The Niehoff Urban Studio
The Over-the-Rhine Project
SUMMARY REPORT 2004-2006
Niehoff Urban Studio

Mission

The Niehoff Urban Studio is a place for the university led, but community driven investigation of urban issues for the benefit of Cincinnati and other urban centers. It is a place where University and non-university participants can come to participate in educational classes, events, symposia, and exhibits that explore these urban issues.

The Niehoff Urban Studio is a unique and innovative off-campus classroom in which an interdisciplinary group of university students and faculty can interact with community stakeholders to study and experience, first-hand all aspects of the urban issues relevant to the center city.

The work of the Niehoff Urban Studio is intended to have a tangible impact on the urban problems under consideration and will contribute to the body of knowledge of research in this area.

Objectives and Outcomes

Research on Urban Issues: Students and faculty engage in academic research on specific urban issues and topics.

Applied Research for Design Projects: Interdisciplinary teams of students explore, develop, and recommend strategies and design solutions to address specific urban problems.

Community Development and Service Learning: Faculty and students work with community groups and stakeholders to collaborate on strategies and design proposals that have a timely and tangible impact.

Public Education: Public symposia, presentations and exhibits are sponsored to provide a forum for public discussion of urban planning, design, and quality of life issues for the urban center.
In 2004-06 the Niehoff Urban Studio examined the economic, social, and physical issues affecting the viability of the Over-The-Rhine neighborhood of Cincinnati. This neighborhood is located between the two major employment centers of the Cincinnati Central Business District and the “Uptown” area neighborhoods which are anchored by the University of Cincinnati and several medical campuses. Over-the-Rhine has suffered over the last five decades from substantial disinvestment that has left is residents in poverty (79%) and its physical and functional form in disarray. Yet significant assets remain in the area despite a dwindling population (11,914 -1980, 7,422 -2000) and these include distinctive historical architecture in pedestrian friendly mixed-use districts as well as an active commitment by the city and community leaders to revitalize the neighborhood. Interventions in this area are seen by many as an important opportunity to create a vibrant community that improves conditions for existing stakeholders while encouraging new residential and commercial activity.

The Niehoff Urban Studio provides opportunities for faculty and students of Urban Planning, Architecture, and related disciplines to address these issues in problem solving exercises conducted with the participation of community stakeholders. The Studio is structured as a joint lecture/lab course offering by the School of Architecture and Interior Design and the School of Planning with interdisciplinary participation by faculty and students from other UC colleges. Up to 30 graduate-level and advanced undergraduate students will participate each quarter. The Studio is team-taught by a group of faculty, one from Architecture, one from Planning, and the Director of the Community Design Center (who teaches and coordinates the overall Studio program), and includes, on a rotating basis, participating faculty from other colleges and disciplines. The Studio is located off-campus in the first floor of the Emery Building in Over-the-Rhine and allows space for faculty and student design and research, meetings and events, and permanent exhibits. Studio content is based on community development priorities and community stakeholders visit the studio and interact with students and faculty throughout the quarter.

Through this academic outreach studio and related research and technical assistance, the University of Cincinnati Niehoff Urban Studio shares the expertise and talents of its students and faculty with community stakeholders to address, together, problematic urban issues in a neighborhood of need. The Studio functions to do this on many levels. Through service learning activities, it introduced more than 150 students to these issues and the community stakeholders that struggle with them. The studio provides a resource for applied research for design projects that address problems and advance solutions for fourteen community based organizations as described in the quarter activities attached. Studio projects are connected to and lead to funded technical outreach work with eight community based organizations conducted by the UC Community Design Center that provides tangible community development outcomes for the community, e.g. Imagination Alley, Venice Pizza, Drop-Inn Center Mural. Studio projects are connected to and lead to funded data services projects that facilitate future community development, e.g. Washington Park District Housing Inventory and Mapping Project conducted for Cincinnati Center City Development Corporation and Findlay Market District - OTR Development Mapping conducted for the Corporation for Findlay Market. Studio projects are connected to and complement funded research on urban issues that contributes to the body of knowledge, e.g. Planning Support System for transit oriented development and residential development in Over-the-Rhine. And finally, studio work is the inspiration or backdrop to a valuable Community Education Program that in eleven events involved almost fifty community based organizations and more than 600 community stakeholders who benefited from presentations, forums, and workshops on community asset building, urban design and community development issues timely and relevant to the city.
Collaborating Entities - Academic:

UC Community Design Center, UC School of Planning, UC DAAP School of Planning-the Joint Center for Geographic Information System and Spatial Analysis, UC School of Architecture and Interior Design, UC School of Art, UC Economics Department-McMicken College of Arts and Sciences, Miami University Center for Community Engagement, UC Institute for Community Partnerships, UC Department of Transportation Engineering, UC College of Medicine

Collaborating Entities - Community:

To consider theming in the urban environment as market exploitation of cultural symbols that ends in the inability for social cohesion and economic sustainability. Thanks to corporate marketing and our wholesale suburbanization of the environment, themes in a modern environment are vapid fantasies with false senses of community and culture. To compete with the suburbs economically, many cities have recently brought the ideals of theming into their development schemes in an attempt to promote tourism.
We found clusters of themed establishments and clusters of unthemed establishments. These are more dense on Main Street and less dense on Vine. This could be due to the level of development on each. We do find, that where there are themed establishments that they do happen primarily on Main St, where the unthemed, or authentic establishments seem more free to be on either Main or Vine. Twelfth St seems to be the linking corridor between Main and Vine. Along this link there is an interesting push-pull between the major theme cluster and one of the unthemed clusters. Along Vine Street, there is a gradation of unthemed environments. Along Main, there is a heavily themed node on one end, a mildly themed node on the other and gradations of authentic in between.
The combination of the population decline over many decades and the continual vacancy of housing units throughout Over.the.Rhine has produced the overwhelming sense of EMPTINESS.

There is no substitute for lively streets, (Jacobs, 120). When the population is declining and the buildings are empty, it becomes very difficult for the streets to be lively. Just like any city Over.the.Rhine is a study in organized complexity, "all varying simultaneously and in subtly interconnected ways," (Jacobs, 433).

The portion of the population unemployed and not in the labor force under any label is considerably more than the employed population. Individuals over age 16 are considered for the labor statistics. Once a year of unemployment has passed an individual is no longer counted as unemployed.

www.census.gov CITY OF CINCINNATI OTR MASTER PLAN - WWW.CINCINNATI-OH.GOV JACOBS, JANE. THE DEATH AND LIFE OF GREAT AMERICAN CITIES
Cincinnati's Music Hall is a cultural institution located in what is perceived to be a dangerous area. As a result of this, its conditions of access and experience are skewed when viewed in comparison to other cultural facilities of similar prominence within the city of Cincinnati. This study examines this building's relationship with its surroundings and the public image of the institution that governs it.

**CRIME STATISTICS**

Local crime statistics corroborate, at least on a certain level, the level of distrust and concern for safety associated with Over the Rhine. What is unclear is the demographic nature of the crimes committed, and whether the audience members of Music Hall have ever been targeted.

**THE QUESTION OF INTERVENTION**

A successful intervention into this site would need to address special aspects of experience in the context surrounding Music Hall. Dining, parking, street lighting are important considerations. Existing facilities for the homeless will need to be accommodated in a fashion that does not intrude on the experience of concert attendance, or there will be no life on the streets surrounding Music Hall.

**COMPARISON OF SUGGESTED PARKING VENUES**

Parking at the Aronoff Center is spread throughout a variety of garages near the facility. Parking for Music Hall is housed solely in a parking garage across Central Parkway. Access is provided via the main road via a pedestrian bridge, likely in order to shield patrons from the street life in Over the Rhine.

**RECOMMENDED DINING ESTABLISHMENTS**

The Cincinnati Arts Association offers no dining suggestions for restaurants near Music Hall. Instead, they offer the same restaurants that are within walking distance of the Aronoff Center, which are not also reasonably walkable from Music Hall.
How to Define the Edge of a Historic Neighborhood

Katie Hunter

What is the Current Condition of the Southern Edge of the Over the Rhine Neighborhood?

The western side of the boundary is primarily ground parking lots with the YMCA building as the only anchor. The new School for Creative and Performing Arts is proposed across Elm Street. The new structure will help establish the western edge.

The Central portion of the Central Parkway boundary is somewhat defined, but still has a number of parking lots making it difficult to establish as a gateway.

The eastern edge is fairly well defined. The smaller buildings change in character and help transition from the central business district to the historic Over the Rhine area.

What is the Social Situation in the Area?

1. Along Central Pkwy, between Plum and Vine, the area has low residential property values and high vacancy rates. Home ownership is low and the median family income is significantly below poverty level. The area is about 70% black and 30% white.

2. Between Vine and Sycamore, residential property values are very low. As much as a third of the housing in this area is vacant. Nearly all of the residential in this area rent. The median family income is below poverty level, however, it is more than twice as high as in the area between Plum and Vine. The racial composition is approximately 70/30, predominately black.

3. East of Sycamore, the Pendleton area has much higher residential property values, averaging over $150,000. Almost one tenth of the residents own. More than 80% are highschool graduates and 16% hold a bachelors degree or higher. The racial mix is 80% black, 16% white, and 4% other.

Conclusions and Recommendations

Future development along Central Pkwy must be cognizant of the edge condition of this historic neighborhood. Pedestrian and vehicular gateways to the neighborhood should be clearly denoted.

New or renovated housing in this area should be required to include some units for affordable housing to ensure that the current residents will still have a place in the neighborhood as it becomes more affluent. Services for the poor must still be located near the housing.

Some kind of language of street furnishings, lighting and signage should be considered for the OTR neighborhood to identify the neighborhood, buildings, and sites as historic.
The Real Agenda
The real vision underlying all of the planning is a repopulation of the area with residents that can afford to put money back into the economic system. This is a further perpetuation of the existing cycle of low-income evacuation. One obvious piece of evidence to this is the sort of vendors Findlay Market lists on its web site. The list includes, wine shops, coffee shops, ethnic take-out, chocolatier/confectioner patisserie, specialty meats, organic foods and a juice bar. All of the vendors mentioned provide speciality items that would cater to a higher-income population. In addition, the lowest vendor stands rental costs are higher than the average apartment rental costs in the area.

Another clear indicator is the basic horseshoe form of the market. The market is increasingly not about the neighborhood. People come into the parking lot and are funneled onto the market. When they are finished they go right back out again the way they came in. There is no meandering in the surrounding area looking in the shops.

Challenges to maintain a mixed income population
- Revitalization raises property values and the low income population can not afford the cost
- Difference between property owners and renters
  - Property owners want a return on their investment
  - Renters want stabilized rents
- Provide incentives and controls to ensure that development does not push out the current population

Challenges to increasing ownership
- Ownership is only 5% compared to 38% citywide
  - Renovate existing housing stock for purchase
  - Conversion of existing brewery and industrial buildings
- Prohibitive investment for rehabilitation costs and the buildings require a lot of work to bring them up to current code
  - Provide incentive for developers, gap financing, low income tax credits, federal historic tax credits, low interest loans, and city grants.
The Anatomy & History of an Urban Village

1870 Titus Map
- Total Population: 6,247
  - White: 6,228
  - African American: 19
  - Native: 3,976
  - Foreign: 2,271

1904 Sanborn Map
- Total Population: 8,469
  - White: 8,252
  - African American: 217
  - Native: 6,842
  - Foreign: 1,627

1904-1930 Sanborn Map
- Total Population: 5,199
  - White: 5,169
  - African American: 30
  - Native: 3,268
  - Foreign/Mixed Parentage: 1,416

1960-1980 Sanborn Map
- Total Population: 5,433
  - White: 4,632
  - African American: 789
  - Other Races: 12

2004 CAGIS Map
- Total Population: 1,985
  - White: 929
  - African American: 971
  - Occupied Housing Units: 856
  - Owner: 292
  - Renter: 564

New Construction
"Increasingly, our schools are critical to bringing our communities together. We want them to serve the public not just during the school hours: to function as vital community centers. places for recreation and learning, positive places where children can be when they can't be at home and school is no longer going on; gathering places for you young people and adults alike."

Washington Park Elementary School, 115 West 14th Street

Building Assessment Summary
Date of Construction 1958
Existing Square Footage 73,466
Current Square Footage per Student 173

<table>
<thead>
<tr>
<th>Student Ethnicity</th>
<th>Washington Park Elementary</th>
<th>State Average (Grades K-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>99%</td>
<td>18%</td>
</tr>
<tr>
<td>American Indian</td>
<td>0%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Asian</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>White</td>
<td>1%</td>
<td>79%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Economic Level</th>
<th>Washington Park Elementary</th>
<th>State Average (Grades K-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of students receiving free or reduced lunch</td>
<td>99%</td>
<td>37%</td>
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</tbody>
</table>
This quarter, the Niehoff Studio students took a look at the Over-the-Rhine neighborhood from a unique perspective and saw visions for its future from the eyes of individuals much different from themselves. Many students chose to focus on Vine and Main Streets. This is partially due to the recent emphasis on the area and the sense of urgency to save it from destruction. The overarching goal of this studio was to make Over-the-Rhine a safe and livable place for its residents, visitors and business owners. During the last two years, the City of Cincinnati has been promoting the revitalization of Vine Street as a special district with the potential to combine entertainment, art venues, and housing. In addition, Main Street is a unique urban district with some strong indication of becoming a regional destination (urban entertainment district). Restaurants, bars, cafes, bakery and other shops on Main Street, that are devoted to food production and service, have become magnets for visitors. In addition, existing grocery and convenient stores continue to service the residents in the area. This is occurring without any explicit City policy and planning. The relationship between Main and Vine Streets as mutually supportive corridors of a revitalized district is weak and needs to be clearly defined. Overarching the potential for reinvestment are the serious concerns with the preservation of the historic resources and character of the area, and the need for redevelopment to be a positive catalyst for opportunity for the residents and their local businesses and support.

Students in this studio addressed questions through the "lenses" of 12 specific social groups that include single mothers, young professionals, small scale developers, police, along with others. The studio addressed the following questions as they applied to each lens group:

- How can we understand and define the concept of shared/negotiated space to uniquely address our area in OTR?
- How do we use the knowledge gained to establish design plans and strategies?
- Can we establish a shared/negotiated environment with long-lasting promise for livability?
- How do we integrate the studio recommendations with the OTR and city basin area? What type and form of integration is desirable?
- How can plans and strategies for a shared/negotiated space become a catalyst for revitalization? What type of an urban design plan/strategy is possible?
- What type of policy is necessary and how do we explicitly address gentrification within the redevelopment strategy?
- How do we integrate redevelopment and revitalization with historic preservation within an economic development strategy?
- How may we inform ourselves for more effective urban design by understanding the negotiated space as a "place" through the lenses of the stakeholders?

The students explored the answers to these questions with varying degrees of complexity as shown in their recommendations.
In addition to these designs, individual groups have completed connectivity and park plans to create a more comprehensive planning effort.
This diagram displays the location of each of the proposed areas and how each of this quarter's student proposals is connected to each other through pedestrian pathways, vehicular routes, and green spaces. These proposed projects include Parks and Green Spaces, Housing, Mixed Use, Light Industry, an International Market, a Homeless Village, and a Kid's Zone. These proposals are connected through a system of pedestrian and vehicular pathways to promote use of each and to create easy access to all. The pedestrian routes are not completely restricted to the use of pedestrians yet they have been altered to create a safe environment while sharing the space with the vehicular traffic. These pedestrian routes will be paved in brick to slow traffic, and encourage a more friendly environment. The green spaces are another form of connection between the proposed areas. These serve as green patches that connect the pedestrian routes, forming a scenic walkway through Over-the-Rhine. To encourage individuals to make the journey through these green pathways, the routes will provide inviting amenities such as colorful buildings, flower boxes, and small café's and boutiques. Within and on the periphery of the proposed areas, gateways are included that represent areas of focus, activity, and entry.
The Long Term Elderly Residents of Over the Rhine do many of the activities of any regular elderly person does. Activities such as shopping, seeking medical help, staying home and socializing, utilizing the Over the Rhine Senior Center, going to bars and restaurants and also going to church. But there are also issues that set apart seniors from Over the Rhine. Issues such as getting to and from places dealing with a crumbling infrastructure such as sidewalks and stairs, a lack of shopping choices and also dealing with a high crime rate. All these things contribute to creating a difficult living environment. Though Over the Rhine has some assets such as Metro Bus Stops, Kroger, Findlay Market and the Senior Center it still needs help in catering to its older population. Some elderly live in fear and rarely come out. Others go on with their daily activities regardless of what is going on around them, they are determined to live in Over the Rhine whether there is crime or not because they have pride in where they live because it has been their life-long home. We interviewed Virginia from the Over the Rhine Center and she discussed these issues with us. The fact is, the elderly want to live in Over the Rhine even with these difficulties. She discussed some things the elderly would like to see done with the neighborhood. Like having a store that would have a broad selection and discounts and activities with reasonable prices, such as Music Hall and the Aronoff Center. Even though they are close, they prove to be too expensive. Our goal will be to address the social, mobility, accessibility, historical character and safety issues of Over the Rhine in order to cater to the long term elderly residents who live there.
Washington Park will be redesigned in areas to meet the needs expressed in the community’s focus group.

13th Street will be transformed into a pedestrian friendly street, known as “The Avenue of the Arts.” The sidewalks will be widened on each side, fixtures such as lampposts, trees, planters, and benches will be installed. It will also allow for the seasonal display of street art.

Ziegler Park will be redesigned to include a modern summer aquatic facility. The pool area will be refurbished and expanded with a children’s play area. A small community garden will be located in the park as well. The existing dry playground at Ziegler will be maintained, and will a pedestrian corridor will pass through the open area of the park to connect 13th Street with the playfield.
The art community in Cincinnati, while thriving, is disconnected and spread out across the city making it hard for a real creative hub to form. Over-the-Rhine is the perfect opportunity for artists because of the great living spaces that could be available including loft spaces, studio spaces, and alternative housing and apartments. OTR is also the center of the city making art exhibitions easily accessible from all around the tri-state. A diverse amount of commercial is already moving into the neighborhood giving it a good start, however, much more would be needed to sustain a larger population than what is already there. The housing stock is already there as in the potential. Displacement would not be an issue with market rate housing and the vast majority of vacant buildings already. Artists are already all-embracing and would be great to revive the struggling OTR community and economy.
This project uses the vacant Hussman Potato Chip Factory. This space would provide enough room to obtain our design goals of creating a campus style cluster that is appealing to the eye yet very functional for its intended purpose.
Our plan is to develop a homeless village with the necessary amenities and services to assist the homeless and rehabilitate the drug addicted. Once they have fully recovered, we will provide them with job training and return them to society as contributing members instead of needy panhandlers and vagrants.

### Statistics

*Increases by app. 1,250 people per year

*App. 51 homeless resource services in OTR

### Recovery Cycle
Typically, a homeless person starts out at the drop-in shelter, where danger is always an issue and security is minimal. The drop-in shelter has a rehabilitation program, but it only holds 20 people. If a homeless person is trying to change their life around, they will most likely enter the City Gospel Mission's recovery program, which assists in living and in rehabilitation. There are also other ways of improving themselves, such as the Lord's Gym, support groups, churches, and the Library.
Light industry plays an important role in Over-the-Rhine. It is a valuable part of the community because it employs many of the residents who live inside the community and provides a very valuable tax base for the community. We see our district as providing an economic development opportunity for Over-the-Rhine by providing personal and career development oriented job training as well as incentives for businesses to come and prosper within our area. In the future these jobs, and possibly worker owned companies, will house many desirable positions for those living in and around OTR. Also, the utilization of the assets OTR possess will help to provide economic stability as well as neighborhood pride. Moving businesses in that will maintain their buildings will help create a better atmosphere for the entire community. Attracting business to the area will require incentives and new ways of encouraging growth.
Any redevelopment plan must employ, educate, and engage the youth of OTR if it is to be successful. Five major points are identifiable:

1. **Provision of Economic Opportunities**
Any new development shall apprentice local youth as part of the workforce. To avoid displacing or income sorting locally within OTR, new developments shall offer a mix of income rental units: high, middle, and subsidized.

