, both as a social good and a financially positive project, will depend upon the experience of the user. In the case of this project where providing several benefits to the community is a priority it must be understood that not every amenity, either publicly or privately funded, will result in a direct cash flow activity. Some design moves are initiated solely because they provide a social good, but collectively, over time, they should result in good economics, the proof of sustainable and replicable design. Building a strong economy in the community will raise the demand for leasable space which is a positive trend for my building project. Building a strong community will create a neighborhood where people want to move to, visit, and work within. Financially, this results in better marketability, lower vacancy rates, and greater appreciation of the real estate.

The Interstate 40 right-of-way is currently underutilized. When this area becomes a landscape full of Tennessee wildflowers, tall grasses, and a bird sanctuary it will surely draw bird-watchers from all over the city. A large patio stretches along the entirety of the proposed building, providing a raised platform for the public and residents to enjoy.

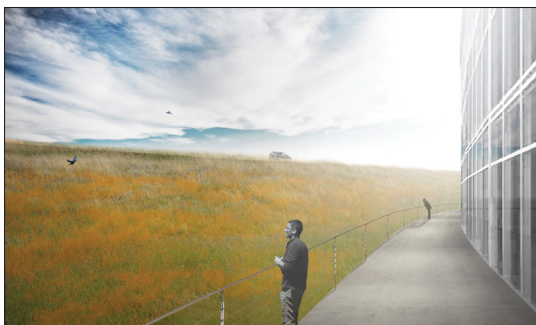


Figure 30_Right-of-way Landscape Design
Source: Drawn by Author



Figure 31_Image of Building at Night
Source: Drawn by Author

The proposed building will house a restaurant, terrace with a view of the downtown skyline, several office spaces of different sizes, twenty-one condominium units, a private courtyard and plenty of retail space. The neighborhood will benefit from these walkable amenities and the residents will easily have access to all programs without leaving the building.

Residents and the community will also have quick access to the park and event venue space under Interstate 40. During the warmer months a concert event will take place on the weekends at the newly proposed amphitheater, shown in Figure 32 and Figure 33. As spectators come to the concert they can enjoy the food trucks along North Central Street. Across from the food trucks which will park in the otherwise empty AAA parking lot the restaurant will provide a more stable destination for eating and getting drinks. Above the restaurant a terrace invites the public to interact with the building and further enjoy the site.

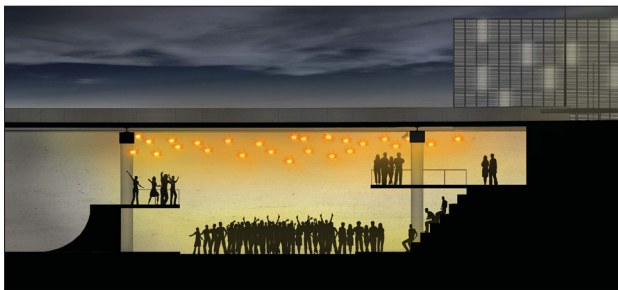


Figure 32_Section through Event Space
Source: Drawn by Author



Figure 33_Activated Section through North Central Street
Source: Drawn by Author

PART 6_CONCLUSION

6_Conclusion

My understanding on this topic certainly has grown over the past year, but like any topic worth exploring it has left me with more questions than I began. Having explored my case study project, I believe that establishing a new process of development would have a major impact on the built landscape and ultimately the society that inhabitates. During my research I have found that there are many potential urban building sites in Knoxville, and I believe that to be true in most cities. Reestablishing the architects' role in the development process seems to have a real impact on site selection, probably even more of an impact than government intervention on land use controls. If architects do become the catalysts for building on the unused gap lots in the city fabric then a new appreciation for unique, challenging sites could arise. I am left to question what extent the proposed process of development would have on cities and if the process would be optimistically replicated by the new generation of architects. Perhaps the change begins with more experienced architects and as success is observed architectural education will evolve to have a degree of its curriculum focused on real estate laws, finance, and development. There seems to be a sweet spot between architecture and real estate development that will provide great opportunities for the next generation.

I look forward to continuing my exploration of this topic. This thesis has led me to believe that I should and can successfully apply many of the lessons learned in this thesis to the projects I work on in my career. Having explored the best ways to engage to public in private development I believe that community spaces can successfully strengthen the social and economic viability in the project. My research on the topic has opened my eyes to recognizing successful community spaces in private commercial areas including Gatlinburg and, perhaps to the greatest extreme, Las Vegas. Successful community space does raise the

appreciation and use of a project which will allow architects to design on unused or underutilized pieces of land in the city in unique and successful ways. I have seen that there are successful components in development, just not fully integrated as would be the case in the proposed process of development. Ultimately, I believe that this thesis suggests a way that architects and developers can initiate more successful projects and contribute to building a better city.

