EXECUTIVE SUMMARY

• Purpose
• Focus
• Methodology
Executive Summary

Purpose

Model Group (MG) is currently undertaking or planning to undertake new construction and rehabilitation of selected structures in various parts of Cincinnati’s Over-the-Rhine (OTR) and Pendleton neighborhoods. Some of those rehabilitations being undertaken by Model Group involve the relocation of U.S. Department of Housing and Urban Development (HUD) Housing Assistance Payments (HAP) contracts to new buildings, consolidating into single but scattered buildings subsidized housing units heretofore in the same buildings as market rate units. The purpose of this study is to gain a baseline measurement of neighborhood conditions in the areas surrounding these developments that may be coupled with future data to develop a time series of neighborhood conditions.

Focus

This study’s geographic extent is drawn around MG properties currently or soon to be under (re)development. These four study areas are:
1. Central Parkway YMCA: one block bound by Central Parkway, Elm Street, and W 12th Street.
2. Pendleton: bound by Liberty Street, Reading Road, and Broadway.
3. Mercer Commons: roughly between Vine Street, Walnut Street, E 12th Street, and E 14th Street, as well as along Walnut Street between E 14th Street and Liberty Street.
4. North Rhine Heights: roughly between Vine Street, Main Street, McMicken Avenue, and Peete Street.

Methodology

The University of Cincinnati Community Design Center (CDC) and Economics Center (EC) developed a suite of analyses that triangulate to provide a more complete and accurate depiction of the study areas than any one analysis could have on its own. These analyses included quantitative techniques, qualitative techniques, statistical analysis, spatial analysis, visual surveys in the field, and a telephone survey. The two overarching analyses cover physical and social conditions, each of which being made up of five components, as outlined below.

Physical Analysis
- Property Conditions
- Streetscape Blight
- Permits and Citations
- Investment in Historic Properties

Social Analysis
- Demographics
- Street Activity
- Social Effects of the Built Environment
- Crime
Introduction

Model Group (MG) is currently undertaking or planning to undertake new construction and rehabilitation of selected structures in various parts of Cincinnati’s Over-the-Rhine (OTR) and Pendleton neighborhoods. Some of those rehabilitations being undertaken by MG involve the relocation of U.S. Department of Housing and Urban Development (HUD) Housing Assistance Payments (HAP) contracts to new buildings, consolidating into single but scattered buildings subsidized housing units heretofore mixed with market rate units in the same buildings.

Because they represent a project-based subsidy, permission by HUD to move HAP contracts is unprecedented. Therefore, it is important to understand the impact on neighborhoods of such a decision. The purpose of this study is to gain a baseline measurement of neighborhood conditions in the areas surrounding these developments that may be coupled with future data to understand how the neighborhood may be impacted by current developments by MG.

Retained by MG, the CDC and EC worked together to develop a suite of analyses that triangulate to provide a more complete and accurate depiction of the study areas than any one analysis could have on its own. These analyses record physical and social phenomena using a variety of methods. This report is accompanied by a digital database that includes spreadsheets, GIS shapefiles, photos, and other digital material that were used in producing the results included in this report. The intention is for these methods to be repeated in the future to produce a time series of neighborhood conditions.

MG approached the CDC and EC about this research project in early 2011. Data collection and analysis started the following summer and was largely completed that fall. This report was submitted to MG in 2012.
3 THE STUDY AREAS

- Central Parkway YMCA
- Pendleton
- Mercer Commons
- North Rhine Heights
The Study Area

Boundaries were drawn for four study areas surrounding MG and other key properties currently or soon to be under (re)development, including areas likely to be impacted by those rehabilitations and developments. Each study area was delineated using slightly different methodologies, reflecting the diverse urban spatial dynamics at play in different areas of OTR. The purpose of this section is to introduce those study areas, outline their boundaries, and describe the methodologies used in drawing those boundaries.

Central Parkway YMCA

The YMCA is located on the northwest corner of Central Parkway and Elm Street in OTR and was built in 1930. MG plans to convert the building into one sixty-five units of senior housing, subsidized by a new allocation of project-based Section 8 vouchers.

Though the property is large and its physical presence imposing, we restricted this study area’s boundaries to the block on which the YMCA resides because of the expected nearby impacts of the new School for the Creative and Performing Arts as well as the redesign of Washington Park. Moving the boundaries further out, it was decided, would skew the results of our analysis by including in our analysis streets and properties that will undoubtedly be impacted more by those developments than by the YMCA.

Pendleton (Abigail Apartments and Rhonda Manor)

Abigail Apartments refers to a discontiguous cluster of rental apartment properties on a block in Pendleton bound by E 12th St, E 13th St, Pendleton St, and Reading Rd that will be renovated by Model Group using LIHTCs and subsidized with HAP contracts. Rhonda Manor refers to another discontiguous cluster of rental apartments in Pendleton. Rhonda Manor properties are located along E 12th St and E 13th St between Broadway and Pendleton St. These properties are currently subsidized using HAP contracts, but will be converted to market rate once those contracts have been moved to the North Rhine Heights properties (see below).

Because Pendleton’s neighborhood boundaries are so clearly defined by Reading Rd, Liberty St, and Broadway, we decided to survey the entire district rather than limiting our analysis to areas closest to Rhonda Manor and Abigail Apartments. This decision is based on the understanding that changes within such a clearly defined and compact neighborhood are likely to affect all properties within those boundaries and that, conversely, changes that occur nearby but outside those boundaries are less likely to affect the properties within.
Mercer Commons

Mercer Commons is located roughly between Vine Street, Walnut Street, E 12th Street, and E 14th Street, as well as along Walnut Street between E 14th Street and Liberty Street. Mercer Commons refers to a substantial assemblage of property between Vine St, Walnut St, E 14th St, and E 13th St in OTR that is currently under redevelopment. The redevelopment is mixed use and will include market rate condominiums, market rate apartments, subsidized apartments, commercial space, and substantial parking facilities. The redevelopment’s immense scale is expected to cause substantial spillover effects for the neighborhood. At the same time, this section of OTR, recently branded as the Gateway Quarter, is home to many other recent and planned renovation and redevelopment projects, which are expected to bear their own spillover effects.

Because this study is concerned only with the effects of the Mercer Commons development, and in order to balance against the possibility of overlapping impacts, we decided to include in our analysis properties within one half or one block of Mercer Commons properties. More specifically, study area boundaries extend out one block in either direction along the same street where more property is contiguously clustered. Study area boundaries extend one half of a block where less property is contiguously clustered. Corner properties at the next cross street were included if a Mercer Commons property was one half a block away or less.

North Rhine Heights

North Rhine Heights is a branding term that refers to a northern section of OTR that is roughly bound by Vine Street, Main Street, McMicken Avenue, and Peete Street. The area is largely residential, though some light industrial and mixed commercial uses exist, particularly along East McMicken Avenue. North of McMicken, the neighborhood follows a hillside such that streets either climb or run along that hill.