2. **Improve Environment**
The city shall litigate against property owners that are allowing their buildings to deteriorate, enforcing minimum standards of exterior appearance. The appearance of the blocks between main and vine shall be improved with new trees, lights, flower boxes, and artistic murals - to be executed with local talent.

3. **Provide Education Necessary to Redevelop**
To aid in the rehabilitation, a trade and craft school will be founded in OTR that will educate youth on techniques of rehabilitation and renovation of historic structures. The goal will be to have students acquire a building and renovate it upon graduation. The city shall provide low-interest loans.

4. **Secure Household Life**
The youth of OTR need a more stable family life to support them. The welfare system shall cease to reward single mothers with multiple children, and instead shall provide more aid to households with two parents and some income. This will reduce the need of youth to turn to drugs as supporting income.

5. **Recreational Opportunities**
Currently Young African American Males are under served recreationally in OTR. We propose new businesses to support them, including, but not limited to: A poolhall/restaurant, a weightroom/basketball hall, and a dance studio/night club.
We have selected Findlay Market as an anchor for an international market. The international market will pick up where we feel Findlay Market has left off. Our plan is to bring in an opportunity for ethnically diverse dining and shopping experiences. With this implementation we feel that not only Findlay Market will be helped, but the entire neighborhood.

We plan three sections, or districts, surrounding the Findlay Market development, each devoted to a different international culture. The three districts will be Asian, Middle Eastern, and European themed.
Today's empty-nesters are more active, healthy, and romantic than previous generations. While they miss their children, they seem delighted to be getting on. More and more, they are going out to play now that the kids are away. They can be described as adventurous, sophisticated, have money, appreciate good food, wine, and eating out, want to travel and have fun.

Over the Rhine currently offers amenities that could attract empty nesters to invest in the neighborhood. This includes the concentration of restaurants, bars, lounges, Music Hall, Findlay Market as well as the proximity to and Downtown.
This plan’s goals are to fill in vacant lots with the addition of new mixed-use buildings to go along with the current mixed-use. These new buildings will create an enhanced street environment along Vine Street. Also some of these vacant lots will be utilized as surface parking lots located behind buildings facing Vine Street. Pedestrian pathways will be created to lead from these lots to the street front. We also considered the area around Vine Street, including 12th and 13th streets, to further activate foot traffic throughout the neighborhood.
**Concept Statement:**
We are proposing for this area an integration of Main Street and Vine Street with the surrounding area to create a cohesive and viable business district, this will be done by creating more retail, housing, and food services and changing 14th Street into a pedestrian only environment.

**Vine Street Proposal:**
By increasing the aesthetics on Vine, we propose not only to allow a certain number of units made up of restaurants, ethnic cafe’s, multi-cultural stores to be allocated within the region, but also to increase the complexity of the region with the addition of mixed use housing. Overall, a higher density percentage would put those business with a likely advantage to succeed.

<table>
<thead>
<tr>
<th>Goals</th>
<th>Location</th>
<th>Proximity</th>
<th>Type</th>
<th>Amenities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Increase available parking to businesses on Main and Vine</td>
<td>Disperse small lots to cater to the adjacent businesses</td>
<td>Within a 2-3 minute walk to corresponding businesses</td>
<td>Well lit parking lots, Tree lines lots, lighting medians</td>
</tr>
<tr>
<td>2</td>
<td>Increase the number of restaurants on Main and Vine</td>
<td>Majority on Main and Vine providing access to the area</td>
<td>Have restaurants in close walking distance to the business district</td>
<td>Have a variety of restaurants, ethnic cafes, corner stores</td>
</tr>
<tr>
<td>3</td>
<td>Increase police presence</td>
<td>Have police patrol assigned blocks on a regular basis</td>
<td>Patrol the surrounding area</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Provide more retail in the surrounding areas</td>
<td>More retail on main and Vine, creating more distinct sense of place</td>
<td>On Main and Vine within walking distance</td>
<td>Clothing stores, music stores, jewelry, boutiques</td>
</tr>
<tr>
<td>5</td>
<td>Increase the amount of housing around Main and Vine</td>
<td>On the streets between Main and Vine</td>
<td>Within a 1/4 mile walk of Main and Vine</td>
<td>Loft apartments, family apartments, studios</td>
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**Policies**

- Unite OTREC under one vision to include all business within the Main and Vine Street district. This would provide these businesses to have the power to thoroughly discuss and convey their ideas, presenting the finished ideas with more force to get funding for lower end businesses.
- Increase the presence of the Police enforcement in this area by assigning individual beats to specific officers that are patrolled on a consistent basis.
- Restore the vacant buildings by locating businesses and housing within while creating more attractive storefronts.
- Create awareness program of OTR area. By educating people on the area, the perception that OTR is not safe to be in will be extinguished. If people are educated, then they will feel more comfortable coming downtown to shop, eat, and even live.
- Create a network of street vendors that cater to the main and Vine Street district. They will be concentrated on 13th and 12th Street, but will also be dispersed throughout the area providing easy food for the business owners and hungry shoppers.
To the bystander’s naked eye the current condition of the neighborhood appears to be run down and vacant. Although some of it is true, the neighborhood posses many great qualities including a thriving market and magnificent park. There are many vacant properties in Over-The-Rhine, including the neighborhood from Green St. to 14th St. Many of these properties appear to be dilapidated and not worth restoring. But many of these buildings hold tremendous potential for restoration. We proposed a mixture of new infill housing and mixed use housing between 1,200 and 1,500 Sq. Ft. per residence in this area. Also we have identified a new potential landmark to help anchor the community. We also wish to keep the amenities that are already in place such as the existing playground and community garden.
African American Single Mother Goal/Achievement Matrix

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<thead>
<tr>
<th>Assets</th>
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<tbody>
<tr>
<td>Strong community ties</td>
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<tr>
<td>Rich history</td>
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<tr>
<td>Urban character</td>
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<tr>
<td>Proximity to downtown</td>
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<tr>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime and safety</td>
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<tr>
<td>Underfunded schools</td>
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<tr>
<td>Dilapidated housing</td>
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<tr>
<td>Litter and debris</td>
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<table>
<thead>
<tr>
<th>Activities</th>
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</thead>
<tbody>
<tr>
<td>Grocery shopping</td>
</tr>
<tr>
<td>Laundry</td>
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<tr>
<td>Restaurants</td>
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<tr>
<td>Working</td>
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<table>
<thead>
<tr>
<th>Challenges</th>
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<tbody>
<tr>
<td>Home ownership</td>
</tr>
<tr>
<td>Efficient transportation</td>
</tr>
<tr>
<td>Escaping poverty</td>
</tr>
<tr>
<td>Finding time to relax</td>
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<table>
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<tr>
<th>State of Mind</th>
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<tbody>
<tr>
<td>Working vs. parenting</td>
</tr>
<tr>
<td>Retirement not feasible</td>
</tr>
<tr>
<td>Children's safety and education first.</td>
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The Creation of Positive Public Space

A mothers’ protective instincts are not supported by the current state of urban fabric and public space in Over the Rhine. Public spaces are carved out by the physical surroundings. The formation of space gains character and becomes a living center, a “shell” formed by the walls, light, trees, and many other objects of space. The black and white silhouette to the left illustrates the present day conditions of urban space in Over-the-Rhine. The lack of recognizable boundaries and defensible spaces is directly related to the feelings of insecurity felt by African American Mothers in Over the Rhine.

Restoring the Urban Fabric

The Creation of Public Space: The continuous improvement of the shells of public space which make the human community. This to be done by a committee of professionals, acting in concert with community members, within very carefully agreed verbal agreements of the general patterns to followed. Nodes and shells are easily recognizable in this spatial arrangement of buildings. Public spaces can also be formed by the social uses that are harder to see.

Identifying the Inner Spaces

The green areas on the left are individual shells, each with their own unique character created by both the residents who occupy the space and the physical characteristics that define it. Typically, the spaces would be occupied by community gardens and courtyards. Their enclosure within the buildings implies their defensibility.

Identifying the Main Public Spaces

Public spaces are less defensible based on enclosure and accessibility but these spaces are equally safe due to the amount of “eyes on the street” that comes from a high volume of people traffic and commercial businesses. Its important to keep a sense of scale present in public space so the larger public spaces should be divided into smaller areas within.

African American Single Mother Goal/Achievement Matrix
The Mercer Street Kid's Zone, between Vine and Walnut Streets, will become the area's epicenter of child activity. The buildings will be retro-fitted to house arcades, learning centers and community centers, and will be painted a vibrant color scheme. The remaining area around these buildings be set aside for green space that can be used for outdoor activities of any kind. The overall aim of this zone is for Over-the-Rhine to have a child friendly, child centered district within walking distance of where the youths live. The "Kid's Zone" will be the safe and entertaining place that youths desperately need.
Architecture, Urban Planning, and Economics students worked with Public school administrators to envision a new Entrepreneurial High School and a revitalized commercial and residential district around Findlay Market in Over-the-Rhine. This included illustrating a new public high school focused on entrepreneurial training of youth with a synergistic relationship to businesses in the Findlay Market commercial district. This project exploits a new approach to public education and school facilities which follows a concept supported by the US Department of Education called "Schools as Centers for Community Learning". In this project the Entrepreneurial High School provides a setting for students to connect with local businesses and participate in activities which support specialized learning for both students and community residents while at the same time, strengthen the local commercial district. Stakeholders and active participants in this quarter’s studio included the principal and high school students of the current Entrepreneurship High School.
Entrepreneurial High School Campus

The rationale behind the Entrepreneurial High School Campus is to take advantage of the existing amenities in the area and create a vibrant connection between the proposed high school and the Findlay Market District. The Campus will include a 60,000 square foot recreational center, a 26,500 square foot library, a 120 space parking structure, a 25,000 square foot art gallery, and over a 100,000 square foot office space equipped with a full-service daycare and health center.

Enhance Elm streetscape with the use of pavers, lighting, and signage

Convert Boys and Girls Club into 60,000 s.f. Recreational Center

26,500 s.f. Library to replace dilapidated housing

120 Space Parking Garage to replace existing surface lot

Proposed Entrepreneurial High School

Implement tree-lined medians and pedestrian walkways on Liberty Street

Create greenways and vegetation buffers along Elm Street

Enhance connection to Findlay Market with treatment of tertiary paths

25,000 s.f. art gallery and studio to replace existing infill

Increase density throughout Elm Street corridor with mixed use infill

Create gateway at Liberty and Elm with outdoor plazas and landscaping

Logan Street Elevation

Proposed Recreational Center and Office Building
By incorporating a theme of Humanities into the existing framework of Over-the-Rhine it is anticipate the neighborhood will experience an urban renewal. Renewal of the community, hopefully, will spread throughout the district and prevent further decline. In order to implement the Humanities Corridor and be an effective means of revitalization to the entire community, we feel several specific building types should be considered. Schools are a major category of our design plan, placed as anchors along the corridor. Other buildings we feel are necessary to the creation of the Humanities corridor include a branch library, a science and manufacturing museum, an Over-the-Rhine history museum, retirement center, daycare, and mixed use buildings. It is also important to keep Over-the-Rhine available to people of all incomes, and to propose infill and rehabilitation of existing buildings into mixed income housing.
Campus as Community Center

Barrett McClish

The 'Campus as a Community Center' plan makes a connection between the new Entrepreneurship High School and the Findlay Market District. The Elm Street retail corridor integrates mixed-use buildings as well as multiple EHS satellite storefronts as a way of creating a pedestrian link between Findlay Market and EHS.

Adjacent to both the EHA community campus and retail corridor are residential buildings to help support the community.

In addition, the campus contains several institutions aimed at supporting the residential district, such as: library, day care center, office space, and recreation center.
A Face Lift For Over-the-Rhine

The key to making this idea work is finding a way to draw the people from Findlay Market down to the entrepreneurship high school and visa versa. This attempts to tie these two locations together and ultimately enhance district economic development.

The new school will be an estimated 50,000 s.f., three stories tall and be constructed of metal framing and brick veneer. A center courtyard was created similar to that of the proposed Findlay Market plaza, which will allow people to have an open space to shop during lunch or after school. On the weekends the school could act as a second Findlay Market if needed.

Various old vacant buildings near the high school will be converted into businesses that help support the school and give the kids places to shop for many of their necessities, as well as provide the surrounding residential units with places to shop, eat, read or just socialize.

Along the same lines as the high school many of the buildings close toward Findlay Market will be converted into businesses that will help to support Findlay Market.
The design for EHS creates a building massing based on program. The **two part massing defines a public building on the east side addressing the prominent corner with a more private building housing only classrooms on the west side of the site.** The parti, the circulation, is expressed on the exterior and connects the two buildings.

**This exterior expression creates a theme for the entrepreneurial sales functions of the building allowing future expansion to other stores to reflect the original design.**
Entrepreneurial High School

Charles Jahnigen

New School Proposal

Today’s educational institutions are changing...we are creating educational facilities that incorporate unique curriculum.

EHS is a combination of teaching practical skills for the workplace with traditional subjects—this provides students with a skill set to be prepared to go to college or to start their career path.

EHS’s specialized areas include digital photography, basic cooking, embroidery, and banking.

The location will be on the corner of Elm and Liberty Street in Over-the-Rhine. This site will take advantage of its location by serving as the midpoint on a street focused on learning and retail.

The design for EHS need to fit with Over-the-Rhine’s existing urban image utilizing similar scale, proportion, and materials.

The building will become a learning center for the community—will available to the community on night and weekends.

EHS Is unique therefore, it requires unique treatment, and will serve as an exclusive facility for public schools in America.
Students from various quarters have assisted community groups to vision building specific opportunities along Vine Street in OTR.

Professors:
Frank Russell
Carrie Biedleman
Jeff Tilman
Namdi Elleh
Terry Boling
**Cincinnati Black Theater.** One project concerns an adaptive reuse of an historic brewery building for the Cincinnati Black Theater, a local non-profit actively seeking a home in OTR. This project played an important and timely role in facilitating community decision making, concerning the preservation of the historic Kaufman brewery building, which was saved from demolition, in part, through the visioning work of the students.

**1313 Vine Street.** Adaptive reuse scenarios were also the subject of study for architecture students who designed alternative programming and facility uses for the vacant 1313 Vine street, a former 19th Century dance hall, more recently a night club.

**Venice Pizza.** The Venice pizza project, now fully realized as a built work, owes its conception and implementation to the students of the Niehoff studio and other classes of the College of DAAP. In 2004 the project was included in into the Niehoff Urban Studio academic program, which at that time was focused on urban food issues, including research on restaurants as community development tools within urban entertainment districts. Interior design students of the Niehoff Urban Studio worked closely with the stakeholders to design more than ten different scenarios for the renovation of a storefront at 1301 Vine Street, owned by the affordable housing provider ReSTOC. At the conclusion of the academic studio, UCICP provided funding for the UC Community Design Center to hire an architecture coop student to create construction documents under the supervision of the Director and Architect. Following a year long documentation, permitting, and fundraising effort, construction commenced on the project, again with assistance from UC Community Design Center architects. During the twelve month construction period, UC students were again involved with the project where they served, through academic coursework, and volunteer time, to construct a number of elements in the storefront space, including wall finishes, tile work, and furnishings. Also, during this period UC Community Design Center collaborated with the Miami University Center for Community Engagement to have Miami University Architecture students design and build the finishes for the job skills training room in space adjacent to the restaurant.

This project serves the non-profit Power Inspires Progress, founded by the Dominican Sisters of Hope and the Sisters of Notre Dame de Namur, an organization that hosts two job training programs, Venice Pizza and West End Catering in the space. On completion of this project (opening October, 2006) this effort showcases the value derived from university-community partnerships from project conception to implementation. The project benefited from various stages of academic work (design and design-build) and from direct technical assistance (construction documentation, coordination, and observation). Students involved engaged in service learning through a real world project that resulted in a tangible outcome. This project was recently recognized by the Cincinnati Chapter of the American Institute of Architects, Cincinnati Design Awards 10 - 2006: Collaborative Project Merit Award. Our community partner, PIP, benefited from the service and participation of students and faculty. The Over-The-Rhine community inherits a significant community development resource that not only functions to revitalize an important blighted street, but also trains hard-to-employ community residents in job skills necessary to allow them to become self sufficient.
This is a theater design for the Cincinnati Black Theater Company that is an attempt to propose an African American Architectural style. The inspiration for this design came from the research of African American Art, particularly paintings. The paintings exude a fluid and dynamic quality common in African American Art, translating into the round forms the building creates. The curved walls, path of circulation, and even the revolving doors are elements that reinforce the fluidity of the design intent. The design is bold and unique in order to create a sense of identity for the African American in the Community, as well as Cincinnati at large, that will serve as a monument to this American sub-culture. This is not intended to be the final word on African American Architecture, but merely an investigation into its potential.
"The curved walls, path of circulation, and even the revolving doors are elements that reinforce the fluidity of the design intent."

Greg DeNicola
Shelter is a fundamental staple of life. Native African culture used the art of weaving as functional dwellings and as everyday tools. The task is to provide Cincinnati Black Theatre Company with an architectural gem that expresses their heritage & direction. This design reflects on the past in form and looks to the future with material. This building proposal is a shell with woven wooden ribs and glass which echoes the intertwined fibers in native African huts.
Space in this building includes a 420 seat theatre, a 150 person black box theatre, dressing rooms, rehearsal and dance studios, set & costume shops, and administrative and ticket offices. In short, this project represents the realization of weaving heritage with technology.
Designing by Experience

Ordinary Experience. The architecture that supports this experience should add to the drama, not to distract you from the excitement. The 'show' portions of the building puncture the existing shell making their presence known of the street, promoting an interaction between the existing facade and the drama that occurs within.
**Telling a Story**

The intention was to take theater-goers through the evening on a simple path through the building. It allows them to see hints of the theater above, but encourages them to take part in all of the evening festivities. The series of ramps and stairs takes you past retail, which is just recessed from the street, into the main atrium space for drinks and concessions. From there, stairs or an elevator, coupled with a ramp introduce them to the theater. The ramp winds its way back across the building into the back of the main theater. As the ramp ascends, the wall becomes lower slowly revealing the theater.
Metaphorically Speaking

The building is an unbroken chain of spaces, winding its way through the building’s stages, providing the opportunity for literal and metaphorical dynamic installations and fluid movement for theater patrons.

The chain’s undulating form defines the striking interior of the main atrium space, visible as it glimpses through the preserved existing facade of the historic Kauffman brewery.

Scott Hines
1313 Vine

**adaptive re-use**

This building could house Cincinnati Irish Cultural society in one location; The McGing Irish Dancers, the Riley School of Irish Music, the meeting hall of the Ancient Order of Hibernians and a traditional Irish pub and restaurant that the entire neighborhood could enjoy.

The sub-basement would be the only function that breaks from the Irish theme, this floor would house a bar venue that would caters the younger budding art community.

John Back
After completion of the studio UC Community Design Center with funding from the UC Institute for Community Partnerships provided complete architectural services. Project Architect Frank Russell collaborated with two local architecture firms, KZF and Brashear Bolton which provided pro-bono consultation services. The designing and construction of Venice Pizza was a collaborative project that involved community leaders, eight individual architects and more than forty architecture students from two universities, two private architectural firms, and two community based non-profit organizations.

Interior Design Students instructed by Carrie Biedleman proposed schematic design ideas for the restaurant and training center. One student proposed this vision: "Venice Pizza is a fun, friendly restaurant where families gather, neighbors meet, and citizens find a fresh start. Local artwork and community bulletins reflect the city. Stained concrete, particle board, and bright colors create a raw, urban space and an innovative, cost-effective solution. Colorful "graffiti" artwork gives the space energy and the custom-designed booths can be built by Venice’s own employees.

