UNIVERSITY OF CINCINNATI

Date: May 12, 2009

I, Alicia J Kravitz

hereby submit this original work as part of the requirements for the degree of:

Masters of Architecture

in the School of Architecture and Interior Design

It is entitled:

Transit Oriented Design: A Reinterpretation

Student Signature: Alicia J Kravitz

This work and its defense approved by:

Committee Chair: George T Bible

John Hancock

Approval of the electronic document:

I have reviewed the Thesis/Dissertation in its final electronic format and certify that it is an accurate copy of the document reviewed and approved by the committee.

Committee Chair signature: George T Bible
Transit Oriented Design: A Reinterpretation

A thesis submitted to the

Division of Research and Advanced Studies
of the University of Cincinnati

in partial fulfillment of the
requirement for the degree of

MASTERS OF ARCHITECTURE

in the School of Architecture and Interior Design
in the College of Design, Architecture, Art and Planning

2009

by

Alicia Kravitz

B.S. Arch, University of Cincinnati, 2007

First Committee Chair: George T. Bible
Second Committee Chair: John Hancock
Abstract

As the line between rural and urban space have blurred over time, the clarity of this boundary is needed once again. Public transportation, and specifically rail, is one tool that can bring a sense of urbanity back to the city, developing the city about transit stations and the scale of the pedestrian, rather than the nebulous streetscapes and limitless suburbs constructed for the automobile. Following a period of vast over construction in America, people are beginning to reconsider the suburban life and look again at the numerous benefits of city living.

Based upon the guidelines of New Urbanism town planning, a new form of urban design has recently emerged. The Transit-Oriented Design (TOD) was founded on the concept that public transit and the pedestrian are the primary design concern within a community. The needs of the automobile should not detract from the environment but rather become integrated within a people-oriented community. Traditionally, TODs have been implemented in suburban locations, in newly planned towns or in generally more remote settings. They offer a newer, and more detached version of what our cities used to offer. It is becoming apparent that TODs must be utilized in order to restore a needed sense of urban living: a pedestrian scaled, dense, urban context. If people have begun to search for a denser urban environment, the downtowns of American cities must act as the model for newer suburban reinterpretation.

Cincinnati is among those cities that require drastic downtown re-urbanization. The city has become riddled with expansive parking lots, leaving gaping wounds in the center of the city. One of the largest wounds within the city center is Broadway Commons. Now mostly parking lots, it serves only the automobile, completely disregarding the pedestrian and the urban scale of downtown. The only memory that remains of public transportation and the pedestrian is the Greyhound station, currently in a state of disrepair, with no connection to the surrounding urban fabric and its community. This thesis aim to integrate a redesigned Greyhound station within a revi-
talized urban landscape, comprised of community and transit.

As Cincinnati begins to move toward a more efficient and expansive transit system, a TOD would be an appropriate strategy to apply to a new Broadway Commons district. This thesis aims to develop a strategy to develop a neighborhood center, with transit as the core, to create a better sense of community, place and urbanism for the city of Cincinnati.
# Table of Contents

Illustration Credits

Introduction ............................................................................. i

Chapter One - Transit ........................................................... 1
   The Need for Public Transportation ................................... 1
      History of Transportation in Cincinnati ......................... 5
         The Problem of Transit ........................................... 5
         Water Transportation ............................................. 6
         The Transitional City ........................................... 6
         The Industrial City .............................................. 7
         Depression and War ............................................. 10
         Suburbanization ................................................... 12
         The New Transit Era ............................................. 13
         Local Hurdles ..................................................... 15

   Summary ............................................................................. 16

Chapter Two - Community and Transit ................................. 19
   Community Design Strategies ............................................. 20
      The Planned Community ......................................... 20
      The Designed Community ...................................... 21

   Transit - Oriented Development ....................................... 23
      Location Efficiency ................................................ 23
      Rich Mix of Choices .............................................. 25
      Value Capturing .................................................... 27
      Place Making ........................................................ 28
      Resolution Between Node and Place ......................... 30

   Urban Examples .............................................................. 31
      Belmont Station – Chicago, IL .................................. 31
      Place de l’Homme de Fer - Strasbourg ..................... 32
Chapter Three - Program and Site Development

Broadway Commons: Current Conditions

Broadway Commons: Future Plans

The Transit - Oriented Design

The Users

The Resident

The Commuter

Introduction to Site

Scales of Design

The Region: Metropolis, City and Town

The Neighborhood, The District,

The Corridor

The Block, The Street, The Building

Site Analysis

Locale

Region

City

Neighborhood

Site Documentation

Photographic Documentation

Existing Urban Fabric

Proposed Urban Fabric

Topography

Land Use

Nearby Draws

Entertainment
Illustration Credits

Introduction

I.1 Music Hall from Washington Park. 1898. The Public Library of Cincinnati and Hamilton County, Cincinnati Slide History Collection.

I.2 Entrance to Eden Park, Late 1800s. From the Clyde M. Bowden Collection of Postcards. Property of The Public Library of Cincinnati and Hamilton County.

I.3 Fountain Square and Tyler-Davidson Fountain. Published by Detroit Publishing Co. From the Clyde M. Bowden Collection of Postcards. Property of The Public Library of Cincinnati and Hamilton County.

I.4 Fourth Street, Looking West from Vine, 1902. From the Cincinnati History Slide Collection, property of The Public Library of Cincinnati and Hamilton County.


Chapter One


1.9 Kravitz, Alicia. Personal Sketch. 20 November 2009.

1.10 Miami and Erie Canal, 1920. Cincinnati History Slide Collection. The Public Library of Cincinnati

1.11 Kravitz, Alicia. Personal Sketch. 20 November 2009.

1.12 Washington Park. Published by The Cincinnati News

1.13 Kravitz, Alicia. Personal Sketch. 20 November 2009.


1.19 Kravitz, Alicia. Personal Sketch. 20 November 2009.


1.24 Kravitz, Alicia. Personal Sketch. 20 November 2009.


Chapter Two


2.9 Kravitz, Alicia. Personal Photograph. 21 August 2008.


2.18 Kravitz, Alicia. Personal Photograph. 21 August 2008.


2.20 Kravitz, Alicia. Personal Photograph. 21 August 2008.
Chapter Three

3.1 Kravitz, Alicia. Personal Photograph. 3 November 2008.
3.2 Jail extension map of Sites. Hamilton County.
3.4 Casino Image. Available <http://www.gamblingplanet.org/GP_editorial_072407>
3.5 Kravitz, Alicia. Personal Sketch. 20 February 2009.
3.6 Kravitz, Alicia. Personal Sketch. 20 February 2009.
3.7 Kravitz, Alicia. Personal Sketch. 20 February 2009.
3.8 Kravitz, Alicia. Personal Sketch. 20 February 2009.
3.9 Kravitz, Alicia. Personal Photograph. 20 February 2009.
3.10 Kravitz, Alicia. Personal Photograph. 20 February 2009.
3.11 Kravitz, Alicia. Personal Photograph. 20 February 2009.
3.12 Kravitz, Alicia. Personal Photograph. 20 February 2009.
3.19 Main Street, Cincinnati. Available <http://cincinnatiarts.com/ffmainstreet>
3.26 Hauck, John W. Narrow Gauge in Ohio: The Cincinnati, Leba-


3.28 Hauck, John W. *Narrow Gauge in Ohio: The Cincinnati, Lebanon & Northern Railway*. Boulder, Pruett Publishing, 1986. p. 95-


Chapter Four


4.23 Kravitz, Alicia. Personal Model/Photo. 15 February 2009.


Introduction

Cincinnati was once a city of innovation, society, the arts and development. People traveled from across the country to explore the city and attend its events. Cincinnati boasted a bustling urban lifestyle, including Music Hall, parks, museums and shopping. By 1850, Cincinnati was one of the most successful and booming metropolises in the nation. People speculated that Cincinnati would soon become the newest ‘capitol’ of the west, due to its location in regards to river traffic. The new German population that moved to the city from war-torn Europe created an extremely broad employment pool that allowed the city’s industry to grow tremendously.¹

As other cities began to surpass Cincinnati in regard to population and rail traffic, Cincinnati focused its efforts on a revitalized cultural identity. Music Hall, the Cincinnati Parks system and one of the nation’s first professional baseball teams in 1868 re-energized the city.² Cincinnati was a successful metropolis partly because the city was so compact. It is well understood that densities of people, especially in an urban core lead to success. Jane Jacobs notes in her work, *The Death and Life of Great American Cities*, “[The] relationship of concentration - or high density - to conveniences and to other kinds of diversity is generally well understood as it applies to downtowns. Everyone is aware that tremendous numbers of people concentrate in city downtowns and that, if they did not, there would be no downtown to amount to anything” (p. 201). Jacobs makes this observation within the context of examining suburban communities and their reliance on cities for culture, yet their unwillingness to support them. Before the advent of public transportation and eventually the automobile, allowing people to move further away from the city center, we lived close to one another. Those

2 “While the Cincinnati Southern Railroad was under construction, Cincinnati’s boosters forged a new identity for themselves and the Queen City. They worked to create a city of culture and tradition, of beauty and pageantry. When the boosters having given up on making Cincinnati the nation’s largest city, turned inward and built an artistic tradition for its own sake” The Cincinnati Historical Society. Cincinnati: The Queen City Bicentennial Edition. Cincinnati: The Cincinnati Historical Society, 1988. p. 62.
of all colors, creeds, economic classes and occupation lived in one area. It was this diverse population that was able to support the diversity of opportunities that a city provides. It was transportation that moved people away from the urban, sustainable lifestyle, and ironically enough, is what is needed to bring this way of life back to Cincinnati.

Although the density was a positive force for city development at the turn of the 20th century, people desperately wanted to get out of the crowded and polluted basin. The surrounding hillsides had trapped Cincinnatians in a relatively small area. When public transportation became accessible to the upper class, they immediately left the density of the basin. The move to the suburbs was never questioned. In the basin there was no open space, yet in the suburbia, children had ample space to play. This move created the first transit oriented developments such as Walnut Hills, Clifton and College Hill. These new developments were advertised as a healthier environments, as seen for the advertisement for Wynnburn Park in Figure I.5.

These first suburbs were created within the constraints of public transportation, and produced communities that were concentrated in a nodal fashion around the train station. The central city was the center for transportation, and railroad suburbs began to develop around smaller stations, with little development outside of the walking distance from the station. As people moved away from the city, they were still physically connected to the city through public transit, and the pattern of development reflected its importance and are compared to beads on a string, as seen in figure I.6. The central city was connected in a

---

3 “The first important characteristic of the walking city was congestion. Gross densities normally exceeded 75,000 per square mile and were rarely less than 35,000 per square mile, which is about the level of crowding of New York City in the 1980s.” Kenneth T. Jackson, Crabgrass Frontier: The Suburbanization of the United States. New York: Oxford University Press, Inc, 1985. p.14

4 “The result was hailed as the inevitable outcome of the desirable segregation of commercial from residential areas and of the disadvantaged from the more comfortable.” Jackson, 20.