Scattered throughout North Rhine Heights are sixteen apartment buildings on eleven properties owned by MG that will soon be renovated for affordable housing. These properties are located in the vicinity of E McMicken Ave between Main St and Vine St; Vine St between E McMicken Ave and Mulberry St; Mulberry St between Vine St and Main St; and Main St between Mulberry St and E McMicken Ave. Financing for those renovations will come in part from the Low Income Housing Tax Credit (LIHTC). Rent subsidy will come from the Housing Assistance Payments (HAP) contracts moved from other MG properties in OTR.

Because the properties are scattered but this section of OTR somewhat cohesive as a district, this study area’s boundaries were drawn using a methodology that blended that of Mercer Commons and Pendleton. More specifically, the northeastern, eastern, southern, western, and northwestern boundaries were drawn using the methodology that we developed for Mercer Commons (described above). The northern boundary was drawn along Peete Street from Lang St to Vine St to include non-NRH properties within the cohesive district, while excluding properties along Mulberry Street. Properties facing Mulberry Street were excluded because this street currently enjoys a character unlike the other streets in this district in terms of current level of investment.
• Physical Analysis
• Social Analysis
Methodology and Analysis

A baseline measurement of neighborhood conditions requires a combination of quantitative and qualitative data collection and analytical methods that triangulate to create a more complete portrait than could be produced by any one method alone. For this report, the EC and CDC studied physical and social conditions from a variety of perspectives.

This study’s various components work together synergistically to provide a robust impression of neighborhood condition and quality of life. They were chosen to complement each other’s strengths and limitations in painting a complete picture of the study areas. While the components of the Physical Analysis combine to paint a picture of physical conditions and levels of physical investment, the components of the Social Analysis complements that picture with an impression of who lives in the study areas, what they are doing, how they are affected by their surroundings, and how they perceive neighborhood conditions. Some of the analyses, especially Social Effects of the Built Environment draw from both physical and social perspectives to provide a framework for understanding how the nature of the built environment in the study areas potentially affects social vitality. The individual analyses outlined in the following pages are listed below.

Physical Analysis
- Property Conditions
- Streetscape Blight
- Permits and Citations
- Investment in Historic Properties
- Investment in Affordable Housing

Social Analysis
- Demographics
- Street Activity
- Social Effects of the Built Environment
- Crime
- Local Perception

Physical Analysis

The CDC and EC studied physical conditions within the study areas to develop an understanding of existing neighborhood conditions. The Physical Analysis considered individual properties and recent or planned investment toward their upkeep as well as entire streetscapes. Historic properties and affordable housing were given special attention. These analytical techniques are complemented by the Social Analysis.

Triangulation

The Property Conditions analysis serves as an essential baseline for apparent physical conditions. The geographic unit is the individual property, usually one building on a single parcel, and as such complements the broader Streetscape Blight analysis. This technique necessarily relies on present apparent conditions and does not take into account when investment has been made or is planned to be made, which is why this technique is complemented by the Permits and Citations analysis.

As a street survey, the building conditions component is limited to what can be observed from the public right-of-way. This excludes building interiors and in many cases roofs, back yards, rear-facing walls, and other elements shielded from view from the sidewalk.

Because the property condition component involves weighing visual analysis of multiple elements of each property, this component involves some level of subjectivity. The photos and notes taken on each property serve as justification for each assigned grade.

Methodology

Individual properties within the study areas were evaluated and graded based on physical conditions. This evaluation included any present appurtenances such as outbuildings, fences, and yards/landscaping. Each property was graded 1, 2, 3, or 4 based on the criteria below, which stresses structural issues over aesthetic issues. The CDC surveyors employed expert analysis in weighing individual indicators of condition in order to assign one grade to each property. Notes and photos were taken for each property, focusing on particular property elements that exemplify the assigned grade. Cases in which one property’s separate buildings or facades were divergent in condition, they were described separately, but graded as a whole. Buildings apparently under rehabilitation were noted as such, but graded in their current state. This survey was completed on foot throughout the study areas between August 15 and August 30, 2011.
Delineating Properties

Because the geographic unit of this analysis is the individual property, we needed to establish the boundaries of individual properties within the study areas. These properties were assigned unique identification numbers and assessed individually for physical condition. The basic unit of properties, as spatially defined them, is the parcel. At the basic level, an individual parcel is considered to be an individual property. However, adjacent parcels under common ownership were grouped together as a single property except for cases in which those individual parcels were evidently divergent in land use and/or appearance. In a small minority of cases, individual parcels were only partially included in the analysis if the following was true: the parcel exists at the edge of a study area and the façade of the property that faces away from the rest of the study area was divergent from its other façade in terms of land use and/or appearance.

For example, adjacent but individually owned parcels were considered to be separate properties. Contiguous vacant lots under single ownership were grouped as a single property, as were contiguous apartment buildings that appeared to be managed and maintained as a single complex. At least one parcel was only partially included within a study area because it was near and fronted the same street as a NRH property, but that the façade facing this street was evidently divergent from its other street-facing façade. In this case, the parcel was overgrown back yard with the appearance of a vacant lot facing one street and a maintained home at a much higher elevation facing another, parallel street.

Properties on each map were assigned unique identification numbers for recording purposes. Because the decision to combine or separate parcels into unique properties was often made on the fly and in the field, some numbers in sequential order were skipped. This resulted in what may appear to be missing properties in our photographic and narrative record of property conditions. The maps in [Appendix X] represent the outlines of properties as they were defined as well as their unique identification numbers.

A Preservation Perspective

The National Trust for Historic Preservation defines historic preservation as “the process of identifying, protecting, and enhancing buildings, places, and objects of historical and cultural significance.” Preservation is not only a means for maintaining tangible links to our shared history and enhancing a community’s distinct sense of place, but is also recognized as a strategy for economic development and environmental sustainability.

Structural preservation is defined by the U.S. Secretary of the Interior’s Standards for Preservation as “the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction.” This perspective informed our note taking and grading when surveying property conditions in the study areas. As such, notes taken on individual properties assume that material repairs are favored over replacement and that proper maintenance favors quality, in-kind materials. Façade conversions (usually from storefront to residential) were noted to have been completed either sensitively or insensitively in regard to a building’s original materials, architectural integrity, and composition. New construction that imitates historic design was noted as an aesthetic dilemma, though this designation did not affect grading.

To properly replicate this study, future surveyors must be trained to some degree in methods of historic preservation and conservation. The survey team for this study included Dugan Murphy of the CDC and Juliana Silveira of the EC.