Lauren Farquhar

STUDENT PROPOSALS
Venice Pizza is located at 1301 Vine Street and is a program of Power Inspires Progress, which provides job training and employment readiness for low-income residents of Over-The-Rhine. After the UC Community Design Center provided design and construction management, Architecture students instructed by Architect Terry Boling and Miami University Architecture Students directed by Tom Dutton and Robert Bell of the Miami University Center for Community Engagement in OTR provided design-build services for the finishes in the dining and office spaces respectively. The 2400 s.f. project consists of a Pizza and catering kitchen, dining area, and office-training room in the storefront of a three story historic mixed-use building.
In this quarter's work students designed REVITALIZATION scenarios for some of the major corridors of OTR, including new development scenarios for Upper Vine Street, Liberty Street and Main Street.
There are five distinctive buildings emphasizing the intersection of Vine, McMillian, and Findlay St. as an entry to Over-the-Rhine and the Vine Street Corridor.

**Spatial organization of the destination entrance at “Five-Points”**

The intersection of Vine, McMillan, and Findlay streets signifies the northern entrance to the OTR district created in the overall plan. The goal is to integrate the Vine street destination infill and retail development with the surrounding neighborhood without disrupting the interests of the community.

Currently at Five Points, there are several very interesting buildings which hold the shape of the five-points. Most of these buildings however, are abandoned and in poor condition. The abandonment of the buildings at this intersection destroys the opportunity for street-life in an important sector of an otherwise active corridor. I propose to increase the activity and the feeling of density at the intersection to announce what we feel is the epitome of the OTR district.

The goal is to integrate the Vine Street destination infill and retail development within the surrounding neighborhood without disrupting the interests of the community.
The Problem

Lack of HUMAN SCALE on Liberty Parkway - No STREET LIFE on Liberty or Vine Streets - Neighborhood has no CENTER - Findlay market lacks VISIBILITY from Vine Street - ENTRANCE to neighborhood is poorly DEFINED - UNDERUSED open spaces - Lack of DIVERSITY

The Solution

20 ft. wide median along the center of Liberty Parkway. This will break up a huge expanse of paving making the street more pedestrian-friendly. Shops and storefronts area proposed to engage street and ENHANCE FOOT TRAFFIC.

Propose dense commercial and mixed-use development along Vine and Liberty. In order to achieve the desired DENSITY, we propose destination retail along Vine. Development along Liberty will focus on a mix of destination and neighborhood uses.

Propose a plaza in the center of the neighborhood that will serve as a GATHERING PLACE for the people of the surrounding area and destination for daily visitors from other neighborhoods.

Convert Elder Street into a PEDESTRIAN MALL lined with shops. This will help extend the Findlay market experience to Vine Street and create a visual axis from Vine.

Increase density at the intersection of Vine, McMicken and Findlay in order to announce the neighborhood as a dense urban district and ENHANCE STREET LIFE.

Develop the underused Findlay Park into a dense urban block with street-front businesses and a large parking area. The parking will serve the businesses and the market. This will create a smaller, livelier open space by moving ACTIVITY to the Elder Street mall. Doing so will give continual use to the space even when the market is not open. Additionally, this will help rejuvenate the nearby park on McMillian Street.

Develop low-income HOUSING and neighborhood oriented development along Elm, Race, Green, and Findlay Streets aimed at retaining the neighborhood’s current residents. Propose high-end residential and destination commercial and office space along Vine Street.
Liberty and Adjacent Streets

Urban Intervention

Create PEDESTRIAN-FRIENDLY open spaces along Liberty Street but maintaining the historical structure of OPEN SPACES along the south side of the street.

- Central square on corner of Vine and Liberty: Storefronts are continued along Liberty to create a more active and safer environment.
- 5 to 6 story buildings along Liberty create a better scale for the street.
- Increased building heights and a planted boulevard are appropriate to the scale of Liberty Street. Along the south side the historic pattern of the setback open space is maintained.
- Semi-private inner courts are shared by the abutting residents.

Liberty & Adjacent Streets

LEGEND
- Residential
- Commercial
- Institutional
- Green areas
- Parking lots

- Single family housing on Pleasant and Republic Streets.
- Multi family housing along Liberty
- Parking in alley, underground parking on Liberty.
- Creation of semi-private interior courts in blocks without alleys.
- Continuity of historic pattern of buildings/open space along Liberty.
- Continuity of north-south building form.
Liberty Street, as it stands today, is an open void, a broader vacuum that sits unused in the center of Over-the-Rhine. Though it links the neighborhood and many other areas, it stands largely vacant. An organ transplant of sorts will take place. New infill will stake out Liberty’s rightful position as the functional HEART OF THE COMMUNITY.

Add, relocate, and centralize essential "anchor" services (post office, credit union, library, medical center)

Balance diversity of uses: pedestrian/vehicular, functional/recreational, daytime/nighttime, etc.

Create a landmark urban sculpture/garden space in the center of Liberty Street.

Develop relationships between city, charity and business in a unified format; giving the people a stake.
Liberty and Vine Plaza
Providing a Place

Some urban plazas are extremely popular, while others are devoid of life. A plaza in Over the Rhine becomes even more problematic, because the neighborhood lacks the active street life of the ideal urban setting. The task, then, is to promote an active street life while giving it a coherent space to concentrate the activity.

Vine as a corridor pushes people through the neighborhood, but currently provides little reason to stop. Shops that provide mundane/everyday services are concentrated on Republic. The plaza then becomes a dialogue between the routine needs of everyday life, and the life of a main commercial corridor.

The Problem
The neighborhood lacks the active street life necessary to support community and economic growth and interaction.

The Solution
Promote an active street life while giving it a coherent space to concentrate the activity.

Over the Rhine has a dual character in the city. It is both a coherent neighborhood, and a connector between important parts of the overall city. The goal is to draw together the local and city roles of Over the Rhine, and PROVIDE A PLACE that bridges these disparate elements.

The plaza becomes a dialogue between the routine needs of everyday life, and the life of a main commercial corridor.
Main Street Revitalization
Blending Destination with Community

GOAL
Make Main Street a Vibrant Area Catering to Pedestrian Activity.

OBJECTIVES
Narrow or widen sidewalk space
Implement landscape plans
Create Pedestrian Only Entertainment District

How do people relate to the buildings, streets, and outdoor spaces on Main Street?

Proposed Street Scape Improvements

Perspective Plan A
Perspective B
Perspective Plan B
Perspective C
Site Section A
Site Section B
Site Section C
A variety of **HOUSING OPPORTUNITIES** appealing to people with different incomes, ethnicities, and occupations will be developed in the Findlay District, thus broadening the market and encouraging private investment.

This type of approach requires very different peoples to successfully coexist. In order to accomplish this, articulation of space will be very important. The definition between private, semi-private, semi-public, and public space will become an integral part of this project.
Cultural Education, Play, and Community Development in Over-the-Rhine

Working with non-profit and community groups, students created a variety of neighborhood design projects including: Urban Design Plan for the OTR Brewery District entertainment area; Streetscape and new housing in the North Vine Street commercial district; Redesign of the OTR recreation center entry and public play area; Designing "defensible space" for the Sharp Village residential district; Designing a housing and commercial plan for the blocks south of Findlay Market in OTR. Each of these projects was developed and conducted by students who worked closely with individual community organizations to provide feasibility research and visualizations that are utilized to advance the further planning and implementation of the project.

Professors:

Namdi Elleh
Frank Russell

Winter 05

Aditi Mantrawadi
Brett Kordenbrock
Eric Anspach
Brian Wamsley
Michael Yerman
Using Light to Deter Crime

Street Lighting has been shown to reduce violent crime but sometimes at the expense of property crimes. By placing lighting in places that are highly used by pedestrians both types of crimes go down.

New lighting also has an effect on community spirit because of the new investment and attention it brings.

Encouraging Pedestrian Traffic

Pedestrian traffic is important for defensible space and should be guided into appropriate areas. The stairs above lead up to a basketball court, blacktop area, and a church which makes this path ideal for focusing traffic.

Using Terracing to Create Defensible Space

Terracing is both aesthetically attractive and effective for creating defensible space. It severely limits access to the area from the street and gives the owner of the terrace a safe place to observe the street below.

Restoring the Corner Store

Jane Jacobs inspired the planning motto "Leave room for the corner store" because it plays an essential role in generating pedestrian traffic. Storeowners are also more protective of the area outside their business to insure customer safety. Local Economic Vitality is a major factor in the safety of a neighborhood. Jobs keep people from hanging out on the streets all day.
Responsibility for area is shared by surrounding residents making the area seem controllable and encouraging social intermingling among neighbors.

Some courtyards should have a passive use and others a more pro-active use. This increases the use of the courtyards by different peer groups.

A community garden is one way to bring residents together and to start to looking out for each others property.

Gardens also encourage people to come outside for extended periods of time, both to work and enjoy.

The Broken Window Theory by James Q. Wilson and George Kelling states that a neighborhood that looks like it is in poor shape actually invites foreign criminals into the area since it appears as if there is no authority. People withdraw and become less willing to intervene to maintain public order. Sensing this, teens and other possible vandals become bolder and intensify their harassment and vandalism. Any graffiti should be cleaned up immediately and neighborhood clean up days should be established.
The Over the Rhine Rec Center is squeezed between Green, Race, Republic and Elder streets. It is located just East of Historic Findlay Market. The Rec Center currently serves the general public of Over the Rhine. There is currently a 10 dollar membership fee to use many of the Rec Center's facilities. The Site houses a 25 meter pool, indoor basketball, a roller rink, and fitness rooms. The center is primarily used by residents of neighborhood. The center is currently surrounded by many low income housing units many of which share the same outdoor space as the Rec Center. The Rec Center has operated and served the community providing an outlet and recreation for many OTR residents.

1 Safety
the outside of the facility has high crime and has become littered with trash and graffiti

2 No Playground or Green Space
existing green space has become littered with trash and there are no outside playground facilities

3 Parking
there is very little on-site parking for the Rec also the parking lot has become a high drug activity zone
This corner building is vacant and casts a negative image for the market and the rest of the street.

The inner courtyard is primarily used for parking. The green space is trashed and has turned to mud because of overuse. Also the Rec has no way to protect the area.

Low income housing and small businesses that maintain their buildings. Most of these units have tenants.

This vacant courtyard area behind many of the vacant buildings on Vine has created a zone to deal drugs and use them. Many of the buildings are broken into and serve as squatter settlements for the poor.
The Vine Street North District is an area of great potential. Through several proposed projects a sense of identity can be created for the area and Grant Park can be revitalized. These interventions will bring diversity and new life to the area, becoming once again a vibrant and vital neighborhood within Over-

New Streetscape along Vine Street and Elder Street, includes new street lamps matching those at Findlay Market, along with corresponding street furniture and paving. This will help provide a sense of identity to the Vine Street North district, tying it to the market. Special pavers in the streets, especially at the intersection with Elder will alert passers-by on Vine Street of the proximity of the market.

A new residential neighborhood would be located around the renovated Grant Park. Linked to Vine street by a new tree-lined street, the new district would be oriented toward the existing residential area to the east and have a more quiet character than the commercial area on Vine.
An important gateway into the Market neighborhood, Republic Street after a facade lift.

A new connection or pathway will lead south one half block to the new widened portion of Elder Street at Republic Street. Another new walkway will lead from Findlay Market east one half block to Vine, where the entrance to the Cincinnati Black Theater Co. will be located.

Elder Street widened from Race St. at Findlay Market east. This will extend the open space of the market place closer to Vine Street and create a new open space that can be used for special events. The current buildings on the south side of Elder Street will be replaced with new structures fronting the space.
The Findlay Market is Ohio's oldest surviving public market and a major attraction for urban shoppers looking for fresh farm produce. The market is one of the biggest projects for the neighborhood's revitalization. Development projects have the potential to become catalysts for the revitalization of the business district and improve the outward image of the neighborhood.
Strengths
- Proximity to Findlay Market
- Mixed use and commercial land uses
- Business and Community commercial
- Pedestrian zoning

Weaknesses
- Several vacant parcels
- Dilapidated buildings
- Safety issues, lighting
- Lack of leadership
- Lack of critical mass and money

Opportunity
- Street vending on Elder Street
- Commercial on ground level with residential above on Elder Street
- Renovation and reuse of buildings

Threats
- Lack of initiative from residents
- Insecurity about sustained returns
- Lack of community/political support

Goals and Objectives
- To transform the Findlay Market South District into a vibrant and active neighborhood.
- To attract residential and commercial population by providing adequate housing and parking.

The goal when developing the housing is to create a mix of incomes and age groups, while maintaining the character and historic appeal of the Findlay Market area.

Aditi Mantrawadi
The **Brewery District** combines several components, creating an overall vision for the area. Over-the-Rhine will be a community that will **support** the lives of a diverse user group. This will be done by changing the community to suit the needs and lifestyles of these groups as well as creating a community of **social acceptance** in Over-the-Rhine.

The adaptive reuse is critical in the sense that many buildings have a significant history behind them, and are contributing to character of the neighborhood.
Improvements Include:

**HILLSIDE HOUSING DEVELOPMENT**

provides market rate housing targeted at young professionals seeking an urban lifestyle and a home in close proximity to their place of employment. Brewery Heights is a townhome development on the hillside that utilizes views of the OTR Basin and the downtown CBD. Mixed-rate housing will promote the mixing of incomes with federal and city based funding programs.

**THE CINCINNATI METAL BLAST BUILDING MAY BE CONVERTED INTO AN ENTERTAINMENT ANCHOR** housing, an eclectic/cultural restaurant, microbrewery, and beer museum make this building one of many highlights foreseen in the Brewery District. Use of this building is critical in creating a vibrant entertainment area due to its size and scale sitting at top of Over-the-Rhine.

There is great **significance** of the proposed linear park in relation to the proposed housing. The effect of **defensible space** both in the tenant commons and the enclosure created by the housing structures makes this area **feel safer** and more incorporated into the Over-the-Rhine neighborhood.
Education in Over-the-Rhine: Future Scenarios for the School for Creative and Performing Arts. Students worked with students and faculty of the existing high school to vision two scenarios: Renovation of the existing building for continued school use and adaptive reuse of the existing school building for residential use. This public high school is scheduled to vacate their current OTR facility and the disposition of this school building is a source of great concern for the community. Students were able to show how the building could be adapted for residential use or alternatively, renovated for the expansion and retention of the existing high school program. The community will use the student work to negotiate an outcome with the school district. A highlight of this project was the collaboration with faculty and young students of the high school who worked in teams with the UC architecture and interior design students throughout the quarter at the Niehoff Studio.

Professors:
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The trade school emerged as a response to the large number of high school graduates and dropouts who loiter around the area, lacking the ability to be hired for full time work. After surveying other trade schools around the country and taking OTR’s inherent needs into consideration, the following majors were selected and included in the design: Construction/Building Trades, Plumbing, Electrical Engineering, Childcare Education, Culinary Arts, General Business, Entrepreneurial Business, Computer Programming, Electronic Media.

The Pendleton Marketplace and Trade School combines an educational facility for the community with profitable retail stores that also respond to neighborhood needs. The large space provided by the re-used building allows for both services to be offered together. The businesses are a mix of store types; one category is those that can be staffed by the trade school students as a cooperative education option. It is an affordable means to gain a practical education, and will include a career development department to help students find jobs and lead productive lives post-graduation.
The redevelopment of Main Street in the early 90’s brought furniture showrooms, art galleries, coffee shops, and loft apartments to the area, as well as a nightlife complete with clubs and bars. Pendleton Arts Center, located at 1310 Pendleton Street, houses over 150 local artists. Many of these artists rent studio space within the building for workspace. This facility is at full-capacity and has an extensive waiting list.

The SCPA building is located between these two locations. By creating artist space and showrooms within the SCPA building, this gap would be bridged, providing for a more comprehensive and extensive Final Friday event, as well as a more cohesive art community in Over-the-Rhine.

The showrooms on the first floor of the building help to expand the retail market by adding to those on Main Street. This would create a cluster of lighting, furniture, fixtures, hardware, and fabrics stores.

The artist spaces created for the building are all located on the second floor, each has access to natural light. They range in size, to provide the artists with freedom to arrange their space as they choose. An artist may choose to rent an entire studio and create work and display space, or he/she may choose to share the space with other artists and to design it to be a gallery.

The downtown housing stock of Cincinnati is currently growing. According to the Center City Residential Market Study, over the next several years 1,700 units are projected to be added to the Center City Market. The units in this building range in size from 1 bedroom apartments to 3 bedroom lofts. This design has provided for 60 parking spots contained within the building. The design also includes other popular amenities of public outdoor space, a fitness center, a club room, guest rooms, and city views.
This project proposes to keep the existing School for Creative and Performing Arts in its current location on 1310 Sycamore Street. SCPA will grow from a 4-12 school to a K-12 school and in order to fulfill its necessary expansion, 2 additions will be made to the school. The 3 buildings total 293,976 sq. ft. of usable space.

In the debate of keeping the SCPA in its current location or alternately relocating it to Washington Park, there are several reasons to maintain its location; SCPA is a prominent cultural landmark in Cincinnati. It symbolizes a long history of education and the arts, the building creates a safe zone within the surrounding neighborhood, and it is an aesthetically beautiful building.

The overall intention was to space the functions of the program in 3 nodes of activity that were spaced in such a way to create a campus environment. The campus is divided into 3 buildings:

- A new K-6 academics and arts building with a gymnasium, pool, and dance studios, and 3 levels of underground parking
- The existing SCPA building houses grades 7-12 academics and arts, the school cafeteria and the 350 person theatre remains in the center
- A new Theatre building with a 750 person theatre, theatre tech and production, 2 levels of underground parking and a 3rd floor sky walk connecting to the existing SCPA building.
The New SCPA

Design by
Cole & Russell Architects
A Garden Community

If you replaced conventional solutions with pull-out-the-stops creativity, what vision would you have for a struggling neighborhood? That’s the mindset of students at the University of Cincinnati’s Niehoff Urban Studio, where project teams are challenged to develop solutions for problems of the urban core. In this one, students imagine transforming Over-the-Rhine’s narrow Pleasant Street into a pedestrian pathway, replacing empty, dilapidated buildings and vacant lots with single-family housing along its length. The plan creates a “green” corridor—with trees, courtyards, and eco-friendly permeable pavement—that links up with the north end of Washington Park. The goal is to strengthen the connection to the park, encourage a sense of community, and discourage outsiders from cutting through the neighborhood.

**DESIGN TEAM:** Students Cynthia Bubb and Jessica Kersting, University of Cincinnati College of Design, Architecture, Art, and Planning

**TIMETABLE:** There’s no plan for a class project like this to become reality. But city leaders and developers who are serious about utilizing the talents of the “Creative Class” should pay attention.
Students worked closely with an affordable housing provider and a citywide development corporation to vision three scenarios for a revitalized housing district in the four block area north of Washington Park in Over-the-Rhine. Students were able to use their design work to attempt to resolve potential conflict between two organizations with opposing missions, ReSTOC, and affordable housing provider, and the Cincinnati Center City Development Corporation, pro-development organization. In the process, a fruitful relationship was developed with the outreach program of another institution, Miami University Center for Community Engagement in which faculty and students cross-collaborated. This project received an award from the Community Development Corporation Association of Greater Cincinnati for the “Most Outstanding Collaborative Effort” between ReSTOC, Miami University, and the University of Cincinnati (6/17/05) UC Community Design Center followed this academic project by providing technical data services for the Washington Park District Housing Inventory and Mapping Project for the Cincinnati Center City Development Corporation.
Regional Influence - High Arts
Music Hall, a high art institution in Cincinnati for over 100 years, and the recently completed Cincinnati Ballet building combine with Final Friday to make Over the Rhine a regional attraction for arts in Cincinnati.

City Influence - Mainstream Arts
The new Art Academy of Cincinnati and School for Creative and Performing Arts anchor the city scale art interest in OTR. These institutions generate a smaller scale art loop including galleries and art services on 13th, 14th, Race and Main Street.

Community Influence - Urban Arts
Building from the existing urban arts culture in Over the Rhine, a community based art loop that incorporates 15th St. and Vine St. revitalizes the neighborhood from within. This smaller scale loop highlights non-traditional and subculture arts such as textiles, cars, hair, and graffiti art. Embracing these arts empowers the existing residents by supporting their lifestyles and legitimizing their interests in alternative forms of expression by providing a positive outlet for their energy. Utilizing the existing church on the corner of 15th and Race as an arts consortium for work and performances, and providing live/work lofts creates spaces that support these activities. Buildings designed as canvases, and parking lots as showcases give importance and validation to a new kind of art.