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APPENDIX

Appendix 1: Final Presentation Boards

THE ROLE OF THE ARCHITECT IN THE PROCESS OF DEVELOPMENT

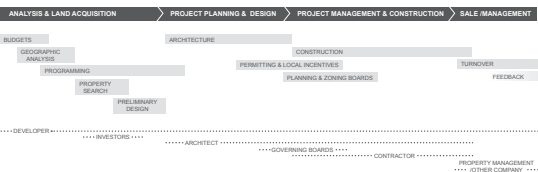
CHRISTOPHER A. OWENS

ABSTRACT:

Population growth and cars have caused cities to sprawl from their downtown cores, resulting in a landscape of low density building. Far too often the empty lot at the edge of the city or along a highway attracts the next opportunity for development, furthering the gap between residential and commercial zones. The profession of architecture recognizes that urban site selection and mixed-use programming is vital to the social and financial health of a city, though it typically only participates in the design of the building. However, the visionary training and practice of architecture places the architect in a unique position to initiate successful projects on sites that are undervalued. This suggests that the architect's role in the development process should be expanded in order to participate in programming and site selection. This expanded role will lead to more frequent and better quality urban development which is supported by financial incentives to cities, developers, and architects.

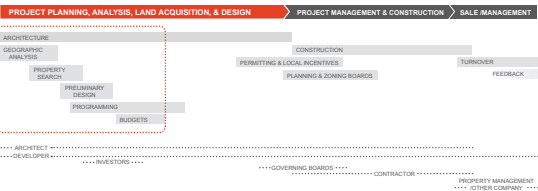
THE ISSUE: TRADITIONAL PROCESS OF DEVELOPMENT

Most development is either initiated by the administration of a business or by developers. Unfortunately many developers and most businessmen have no formal training in urban design. Therefore, and while there are many notable exceptions, the projects they often initiate are evidence of the more **visible advantages of suburban development over the more complex advantages of urban development**. Some of the benefits of suburban development include cheaper land, larger plots, and the perceived benefit of a lack of built context.



THE OPPORTUNITY: PROPOSED PROCESS OF DEVELOPMENT

We should choose a more contemporary model of development that emphasizes the urban environment and fosters a more social and economic city. Architects have the training required to build successful projects on urban sites that others would shy away from due to a set of challenging conditions. For that reason **architects should assume a more prominent role in the early stages of design**, either as the developer or directly partnered with a developer.



SOCIAL CONCERNS

Since architects tend to prefer projects that contribute to the urban fabric, it stands to reason that the development they would initiate would be **urban projects**. As outlined in the comparative analysis of Turkey Creek and Downtown Knoxville denser development results in a more **walkable and social environment**. Communities also benefit from projects that have publicly programmed components, programs that go beyond the direct return of investment.

ECONOMIC CONCERNS

The proposed process of development encourages urban density and therefore supports the type of development that results in **lower infrastructure costs and lower taxes** for the community. The proposed role of the architect places them in a unique position to apply their creative vision in finding the potential of a site that has a low monetary value due to a set of preconceived conditions and developing it into a successful project, subsequently **increasing the value of properties**.

PROFESSIONAL INCENTIVES

The **increased level of design control** would allow important design concepts to become prioritized at the architect's discretion. They would work with city planners and need to make their voices heard in urban planning decisions, increasing their **political leadership**. There are also **several financial opportunities** that become available for the architect who initiates their own development, such as rentable property and a diverse portfolio important to a profession so closely tied to economic markets.

The following investigation explores the possibilities and benefits associated with the proposed process of development. The most important phase of the development begins with site selection. Site selection begins with a macro analysis of the city, followed by an analysis of the individual neighborhood, and finally **identifying a specific site that is underutilized, but can become something special to its community**.

COMMERCIAL DEVELOPMENT IN KNOXVILLE



Built in the late 1970s and 2000s, Turkey Creek Shopping Center is located approximately 15 miles from Eden Prairie. Turkey Creek is a thriving environment, designed with a central spine artery which quickly moves in and out of the center. While it functions well for big box retailers, the lack of residential birds' eye's view interactions during certain periods of the day. **Parking lots** shown below, **lots over the landscape** shown



SECTOR MAP



INTERSTATE AS DIVIDER

The situated site lies along the southern edge of Downtown North and I-10. The site is **both a physical and symbolic division** between Downtown and the Downtown North. Buildings and blocks were intentionally destroyed to make way for the development of the site which came through Nashville in the late 1970's.

LOWER PROPERTY VALUES

The block that is our site was unfortunately left half, none of the building destroyed is made much for the construction of the steel structure and entrance wing. That went left is damaged and destroyed by leaving its property value due to its **irregular shape and proximity to the interstate**.

