RETURNING THE NEAR SOUTH TO DOWNTOWN INDIANAPOLIS
Daylighting Pogue’s Run: A Plan for Urban Renewal

An Honors Thesis (LA 404)

by

Lauren Schmidt

Thesis Advisor
Joe Blalock

Ball State University
Muncie, Indiana

May 2012

Expected Date of Graduation
May 2012
This project is a plan for urban renewal in the Near South of Indianapolis. With the main catalyst being the daylight of Pogue's Run, this design looks to revitalize one of the most critical areas of downtown.

After identifying the problem, topics of literature significant to the Near South were investigated. These were urban renewal, daylighting waterways, sports stadiums, and current plans in Indianapolis today. From there, site inventory and analysis was conducted to develop initial concepts. One concept was then developed into a final master plan. Supporting diagrams, sections, plans, details, and perspectives were also produced to help show the design implementations in more detail.
First, and foremost, I would like to thank my wonderful fiancé for tolerating my extreme work ethic these past couple of weeks and for being able to manage without me for one last semester. Secondly, my gratitude goes out to my parents, whom without my education here would not have been possible.

I would also like to thank my advisor, Joe Blalock, who helped push me in the right direction. And, finally I would like to thank all of my classmates, instructors, and professors whom I have learned so much from over the past five years.
# TABLE OF CONTENTS

## INTRODUCTION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Problem</td>
<td>4</td>
</tr>
<tr>
<td>Significance</td>
<td>5</td>
</tr>
</tbody>
</table>

## LITERATURE REVIEW

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Renewal</td>
<td>9</td>
</tr>
<tr>
<td><strong>CASE STUDY:</strong> Pearl District, Portland</td>
<td>11</td>
</tr>
<tr>
<td>Daylighting Waterways</td>
<td>12</td>
</tr>
<tr>
<td><strong>CASE STUDY:</strong> Thornton Creek, Seattle</td>
<td>14</td>
</tr>
<tr>
<td>Sports Stadiums</td>
<td>15</td>
</tr>
<tr>
<td>History of Lucas Oil Stadium</td>
<td>16</td>
</tr>
<tr>
<td><strong>CASE STUDY:</strong> The Banks, Cincinnati</td>
<td>17</td>
</tr>
<tr>
<td>Indianapolis Today</td>
<td>18</td>
</tr>
<tr>
<td><strong>CASE STUDY:</strong> Cultural Districts</td>
<td>20</td>
</tr>
</tbody>
</table>

## SITE

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>25</td>
</tr>
<tr>
<td>Timeline of Indianapolis &amp; Near South</td>
<td>28</td>
</tr>
<tr>
<td>Context</td>
<td>30</td>
</tr>
</tbody>
</table>
Inventory ............................................................................................................. 32
Book Systems ........................................................................................................ 34
Natural Systems .................................................................................................... 36
Analysis .................................................................................................................. 38

DESIGN .................................................................................................................. 41
Goals & Objectives ................................................................................................ 42
Program .................................................................................................................. 42
Analysis .................................................................................................................. 43
Conceptual Development ...................................................................................... 44
Concept One .......................................................................................................... 44
Concept Two .......................................................................................................... 45
Concept Three ....................................................................................................... 45
Refined Concept .................................................................................................... 46
Final Concept ......................................................................................................... 47
Master Plan ............................................................................................................. 48
Land Use ................................................................................................................ 51
Circulation ............................................................................................................. 52
Pogue's Run Daylight
Streamflow Patterns .............................................................................................. 54
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed Plan</td>
<td>55</td>
</tr>
<tr>
<td>Edge Conditions</td>
<td>57</td>
</tr>
<tr>
<td>Planting Zones</td>
<td>58</td>
</tr>
<tr>
<td>Water Systems</td>
<td>59</td>
</tr>
<tr>
<td>Stadium Plaza</td>
<td></td>
</tr>
<tr>
<td>Enlargement Plan</td>
<td>60</td>
</tr>
<tr>
<td>Fixture Details</td>
<td>61</td>
</tr>
<tr>
<td>Near South Imagery</td>
<td></td>
</tr>
<tr>
<td>Bird's Eye View</td>
<td>62</td>
</tr>
<tr>
<td>Stadium Plaza</td>
<td>63</td>
</tr>
<tr>
<td>Pogue's Run Daylight</td>
<td>64</td>
</tr>
<tr>
<td>White River Greenway</td>
<td>65</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>67</td>
</tr>
<tr>
<td>Conclusion</td>
<td>69</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>A.1</td>
</tr>
<tr>
<td>Appendix A: Site Imagery</td>
<td>A.3</td>
</tr>
<tr>
<td>Appendix B: List of Figures</td>
<td>A.7</td>
</tr>
<tr>
<td>Appendix C: Works Cited</td>
<td>A.9</td>
</tr>
</tbody>
</table>
INTRODUCTION
The history of cities in the United States has followed a fairly distinct pattern over the past fifty years. The economic growth that followed World War II created a housing boom across the country. With the help of the automobile, people moved from the city to the country. The majority of these people were white, upper-middle class. Cities were no longer the desired place to live, work, and raise a family. Starting in the 1950s, the Interstate Highway System made this even easier, with efficient roads that easily connected the cities to the suburbs.

As a result of such large flight out of the city, neighborhoods in these downtown areas began to decline. Some of these were demolished to make way for larger buildings or industry. With the economic downturn in the 1970s and 80s, this problem was made even worse. Steel and related rail industries across the Northeast and Midwest began to leave cities as well. This resulted in even more urban decay across many lower income residential neighborhoods that had relied on these factories and industry. By the late 80s and early 90s, many urban centers in cities across the country were in serious trouble.