Washington Park Art Market
Envisioning the intersection of 14th and Elm as an important crossroads of three tiers of the arts, we determined the need for a market of interaction for these arts. Located at the north end of Washington Park, this proposed art market will provide a venue for the interaction of art factions, an area for programmable park events, and an anchor to improve the connection between Findlay Market and Washington Park.

Cluster Benefits
Understanding the large scope of the area of concern, we divided the neighborhood into community clusters. Organized in response to the existing building conditions and proposed new uses, these clusters each possess distinct characters that allow for more manageable development assembly and construction phasing. These clusters reflect the varied nature of the existing community groupings found throughout Over-The-Rhine.

See and be seen
Neighborhood vitality is created through an active and engaging street life. The streets and sidewalk of Over the Rhine are impromptu gallery spaces where people go to show their works, or to see the work of others. Balconies and large picture windows that overlook the streets keep residents connected to the living gallery spaces below.

Security and community
Each cluster is secured by limiting access to no more than one public entrance. Secured access points also promote resident use of front doors to encourage monitoring of the cluster from the periphery and interaction with the larger realm of the neighborhood.

Zones of Influence
The foremost design feature of these clusters is a shared interior courtyard. Each house or rental unit has a private patio or balcony to provide a physical and visual connection, and thus ownership, to the space. Each courtyard can be tailored to each cluster.
Proposed Medium Density Mixed-Use Building
- Four 1,300 S.F. First Floor Commercial Storefronts
- Extensive Green Roof
- Recessed Balconies Provide Views to the Street Life
- Pull in Parking Spaces to Display Modified Cars
- Common Stairwell Fosters Neighborly Interaction - CNBSEEN
- Operable Windows Utilize Cross Ventilation

Proposed Medium Density Multi-Family Lofts
- Residential Live-Work Artists Studios on First Floor
- Medium Density Residential Lofts Above
- Recessed Balconies Provide Views to the Street Life
- Common Stairwell Fosters Neighborly Interaction - CNBSEEN
- Operable Windows Utilize Cross Ventilation

Proposed High-Density Residential With Commercial First Floor And Concealed 2-Story Rehabilitated Multi-Use Building & Access To Parking Garage
Proposed Resident Parking Lot
Typical Shared Courtyard
Proposed Landscape/Parking Lane
Resident Garages With Garden Roof
Proposed Alley And Resident Parking
Proposed Mixed-Use With Green Roof
Proposed Pull-In Parking To Serve Storefronts
Proposed 15th As 2-Way Street
Proposed Rehabilitated Church For Artist
Proposed Multifamily Infill To Restore
Proposed Widened Alley With Rear Access
Proposed Art Market
Music Hall
The redesign of Washington Park is an important step in the revitalization of Cincinnati. The promise of a clean, secure area for the residents of Over the Rhine should not be limited to the park, but extend outward to the entire community. In order to do so, it is necessary to reinstate Pleasant Street as a vital artery that connects Washington Park and Findlay Market. We envision Pleasant, the lifeblood of this new neighborhood, open to pedestrians but closed to cars. In place of traditional pavement, the Pleasant Street pedestrian way will feature an environmentally sensitive material. The first gesture in the creation of a new identity for the Washington Park neighborhood, the greening of Pleasant Street will extend to yards, courtyards, walls, roofs and buildings in the neighborhood and create a truly sustainable place to live.
The environmental focus of the garden community supports the reuse and renovation of existing structures, those unoccupied/beyond repair and those least adaptable to the new vision for the neighborhood will be demolished.

Alleys & Parking
The addition of alleys in the north blocks and widening of alleys in the south blocks provide infrastructure to accommodate parking, garbage trucks, rear garages for new single-family and provide additional spots for existing and new multi-family housing.

Traffic Flow
Race, Elm, 14th and 15th Streets remain one-way. Pleasant Street is closed to vehicles from 14th Street to Liberty. The alleys run north/south with slight jogs at 15th Street to discourage people from using them as shortcuts through the neighborhood.

Green Corridor
The green corridor is a symbol of an ecologically, economically, and socially sustainable community. Removing the car from Pleasant Street strengthens the connection to the outdoors and to Findlay Market and Washington Park.
Compression & Release
mixed use housing in the community core

Jessica Merryfield
Amanda Dotzauer

The Washington Park Housing District strives to maintain the diversity that is unique to Over the Rhine. We hope to create a vibrant neighborhood composed of a variety of races, incomes and religions. This diversity is key to bringing new life into Over the Rhine without stifling the lives that already exist in this unique area. Over the Rhine is an area like no other. The rich history of this once vibrant neighborhood still permeates the streets. The beauty of Italianate architecture is complimented by a sprinkling of modern and traditional infill housing and restored to its past radiance. The Washington Park Housing District is also conveniently centered in Over the Rhine and within walking distance of Music Hall, Findlay Market, the Central Business District and Washington Park. Unifying the community is one of the best ways to maintain the development of the Washington Park Housing District. By taking ownership of the neighborhood, residents would be responsible for the area’s character. Whether it be a gathering in the community core, or a party in Washington Park, the utilization of community will contribute to the success of the Washington Park Housing District.
Permeable Pavements
Permeable pavements reduce water runoff by allowing water to percolate through them back into the groundwater, eliminating the use of a collection system or sewer system. This provides purification at the pavement level, eliminating costly storm drainage systems.

Living Walls
Cultivating plants on the south façade of residences provides shading from the harsh southern sun which has been shown to improve thermal insulation 5-10%. The plants also provide a habitat and food source for numerous animals and insects, and brings touch of nature to cramped city environments according to Living Spaces by Gunter, Abraham, and Fischer.

Visual Access
Large courtyard openings provide visual access of landscaped areas to Pleasant Street, while providing an architectural spatial barrier. This allows some “policing” of courtyard areas to occur from Pleasant Street, while maintaining a private atmosphere in the courtyards.

Businesses Creating Community
There are certain types of commercial development that are social by nature. Laundromats, coffee shops, salons and gallery spaces are just a few examples of commercial spaces that promote gathering and social events while supporting the needs of the community. By making these businesses centrally located, we are bringing people into the community core and creating a reason to frequent this vibrant space.

Designing for Spatial Awareness
There are several ways to define space. In the community core, there is a set back on the buildings creating small outdoor rooms for community use. The pavement on Pleasant Street changes around the intersection of 15th Street and Pleasant to alert the car and the pedestrian that they have arrived at a different place. This differentiation helps to call out the importance of this space.

Outdoor Living Rooms
Inactive space can be dangerous space. You can attempt to eliminate some crime activity by creating community spaces that are used by active community groups and businesses. We propose outdoor seating for a deli, checkers/chess boards surrounding a water feature, benches and a small stage.

Ventilation through the Stack Effect
Openings between floors in shafts, such as a stair tower, provide opportunity for warm air to rise between floors. When an operable opening is placed at the top, heat is drawn out of the structure creating a stack effect.

Mixed Use
Multi Family
Single Family
Parking Structure
Existing
Raising the Roof
Vegetation above us could be very cool

BY MARGO POESE

In Greater Cincinnati, summer is a smog alert season, but it doesn't have to be.

While car manufacturers tout protests about manufacturers, government cars, and politicians debate scientists about the merits of alternative fuels and damaging what's left of our unpaved eco-system with oil drilling, a revolutionary approach to addressing environmental issues has been growing overhead.

One economically viable and socially responsible alternative isn't just reducing pollution but is also feeding the poor, lowering energy bills and making concrete jungles a more pleasant place to work and live. It's called "green roofs."

Unlike the traditional roof garden of potted plants scattered around a gravel-covered roof with a picnic table and some shrubs, a green roof is a rooftop covered with plants, which takes the place of standard roofing material such as shingles, according to Virginia Russell, associate professor of landscape architecture and leadership in energy and design (LEED) at the University of Cincinnati.

"An extensive green roof is 100 percent vegetation," she says. "At the other end is intensive that's more like a roof garden. When you say 'roof garden' to me, that means people. You might have walkways, you might have benches, you might have lighting. You're going to have things that make people comfortable and safe that take up space that might have been given over to vegetation."

Alpine Cincinnati
The user-friendly green roof has different requirements and benefits. What they have in common is a waterproof membrane that covers the roof, with "growing medium" on top of that. Russell doesn't recommend shoveling dirt from the backyard onto the top of the garage to start your herb garden.

"Bad idea," she says. "Don't try this at home. A lot of growing medium is actually engineered soil."

Depending on the plants chosen, the soil will be a mixture of organic matter, lava or pumice rock or extruded clay that creates a lightweight yet porous foundation in which plants will grow. The bugs, fungus and disease that migrate from the air, in addition to a lot of particular matter with proper planning, is provide most, if not all, water will need, resulting in being dumped into stormwater. As roofs can also help with temperature in a city, known as 'cooling.' A reduced number of cooling and radiating heat, it initiatives, such as plants at the street level, mean temperatures on the hottest of a rooftop to 40 degrees lower than the outside air temperatures.

Russell provides a thick, rich, slow growing to 40 square feet of roof top to 40 degrees lower than the outside air temperatures. It also provides a thick, rich, slow growing to 40 square feet of roof top to 40 degrees lower than the outside air temperatures.

"If a green roof is just to be sustainable, it's going to be sustainable design," says Stoughton, a third-year student at UC. "It's sustainable design to be sustainable, and economic benefit," he says. "I believe he 'fun factor' is a good one.

At the University of Cincinnati’s Niehoff Studio, visitors study presentations on green roofs and sustainable design in Over-the-Rhine.

Russell suggests businesses and homeowners ask for references of three similar projects before signing contracts for extended solar panels. There are lots of great classes available for training, but a national standard for a certificate is still being developed.

The cost of a green roof can range from $40 to $40 per square foot and up, according to the Frequently Asked Questions page at www.greenroofs.com, billed as the "green roof industry portal."

Russell says the cost of a green roof is dropping and could be competitive with other roofing materials if state and local building codes were to incorporate green building requirements. Buildings include green roofs, which would be supported by sustainable and retrofitting existing structures, incentives such as tax breaks for green roofs that reduce pollution and reduced fees for selecting the stack found on public services such as sewer systems and would give sustainable design a boost.

Because large buildings have a greater impact on the environment and services, their design and construction are called sustainable design. Vegetation of every building, including those in the city, should be required to incorporate a green roof.

"Just imagine if every big box (retail store) had to do this," Russell says.
Working with the Hamilton County Planning Partnership - Local Alliance for Nature and Development (LAND), the US Green Building Council, and the Over-The-Rhine Housing Network, students researched and illustrated sustainable building techniques applicable to inner city buildings and sites. Again, this studio project is inspired by and facilitates sustainable development advocacy that is being led by active community partners.

Spring 06: Urban Green Housing in OTR.

With a focus on sustainable affordable housing solutions and eco-village concepts for districts within OTR, students presented their work to the general public and community partners on 6/2/06. This end of quarter event was complemented with a panel on sustainable development led by Cincinnati City Councilman Chris Bortz, who spoke on his pending city policy resolutions for sustainable construction requirements for municipal, commercial, and residential buildings, Steve Evans of Green City Builders, a proponent of eco-housing, and Jim Schenk of the environmental advocacy organization IMAGO, discussed urban eco-village concepts.

Professors:
Virginia Russell
Michaele Pride-Wells
Frank Russell

Mark Saur
John Stoughton
Evan Blake Henderson
Nate Morgan
Klye Bragg
Sarah Major
The Project Site is one block in Over-the-Rhine. It is bordered on the West by Main St., the North by Mulberry St., and the East by Sycamore St. Its location corresponds with the goals of the Over-the-Rhine Comprehensive Plan as it is a proposed residential development located in the future land use- medium density residential and on the fringe of the North side single family infill housing focus area. It is also surrounded by a greenway.

**Mark Sauer: Sustainable Block**

Proposed Site Plan

Sustainability and green design are found in two ways in this project; cohousing inspired site design and affordable house construction. Common facilities, residential management, shared open space, remote parking, and a non-heirarchical participatory process are some of the characteristics of a cohousing situation that this development embodies. Residents are required to participate in the cohousing community by maintaining their properties, preparing common meals, and working in the eco-garden, green house, and bike shop.

Neighborhood Components Triangle

This development embodies the social, economic, and environmental aspects of design in the following ways....

**Social/Cultural...**
embrace. By creating a site that not only retains the historical aspects of its surroundings but also brings a modern style of design, we strive to bring new life back into Over-The-Rhine. The cohousing lifestyle brings a new sense of community within a larger neighborhood.

**Economic...**
efficiency. Connection with Findlay Market through the eco garden and green house provides a way not only to actively participate in the cohousing community, but the existing neighborhood as well. Through required participation, by cohousing residents, in the eco garden and bike shop, learning opportunities are created for the broader community.

**Environmental...**
sensitivity. Using LEED strategies in new construction as well as the site design, we can minimize the impact of development. Placement of design elements, such as houses and park spaces provides maximum efficiency and resourcefulness.
John Stoughton: Can Sustainable Rehab Housing Really be Affordable?

Assuming a $100/SF construction cost, the total value of this rehab project is $195,500. I concluded that the total amount of financing needed to make this project happen is $23,500. Although all numbers in my calculations were approximate, this relatively low number is very encouraging. Sources of financing are plentiful because the project is in a Historical District and is implementing sustainable design. Tax credits and other incentives for building in this area should make this project a reality.

The Trombe Wall is the most visually significant feature of this house. The system maximizes passive heat gain in situations where south facing glazing is not possible. A south-facing wall is coated with a dark material. A layer of glass is placed no more than 6 inches from the wall. The sun's heat will be trapped within the small space between the building and the glass. It takes hours for this heat to transfer from the exterior through the mass of masonry to the interior. The masonry wall can be sized to intentionally allow the heat to enter the interior during the night. Additional vents within the system allow direct warm air into the coolest spaces in the house. Average temperatures are about 20 degrees cooler at night than during the day, so heating the space in the cooler night time using a passive system is an easy way to ensure the building will not cool down too much in the winter months. Exterior shading can be applied to the Trombe Wall during the summer months to ensure the space will not overheat in the summer. This passive heat gain system is especially intriguing in an urban environment such as Over-the-Rhine where masonry structures with an existing window pattern are prevalent.

The Stack Effect is created on the southwestern corner of the building to promote passive heat gain, passive cooling, and natural ventilation within the duplex space. This area is an open, unobstructed double height space with no confining walls. As heat enters the space it will rise and be distributed within the home. Strategically placed operable windows assist in directing the air throughout the building. An additional benefit to this space are the incredible views of downtown Cincinnati unique to this area of OTR.

Roof Gardens exhibit many beneficial qualities which can be exploited in the urban environment. These roof spaces provide a much needed private green space for the resident. Views and privacy are luxuries in urban environments. Both can be found on the roof garden of this building. Stormwater runoff is collected on the roof and used below on the community gardens. The insulative properties of a roof garden are especially beneficial in the cooler winter months, and the landscaped vegetation helps protect the roof from direct sunlight in the summer months.

Other Sustainable Features Less visible sustainable strategies are also employed within the building. Ceiling fans operated by solar panels located on the roof garden are a great way of cooling the 10' tall spaces within the units. The cool basement air is used to supplement a central air system putting less strain on energy costs during the summer months. This air system is integrated into the core utilities wall where the plumbing fixtures are located. Vertical spaces such as this utility wall and the community staircase are testaments to the urban typology.
The Crankshaft Block will be centered around a public green space, the Community Commons. The new commons will not only be much more aesthetically pleasing, but also serve as a gathering place for neighbors. A pergola connects the historic buildings while the open grass is used for block parties and family recreation. Rehabilitation on surrounding buildings will place an emphasis on opening their facades to the commons, daylighting, and a gorgeous view of Cincinnati's skyline.

**LOCATED** in the southeast corner of Over the Rhine and just North of the Business District, the Crankshaft Block will become a diverse and healthy place to live, as well as a model of sustainability for urban neighborhoods economically, environmentally, and socially.

- No new construction needed
- Diverse neighborhood, keeps current residents in affordable housing and introduces newcomers
- Amazing views of the Cincinnati skyline
- Within walking distance of schools, markets, restaurants, churches, parks, and entertainment
- Easily accessible by automobile, foot, and public transportation
- To keep Cincinnati beautiful this site needs to be rehabilitated immediately

**Evan Blake Henderson:**

**Turning Don’s Crankshaft Green**

The Plan

The Plan

**BASEMENT LEVEL**
- Features
  - Large storage areas
  - Truck access
- Sustainability
  - EPA required clean-up
  - Gray water recycling tanks
  - Solar batteries
  - On-Demand water heaters
  - Geothermal Furnace

**GROUND LEVEL**
- Features
  - Parking & storage
  - Separate unit entrances
  - Retail display windows
  - Large retail space
- Sustainability
  - Added South glazing
  - Grouped utilities
  - Flexible floor plans
  - Two business incubators
  - Lighting controls

**UPPER LEVEL**
- Features
  - Two four bedroom units
  - City view
  - Outdoor patio for each unit
- Sustainability
  - Green roof - patio & gardens
  - Ceiling Fans
  - Open floor plans
  - Added West & South Glazing
  - Grouped Utilities
  - Modular Rooms
  - Windows spaced to maximize daylight

**ROOF**
- Sustainability
  - Green roof
  - Clerestories for each unit
  - Photovoltaic Panels
  - Water retention
  - Sun shades

**Sustainable Concepts**

**Heating**
- A green roof insulates the ceiling, a Trombe Wall stores and releases heat and is shaded from summer sun

**Ventilation/Lighting**
- Operable clerestories pull air through each unit and provide daylighting while shading summer sun

**Water Retention**
- The upper green roof supplies water to a cistern which can be used to water gardens on the lower green roof
Nate Morgan: Shining Some Light on the Subject

DESIGN OVERVIEW: The main goal of this 1600 sf design is to incorporate every aspect of daylight into the house. Whether it is used to passively heat the space, increase the health of the occupants or by even allowing light through large amounts of glazing which also provide opportunities for outdoor views.

**Passive Heating**
- **NATURAL LIGHT** - southern exposure to make the best use of heating effect of solar energy from the sun on the glass.
- **SUPER INSULATION** - double, or thicker insulation of walls, floors, and roof to store warmth during the winter months throughout the day and to release the heat stored at night.
- **TRIPLE GLAZED WINDOWS** - on southern side, stops heat from leaking from the building in the winter, and prevents heat to penetrate the building in the summer months.
- **SUPER WINDOWS (R8 VALUE)** - on north side, actually collect more heat during the day than they lose during the whole 24 hour period.
- **GREEN ROOF** - designed to keep heat in during the winter months due to its increase depth and good insulating materials.

**Passive Cooling**
- **SHADING** - shading of glazing with deciduous vegetation to shade the glass in the hot summer months, yet lose their leaves in the winter to allow sunlight to penetrate the building. Or using horizontal louvers to shade the surface of the glass and not allow all of the sunlight to penetrate the building when heating is not desired.
- **SUPER INSULATION** - double, or thicker insulation of walls, floors, and roof to keep cool air from escaping the house during the summer months.

**Active Systems**
- **PHOTOVOLTAIC PANELS** - (3' x 5') technique to transition solar energy into electricity, through panels that collect sunlight, to power heating and cooling systems.
- **GREY WATER SYSTEM** - collecting water from roof, filtered before use and stored in tanks within the building to be used for flushing toilets and irrigation.

