

Linden Gateway Small Area Study

Preliminary Draft
Existing Conditions Report
September 27, 2007

DRAFT



TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION
Background
Task Force
Study Boundary
Key Person Interviews
Considerations

CHAPTER 2: 12th STREET
12th Street Widening Project
12th Street Redevelopment Plan
Considerations

CHAPTER 3: DEMOGRAPHICS
Population and age distribution
Education
Income
Public Assistance
Employment
Commute
Housing
Considerations

CHAPTER 4: GREEN INFRASTRUCTURE
Impervious Surface
Tree Canopy
Considerations

CHAPTER 5: COMMUNITY FACILITIES & UTILITIES
Schools
Childcare & Early Childhood Education Centers
Recreation and Open Space
Police Protection
Fire and EMS Services
Libraries
Churches
Water
Sanitary Sewer
Telecommunication
Considerations

CHAPTER 6: STREETSCAPE
Sidewalks
Streets
Parking
Street Trees
Considerations



Table of Contents

CHAPTER 7: HISTORIC PRESERVATION
National Register of Historic Places
Local Historic Preservation Overlay Zones
Considerations

CHAPTER 8: EXISTING LAND USE & ZONING AND FUTURE LAND USE
Existing Land Use
Existing Zone
Recommended Future Land Use
Considerations

CHAPTER 9: TRANSPORTATION
Introduction
Commuting Patterns
Street System
Bike and Pedestrian Facilities
Transit Authority of Northern Kentucky
Crash Experience
Infrastructure Conditions
Future Plans
Considerations

CHAPTER 10: BUILDING CONDITIONS SURVEY
Methodology
Considerations

MAPS

Map 1: Study Boundary
Map 2: 12th Street Redevelopment Plan
Map 3: Impervious surface & tree canopy
Map 4: Community Facilities
Map 5: Utilities-Water
Map 6: Utilities-Sewer
Map 7: Historic Preservation
Map 8: Existing Land use
Map 9: Existing Zoning
Map 10: Future Land Use: 2006-2026 Comprehensive Plan
Map 11: Regional Activity Centers
Map 12: Transportation Systems
Map 13: Crash Data

APPENDICES

Appendix A: 12th Street – Existing Zoning
Appendix B: Streetscape Inventory
Appendix C: Street widths & Right Of Way Inventory



Background

In December 2006 the Northern Kentucky Area Planning Commission and the Kenton County Planning Commission approved the *Comprehensive Plan 2006-2026: An Area-Wide Vision for Kenton County*. The Comprehensive Plan recommended that a small area study (SAS) be conducted for an area in the City of Covington to be impacted by the future widening of 12th Street and the location of the new St. Elizabeth Medical Center.

Following the adoption of the Comprehensive Plan the City of Covington requested the commencement of the SAS. The study titled *Linden Gateway Small Area Study* is being undertaken in collaboration with the City of Covington and the Center for Great Neighborhoods.

The SAS will consist of two interconnected parts. First, is the location of the medical facility and other uses; the construction of the access road to the facility; and the reconstruction and widening of the 12th Street corridor from the interstate to Scott Street. How these directly influence the existing neighborhoods in regards to such issues as traffic flow, site development, location and extent of ancillary spin-off uses are important considerations. Second, is the potential that these new land uses can create for two of the city's historically-premier neighborhoods - Peaselburg and Westside. Therefore, the scope of the SAS is comprised of a process to look at these interconnecting dynamics.

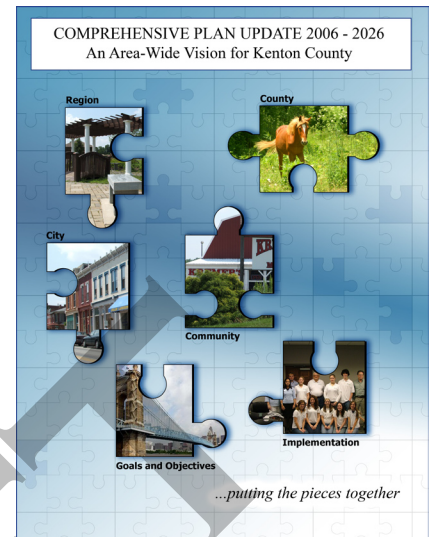
Task Force

A major component of this SAS is public input and citizen involvement throughout the project. A task force comprising of 11 members representing various interest groups— Peaselburg Neighborhood Association, Westside Action Coalition, St. Elizabeth Medical Center, Linden Grove Cemetery Board, Peaselburg and Westside neighborhood residents, representatives of the business, church and industries in the area was formed. The task force will provide oversight and guidance throughout the study process while representing the interests of the community.

The task force will vote on four items during the course of the study - approval of study boundary and title (action taken in July 2007), approval of the existing conditions inventory, approval of land use/ transportation alternatives, and approval of the final draft of the *Linden Gateway Small Area Study*.

Study Area

The study area for the project as approved by the task force in July 2006, extends from south of 12th Street to the north, 19th Street to the south including properties just south of 19th Street, I-71/75, a major geographic boundary to the west and the railroad past Russell Street to the east as shown on Map 1 on page 5.