Urban renewal began in the 1990s as a response to this rampant urban decay. The movement has slowly gained momentum and is starting to bring life back into downtowns. In Indianapolis there have been several urban renewal projects in the past decade, though not all have been successful. Much still needs to be done if the city as a whole, including the downtown, expects to be successful in the twenty-first century.
Indianapolis, like many Midwestern cities, has been slow to adopt urban renewal strategies that will benefit its urban core. With a population of 829,718, it is considered the 12th largest city in the country. It is also one fastest growing metropolitan areas. But these numbers are actually indicative of greater problems within the city. In 1970, to combat the growing number of people leaving the urban core, the city and county merged. This move enabled the city to collect taxes and revenue from the people who were living further and further outside the city limits yet still commuting in for work. Though this worked for a while, it only postponed the inevitable. Suburban growth has continued in very similar pattern. Today, many people live outside of Marion County and commute into the city to work. Not only does this create a hollow city, but it puts added pressure on the already congested network of roads, which is the primary form of transportation in the city. If Indianapolis is going to prosper in the coming decades, a paradigm shift will be needed to keep the city from collapsing in upon itself.

As a result of so much suburban growth, there are many areas near downtown in need of urban renewal. Parking lots are rampant, a lasting result of demolition, an unfortunate policy toward unwanted, vacant properties. The result is a vicious cycle of decreasing land value, more vacancy, and demolition, creating a vast, expanse of open space. In recent years, momentum has been growing and parts of the city are beginning to undergo dramatic change. Yet there are still large portions of the downtown that remain in a state of urban decay.
SIGNIFICANCE

Within downtown, the Near South is one of the areas in most dire need of urban renewal. Adjacent to the Indiana Convention Center and housing Lucas Oil Stadium, the Near South has hundreds of thousands of visitors every year. It is also just south of the Mile Square and Wholesale District and so is within walking distance of all of the major amenities of downtown, including Circle Centre Mall, Monument Circle, White River State Park, Victory Field, numerous museums, and countless shops and restaurants. Despite this prime location, the Near South is one of the most empty and underutilized areas of downtown. It is primarily surface parking and vacant lots with eight Interstate on/off ramps cutting through the area. With such location and character, the Near South is a prime opportunity for urban renewal in downtown Indianapolis.
Within the topic of urban renewal the New Urbanist movement is discussed almost exclusively in current literature about urban design and renewal. There is no one definition that encompasses all of the ideas of New Urbanism since it is an attempt to "reconcile competing ideas about urbanism that have been evolving in America for over a century" (Talen, "New Urbanism" 1). It strives to obtain those certain, elusive qualities that create a successful urban space.

According to the Charter of the New Urbanism, the central concept is to promote "compact, pedestrian-friendly, mixed-use residential developments close to amenities and public transport" (157). These characteristics also address many sustainability issues that currently face society, such as urban sprawl, car dependence, congestion, pollution, walkability, community isolation, and obesity. Such communities are also claimed to reduce crime by simply having more opportunity for natural surveillance with more walking and social interaction, and thus promoting a sense of place, community, and social order.

There are at least three different ways in which New Urbanism is implemented. The three most prominent are aesthetic style, urban design practice, and land use policies. The aesthetic style is usually neotraditional, or the revival of traditional architectural styles. Urban design is implemented as a set of streetscapes, public spaces, and densities, while New Urbanist land use policies comprise of mixed-use, mixed-income, and transit-oriented development (Cozens, 430). While "true" New Urbanism incorporates all three of these categories, the most prevalent is aesthetic style, which is often used without urban design or land use. Many subdivisions have New Urbanist-inspired neotraditional homes, but are still built on the standard, large suburban lots. Though the ideas of urban design are used less than aesthetic style, they are still more common than the land use policies (Sohmer and Lang, 756-58).

**Issue of Gentrification**

One of the biggest hurdles that New Urbanism faces is that a majority of New Urbanist developments in the United States are unaffordable for most middle and lower-income populations. There are various strategies that can be used to improve housing affordability. Using cost-effective building materials and reducing the amount of regulations can both increase affordability. Still, the most important and effective approach to designing more affordable housing is reducing size. This means small lots...
and small housing units, which can have the added bonus of creating a more walkable neighborhood. These types of mixed-use neighborhoods are also more affordable since they are “location-efficient.” With amenities mixed in and around housing, people who live there will save money on transportation costs (Talen, “Affordability” 492-3).

Yet the main problem of affordable housing, is that a mixed-use, New Urbanist neighborhood is a desirable place to live. The high demand for such locations will quickly drive up the cost of housing. Research has shown that people are willing to pay a premium to live in an amenity-rich, walkable community. It is not enough to simply put a cheap house in well-designed and highly desirable place and expect it to be affordable. New Urbanism cannot just be focused on design-only strategies. Multi-dimensional policies should be implemented, with the integration of the public sector or brokering shared equity programs, to make housing more affordable (Talen, “Affordability” 508).
CASE STUDY: Pearl District, Portland

The Pearl District in Portland, Oregon is a highly successful example of urban renewal with a very similar history and context to that of Indianapolis. It has numerous rail lines along the riverfront, Interstate-405 to the west, and the Portland Union Station directly southeast of the area. As a former industrial and warehouse district, the history of the Pearl District is similar to that of the Near South. Revitalization of this area began in the early 1990s and got its name by reusing many old factory and warehouse buildings that were dubbed “pearls,” and just needed to be polished. Today it is one of the most popular places in the country to live.

There have also been some more recent plans within the Pearl District. The North of Lovejoy Project, in the northern part of the district, began in 2002 as a piece of several developments. In January 2005, a design charrette was held to consider present and future neighborhood qualities and development.