**Cross Ventilation**
- **STACK EFFECT** - using a double height atrium space to pull hot air up and out of building.
Going Green and Saving Green

<table>
<thead>
<tr>
<th><strong>Added Cost</strong></th>
<th><strong>Savings</strong></th>
<th><strong>Payback</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows - Replace windows with U-factor of 0.35 or less.</td>
<td>1.72 $/sf.</td>
<td>50 $/sf/yr</td>
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<tr>
<td>Walls - Insulate exterior walls to at least R-19.</td>
<td>52 $/sf.</td>
<td>14 $/sf/yr</td>
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<tr>
<td>Ceilings - Insulate ceilings of top floor to at least R-49.</td>
<td>49 $/sf.</td>
<td>14 $/sf/yr</td>
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<tr>
<td>Seal Air Leaks - Reduce air leakage around windows, doors, ceiling, plumbing and electrical features.</td>
<td>28 $/sf.</td>
<td>13 $/sf/yr</td>
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<tr>
<td>Appliances - Replace appliances with ENERGY STAR qualified appliances for a 10-50% energy savings.</td>
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<tr>
<td>Clothes Washer - Energy Star models use 50% less energy and saves about 8,600 gallons of water per year for an average household.</td>
<td>300 $/yr</td>
<td>73 $/yr</td>
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<tr>
<td>Dishwasher - Energy Star models use 25% less energy and save about 800 gallons of water per year.</td>
<td>20 $/yr</td>
<td>13 $/yr</td>
</tr>
<tr>
<td>Refrigerator - Energy Star models use 40% less energy than conventional models sold in 2001.</td>
<td>30 $/yr</td>
<td>6 $/yr</td>
</tr>
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</table>
Promoting voluntary exemplary building guidelines and "smart growth" strategies. Supporting local agriculture, planning recycling & composting programs, and strengthening building energy codes.

Is it feasible to design and build affordable and sustainable housing in Over-the-Rhine, and if so, how might the community as a whole benefit from this change?

Sarah Major:

**Renewal by Design in OTR**

**THE PROBLEMS:** Poverty, Crime, Poor Education, Poor Health & Nutrition, Vacant & Condemned Buildings, Inevitable Redevelopment, Community Displacement, Environmental Deterioration, Pollution and low Quality of Life.

**THE PURPOSE:** The purpose of the community space is to promote and facilitate lifestyles that foster well-being in individuals, their community, and their environment. The provisions of the community space must be the result of united effort on a daily basis among neighbors, thus improving the community via their awareness of each other, their children, and all their commonalities, such as the socioeconomic goals they share.

**THE DESIGN** is for a renovation of an existing apartment building into a community space, and the addition of a greenhouse connector between the building and eco-garden.

**SETTING & STRATEGY** The south-facing slope of the site and building roof are highly conducive to the implementation of sustainable strategies in solar orientation and thermal protection. These strategies are the most obvious... but just the beginning.

A. **Buildings & Land Development** - 1/3 of America's total energy supply is consumed by buildings, a majority of which is wasted by inefficient design. Land use influences 1/3 of all vehicular transportation. From these two categories alone, it is easy to see that small changes in design and land use zoning laws can change the future of our ability to protect our natural habitat.

B. **Community Economic Development and Natural Capitalism** - By now most communities realize that short-term fixes, development at any cost and unchecked environmental risk are not the answers to economic development and renewal. The best way to achieve an exceptional advantage in business and the creation of wealth and positive social change, is environmental change.

C. **Energy Use & Supply - Strategy** - Target the biggest energy saving opportunities first. In lighting, fan and pump systems, 70% to 90-% of energy can be saved. In heating, cooling, appliances and equipment, 60% of energy use can be saved. In other words, green design equals green in your pocket.

D. **Water Use & Supply** - "Soft Path" for Water - Technologies and management systems that provide the same or better services with less water.
A failed ballot initiative of 2002 for improved public transit serves as the backdrop for several grassroots advocacy campaigns for light rail and fixed rail streetcars. A non-profit interest group, the Alliance for Regional Transit, has been active since that date promoting light rail transit for Cincinnati. Another group, the Brewery District Development Group, centered in Over-the-Rhine, is advancing two transit ideas intended to promote community and economic development: a fixed rail trolley loop serving the downtown core, and an incline rail connecting OTR with Uptown residential districts. Urban Planning, Architecture and Transportation Engineering Students and Faculty worked closely with these groups to visualize new options for urban transit and associated "transit oriented development' in Over the Rhine, Uptown, and in the Central Business District.

Studio work also benefited from a funded research project underway entitled “Three dimensional Planning Support System for the evaluation of a Potential Bus Rapid Transit Line in Cincinnati” conducted by Dr Xinhao Wang in the UC DAAP School of Planning-the Joint Center for Geographic Information Systems and Spatial Analysis with the collaboration of UC Community Design Center and funded by the Blue Moon Fund of Charlottesville, North Carolina. Dr Wang conducted a parallel modeling seminar, with students on campus, concerning spatial analysis of various transit models. Research produced by this work is included in a forthcoming paper in Collaborative Geographical Information System Analysis and Modeling. Most importantly, funding from this research project supported travel costs for visiting speakers at an end of quarter event directed at addressing current public interest in the topic that drew more than 120 participants to the Studio.

On 3/7/06 a panel was moderated by former Cincinnati Councilman David Pepper that included Charlie Hales, Transit Planner with a focus on livable communities, transit innovation, and public-private partnerships, HDR, former City Commissioner of Transportation, Parks and Planning, City of Portland, Oregon and William Vincent, Attorney, alternative transportation energy researcher and Bus Rapid Transit advocate, Breakthrough Technologies Institute, Washington DC, former Official with US Department of Transportation. Presentation by the advocates of the Incline Rail and Streetcar proposals preceded the panel. In addition to substantial public education, the outcomes of this quarter’s studio include facilitation of a city funded study on the feasibilities of streetcars for the downtown and OTR districts that will be conducted professionally in 2006-07.

This topic proved to be very timely not only for these advocacy groups, but also for the general public whose attention was drawn to these transit initiatives, through news articles in the Cincinnati Post “Light rail dream is not dead” (2/6/06), Cincinnati Business Courier, “Streetcar Desire” (2/10/06), and CityBeat Weekly, “People, Not Cars: How to reshape Cincinnati into a city that works” (2/15/06).
Architect Mike Schuster describes his design for the government square bus terminal.

City Traffic Engineer Martha Kelly outlined city traffic policy for the student.

Cyclist Chris Pohlar advocated for bikeways.

Steve Leeper shared 3CDC plans for the city.

Planning Professor Dr. Xinhao Wang presented his Bus Rapid Transit research.

Civil Engineering Professor Dr. Heng Wei describes fundamentals of traffic engineering.

Former Councilman David Pepper discussed past and future city development trends.

Metro’s Tim Reynolds described current regional transportation systems.

Panel with David Pepper, Bill Vincent, and Charlie Hales debate transit options.

Streetcar advocate Mike Moose advised students.

Industrial Design Professor So Chin Choi outlined vehicle design.

Denny Dellinger promoted hillside inclines for OTR’s Brewery District.

Transportation Engineering Professor John Niehaus advised the studio.

Developer John Schneider of the Alliance for Regional Transit championed Light Rail Transit.

Dave Tombs | Ashim Srivastava | Christina Kay | Janelle Kelpe | Todd Baxter | Cynthia McCoy | Dan Heintzelman | Ronald Graham | Sharanya Iyer |
The machine is the single most defining entity of the twentieth century. Its role at the turn of the century was a central one: it was the dawn of the modern age facilitated by the energy and productivity of the machine. This shift in experience precipitated a new way of seeing the world. Through the window of a speeding train or from a vantage point in a building towering above the land, new perspectives on the world were made possible by the introduction of the machine.

It has been proposed that Abstract Speed + Sound was the central section of a narrative triptych suggesting the alteration of landscape by the passage of a car through the atmosphere. The related Abstract Speed and Abstract Speed-The Car Has Passed would have been the flanking panels. Indications of sky and a single landscape are present in the three paintings; the interpretation of fragmented evocations of the car’s speed varies from panel to panel. The above work is distinguished by crisscross motifs, representing sound, and a multiplication of the number of lines and planes.

From the waves swelling in the Atlantic, to the translation of people in the city, movement thrives. There exists a flow of information as well as transportation, distribution, culture, and knowledge in cities. The city node provides the membrane for which the motion happens. In an increasingly interconnected world, the shift from local environment to international market is a mere click of a mouse away. As the canvas that awaits these many influences, the twenty-first century city must skillfully support these vital economic, social, and idea exchanges at all levels.

Stuart Themudo

The picture speaks of movement in many ways. It is a public building where a horde of people are moving around in different directions. The more interesting meaning that strikes on the first glance at the picture, is the movement of the sun across the window that signifies changes. Changes that occur inside the building. Change in light. Change in weather. Change in shadows. These changes indicate Movement in the picture.

Ashim Srivastava
This image looks at movement in many different dimensions. Starting with the obvious movement of a car down a winding road, this image takes into account the dimension of time as you actually see the path of the headlights blur over time as the car passes down the hill. This idea of movement over time is why I chose this image to represent movement.

*Dave Toombs*

The movements of things in the city are directly reliant on the movement of other objects. This is reflected in the picture since the plastic bag relies not only on the wind to move, but on the passing cars. The movement of people in the city are reliant not just on their ability to walk, but generally on cars, cabs, buses, trains, or other transportation vehicles to move around urban areas.

*Elizabeth A. Wardlaw*
The visible light spectrum is an inclusive way of representing movement in the city. Whether one is in a city familiar to them, or trying to navigate through an unfamiliar place, each color in the spectrum is used to make movement efficient. Our mind is trained to connect specific colors with meanings in regards to movement. It may not be as apparent in a city that one is very familiar with, but when traveling to new places we are relying on maps, signs, experience, and interpretations to move us to our destination. The following are a few examples:

- The interstates have standard colors on their signage that we are all knowledgeable of and come to depend on for an efficient flow of traffic. What would happen if we all didn’t know that the orange triangle meant caution?
- It is universally understood that each subway line and routes is associated with one of the colors of the visible light spectrum.
- The traffic signals and signs, either intended for automobiles or pedestrians, each related to a specific color in the visible light spectrum that we are taught to understand and follow the meaning of. Even if one does not understand the language to read the signs, the signs can be followed due to the understanding of the universal colors and their meanings.

Each of these examples describe how the visible light spectrum is used in every aspect of creating efficient movement in the cities, as well as interstates moving people cross country or between countries. Each country does have a variation of each, but within a specific country there are standards set. The movement of people is largely dependent on this array of colors; red, orange, yellow, green, blue, indigo, and violet, otherwise known as the visible light spectrum.

Christina Kay

I see movement in the city as occurring on two levels, that of the vehicle and that of the pedestrian. I chose this image of the crosswalk in front of DAAP as an instance where the two levels are forced to interact. Even though the crosswalk is called out by hanging signs, the vehicular traffic dominates, and it is often dangerous to assume that a car will automatically stop for a pedestrian in the crosswalk.

Janelle Kelpe

B-Boying/Breakdancing:

I find that this form of movement is very structured, from the different types of moves to the choreographed run one might perform at a competition or night club. In relation to traffic/transportation, I feel that transportation planning is structured and planned out similar to the choreography, but despite these efforts there are unpredictable patterns of movement or spontaneous direction. This freedom is similar to the change in the middle of a dance due to opposition or better direction in where it would help themselves (here we can relate this to a wreck or shutdown of a lane or entire route - drivers/travelers will then commit to a different route or way of approaching the issue). The relation I see is the freedom of movement and to make up your own “moves” as well as the choreography/structured approach one may have in a dance.

Brett Kordenbrock
This is a grouping of images to display motion. Each of these images was taken within 3 blocks of the Niehoff studio space; displaying that many forms of transportation is used in such a small area. I have displayed personal transport (bike), walking, vehicular traffic and public transit. All of these modes are shown in motion, all working together in movement through this space. Sometimes the options of movement are hindered; as seen in the out of service bus. This is where the multiple options of transportation come in and facilitate the individual needing to get around.

Cynthia McCoy
The humble bicycle has long been an invaluable means of transportation for many urban dwellers. This image captures movement in the active nature of the geometry of the drive mechanism and wheel.

Nicole Cosbitt

MOVEMENT: 1. a series of actions or activities directed or tending toward a particular end. 2. take or cause to take action.

The Image of Martin Luther King Jr. depicts a civil rights leader that fought for the rights of African Americans and people of all cultures. His thoughts and beliefs moved millions into action. He influenced a movement that bettered the rights and lives of many people. I believe our jobs as architects and planners are to move communities to a better place that improves people's lives.

Ronald Graham
Movement occurs everywhere we go in the world. It is all around us and cannot be avoided at any costs. Thus, it was challenging to narrow this assignment down to purely one image. I began to think of what movement means to me on a consistent basis. Action, speed, confusion, and blurry were all words that immediately came to mind when thinking about the term movement. Looking for appropriate related images soon followed and I was able to find a suitable picture of what I was looking for. This image speaks of all the terms that I listed previously and seems to typify a regular person's movement throughout a busy day.

*John Heineman*

This picture that I created represents my vision of motion in a downtown city. Everywhere there is motion I highlighted. I thought it was important to distinguish between the sidewalk and the main road because they both represent different means of transportation. They also both move at different speeds. I believe this downtown motion is what keeps a city alive. I think the downtown area is one of the most important areas where energy and activity should be.

*Dan Heintzelman*

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**Fractal Art | The Tunnel**

This art piece for me represents

"Movement" in two ways:

Movement as Transformation

The image visually represents movement in multiple scales, through space and time. The diagram with its gradual change in scale and level of detail also represents evolution, and movement is a tool for evolution and change.

Movement Amalgamation

The diagram also represents the city as a social, cultural, physical, natural, historic, and psychological amalgam. The fractals represent fragments that fit together to create higher meaning, which is comparable to movement which connects people beyond the physical, integrating communities at the higher level.

*Sharanya Iyer*
### Pedestrian Movement

**History**
- Non-automated movement systems:
  - Trails
  - Sidewalks
  - Alleys
  - Subways / tunnels
  - Bridges/skywalks
  - Shared use
  - Automated movement systems:
    - Escalators
    - Conveyers
    - Lifts

**Economic & Financial**
- Ownership Costs:
  - Rollerblades - less than $100
  - Skateboards - less than $100
  - Bicycles - $100 - $4,000
  - Scooters - $250 - $6,500
  - Segways - $4,500
- Methods of personal mobility are affordable to everyone.
- The negative side of personal transportation is the extended amount of travel time.

**Environmental & Energy**
- Pollution free
- Conserves fuel and energy
- Cuts down on traffic jams and congestion

**Safety & Security**
- Change in surface materials.
  - Narrowing road width.
  - Curbs.
  - Mini-roundabouts.
- Trees along the sidewalks.
- Barriers.
- Pathway lights.
- Textured walkway surfaces.
- Helmets should always be worn while riding!
- Wearing a helmet reduces the chance of brain injury by almost 88%.
- Bike riders should follow the rules of the road.
- Bicyclist should ride in a single file line.
- Bicycle riders should wear light colored or reflective clothing.
- The average cost of helmet is $25.00, while bicycle related head injuries can cost a patient $40,000.

**Social Equity**
- Pedestrian movement is accessible to all:
  - Ramps
  - Elevators
  - Sidewalks
- Personal mobility is available to:
  - Anyone
  - Anytime
  - Anywhere

**Intangibles**
- Green stripes along the pathways provide shade, fresh air, and improves the quality of the urban environment.
- Lighting provides visibility and safety, is aesthetically pleasing, and keeps the city lively.
- Provides amenities such as bus and light rail stops, streetscapes, telephones, trash receptacles, drinking fountains, and information kiosks.
- Rent, Ride, and Return programs.
- Bike lockers at central locations for storage and showers for riders.
- Designated lanes to show where cyclist will be crossing the street.
- Interaction is created between citizens and the city.
- Many cities have yellow bike projects, which allows people to borrow donated bikes if they need to get somewhere.

**System Requirements**
- Walkways adjacent to parking lane.
- Walkways against walls.
- Walkways with planting strips.
- Parking blocks reduce overhang of parked cars.
- Curb drops for sidewalks.
- Ramps for accessibility.
personal vehicles
1920s - Bureau of Public Roads (BPR).
1921 - Federal Highway Act.
1941 - Focus turned toward military needs (WWII).
1956 - Federal Aid Highway Act.
- Interstate Program.
  - The automobile played a critical role in producing military vehicles Post World War II.
  - Every year cars became heavier, more powerful, and more expensive to purchase/operate.
  - Vehicles became the backbone of a new consumer good-oriented society.
  - Changed the architecture of the typical american dwelling.
  - Altered the composition of urban neighborhoods.
- Capacity - The system can house a considerable number of people, but may lead to congestion.
- Personal vehicles can go just about anywhere.
- Structures for parking can be planned for optimal vehicular accessibility.

public buses
1826 - The first public transit system, the omnibus originated in Nantes, France.
1829 - England adopted the model, soon followed by New York.
1831 - The omnibus was adopted by Philadephia.
1835 - The model made its way to Boston.
1844 - The omnibus model of public transportation was being used in Baltimore.
- Capacity - 60 to 80 passengers (40' buses).
  - 100 to 120 passengers (60' specialized vehicles).
  - Up to 260 passengers in new bi-articulated buses.
- Stops are located in respect to major pedestrian generating land uses.
- Convenient 'trip link' possibilities.
- Drivers sightlines should be clear of trees, poles, etc.
- Buses should not restrict visibility of traffic signals.
- Bus stops should not be placed on curves, mid-block stops are preferable.
- New Hybrid engines use batteries to capture energy from braking for use in acceleration, which vastly improves energy efficiency and reduces pollution.
- In Sept 2000 NYC switched all diesel buses to ultra-low sulfur fuel and reduced emissions greatly.
- 642 buses have been re-powered with new technology diesel engines that are up to 94 percent cleaner burning.
- Since 1998, NYC has added 325 Hybrid-Electric busses to its service.
- Avoid remotesness, repair in the public eye.
  - Stay close to a public phone and public facility having extended hours.
  - Landscaping should consist of low shrubbery and trees.
  - Adequate lighting should be used at the stop and adjacent areas.
  - Lighting should coordinate with adjacent uses and street lights.
  - Restrictions for bus parking.
  - Stops should take place at mid-block.
- Buses bring together different people across all divides.
- Disabled Considerations:
  - Built-in systems.
  - Waiting pad 2.5mx2.5m minimum must be provided.
  - Waiting pad must have 1.2m wide ramps on either side with slope of 12:1.
  - Visual and tactile cues including signage on devices.
  - Lifts, Ramps etc. that are not permanently installed.
  - Special Bus design to provide adequate space for wheelchairs.
- High Floor 40' - Length = 12.3 / Width = 2.5 / Height = 3.05
- Low Floor 40' - Length = 12.4 / Width = 2.57 / Height = 3.1
- Double Decker - Length = 12 / Width = 2.5 / Height = 4.3
- 35' Dart - Length = 10.9 / Width = 2.41 / Height = 3.18

Operating Costs - Fuel, tires, and repairs.
Ownership Costs - Insurance, financing, and storage.
Parking Facility Construction Costs - Size per space, size and shape of site, number of levels, topography, financing, and design.
Parking Facility Operating Costs - Cleaning, lighting, repairs, security, periodic resurfacing and repaving, fire control and elevators, ventilation.

Perceptions/Hazards
- Perception of fear
- Security cameras
- Patrol
- Cracking foundations
- Dilapidating structures

Access to personal vehicles are to those that have a means to afford transportation.
- Benefits go to middle class citizens and continue up the socio-economic ladder; there is increased opportunity outside of city (sprawl).

Convenience / Opportunity Costs
- Luxury
- Availability of Personal Space
- Environmental Impacts
- Time

Parking space dimensions.
- Angular parking/parking arrangements and types.
- Land-use and Zoning.
- Display height vs. Viewing heights.
- Disabilities Act (equality on the streets and within services).
- Lane widths, pavement types, markings, colors.
### Transit Streetcars

- **1827** - The first mass transit system was the horse-drawn omnibus, which the street car was developed after.
- **1873** - The cable car was introduced in San Francisco to replace streetcars.
- **1890** - Most American cities had one or more cable lines.
- **1888** - The first electric streetcar was invented by Frank Sprague.
- **1950s** - Many streetcar lines were replaced by buses, which are now seen as an example of trolley cars or trams.
- - Streetcars managed to survive in San Francisco and Boston.
- - Presently, many cities have reconsidered the streetcar as a means of transit.