Dugan Murphy is a graduate of the University of Cincinnati’s Bachelor of Urban Planning program and historic preservation certificate program, both awarded in 2011. The certificate program involved courses in preservation policy, architectural history, and the conservation trades. His work experience includes maintenance and carpentry work involving historic structures, including internships with Maine Preservation, Les Fossell’s Old House Restoration (Maine), and Preservation Timber Framing (Maine), over the summer of 2010. Work completed during these internship experiences involved conservation and restoration work as well as architectural historical research/investigation on a variety of civic and residential structures from the late 18th to early 20th centuries.

Juliana Silveira holds a bachelor’s degree in Architecture and Urbanism, awarded by the Federal University of Pernambuco (Brazil) in 2001. Studio courses in this program included “Intervention on Historic Sites,” along with many other studios within historic districts and seminar classes on architectural history. Silveira practiced architecture and urban planning in Recife, Pernambuco, Brazil, a 17th century city with a large collection of historic buildings and sites protected at local, state and federal levels. The scope of Silveira’s work in Recife included the restoration of two historical buildings from the 17th and 18th centuries, a Cultural and Historic Master Plan for the Cities of Recife (17th century) and Olinda (16th century), and a Study for the Orange Fortress, a 17th century landmark structure.

Definitions

Notes taken in the field on property conditions state the reasoning for each chosen grade. To clarify their usage, some terms used in those notes are defined below. Damage and quantities of weeds or litter are described as minor, moderate, or major/heavy. Structural/aesthetic conditions are described as poor, fair, good, or excellent. The photos included in this section were taken in Corryville on July 13, 2011 and in Over-the-Rhine between August 15 and August 30, 2011.

- Routine maintenance: The minor expense of labor required to maintain the functional and aesthetic order of a building’s component. This may involve fresh paint or minor tightening of joints and fittings.
- Conservation: Sustainment of a structure’s existing form through careful maintenance and repair. Conservation of a building’s components is appropriate when the materials are intact but require some manipulation to return them to their original functional and aesthetic order.
- Restoration: The process of returning an architectural feature to its form and condition as represented by a specified period of time using materials that are as similar as possible to the original materials. Restoration of a building’s elements is necessary when some fabric is damaged beyond repair.
- Replication: The recreation of heavily damaged or destroyed historic fabric using existing materials and/or historical/architectural documents as a guide.
- Rehabilitation: The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.
- **Vacant**: A building’s state of not being occupied by any regular users, whether residential, commercial, or both. Vacant buildings may appear secure and maintained or they may appear abandoned.

- **Appearance of abandonment**: Visible signs that an owner is neglecting her vacant property’s maintenance needs. These signs include insecure openings, damaged or missing windows or doors, and other signs of structural damage.

- **Private yard**: A property that is undeveloped and landscaped and appears to be associated with a developed private property. Private yards are distinct from vacant lots, gardens, and public parks.

- **Vacant lot**: An undeveloped property that bears no sign of regular use. Vacant lots often show overgrown or wild vegetation, litter, illegal dumping, or remnants of demolished buildings, but may also show maintained grass and tree plantings. Vacant lots are distinct from private yards, gardens, public parks, and parking lots.

- **Overgrown**: The state of uncontrolled vegetative growth on vacant lots or undeveloped portions of otherwise developed properties such as garden beds. Predominant weeds and tall grass are common signs of overgrown vegetation. Overgrown vegetation exhibits an unattractive aesthetic appearance and indicates lack of property maintenance, as distinct from wild growth.

- **Wild growth**: Vegetative growth on vacant lots or undeveloped portions of otherwise developed properties that is not maintained through human intervention, but nevertheless exhibits a neutral or attractive aesthetic appearance, as distinct from overgrown vegetation.

- **Overgrown**: The state of uncontrolled vegetative growth on vacant lots or undeveloped portions of otherwise developed properties such as garden beds. Predominant weeds and tall grass are common signs of overgrown vegetation. Overgrown vegetation exhibits an unattractive aesthetic appearance and indicates lack of property maintenance, as distinct from wild growth.
• **Litter**: Refuse composed of manufactured products that might be collected in a household size garbage bag. Common litter items include food wrappers and beverage containers, as distinct from illegal dumping.

• **Illegal dumping**: Refuse composed of manufactured products that are too large to be collected in a household size garbage bag. Common items include construction/demolition debris, furniture, and tires, as distinct from litter.

• **New construction**: A building or group of buildings that appears to have been built within the last twenty years.

• **Paint deterioration**: Exterior paint exhibits signs of progressive decay, such as peeling or flaking, which indicates lack of property maintenance and renders an unattractive aesthetic appearance.

• **Paint patina**: Exterior paint exhibits signs of stabilized wear from age that renders an attractive aesthetic appearance, as distinct from deteriorated paint. Exterior paint may be allowed to reach a stabilized state of patina when covering masonry and other surfaces that do not require a coat of paint to preserve structural integrity. Wooden elements normally require protective paint.

• **Brick spalling**: A form of deterioration characterized by the detachment of a brick's front portion due to restraint against expansion, usually caused by improper use of Portland cement in place of traditional lime-based mortar in repointing or constructing a brick masonry wall.

• **Illegal dumping**: Refuse composed of manufactured products that are too large to be collected in a household size garbage bag. Common items include construction/demolition debris, furniture, and tires, as distinct from litter.

• **Masonry cracking**: Gaps in bricks and/or masonry joints that represent breaks usually caused by uneven settling in a masonry wall. Cracks usually appear vertically or diagonally.
- **Crumbling masonry:** The state of a masonry wall in which its structural integrity is compromised by bricks missing and/or falling out of place due to cracks and deteriorated mortar.

- **Intact:** The state of a building’s feature displaying all or nearly all of its original material, such that it is already in good condition or in need of routine maintenance, conservation, or minor restoration. Features of a building that require major restoration or replication are missing some of their original material and thus not intact.

- **Sensitive:** Describes conversion or repair work that was completed with respect to a building or portion of a building’s original materials, architectural integrity, and composition.

- **Insensitive:** Describes conversion or repair work that was completed without respect to a building or portion of a building’s original materials, architectural integrity, and composition. Insensitive conversions and repairs involve poor quality materials and compositional disruption.

- **Broke

- **Broken bricks:** Bricks that have been split by (usually vertical) cracks, causing portions of those bricks to become loose or fall out of the masonry wall.

- **Deteriorated bricks:** Bricks in a masonry wall that show signs of smooth or bumpy weathering, usually the result of water damage. Deteriorated bricks are not necessarily cracked, broken, or out of place.

- **Noncontributing:** Describes building and infrastructure design that detracts from the otherwise established built character of a block or neighborhood. Examples include visually unmitigated cellular communication towers and large expanses of non-fenestrated wall.