The result was a conceptual urban design framework, which identified the redevelopment sites, existing and proposed retail, proposed open spaces, important edges, and significant gateways (City of Portland, 2-3). This is a significant case study because it combines both urban planning and design into one concept. The same process could be applied to the Near South in Indianapolis to help determine the future of the site.

[2.3] Johnson Street Townhomes in the Pearl District

[2.4] Typical streetscape in the Pearl District
DAYLIGHTING WATERWAYS

Human settlement is inextricably linked to water. This is not surprising, since it is a vital resource and is used for drinking, irrigation, transportation, and even disposal of waste. Most cities around the world were established primarily because they were located on or near a body of water. Prior to the railroad boom and subsequent industrial revolution in the mid-1800s, most cities managed their streams and rivers in a somewhat natural, though increasing channelized, way. The city grid accommodated them for the most part, building bridges and straightening legs to align with roads.

As the industrial revolution took hold, rapid urban expansion quickly followed and with it came a new host of problems. Since human and industrial waste was dumped into waterways, public concern about drinking water led to the burial of thousands of miles of streams and rivers (Buchholz, 5-6). Often in the form of large pipes and culverts, they were usually constructed of brick or concrete. In Indianapolis this is what happened to Pogue's Run, a creek that once ran from the east of downtown through the Near South. Seen also as a solution to rampant flooding in the downtown area, Pogue's Run was piped underground in 1915 (Figures 2.5 and 2.6). Unfortunately this “solution” did not really solve any problems. Wastewater was simply transported further downstream while other issues were temporarily delayed. Further urbanization and development into the twentieth century resulted in even more asphalt and concrete, decreasing the already limited amount of permeable surfaces in cities and urban areas. The pipes built to carry a stream beneath the city could not handle the increased amount of runoff during storm events. There needed to be a better solution. One that did not include continuously expanding and replacing the costly and expansive underground infrastructure of concrete.

[2.5] Construction of Pogue’s Run Tunnel, 1915

[2.6] a section of the tunnel today
The concept of stream daylighting, or restoring a tunnelled stream to the surface and open air, is a relatively new one. Though it began in the 1970s, the 1984 Strawberry Creek project in Berkeley, California is widely considered to be the original model. There are numerous benefits to daylighting, both ecological and economical. Daylighted streams can have much greater stormwater capacity than their piped counterparts and so are more effective at preventing floods. They are also much better equipped to slow and filter this stormwater. In addition to the economic gains of less flooding, daylighted streams can become public amenities, attracting businesses and creating valuable open space in an urban environment (Buchholz, 8-9).

Today, there are numerous examples of daylighting across the country. One of the most infamous is the San Antonio Riverwalk (Figure 2.8). Located in a highly urbanized area of San Antonio, Texas, it is a very controlled channel, that has many characteristics of a canal. Yet it is still a highly successful area, with numerous shops, restaurants, and museums along the river.

The Arcadia Creek in Kalamazoo, Michigan is another urban stream daylighting. While still quite urban, this project was included as a part of the city's redevelopment plan and so was implemented as a feature of a downtown park. The final result was substantial lawn and recreation space, and less native plantings, along the water.
**CASE STUDY:** Thornton Creek, Seattle

Thornton Creek in Seattle, Washington is an excellent example of an urban stream daylighting project used as a stormwater system and with a highly vegetated condition (Figures 2.10 and 2.11). Back in the 1990s the creek was buried in a 60 inch pipe under a two-level parking garage connected to the mall and owned by Simon Property Group.

In 1999, the Thornton Creek Legal Defense Fund was founded to raise awareness about the creek. Their end goal: daylight Thornton Creek. The next year they hired a local landscape architect, Peggy Gaynor, to conduct a study to determine if the creek could be daylighted as a system to treat stormwater, which is what the city wanted. Several years later, the property had changed hands several times, but the project was still moving forward. In 2004, the City Council created the Northgate Stakeholders Group and in June they unanimously approved the plan.

Since it was such a complex project, with "balancing dollars, neighborhood interests, water quality, and issues about flooding," Seattle Public Utilities hired SvR, a landscape architecture firm from Seattle to do the design work. It was a challenging project, taking three years to design and another two to construct. The final product was a meandering highly vegetated creek that also acted like a bioswale, complete with boulders, driftwood, and even recycled street curbing (Reed, 1).

As a smaller stream, the Thornton Creek daylight project could be similarly applied to Pogue's Run in the Near South. While Pogue's Run is a larger stream, many of the characteristics and strategies could still be applied. The interation of nearby condos and apartments would also be highly approriate in such a residential area.
SPORTS STADIUMS

Sports stadiums and complexes are an integral part of any major metropolitan area. A city often has a stadium for each professional sports team, though some teams do share stadiums. The number of professional teams a city has can be considered an indication of how large and economically successful it is. In the United States there are generally three different types of sport stadiums, representative of the most popular professional sports in this country, baseball, basketball, and football. Indianapolis has a sports complex for all three: Victory Field for the Indians (baseball), Banker's Life Fieldhouse for the Pacers (basketball), and Lucas Oil Stadium for the Colts (football).

Though sport stadiums and arenas are widely considered to generate economic success, independent studies have found that statistically there is no positive correlation between the construction of a sports facility and economic development. This misconception is often presented by promotional studies done by consulting firms that are hired by the team or other businesses that support the development of the sport facilities (Siegfried and Zimbalis, 103-4).