### Existing Infrastructure
- - - Existing infrastructure often used for construction.

### Construction Costs
- **- Choice of car:**
- **- Station design:**
- **- Type of track:** (if designed to accommodate future light rail, the cost will be higher).
- **- Operating Costs:** Can easily be less than $10 million/mile.

### Economic & Financial
- **- Streetcars bring development and channel it where it is wanted.**
- **- They can help bring tourists to an area.**
- **- Tracks are permanent and indicate to developers that the neighborhood is here to stay.**

### Safety & Security
- **- Safety Measures:**
- - Bells, horns, lights indicate oncoming trains.
- - Textured/colored strips indicate appropriate standing distance.
- - Colored lights indicate direction of train.
- - Large crowds of people help reduce public crime.
- - Undercover officers, security cameras, and real-time train data on trains.

### Environmental & Energy
- **- Potential Hazards:**
- - Presence of overhead powerlines.
- - Accidents caused by pedestrians/bicyclists at a non-station area.
- - Crowd + ambient noises.
- - 96% of accidents caused by motorists/pedestrian.
- - Fewer road safety measures than light rail.

### Problems
- **- Handicapped accessibility:**
- - Ramps, lifts, designated seating areas.
- - Blind and deaf aided by lights, bells, and guide dogs.

### Social Equity
- **- Creation of jobs:**
- - Presence of rail shows long-term commitment to growth and development.
- - Better "image" than bus transit.
- - Part of America's nostalgic landmark.
- - Trolleys can greatly reduce downtown congestion.
- - Brings people/tourists back to the CBD.
- - Increases property values.
- - Lower cost to the taxpayer compared to most other transit.
- - Existing infrastructure often used for construction.
- - Became symbol or icon of cities.

### System Requirements
- **- Standard cables are typically on average 18 ft and use former freight tracks.**
- **- Trolleys require an immense amount of maintenance.**
- **- Trolleys require shorter turning radius and less infrastructure than light rail.**
- **- Transit authorities do not have specific requirements on braking systems, lighting systems, maintenance requirements, or driver training.**
- **- Ideal system would require a 24-hour maintenance operation.**

### Aerial Tram & Incline Railway

- **1855** - Fleming Jenkins invented the telpherage (aerial tram).
- **1916** - Aero Car Niagara Falls, Canada opened.
- **1929** - Table Mountain Cable Car Cape Town, South Africa.
- **1966** - Sandia Peak Tramway Albuquerque, New Mexico opened.
- **1976** - Roosevelt Island Tramway opened, only commuter tramway in USA.
- **1997** - Table Mountain Cable Car Reopened.
- **2006** - Portland Aerial Tram expected opening date.

### Capacity & Ranges
- - Capacity - Ranges from 25 to 125 passengers.
- - Speed - Ranges from 500 ft/min to 16 mph.
- - Cars can travel of heights up to 2000 feet.
- - They have been used for public transportation as well as tourism, up mountainsides, across rivers, and over cities.
- - The Aerial Car in Niagara Falls travels 1000 feet across the Niagara River.
- - The Table Mountain Cable Car travels to the summit of Table Mountain at 3563 feet.

### Operating Costs
- - In 1915, the Niagara Aero costs $120,000 to build.
- - Operating costs are variable according to size of system.
- - Infrastructure upkeep, mechanical maintenance, and labor costs would be comparable or below light rail costs.
- - In 1976, the Roosevelt Island Tramway was built for $5 million, where today it would cost $20 million.
- - Currently, there is a project being construction in Portland, Oregon which is estimated at $28.5 million.

### Safety
- - Each aerial tram system has a back up motor and break for safety measures.
- - There have been minimal accidents involving the aerial tram.
- - Each car is enclosed giving a feeling of personal safety, other than the Niagara Aero Car which is an open car.
- - 100% visibility both of the car and from within the car.

### Intangibles
- - The midwest does not have an aerial tram, so there are no prior misconceptions or perceptions of them.
- - Areas that could not otherwise be easily accessible can now be profitable, livable locations.
- - The aerial tram has been used for many different communities, in an urban area for transportation, and in a tourist setting.

### Conclusion
- - Allows the movement of people to otherwise inaccessible locations, such as the summit of a mountain or an island where automobile traffic does not have access.
- - Moves people from people A to point B without having to deal with other types of traffic on the roads.
- - Completely separate system, very dependable.
- - Gives people options, providing vertical as well as horizontal movement.
- - Becomes an icon of their respective locations.
### monorails & maglevs

1876 - United States Centennial Exposition
1911 - William H. Boyes Monorail in Seattle, WA
1952 - Alweg first tested high speed monorail
1967 - Design was adopted by Disney
1956 - Houston tests suspended monorail
1965 - I-Beam suspended monorail for New York’s World Fair
2002 - Shanghai maglev monorail takes first trip

**Speeds** - can reach more than 310 mph.
- Monorail turning radii vary from 40 to 80 meters depending on the size of the system.
- Stations are elevated above street level.
- Platform to vehicle is wheelchair accessible.
- Turning radii is determined primarily by speed and weight.

**Construction Costs:**
- Can range from around $22 to over $88 million/mile.
- The initial cost of Monorail Systems is higher, but there is no need to employ drivers.

**Operating Costs:**
- American Maglev Technology (AMT) suggests $13 to $19 million/mile.

**Economic Benefits:**
- Greater economic impact than surface transportation.
- Increases vertical circulation and viability of second and third floor commercial space.
- Most monorails in operation today turn a profit.
- Monorails require very little maintenance.

- Monorails are electrically powered and do not cause local air pollution.
- Noise pollution is not a factor, monorails run on rubber tires that are very quiet.
- Maglev Monorails operate by magnetic force and have no negative effects on the environment.
- Monorail systems do not require imperious pavement.
- Pier system of support allows for endless possibilities at the ground level.
- Does not contribute to gridlock, requires no coordination with existing traffic controls.
- Monorail Systems do not interfere with traffic or pedestrians, avoiding collisions as well as law suits.
- Grade separation of monorail systems contributes to their impressive safety record.
- Most of the few accidents involving monorails have been due to maintenance errors.

**Safety Benefits:**
- Monorails serve considerable numbers of passengers - stations must be able to handle volume and frequency of passengers.
- In many cases monorails are deemed attractions which typically link two or more socially significant locations.
- The financial success of many existing systems may be closely tied to the notion of novelty or futuristic reality in the present day.
- Most cities that have a monorail system are considered to be on the leading edge of development or revitalization.
- Provides places with a sense of connectivity and allows people to interact.

The various types of systems are:
- Straddle
- Suspended
- Hybrid
- Cantilevered
- Maglev
- PRT

### light rail & interurban

1880 - Electrically-powered street railways invented by Frank J. Sprague.
1950 - Huge decline in streetcars as increase in automobile came about.
1980 - Term ‘lightrail’ prevails as new label for streetcar vehicle.

**Capacity** - Average = 120 per car, max 250 per car
**Speed** - Maximum = 50 mph, 40 mph through downtown
- ADA accessible with ramps on grade boarding
- Bicycle friendly
- Commuter friendly

**Construction Costs:**
- Varies according to site conditions (Portland cost $1.650 million for 44 miles of track).
- Choice of car.
- Station design.
- Type of track.

**Operating Costs:**
- Proportional to track length (Portland operating budget $170).

**Economic Benefits:**
- Opportunities for development in area of system increases.
- Land values increase around development.
- Electric cars reduce the draw on fossil fuels.
- Sense of community.
- Relieves congestion.
- Promotes a sense of community.
- Keeps air clean.

**Safety Benefits:**
- Signage
- Trespassing Enforcement
- Security cameras
- Safety devices
- Education programs
- Transit police and security patrol
- Random fare checks
- Random vehicle and facility sweeps
- Coordination in an emergency

**Facilities:**
- Typically 2 rail types for monorail systems vary from 20” x 44.5” up to 35.4” x 89” depending on variables such as loads, topography, speed, and type of system.
- Straddle
- Hybrid
- PRT

**Signage**
- Bike racks available
- Luggage storage provided
- Wheelchair available - level boarding and ramps

**Catalyst for development.**
- Job creation in locality
- Enhances neighborhoods’ appeal, with sidewalks, paved roads, trees, art, and bike lanes

**Facilities**
- Facilitates mobility
- Relieves congestion
- Promotes a sense of community
- Keeps air clean
Memphis is the nation’s 18th largest city.

Memphis has a metro population of over 1 million people, ranking 44th nationally (according to the 2000 U.S. Census).

Memphis ranks 6th in the nation in the number of properties on the National Register of Historic Places and has more historic listings per capita than any city in America.

The city of Memphis was ranked the 4th most efficiently operated city in a comprehensive national study of 44 major U.S. cities by national think tank Reason Public Policy Institute.

Population of 650,100 (2000 census)
Mt. Adams

Aerial Tram System
Creating Cultural Connections

Race St.
Brewery District
Downtown

P & G
The aerial tram system will provide an alternate mode of transportation for many residents in Cincinnati. The tram system will not make other modes obsolete, but will provide connections between the primary cultural and educational destinations in the area. This is illustrated by the ridership numbers shown below. The system will be able to accommodate a large number of individuals who want to travel by aerial tram, but not every Cincinnati resident and/or visitor. Transportation on the ground will be accommodated to support and complement the aerial tram system.

The aerial tram is the primary mode of transportation in the proposed system, but it is supported by other methods of transportation:
1) Increased pedestrian connections.
2) Re-routed Metro buses to accommodate the new system and stations.
3) Shuttles to specific locations, including the airport and stadiums.
4) Cab stands located within stations with the need for them.
5) Bike rental hubs in every station and other various locations around the city.
The two platforms serve as the waiting area for the aerial tram. The top level is for the tram going towards the Race Street Retail Station and the lower level is for the tram going towards Mt. Auburn Station. The predicted annual ridership for people traveling through Vine Street Station is 140,000. The maximum capacity for each tram platform is 200 people.
Urban Design Concepts

Repair by extending the powerful symmetry along the axis of the Union Terminal on the Ezzard Charles Street across the highway. Create a Gateway at the intersection, between Union Terminal and the Music Hall, which would not only be a gateway to the City West area but also to the city as a whole. The Gateway created with concrete ribs compliments the circular form of Union Terminal. Propose a mixed use complex catering to civic needs of the population like Child Day Care Center, Civic Center, Job Training Center, etc. Create a plaza with amenities catering to the commuters and the community. It is the main entrance to the hub and also acts as a spill over area. Shuttle service which connects Music Hall and Union Terminal.

The First level of the Hub comprises of lobby, ticket kiosks, ATM machines and restrooms. The Second level is a revolving restaurant which also acts as waiting area. The Third level functions as the tram stop with an enclosed waiting area. The hub caters to the requirement of restaurants, cafes and bars around the neighborhood.
The corner of 5th Street and Race Street is a symbol of Cincinnati’s failed attempt to revitalize its downtown. With the unsuccessful attempt to attract Nordstrom’s to this location, the City was left with a surface parking lot and skywalks going nowhere. This transit hub will promote revitalization of the existing amenities, and new developments. The mixed use development and integration of Crate and Barrel will provide amenities that are currently missing from downtown Cincinnati, and hopefully create a regional destination.

**Fountain Square Plan:**
- Materials to match Granite Pavers, Stone Platform, Stone Benches, Rod Iron Tables and Chairs, Planting Beds for Flowers, Square Planting Beds for Trees

**Landscape Highlights**
1. Transit Hub
2. Granite Pavers
3. Stone Platforms
4. Shuttle and Bus Pick-up
5. Rod Iron Tables and Chairs
6. Canopy with Benches
7. Landscaped Planting Beds

**Design Highlights**
1. Transit Hub
2. Retail Kiosks
3. Crate and Barrel (35,000 sq. feet)
4. Parking Garage (200,000 sq. feet, 500 parking spaces)
5. Bars / Restaurants / Retail (50,000 sq. feet)
6. Office Space (13,500 sq. feet)
7. Landscaped Open Space
8. One-Way Parking Alley

**Transit Hub Plan**
- 50 Feet in Diameter
- 100 Feet in Height
- 8 Stories of Amenities
- Ground Level - Shown in Diagram
- 2nd Level - Small Convenient Store
- 3rd Level - Cafe
- 4th Through 7th - Office Space
- 8th Level - Coffee Shop/Waiting Area
New housing on the hillsides are tied into the Brewery basin through a pedestrian escalator tube. Critical mass of development around strategic transit hub location for growth in all directions. Future mixed use develops between the hub and historic Findlay Market.

1. Ticketing Kiosk - 740 sf
2. Convenience Kiosk - 680 sf
3. Coffee Kiosk - 600 sf
4. Police Substation - 3200 sf
5. Restroom/Utilities - 3200 sf
6. Taxi Pickup
7. Community Park
8. Rental Bike
9. Bus Stop
10. Pedestrian Tube
11. Local Jobs
12. Community Child Care Facility

The Northwest corner of Over-The-Rhine was once a successful neighborhood of thriving breweries and businesses prior to 1920’s prohibition. Currently with a blighted streetscape of light industry and crime, the amenities in this area including historic Findlay Market struggle to survive. This dramatic intervention of the aerial transit hub at this strategic location will tie together a mix of community elements and work as a development catalyst for revitalization in the renewed Cincinnati Brewery District.
The **Uptown-Downtown streetcar** is of the utmost importance. This connection in and of itself creates a lot of potential residents, business people, and tourists. Its ridership will be of a broad demographic and extremely important to the future success of the OTR Basin, the CBD, and Uptown. Above 5-points the streetcar will continue on through to Short Vine and utilize a stop on Martin Luther King Jr. Drive. This stop is also a multi-modal node paired with a pedestrian walkway and Bus Rapid Transit. The BRT provides an East to West movement linking up with other main institutions as well as major arterials (i.e.-Hamilton Ave.) At this point every other streetcar will continue around the UC Campus and then link back up with the main line (south on Vine St.)

**Liberty and Central Parkway** will become a multi-modal hub. Many low-income housing would support the streetcar line that goes throughout City West and butts up against other public housing structures. This line will help tie the Light Rail Line coming down Central Pkwy thus creating a vibrant intersection and developmental possibilities paired with both the affluent commuting into the city and the lower-income/working class too, commuting to service oriented/manufacturing jobs both in the city and outside in surrounding suburbs.

**Vine Street** will be a dedicated Southbound Streetcar access below 5-points and solely Northbound Auto traffic. The Streetcar Loop continues down Vine creating pedestrian corridors, then diverges at 2nd St. and continues Northbound on Elm and Main Street. The Elm Streetcar will become a loop in which it will go in a continuous loop at McMicken and then south on Vine once again. Main St. will be the only means of going Northbound as it will continue up the hill past 5-points. This North/South function helps to support the two East/West Streetcar Loops and Light Rail as it enters and exits the city.

Utilization of the **existing services** is very important in our transit system. At the station near 2nd Street (Metro Stop) there will be a lot of activity due in large part to the 4 converging lines of which 3 are different modalities. This area is significant because of the amount of people passing by and transferring. A pedestrian oriented, mixed-use development must take place here and continue, as shown, up Vine Street as well as above Fort Washington Way (having that entire area decked).
In an attempt to promote pedestrian activity and transit use, Vine Street will become a northbound auto route paired with a contra-flow streetcar transit line (southbound). From Central to Liberty, the on-street parking will be eliminated on either side of the street in an effort to expand the sidewalks (both for pedestrian and retail spillover) and create a pedestrian thoroughfare. Parking relocation will consist of angled parking on east-west streets. North of Liberty, the parking on the east side of Vine will be eliminated and the sidewalks widened. Parking again will be relocated to angled spaces on crossing streets and alleys.
Potential Movement of People on Streetcar

- **Uptown-Downtown Loop**
  - Estimated 1.25 million riders/year (Metro Moves 2002)
  - Estimated 4,000 riders/day
  - 56,000 people use Findlay Market every year currently

**New Residential**
- 56,500 square feet total (45 units total)
  - North Building 22,500 square feet (18 units)
  - East Building 34,000 square feet (27 units)

**New Underground Parking**
- 115,000 square feet total
  - 350-400 parking spots on 2 levels

**New Retail Space**
- 30,000 square feet total
  - Movie Theater 16,000 square feet (4 screen, 600 seats)
  - First Floor Retail 14,000 square feet (6 storefronts)
Amphitheatre Park for Community Events and other Venues (Gateway Feature)

Commercial Area (Blue) for trade/apprenticeship type job opportunities

Residential Housing Clusters centered around park areas Linking West End with Findlay by Opening up Elder to the Development

Dense Mixed-use and Retail around central station

Station utilizes both modes of transit (Light-Rail down Central and Streetcar across Liberty St. – use as Gateway Feature)

Roundabout with above grade streetcar station and subway for Light-rail

Green corridor to accommodate a bikeway and pedestrian activity

Key - Land Use
- Residential
- Mixed-Use
- Flex Space
- Open space
- Parking
- Civic/Institution
- Commercial
- Entertainment

Proposed Below Grade Station for Light Rail with Street level Station for Streetcar. A hybrid of the two sketches would be an appropriate fix for the transit station. The station would be of a tunnel-like atmosphere below grade with access both vertically (to the center streetcar circle) and horizontally (pedestrian tunnels which would take one to the sidewalk at each corner of the intersection).
The design focuses on the creation of interlinked urban plazas as an intra-modal transit terminal precinct. The core design construct being achieving broad based rejuvenation of the locale by dispersing rather than containing people in a building. Disseminating people in the precinct addresses issues of: coherence with the historic urban fabric, better usage of public amenities and spaces and consequent improvement in the safety, security and overall ambience of the neighborhood.
The proposed transportation oriented development on Broadway Commons has the unique ability, because of its location and large size, to be not only its only destination, but also to feasibly serve as a major park & ride, development catalyst, gateway, and catchment area for the entire Central Business District of Cincinnati, as well as for Over-the-Rhine.

Serving primarily as the major intermodal transit center for our group’s transportation proposal, it accommodates three systems: the urban streetcar line, the commuter light rail, and the short aerial tram line up to Mount Adams. This site is proposed to see lots of riders, as it is one of two major junctures in our system where people from the suburbs will either drive in and park or take the light rail, and subsequently walk or transfer to the trolley to get to work.

This site serves not only as an intermodal transit center, but as its own self-sustained node in the city. Rather than integrate this site into the city grid, I chose to take advantage its large footprint by incorporating several things that urban areas covet but can not always sustain – a large big-box retailer, in this case IKEA, a substantial office park comprised of eight connected towers, and a smaller retail pedestrian promenade. All three elements center around either the rail lines themselves or a series of interlocking spaces that are connected both physically and visually (parking is below grade).

There are also two sculptural pieces on site that give it character: a tower that triples as a tram support, an elevator/stair shaft, and a light well into the parking garage below; and also a large canopy over the hub whose form and materials emphasize movement.

entertainment 25000
mixed use/small retail 90000
IKEA 145000 (x 1.5-2 floors)
usable open space 240000
spec office 240000 base
parking 275000 (x 3)
hub canopy 50000
Light Rail Service to the broader community of Greater Cincinnati will be provided on the eastern corridor by a light rail service that will extend from Broadway commons North to Kings Island amusement park and South to The Cincinnati and Northern Kentucky Airport. This system includes about 36 miles. The termination of the light rail at Broadway commons should be seen as a stimulus for growth on the eastern side of Over The Rhine (OTR). This system has the ability to carry up to 106 passengers per vehicle. The Cost of this system will be approximately $1,250 per passenger annauly.

Bus Rapid Transit: The uptown to downtown connection of a bus rapid transit (BRT) route along Vine street will extend from the zoo, past the university and hospitals down to Liberty and over to Broadway commons. Stops will be limited to these areas and for the purposes of this project the study will focus on the transit hubs at Broadway commons and Liberty Street. This serves an 18 mile system. These two locations should be considered gateways to the OTR community. Each BRT bus will cost $700,000 each. This system has the ability to carry upwards of 100 passengers per vehicle.