12th street looking west

The northern boundary of the study area includes properties between 12th and 13th Streets that will not be impacted by the widening of 12th Street. It is important to recognize that there are areas between 12th and 13th streets that overlap and are a part of both the *12th Street Corridor Redevelopment Plan* area (See Chapter 2) and the *Linden Gateway Small Area Study*. It will be critical that the recommendations made for this area take into consideration the recommendations made in the redevelopment plan. Any recommendations that deviate or are not consistent with those in the redevelopment plan should be thoroughly justified.

Existing Conditions Inventory

The SAS began by conducting an analysis of existing conditions in the area including demographics, green infrastructure, community facilities, streetscape inventory, historic preservation, land use and zoning, transportation, and building conditions inventory. This data gathering stage also includes interviewing key persons in the community as discussed below.

Review of Past studies

A thorough review of past studies was conducted to become familiar with the City of Covington's plans for different

areas within the city. This information gives valuable insight and guidance in integrating this SAS with the city's plans for other nearby areas. The most important of these studies adopted is the *12th Street Corridor Redevelopment Plan* adopted by the City of Covington in 2004. This redevelopment plan, outlined in Chapter 2, was conducted to plan ahead of the widening of the 12th Street corridor from the interstate to Scott Street. The redevelopment plan includes recommendations for land use, zoning, wayfinding and gateway treatments for the corridor.

Key Person Interviews

During the data gathering stage of the project, interviews were conducted with key persons in the community such as Covington city departments, the Transit Authority of Northern Kentucky, Kentucky Transportation Cabinet, social service agencies, Sanitation District, Northern Kentucky Water District, Duke Energy, Covington School Board and so on. These interviews were conducted to gather information pertinent to the study, identify any plans the various groups had for the area including any issues or concerns for the area.

Meetings were also held with the Westside Action Coalition and the Peaselburg Neighborhood Association. Parts of both of these neighborhoods comprise the study area. The purpose of these meeting was to provide awareness about the project and gather information, such as that obtained from key person interviews.



Demographics (Chapter 3)

An analysis of demographics within the study area was conducted using information from the 2000 Census. This information provided insight into the age break down, income, education levels, occupation, and commute to work for residents within the study area. This was compared to similar data for city and county residents.

Green Infrastructure (Chapter 4)

The concept of green infrastructure was used to analyze environmental aspects of the study area. Green infrastructure includes un-built areas and how they relate to one another. The two most important measures of green infrastructure are the impervious surface ratio and the amount of tree cover within an area. These numbers are used to analyze the ratio of the built environment and the natural environment.

Community Facilities & Utilities (Chapter 5)

The location of facilities such as police and fire stations, schools, parks, childcare centers, libraries, water and sewer lines were analyzed. A major portion of this information was gathered from the key person interview process explained earlier.

Streetscape Inventory (Chapter 6)

Every street and sidewalk in the study area was inspected and rated based on its condition. In addition, lane width and parking conditions were also recorded. The city's 2006 pavement inventory was reviewed (See Appendix A) and analyzed.

Historic Preservation (Chapter 7)

Given the rich history of the City of Covington, data was gathered regarding established and eligible National Register Historic Districts within and around the study area. The location of existing Historic Preservation Overlay Zones was also analyzed.

Land use and Zoning (Chapter 8)

The existing land use, zoning, and the future recommended land use was reviewed.

Transportation (Chapter 9)

Commuting patterns and the traffic system were analyzed to understand local traffic flow and identify problems. In addition bike, pedestrian and bus service in the study area was also examined. Crash data was gathered from the Kentucky Transportation Cabinet to identify patterns or locations of higher than normal auto accidents.

Building Conditions Survey (Chapter 10)

With assistance from the Center for Great Neighborhoods, a building condition survey was conducted for all properties in the study area. The condition of the building on each property was documented on a survey form and includes information on buildings use, occupancy; construction, size, and a rating of its general condition.

The finding of issues and concerns from the analysis of existing conditions provides an understanding of the issues that will be discussed with the task force and with residents at the first public meeting. Based on these discussions and



conclusions, recommendations will be formulated.

These recommendations at a minimum will address land use and transportation and other components as derived from discussions with the task force and area residents. Four public meetings are planned throughout the course of the project. The study began in July 2007 and is anticipated to be completed in July 2008.