Among urban football stadiums there are some successful ones. Soldier Field in Chicago (Figure 2.12) and CenturyLink Field in Seattle (Figure 2.13) are both considered successful urban stadiums (Duke, Renn, and Simes). Though Soldier Field is a unique example since it is situated in a park setting along the waterfront, CenturyLink Field is located within the urban fabric of Seattle. Most importantly, it is adjacent to a mass transit stadium. Neither stadium is surrounded by vast amounts of surface parking and have pedestrian access from all sides. These are all important aspects which Lucas Oil Stadium currently does not address very well.
History of Lucas Oil Stadium

Despite the potential drawback of a stadium, its design can directly affect its economic success. Cavan Wilk identified six design characteristics that comprise a successful urban stadium: no surface parking, integration with the street grid, proximate transit access, pedestrian-friendly connection to transit, frequency of events, and vibrant surrounding area. Unfortunately, Lucas Oil Stadium fails five of these six characteristics. Greg Meckstroth, an urban planner living in Indianapolis also considers Lucas Oil a fairly unsuccessful urban football stadium.

The history of the Colts goes back to 1984, when the team was founded. Up until 2004 their stadium was housed in the RCA Dome (previously known as the Hoosier Dome). The stadium was adjacent to the Indianapolis Convention Center, which created “a superblock in downtown Indianapolis that encouraged monotonous urban forms and destroyed vitality in the surrounding area” (Meckstroth, 1). Despite this, the RCA Dome could still be regarded as an appropriate urban stadium since it was built to the street right-of-way, incorporated entrances directly off the sidewalk, and was well integrated into its urban context, having no surrounding surface parking. In 2008, the Dome was replaced with Lucas Oil Stadium, a huge, hulking “mega-structure.” It takes up about two downtown blocks, with its surrounding parking eating up another four to five. It does not provide any accessibility to the south, with large expanses of parking cutting off pedestrian access. In addition, the size of the building and lack of any ground floor retail or other use greatly detracts from street life and activity. “The result is a relative dead zone in an area of Indy that is in desperate need of good urban form to reactivate the area and connect it with the vibrant Meridian Street and Illinois Street to the north” (Meckstroth, 1). These connections may be difficult to integrate but will be necessary for the success of downtown Indianapolis.
CASE STUDY: The Banks, Cincinnati

The waterfront in Cincinnati between Paul Brown Stadium and Great American Ballpark is very similar to the Near South of Indianapolis. Both areas have a riverfront and interstate running through or very near the site, with the downtown area nearby. In Cincinnati this area has a current master plan for urban infill. The development, which is called The Banks, is mixed-use with residential, commercial, and retail (Simes, 1). Phase One of the 18-acre site is currently under construction. When complete, it will include about three million square feet of residential, street-level retail, restaurants, hotels, and office space (The Banks, 1). It will also need to have two floors of underground parking in the entire development in order to provide enough parking for all of the new residents and future employees on site (Simes, 1). This is an excellent case study for the Near South, since it has many similar components and is currently being implemented.

[2.16] Rendering of The Banks, along the Ohio River [18]
INDIANAPOLIS TODAY

There are many different types of plans for the city of Indianapolis. Since the city and county merged in 1970, the plans are often regionally focused. When combined together, these plans can offer an excellent look at the larger picture and necessary connections that can be made across the entire city.

Indianapolis Regional Center Plan 2020
The Regional Center planning area is about 6.5 square miles in the very center of Indianapolis-Marion County. Its boundaries are 16th Street to the north, Interstate 65 and 70 to the east, Interstate 70 to the south, and the Belt Railroad to the west. The plan outlines six main priorities that the city will strive to reach over the next twenty years. Four of these are applicable to the entire regional center plan and are as follows: [1] double the population to 40,000 by 2020 with emphasis on mixed-used development, [2] promote a strategic system of mass transportation and pedestrian/bicycle walkways, including the proposed Cultural Trail, to assure universal accessibility, [3] expand convention and sport capacities and cultural development, and [4] advocate good urban design to assure a vibrant and appealing downtown. There are several other priorities listen, including workforce development, public education, support for the fine arts, performing arts, and art in public places (City of Indianapolis, “Indianapolis Regional” 2).

The Regional Center Plan identified three areas of downtown that did not have existing plans and implemented urban design workshops to generate ideas for these areas. The Near South area of downtown was one of those areas, though the designs and ideas that were developed for the Near South Workshop were not listed out in great detail in the Plan (City of Indianapolis, 7-8). In addition to the workshops, two planning districts within the site were also identified as critical areas in need of development and urban renewal. The first is Planning District 21, also known as Kentucky Avenue Mixed-Use, which is located with Kentucky Avenue and South Street on the north, Missouri Street on the east, I-70 on the north, and White River on the west. It has been cited as critical because it is essentially an obsolete industrial section but is situated adjacent to a large fiber optic hub. This direct access to fiber optics provides lot of potential, making this area attractive to businesses involved in fiber optics networks. Since this district is also near the Indiana Convention Center and Lucas Oil Stadium there has been recent development of new hotels in this area. Due to their close proximity, the Plan suggests that development in this district should be at urban densities. It should be primarily medium-density mixed use, including commercial, retail, but mainly multi-family residential, with an additional 500 new housing units by 2020.

The second district identified as critical is Planning District 28, also known as the Convention Center complex. Only a portion of this district is within the site, being bounded by Maryland Street on the north, Capitol Avenue and Illinois Street on the east, McCarty Street on the south and Missouri Street and White River on the west. Since the Regional Center Plan was published in 2004, this district has undergone extensive changes since then, primarily the construction of Lucas Oil Stadium and the dismantling of the RCA Dome (City of Indianapolis 67-9).
Indy Connect Transit Vision Plan 2035

Until the late 1800s, the city of Indianapolis had an extensive streetcar system. Being the crossroads of so many rail lines, the city once had the largest interurban railway system in the country. In the 1920s, trolley buses began replacing streetcar lines. Like many cities across the country, Indianapolis saw a shift toward the car as the primary mode of transportation. This included investment into roadway systems such as interstates.