Streetcars: As an initial effort to stimulate development in OTR we have identified the need for a transit loop from the central business district (CBD) into OTR. The proposed loop would be a oneway trolley that would circle counterclockwise along Main, Liberty, Race and Third streets. This serves a 3.2 mile system. The cost of each trolley is about $350,000 each, with operating costs of $162,000 annaully. This system has the ability to serve 28 passengers per car.

Bicycle: Bicycle routes will connect uptown and downtown by means of a loop that begins on Central Parkway and runs up to and around the University of Cincinnati (UC), along MLK and into Hyde Park to return to the city along Eastern Avenue. A direct route will also connect downtown and UC along Sycamore Street over to Auburn and into the campus area.

Aerial Tram: The inclusion of an aerial tram will allow for connections to Mount Adams and the art museum. The aerial tram will add visual interest to the city skyline as well as the provision of a unique experience of the downtown area.
Proposed Gateway Plan

Section A

Section B

Section C

Vine Street Corridor

Gateway to Community

Multi Family Housing

Multi Family Housing

Multi Family Housing

MIXED MODE SYSTEM
Visual anchors within any urban space are important factors in determining the viability and vibrance of the spaces affected by the urban framework. Cincinnati’s Over the Rhine neighborhood has a historical character and significance that makes the area quite charming but at the same time decades of deterioration and alteration of the scale of the urban fabric have served to isolate many of Cincinnati’s urban treasures such as Findlay Market and the 5 Points intersection at Vine and McMicken streets. The proposed plan provides a strong connection between Findlay market and a transit hub near the 5 Points intersection. The unique character of the 5 Points intersection suggests a significance that can be exploited to the benefit of the city by providing a public place with strong visual connections to the community at large.
The proposed plan for Broadway Commons will incorporate the existing urban grid that surrounds the site. The area along Central Parkway will have 6-7 story commercial buildings. The Transit Hub will be located along Gilbert Ave to provide easy access for buses, light rail, and expressway traffic. The area south of the Transit hub will be a multi-family residential neighborhood.
why BRT, why CINCINNATI?

In a city primarily built for the use of automobiles, a new transit system using the existing road network would be most viable. Cincinnati, a city whose work center is split between uptown and downtown, calls for a quick transit system connecting both areas in effect to stimulate development in between and around primary nodes. Over the Rhine currently exists as a void between these two zones which has remained poverty stricken for many years. Fortunately, the correct application of transit has proven to enhance communities exhibiting the same attributes as OTR, via multi-modal transit hubs and other enhanced transit stops. It can be seen by the transit map that Vine Street exists as a backbone in Cincinnati’s urban fabric. It is because of this that it was chosen to be the primary route of transportation (the SPINE) of our network. It was then determined that Bus Rapid Transit would be most suitable because capital costs are low, demolition required is minimal, new multi-articulated buses have a large capacity, and quick implementation is feasible.

Lateral routes run perpendicular through the SPINE in three different locations. They serve to tap into local neighborhoods such as the City West, Mt. Adams, Covington, Newport, Northside and Hyde Park. The SPINE starts at Cincinnati’s acclaimed Zoo and ends at “the Banks” where the sports venue is located, and expectations for a new mixed use project are currently being planned.
Elevation on Vine Street

**Green Space:** The TOD acknowledges valuable community green space within the community. The development relocates the Findlay market park two blocks southeast of the TOD hub. The park is expanded and includes a walking trail, basketball courts and a playground. Other open spaces include a rooftop park for the residents located in the mixed use facility, and a Plaza provides Findlay market with a courtyard area used for concerts, communal space, and additional outdoor market space.

**Urban Framework:** The Five Points Transportation Hub is located near Cincinnati's historic Findlay market in Over the Rhine. The hub is located on Vine and Elmor and serves both market visitors and local commuters. The TOD creates a mixed-use experience with several retail shops, townhouses, apartments and a outdoor plaza. The transit hub considers a transformation of Findlay market into a major transportation, retail and market district.
**Proposed Land uses**

- Commercial establishments - small scale establishments, architecture offices
- Residential units, live-work spaces for SCPA students
- Retail corridor - restaurants, cafes, bookstores, art galleries
- Transit hub - BRT stop with subway interchange

**User groups**

- Residential neighbourhood in and around Washington Park
- Existing residential on Central Parkway
- New condominiums
- Proposed residential for SCPA students
- Ensemble theatre visitors
- Kroger employees and people working in Downtown

**Urban framework analysis**

- Absence of coherent street frontage on Vine St interrupted by parking lots and vacant land - 1
- Abandoned / vacant buildings on Vine St overlook narrow alleys - 2
- As a result, 12th St & 13th St become desolate for pedestrian use - 3
- Proposed studios, live-work spaces for SCPA students on Vine St - 4
- Gateway garage at the corner of Vine St & Central Pkwy follows the character of the new mixed use corridor on Central Pkwy - 5

**Bus and subway transit create movement corridors on 12th and Vine St.**
This birdseye view shows the BRT hub in a close context with its surrounding buildings. The white gap between the red influence zone highlights Vine street as a major thoroughfare between this activity area. The Bus Rapid Transit hub acts as an anchor by bringing more pedestrian activity to this area.

The site includes a redesigned Post Office with dedicated access to a section of the parking garage, a restaurant, a Bus Rapid Transit (BRT) station, and a Bus Maintenance facility also located within the garage. One floor of the garage will serve as private use leaving four floors for public parking.

The elevation change of 18 ft. allows for below grade access on Jefferson Avenue and on-grade pedestrian access into the terminal.

The ultimate scheme of this project is to draw people to Vine street from all primary nodes in the Corryville area. The design of the transit hub focuses on enhancing the vitality of Vine street through Transit Oriented Development (TOD). With the location of the transit station pushed almost flush with Vine St. an activity area will be created along Vine street, enhancing the outdoor environment, thus creating a greater opportunity for new developments along Vine.
GIS PLANNING APPLICATION

The Street Hierarchy: Using the StreetCL file provided by CAGIS, we reorganized the roads into a three tiered hierarchy. The first tier consists of primary roads, which have a higher capacity than the others. The second tier contains secondary roads that have a lower capacity than primary roads, but not as low capacity as residential streets, the third tier. The street network and hierarchy form the basis for Network Analyst a program used later in the study.

Spatial Analyst: The background map was created using ArcGIS to isolate commercial and office locations. Next, using Spatial Analyst, Euclidean Distance was determined for both commercial and office locations. This produced two maps which we then combined into one using a reclassification tool and a weighted overlay tool. The end result was one map that depicted distances from either a commercial or office parcel. This depicted clusters of these areas which helped decide where to place the routes.

The Final Route: The final route was determined by the aforementioned process as well as an examination of the service area. Using Network Analyst, we calculated the service areas based on a quarter of a mile, a half mile, three quarters of a mile and one mile. Our chosen route provided the highest concentration of commercial, office, and residential areas within one quarter mile of the route.

Choosing the Route: By examining the commercial and office map; the residential densities; and locations familiar to University students, we determined an extensive list of possible origins and destinations. From this we narrowed the choices to areas near commercial and office clusters; areas with high residential densities; and areas near the University of Cincinnati.

Purpose of the study: to identify the corridors which efficiently connect the potential BRT users.
The **Potential BRT Sites** are based on the following Analysis: Population Density | Age Distribution | Land Use | Income | Vehicle Ownership | Major Attraction Centers

Next, the income raster and existing Bus Stops are laid over the raster of land use, income level and the parcel layer. This gives the identification of the sites that lack the BRT facility. The sites are proposed in the places which have low and medium income group, high population density, major attraction centers, employment centers and that lack the BRT facility.

The purpose of this project is to provide neighborhood connection with additional amenities and transit services. It links other modes of transport such as bikeways, streetcars and LRT by acting as interchange node.

In addition, it will connect each neighborhood and make easy access to jobs, educational institutions and other services.
Are bus ridership in the uptown/downtown study area proportional to the level of service?

- Is bus ridership in the study area proportional to the level of service? **no**
- Are existing bus stops located within a walkable distance to all areas of the study area? **yes**
- Are existing bus stops located near areas of high population density? **yes**
- Are existing bus stops located near major employers? **yes**
- Are existing bus stops located near areas with a higher concentration of lower-income people? **yes**
- Is there a correlation between high demand areas and bus ridership rates? **no**
This project looks into revitalizing the streetcar as a viable mode of transportation in Cincinnati. The project will look at the historic street car routes and the proximity to cultural sites, tourist attractions and the central business district.

**Goal:** To provide an alternative transit option that preserves and enhances Cincinnati’s historic charm and character.

**Objectives:** Building a new tourist attraction, improving transit ridership and providing an impetus to development along fixed transit lines.
In 2002 Hamilton County Ballot Issue 7 tested voter’s readiness to fund major improvements which included enhanced bus transit, highway upgrades, and a light rail system. This became, and continues to be, a divisive issue, while traffic problems...
Bus Rapid Transit* in the USA

*High-quality, customer-orientated transit that delivers fast, comfortable and low-cost urban mobility.

How to effectively communicate?

Issue: getting stakeholders’ support
- Multiple and conflicting views
- Envision of the future
- Understand each other

Information Technology to improve urban and regional planning and development decision-making processes

GIS PLANNING APPLICATION

Analytical Model
GIS

Special groups
Planners
3D visualization

Engineers
Public transit riders
Federal governments
Renters
Business owners
Municipalities
Architects
Home owners
Automobile users
State governments
Investors
Developers

Public transit riders
Municipalities
Planners
Engineers
Federal governments
Renters
Business owners
Municipalities
Architects
Home owners
Automobile users
State governments
Investors
Developers

GIS
Spatial Analysis
Modeling
Visualization

Information Technology

Planning Applications

GIS PLANNING APPLICATION

Demonstration Sites
Consortium Members

Eugene
Alameda and Contra Costa
Santa Clara
Los Angeles

Honolulu
San Juan

Albany
Boston
Hartford
Montgomery
Louisville
Charlotte
Pittsburgh
Dulles Corridor
Chicago
Cleveland


demonstration sites
consortium members
Long-term Goals

1. Collaborations between professionals of GIS, Simulation Modeling, Computer Visualization, and Planning Experts

2. Development of a system that is able to utilize the current data collected in evaluating development proposals with computers before the building phase
System Applications

1. Provide a contrasting view that residents and policy makers need to see before they can take a stand on the issue

2. Foster a sense of collaboration between stakeholders based on a better understanding of how a major construction project will impact their community

3. Engage general public involvement in planning process
A Route Test Case

To promote the appreciation of community heritage
To promote the enterprise of strong local ties
To promote the awareness of neighborhood assets
To integrate with existing land uses in the surrounding area.

BRT Bus Station/stop

Design Principles
Visualization

5.5-Mile BRT Route, BRT Speed range is 30-35 MPH

Real time information
Attractive design
Large capacity
Comfortable
Low floor

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<tr>
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<td>Mean: 0.049</td>
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CO Emission Concentration Contours

Maximum concentration
Fall 05:
Urban Ecosystems in OTR and the Basin

The subject of this quarter’s work was to document and understand the urban ecosystems that exist throughout the OTR, CBD, and Basin Area. Students conducted their research to complement work underway for the preservation of the lower Mill Creek waterway by the Mill Creek Restoration Project. Rarely documented and frequently underappreciated, the natural areas within the city’s central core can work to support improved quality of life for community residents. This studio illustrated the location of natural assets and how they could be utilized to benefit residents of the basin. Public presentations made by students for this project help to educate the public about natural assets and promote the efforts of the Mill Creek Restoration Project, the Hillside Trust and other environmental groups. A special aspect of this studio was the participation of 16 visiting Italian architecture and planning students in an intense two week design charrette with the studio. Students of the Spring 06 studio later participated in a design exercise for furniture and landscape enhancements for the proposed Mill Creek greenway.
intuitive analysis

general street layout

eastern pattern

uphill pattern

western pattern

patterns

pattern diagram:
east: original grid
west: newer fabric, output of several writings
and erasures of the original fabric
north-east: newer fabric - cul de sacs

extensions to the directional streets of the original grid in western side

north-south streets

east-west streets

layers of the street pattern

anomalous streets cutting the grid
grid evolution

grid deviations

stretch

breaks

erasure

PRE-CONCEPTION ON-LINE

typological morphological analysis
natural features

The Basin in its Context

Cincinnati's soils shift along the slopes. This results in Cincinnati's large budget for maintaining the hills.

A shifting hillside destroys a parking lot foundation on Clifton St. on Mt. Auburn.

First Cincinnati's conquered the hills with railway inclines. These historically important constructions were eventually outdated by roads and shutdown.

Now Cincinnatians hold up their hills with walls like this one at the base of Mt. Adams ($22 million).
the battle between man and nature

The first Cincinnati settlers from the east were welcomed by a thick forest of trees surrounded by overbearing hillsides and a network of waterways: forcing them to settle on the flat land inbetween these forces.

The Hillsides of Cincinnati are just that: slides. While daunting at first we overcame these large boundaries, but now they are fighting back!

CONCLUSION: The battle will continue on as long as the citizens try to defeat this force instead of nurture it.
The basin area as it appeared in the 1890’s. A strong urban fabric can be seen as the west end has reached its height.

The morphology of the basin area as it looked in the 1920’s. No major changes have occurred regarding urban renewal as the west End and basin area were already the slums of the city. The only changes since the late 1890s has been the addition of transportation in the railroad along mill Creek, the loss of streets surrounding mill creek and the building of a baseball park in the basin.

The beginning of some of the major urban renewal projects that would change the morphology of the basin area. The construction of Union terminal, the new Post Office, and the further expansion of the transportation and industrial uses to the west. This is the last map of the basin area before the new public housing projects began.
The enormous urban renewal projects have begun on the West End. Interstate 75 has cut right through the middle of the neighborhood, separating it into two. The public housing projects have replaced traditional housing with large block housing, and the railroads to the west have taken away even more of the neighborhood.

The basin area as it looked up till the last few years. The urban renewal projects have totally transformed the basin area from the past 100 years. Interstate 75 cuts the basin area in half. The interstate required demolition of dozens of city blocks, and permanently altered the morphology of the basin area. 4,888 families (15,000 - 20,000 people) and 551 businesses were displaced. These homes and businesses have been replaced by industrial super blocks and the construction of 2,000 public housing units for the poor.
Cincinnati basin, the area where the first immigrants settled, is an example of congestion of urban functions, as in most of modern American cities. The crisis of congestion was produced by the system of private property and the inability of regulatory planning controls to solve functional problems.

Congestion means at Cincinnati's case, as in most cases, a jumble of railway lines and an uncoordinated street system. The intensive development and the random placement of a variety of land uses were destructive for building activity and real estate investments. There are many examples of congestion between investment areas on public utilities, such as railways and highways, and tenement housing. Traffic congestion, intensive land utilization, housing requirements and rapid-transit provisions, prevented in many cases economic development.

A city plan was considered as a general plan of arterial streets and transportation lines by which the different sections of the existing and future city will be connected to each other and with the center of the city. Cities should be a land for an easy and successful commerce. In this way, rapid-transit facilities became the first priority for most city plans, as for Cincinnati. Their construction pushed businesses and commerce to separate from residential areas and spread along transportation networks, where land was cheaper and more profitable. These were the first acts of suburbanization that occurred and at the same time people started to move from city centers.

The economics of land development contributed to congestion and the growth of an irrational pattern. As city grew, land was subdivided and movement and displacement of people became massive. The
plans failed to predict the adaptation of streets to new needs and this is another proof of the irrational expansion cities. Unimproved and poorly utilized land was a result of the owners’ feeling that the character of an area is changing and therefore its permanent character is unknown and risky to invest. Development remained uncontrolled and an uneven development pattern resulted, leading to an enormous loss and obsolescence of buildings. This is a result of lack of adaptation to function.

At Cincinnati, a large scale functional change has occurred over the last century. This makes a survey of the problems and reasons of congestion easier. The industrial area has been concentrated around Mill Creek, moving from the banks of Miami Canal. This required an enormous clearance of tenement housing and caused a large scale displacement of low-income workers. At the same time it divided the city center from the east and deteriorated the quality of living for the neighboring districts. Commerce and business on the other hand were concentrated downtown and along the main streets and highways. Dense residential areas have moved towards the surrounding hills and suburbs, as the concentration of the major city functions in a limited area of the basin, has declined the quality of living. Just a few districts are still resisting the urban growth and land utilization of the developers and remain almost intact. But for how long?

The new functions of the city have created a great segregation within the basin and a congestion of land uses, housing and transportation. Functions of the city seem more like pieces of a puzzle that do not fit together...
dissecting the basin

perspectives outside the city - approaching the city

- the closer you get, the more majestic the city becomes
- view partially blocked by separating wall highway
- rt. washington way: frog perspective

- frontal approach
- arches of bridge add to dramatic effect
- most majestic view of city

- winding road down to the basin
- no view on city while descending
- city gradually reveals itself as you go south
perspectives inside the city

- grid pattern — great vistas
- emphases on north-south direction
- scale less majestic once inside city
- views obstructed by skyscrapers
- Finale of both directions anti-climactic

a walk on vine street

place

- complete lack of place
- no identity/character
- no human scale
- apart from hopes fail to create place

- few places with human scale and character:
  - bouncer square
  - post park
  - main library
  - vine street
  - 6th street

- place during day
- place during night
- distinct character
- not a place for everyone

- a place with human scale and character
land uses

functional analysis
**Planning Process**

- Scenario
- SWOT
- Vision
- Objectives
- Strategies
- Actions
- Masterplan
- Projects
- Multi Nodal Region Model
- Territorial Structure

**Vision**

- Unify the fragmentation
- Give value to the diversity

- solve the barriers between the different parts of Cincinnati
- find connections and developing relationships
- give value to their diversity and identities
Trends and Scenarios

- **Urban Service Boundary (USB)**
  - Curtail the sprawling development of rural areas
  - Establish of service boundaries
  - Use the existing limits of infrastructure
  - Maximize urban growth within land already developed

- **Compact City**
  - Emphasize development of the central city
  - Use high density and mixed land use
  - Use existing infrastructure and facilities

- **Multi Nodal Region**
  - Develop of multiple closed centres
  - Use existing infrastructure

---

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<td>Concentration of the African American People</td>
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<td>Return of young professionist and empty nester family</td>
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<td>%Activities:</td>
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multi-nodal region model

- Avoid urban transformations without planning and projects
- Reduce the spread of development on open lands
- Create and develop multiple mixed use centers
- Give value to the potentiality of each node
- Connect open nodes through the transports
- Make efficient this territory shifting a large part of the mobility on the public transport, such as the subway

territorial structure

The analysis of the Greater Cincinnati metro region scale marks three distinct rings of development:

- the first ring is about the urban core (two mile)
- the second ring means the first expansion on the urban core (four mile)
- the last ring represent the first ring of suburban growth beyond the core city (eight mile)

The second analysis of territorial structure is on the highway-ring scale. It shows the knots and the corridors at the upper scale. The nodes could be mobility, attraction and physical and functional connection.
1. Plaza
2. Industrial zone
3. Pedestrian/bike path
4. Green buffer
5. Logistic Zone
6. Cultural Zone

1. Plaza mixed use near Union Terminal

2. Industrial Zone

Existing buildings
New buildings
Parking lots
3 _PEDESTRIAN / BIKE PATH

4 _GREEN BUFFER
The green buffer secures the path

5 _LOGISTIC ZONE
Parallel buildings who are designed by the example of the cultural building.
The area is very easy to penetrate. The buildings are all parallel to each other.
The pedestrian path goes perpendicular through the zone.

6 _CULTURAL ZONE
The cultural building is an old factory where young artist found their housing.
The building looks out on the river and the new landscape.
the ohio water front

Ecotone  Park  Event spaces  Parking  Stadium

from nature to recreation
With our project we want to give to this highway a more urban role with the insertion of new green areas made by artificial hills or with tree-lined roads.