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Vegetation and Water Penetration

Special attention was paid in the notes for this analysis to opportunities for water penetration because of its strongly adverse effect on structures. Common examples include broken window panes, missing or partially demolished windows, or windows boarded from the inside. Damaged or missing downspouts were also noted because of the deteriorating effect of storm water when not shed away from a building's exterior surfaces.

Vegetation, such as weeds and vines, bear a slow but steady deteriorative effect on a building's exterior surfaces and structural elements. As such, vegetation was documented when present.

Material Choices

Material choices generally did not affect property condition grading if it appeared that the materials were installed properly and in good condition. However, insensitively replaced (or removed) cornices, windows, siding, doors, lintels, and other ornamentation were noted, if only because of the aesthetic degradation that such replacements may have caused. Replacement doors and windows often pose a problem for historic structures because their size and/or material composition may not contribute to the architectural integrity of the structures into which they have been installed. Vinyl windows are an especially prevalent problem because their size and color often do not match the windows they are replacing.

Grading Criteria

1. Good condition
   - Windows and doors secure and in good repair
   - Masonry or exterior sheathing in good repair; paint (if present) not peeling
   - Historic ornamentation (cornice, lintels, cast iron storefront, &c.) in good repair
   - Fence and/or other property elements are in good repair
   - Plantings are maintained
   - Undeveloped land is maintained and utilized for a useful purpose such as a garden or recreational yard space

2. Wear, but no structural defects
   - Some windows or doors require maintenance
   - Peeling paint or other minor-moderate sheathing wear
   - Minor masonry spalling or cracking
   - Rusted or damaged downspouts or gutters
   - Architectural ornamentation requires minor maintenance
   - Fence and/or other property elements require maintenance
   - Plantings are somewhat overgrown or dying
   - Undeveloped land is maintained, but not utilized for a useful purpose
3. Structural defects / considerable wear
- Moderate masonry spalling or cracking
- Areas of missing sheathing
- Windows or doors in need of repair; broken panes
- Water damage from damaged or missing downspouts or gutters
- Historic ornamentation requires moderate restoration / partial replacement
- Fence and/or other property elements are largely broken or missing
- Plantings are largely overgrown or dying
- Undeveloped land is overgrown or with litter present

4. Major structural defects
- Heavily damaged windows or doors
- Openings to weather: roof damage, crumbling masonry, missing doors and windows
- Sections of historic ornamentation separating, crumbling, or missing
- Compromised foundation
- Fence and/or other property elements are in need of replacement
- Plantings appear to have been given no attention
- Undeveloped land with junk cars, illegal dumping, or heavy litter
Results

This survey, completed on foot by Dugan Murphy and Juliana Silveira between August 15 and August 30, 2011, produced a detailed inventory of all properties within the study areas. Each property was photographed at least once from the public right-of-way. Additional photos provide side views, rear views, and detail close-ups, when applicable. Those photos have been submitted in the form of a digital database, catalogued by unique property identification number.

Also included with this report is a digital spreadsheet of qualifying notes attached to each property grade. These notes reflect the multiple factors included in making each property condition grade decision. This spreadsheet’s printed form is included in (Appendix X).

Property condition grades were mapped throughout the study areas. The spatial patterns reflect recent redevelopment efforts on Vine Street, a pocket of maintained historic homes on upper Broadway in Pendleton, and challenging conditions throughout other parts of Pendleton and North Rhine Heights.
**Streetscape Blight Analysis**

**Triangulation**

Because blight includes elements not necessarily associated with individual private properties, blight was measured at the block level. Blight is an important component to this study because it considers indicators of the condition and quality of life in a neighborhood that are not associated with individual properties (Property Conditions Analysis) and not necessarily recorded by public permits or citations (Permits and Citations Analysis). In a basic sense, the Streetscape Blight Analysis is the Property Conditions Analysis applied to entire streetscapes and segments of public rights-of-way. This visual condition of a neighborhood is an important part of how it is perceived and utilized by visitors and residents. Because the blight component involves weighing visual analysis of multiple elements on each block, this component involves some level of subjectivity.

**Methodology**

CDC employees surveyed the study areas for indicators of blight, assigning a grade of 1, 2, 3, or 4 to each block face using the criteria below. A block face was defined as one side of a street segment between two intersecting streets. The public right-of-way that a street segment faces was also considered in its grading.

Blocks are defined as street segments rather than polygons of parcels surrounded by public right-of-ways because neighborhoods are experienced on the street, not in the middle of the block polygon. Furthermore, properties tend to be impacted more by their neighbors adjacent and across on the same street than by properties abutting theirs but facing a different street. Finally, a blight study was decided to include the public right-of-way because it is a legitimate component of the urban fabric that contributes toward a sense of blight or lack thereof.

The CDC surveyors employed expert analysis in weighing individual indicators of blight in order to assign one grade to each block face. Notes and photos were taken for each block face, focusing on both the entire streetscape as well as particular signs of blight or lack thereof that exemplify the assigned grade. This survey was completed on foot throughout the study areas between August 15 and August 30, 2011.

The indicators of blight and block face grading criteria were partially derived from the Keep Cincinnati Beautiful Blight Index, included in [Appendix X].

**Viewsheds**

When properties on a block face were undeveloped or otherwise open, viewsheds from a block face’s right-of-way were included in grading. Viewsheds include areas not within, but readily observed from the public right-of-way.

**Which Block Faces Were Included**

If a study area boundary crosses a block face but at least one property within the boundary is primarily oriented toward that face, then the entire block face was included in the study. Properties located on street corners that are equally oriented toward two block faces were considered sufficient reason to survey both block faces.

**Indicators of Blight**

**Minor indicators**
- Litter
- Overgrown lawns or landscaping
- Few, isolated spots of graffiti/tagging
- Buildings in need of routine maintenance
- Cracked sidewalk
- Potholes in roadway

**Moderate indicators**
- Illegal dumping
- Vacant but properly mothballed buildings
- Periodic spots of graffiti/tagging
- Some examples of structural defects on buildings
- Junk cars
- Defective street furniture: street lamps, benches, etc.

**Major indicators**
- Vacant buildings open to the elements
- Graffiti/tagging is prevalent
- Buildings with major structural defects that cannot be restored
- Public infrastructure appears abandoned

**Grading Criteria**

1. No blight
   - Virtually no blight can be observed on private, public property, or in the right-of-way.
   - Indicators of blight are minor, appear isolated, and cannot be readily observed.
   - The block face has a generally well-kept appearance.

2. Minor blight
   - Minimal blight is present.
   - Indicators of blight appear isolated.
   - The block face has a generally well-kept appearance.

3. Moderate blight
   - The block face has a generally well-kept appearance.
   - Indicators of blight appear more frequent and severe.
   - The block face has a generally well-kept appearance.

4. Major blight
   - The block face has a generally well-kept appearance.
   - Indicators of blight are severe and frequent.
   - The block face has a generally well-kept appearance.