The Transit Vision Plan (Figure 2.17) discusses the future expansion of rail projects on existing railroads, express bus services, bus rapid transit and light rail projects on arterial streets. It also discusses the planned renovation of Union Station, which would serve intercity rail and bus, commuter rail, express bus, and bus rapid transit. Plans estimate that it would cost about $100 million in order to create a high quality facility that could serve all of these transit modes. There is also a proposal for a Downtown Transit Center, to be located along South Street near Union Station. This would possibly be located at the current U.S. Post Office site. With a capacity for 20 bus bays, it would be primarily used for bus layovers and transfers (HNTB, 23-4). These future plans have a significant impact on the Near South since both of these hubs will occur directly adjacent to or within the area.

Raw Sewage Overflow Long Term Control Plan and Water Quality Improvement

The City of Indianapolis has outlined their plan to reduce sewage overflows and improve the sewer system to meet the Clean Water Act requirements. Within the Near South, the plan discusses several options for the Pogue's Run Culvert. In 2004, Pogue's Run Art and Nature Park was constructed to reduce flooding downstream. Though this has alleviated much of the problem, the current system still has multiple combined sewer overflow (CSO) outfalls that empty into Pogue's Run. In the current plan, two different options were outlined for the creek, both of which involve the construction of underground infrastructure to capture CSOs and then transport them to a facility to be processed. (City of Indianapolis, 4.33-7).
Recent Downtown Developments
There have been a number of new developments in and around the downtown area. Two of the more substantial projects are Georgia Street and CityWay. Not surprisingly, they are also fairly close to the Near South. Both have a strong emphasis on urban renewal and will help to bring more life to downtown. Georgia Street, which was completed in time for the Super Bowl, connects the Convention Center to Banker’s Life Fieldhouse, transforming a street into a pedestrian thoroughfare.

On a larger scale, CityWay (Figure 2.18) is a mixed-use development that is currently under construction. It is nearly adjacent to the Near South, just further east along South Street. When complete it will have a 157-room hotel with 15,000 square feet of conference space, 320 apartments, a 75,000 square foot YMCA, and over 100,000 square feet of retail and office space (CityWay).

Within Indianapolis there are six recognized cultural districts. These areas within the city all have unique pockets of “cultural opportunity,” such as public art, galleries, museums, night clubs, theaters, and many different types of cafes and restaurants. Four are in the immediate downtown area: Indiana Avenue, the Canal and White River State Park, Wholesale District, and Mass Ave. Broad Ripple Village is just nine miles north and Fountain Square is a mile southeast down Virginia Avenue (see Figure 2.19).

These cultural districts are the most successful areas of the city and demonstrate the necessary ability to attract visitors. Of the six, Broad Ripple, Fountain Square, Mass Ave (Figure 2.20), and, of course, the Wholesale District (Figure 2.21) are the most populous of the districts and have a mix of different amenities, including commercial, residential, and public spaces, such as parks and plazas. Most importantly, these districts have “culture,” which is something that can only be obtained over a long period of time. The culture is inextricably linked with the histories of these places. Unfortunately this is a big problem facing the Near South. Since so many buildings have been demolished over the years, it has lost much of its historic character and culture. Despite these drawbacks, the Near South can still draw from the successes of the Cultural Districts.

[2.18] Rendering of CityWay development
[2.19] Map and logos of the Indianapolis Cultural Districts
[2.20] Massachusetts Avenue [17]

Indianapolis was founded in 1821. It was selected to become the new state capital, which until then was in Corydon, in southern Indiana. Being in the center of the state and along the White River immediately gave the city a distinct advantage. Though the river eventually proved to be unnavigable the framework for the city had already been laid. In 1821, Elias P. Fordham and Alexander Ralson drew up the first plans for the city. The Mile Square included a circular block in the center with four radiating streets set on a typical grid (Figure 3.1). Though the city has changed since the original plan, some parts of the four diagonals and the circle still remain today.

Growth was relatively slow in Indianapolis during the early years. In 1831, the city formed and passed the Internal Improvement Bill. The bill called for the construction of roads, canals, and railroads, which were to radiate from the center of the city to the south (Encyclopedia of Indianapolis, 23). Construction began on canals all across the state, but ended in failure by 1837, with the state barely avoiding bankruptcy.

Ten years later, in 1847, the first railroad finally arrived. The Madison and Indianapolis, which connected to Madison, Indiana enabled the town to finally begin to grow into a city. Factory buildings started springing up along the new rail lines and the river. Various industries, from sawmills to pork packing plants, flocked to Indianapolis. As a result, the population more than doubled, from 8,091 in 1850 to 18,611 in 1860 (Encyclopedia of Indianapolis, 25).