5 “The practical result of this limitation was that railroad suburbs were usually discontinuous and separated by at least a mile or two of open space or greenbelt from each other. The typical pattern was for them to develop like beads on a string; the towns themselves were connected by the railroad line but were not initially contiguous either to each other or the central city. Within the sub-

---

Figure I.4 Fourth Street at the heart of downtown, turn of the 20th century.

Figure I.5 Wynnburne Park development, one of the first Cincinnati automobile suburbs.

Figure I.6 Beads on a string diagrams the relationship between the central city and railroad suburbs.
nodal fashion to developments at each new train station. Only the wealthy were able to move into the countryside, leaving all other economic classes in the overcrowded basin.

The automobile took that move into the countryside to an unprecedented level. Before the car, development was limited to either public transportation or walking. There was a distinct line between urban and rural space. Following the mass production of the automobile, people were able to move far enough from the city and mass transit, that the only way to get to their home was by car. Mass transit was no longer expected to be at the heart of the development of the community, it became a supplement to the new automobile development model. The wealthy and middle class left the urban core, leaving the urban poor to live in a homogenous ghetto. People founded new homogenous suburbs, and abandoned the city. One woman writes about her daily life in the suburbs, “There is no sense of community here on my street, either, because we all have to drive around in our own little worlds that take us fifty miles a day to every corner of the surrounding five miles.”

The city of Cincinnati has developed a preliminary plan for light rail and streetcar in the city, and Broadway Commons is identified as a major transit hub. This site should not be developed in a way that gives preference to the automobile, as many suburban park and rides do. The automobile is an important component to urban design but not the primary design consideration. As Peter Calthorpe, transit and New Urbanist expert explains, the pedestrian and the automobile scale much work together to create a neighborhood, not a total dominance of either. The recent trend of designing solely for the car results

---

6 “The second important characteristic of the walking city was the clear distinction between city and country” Jackson 14. “The first distinguishing element of metropolitan areas in this nation is their low density and the absence of sharp divisions between town and country.” Jackson 6.


8 “…the more interesting design challenge for me is not to make either the car or the pedestrian the nexus that we design...
in a separation of the station from the surrounding urban fabric. The alternative to this type of careless design is the transit-oriented development. The TOD has been implemented more and more in recent years, and has proven to be quite successful when established properly. This strategy encourages walking, offers public transit at the core of the community and attempts to reduce the amount of driving its residents would otherwise engage in. This concept is usually applied to a new suburb, or in an old railroad suburb that requires a face-lift. In the case of this thesis, it is an urban site that could benefit from a TOD. An urban transit hub is an opportunity to integrate transit seamlessly into a city. Large, separated train hubs are a typology not meant for a modern mid western city, where light rail and streetcar are able to release their passengers into unobstructed urbanity. This type of transit hub would bring people from downtown, Over the Rhine, and the suburbs into the everyday life of a TOD. The large expanses of parking could be diminished by offering the services the surrounding neighborhood needs, as well as the services the commuters and daytime workers require.

Figure 1.9 - Site plan on suburban Transit-Oriented Development in Orenco, Oregon, a western suburb of Portland.

Chapter One – Transit

Transportation has always determined the patterns of development within a city, especially in America. In the past, the path of the rail lines and streetcars determined city development and lifestyle, starting with horse car lines in Cincinnati (Figure 1.1). Today, most Americans cannot imagine living without their cars. This reliance on the automobile is reasonable, considering how American cities and communities are developed. Over 40% of us live in the suburbs\(^1\), where a two or three car garage, large lot and wide streets are the standard. Many people protect this lifestyle as being a natural development of our society and is the result of demand. This is not the result, however, of market demands or a reflection of what people truly want. We quickly forget that the major push factor in the move out of the city made the suburb the more attractive way of life, through the GI Bill and affordable mortgages. This was started in the time following World War Two, to provide construction jobs for the returning soldiers. They not only built the countless suburban homes, but the roads, freeways and expressways to connect them. Today, we are facing the repercussion of these large scale investments. The market is already saturated with suburban homes and freeways, forcing us to turn our attention to smarter growth, which includes a renewed investment in urbanism and mass transit.

The Need for Public Transportation

Prior to the advent of the steam engine and later, automobiles, walking cities were dense, urban communities. Public transit later allowed people to live further away, yet restricted how far people could move. As the automobile became the main mode of transportation, everything changed. People could live wherever they desired, without limits. The limits placed on development can be what give our cities our most interesting places such as Place de l’Homme de Fer in Strasbourg, or Madison Square in New York (Figure 1.3). Now, as those lim-

its have expanded too far from the urbanity of the city, a return to density and public transit is what is needed to re-create our sense of place, community and urbanity. In a society where the economic and cultural viability of the car is coming into question, public transit needs to be developed to become the viable alternative.

In a country where the federal government requests an increase in gasoline taxes to make up for Americans driving less, we as a society need to re-examine how we travel. According to the Associated Press, “Motorists are driving less and buying less gasoline, which means fuel taxes aren’t raising enough money to keep pace with the cost of road, bridge and transit programs.”2 Not only has the rise and fall of the price of oil wreaked havoc on the American consumer, its flux has stalled change every time we begin to change our mind set. Because America uses so much oil (Figure 1.4), gasoline taxes become a major source of income that could be lost as Americans drive less. A major shift in the way we view our transportation needs is in order. Jeffrey D. Sachs from the Earth Institute at Columbia University points out that the shortage of oil will only worsen with increasing demand from rapidly developing China and India. He gives two different, yet complimentary approaches to solving the problem. Much more efficient sources of energy and vehicles must be developed, or the way our cities are designed must change. Improved zoning codes, promoting walking and biking and the re-investment in public transit are all important matters to discuss.3

It has been demonstrated that the financial ease of owning an automobile has changed our society in such a way that it has reached a breaking point. People have moved so far from the city center that urbanity is all but lost. The number of commuters and the distance they travel has risen to such a level that there is no way to keep up with the demands of road construction and maintenance. As illustrated in the recent past, Americans slow their driving habits when the cost becomes pro-

---


3 Jeffrey D. Sachs, “Coping With a Persistent Oil Crisis,” Scientific American (October 2008).
hibitive. The way to keep people moving where and when they want to is not by building more roads and removing a gas tax, but to instead develop positive alternatives.

The concept of “induced demand” shows us that not only does adding more lanes to a busy highway make for a larger impact on the surrounding community, but it actually attracts more drivers to that highway, leaving the road equally, if not more congested before. The overuse of roads and highways leads to longer commutes and more headaches for drivers, and is also an enormous drain on the economy. One of the major patrons of our highway, the trucking industry is the most affected by their condition. When they are stuck in traffic, it costs time and money, which is indirectly paid for by the American people. Chairman of the American Trucking Association, Charles Whittington wants to see more investments in the highway system, “Bottlenecks around the nation cost the trucking industry about 243 million lost truck hours and about $7.8 billion per year, according to the commission.”4 If growing the current transportation system will not relieve the congestion, more varieties of transit need to be developed, and the way this country moves its goods will shift as well.

It is apparent that there is a problem with the way people move within the United States, and although transit is an important component to consider, it is the result of a shift in value, rather than the catalyst for this change. People will not re-consider their driving and living customs until there is another option that is equally attractive, whether based upon ease or expense comparisons. Emory Bundy, an avid environmentalist and anti-light rail author notes in his essay, Sprawl and Congestion – Is Light Rail and Transit-Oriented Development the Answer?, that light rail alone will not solve the problems of American sprawl. Public transportation is a costly endeavor, and according to Bundy, a wildly expensive solution. Americans are not fully paying for the cost of driving, and until they do, light rail and other investments into public transportation will always be an unnecessary expense. He gives the example of a small San Francisco company. The business could either pay the owner of

---

4 “Raise Gas tax By 10%, Congress Urged,” MS NBC Online. 2 January 2009.
his building a large amount of money to rent parking spaces for their employees or give incentive for the employees to not drive. The company decided to give each employee three dollars for each day they did not drive, but also ask them to pay three dollars when they did. It is innovation such as this that can change the shape of our cities.

Bundy presents a valid idea of how to fix the transportation problem. He suggests how American cities can change for the better, but he is only part of the equation. The company that paid its employees to find alternative ways to get to work is a concept that could not work in a city like Cincinnati with inadequate transit. The bus system in Cincinnati is far less efficient than all of the public transit options in San Francisco. Most times, it is actually easier and faster to move through San Francisco without a car. In Cincinnati, it might be in the employee’s best interest to pay the their employer in order to park at work. The small difference in price is not worth the large inconvenience of being forced to use an inadequate transit system, and in the case of Cincinnati, the value of time lost is worth more. In all cities, the development of better public transportation, in conjunction with an increased awareness of the true cost of driving will change the behaviors of American drivers.

The investment in transportation serves more than to simply lessen our reliance on cars and the oil that fuels them. Public transportation has proved over and over to improve the quality and economic stability of a neighborhood. Land value in close proximity to a rail station far exceeds that of the same land use in close proximity of a highway. This is seen clearly in the case of the Pearl District in Portland Oregon. Prior to redevelopment and rail development, the Pearl District was a struggling industrial zone. Today, the scene is much different. It is a pedestrian and transit-friendly area with a good mix of retail, office and housing. (Figures 1.7-8).

Much of the initial costs of building transportation infrastructure is made up by the raise in property values, and
therefore increased taxes collected by the government. This is important in all cities, especially Cincinnati. It has been shown that a reinvestment in permanent public transportation raises property values, brings about new development and a larger tax base, as it did for Charlotte, North Carolina. After a large number of Cincinnatians moved to the suburbs, diminishing the city’s tax base, a permanent reinvestment must be made, allowing Cincinnati to be a competitive and unique place to live. This reinvestment will bring about new developments and in time, along with policy changes, make the city one of the most desirable place to live in the region.

History of Transportation in Cincinnati

The Problem of Transit

Cincinnati, not unlike many American cities, was settled due to ease of transportation. The city had almost every form of transportation influence the development of the city. There was a time when the city prided itself for being one of the most progressive cities in the country. Sometime in the last hundred years, something changed and Cincinnati is no longer known as a progressive city. As one of the largest cities in the country without a comprehensive transportation system, the city is losing potential residents to places such as Portland and San Francisco that are attracting young professionals that the city needs to thrive. Young people, needed at all of Cincinnati’s large corporations and businesses, are moving to cities like Portland which offer more complete transit systems and a more progressive approach to city planning. The number of 18-25 year old has decreased in Cincinnati over 8%, yet increased over 12% in Portland. In order for Cincinnati to attract young professionals and keep the city growing, an investment in the

---

6 “Light Rail’s Success Outshines Woes, Charlotte Exec Says,” The Virginian-Pilot. 5 December 2008. “It's amazing how quickly people forget the short-term nuisance of construction,” That’s because about $1.8 billion of new development has been announced along the rail line and ridership is about to shatter 20-year projections. Now there’s a push to fast-track extensions.”

center, and more specifically public transportation, is needed.