**Attractive public plantings, even sidewalk free of weeds**

**Well maintained building appearance, even sidewalk with no weeds**
2. Slightly blighted

- Minor, isolated indicators of blight can be easily observed.
- One or two moderate indicators can be observed, but are isolated within an otherwise not blighted block face.
- Indicators of blight appear temporary and/or may be removed without organized effort.
- Visible indicators of blight do not characterize the block face.

3. Blighted

- Indicators of blight grab the eye and characterize the block face.
- Multiple moderate indicators of blight can be easily observed.
- One or two major indicators of blight can be observed, but are isolated within an otherwise very slightly blighted block face.
- Removing blight from this block face may require an organized effort and/or outside assistance.

4. Extremely blighted

- Major and/or moderate indicators of blight grab the eye and characterize the block face.
- Multiple major indicators of blight can be easily observed.
- Removing blight from this block face clearly would require an organized effort and outside assistance.

Results

This survey, completed on foot by Dugan Murphy and Juliana Silveira between August 15 and August 30, 2011, produced a detailed inventory of streetscape blight levels throughout the study areas. Each block face was photographed multiple times from the public right-of-way to include the breadth of a block face’s structures, sidewalk, and details, focusing on outstanding grading indicators. Those photos have been submitted in the form of a digital database, catalogued by unique block face identification number. Of the 42,196 feet (about eight miles) of streetscapes surveyed, eighteen percent contained no blight, forty-eight percent were slightly blighted, thirty-one percent were blighted, and four percent were extremely blighted.

Also included with this report is a digital spreadsheet of qualifying notes attached to each streetscape blight grade. These notes reflect the multiple factors included in making each grade decision. This spreadsheet’s printed form is included in [Appendix X].

Streetscape blight grades were mapped throughout the study areas. The spatial patterns appear to correlate with property conditions.
Permits and Citations Analysis

Triangulation

The UC Community Design Center analyzed permits and citations recently issued by the City of Cincinnati in order to measure recent and planned investment in the study areas as well as to measure current levels of disinvestment. The CDC also analyzed permits and citations for the purpose of understanding blight in the study areas. By using permits and citations as a proxy for investment, disinvestment, and blight, this analysis complements the Property Conditions and Streetscape Blight analyses, which rely on visual analysis. One strength of this methodology is its repeatability. Assuming that no major changes occur in permitting and citations issued by the city, this analysis may be repeated at a future date to quantifiably measure neighborhood improvement or decline.

This analysis relies on permits and citations to measure investment and disinvestment, so this methodology does not include unpermitted investment activity. Likewise, indicators that cannot or may not be cited by the city are not included. An example problem scenario is an area that gets cited for public hazards, dumping, or pests more than another not because those indicators occur more often, but because they are reported more often. Conversely, a large property may receive a substantial material investment that must be permitted only once while many other smaller properties may receive multiple permits for marginal improvements. This latter scenario would skew the results in favor of the smaller investments due to the quantity of improvements.

Methodology

The CDC collected from CAGIS a GIS shapefile containing data relating to permits and citations issued by the City of Cincinnati. Permits and citations issued between 2008 and 2010 were considered and were divided into four categories for this analysis: major indicators of investment, minor indicators of investment, major indicators of disinvestment, and minor indicators of disinvestment. Examples are given below:

<table>
<thead>
<tr>
<th>Included Permits and Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators of Investment</td>
</tr>
<tr>
<td>MAJOR</td>
</tr>
<tr>
<td>New construction</td>
</tr>
<tr>
<td>Building repair</td>
</tr>
<tr>
<td>Certificates of Appropriateness</td>
</tr>
<tr>
<td>Building additions</td>
</tr>
<tr>
<td>Building rehabilitation</td>
</tr>
<tr>
<td>MINOR</td>
</tr>
<tr>
<td>Mechanical repair/upgrades</td>
</tr>
<tr>
<td>Plumbing repair/upgrades</td>
</tr>
<tr>
<td>Retaining wall repair and</td>
</tr>
<tr>
<td>construction</td>
</tr>
<tr>
<td>New swimming pools</td>
</tr>
<tr>
<td>Graffiti removal</td>
</tr>
<tr>
<td>New Signage</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
For this analysis, the CDC used a GIS shapefile provided by CAGIS called cityactivities.shp. To prepare the data for analysis, the CDC removed all permits and citations from the file that were issued before 2008 or after 2010. To determine which permits and citations were major or minor indicators of investment or disinvestment, we looked at the TYPE_TITLE and STYPEDESC fields, which indicate the permit/citation titles and descriptions of those permits/citations, respectively. Values in these two fields were classified as major indicators of investment, minor indicators of investment, major indicators of disinvestment, minor indicators of disinvestment, or irrelevant.

Selections were made from TYPE_TITLE when all permits/citations under that title could be classified the same way. The CDC selected features from the STYPEDESC field when a permit/citation title included features that could be classified differently, based on their descriptions. For example, the title “Building Combo” included permits of different descriptions, but they could all be classified as major indicators of investment because all permits under this title involved new construction. Conversely, the title “COMMUNITY SERVICE REQUEST” included permits and citations of diverse descriptions such as “Bed bugs, req for into,” “Billing disputes,” and “Graffiti, removal.” Thus, values from this permit title category were selected by their descriptions. The table in [Appendix X] lists which titles and descriptions were classified as investment and disinvestment.

Equalization of (Dis)Investment Score

The score equalization method chosen for this analysis involved dividing aggregate investment and disinvestment scores for each block face by the number of properties associated with each block face. Equalizing instead by the linear length of each block face would have produced different results. We feel confident in the equalization method chosen because permits are assigned by property, not by linear street frontage. This method may, however, over represent permits and citations assigned to smaller properties because multiple permits to multiple smaller properties may account for the same street frontage occupied by one building which may be experiencing the same indicators of investment or disinvestment as one permit or citation, which would in this case account for a spatially larger scale.

Demolition Permits

Demolition permits were intentionally omitted from this analysis because of their ambiguous meaning in regards to indicating investment versus disinvestment. Building demolitions often occur as a precursor to new development, and as such could indicate investment. However, buildings are often demolished for nuisance abatement purposes and the property not redeveloped. This form of blight indicates disinvestment. Demolition permits were omitted because of this ambiguity.

Pests

Pests such as mice, rats, and roaches were classified as minor indicators of disinvestment whereas bed bugs were omitted from the analysis because they have become so prevalent as to be particularly associated neither with areas experiencing investment nor areas experiencing disinvestment.

Results

The permits and citations from the table above were geographically located on maps to reveal spatial concentrations of investment and disinvestment within the study areas. Major and minor indicators were given separate scores to facilitate quantitative comparison.