DRAFT



Map 1: Study Boundary

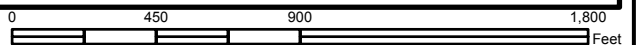


Linden Gateway Small Area Study



City of Covington
NKAPC

- 12th Street Redevelopment Plan
- Linden Gateway Small Area Study





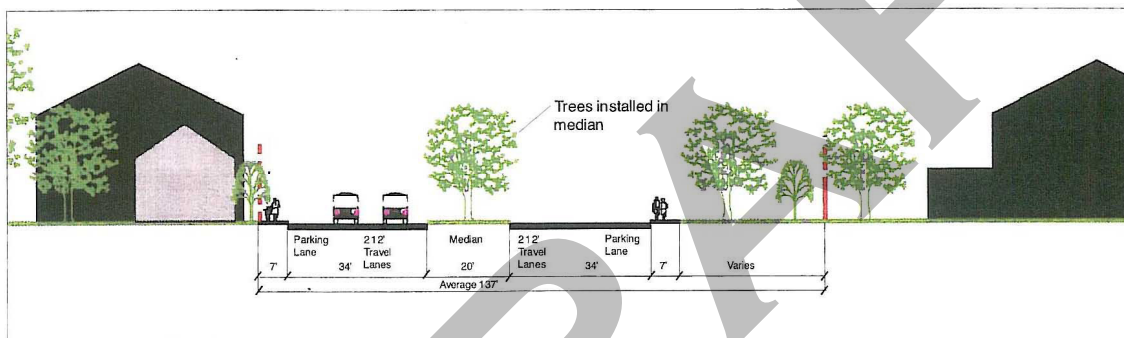
DRAFT



The plans for the 12th Street corridor widening project were approved by the Kentucky Transportation Cabinet (KYTC) in 2003. In order to plan ahead of the actual widening, the City of Covington did a study of the 12th Street corridor and documented the findings and recommendations in the *12th Street Corridor Redevelopment Plan*. The widening project included the removal and relocation of several buildings along 12th Street/Martin Luther King Jr Boulevard in order to facilitate the widening thereby creating opportunities for redevelopment. The Plan identifies these opportunities along the corridor for infill development and rehabilitation.

12th Street Widening Project

The 12th Street project by KYTC will widen 12th Street from a 2-lane undivided section with on-street parking to a 4-lane divided highway with an average 16 feet wide median, on-street parking and auxiliary turn lanes. The typical section of the proposed roadway through the study area is shown in the picture below taken from the redevelopment plan. In addition to the widening, the project will extend the current two-way operation of 12th Street from Madison Avenue to Scott Street. 12th Street will remain a one-way eastbound route from Scott Street to the Licking Valley Girl Scout Bridge.



Proposed cross section of 12th Street.
Source: 12th Street Corridor Redevelopment Plan

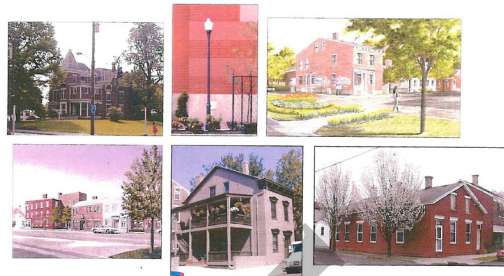
The reconstructed 12th Street corridor will serve as the primary gateway to the City of Covington at I-71/75 and Newport, from the Licking Valley Girl Scout Bridge. The additional capacity provided by the widening of 12th Street will further reinforce 12th Street as the primary east-west corridor through the city connecting with I-75 on the west and the City of Newport on the east.

As such 12th Street will likely attract a higher volume of traffic than currently uses the corridor. The increased volume and functional importance of 12th Street serving as a major arterial, will create challenges within the corridor to ensure that traffic characteristics are conducive to mixed use and pedestrian centered activities along 12th Street and its interface with the Linden Gateway study area. Within the Linden Gateway study area, the existing access point at Lee Street and Banklick Street will be converted to a right-in right-out access only, due to the construction of the median along 12th Street.



Picture of Flannery Painting Building on 12th Street proposed to be relocated.

12th Street Corridor Redevelopment Plan
Covington, Kentucky



Final Report
September, 2004

Four historic buildings in the 12th Street corridor will be preserved. Two buildings – will be rehabbed in place and two historic buildings will be relocated. All the utilities along the corridor are slated to be underground.

The 12th Street Corridor Redevelopment Plan recommends various mixed use office/retail, restaurant and residential uses on the south side of the 12th Street corridor bordering the Linden Gateway study area. Off-street parking is proposed along with this plan to accommodate the reduction in side street parking as a result of the widening of 12th Street.

12th Street Corridor Redevelopment Plan
The 12th Street Corridor Redevelopment Plan, a Kentucky Revised Statutes Chapter 99 Plan, was reviewed by the Kenton County Planning Commission for compliance with the comprehensive plan and adopted by the City of Covington in September 2004. The redevelopment plan covers areas along 12th Street, bounded by I-71/75 to the west, Watkins Street to the south, 11th Street to the north, and Scott Street to the east. Four public meetings were held during the course of the project to receive input from area residents.

While the study boundary and recommendations for the redevelopment plan extend to Scott Street to the east, the *Linden Gateway Small Area Study* will only focus on the area from the interstate to the CSX Railroad overpass east of Russell Street. One reason behind this is that another effort is currently underway by the city to develop form district regulations along Madison Avenue that includes the area between the railroad and Scott Street.

There are several National Register Historic Districts located within the study boundary. As the widening project would impact historic structures within the corridor, mitigation is planned in terms of moving two historic buildings (425 12th Street and 1201 Main Street) and rehabbing two historic buildings (1205 Lee Street and 228 12th Street) in place.

The conceptual recommendations of the plan are illustrated in Map 2.

Proposed Land Use

The Plan recommends various mixed use-office/retail/residential, restaurant and residential uses along the corridor in areas where in-fill development is possible due to the demolition



of buildings to make way for the widening of 12th Street. The plan states that retail and office uses should be located at the ground floor with residential and office uses above and most infill structures would be two-story, although a few could be three-story. These conceptual land use recommendations are shown on Map 2.