Water Transportation [before 1840]

Due to Cincinnati’s location along the Ohio River, one of the major lines used to transfer goods and people, Cincinnati was in the perfect location to benefit from the advent of the steamboat. Thanks to the steamboat in 1807, river trade was no longer limited to the flow of the river, and trade could be made upstream as well as downstream. Cincinnati, along with Louisville and Pittsburgh benefitted dramatically from this invention due to their larger markets. The pattern of development that followed was not expansion, but further densification. All of the activity still focused on the public landing, and as trade grew, the area densified.

Just as the population was beginning to run out of space within walking distance of the landing, another form of transportation was introduced to the city that greatly affected the way that the city was developed. In the 1830s, the state funded the construction of the Miami Canal. It opened in 1829 and allowed for water traffic to penetrate the interior of the state. Land that was once considered too remote to be develop was now within reach. Real estate along the length of the canal increased greatly and it created community growth in areas such as Lockland and Middletown. People began to move to Cincinnati in search of a more adventurous and prosperous life. Americans were beginning to enjoy their newfound freedom, and the western frontier was the most exciting pilgrimage one could make.

The Transitional City [1840-1875]

Because transportation was limited to the canals and river, the population grew incredibly dense along the waterways. During this time, Cincinnati saw a large influx of European immigrants who had fled war and famine in their home countries, and had a drastic effect on the population. From the years of 1800 to 1850, the population had doubled every decade, mostly due to the large waves of immigration. Due to the demand for laborers in river trade and the rest of the budding industry, German immigrants came to the city in great numbers. As the city
grew more dense, people began moving to the Northern Liber-
ties, which was technically not under the jurisdiction of  the city.
While few had the ability to move far from the basin, the city
became stretched to its population capacity. Living conditions
grew worse, and as the city was still a walking community, peo-
ple had no choice but to live in tight quarters. The only option
was to walk further to work, which is what the poor were forced
to do.

As the density of  the city approached capacity, there
was almost no green or open space for the people to enjoy. When
the city was planned, no space was devoted to public space, save
the public landing, still a busy commercial center. Washington
Park was an important space within the community, and served
for recreational and political purposes. Many protests and ral-
lies were held at the park, which has today is left as one of  the
only urban green spaces left in the city.8

There was a very limited amount of  green space within
the city, so the wealthier citizens began to move up into the hills
surrounding the basin to get fresh air and open space. Only the
select few were able to make the move, because the city did not
yet have a public transit system. Private coaches were the only
way to get out of  the dirty, overcrowded basin. Mt. Auburn was
the first of  the Cincinnati suburbs, starting a trend that quickly
changed our entire social makeup, essentially turning the social-
geographic makeup of  the city inside out. The wealthy left the
city center, and the poor began filling that void.

The Industrial City [1875-1920]

The Industrial Revolution marked a significant change
within the city. Previously, industry was located along the wa-
terways. Their products traveled south, specifically to New Or-
leans. Most of  the intricate metal work that adorns the homes in
the French Quarter was made in the Cincinnati region.9 Cincinnati
sent a large amount of  product to the South, but when the
South split from the North, Cincinnati was strongly discouraged
from sending product. This hurt many Cincinnati businesses,

8  See Stradling, 37.
9  McTague, Colleen. Lecture. University of  Cincinnati. 29 October
   2006.
and became a point of contention for many Cincinnatians. Some even believed that Cincinnati was not a true Northern City.

Cincinnati also specialized in the meat packing industry. As industry allowed for greater speed and efficiency in processing pigs, the slaughterhouses were able to offer higher and higher prices to the surrounding farmers. Farmers were willing to travel further to sell their pigs. The economic reach of the city steadily grew. As industry began to expand, the need to flee the city grew more desperate. This created a cycle, not unlike many other developing cities of an interdependence and mechanization of both the farm land and the city. Food could not be grown in the city, and the farmers needed the city to buy their produce. As this cycle continued, it created an overly dense urban fabric, and the industrialization began to take a toll on the people.

The answer to people’s need for cleaner air and less dense quarters was finally answered by the boom of public transportation and the interurban railways that began in the 1850s. Industry was no longer dependent on river traffic, with its unpredictable seasonal and intermittent traveling conditions that could slow or stop shipments. They could now ship by rail line, which was much more reliable. Cincinnati became more connected to the East Coast, but not as well connected as cities such as Chicago. Cincinnati was somewhat losing the race of industrialization to other cities, yet still experienced tremendous growth, because of its specialized emphasis on meat packing, breweries and machine tooling (Figure 1.16). Cincinnati’s efficiencies in the meat packing industry later became one of the models for the extremely efficient assembly line.

Though Cincinnati had railroads that brought about economic and industrial growth, they were too expensive for most people to use for personal transit on a daily basis. Small towns grew far outside the city, in Newtown, Sharonville, Montgomery, Norwood and Linwood (Figure 1.17). The city itself did not experience much growth until the technology of the

10 See Stradling, 33.
The railroad was translated into interurban and local transit. The first public transit options did not do much to grow and develop the city. The hilly geography of the city limited where people could live and travel. Only when the streetcar began to replace the horse drawn cars, did the city began to grow. The pattern of development was first determined by the developers who built the line. They built the track, the homes to surround it, and the commercial center at the nodes. This created a pattern of development that included viable retail, supported by both the resident and the commuter. The homes facing the track were narrower to give the developer more opportunities to sell more homes at a premium, and the lots grew larger as one moved away from the line.\textsuperscript{12}

As the first ring suburbs grew, the basin became an undesirable location, and deteriorated. The wealthier left the central city, leaving the city unbalanced. Industry could not abandon the city, their employees still lived in the crowded downtown. Relief from the agglomerated basin did not come until the inclines were built, allowing the middle class to begin the migration to the suburbs. Only then did the industry begin to follow suit. One of the first notable moves to the suburbs was the relocation of Procter and Gamble in the early 1880s to what is now known as St. Bernard (Figure 1.18), seven miles away from the city and located along the Bee Line Railway. Their original plant on Central Avenue had burned down, and they determined it was a good opportunity to move to where there was more land to build upon. The people’s new reliance on public transit brought their employees to work every day, also allowing them to live wherever there was a transit line. The success of the suburban location of Procter and Gamble highlights the mind set at the time, that people would rather live and work outside of the city center.

Industrialization was an extremely important time in the development of transportation. New technology gave rise to transit, which expanded the city, which gave rise to new industry. One may say it brought about the largest growth and change cities had ever seen. Today, one can examine Cincin-
nati's growth patterns and still see the patterns of development the city has seen due to mass transit.

**Depression and War [1920-1945]**

In the early 1900s, transportation had taken a hold of the city. Several different railroad companies created lines through the city, creating multiple stations, and even different track gauges. This meant that the different rail companies could not share track and created multiples of rail support services around the city, taking up much more downtown real estate than necessary. By the time the city tried to control this issue, it was almost too late. Track had been laid, and there was nothing, short of tearing out existing track, that could change it. In 1930, Union Terminal was constructed on the West End of Cincinnati, but in the process taking away one of the few green spaces in the city, Lincoln Park. Union Terminal was meant to create a transportation hub for the city that would move the rail congestion out of downtown, yet still be close enough to service the city. It was opened in 1933, shortly after the stock market crash, and just as automobiles were started to take hold of the American public. It was largely under utilized until World War Two, when it was used to transport men and women in the service. It was not as successful as hoped, and went through several times of abandonment, and a short life as a shopping mall before the History Museum became the main tenant in 1990.13

Union Terminal was not the only large investment in Cincinnati's transportation system at that time. People no longer used the canal system as railroads became the more efficient and desirable option. The canal became more of a liability than an asset. The canal was built so that there was no current, which meant that there was stagnant water sitting in the crowded downtown basin, festering disease. The people wanted to remove it, and the city began to build a subway system in its place. Several stations and a complete tube were built connecting Over the Rhine to downtown. Originally the subway was supposed to run through Oakley, Bond Hill, Clifton, Over the

---

Rhine and downtown. The project was started in 1919, and continued until 1926. At that point, inflation and general costs had risen so high that the project needed an additional ten million dollars to complete the project. Not only was the financial burden great, there was also a great amount of political turmoil as different political parties were vying for power, namely the Boss Cox political machine and the Charterite Party. The subway became associated with political corruption and the idea did not resurface for decades.

The Subway was abandoned and converted to Central Parkway (Figure 1.21), a large boulevard meant only for automobiles. The Parkway was completed in 1928 and gave Cincinnatians a direct and wide paved road straight through the city, something that was not an option before the completion of the Parkway. Although the subway project was never completed, there is still talk of converting the still usable tunnels for light rail use. Large amounts of work and engineering must be done to update the stations and re-direct easements, but it is a possibility the city has recently begun investigating.

Since the end of the subway system, the only real transit improvement the city has made is for automobiles. Although the Southwest Ohio Regional Transit Authority (SORTA) has won awards for its organization, it is so underfunded that it is inadequate to serve the needs of the people who need it, now that transportation is only used to follow development rather than insight it. After the stock market crash of 1929, the Public Works Administration completed multiple road construction projects. Although known to be somewhat inefficient, they created some of our major parkways, including Columbia Parkway, a major thoroughfare connecting the eastern half of the city. They also build other forms of infrastructure such as sewer and water lines. As construction for the automobile became the predominant infrastructure investment, the public transit was either removed or left in disrepair, resulting in the dismantling of much of Cincinnati’s public transportation system, including all of the streetcars and inclined railways.

Many of the reasons that hindered new transit in the past still plagues the city today. Through segregation, the city became segregated by economic status, as well as by race. When
the city was first developed, everyone was confined to a small amount of land. People of all classes passed each other on a daily basis, and segregation was never an issue. As the city began to grow and the more wealthy members of society were able to move to the outskirts, a class divide ensued. A racial divide followed. Just prior to World War Two, towards the end of the Depression, crime rates began to skyrocket. Most of the crime was being committed in the West End, and mostly in black areas. The New Deal gave federal funds through the Federal Housing Authority, and Cincinnati built two extensive public housing developments in the West End. Laurel Homes was built for whites, while Lincoln Court was built for blacks (Figure 1.24). Because even the poor whites did not want to move to the West End due to racial tensions and a lack of housing for poor blacks, the whole development became exclusively for blacks. Just as today, people of the city did not want to finance a project that would not directly benefit them, and fear of access to ‘undesirable’ regions might de-centralize the crime that had previously been associated with the black under class. This was not only an issue of racial issues within individual neighborhoods, but also caused by the rules and regulations of the real estate agencies. For a long time, real estate agents were not allowed to sell a home to a black family in a white neighborhood. There were also many banks that would either not give loans to black people to move into certain neighborhoods, or they would deny them a loan all together. Many people argue that these issues are still prevalent today. Whatever the motives, it reinforced segregation and has left Cincinnati racially divided ever since.