In the first analysis, permits and citations were displayed using different colors to reflect the four (dis)investment categories. This analysis produced a simple dot distribution map that renders a basic understanding of the distribution of investment and disinvestment indicators.

For the second level of analysis, indicators of investment and disinvestment were represented separately and aggregated by block face. Indicators were assigned to block faces based on their address. Properties that abut more than one block face were assigned to the block face that the property’s primary façade faces. Major indicators were given a score of two and minor indicators a score of one. The total investment and disinvestment scores of each block face were divided by the number of properties assigned to that block face and the resultant equalized score symbolized by color gradient.
**Permits and Citations: Indicators of Investment**

*Model Group Neighborhood Impact Study*

| CAGIS | Permit/citation score per property

---

**Legend**

<table>
<thead>
<tr>
<th>Level of Investment</th>
<th>Study Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01 - 2.00</td>
<td></td>
</tr>
<tr>
<td>2.01 - 5.00</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>0.01- 1.00</td>
<td></td>
</tr>
<tr>
<td>5.01 - 20.00</td>
<td></td>
</tr>
</tbody>
</table>

---

**Investment in Historic Properties Analysis**

**Triangulation**

To achieve a baseline measure of recent and planned private investment in historic properties in the study areas, the UC Community Design Center analyzed permits recently issued by the City of Cincinnati for additions, repairs, alterations, and signage improvements to historic properties within the study areas. This analysis is related to the Permits and Citations Analysis also completed by the CDC in that it focuses on investments made in historic structures that have met approval by the City of Cincinnati Historic Conservation Board or office staff. By using permits as a proxy for investment, this analysis complements the Property Conditions and Streetscape Blight analyses, which rely on visual analysis.

One strength of this methodology is its repeatability. Assuming that no major changes occur in permits issued by the city, this analysis may be repeated at a future date to measure the increase or decline in the number of approved investments in historic structures.

This analysis relies on permits to measure sensitive investment made in historic structures, so this methodology does not include unpermitted investment activity. Conversely, a large property may receive a substantial material investment that requires approval only once while many other smaller properties may receive multiple permits for marginal improvements. This latter scenario would skew the results in favor of the smaller investments due to the quantity of improvements.

**Methodology**

The CDC collected from CAGIS a GIS shapefile containing data relating to permits issued by the City of Cincinnati. For this analysis, only permits issued between 2008 and 2010 for additions, repairs, alterations, and signage attached to buildings built in 1960 or earlier were considered. A complete list of those permit names and descriptions are listed in [Appendix X]. Also included in [Appendix X] are conservation guidelines from the City of Cincinnati Historic Conservation Office, including guidelines for additions, repairs, alterations, and signage within the Over-the-Rhine Historic District.

For this analysis, the CDC used a GIS shapefile provided by CAGIS called cityeactivities.shp. To prepare the data for analysis, the CDC removed all permits and citations from the file that were issued before 2008 or after 2010. To determine which permits and citations were relevant, we looked at the TYPE_TITLE and STYPEDESC fields, which indicate the permit titles and descriptions of those permits, respectively.

Selections were made from TYPE_TITLE when all permits under that title were relevant. The CDC selected features from the STYPEDESC field when a permit title included features that could be classified differently, based on their descriptions. For example, the title "Building Repair 2007" included permits of different descriptions, but they were all considered relevant because all permits under this title involved repair of existing structures. The description field classified the permits as attached to commercial, residential, etc. Conversely, the title "Building Combo 2009" includes both new buildings as well as additions to existing structures; thus, values were selected by their descriptions.
Buildings Built in 1960 or Earlier

A construction date of 1960 or earlier was chosen as the single criterion for a structure to be deemed historic for the purposes of this analysis because it reflects the most objective criterion of the U.S. Secretary of the Interior's evaluation criteria for evaluation historic properties. According to those criteria, "Ordinarily...properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register." Because the criteria involves subjective judgment and weighting of various property aspects by a professional, state-level board, utilizing it in its entirety for individual buildings would be outside the scope of this analysis.

Certificates of Occupancy

Certificates of occupancy (listed as such under the title field) were intentionally removed from this analysis because the description field for this permit type does not distinguish between those issued for alterations and those issued for new construction. This decision was also made under the assumption that any alteration work completed that would require a certificate of occupancy would also be issued a building combo permit captured in this analysis.

Mechanical, Electrical, and Plumbing Permits

All mechanical, electrical, and plumbing permits were also removed from this analysis under the assumption that they would not alter a building’s exterior appearance, and thus require review by the Historic Conservation Board or office staff.

Results

In the first analysis, all permits that met the criteria above were plotted on a map of the study areas. The resultant analysis is captured in the map above. In the second analysis, permits were divided into their basic categories: repairs, alterations, additions, and signs. The results of this analysis are displayed in the map below.
**Investment in Affordable Housing Analysis**

This analysis was not completed because a list of affordable housing properties within the study areas was never provided.

**Triangulation**

The Investment in Affordable Housing analysis measured investment recently made in affordable housing within the study areas. This measurement was achieved by comparing known affordable housing properties with investments recently permitted by the City of Cincinnati. A list of affordable housing was generated by contacting OTRCH, CMHA, MG, ... and was spatially compared to indicators of investment drawn out of the Permits and Citations analysis. This analysis is a sort of subset of the Permits and Citations analysis by drawing out investment made to designated affordable housing properties.

[Text about strengths and weaknesses goes here.]

**Methodology**

[Text goes here.]

**Results**

[Text goes here.]
**Social Analysis**

The Social Analysis component was designed to complement the otherwise physical analysis of neighborhood conditions in this report. This component includes five subcomponents: Demographics, Street Activity, Social Effects of the Built Environment, Crime, and Local Perception. The Demographics Analysis paints a picture of who lives in the study areas and the Street Activity Analysis shows where they are in the neighborhood, in terms of pedestrian activity. The Social Effects Analysis accounts for the distribution of properties and public infrastructure elements that potentially contribute toward or detract from social vitality, thus helping to explain the results of the Street Activity Analysis. The Crime Analysis is combined with the Local Perception Analysis to juxtapose a quantifiable measure of safety against perceptions of safety, among other neighborhood conditions. The Local Perceptions Analysis utilized a telephone survey to measure how those conditions are perceived by neighborhood users.

**Demographics Analysis**

This section is a placeholder for the Demographics Analysis from the EC.

**Triangulation**

The Demographics Analysis provides a statistical overview of who lives in the study area, focusing on traditional demographic categories utilized by the U.S. Census Bureau: category, category, category. Along with the Crime Analysis, the Demographics Analysis utilizes third party statistics to complement the subjective, qualitative data recorded in the Local Perception and Social Effects of the Built Environment Analyses. The third party demographics data also complements the CDC-recorded, quantitative data recorded in the Street Activity Analysis.