Existing & Proposed Zoning

The majority of *12th Street Corridor Redevelopment Plan* is currently zoned for residential uses, including RU-2B, RU-2, RU-2B (HP-O), RU-3.5 with some amount of land zoned for commercial uses – CG-7P (See Appendix A). The plan recommends that this area is suitable for mixed uses including retail that serve residents in nearby neighborhoods as well as specialized retail that would cater to the traffic along the corridor. Residential uses are also recommended as viable uses along the corridor. In addition, the density of the development that be permitted in this area equates to approximately 20 units/net acre. The plan recommends that a zoning district that would allow the previously stated uses be pursued.

It was also recommended that a Historic Preservation Overlay Zone be created all along 12th Street so all exterior remodeling would be reviewed and approved by the City of Covington’s Urban Design Review Board. The Plan recommends that the currently established *Historic Covington Design Guidelines* be used for the corridor. The plan also summarizes the suggested height, width, massing, orientation, setbacks, roof shapes and fenestration for buildings along the corridor.

Streetscape

The *12th Street Corridor Redevelopment Plan* recommended that a uniform set of design

elements be used throughout the 12th Street corridor to enhance the appearance of the area and invite pedestrian activity. The following streetscape elements are discussed in the plan:

Street Lights

Use of acorn style fixtures similar to that used in downtown Covington is recommended for the area.

Sidewalks

Sidewalks will be installed in coordination with the widening of 12th Street. The sidewalks will be a minimum of seven feet in width and special accent paving is recommended in certain areas to highlight building entrances, plazas and courtyards.

Textured Crosswalks

Scored concrete crosswalks designed with a grid pattern of approximately one square foot will be installed as part of the widening project.

Utilities

Underground utilities are recommended to be coordinated with the widening of the street for cost savings.

Wayfinding

The plan recommends the usage of consistent signs, landscaping and other design features throughout the 12th Street corridor to create a system of wayfinding. This system will guide users to primary attractions and entry points to downtown as well as intended parking areas. The plan identifies a three-tiered wayfinding system along the corridor to lead users to key community resources and improve

pedestrian and automobile circulation.

Level 1 signs will provide information to point the way to destinations, level 2 signs will allow for “continuation” signage to notify travelers that they are still approaching their destination and level 3 signage is primarily used to help users locate “special places” and are located closer to the actual site.

In addition, the plan also recommends that a distinct graphics package consisting of directional, regulatory and information signs be considered.

Gateways

The plan recommends that all major entry points into the corridor and key intersections within it should be clearly identified with signs and landscaping.

The plan identifies three levels of gateway treatments for the 12th Street Corridor. Four such gateways are located within the study area. The Level 1 gateway is identified as a high priority gateway called the Western Gateway. It will be located at I-71/75 and 12th Street near the interchange. This gateway is to include landscaping, a monument sign with stone columns or artwork, benches, decorative paving and a sign identifying an entrance to the corridor.

Level 2 gateways were identified at Pike Street at the interchange with I-71/75, and the intersections of 12th Street with Russell and Madison Streets. The usage of special signs, ornamental street lights,

decorative paving at sidewalk corners is recommended. Level 3 gateways are recommended at the intersection of 12th with Holman Avenue, Lee Street, Scott and Greenup Streets. The elements recommended at these gateways include special signs, lighting and decorative paving.

Interpretive Park

An interpretive park located in the 500 block of 12th Street was recommended as part of the mitigation action related to the widening project. The park includes seating, stone walls, trees and plaques.

Parking

Design of the widening project indicates creation of 45 on-street parking spaces between the interstate and the CSX Bridge. It is recommended in the plan that redevelopment of the area south of 12th Street include provisions for off-street parking.

Implementation

The plan recognizes that successful implementation of the *12th Street Redevelopment Plan* will require a coordinated effort between public and private entities. The plan also calls for the designation of a person within the city as development facilitator for the corridor. Also suggested is the use of Community Development Block Grant funds, Capital Improvement funds, creation of a Special Improvement District and so on to implement the recommendations in the plan.



Considerations:

- The extension of transportation modes into the *Linden Gateway Study Area* through the use of pedestrian, bicycle and automobile modes should be studied. Consideration and evaluation should be completed to ensure that appropriate traffic characteristics extend into the neighborhoods.
- The redevelopment of the 12th Street corridor will likely attract increased activity including automobile and pedestrian. This increase in activity may likely infiltrate the Linden Neighborhood necessitating that adequate parking for both residential and commercial uses within the area is provided.
- The extension of this wayfinding system into the study area should be assessed to assist in ensuring that visitors to the area are directed to their intended destination along the appropriate routes and can serve to keep visitors out of more private residential areas, if desired.
- Transportation elements of the *Linden Gateway Study* should ensure that adequate circulation and access is maintained along Lee Street and Banklick Street, by providing internal circulation to accommodate ingress and egress movements from/to westbound 12th Street.
- The land uses recommended in the *12th Street Corridor Redevelopment Plan* should be revisited to the extent that the proposed uses do not conflict with visions established for other areas in the City of Covington through previous studies.
- While the plan recommends the usage of the *Covington Historic Buildings guidelines*, it also recommends certain design guidelines for height, massing and so on of buildings. The current guidelines should be reviewed to assess if it covers the recommended guidelines.



DRAFT



Map 2: 12th Street Redevelopment Plan



City of Covington
NKAPC

	Gateway - Level 1		Gateway - Level 3		Parcels
	Gateway - Level 2		Buildings		



DRAFT



This section compares basic demographic information of the study area with that of the City of Covington and Kenton County. This data provides information on study area residents that illustrates the composition of the area and will help identify characteristics that need to be considered as the planning process continues. All of the following data comes from the 2000 US census.