Suburbanization [1945-2009]

Cincinnatians had already started the move into the suburbs before the onset of World War Two, but were still limited to the path of the streetcar and other passenger rail lines. The ownership of a home or an automobile was still unattainable for most of the population, and would remain so until the Federal Housing Administration began to give affordable mortgages, usually less expensive than rent, to buyers of newly con-
structured single family homes, these changes did not encourage renovation of older homes, encouraging people to abandon the city center. This type of government subsidy and intervention created neighborhoods that were homogenous - single family homes with little to no commercial centers.\textsuperscript{15} When given the option of a brand new home away from the congested city for less money than what one would spend on rent, the choice was easy. As people moved away from the city, most still had to work downtown. As store owners noticed that people were coming downtown less and less, they followed their consumers to the suburbs. Many employers soon followed in large numbers.

Kenneth Jackson, author of \textit{Crabgrass Frontier} describes this move to the suburbs to have four spatial results. Suburbanization and sprawl resulted in a change to the overall pattern of development, the length of the journey to work, the movement of employment centers and new forms of low-density residency. For example, the neighborhood of Avondale is an old railroad suburb. The homes were designed for pedestrians and the streetcar, with some horse-drawn carriages and cars. The homes are closer together to allow for shorter and more direct walking distances, and streets are scaled for people and public transit. There are commercial and residential streets, along with mixed-use buildings, which include a storefront and upstairs apartments. There are large apartment buildings, large homes and small homes. The streets are regular and gridded for easy navigation and movement.

The New Transit Era [2009-Future]

As cars became the most widely used form of transportation, and government subsidized this mode of transit in this country, most cities changed with the times and allowed freeways and cars to dominate the urban landscape. Not every city, however accepted these changes without looking back. An example of this is San Francisco and their refusal to re-build the Embarcadero Skyway (Figures 1.28-29) when it crumbled after an earthquake in 1989. Even before the quake, the local government refused as much as they could for the highway to be built as planned. They were able to re-route most of the free-

\textsuperscript{15} Duany 8.
way outside of downtown San Francisco and save much of the waterfront for the people. When the quake destroyed the part of the highway that was actually constructed, the highway was not re-built and the Embarcadero is now a multi-modal road, with pedestrians, cars, busses and the streetcar running along its route.

Cincinnati did not respond in the same way that San Francisco did. Cincinnati allowed the construction of a major highway through one of the densest communities in the city, the West End. It tore apart a close-knit community and the city was not prepared for the enormous numbers of people that would be displaced by the highway. Cincinnati also allowed a large highway connector, Fort Washington Way to separate the waterfront from the downtown, as seen in Figure 1.27. Also, unlike several other cities, Cincinnati allowed highways to enter its core and did not re-invest in the public transportation that was destroyed in the process of moving to a road and rubber tire system. Cities like San Francisco, New York, and Chicago were able to hold on to their public transit systems, something that they are now heavily associated with and in a way have become a symbol for each city.

Today, as more and more mid-sized cities are looking to re-develop their lost rail transit lines, the idea of the station and how people move from one mode of transit to another has not yet developed completely into the community in which it serves. In Denver, there are far too many park and rides, where drivers park their car next to the station and then board the train. In some cases, the stations are straddled on either side by a highway. The only way to get out of the station is to cross a bridge into a parking lot. Cincinnati has yet to implement one, but this could be a great advantage. The city will be able to look to a range of attempts in other cities so that when stations are being designed and built, the station can be a part of the community, strengthening the connection to the people as well as the connection to other modes of transit, such as the automobile.
Local Hurdles

Cincinnati has many obstacles when it comes to the implementation of a light rail or streetcar system. The first issue is of course price. When a mass transit system was brought to the ballot in 2003 (Figure 1.28), Cincinnatians had recently passed the tax levy to fund construction for two new stadiums and were not willing to pay more at the time. Also, if a person did not believe they were going to ride the rail line, they did not vote in favor of new funding. They did not believe the tax revenues light rail brings to the city was worth the personal up-front taxes. Another important reason the city has not yet developed better mass transit is because Cincinnati is still an extremely racially divided city. Some people believe that the construction of better mass transit will give ‘undesirable’ people easy access to their neighborhood. When this issue arose in a lecture by Tim Reynolds from SORTA, he remembered the opponents claiming that if a station were placed near a local elementary school, it would allow someone from another neighborhood to come, kidnap a child, and quickly leave. Reynolds was quick to point out that no one would steal a child and then wait fifteen minutes for the next train to arrive. It was people’s unwillingness and trepidations from straying from the homogenous neighborhoods they were used to and wanting to become more of a single community again. All of this is what defeated the light rail in 2003.16

SORTA was one of the spearheading groups for the light rail initiative in 2003, and today are involved in a large debate over the fate of Cincinnati public transit. There is an issue concerning which municipality is funding SORTA and who has voting power. Currently, the City of Cincinnati pays for a large majority of SORTAs yearly budget, yet on the board, Hamilton County has more voting power. The City Council does not believe that they should be paying for a system they do not get voting power on. The county views this issue much differently. They do not understand why the city would want to take control, or how that would further the goal of having a regional transit authority. Taking into account that many of these people work within the city limits and their income taxes

are used to fund the bus system, it become increasingly difficult to determine who deserves the voting power.

**Summary**

Transit has and always will be one of the most important factors to consider when looking at the history and form of a city. In Cincinnati, the city has been shaped by every form of transportation there is, and has responded to each. As the city has grown, it is going to be especially difficult to escape from the forms built based on sole automobile transportation, similar to past shifts in transportation. Just as the city has responded so profoundly to the car, it will change when rail transit is reintroduced to the city. The investment in rail transit is not only a dream of urbanists, but a necessity in order to have a viable alternative to the car, bring development to the city and return our sense of community.
Water Transportation - Before 1840

The Transitional City - 1840-1875

The Industrial City - 1875-1920

Depression and War - 1929-1945

Suburbanization - 1945-2009

The New Transit Era - 2009-Future
Chapter Two: Community and Transit

Until recently, transit and development has gone hand in hand. Transit was constructed and development followed along its path. The homes around a streetcar line were smaller and narrower so more could be sold on such valuable land. The retail spaces built around a commuter train station were naturally more expensive, as developers knew that’s where critical mass would occur. In many ways, this is similar to automobile development. Major roads and highways create development along them, and even more when they cross, as the car is not limited to certain routes and stations, development can occur almost anywhere. No longer are cities places of dense urbanity surrounded by rural countryside. Instead, they have become a sprawling land of suburbia and cars. The line between city and country has grown unintelligible. Following the recent financial collapse brought on by a period of vast over-construction, more people are considering smart growth design concepts.

There have been many different strategies over time as to how to design, develop and analyze a city. Natural growth and planned growth represent two major categories most fall under. Cincinnati, along with many other cities fell victim to a city of natural growth that lead to an overly dense, unhealthy community. Heavy industry was integrated into the residences and people needed space and air, as disease became a problem. People moved to the planned community because the unplanned community was not working, and interestingly enough, people are beginning to desire the more natural community that suburbia all but erased. New Urbanism attempts to bridge the gap and create designed communities that use the principles that unplanned communities excelled in, and the healthy lifestyle that a planned community attempts to attain.

Currently, many of these smart growth principles of New Urbanism are being merged into the newest and most relevant urban design strategies, the transit-oriented development. According to Hank Dittmar and Gloria Ohland, leaders in the development of the TOD design strategy, there are five main goals; location efficiency, a rich mix of choices, value capture,
place making and a resolution of the tension between node and place.¹ In many ways, the TOD is a slightly different form of New Urbanism with an emphasis on transit utilization.

**Community Design Strategies**

The Planned Community

Location efficiency is one of the critical components necessary to have a successful TOD. Simply put, there needs to be enough density to support the community. Today’s urban development patterns are not at all efficiently designed for higher densities. They are planned for cars and convenience, not for community and transit. There are entire suburbs with no retail, commercial zoning or sidewalks. People are either driving longer distances to find their daily needs, or they are having them delivered, abandoning their connection with others in their community and their participatory role in the local economy. There is a stigma attached to walking the non-existent sidewalks or taking the unreliable bus. Driving is the only real option in order to become a part of the suburban society. This leaves a large percentage of the people in this country stripped of the freedom of mobility, those too young or too old to drive, those who cannot afford a car, or those who simply would rather not drive. These placeless communities are oddly enough are the most planned places in America. Their zoning and structure is organized to exact specifications, yet their organization does not appropriately respond to the needs of a community, which the suburb fails to achieve in its attempts to form the perfect neighborhood. Community centers are built in the place of everyday urban meeting places, an artificial replacement for the community people need. Planners have now worked for decades to zone and separate neighborhoods to avoid the issues of the diseased city of the past. Enough time has passed to learn the difference between appropriate zoning versus the elimination of community.

An example of a neighborhood within the city of

---

Cincinnati that was planned in order to completely separate the resident from the other aspects of community is Amberly Village. When the village was incorporated in 1940, it was an automobile suburb, a place where people could escape the city. The street grid reflects this change. Curvilinear streets and cul-de-sacs promote privacy and discourage pedestrians from using the sidewalk-free streets. Zoning allowed the community to essentially banish everything besides residential, park and a small amount of industrial (most likely included for the additional tax revenue). The industry is bordered by the slightly more dense and probably lower income housing, which protects the wealthy from any other use besides single family residences. As shown in figure 2.5, the light industry is represented in purple and the residential zones are red and yellow. This is in comparison to the neighborhood of Over The Rhine, that is much older and has a wide variety of housing options, commercial and office space, some industry and many breweries. The buildings have historical value, and sidewalks and the regular street grid promote pedestrians and provide a space for real community to develop.

The Designed Community

Understanding both the shortcomings and strengths of the planned and unplanned community, today's designers are better equipped to implement a more appropriate solution. Prior to the recent rebirth of public transportation, the concept of New Urbanism was the predominant planning strategy used to bring community back to the city. Many people view New Urbanism as the style seen in Seaside, Florida (Figure 2.6), as an artificial utopia and sometimes is viewed as contrived. This, however, is not the true meaning and intention behind New Urbanism. Peter Calthope, a leader in the New Urbansist
movement, believes it to be a set of principles, rather than the cartoon style it has come to represent.\(^2\) It has been viewed as everything from being retro and outdated to utopian and unrealistic. Calthorpe points to the Congress of New Urbanism, the charter or guidelines that were written to help create the designed community. The Charter is broadly separated into three main scales; that of the region, the neighborhood, and that of the block, street and building. In a society of an ever increasing regional scale, the concept of the transit-oriented development further reiterates the necessity to be looking at all three at once. A TOD needs to have regional appeal, benefit the neighborhood as well as be an attractive and safe street and structure, similar to the original New Urbanist guidelines.

Within the first sentences of the Charter of the New Urbanism it states, “We stand for the restoration of existing urban centers and towns within coherent metropolitan regions, the re-configuration of sprawling suburbs into communities of real neighborhoods and diverse districts, the conservation of natural environments, and the preservation of our built legacy.” They are advocating that both the suburban and urban cores be reconfigured based on the timeless standards of the walkable neighborhood and community oriented places. One real example of how this can be done on a suburban level is a project completed by Calthorpe. A developer came to Calthorpe, showing him an existing suburban town center (Figure 2.6-7).