The Demographics Analysis utilizes a standard method that may be easily repeated with updated census data at a future date to show demographic changes in the study areas.

**Methodology**

[Text goes here].

**Results**

[Text goes here].
Street Activity Analysis

Triangulation

The Street Activity Analysis was completed to gain a sense of the quantity and geography of pedestrian activity in the study areas. Pedestrians were counted in all sections of the study areas and their geographic distribution recorded in selected sections. This analysis of pedestrian street activity was designed to offer a spatial component to the study of neighborhood residents and users to complement the other subcomponents of the Social Analysis. This analysis uses objective, repeatable methods to produce quantifiable data that can be compared to updated results in the future.

Methodology

This field survey involved counting pedestrians, recording where they were on the block, and recording their activity. To geographically organize the data and to facilitate analysis, street segments in the study areas were grouped and divided into analysis zones based on those streets' length and character. Maps of these analysis zones are located in [Appendix X] and the reasoning behind these groupings and divisions is detailed in [Appendix X].

CDC surveyors visited each analysis zone three times between September 12th and September 18th, 2011: a weekday at lunch time, a weekday in the early evening, and a Sunday in mid afternoon. Specifically, each zone was surveyed between 11:00 AM and 12:30 PM as well as between 5:00 PM and 6:30 PM on either Monday, September 12 or Tuesday, September 13. Each zone was visited a third time between 1:00 PM and 3:00 PM on Sunday, September 18. These time windows were chosen when as many people as possible might be present on the street, given diversity in residents' lifestyles. These times took into account typical schedules for work, church, school activity, and meals. Further discussion of the methodological options considered in designing this field survey is outlined in [Appendix X].

Pedestrians were counted in all zones. In selected detailed analysis zones, pedestrian locations and activity were recorded. Simple pedestrian counts were completed by windshield survey, each zone taking about one to two minutes to complete in a moving vehicle with one driver and one dedicated observer. The completed pedestrian count forms, including notes about the weather conditions, are included in [Appendix X].

Detailed analysis zones were surveyed using a method that involved one surveyor walking through the zone while the other surveyor waited in the car. The walking surveyor communicated discretely via cellular phone how many pedestrians were where and in what activity they were engaged. The surveyor in the car located those pedestrians on a map and recorded their activity on a printed form. Walking through a detailed analysis zone took about five minutes.

Methodological Precedents

In order to establish an understanding of precedents in studying pedestrian location and activity in the field, University of Cincinnati Bachelor of Urban planning student Craig Moyer completed a literature review on this topic. The results of this literature were used to inform the methodology used for the Street Activity Analysis. Craig Moyer’s final report and summary PowerPoint presentation are included in [Appendix X].

Who Is Counted as Present

Pedestrians were counted as present in a zone if they were physically within its boundaries during the time it took surveyors to complete surveying a zone. As such, some pedestrians were counted twice if they were present in one zone at the time that zone was being surveyed and present in another zone at the time that one was being surveyed. People sitting in automobiles parked in the public right-of-way were counted as pedestrians under the assumption that they had recently been or will soon be present outside their automobiles.

Applying Scores to Pedestrian Activity

In this methodology’s original design, different pedestrian activities were given positive, neutral, or negative scores to reflect their assumed contribution to, neutrality toward, or detraction from healthy street activity. Scoring was left out of the final analysis because this level of analysis was deemed too nuanced to produce useful results. These scoring criteria are included in [Appendix X] and the completed field survey forms in [Appendix X].

Constraints

Due to time and resource limitations, the study areas were surveyed only three times. If the Street Activity Analysis had been the focus of this project, the field surveys of pedestrian location may have been repeated a greater number of times to provide more robust results. Future surveyors may consider this option when repeating this project’s methods.

Results

The first analysis produced a series of three maps that display the number of pedestrians observed per 100 feet in each analysis zone for each of the three survey time periods. It was decided to equalize the pedestrian count by analysis zone length in order to account for their variable lengths.

For the second analysis, pedestrian counts for all three time periods were combined to produce one map that displayed the average pedestrian count in each analysis zone for all three time periods.

In addition to counting pedestrians in all analysis zones, surveyors also documented proximate pedestrian location within selected analysis zones. Pedestrians identified during the three separate visits were located on one map and symbolized by color so that the reader might identify similarities and differences between pedestrian location at different times of the week.
Pedestrian Location: Pendleton

Legend
- Pedestrian: Weekend 1-3PM
- Pedestrian: Weekday 5-6:30PM
- Pedestrian: Weekday 11AM-1PM

* CAGIS
* Field survey

Pedestrian Location: Mercer Commons

Legend
- Pedestrian: Weekend 1-3PM
- Pedestrian: Weekday 5-6:30PM
- Pedestrian: Weekday 11AM-1PM

* CAGIS
* Field survey

Model Group Neighborhood Impact Study
Draft 2.17.12
To gain an understanding of how elements of the built environment affect urban social vitality, the CDC mapped and analyzed these elements, drawing out specific observations of the built environment that contribute toward or detract from livability of the public realm in the study areas. This analysis contributes to an understanding of the current social conditions of the public realm in the study areas by recognizing how the built environment affects the social realm, apart from its inherent value in terms of condition or level of blight. It also complements the street activity survey by recognizing the connection between pedestrian activity and the built environment within which that activity takes place.

This analysis is subjective and relies heavily on assumptions about the relationship between the built environment and quality of life. However, those assumptions have been clearly stated, thus making this analysis method easily repeatable in the future. It complements the quantitative, statistical methods of the Crime and Demographics Analyses. The Social Effects Analysis may also help explain the quantified social phenomena recorded in the Street Activity Analysis by analyzing the same geography with a different approach. This analysis also complements the Local Perception Analysis by adding a detailed geographic component that draws from the physical environment to help explain perspectives of neighborhood social conditions.

Methodology

The following elements were mapped across all study areas:

- Vacant lots
- Buildings with graffiti
- Buildings with boarded openings
- Buildings with broken or missing windows
- Vacant buildings
- Abandoned buildings (see building condition criteria for definition)
- Parking lots
- Occupied buildings
- Gardens
- Parks
- Private yard space (see building condition criteria for definition)
- Street trees
Boarded Windows and Doors

Legend
- Study Areas
- Buildings with Boarded Openings

Broken and Missing Windows

Legend
- Study Areas
- Buildings with Broken or Missing Windows

*CAGIS
*Field survey

Model Group Neighborhood Impact Study
Draft 2.22.12
In detailed analysis zones (see street activity survey methodology), the CDC broke down the occupied buildings category into land use typologies relevant to social vitality. When assigning land use typologies to occupied buildings, only the first floor of the façade facing the analysis zone was considered.