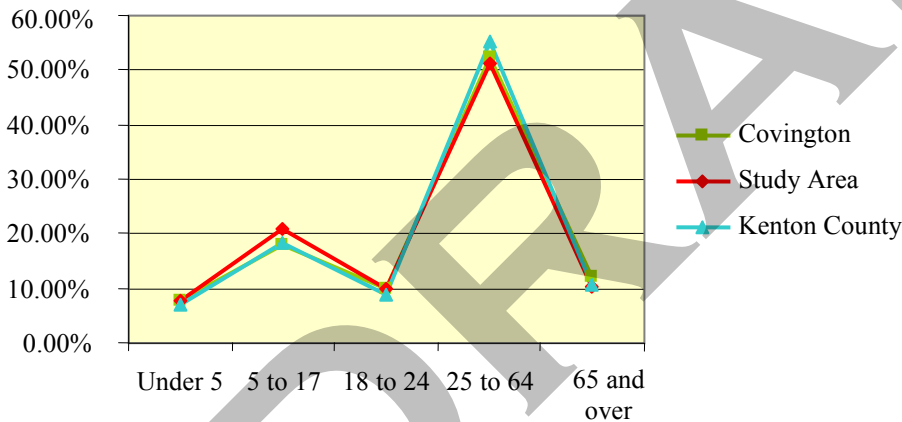
Population and age distribution

The study area covers 218 acres with a total 2000 population of 3,253, or about 7.5 percent of Covington’s population, which translates to under 15 persons per acre. The median age of residents in the study area is 32 years, which is almost the same as that of residents in the city (33 years) and Kenton County (34 years).

The age distribution of the study area is almost identical to that of the city and the county as shown in Chart 1 with the exception of having slightly more young people (under 5 to 18 to 24) than the county and slightly less working age people (18 to 65) than either the city or county. Typically, differences in age distribution can be reflected in differences in income and buying power, housing, and education.

Chart 1: Age Distribution

Source: 2000 U.S Census

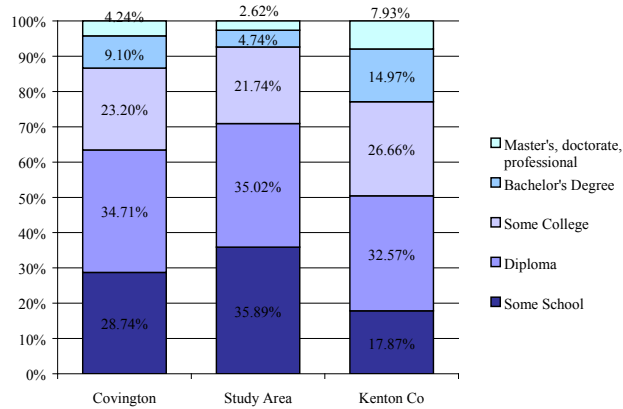


Education

The large number of people within the study area without a high school diploma as shown in Chart 2 translates into a lower median income compared to that in the City of Covington and Kenton County. The lower percentage of residents with college degrees helps re-enforce this assessment.

Chart 2: Educational Attainment of Adults 25 and older

Source: 2000 U.S Census



Public Assistance

Study area residents receive a higher level of public assistance (9.98 percent) than those in the city (6.26 percent) and Kenton County (3.15 percent).

Employment

The percent of people not in the labor force in the study area (42 percent) is higher than that in the City of Covington (30 percent) or Kenton County (37 percent). This is one indication of why the area has a lower average income than either the city or county. The rate of unemployment is comparable with both that in the city and county.

Income

The income distribution as shown in Chart 3 of the study area is lower than the county's helping to illustrate, as mentioned previously, how education levels tend to reflect income levels.

The median household income of residents in the study area in 2000 (\$28,600) is lower than that of residents in the City of Covington (\$30,735) and Kenton County (\$43,906) for the same time period.

Employment distribution further explains the income difference between that of residents in the study area and the city and county. A larger percentage of study area residents are employed in the lower paying manufacturing and retail industries and a smaller percentage are employed in the higher paying finance, insurance, real estate, rental and leasing, and the professional categories. (Chart 4)

Chart 3: Income Distribution

Source: 2000 U.S Census

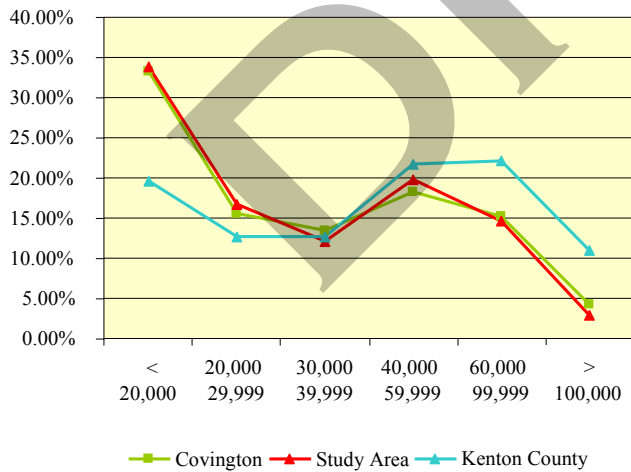
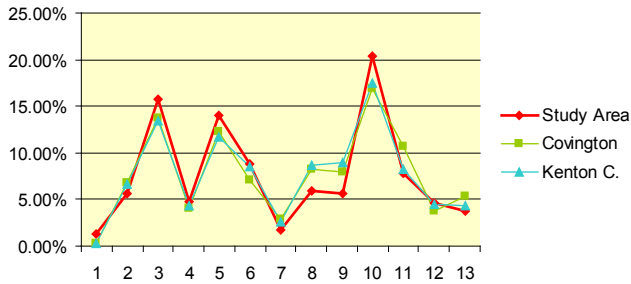