As with many suburbs, this center was at the crossings of two major arterials. No doubt this kind of traffic was attracting interest from big box retailers, who saw the high traffic counts and potential. This would have created a placeless intersection instead of a community center, filled with vast parking lots and no sense of true identity. Calthorpe designed a solution that separated these large scale arterials into two one way streets,

\(^2\) Fishman, Robert. *New Urbanism: Peter Calthorpe vs. Lars Lerup*. Ann Arbor, MI: The Regents of the University of Michigan, 2005. “I would posit that in my experience as a practitioner, most of the neo-traditional style comes from the marketplace itself, not from the intentions of any designers or an intentional design ethos. Students must learn to take on the challenge of marketplace forces and understand that the demand for a sense of scale and history and uniqueness, even in its most ridiculous and absurd character represents real needs that relentless express themselves” (p. 17).
siting a park and smaller scale sites in between. After this was implemented, stores were able to front the street, a public library was built and a large town green was created at the center. The streets are walkable and invite people to spend time in the area.

Transit-Oriented Development

A Transit Oriented Development (TOD) is a return to the concept of the railroad town, the prominent design model at the turn of the century. The same concept as before the development nodes of commercial activity and housing surrounding and supporting a transit station created a sense of community, people populating the area at all times of day and night. The difference between then and now is that now we have to re-integrate this concept within an automobile society. There is competition from the car and automobile-centered developments, so a TOD is a harder reality to obtain. According to Dittmar and Ohland in their work, *The New Transit Town: Best Practices in Transit-Oriented Development* there are five goals a successful TOD strives for. Those are location efficiency, a rich mix of choices, value capturing, place making and the resolution between the node and place.3

Location Efficiency

Location efficiency is one of the most critical components of a successful TOD. Simply put, there needs to be enough density of people to support the transit line. It has to be placed in a location that is easy to access and is a part of the community. There are real densities that can be associated with supporting a transit station. If there are seven dwelling units per acre, the area is able to sustain transit that stops every thirty minutes. Fifteen units can support one that comes every ten.4

Not only does creating density around transit station boost the ridership and efficiency of the line, it frees people from the necessity of owning a car, and can eliminate many instances

---

3 See Dittmar, 9. “TOD cannot be and should not be a utopian vision: It must operate within the constraints of the market and realistic expectations of behavior and lifestyle patterns.”

of poverty. Cars are not inexpensive pieces of equipment, and not everyone can afford one. If transit is a viable solution within a densely developed neighborhood, people that lived in poverty because of a car and then associated costs, can now live a little more comfortably without that large expense. People on fixed incomes or living on the edge of, or below the poverty line suffer enormously when oil prices fluctuate. When gas is two dollars a gallon, people above the poverty line are on average spending 1% of their income on gasoline. Those below the poverty line are spending 4.3%. When gas prices rise to four dollars a gallon, people above and below the poverty line are spending 2.1% and 8.9% respectively, an exponential difference. If transportation became a reliable source, not only would people be able to get out of the cycle of poverty more easily, but the stigma transit has would be begin to change. This will ease the financial burden, and allow more people to participate in the local economy, which will only help the community.

Another necessary component transit needs to embody to be successful is the image of safety and security when using the station. An increase in the perception of safety attracts not only riders of need but riders of choice. Currently, people view busses as a sign of poverty, and sometimes feel unsafe waiting at dimly lit, empty stations. The riders become stereotyped, which only perpetuates the idea that transit is not an attractive alternative to driving. Jane Jacobs notes in her publication, *The Death and Life of Great American Cities* that “...there must be eyes on the street, eyes belonging to those we might call the natural proprietors of the street [and] the sidewalk must have users on it fairly continuously, both to add to the number of effective eyes on the street and to induce the people in buildings along the street to watch the sidewalk in sufficient numbers” (39). The more eyes on the street and the more healthy activity that occurs there, the

---


6 “In most suburban communities, transit passengers are made to feel like impoverished transients, waiting by the side of the road on a graffiti-covered bench or inside an ungainly plastic bubble...When the transit stop is located at the neighborhood center, next to the corner store or cafe, the commuter has the opportunity to wait for the bus or trolley indoors with a cup of coffee and a newspaper, with some measure of comfort and dignity” (Duany 203).
safer and more attractive the neighborhood will appear.

Density is needed to create a close knit community that has eyes on the street, economic vitality surrounding the station, and the ridership numbers a transit system needs to be sustained. People are beginning to question the vitality and community the traditional suburb offers and are moving back to the city in record numbers. They need to be met with the dense environment they have been lacking, something this thesis aims to address.

Rich Mix of Choices

Having multiple housing options, retail and entertainment activities make a successful TOD stand out against one that is not. As Dittmar suggests, “Contrary to the assertions that are sometimes made, TOD is not about ‘forcing’ people to live in a particular way. Rather TOD offers a wider range of housing, mobility, and shopping choices than conventional suburban development (and much urban development) do not. Rather than leaving residents with no other option than to live in a single-family home, shop at an auto-oriented retail center, drive to their workplace, and chauffeur their children to activities, transit-oriented development can offer shopping choices that range from small specialty shops to larger retail outlets (p.26). This allows people to stay in the neighborhood, even though their needs might change over time. They are not excluded from the neighborhood if they have had children, wanted to move to a smaller space, or grow older and desire an easily walkable community.

Currently, twenty percent of our population moves every five years’, many times because of changes in need or a shift in lifestyle. Today, many of our neighborhoods are designed for a specific need or a specific income. People who live in a certain suburb might only have options of a large home and large yard. When their children move away, they are forced to move out of the neighborhood if they want to move to a smaller dwelling. Inversely, people who live in a more dense environment who find themselves needing more space find few options than to

move to a more suburban locale. If all of these options were within the same community, the population could stay more stable and create a closer sense of community.

Another benefit of offering a rich mix of choices within a community is the important integration of incomes that are necessary to sustain a neighborhood. Currently, most American neighborhoods are meant for a specific income level. In Cincinnati, there is an ongoing issue of how to get low income residents in the inner city to the jobs that are needed outside of the city. The two major employers that are experience this lack of employees are Kings Island Amusement Park and the Cincinnati/Northern Kentucky International Airport. Both are far away from the city center and require large amount of employees that are lower paying positions. Many of the employees they try and attract are either not old enough drive or cannot afford to own a car. Public transportation seems to be the answer, yet there have been problems with this as well. Bus service to both these locations have been lessened in the recent past, and both employers are having trouble finding and keeping employees.

Kings Island has gone so far to hire large numbers of foreign seasonal help, and then create transit for them to live in the city and commute to work. If communities were built on the notion that people of all income levels are needed in order to sustain a community, we would live in a much more efficient and welcoming society.

Having multiple housing, shopping, entertainment and job opportunities does more than create a close knit community, it makes the neighborhood a safe place to be. Because the diversity of people and businesses within the community would be great, the street will be occupied and stay busy at all times. As mentioned earlier, the more ‘eyes on the street,’ the
safer it feels. Jane Jacobs points out that due to the variety of different people and uses, the street is populated at all times of the day and night. There are people coming home from all shifts of work, businesses that are open during the day and at night. Every person who is on a slightly different schedule, and the street never appears abandoned.

This is a problem that downtown Cincinnati is currently overcoming is the lack of people living in the downtown area to justify businesses to stay open past lunch. The corner stores and small eateries close by two in the afternoon and leave the streets blind during the night. No one is coming home after work, walking to the convenience store, taking a late night stroll. People feel unsafe walking around at night, because no one else is. In order to have a successful community, people have to feel safe at all times. Providing activities of variety aid in creating this sense. Only in the very recent past as people are beginning to move back, the restaurants staying open later and a wider variety of services being offered again.

Value Capturing

It has been proven that the value of a home in close proximity to a transit station is worth more than the same home in close proximity to a highway.\(^9\) Because of this, capturing the value of a development is much more effective when a reliable and well-connected transit line stopping nearby and using the principles of the TOD. Dittmar does, however note that value will be captured only when certain key requirements are met: There must be frequent, high-quality transit service, and good connections between the station and the surrounding community. That community must be dedicated on proving the essential amenities to its residents and dedicate itself to place making. Finally, the finances of the development must be carefully watched, to make sure the return on investment is going as planned.\(^10\)

If everything is planned and built as envisioned, there are many opportunities to capture the value of the investment. The most important is from the future residents. After housing,

\(^9\) Dittmar 29.
\(^10\) Dittmar 26.
people spend most of their money on transportation. Usually that means buying and maintaining a car. If people can really begin to eliminate or lessen their dependence on the automobile, their salary can be stretched further and be partially re allocated to other luxuries. For the local government, it could mean a higher tax base as property is worth more with the introduction of public transit. For the transit provider, they have the opportunity to become part of joint ventures with developers close to the station, and see benefit from the increase in fare purchases. This new form of transportation would allow new businesses to flourish, who are able to meet the needs of the pedestrian and transit user. In the past, day care centers located near stations have succeeded, as well as other small businesses that would benefit from foot traffic.

Although these are all positives, it cannot be stressed enough that it is necessary to have good, reliable transit before any of the value can be captured. People will not change their lifestyle for inefficient, unreliable service. In that case, they will not sell their extra car, be willing to walk to a station or pay a premium for living near a transit station that does not work as it should. All planning must be done with the understanding that providing good public transportation is the first and most important goal to create a successful TOD.

Place Making

Out of the five guidelines to create a successful transit-oriented development, place making is the most subjective quality. It refers to the making of the community in such a way that it becomes a specific and unique setting. It must be an attractive and vibrant area that welcomes people from across the city to be outside and feel comfortable. If a person feels that taking transit and living in this community does not welcome them, they will simply not live there. Someone waiting for a bus in front of a big-box parking lot, and someone waiting for that same bus in a space designed for that purpose has an entirely different outlook on using public transportation.

Place making means more than simply designing the community to be cohesive. It means that it is a place of inter-
est, a place with history and character. People are becoming re-infatuated with the city because it has a character. It has age and it has memories. As Kevin Lynch observes in his work *The Image of a City*, “Every citizen has had long associations with some part of his city, and his image is soaked in memories and meaning” (1). Suburbia is mostly similar to every other suburban neighborhood in the United States. Driving along a boulevard of chain stores looks no different in Cincinnati than Indianapolis or Cleveland. When designing a unique place, it is important to see suburbia as the cohesive sameness that people are beginning to question the integrity of. Now, the difficult challenge for the designers is to reintroduce our parking infested downtowns with the cities America has lost.

Place making is what gives community its social capital. People need to feel a part of a community, and it is the physical environment of that community that can either promote or destroy the quality of the place. As sociologist Ray Oldenberg notes, “In the absence of an informal public life, people’s expectations toward work and family life have escalated beyond the capacity of those institutions to meet them.” (1) Because of the regionalism popularized following World War Two has completely changed and mostly destroyed the idea of a community and place.