Scores were assigned to these land uses as well as elements of the built environment that were mapped for all study areas. Scores associated with properties were adjusted to account for the property’s street frontage and all added to calculate two total scores: a positive and negative score for each detailed analysis zone. It was decided not to combine positive and negative scores under the reasoning that elements of the built environment that contribute to vitality do not sociologically cancel out those that detract. See the table below for a comprehensive list of categories and their scores.

For cases in which a property faces more than one analysis zone, that property’s score was assigned to the zone that its primary façade faces.

Each property’s score was multiplied by its width, in feet, in respect to the analysis zone, to equalize for the property’s linear size along the length of the analysis zone. The equalized positive and negative scores were totaled for each analysis zone. These equalized totals were each divided by the total number of feet of property widths for the analysis zone. These resultant calculations were considered to be the final positive and negative scores for each analysis zone. A score of 1.6 is considered desirable because it would reflect a block with ten percent highly contributive land uses (score 3), fifty percent fairly contributive (score 2), thirty percent somewhat contributive (score 1), and ten percent that neither contributed toward nor detracted from social vitality (score 0).

**Results**

Mapping the properties by their assumed contribution toward, neutrality toward, or detraction from social vitality produced one map for all study areas and three additional maps for more detailed displays of the analysis zones. The map of all study areas reveals patterns over all analysis zones while the detailed maps better display the boundaries of individual properties.
Social Effects of the Built Environment: Pendleton
Model Group Neighborhood Impact Study

Legend
Street Vitality Score | -3 | -2 | 0 | 1 | 2 | Analysis Zones
Study Areas
Composite scores for each zone noted in bold

Social Effects of the Built Environment: Mercer Commons
Model Group Neighborhood Impact Study

Legend
Street Vitality Score | -3 | -2 | 0 | 1 | 2 | Analysis Zones
Study Areas
Composite scores for each zone noted in bold
Crime Analysis

Triangulation

To measure public safety in the study areas, the UC Community Design Center analyzed crime documented in the study areas. Along with the Demographics Analysis, the Crime Analysis is a quantitative study based on third party statistics and is designed to complement the subjective, qualitative data recorded in the Local Perception and Social Effects of the Built Environment Analyses. Because they all utilize a spatial dimension, the Crime, Street Activity, and Social Effects Analyses triangulate to explain the distinct social phenomena on which they individually focus.

One strength of this methodology is its repeatability. Assuming that the Cincinnati Police Department (CPD) continues to record crime as they do now and to make their data available, this analysis may be repeated at a future date to measure increase or decline in different types of crime. Another important measure of neighborhood conditions, however, is the perception of safety. The Local Perception Analysis is designed to measure this perception.

Methodology

The CDC collected from CPD a spreadsheet of all offenses documented within the City of Cincinnati during the year 2010. All offenses recorded outside the neighborhoods of Over-the-Rhine and Pendleton were excluded from the analysis. The resultant table contains fifty distinct offense values. Those offenses were grouped into three categories: violent offenses, property offenses, and public disorder. The table below illustrates those groupings:

<table>
<thead>
<tr>
<th>Violent Offenses</th>
<th>Property Offenses</th>
<th>Public Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abduction</td>
<td>Breaking and Entering</td>
<td>Disrupting Public Service</td>
</tr>
<tr>
<td>Aggravated Assault</td>
<td>Burglary</td>
<td>Improperly Discharging Firearm</td>
</tr>
<tr>
<td>Aggravated Burglary</td>
<td>Criminal Damaging/Endangering</td>
<td>Inducing Panic</td>
</tr>
<tr>
<td>Aggravated Menacing</td>
<td>Criminal Mischief</td>
<td>Interference with Custody</td>
</tr>
<tr>
<td>Aggravated Murder</td>
<td>Grand Theft</td>
<td>Intimidation</td>
</tr>
<tr>
<td>Aggravated Robbery</td>
<td>Misuse of Credit Card</td>
<td>Making False Alarms</td>
</tr>
<tr>
<td>Assault</td>
<td>Pett Theft</td>
<td>Minacing</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>Receiving Stolen Property</td>
<td>Personating an Officer</td>
</tr>
<tr>
<td>Domestic Violence Felony</td>
<td>Tampering with Coin Machines</td>
<td>Public Indecency</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>Theft</td>
<td>Taking the Identity of Another</td>
</tr>
<tr>
<td>Misdemeanor</td>
<td>Theft-License Plate(i)</td>
<td>Violate Protection</td>
</tr>
<tr>
<td>Endangering Children</td>
<td></td>
<td>Order/Consent Agreement</td>
</tr>
<tr>
<td>Felonious Assault</td>
<td></td>
<td>Voyeurism</td>
</tr>
<tr>
<td>Felonious Assault - Victim Seriously Harmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Sexual Imposition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidnapping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robbery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Imposition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone Harassment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unauthorized Use Motor Veh- Interstate 48 Hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unauthorized Use of Motor Vehicle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unauthorized Use of Property Vandalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vandalism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle Theft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VEHICULAR VANDALISM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Offense names appear in the table as they do in the spreadsheet collected from CPD
Once the offenses were grouped into the three categories and values from other Cincinnati neighborhoods eliminated, those remaining were geographically located on a map using GIS geocoding. Finally, all crimes that occurred outside the study areas were eliminated. A crime was included if it occurred within a study area boundary or on either side of a street segment that serves as a study area border.

**Crime Categories**

The three crime categories were chosen because they have been used by CPD in crime maps made available to the public. In a future analysis, these crimes may be categorized using more or fewer categories.

**Results**

In the first analysis, all 2010 crimes within the study areas were displayed and color coded by category. To reduce the effect of overlapping dots, crimes of different categories were separated into individual maps.

In the second analysis, the ESRI Spatial Analyst’s Point Density tool was used to display crime density. Four maps were produced using an output cell size of 5 and a radius of 70. The first map agglomerates all offenses and the following three maps draw out the three offense categories.
Crime: Violent Offenses

Legend
- Violent Offenses

Crime Density

Legend
- High
- Low

*CAGIS, Cincinnati Police Department, 2010
Draft 1.27.12
* CAGIS, Cincinnati Police Department
Draft 2.21.12
Model Group Neighborhood Impact Study

Crime Density: Public Disorder

Legend

- High
- Low

*CAGIS, Cincinnati Police Department

Draft 2.21.12

Crime Density: Property Offenses

Legend

- High
- Low

*CAGIS, Cincinnati Police Department

Draft 2.21.12
**Local Perception Analysis**

This section is a placeholder for the Local Perception Analysis from the EC.

**Triangulation**

The Local Perception Analysis utilized a telephone survey of neighborhood users to study their perception of neighborhood conditions. This qualitative method complements the quantitative analyses by providing public perception data to compare with empirical data. The sampling technique and survey questions may be easily repeated in the future.

**Methodology**

[Text goes here].

**Results**

[Text goes here].