Chart 4: Employment by Industry

Source: 2000 U.S Census



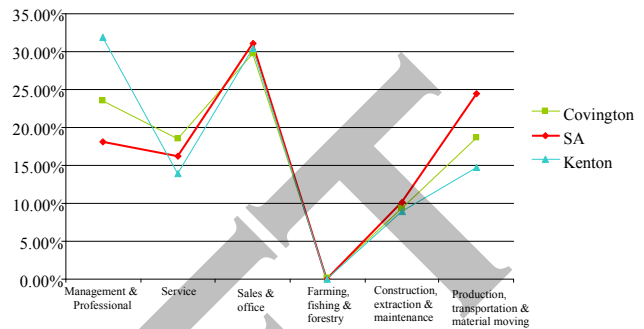
- 1 Agriculture, forestry, fishing and hunting, and mining:
- 2 Construction
- 3 Manufacturing
- 4 Wholesale trade
- 5 Retail trade
- 6 Transportation and warehousing, and utilities:
- 7 Information
- 8 Finance, insurance, real estate and rental and leasing:
- 9 Professional, scientific, management, administrative, and waste management services:
- 10 Educational, health and social services:
- 11 Arts, entertainment, recreation, accommodation and food services:
- 12 Other services (except public administration)
- 13 Public administration

A higher percentage of the study area residents work in the educational, health, and social services category compared to those in the city and county. Comparing earnings between this category and others is rather difficult because income can vary

greatly within this category. It can be inferred that more of those study area residents working in these industries probably are employed in the lower paying jobs.

Chart 5: Employment by Occupation

Source: 2000 U.S Census



A more dramatic illustration of employment differences can be seen when it is separated by occupation. (Chart 5) There are a significantly lower percentage of study area residents in high paying management and professional occupations compared to the city and county and a significantly higher percentage in low paying production, transport and material moving occupations.

Commute

Approximately 4.23 percent of study area residents use mass transit as compared to only 3.35 percent of residents county-wide that use mass transit. The lower percentage of county residents using mass transit can be partially attributed to the limited availability of bus service in certain parts of the rest of Kenton County. Approximately 7 percent of City of Covington residents use mass transit. This increase use of mass transit may be attributed to higher availability of the service in other parts of the city. As shown in Chart 6, approximately 50 percent



Chart 6: Travel Time to Work

Source: 2000 U.S Census

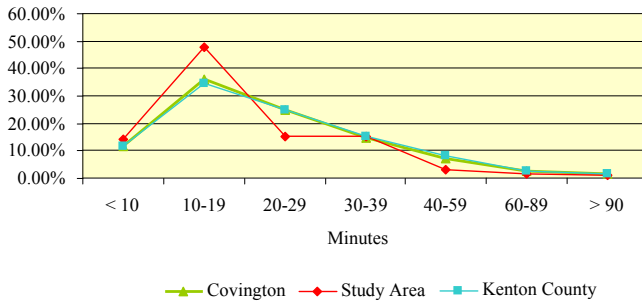
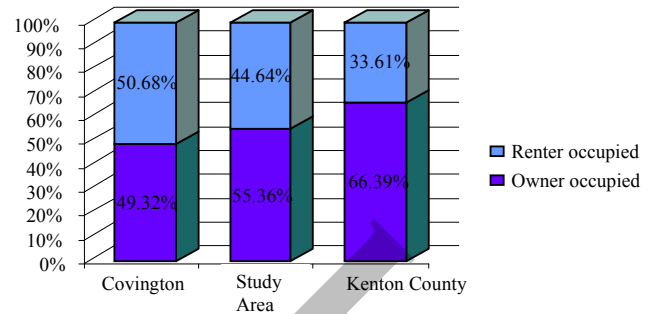


Chart 7: Housing Tenure

Source: 2000 U.S Census



of the study area residents travel between 10-19 minutes to work while a lower percentage of city and county residents travel an equal amount of time to work.

Housing

The study area compares favorably with the City of Covington in the percentage of housing units occupied with 87 percent for the study area and 89 percent for the city and 92 percent for the county. Homeownership in the study area is above the city average of 49 percent with 51 percent as shown in Chart 7. Both the city and study area are below Kenton County (66 percent).

Considerations:

- Although home ownership is above the city average it is still below the level of the county and HUD’s goal of 66 percent. More participation in homeownership programs should be a consideration.
- Training, employment, and education programs need to be widely advertised to reach everybody in need including low income population.
- Programs aimed at providing employment, housing, education, child care, and health care should be coordinated to better assist the families in need.