Prior to suburbanization, urban neighborhoods were incredibly diverse in terms of income, age and occupation. One aspect unified them, their ethnicity. There were very few neighborhoods that did not have an ethnic identity, especially in Cincinnati. There were public community gathering spaces, a local identity and a general sense of community that has been lost in translation. Now that these neighborhoods are beginning to be rebuilt, ethnicity is no longer the common thread. Americans need to find new threads of commonality, possibly the interest in rebuilding community.

To create this urban identity, especially at Broadway Commons, it is difficult because of the great lack context. It is a blank slate. If a major intervention is required in Broadway Commons, it would be helpful to refer back to Lynch’s work. Lynch observes that every citizen has had long associations with some part of their city, and their image is soaked in memories and meaning. This is true for every city in the United States, and especially for Cincinnati. As Oldenberg notes, “In the absence of an informal public life, people’s expectations toward work and family life have escalated beyond the capacity of those institutions to meet them.”

---


Figure 2.10 - Beecroft Avenue outside of Cincinnati could be any unattractive street in the nation.
Commons, it needs to be designed in order to accept later interventions allowing the area to develop character over time. It should not be planned and built at one time, but should be an additive, piecemeal approach that creates a sense of history and presence that a new development built at a single time simply could not produce.

Resolution Between Node and Place

The tension that arises between node and place is a struggle every transit-oriented development has to come to terms with, and the major issue that will be addressed in this thesis project. The station is not only the center of a community (the place) but part of a regional system as well (the node). One need cannot come before another, and that resolution of push and pull factors is what creates a community that serves each need while enhancing both. The location of the development within the general framework of the system cannot be overlooked. As Dittmar describes, “Transit-oriented development involves the tension that exists between the role of a transit station or stop as a ‘node’ in a regional transportation network and the station’s role as a ‘place’ in a neighborhood” (32).

Broadway Commons has been identified as a hub by the transportation engineering department, meaning that more than one mode of transit is expected to be utilized within this site. Currently, a stop at Broadway Commons would not serve any number of residents or employees. It would be a place to change modes of transit, and go on your way, meant only as a node. This creates an opportunity to create a community hub as well, and the concept of a transit-oriented development aids in making this merging of node and place successful.
Urban Examples

**Belmont Station**
Chicago, Illinois
Completed 1900

The Belmont Station and surrounding area is one of the more recognizable and popular stations in the Chicago transit system. The street is teeming with life, from early in the morning to late in the evening. Those who live in the area and work elsewhere can be seen walking to the station in the morning, many times buying a cup of coffee or breakfast on their way. During the day, the street is alive with people, shopping, eating lunch, going to the library and walking to and from the station. In the evening, it is a similar scene. People begin to come home, sometimes stopping for dinner or drinks. On the weekend, the surrounding bars stay open late, and after closing, people move Clark’s, the twenty four hour diner. The street is always alive, and a lot of this success can be pointed to the proximity of the station.

The station is a hub for the “L.” One is able to switch between the local and the express lines. It is a relatively easy place to meet, considering so many trains stop at this station.1 Belmont has become a center for transit and the community. Recently, a city initiative for local businesses to ‘adopt’ stations has been developed, and Ann Sather’s Swedish Restaurant, adopted the Belmont station, commissioning murals for the station in attempts to assimilate the station into the community.2 The Belmont Station is an important precedent for this project, due to its relationship to the community.

---

1 “In 1907, Belmont station achieved an importance status, becoming not only a transfer station between expresses and locals but between main line trains to Wilson and trains to the new Ravenswood branch. Entering service on May 18, 1907, the Ravenswood branch leaves the North Side Main Line just north of Belmont station, making Belmont the first (or last, depending on direction) stop shared by the two services.” Belmont. The Chicago “L.” Accessed 12 February 2009. <http://www.chicago-l.org/stations/belmont.html>

2 The “Belmont 2000” mural project includes twelve mural panels on the elevated structure over Belmont Avenue, six on each side, and three more at ground level on the station house exterior. The murals are the work of Chicago artist David Lee Csicsko, whose illustrations have appeared in magazines and newspapers, galleries, and books such as *Behind the Lions: A Family Guide to the Art Institute of Chicago*. Source: <http://www.chicago-l.org/stations/belmont.html>
The Place de l’Homme de Fer is an urban streetcar station in Strasbourg, France. Following World War Two, Allied bombings left the square with a jarring, asymmetrical hole that the station was forced to respond to. When Strasbourg began their urban renewal plans to recapture pedestrian space in the city, streetcar lines were the first phase. At this square, that connection between the people and the transit it apparent. Cafe and public seating, and the protective circular glass structure begin to cater to the pedestrian, with four of the five streetcar lines passing through the space.

The square responds to the people and the surrounding buildings. The green tone of the glass responds to the oxidized copper on most of the surrounding roofs, while the stone coloration and patterns reflect historical building facades. Although the structure is modern, it pulls from its historical context and tries to bridge the large gap between public space, historic structures and the pedestrian.

Part of what Strasbourg has done to celebrate the presence of the pedestrian was to eliminate vehicular traffic in many parts of the city center. Traffic has been reduced by over 40% and underground parking was built to allow people to use the streets as a pedestrian and the underground as a driver. This integration between the people and transit speaks to the goal of the transit-oriented development to find resolve the conflict between node and place. Place de l’Homme de Fer is a successful attempt to find resolution of that tension.

“We must do everything to design the city to be complex. Cars surely have a point there too, but we have to help find it again.” Driedrich, Lisa. “Strasbourg: The tram’s comeback.” Topos: European Landscape Magazine. 15 June 1996. p. 100-116. p. 113.
Orenco Station
Portland, Oregon
1997, PacTrust and Costa Pacific Homes

Orenco Station is a new Transit-Oriented Development west of Portland, Oregon. It was developed to be an idealized town, an escape from the congestion of the city, offering its residents a quiet, pedestrian-friendly environment to live in and commute from. The light rail station is close by, and the downtown has both a pedestrian and automobile point of entry. There are many types of housing, ranging from smaller apartments to much larger town homes and freestanding residences. It is meant to bring the quiet of the suburbs with the walkability of an idealized urban environment together. In many ways, this creates an unrealistic environment, something described by Sunset Magazine as “New housing developments that feel like real communities.” If a ‘real community’ could be implemented in a rural setting, it can certainly be introduced into an urban setting, where the density and population are either already present or are much more conducive to this type of lifestyle. If an urban town center can appear attractive in the suburbs, it can certainly succeed in the urban environment.

Some of the major observations made when walking the streets of Orenco Station was how disconnected the train station was from the town center. It was at least a five minute walk from the ‘downtown.’ This violates the major tenant of a transit-oriented development, that the transit stop is at the center of the community. When stepping off the light rail, a large undeveloped piece of land is on one side of the tracks and town home carports are on the other, making this not a true TOD. Even if places like Orenco Station are not ideal for all people wishing to lead a more urban lifestyle, it provides evidence that public transit is something that people are beginning to desire.

16th Street Mall
Denver, Colorado
Completed 1982, I.M. Pei and Associates

The 16th Street Mall is one of the most successful spaces in Denver. It is a pedestrian and transit only boulevard, with no automobile traffic allowed. Along the street, free battery-powered busses run every 2-3 minutes, allowing users to park on any of the crossing streets and take the free mall ride bus anywhere along the boulevard. There are numerous bars, restaurants, shops, and offices along this route, leaving housing as the only under-represented building type. The boulevard was completed in 1982 and in 2007 was the second most visited attraction in Denver. It connects two major hubs of transit and is used by residents, commuters as well as tourists. It offers free wireless internet access along the route and in the connecting park space and is maintained by a cleaning crew funded by the surrounding businesses.

There are many lessons Cincinnati, and specifically this thesis, can gain from examining the 16th Street Mall. People seem to feel more comfortable walking and shopping in an area that was specifically designed for the pedestrian and their needs and wants. It does not seem to be the specific stores or the quality of restaurant that line the street, its the fact this it is a different type of urban space, for the pedestrian and it allows itself to become conducive to easy public transit. This in itself creates a place of gathering and an understood boundary of pedestrian space. People congregate there, only adding to the perceived level of safety and security.
Chapter Three - Program and Site Development

Broadway Commons: Current Conditions

Broadway Commons has been a leftover space for many years. It is a vast open area with very few programmed spaces within a vast parking lot. Parking lot shuttle busses bring patrons downtown in the morning and back to their space at the end of the day. Monthly parking is inexpensive, and the lots are relatively full during the day. The relatively low cost of parking is one of the major reasons why transit in Cincinnati could not work under current policy conditions. According to Robert Cervero, a noted Transit Development authority, “the availability of free parking at the destination of the journey acts as a deterrent to the use of rail. If an employer or shopping developer provides a parking space without charge then travellers are more likely to use their cars rather than the train.”¹ With the development of this large site, reducing the available parking spaces, the price for parking should rise, along with a larger interest in the transit it would provide.

On the site currently is the Greyhound station serving the city. Greyhound has expressed in interest to move closer to downtown, as they feel they are isolated from the city. They were forced to move from their original location downtown built in 1942 (Figure 3.1) to their current location (Figure 3.2) several years ago when people began to complain of people loitering around the building. The original structure was much more lavish, with terrazzo tile floors, walnut benches and Indiana Limestone faced walls.² The new building was constructed with much less design intent and remains an undesirable place, separated from the city by a sea of parking lots.

Because Broadway Commons is the largest undeveloped land in the basin, it makes sense to utilize it for a large transit hub. There is ample parking space in the city to absorb the downtown workers that currently park at Broadway Com-

---

mons. The site is along the rail line the city currently owns, and specifically reserved for rail traffic. Central Parkway has also been identified as a major route for both streetcar and light rail. Beneath Central Parkway is the unfinished transit line, which the City has not yet determined if it should be updated and used. Because Broadway Commons currently sits in close proximity to so many rail routes, it will eventually become part of the transit route, and should be developed as such if this is the direction the city is moving towards.

**Broadway Commons: Future Plans**

Because this area has been undeveloped for so long, many people have seen it as an opportunity for development. It is the largest undeveloped piece of land within the Cincinnati, and remains a key property for future development. The recent proposals have been to use the site for a baseball stadium, an extension of the county jail, a casino and a transit-oriented development.

The baseball stadium proposal was brought to the ballot in 1998 (as seen in Figure 3.3) and was defeated, placing it at its current location on the waterfront. It was proposed in a way as to revitalize the surrounding urban environment, and create a true urban baseball city, similar to Chicago and Wrigley Field. There was a great debate over whether to place the stadium at Broadway Commons or the Riverfront. The riverfront proponents claimed that the stadium was needed to revitalize the riverfront, and would offer the parking needed for the busses and crowd expected. When this proposal failed, the land was forgotten and remained empty.

Within the last several years, conversation of expanding the jail into Broadway Commons has surfaced. The jail has been in need of an expansion for a long time, and Broadway Commons was one of the sites considered. Because it is across the street from the current jail, it is a prime site. It could also hold other related buildings, and create a civic district around this extension. This expansion has not yet been resolved, as the most recent of the jail tax levies was defeated.