The role of these green areas is:
- to protect the urban core against the air and noise pollution
- to reduce the visual impact on the urban landscape
- to protect the cycle path from the high speed traffic on the highway
- to let the vision of some important points or areas (such as the union station) along this path.
The public transportation network consists of two levels, the regional and the local.
- High-speed railway
- Line 1 from Western Hill to Riverfront
- Line 2 from Union Terminal to the east
- The Tram Ring

Subway Line 1 & 2
A sequence of Events & Visions

The cultural network consists of two parts with different formation and architectural features.
- Over-The-Rhine / reactivates and initiates functions and activities, concentrated on culture, recreation and retail.
- The intersection of Line 1 & 2 in the middle of the cultural stream becomes a major local node, in both means of transportation and cultural integration of OTR and CBD.
- CBD / connects OTR with the Riverfront through Vine Street, integrates major cultural places by the low speed zone, widening of sidewalks, speed limit for vehicles, and indicatory signs and stops.
- Riverfront Subway Terminal / park and transition node from the subway to the tram and entrance to the riverfront recreation zone.

The Cultural Stream
A sequence of Events & Visions
LINE 1
1. Findlay Playground
   Vine Street
2. Riverfront Terminal
   Walnut & 2 Streets
3. Findlay Market
   Pleasant Street

LINE 2
1. West End center
   Linn & Charles Dr
2. Washington Park
   Subway Intersection
3. Garfield Place
   Garfield & Race St
Project aim

To build a single project scenario for the future of the basin area

Social perception and perspective for the study area

Territorial dynamics acting on the study area

Project image which considers people’s needs

Understand the territory in all its dimensions

Social analysis

Analysis of the context (qualitative analysis)

Interviews

Knowledge of wishes and expectations of local communities

Image of actual reality

Image of future scenario

Perceptions and feelings people have about the community they live in

Social relationships between every district and the neighboring ones

Relationship with environmental and infrastructural dominant elements

Interviews
<table>
<thead>
<tr>
<th>Neighborhoods</th>
<th>Problems</th>
<th>Expressed need</th>
</tr>
</thead>
<tbody>
<tr>
<td>lower price hill</td>
<td>The neighbor is trashy, there are too many abandoned houses, no playground and it seems to be no law, cars go by too fast and parks close by for kids; Mill Creek need to be cleaned up, it is stink and contaminated</td>
<td>We need someone to clean up the community, to guarantee safety for children, we need fresher air and houses better built, need more parks where kids can play safely, we need to get rid of a lot of the drug dealers</td>
</tr>
<tr>
<td>camp washington</td>
<td>The neighbor is full of trash and drugs, parks are far away</td>
<td>We need better people living in the neighbor and to clean up trash, we need more employment opportunities, and big money and caring for our neighbor; Mill Creek is a bad place to live</td>
</tr>
<tr>
<td>north fairmont</td>
<td>people don’t care about the neighbor and it is trashy, there is high crime and no lighting</td>
<td>We need better families to move in and more street lights, we need crack down on the drug dealers</td>
</tr>
<tr>
<td>northside</td>
<td>more parks and recreational centers for children, we have problems of drugs and so problems for kids on state ave.</td>
<td>We need to get drug dealers off the street, we need green areas</td>
</tr>
<tr>
<td>over the rhine</td>
<td>there are troublemakers from other areas and drugs, we have not enough police to offset drug deals and shooting</td>
<td>We need more police, we need more greenspace and parks, we need a better air quality, we need lower speed limits and cheaper bus fare</td>
</tr>
<tr>
<td>west end</td>
<td>we have problems of crime</td>
<td>We need economic development, small business and respect for community; we need they run the city with less politics</td>
</tr>
<tr>
<td>winton woods</td>
<td>we have no central gathering point</td>
<td>We need parks and green spaces, we need more money to make downtown a better place to go, we need a gathering point to have a picnic and eat out and people watch, maybe by findlay market, we’d like street performances and events</td>
</tr>
<tr>
<td>western hill</td>
<td>not enough street lights</td>
<td>They have to crack down on the drug dealers and the shooting among each other</td>
</tr>
</tbody>
</table>
Main Goal:
creation of an interrelated system containing 'corridors of opportunities' by enhancing the character and strengths of the Mill Creek corridor, western highway corridor, and the eastern hills greenway.
corridor analysis

Section I

Section II

Section III

Section IV

Section V

Section VI

Tutors: Tanja Congiu | Anna De Liddo

Giuliano Cosseddu | Silvia Gugu | Rosalba Innamorato | Claudio Marras | Amy Miekley | Fabrizio Pusceddu
Interventions:
• A Water Plaza
• Cable Car-Incline System
• An Inter-modal Platform
• A Commercial/Entertainment District
• A Technological Park
• Sawyer Point
• A Connecting Park
a linking park

- Constructing a greenway along Mill Creek
- Connect Mill Creek greenway with Eden Park
- Construct a walk/bike trail along the greenway

From the survey:
  - Provides open spaces for families
  - Increases health as environment must be cleaned-up

From the analysis
  - Unites all three corridors through environmental and transportational means
  - Attracts people from all neighborhoods

a water plaza

- Construction of a harbor
- A point along the connecting greenway
- Construction of a culvert from sewage plant

From the survey:
  - Provides jobs
  - Safety
    - Attracting people
    - Clean-up Mill Creek
  - Community Pride
    - Provides open space to enjoy

From the analysis
  - Construction of a harbor
  - A new “Gateway” for Cincinnati that connects rail/car/water
an intermodal platform

• Expands already existing Union Terminal
• Construction of railway from CVG international airport to Union Terminal

From the survey:
– Attracts more people
– Becomes a larger attraction for community residents
– Safety increases as more attention given to the area

From the analysis
– Expansion of an existing node
– Increases functionality of corridor by connection to airport and other modes of transport

a commercial/entertainment district

• Extension of planned West End/Over-the-Rhine loft District
• Anchored on Union Terminal
• Shopping Mall

From the survey
– Provides more jobs as more businesses come to the area
– Safety increases as more attention given to area

From the analysis
– This corridor furthers its functionality as it also provides commerce to residents
– Increased interaction among residents
the planning diagram

NATIONAL AND REGIONAL FORECAST

FUNDAMENTAL OF THE PROJECT

DIFFERENT TYPES OF ANALYSIS

STRENGTHS / WEAKNESSES OF CINCINNATI BASIN

BASIC STATEMENT AND GENERAL OBJECTIVES

Masterplan with projectual attitude scenarios

PROJECTUAL SIMULATIONS

BEST PRACTICES

SWOT ANALYSIS

Strength
- Amount of businesses in the city
- Physical appearance of the city
- Infrastructure (existence of the highway) and buildings
- Cultural institutions (Cincinnati Art Museum, Art Academy, Music Hall)

Weakness
- Segregation between land uses (alternative: mixture of industrial, residential, business)
- Segregation of residential areas (closed neighborhoods)
- Brownfield (pollution, ugly)
- Railroad (pollution, waste of land, underused)
- Majority of population have low income
- Alarming rate of unemployment
- Mill Creek pollution (local approach isn’t enough)
- Mixed use in OtR, not working because of crime!
- Lack of alternative transportation
- Lack of green spaces
- Lack of social mix

Opportunity
- Brownfields (governmental support for clean up)
- NAFTA-network
- Hills (nodes of hypothetical ecological network, natural resources)
- River (port activities, riverfront)
- Gentrification (reinvestment into area)

Threat
- Hill (landslides)
- River floods
- Public investments addressed to high income people (housing)
- Gentrification (displacing the poor)

The project requires to have an integrated environmental/functional/social approach taking in account the superlocal forseen about the Greater Cincinnati Metro Region

GENERAL OBJECTIVES

Mitigation of the separation between land uses (industrial/residential/business) and residential areas (closed neighborhoods) by studying convenient forms of physical connections

Cover the lack of green spaces restoring the brownfields (governmental funds available for the clean up) thinking about the role of Mill Creek and taking in account the flooding return time
swot analysis

Strength

- Amount of business in the CBD
- Physical appearance of the CBD
- Physical accessibility (presence of the highway)
- Historic structures/buildings in OtR and WE
- Cultural institutions (Findlay Market, stadiums, Union Terminal, CAC, Cincinnati Art Museum, Freedom Center, Taft Art Museum, Art Academy, Music Hall)

Weakness

- Segregation between land uses (alternative: mixture of industrial, residential, business)
- Segregation of residential areas (closed neighborhoods)
- Brownfield (pollution, ugly)
- Railroad (pollution, waste of land, underused)
- Majority of population have low income
- Alarming rate of unemployment
- Mill Creek (pollution -> local approach isn't enough)
- Lack of alternative transportation
- Lack of green spaces
- Lack of social mix

Opportunity

- Brownfields (governmental support for clean up)
- Proposed NAFTA-network
- Hills (nodes of hypothetical ecological network, natural resources)
- River (port activities, riverfront)
- Gentrification (reinvestment into area)

Threat

- Hill (landslides)
- River floods
- Public investments addressed to high income people (housing)
- Gentrification (displacing the poor)

concept

spatial identification of areas of intervention

the fundamentals of the project

Tutors: Roberto Cossu | Frank Russell

Massimiliano Campus | Mauro Cossu | Belgin Gumru | Paola Marzorati | Chris Mohr | Tom Tastenhoye.
the masterplan

New community with unusual housing typologies

Man made wetlands

Platform system

Technopole

Stepping stones

Green corridor

River banksporting park
The horizontal backbone gives the basin area a strong axis, contrasting with the vertical structure of the different districts and tying these districts together: the Technopole, wetlands, Mill Creek, railroad area, industrial district, West End, and finally Over-the-Rhine and the CBD.

It uses three landmarks as its focal points: Music Hall in Over-the-Rhine, Union Station in the West End, and the new Technopole landmark in the most western part of the basin.

The platform is structured by a division into several parallel horizontal strips. Being 450ft wide, a totally new urban landscape is created. Flow of people across the platform happens on the roof of the structure, giving a magnificent view of the area.

A tram as part of the inner-city public transportation system allows for a fast crossing of the platform. Cars are not allowed, they use roads parallel to the horizontal backbone to travel between east and west.

Under its roof, the structure houses office and commercial space which can be accessed from the urban landscape above, again because of the wave-like motion of the strips.

The landmark located at the end of the platform in the Mill Creek Technopole is a building for public activities, we proposed to localize a Wetland Research Center leading scientific studies on the humid zone habitat.
Create a **NEW** business and touristic city in the western part of the downtown, enlarging the existing convention center, improving the hospitality (hotels, restaurants,...).

The road system is the extension of the CBD with the combination of the two **GRIDS** present in the downtown area. Where there are the interceptions of the grids we have inserted squares and green public spaces.

The intention is to keep the streets as free from cars as possible by narrowing the streets and providing parking structures outside the center.

**PEDESTRIAN**

Emphasizing the movements and use of new grid typologies leads to a European feel. The biggest buildings are located in the four central squares while in the other squares we have thought of a new loft district in a mixed use: residential, commercial, cultural, gastronomical.
The existing waste treatment plant will be put below the ground level and its action will be fortified by the creation of made wetlands that treat nitrates, bacteria and other contaminants. The creek will be carried to the original natural shape it had until the end of the 19th century, before the industrialization, recreating a meander and some wetlands along its course.

The restoration is necessary because the Mill Creek Valley is the location of some brownfields, typically sites where hazardous or contaminated materials were used, handled, transported, or produced in the past and so the creek water and the ground water are polluted.

The wetlands are also important for the flood control. Three important functions of wetlands are:

1. They are home to wildlife.
2. Wetland plants and soils naturally store and filter nutrients and sediments. Man-made wetlands can even be used to clean wastewater, when properly designed.
3. Wetlands protect our homes from floods. Like sponges, wetlands soak up and slowly release floodwaters. This lowers flood heights and slows the flow of water down rivers and streams. Wetlands also control erosion. Shorelines along rivers, lakes, and streams are protected by wetlands, which hold soil in place, absorb the energy of waves, and buffer strong currents.

The creation of a new community with houses on stilts will bring an unusual housing typology to Cincinnati. The houses on stilts:
- allow water to pass through;
- put a minimum footprint on the natural environment;
- allow the inhabitants to integrate with the natural environment with a minimum impact.

The community will be created with a new environmental sensibility model.
This is basically a **LANDSCAPING** intervention that involves the mouth of the Mill Creek and the river bank.

The project consists in designing **GREEN HILLS** with two functions, one is to prevent the flooding of the Ohio River and the Mill Creek and the other is to create a new amazing landscape and a **BELVEDERE** on the river, creating a new relation between land and water. In the area below the existing CBD and the new part, it’s planned the creation of a river bank **SPORTS** park, with different sport facilities, golf course, soccer/tennis field.
Transforming the Queensgate West in a Technopole, a center of excellency with INNOVATION based companies, research centers, universities. Using green roof and innovative building technologies. The Technopole will give the economic support to the realization of a new PUBLIC park for the existing community in Lower Price Hill, with open spaces, soccer fields and playgrounds located along the course of the Mill Creek. Also the realization of the project will create JOBS for the low income communities, for example planting trees, construction, etc.
With the capping of the already below grade Interstate 75 freeway, a new urban corridor of parks was created. The idea behind the capping and the eventual creation of this park system was the **RECONNECTION** of the West End neighborhood that was lost during the construction of the freeway system and the recreation of the basin’s urban fabric that was lost during the urban renewal programs. This nearly 2 mile long system of parks and a new parkway changes as it winds down the basin area through each distinctive neighborhood.
Redesign the railroad area, to scale down the size of the railroad area, creating a new stocking area for **CONTAINER** (using innovative technologies to put the container one above the other) and decreasing the acoustic pollution caused by the train.
Over-The-Rhine Summit

A special event for community-based organizations to display their visions and work to sustain this neighborhood while learning about the progress of the 2002 Over-The-Rhine Master Plan

September 21, 2006. More than 200 community stakeholders attended this event at Memorial Hall hosted by the University of Cincinnati Community Design Center/ Niehoff Urban Studio, in partnership with the City of Cincinnati Department of Community Development and Planning.

This event was conceived to showcase the OTR-related student design work and community research created by the UC Niehoff Urban Studio 2004-06, "The Over-The-Rhine Project" and to highlight the vision and accomplishments of 39 community-based groups that work in OTR. These organizations spanned many interests including the arts, housing, social services, economic development, real-estate development and others.

The event also provided a public forum on the current implementation of the OTR Comprehensive Plan completed in 2002. Community-based organizations displayed project work in the form of posters and displays. The City of Cincinnati Department of Community Development and Planning mounted a display of 2002 OTR Community Plan goals and implementation outcomes. UC PhD student Eric Lose and the UC Community Design Center exhibited portraits and profiles of 12 visionaries of OTR. More than twenty student design and research projects for OTR were shown at the event.

Participants

Art Academy | Boys and Girls Club | Brewery District | Cincinnati Business Incubator | Cincinnati Center City Development Corporation |
Cincinnati Coalition for the Homeless | Cincinnati Department of Community Planning | Cincinnati Development Fund |
Cincinnati Public Schools | Civic Garden Center | Cornerstone | Corporation for Shared Equity | Drop Inn Center | Emmanuel Community Center |
Ensemble Theater | Findlay Market Corporation | Freestore Foodbank | Friends of Findlay Market | Ink Tank | iRhine | Keep Cincinnati Beautiful |
Know Theater | MADCO/YoOTR | Memorial/Impact | Merchants of Main | Mercy Housing/ Fransiscan Home Development |
Miami Center for Community Development | Over-the-Rhine Chamber of Commerce | Over-the-Rhine Community Council |
Over-the-Rhine Foundation | Over-the-Rhine Community Housing | Peaslee Center | Pendleton Community Council |
School of Creative and Performing Arts | School Talk | Smart Money | Volunteers of America |
A presentation took place featuring the following speakers and a summary of their remarks:

**Melissa Moseby**, OTR Resident, InkTank representative and "Street writer" Poet, read from two of her original works of life in OTR: "The air pulses with life and energy. We are. We are. We are. Our pulse. Our energy. Our community. Ours. Our flow" InkTank is a grassroots collective of writers located in OTR that is committed to connecting people through the power of words, in workshops and writing groups, publications and performance;

**Frank Russell**, Director of the UC Community Design Center and the UC Niehoff Urban Studio presented the work of the Studio and described fruitful collaborations between UC students and the community;

**Sr. Monica McGloin**, former OTR Community Council President, described the experience of collaborating to create the OTR Community Plan in 2002. She noted frustrations related to sustaining the planning process through its final stages and ended by calling for significant and ongoing community based efforts to lead plan implementation;

**Brian Tiffany**, President, OTR Chamber of Commerce discussed the mission of the chamber, its programs and recent collaborations to advance OTR, such as the clean and safe initiatives, the Leads Luncheon for business networking in OTR, Second Sundays on Main, Final Fridays, the annual Midpoint Music Festival and plans for OTR Housing Tour in June of 2007. He also noted other significant positive changes in OTR including the declining crime rate, the construction of the new School for Creative and Performing Arts, and 3CDC's investment in over 100 properties throughout the community;

**Michael Cervay**, Director and **Jennifer Walke**, Planner, City of Cincinnati Department of Community Development and Planning reviewed key goals of the OTR Comprehensive Plan of 2002 such as housing (goals for protection of affordable housing), reduction of blight/abandoned buildings, community beautification (public gardens and co-ops, historic preservation and national designation on the Historic Register) and illustrated measured outcomes of the implementation of the plan to date;
The Art of OTR Possibility
New city manager points to Over-the-Rhine's promise

By Margo Pierce

Enthusiastic applause followed City Manager Milton R. Dohoney Jr.'s remarks Sept. 21 at Memorial Hall after his remarks at the Over-the-Rhine Summit hosted by the University of Cincinnati.

In one of his first public appearances since taking office, Dohoney impressed participants with his focus on what he called the "art of possibility" for Over-the-Rhine.

"When you look at a vacant lot, what do you see? What can you imagine?" Dohoney said. "When you look at a child who may have dirt on her clothes, maybe her hair is unkempt, what are you looking at? Are you looking at an individual society might say will never make it, or are you looking at someone who in the future will be an astronaut?"

"In communities that I have worked in, we have had to deal with those kinds of realities: the art of possibility. In Over-the-Rhine, there are a number of vacant buildings today. I cannot stand here and tell you that all of them should stay, but at least with some of them you can see the art of possibility, what they could be in order to contribute to the fabric of this neighborhood."

You seem to have a strong core of people who are committed to the area — some people live here and some who work here. I would think, if you have disposable income that would enable you to go other places, it signals that you are here by choice.

"I want you to know that I am in Cincinnati, Ohio by choice. I didn't have to come here. I could have gone somewhere else."

‘Never invited’ to inclusion

Dohoney, who moved here from Lexington, asked the audience to be permitted to work with them to advance the vision of Over-the-Rhine. Melissa Mosby, a "street writer" with the Word on the Street Program, reflected that vision in a poem that she read:

The air pulses with life and ease
We are.
We are.
Our pulse.
Our energy.
Our community.
On.
Over.
The Over-the-Rhine Summit was for the Niehoff Urban studio, a class College of Design, Art, Architecture design in various programs. For her class has met in the Emory Center over.

The program moves to a location close to the

Kathy Brookshire (left) and Angie Ratliff of the Cincinnati Development Fund look at a model made by UC in the mid-1980s for Vine Street redevelopment.

Rhine Comprehensive Plan as "wide most inclusive, consensus-building" memory. Russell said some activities have consensus with the goals while others went forward "in denial.

Guests included 60 community-based organizations and highlighted individuals dedicated to furthering the vitality of Over-the-Rhine. During a format presentation to a crowd of more than 100, successes and failures were reviewed.

Sister Monica McGloin, introduced as one of the architects of the comprehensive plan, highlighted what hadn't been done and how the residents have been excluded from the city's activities. She deemed the plan just another.

The interior beauty of Memorial Hall, which hosted the Over-the-Rhine Summit, epitomizes the area's reputation as an architectural treasure trove.
Neihoff Urban Studio 2004-2006

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• Dr. David Edelman, Director School of Planning
• Michaele Pride Wells, Director School of Architecture and Interior Design

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