The percentage of vacant housing in the study area (12.72 percent) is higher than that in the city (10.7 percent) and the county (6.4 percent). The acceptable rate for the Philadelphia planning Commission is 10 percent. (http://www.philaplanning.org/cpdiv/Neighborhood_Standards.htm) The percentage of renter occupied units in the study area is 45 percent as compared to that in the city of 50 percent and in the county of 34 percent.



Green infrastructure is a network of vegetated or non-paved area(s) that sustains the diversity and quality of natural systems and contributes to the health, economic vitality, and quality of life for communities and people. The concept views the natural environment as important as the built infrastructure, requiring the same amount of attention and planning. It can include intricate systems of connected parks, trails, sidewalks/boulevards, riparian stream corridors, preserved hillsides, working farmland, woodlands, and other forms of un-built upon land.

Impervious Surfaces

The most important measure of green infrastructure, or the lack there-of, is the percentage of impervious surfaces within an area. Impervious surfaces do not allow water to permeate into the soil causing flooding and requiring expensive man-made drainage systems to remove and cleanse the water. All impervious surfaces are man-made and represent the opposite of green infrastructure. All the streets, parking lots, sidewalks, driveways, and buildings are impervious. Within the study area there is 91 acres (42 percent), of impervious surface. Map 3 - Impervious surface and tree canopy, identifies impervious surfaces within the study area.



View from Kavanaugh Street with Linden Grove Cemetery to the left and street trees on the right.

The higher the amount of impervious surfaces the less green infrastructure. The best solution is to reduce the amount of impervious material. There are “green” building techniques such as the use of pervious pavement, green roofs and so on that can reduce the amount of impervious surfaces thus reducing the potential for flooding and the need for expensive drainage systems. A densely built upon area such as the study area can benefit from green design.

Tree Canopy

Another important measure of green infrastructure is the percentage of tree canopy in a given area. Trees provide a large variety of important ingredients for a high quality of life. Trees take pollution out of the air, reduce energy costs in the summer by shading buildings, improve the aesthetic appeal of an area, and provide natural habitat for a variety of animals. The tree canopy within the study area is approximately 20 percent as shown on Map 3 - Impervious surface and tree canopy. This is slightly below the recommended amount of 25 percent for urban residential (Source: American Forests – www.americanforests.org). Trees cover 36 percent of the entire city of Covington a little below the recommended 40 percent for a city overall.

Large, uninterrupted areas of natural vegetation are the best habitat for most wildlife and provide valuable recreation space for people. This type of area does not exist in the study area. Linden Grove Cemetery is a large green space but it is not in a natural state. The proposed interpretive park along 12th Street as part of the 12th Street widening project will add some green space to the area. In addition, the conceptual plans for the new St. Elizabeth Medical Center, located within the study area, indicate some green space with healing paths. The new access road from 12th Street to the new medical center may create some opportunities for a small green space area at 13th and Main Streets.

While there are no large, uninterrupted natural green space areas within the study area the small natural spaces may be linked together to form an urban greenway. These natural spaces within the study area can be linked to natural spaces close by, providing a large connected system of natural areas for wildlife and people to use and enjoy.

During meetings with city officials, neighborhood associations, and concerned residents, the lack of green space has been expressed. A few residents voiced their concern about people moving out to the suburbs so their children had room to play. Finding that space within the study area will be a challenge. However, it is strong evidence that the community is concerned about the quality of life of this neighborhood.

Considerations:

- Develop programs to increase the percentage of tree canopy in the area.
- Identify the potential to create an urban greenway by linking existing and future green space areas.
- Identify potential parcels within the study area that could be preserved as green space.
- Utilize green infrastructure techniques or best management practices whenever possible for all new development within the area.





DRAFT



Community facilities include services such as schools, police, fire protection, police protection, libraries and health care facilities. Utilities include sewer, water, electric, and natural gas service. This section contains information regarding those facilities and utilities that are contained within the study boundary or are close enough to provide services to the study area.

Schools

The St. Augustine Elementary School, located at the corner of Jefferson Street and 19th Street, is the only school located within the study area. A total of 136 students are currently enrolled in the school with 100 students from the City of Covington. There are several other schools located in the areas surrounding the study area. These include the Glenn O Swing Elementary, John G Carlisle Elementary, Thomas Edison Elementary and the Sixth District Elementary, all of which are part of the Covington Independent School District as shown on Map 4. Covington Latin High School, Holy Family Catholic School and the Virginia Chapman Vocational school are parochial and private schools located in the surrounding area. Covington Independent School District is one of the five school districts in Kenton County.

The Covington Independent School District currently has no plans to build any new schools or make additions to any existing schools. Due to declining enrollment, it is much more likely for a school to close or combine a few schools. The study area in particular, served by John G Carlisle Elementary School and Glenn O Swing Elementary School, has seen a slight decrease in the number of students. The 2004 – 2005 school year began with 163 students and the 2006 – 2007 school year began with 149 students.

One of the most substantial issues faced by the Covington Independent School District is that approximately 30-35 percent of students in a given year are “transient students”. These are students who change schools at least once in a year’s time. Within the last three school years, the study area had a slightly lower percentage of transient students. Approximately 35 – 40 students are considered transient each year within the study area. The total number of students residing in the study area over the last three school years ranged from 149 to 165 students.

Another sizeable issue that this district continuously faces is the fact that nearly 85 percent of their students are eligible for the free and reduced lunch program thus cutting into the school budget. During the last school year (2006-2007) the study area was home to 125 students (from a total of 149) who were eligible for free or reduced lunches.