Very recently, there has been interest in a casino at Broadway Commons. In 2008, an Ohio bill was defeated that
would have allowed a casino in another city, and will return in
the next election to allow casinos to be built in several cities, in-
cluding Cincinnati. One of the major sites that are being exam-
ined is Broadway Commons. This would not be the ideal site for
a casino, and counters all urban design principles. Traditionally,
casinos are very inward looking. They do not have windows,
and are designed to keep people inside, discouraging them from
interacting with the surrounding urban environment.

As a counter to these proposals of large scale single
developments, the idea of a transit-oriented development keeps
being brought up, to shape the site into part of the surrounding
city. This is what this thesis is examining, to explore an alterna-
tive to the large scale development.

The Transit Oriented Design

This project is designed for three major groups of
people; those using the site as a transit hub, those using the site
as a place of residence and community and those approach-
ing the area as their destination. All three are necessary in or-
der to have a successful transit-oriented development. Dittmar
and Ohland, authors of The New Transit Town site one of the
main goals of a transit-oriented development as the resolution
between node and place. This development not only serves an
important node within the regional transportation system, it is
a place of importance for the residents. It fulfills the needs of
the transit system and creates a vibrant community center for
the residents, and this synergy creates a destination point for
a wider group. If there is easily navigated transportation that
merges within a viable community, it not only becomes a place
for coming and going, but a real place of destination.

The Users
The Resident

The needs of the resident within the context of a
transit-oriented development are the most simple, and the most
generally understood. People need a place of community. They
need to have the daily essentials that support a lifestyle that
reduces driving, and within the generally understood walking
distance of a quarter mile. They need to be able to buy their groceries, go out to eat, have smaller support stores and places of entertainment within that distance. It is not sustainable nor desirable to be forced to drive a long distance to shop at a basic grocery store, and the drive again to run a separate errand. One of the many benefits to the resident of living within a transit-oriented development is that with the patronage of the residents, commuters and destination customers, more stores, restaurants, businesses and places of entertainment can be sustained.

The Commuter

The needs of the commuter are different from that of the resident, and in many ways they benefit from the presence of each other. They commuter is at this node as a place of waiting, and require more convenience-based amenities. According to the Victoria Transport Policy Institute, the commuter needs “Transit stops and stations that are convenient, comfortable and secure, with features such as comfortable waiting areas, real time vehicle arrival information, vendors selling refreshments and periodicals, washrooms and information.” Creating a sense of safety and comfort only creates a greater synergy for the residents and visitors. Specific programmatic elements that would support the commuter would be day care centers, convenience stores, street vendors, coffee shops, florists, and a place to pick up a quick meal.

The Tourist

As people travel to cities such as Chicago, New York and San Francisco, many would note that a large part of the experience is being part of such a dense urban environment. It is possible to travel without a car, comfortably and conveniently. The street vendors selling coffee, newspapers, jewelry and other items are a part of this experience. The locals, the commuters and the tourists become part of this critical mass that developers and business owners recognize, and further invest in the area, opening more restaurants, bars, and shopping in the area.

---

This brings more people to the district, and in turn supports the transit system.

**Introduction to Site**

Broadway Commons has been identified to hold a major transit hub, meant to serve the needs of multiple modes of transit, in anticipation of the completion of the proposed transit system. Cincinnati is one of the largest cities in the nation without a mass public transportation system, and when a system is eventually put in place, the station must integrate fully into the surrounding community. Too often, these major transit hubs are not points of connection between the station and the community, but become barriers. To address this issue, the concept of a Transit-Oriented Development (TOD) will be implemented. Traditionally, a TOD is established in a more suburban location, as a new community. These new communities have been constructed across the country in recent years, yet have not been utilized in a more urban setting. This transit hub will serve the needs of many groups of people, not limited to the commuter, the resident, the visitor and the employed.

The site currently is the home of the Greyhound bus terminal. The terminal is far removed from the community, and there is little to no connection between transit and community. This thesis aims to integrate a newly developed Greyhound station within the context of a newly urbanized Broadway Commons. Toady, the site is heavily under-utilized, but is an important location within the Cincinnati basin. It is very close entrance and exit ramps to I-71, which travels from Louisville to Cleveland, intersecting with several other major highways. It is next to the neighborhood of Pendleton, a historic residential neighborhood to the north. To the west of the site is the county courthouse and jail, the east a pedestrian bridge across the highway to Mt. Adams, a wealthier residential neighborhood and to the south the edge of the Central Business District.

The architectural program includes a newly designed bus terminal, with a connection to the proposed light rail station. This program assumes there will be new retail and housing within the currently empty site, providing context and the urban environment needed to sustain a transit hub. The chal-
Challenges and design opportunity exist on multiple scales. The major opportunities include the possible extension of Central Parkway, and the connection of the existing community with that of this new development. A major site condition that must be integrated is a large difference in elevation across the site, particularly on the northern border.

Scales of Design

When implementing a transit-oriented development, it relates much more heavily on the surrounding context than a suburban transit development. American cities have become regional, and the goals of the specific development must reside within a much larger context, especially when the development is transit-based. People are encouraged to move between communities, which Calthorpe emphasizes as, “Most of are citizens of a region - a large and multifaceted metropolitan area encompassing hundreds of places that we would traditionally think of as distinct and separate ‘communities.”4 When considering the role of an urban transit-oriented development, the region, the neighborhood as well as the individual block and building must be considered.

The Region: Metropolis, City and Town

Today, most American cities are not isolated municipalities. They exist within a context of multiple townships, districts, and cities that are expanding to such a degree that the boundaries between them have blurred. This is a major hindrance when attempting to determine how successful a specific neighborhood or community is. It exists not only in a specific place with specific residents, but resides within a regional, national and global metropolis. Political jurisdictions begin to have little to no value, because we can easily cross them and support another, creating unnecessary competition and over-construction.5 American society in particular has become susceptible

4 Calthorpe 15.
5 “Finally - and perhaps most important from our point of view - we are beginning to set aside our outdated view of independent towns and suburbs and coming to see that the region is also a cohesive social unit...On the local level, we operate under the assumption that each city or suburb has its own economy. Local politicians compete...
to this problem of over-construction and competition. As the boundaries have blurred between separate municipalities and artificial boundaries, the border between inhabited space and hinterland has almost disappeared. The Charter of The New Urbanism stresses, “The metropolis has a necessary and fragile relationship to its agrarian hinterland and natural landscapes. The relationship is environmental, economic, and cultural. Farmland and nature are as important to the metropolis as the garden is to the home.” When developing a TOD, its relationship with the entire region must be closely examined.

The Neighborhood, The District, The Corridor

As presented by the Congress for New Urbanism, The Neighborhood, District or Corridor is what people recognize most about their surroundings. A neighborhood refers to a mixed use area that caters to the pedestrian and is compact and dense. A district refers to a zone of a single use, which is what American development has been following for decades. As much as possible, a district should also be integrated into a neighborhood. These districts and neighborhoods then begin to form corridors where they meet. Transit hubs, parkways and boulevards act as the regional connectors and have a great ability to revitalize urban cores and begin to organize an unorganized metropolis. The health of the city and the region depend on the health of its individual components. Transit can have a large part of the redevelopment and revitalization of the neighborhood. By presenting people with the viable option of public transit, compact neighborhoods become the model for development, offering all the essential amenities within walking distance of the transit station. These New Urbanist goals align greatly with the goals of a transit-oriented development. As Dittmar and Ohland state, “[A] successful TOD needs to with each other to attract new businesses inside their jurisdictional boundaries, often providing financial subsidies to specific businesses as part of the bait...Political boundaries are artificial - and they do not reflect the way the global economy operates” Calthorpe 17.

transit service with the scale of the adjacent community” (Dittmar 4).

The Block, The Street, The Building

The role of the individual block and building is the actual representation of the concept of both New Urbanism and Transit-Oriented Design. The street should be responsive to all modes of transit, finding a balance between the pedestrian, the car, the bicycle and public transportation. The buildings should respond to each other, and ultimately respond to the climate, topography and history of the area. The street should feel safe and offer a place of beauty and interest for the resident. The feel of the street and its buildings should encourage people to become pedestrian and public transit users, interacting fully within the community. Just as the two major concepts of planning does, this thesis proposes a more integrated and thoughtfully designed way of life.
Site Analysis

Locale

Region

Cincinnati is located in the southwestern corner of Ohio, on the banks of the Ohio River and within driving distance of several other mid-western cities, including Indianapolis, Columbus, Lexington, Louisville, Dayton, as well as St. Louis, Cleveland, and Chicago. It is known as the Queen City, one of its first nicknames. It is known as the first true American city, because of its formation following the development of the East Coast, and its obvious European influences. The city was founded in 1788 by John Cleves Symmes, and quickly grew into a booming city, boasting industry, machine tooling, breweries and the arts. Although other cities eventually surpassed Cincinnati in terms of scale and prominence, Cincinnati is left with a unique, hilly topography and some of the best examples of historic American architecture in the country.

The regional transportation Cincinnati is offered through bus, airlines and some rail. The Greyhound Station is located at the Broadway Commons location along with Mega Bus, which drops off at an unassuming station downtown. The regional airport is the Cincinnati/Northern Kentucky Airport located in Northern Kentucky, 13 miles south of the site. There is a small Amtrak station on the western end of the city, offering service to Chicago.

City

The site is more specifically located within the downtown basin. The basin was the first portion of the city to be developed, as it is surrounded by the river and hillsides. Before transportation was able to bring people to the hilltops, all development occurred within the relatively small basin. The areas of downtown, Over the Rhine, The West End, and Pendleton make up the basin. All are in a period of redevelopment and flux. The city-wide transportation is comprised almost exclusively by bus service, and does not adequately service the city. In Cincinnati, the Metro system operated by
SORTA and Northern Kentucky offers TANK, both meeting in downtown Cincinnati to transfer passengers.

Neighborhood

The site is located at the center of four very different conditions. To the east, Interstate 71 creates the site boundary. It is an elevated highway with entrance ramps and connecting street running underneath. From I-71, the site is clearly visible. To the north of the site, the Pendleton residential neighborhood is on the other side of the bounding street, Reading Road. Pendleton is a historic neighborhood that is in the process of change. There are several new or restored condominiums and apartments, and upscale restaurants. The majority of the buildings are four to five stories and has a very urban residential quality to it. To the south is the northeastern edge of the central business district, taller office buildings, some of which are historic. To the west is the county jail and other civic structures. The jail presents a design challenge on how to integrate it, yet to not showcase it.

Figure 3.7 - Broadway Commons within the surrounding street grid
Site Documentation

Photographic Documentation

Figure 3.8-9 - Site
Existing Urban Fabric

Figure 3.12
The proposed urban fabric extends the street grid through the site, creating opportunities for store frontage to the street and creates a similar scale and feel the to close by Over the Rhine.
Topography

Figure 3.14
Nearby Draws

Because the goal of this thesis is to create a node within a total system, the surrounding area must compliment what is being developed. The major typologies that could support future developments is grocers and entertainment. Grocers include both conventional stores and food markets. Entertainment exists in specific districts that offer a variety of entertainment and dining venues. Figures 3.15-16 illustrate the distance of prominent existing draws in relation to Broadway Commons, in the scale of the quarter mile to half mile comfortable walking distance.
Entertainment

There are four small districts around the site that offer a variety of entertainment. Main Street, The Gateway Quarter, Seventh Street bars and the eventual Banks project. They offer very different environments and cater to a variety people and needs. Broadway Commons should respond to these different environments and find a way to compliment them.