This growth was reflected in the Near South, which was fueled by the population boom. By 1887 (Figure 3.2), residential homes had spread through much of the Near South. Though it is interesting to note the change from 1887 to 1914 (Figure 3.3), particularly the channelization of both the White River and Pogue's Run, which was subsequently buried the following year in 1915.
In the almost 30 years from 1887 to 1914, Indianapolis experienced substantial growth and development. Much of this was outside of the Near South, as the city expanded much further south than it had in the previous fifty years. Some residential homes were replaced with larger industrial areas and rail yards. Commercial buildings also expanded along South Street and the Manual Training High School was built in the wedge bounded by Meridian, Madison, and Merrill. For the most part, the Near South remained largely a residential neighborhood. This pattern of growth started to change in the 1920s. Immigrant families that had started out in the Near South more affluent areas of the city, often the Northside. Though this was hindered by the the Great Depression, by the onset of World War II, families once again began to leave. As the residential neighborhood began to empty out, industry slowly took over (Louvenbruck, 2, 7). While it had started mainly along the river, gradually most of the western portion of the Near South was converted to industrial use. Before long the fabric of the Near South would be drastically
changed even more. Planning and development of the Interstate Highway System in Indianapolis began in 1956. The overall concept always included three parts: the outer belt around the suburban area, the inner belt located around the central business district (downtown), and spurs connecting them (Ripple, 388). By 1960 the inner belt (Figure 3.4) had been approved and by 1963 forty percent of the property for the interstate had been acquired. Though public opposition to the interstates had grown it was deemed that the project had progressed to the point that any major revisions would have resulted in at least a five year delay, which would have jeopardized the use of interstate funding for the construction (Ripple, 487).

While the interstate has become a vital part of the city of Indianapolis, it had a destructive effect on the Near South. During construction, only the houses that were in the planned route were removed, yet the aftermath of cutting through such a residential area was inevitable. People continued to leave the area, exacerbating the already prevalent exodus of the city.

Around the same time the sports scene in Indianapolis was growing, the Pacers were formed in 1967. The Colts came from Baltimore in 1984 to occupy the newly built Hoosier Dome. Less than twenty years later, its replacement, Lucas Oil Stadium was constructed in the Near South. As a result, the city was able to host its first Super Bowl in 2012, which is widely considered to have been a tremendous success.
[3.5] Timeline of Indianapolis and the Near South, (Encyclopedia of Indianapolis) (Louvenbruck)
The capital of the state of Indiana, Indianapolis is in the middle of the state and the center of Marion county. In 1970, the city and county merged, with just a few unincorporated areas (see Figure 3.7). Within the city, growth has been oriented toward the north, as is evident even by the location of the outer loop. Closer to downtown this pattern of growth is even more evident, with many viable neighborhoods still existing to the north, such as Old Northside and Lockerbie Square (Figure 3.8).

The Near South (Figure 3.6) is located just south of the downtown Mile Square. As such, its northern boundary is the rail line, just including South Street, and is bounded on the south by Interstate 70. The White River defines its western edge, while Madison Ave, along with the Eli Lilly campus create the eastern edge. With the Wholesale District just to the north, there are countless amenities and destinations within walking distance, including Monument Circle, Banker's Life Fieldhouse, Union State, Convention Center, Victory Field, White River State Park, as well as numerous museums, shops, restaurants, and hotels. This location makes urban renewal in the Near South all the more viable and necessary to the success of the entire downtown.
Near South and its immediate context
During the inventory and analysis phase, several different areas emerged, each with their own character. They were defined primarily by land use and building types but also by the general feel and scale. (Figure 3.9)
INVENTORY

[3.9] General zones with corresponding photos of existing conditions
The existing infrastructure and built systems have had a significant impact on the site. The figure ground (Figure 3.10) shows how few buildings remain in the Near South today. This is, in part, due to circulation patterns (Figure 3.11), with ten on/off ramps along this portion of I-70. Eight of those are on the north side and within the site. There are also three IndyGo bus routes that stop in the Near South, though one simply serves stops by the hotels on the way to the airport.

While this area was historically residential, a large percentage of the Near South is currently vacant. Existing land use patterns (Figure 3.12) are largely industrial; many light industry businesses, such as welders and auto shops have crept into the vacant residential neighborhood.
INVENTORY: Built Systems

[3.12] Current land use patterns
There are very few natural systems in the Near South today. Those that do remain have been so drastically altered that they are almost not natural at all. The most significant of these is Pogue's Run, which is a creek that runs under the site. Shown in the dashed line, it is entirely contained in a concrete tunnel until it lets out into the White River.

The topography (Figure 3.13) and soil types (Figure 3.14) have been the most unchanged in the eastern portion of the site, while along the river they have been dramatically to create a levee.

While the earth is highly unnatural along the river, it is the largest area of naturalized vegetation in the Near South (Figure 3.15). This vegetation only exists as a remnant buffer between the river and industry and is currently not being utilized, though there are plans to continue the White River Greenway through this area.
INVENTORY: Natural Systems

[3.15] Existing green spaces and water systems
In the Near South there are countless issues and problems to be addressed. At the same time, there are many opportunities to solve these problems. With such a close relationship between the two it can be difficult to separate potential opportunities from constraints. Often, a certain characteristic or situation can provide both a constraint and opportunity. Despite this, areas that presented more positives and potential were considered as opportunities (Figure 3.16), while areas that had greater negative impacts were constraints (Figure 3.17).

After those areas were identified a final layer of analysis was applied to determine how to address those opportunities and constraints (Figure 3.18)
ANALYSIS

[3.18] Combined analysis
## GOALS & OBJECTIVES

From the research and site analysis, a set of goals and objectives were developed to dictate a program for the Near South.

1. **Create a cultural district in the Near South that has its own unique character & experiences**
   - Celebrate the history & cultural diversity

2. **Attract people to the Near South from all of the surrounding areas**
   - Capitalize on visitors from downtown
   - Address the future role of Union Station and a possible bus facility
   - Create stronger connections across the interstate and along the river

3. **Make the Near South a desirable place to live**
   - Connect residential to the stadium
   - Create a higher density & diversity of housing type
   - Expand the green space network

## PROGRAM

- Maintain historic buildings
- Renovate/repurpose unused industrial buildings
- Pogue’s Run (partial daylight)

- Commercial/retail infill (restaurants, hotels, grocery, etc.)
- Office space
- Parking (structures, underground)
- Plaza south of Lucas Oil
- Greenbelt along river
- Pedestrian access into Near South

- High-density residential (condominiums, apartments)
- Medium-density residential (townhouses, multi-plexes)
- School and health services
[4.1] Analysis of the program
After defining the program three separate concepts were developed to explore different directions the project could take. Each concept was then analyzed for its opportunities and constraints. The best concept was then further developed.