CONDUIT

The site itself has become the primary artery through the city. **Lebanon's Downtown North is significant and aged**, and due to it is an contributing factor as it rises above the ground nearly fifty feet. The primary focal point is now the raised platform of the site itself, railway Plaza, the core of the neighbourhood.



CRUCIAL INTERSECTION

The site lies at the corner of two major roads, 75th Avenue which connects the east Kinsdale neighbourhood to the downtown and North Central Street which connects the Old City to Emory Place, the center of Downtown North. This intersection should and will become a significant intersection as the Old City and Emory Place become revitalized.

NEIGHBORHOOD GATEWAY

As North Central Street **connects the Old City to Downtown North**, I pass under I-40 creating an ideal physical and symbolic gateway between the two neighborhoods. Traveling under the raised viaduct platform is an opportunity to make an interesting experience upon opening to the other side. Programmatically North Central Street could become more vibrant with retail and restaurants along a walk from Old City to Spring Place.

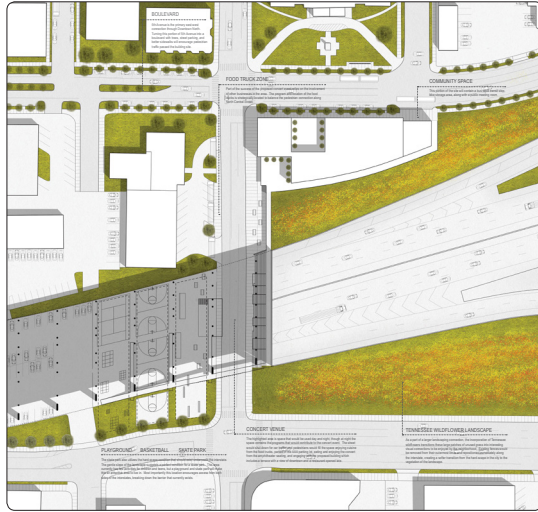
COMMUNITY CENTER

As the site is located between two growing neighborhoods and is located at a major intersection (corner) the ideal location for a community center that has the power to **bridge the gap between the two neighborhoods**. The community center would provide social and economic benefits as it provides the platform for business owners, residents, and commuters to further improve their neighborhood.



ACTIVATE

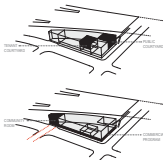
LOCAL IMPACT OF DEVELOPMENT



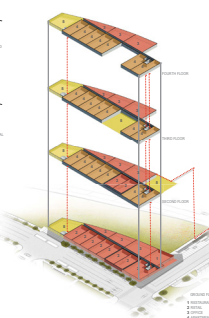
TENNESSEE WILDFLOWER LANDSCAPE



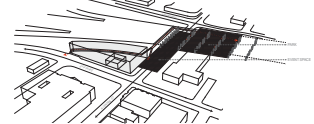
BUILDING FORM



MIXED-USE PROGRAMMING

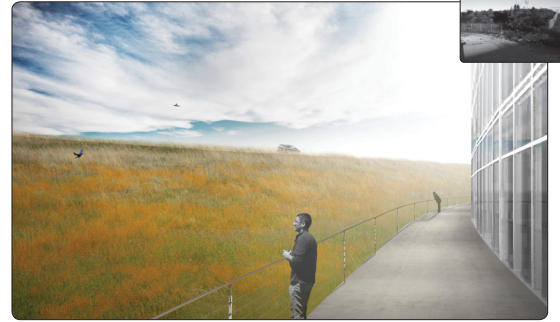


ACTIVATE GATEWAY BETWEEN
NEIGHBORHOODS



USER EXPERIENCE

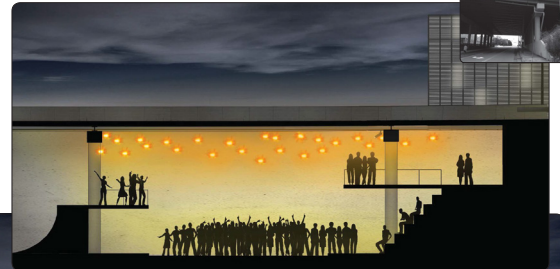
RIGHT-OF-WAY AND INTERSTATE AS LANDSCAPE



COMMUNITY CENTER



AMPHITHEATER



VITA

Chris Owens is from Huntington, West Virginia and moved to Knoxville, Tennessee in 2013 to pursue a Master's Degree in Architecture from the University of Tennessee. He earned a B.A. in Architecture with a Minor in Business from the University of Kentucky in Lexington, Kentucky. His studies in urban design and architecture at the University of Tennessee have led to his exploration and research in role of the architect and how it can take more prominent leadership role in a community.

Upon completion of graduate school, Chris will pursue licensure as an architect in Nashville.