Main Street, between Central Parkway and Liberty Street is most well known for its many small art galleries, cafes and bars. Once a month, there is a gallery opening called Final Friday. On the last Friday of each month, all the galleries are opened and many serve wine, beer or food. People walk along the street, moving between galleries and bars. This portion of Main Street is very close to the site, and it is likely that if people were to arrive by transit, Broadway Commons would likely be the nearest station.

The Gateway Quarter is slightly further and has developed into an entertainment district in the recent past, and is still growing. There are several small bar/restaurants and boutique style stores. This area attracts a slightly more wealthy crowd than that of the Main Street bars and galleries. This is also an area that is attracting many new urban residents.

The Seventh Street bars are a series of larger bars that attract a much younger crowd, primarily from the Universities in the city. They stay open very late and can be very busy. They are located around the Cincinnati Contemporary Arts Center, designed by signature architect, Zaha Hadid. The museum holds many events, some of which last until late at night.

The Banks project is a development that has yet to become realized. Site work was begun in 2008, but the development’s fate is up in the air considering the current economic condition. The Banks is to be located along the riverfront, in between the city’s baseball and football stadiums. It is to include housing, office, entertainment and at least one hotel. It is directly next to the Second Street Station, already constructed.

Grocery Stores

There are only two grocers within the Cincinnati basin, the Kroger’s in Over the Rhine and Findlay Market. They are very different grocers and neither are able to completely
satisfy the needs of the urban population, nor would they be able to satisfy the needs of a large surge of urban inhabitants or the commuter. The Kroger is one of the most under-utilized in the Cincinnati-based chain, and is located on a site that is too small to allow the store to offer the selection people come to expect from a grocery store. Also, it is too far from the Broadway Commons site to capture the market of a transit hub. Findlay Market is a unique, historic and successful market on the northern end of the basin. A new grocery store should not compete with Findlay Market and should only complement it.
Site Challenges and Opportunities

Topography

This issue has been the result of many different attempts to build on the site. From the time when the site was used as a transit hub, to smaller buildings, to parking lots, many different foundations and paving jobs has left the site extremely uneven and with a large grade change across the site. In order to have a rail station, the street must be relatively flat. When traveling north to south on the site, there is more than a twenty foot difference in elevation. In order for the rail to extend from Central Parkway through the site, that change in topography must occur in the space between Reading and a Central Parkway extension.

This is very much an opportunity for design. Instead of ignoring the change in grade, the challenge can be used as a design tool, creating a solution that operates on multiple levels, along with multiple modes of transit. It is a constraint or challenge for the bus station, due to the length of ramp required for a bus to navigate the change in grade. This can either limit the path/location of the bus terminal, or may become an interesting design opportunity of how to move busses through the site.

The possibility for multiple levels may also offer different views of the site than originally possible. If rail is on a lower level, the station and surrounding urban area may be viewed from street level as well as from above, and if bus service is on a different level than rail, it offers still more view opportunities.

Surrounding Zones

The surrounding areas are extremely varied. If one were to stand at the center of Broadway Commons and were to look in all directions, there is a multitude of different conditions and uses/typologies. To the north is residential, the east is the highway, to the south is commercial and west is civic buildings and the most notably, the county jail. When looking specifically at the jail, there is a multitude of issues to respond to. Does one ignore the use for the jail and the stigma that is attached to it, or design with the aim to turn a blind eye to the com-

55
plex, attempting to erase it from the area? The highway presents an opportunity/restraint as well. It is a source of noise, as well as an opportunity for people to see a 'gateway' to Cincinnati. As people pass the site along the highway (particularly when traveling south), the Broadway Commons site is extremely visible and currently offers a view of endless parking lots.

Beside these specific instances, the general change in zoning/use from residential to commercial and civic forces the site to be the border between these two zones. This change becomes very important when not only developing a community, but a node within a transportation network. It brings to the site many of the uses that help create a diverse, multi-use transit hub that serves many uses and offers service to people with different destinations and origins.

History of Broadway Commons

Broadway Commons was a name given to the site in the recent past, since the proposal for the urban baseball stadium in the early twenty first century. The name primarily comes from the efforts of past city councilman Jim Tarbell, in attempts allow the people to visualize an urban ballpark, and the name has stuck ever since. Before that time, the area has been a variety of things, including a rail hub. All of the rail yards and passenger stations in Cincinnati were located on the fringe of the city, with multiple gauges and multiple stations, as seen in Figure 3.31. In Figure 3.32, the map of the site area shows the Toledo, Cincinnati and St. Louis Railroad and surrounding industry in 1883. This includes a lumber yard, stove company and white lead company.

The site was used as a transit station starting in February 1882, when temporary tracks allowed trains to travel from the downtown station to Montgomery and Lebanon. By March, seventy passengers were using the route to travel from Montgomery to the Court Street station and one hundred fifty were coming from Lebanon every day. Later that year, there was an-

---

other route to Avondale and Spring Grove and the zoo. During the week, trains left at least once an hour. On Sundays, they left every twenty minutes. Because of the well-scheduled frequent service, the zoo saw a drastic increase in attendance, with the Cincinnati Times Star noting the zoo as “so accessible now that it is the easiest thing in the world to get there, either by streetcars or the Narrow Gauge Railroad.”

Of all the rail yards in Cincinnati, the Court Street Station and the Cincinnati Northern Railroad was the only one that were not in the flood plane. They were located over one hundred feet above the low water mark, and because of this, experienced a lot of growth. There were two rail depots on the site, the Cincinnati Northern and the CL&N by 1885, on either side of Court Street. The CL&N structure is described by The Cincinnati Times Star as a two story structure that includes a ticket counter, general (as well as ladies) waiting room, a lunch counter and the rails stopped behind the building (Figure 3.33). The Architect, Samuel Hannaford, was noted for his design work.

Even after rail lines were not used as the primary mode of transportation, the site was still saturated with rail lines and their necessary structures, as seen in the photo from the 1950s (Figure 3.34), the infrastructure still in place. After the initial investment and construction in the late nineteenth century, there was a drastic shift as railroads began to change to standard gauge rather than narrow gauge. One major hindrance, however, was the fact that Cincinnati government would not allow the rail lines to extend to Fountain Square by way of an elevated line. The safety of people below was of primary concern. This did not allow a complete connection of all existing rail lines and was the beginning of the end.

When the extension of the line became impossible and the automobile and bus system became the desired mode of transit, the system fell into disrepair, the schedule was cut back and the Court Street Depot was no longer used by 1969. By

---

2 Hauck, p.60.
3 Hauck, p.71.
1975, the structures and most of the rail lines were removed. In less than a century, the site was a booming center for industry and rail, and as industry moved out of the city and rail ceased to serve the people, the site was left as the empty wound that remains today.

Figure 3.28 - The Court Street Depot, in 1937.

Figure 3.29 - The Court Street Depot, in the 1950s.

5 Cahal, Sherman. Web article.
Chapter Four - Design Development

Vista and Terminus
It is very important to consider how this urban TOD will be viewed from the terminus of Central Parkway. Currently, there is a certain level of disappointing anticipation as one reaches the terminus of this boulevard. Whether it is a driver, pedestrian or eventual transit rider, the person is guided through large, civic buildings and vistas through a historic downtown and left with the grand vista of a vast sea of parking. How to resolve this terminus is a major design consideration.
Urban Design: The Termination of Central Parkway

It was determined that Central Parkway needed to be extended, but there are many different ways to do this. Three general arrangements were explored; to reinforce Reading Road, to ease traffic for the pedestrian by splitting the direction of automobile traffic, and to offer direct access to Gilbert. After discussion and critique, it was determined that a hybrid of these options would be most appropriate. A direct expansion of Central Parkway, that ‘kinked’ to connect with the pedestrian bridge to Mt. Adams, making it apparent that the node was located at the ‘kink.’
Urban Design: How to Treat Such a Large Wound

The enormity of the site must be addressed, calling for a large-scale exercise to quickly see what the site could be by suturing in other parts of the downtown region to in essence ‘erase’ Broadway Commons in three different ways. These schemes were based upon the previous exercise, adding in the general program of adding green space, a transit hub and additional residential and commercial space. After this exercise, it was determined that this was too far of a step, and first the difference in topography must be addressed, as this exercise had treated the site as a flat surface.

Figure 4.10-12
Independent of vistas, views and traffic, the site arrangement must be explored in a way that responds to the current urban surroundings. Major factors are the jail, the residential district to the north and the presence of a major highway running along the length of the site. This studies examines the transit hub at three different locations within the site, and appropriate site strategies that respond to each. After this exercise, it was apparent that the site should not be zoned so specifically, and is more desirable to locate the transit hub within a more natural, un-restrictive urban context.
Once determined that the newly constructed urban context should simply be a dense, residential and commercial district, the framework for this type of development must be established. In accordance with the idea of the ‘kink,’ three studies were done to explore street grid arrangements. One of these strategies seemed to be the most desirable, allotment of the three programmatic elements were distributed in different ways.
Urban Design: Nature of the Kink

The previous grid study lead directly into an urban design proposal of how to create urban fabric for this station to exist within. The program became specifically a reintroduction of a new Greyhound terminal, light rail station, grocery store and supporting retail. With an established grid pattern, and the introduction of a pedestrian-only portion of Central Parkway, specific site boundaries for programmed activities is determined, and massing could be explored.

Figure 4.20-22
After the location of the station was determined, one of the major design challenges must be addressed, the nearly twenty foot change in elevation between Reading Road and the newly extended Central Parkway. Model studies helped examine different ways to bring people from one level to another, as seen above. These formal studies can be described (from left to right) as a bridge, stair and tunnel connection.
Architecture: The Station

As a specific location for the station became apparent, an exploration concerning the movement of the busses in relation to the site. Three ideas were explored; a bridge, a drop-off station and a more traditional one. Following the prior exploration of the three ways to navigate the grade, they were iterated upon when the movement and design constraints of busses and their associated turning radii were considered. This exercise takes three requirements into consideration; the bus, the movement of pedestrians and waiting/retail areas.
Architecture: The Plaza

As the design for the bus terminal was developed, the feel of the development as a whole had to be considered as well. There are two primary axis within the site; the east/west axis of Central Parkway and the north/south axis of people moving from Pendleton to a (and also through) the site. In the scheme represented in figures 4.31-5, the feel of the outdoor space was beginning to be explored, which is becoming the major focus of the design work.
Figure 4.30
Works Cited


Fishman, Robert. New Urbanism: Peter Calthorpe vs. Lars Lerup.


Sachs, Jeffrey D. “Coping With a Persistent Oil Crisis,” Scientific American (October 2008).