**CONCEPT ONE: Pogue's Run**

The first explores the concept of daylighting Pogue's Run. It would bring the creek to the surface, connecting the stadium plaza to nearby retail and mixed-use.

[+] opportunities
- Pogue's Run provides connecting element
- unique attraction within the city
- restores a historic waterway
- excellent amenity to nearby retail and residential

[-] constraints
- runs through limited portion of Near South

[4.2] Concept one, Pogue's Run daylight
CONCEPT TWO: Sports
The second concept embraces the history of Indianapolis and the Near South and fully integrates the most recent aspect of that history: sports.

[+] opportunities
- incorporates sports throughout
- radial/centralized organization connects to all of Near South
- provide large open spaces near residential

[-] constraints
- arenas would require more parking
- stadiums often sit vacant when not used

CONCEPT THREE: Greenways
The third concept capitalizes on the amount of open space that currently exists in the Near South, turning it into a network of greenways.

[+] opportunities
- many opportunities to access the White River
- creates substantial green network

[-] constraints
- does not integrate area east of Stadium
- too many corridors detract from streets
- greenways alone are not necessarily unique
The refined concept included aspects from the original three, though it derives the most from Pogue's Run, it still incorporated sports and a network of greenways.

[+] opportunities
- Pogue's Run provides connecting element
- excellent amenity to nearby retail and residential
- radial/centralized organization connects to all of Near South

[-] constraints
- runs through limited portion of Near South

[4.5] Refined concept, combining Pogue's Run and sports
Final concept with process and development phases
As in any development, the Near South master plan was designed to be implemented in phases (Figure 4.7). The first phase has three main nodes: Stadium Plaza, IndyGo Bus Station, and White River State Park Expansion. These areas will provide a catalyst for commercial and high-density residential development and help bring people into the Near South. The largest of these, Stadium Plaza, is centered around the first phase of daylighting Pogue's Run. The second phase integrates into the existing lower-density pockets of residential homes and through the existing Meridian corridor. Further expanding the White River Greenway down to the interstate, the park will connect to the second part of Pogue's Run. It also includes the removal of the State Surplus, which was a big-box building that did not address any context of have any historic value. The third and final phase focuses on enlivening Kentucky Avenue, with infill around existing industrial buildings and the installation of a greenway from the river to South Street.

[4.7] Project phasing
[4.8] Master plan
SECONDARY CONNECTOR, TWO-WAY

PRIMARY CONNECTOR, ONE-WAY

LOCAL COLLECTOR, TWO-WAY

RESIDENTIAL COLLECTOR, TWO-WAY

RESIDENTIAL ALLEY, TWO-WAY

SERVICE ALLEY, ONE-WAY

[4.12] Street hierarchy and sections
The full implementation of the master plan will dramatically change the circulation throughout the Near South and downtown Indianapolis. The most substantial change being the IndyGo Bus Station, which will allow for bus transfers to occur at one location rather than the loop which is currently in place. The renovation of Union Station into a transit hub will also bring much more traffic to the Near South, though this increase will be mostly pedestrians.

Finally, with the removal of the Capitol and Illinois interstate ramps, the vehicular traffic will cut through the residential neighborhoods much less. While the surface parking will substantially decrease, parking structures will be interspersed throughout so that there will be an overall increase in available parking to accommodate the increase in residents and visitors to the Near South.
Almost the entire length of Pogue's Run tunnel consists of two parallel box culverts (Figure 4.14). The dimensions vary along the route, though they are shown below at their greatest cross section (City of Indianapolis, "Raw Sewage" 2.10). The implementation of Pogue's Run daylight will more than accommodate the median streamflow and will utilize the existing box culvert for overflow during large storm events.

The Pogue's Run Watershed serves much of downtown Indianapolis (Figure 4.15) and is about 13 square miles. The proposed daylight is only a small section of the entire creek and would require future phases to bring the entire stream back to the surface.
POGUE'S RUN DAYLIGHT

8320 ac
13 mi²

- Existing Culvert
- Daylight
- Future Daylight
- Watershed
- Future Watershed
- Master Plan Area
- waterbody
- roads

[4.15] Pogue's Run Watershed plan
There are various edge conditions along Pogue's Run (Figure 4.16). They range from a highly vegetated and more open "park" to a more enclosed and hardscape "enclosed built." Several of these conditions are shown in section below.
POGUE'S RUN: Planting Zones

STREAM BANK
- Asclepias incarnata (swamp milkweed)
- Juncus effusus (soft rush)
- Carex stricta (tussock sedge)
- Iris versicolor (blue flag)
- Scirpus pungens (three-square bulrush)
- Pontederia cordata (pickerel weed)

OVERBANK
- Lindera benzoin (spicebush)
- Schizachyrium scoparium (little bluestem)
- Aronia arbutifolia (red chokeberry)
- Pycnanthemum virginianum (Virginia mountain mint)
- Rudbeckia subtomentosa (sweet coneflower)
- Aster laevis (smooth blue aster)

TRANSITIONAL
- Halesia caroliniana (silverbell)
- Clethra alnifolia (summer sweet)
- Liatris spicata (marsh blazing star)
- Liriodendron tulipifera (tulip tree)
- Panicum virgatum (switchgrass)

[4.17] General planting zones along Pogue's Run
The Pogue's Run stream daylight has various water systems along its course to control stormwater in various ways (Figure 4.18). It collects water through existing storm drains in addition to collecting runoff from nearby parking lots and plazas and directing it into the stream via trench drains.

In large storm events, when water levels exceed capacity, it overflows into a section of the existing tunnel. The water is held until it can be released back into the stream.

There are also multiple points where check dams and weirs are implemented to slow down the velocity of the creek and make necessary elevation changes.
[4.19] Stadium plaza enlargement plan

[4.20] Stadium plaza surface and underground parking plans
STADIUM PLAZA: Fixture Details

One of the most activated spaces along Pogue's Run is at Stadium Plaza (Figure 4.19), where the creek interacts with Lucas Oil Stadium and commercial store fronts along the street. A substantial amount of surface parking has been integrated into the plaza to allow for tailgating before games. Additional underground parking was also added beneath the plaza (Figure 4.20). To tie into the character of the nearby Cultural Trail, many of the fixtures throughout the plaza will be of the same type and family of those implemented along the trail (Figures 4.21-23).

[4.21] Backed bench detail, Austin Set, Landscape Forms

[4.22] Litter receptacle detail, Chase Park Set, Landscape Forms

[4.23] Lightpole detail, BEGA 997FB
WHITE RIVER GREENWAY, Encourages recreation along the river

[4.27] White River Greenway extension
CONCLUSION

This project originated as an urban design strategy for one of the most under utilized and vacant areas in downtown Indianapolis. The initial research focused on urban renewal and the influence that sports stadiums have on their urban fabric. Gradually as the research became more site-specific, several other themes emerged. The in-depth historical analysis showed how industry had a significant impact on the current character of the Near South. Sports also became a main point, since sports were instrumental in shaping Indianapolis in the past fifty years. But the most crucial element that emerged after all of the research was Pogue’s Run. The creek was the beginning of the history; it was why industry had settled there in the first place. Yet it remains buried in concrete, used as a large storm drain.

In Indianapolis today, the future of Pogue’s Run is likely to remain in concrete. But the Indianapolis of the future has the possibility and opportunity to embrace change and the idea of daylighting Pogue’s Run.

[5.1] Full daylight of Pogue’s Run
APPENDIX B: List of Figures

INTRODUCTION
1.1 Photograph taken in the Near South, 1945 [8]
1.2 Near South today

LITERATURE REVIEW
2.1 Orchard Gardens, a Hope VI project in Boston [9]
2.2 Pruitt-Igoe, an infamously unsuccessful housing project [7]
2.3 Johnson Street Townhomes in the Pearl District [20]
2.4 Typical streetscape in the Pearl District [11]
2.5 Construction of Pogue's Run Tunnel, 1915 [3]
2.6 Section of the tunnel today [12]
2.8 San Antonio Riverwalk [14]
2.9 Arcadia Creek Festival site in Kalamazoo [10]
2.10 Thornton Creek daylight in Seattle [19]
2.11 Thornton Creek daylight in Seattle
2.12 Soldier Field along the waterfront park in Chicago [6]
2.13 Centurylink Field in downtown Seattle [16]
2.14 RCA Dome before it was demolished [5]
2.15 Lucas Oil Stadium [1]
2.16 Rendering of The Banks, along the Ohio River [18]
2.17 Transit Vision Plan map
2.18 Rendering of CityWay development [2]
2.19 Map and logos of the Indianapolis Cultural Districts
2.20 Massachusetts Avenue [17]
2.21 Arts Garden in the Wholesale District [4]

SITE
3.1 Original platt of the city of Indianapolis [13]
3.2 1887 Sanborn Fire Insurance Maps
3.3 1914 Sanborn Fire Insurance Maps
3.4 1970 plan of the inner loop of the Interstate Highway [15]
3.5 Timeline of Indianapolis and the Near South
3.6 Near South and its immediate context
3.7 City of Indianapolis
3.8 Downtown and surrounding area
3.9 General zones with corresponding photos
3.10 Figure ground of existing structures
3.11 Existing circulation
3.12 Current land use patterns
3.13 Topography
3.14 Soil types
3.15 Opportunities
3.16 Constraints
3.17 Analysis

DESIGN
4.1 Program analysis
4.2 Concept one, Pogue's Run daylight
4.3 Concept two, sports facilities
4.4 Concept three, greenways
4.5 Refined concept, combining Pogue's Run and sports
4.6 Final concept with process and development phases
4.7 Project phasing
4.8 Master plan
4.9 Figure ground
4.10 Green space network
4.11 Land use
4.12 Street hierarchy and sections
4.13 Circulation
4.14 Capacity and streamflow patterns of Pogue's Run
4.15 Pogue's Run Watershed plan
4.16 Pogue's Run Daylight edge conditions and sections
4.17 General planting zones along Pogue's Run
4.18 Water systems along Pogue's Run
4.19 Stadium plaza enlargement plan
4.20 Stadium plaza surface and underground parking plans
4.21 Backed bench detail, Austin Set, Landscape Forms
4.22 Litter receptacle detail, Chase Park Set, Landscape Forms
4.23 Lightpole detail, BEGA 997FB
4.24 Bird's eye view
4.25 Stadium plaza
4.26 Pogue's Run daylight
4.27 White River Greenway

CONCLUSION

5.1 Full daylight of Pogue's Run
APPENDIX C: Works Cited

BOOKS


JOURNAL ARTICLES


DOCUMENTS


ONLINE PERIODICALS


WEBSITES


IMAGES