Childcare & Early Childhood Education Centers

The study area contains only one childcare center. The South Side Baptist Child Care Center is located on Holman Avenue near W 15th Street. The Glenn O Swing Elementary After school center serves the south side of the study area and the Northern Kentucky Community Action Commission Head Start center located on Keene Street serves the north side of the study area.

Recreation and Open Space

The study area contains a limited amount of parks and open space. The most significant open space in the study area is Linden Grove Cemetery. This 20 acre piece of land provides a picturesque landscape in an otherwise dense urban environment. The only other designated open space within the study area is the Euclid Park Tot Lot located at the corner of Euclid Avenue and W 16th Street shown on Map 4. Just south of 19th Street, and outside the study area boundary, lies the Glenn O Swing Fields which provide baseball fields and organized open space for the local children.

According to the *2001 Kenton County Comprehensive Plan*, every 1,000 people should be served by a half acre of mini-park space. The study area only contains one tot lot on Euclid Avenue which is less than one quarter acre (the Lance Corporal Justin Sims Memorial Park). Per the standards, the study area should maintain at least one and a half acres of mini-park to serve it's more that 3,000 residents. The study area, on the whole, is a densely developed urban residential area in which open space is at a premium. While the cemetery provides a large open space (roughly 20 acres) in the study area, this is private property which is not "usable" open space to most residents of the community.

Police Protection

The study area is served by the Covington Police Department with 116 sworn officers, 28 civilians, and 5 city beats serving 43,000 residents with 90,000 calls each year. The study area is the second worst area for crime in the city. Drug trafficking is a major issue. The Covington Police Department incarcerates perpetrators in the Kenton County Jail located in the north end of the

City of Covington.

The study area does not contain any police stations; however, a station is located just south and east of the study area boundary on Madison Avenue.

Fire and EMS Services

The study area is served by the fire district 6A and 6B of the Covington Fire Department. The department covers the entire city and also has mutual aid agreements with surrounding cities and first call agreements on some building in other municipalities. This department is served by 119 members with 108 of them unionized, three stations, five pumpers, two aerials, three ambulances, one rescue truck, and one command car. The city fire department responds to 10,000 runs a year and is divided into four (4) minute response times and eight (8) minute response times. Narrow and one-way streets cause problems in accessing some locations.

The study area is characterized by a significant older, renter population which typically means more calls; however, this area is not considered an especially bad area for fires. Many of the industries located within the area have a pre-plan response which include information on what is in the building, type of fire protection systems, and where trucks are to locate.

Covington Station #6 is located on the corner of Holman Avenue and W 15th Street in the heart of the study area. The study area is also served by nearby Covington Main Station located on the corner of Jackson Street and Berry Street just a few blocks north of the study area as shown on Map 4.



Community Facilities & Utilities

Libraries

The Covington Library is located at 502 Scott Boulevard, north of the study area. This is the main branch of the Kenton County Public Library system and is the closest library to serve the study area.

Churches

The study area is served by four churches, the Southside Baptist Church located on Holman Street, the Covington Baptist Temple located on Hawthorne Street, St. Augustine Church located on Euclid Street, and the Boaz Missionary Baptist Church on Russell Street. There are also three other churches which are located in the area immediately surrounding the study area. These include Madison Avenue Christian Church, Cathedral Basilica of the Assumption, and the Church of God.

Water

The study area is sufficiently served by the Northern Kentucky Water District with water lines which are mostly more than 100 years old. For fire protection purposes the Kentucky state minimum requirement is a 6-inch line. The City of Covington uses 8-inch lines as their standard size for the replacement of any lines. The 8-inch lines will allow for current growth rates to continue with no major water issues.

Recent work has been done in the study area. Water mains along Euclid Avenue and Jefferson Avenue have been replaced with 8" lines in conjunction with the City's streets inventory program. In the near future the planned access road to the St. Elizabeth's site will provide an opportunity to fix damaged water mains; however, this work will be very minimal and only one water main access point will be provided to the site. The

12th Street Project will include replacement of the current 20-inch line which runs through that area.

Currently the Northern Kentucky Water District does not have any immediate plans to initiate projects in the study area; however, if an opportunity arises to work with the city, county, or state, the NKWD will do their best to coordinate.

Sanitary Sewers

Sanitation District Number 1 currently services the study area. The entire study area uses a combined overflow system which is considered to be adequate during normal conditions. Just north of the study area, the 12th Street widening project will provide the opportunity for SD#1 to separate storm water and sanitary water along 12th Street between Chesapeake Street and Interstate 71/75. Some minor work will be done in the area with the completion of the new service road for the St. Elizabeth Medical Center site. This will include reworking catch basins. There is an existing sewer line on the northeast side of the site and this will adequately serve the new development.

Currently, SD#1's largest overflow system is a combined sewer overflow which empties under the Brent Spence Bridge along the Ohio River. SD#1 has recently signed a consent decree to work towards limiting bypass occurrences.

Telecommunication

There are no telecommunication towers located within the study area; however, it appears that the area is sufficiently serviced by surrounding towers. One telecommunication tower is located just north of E 11th Street outside of the study area. Another tower is located just north of W 9th Street adjacent to I-71/75 as shown on **Map 4**.



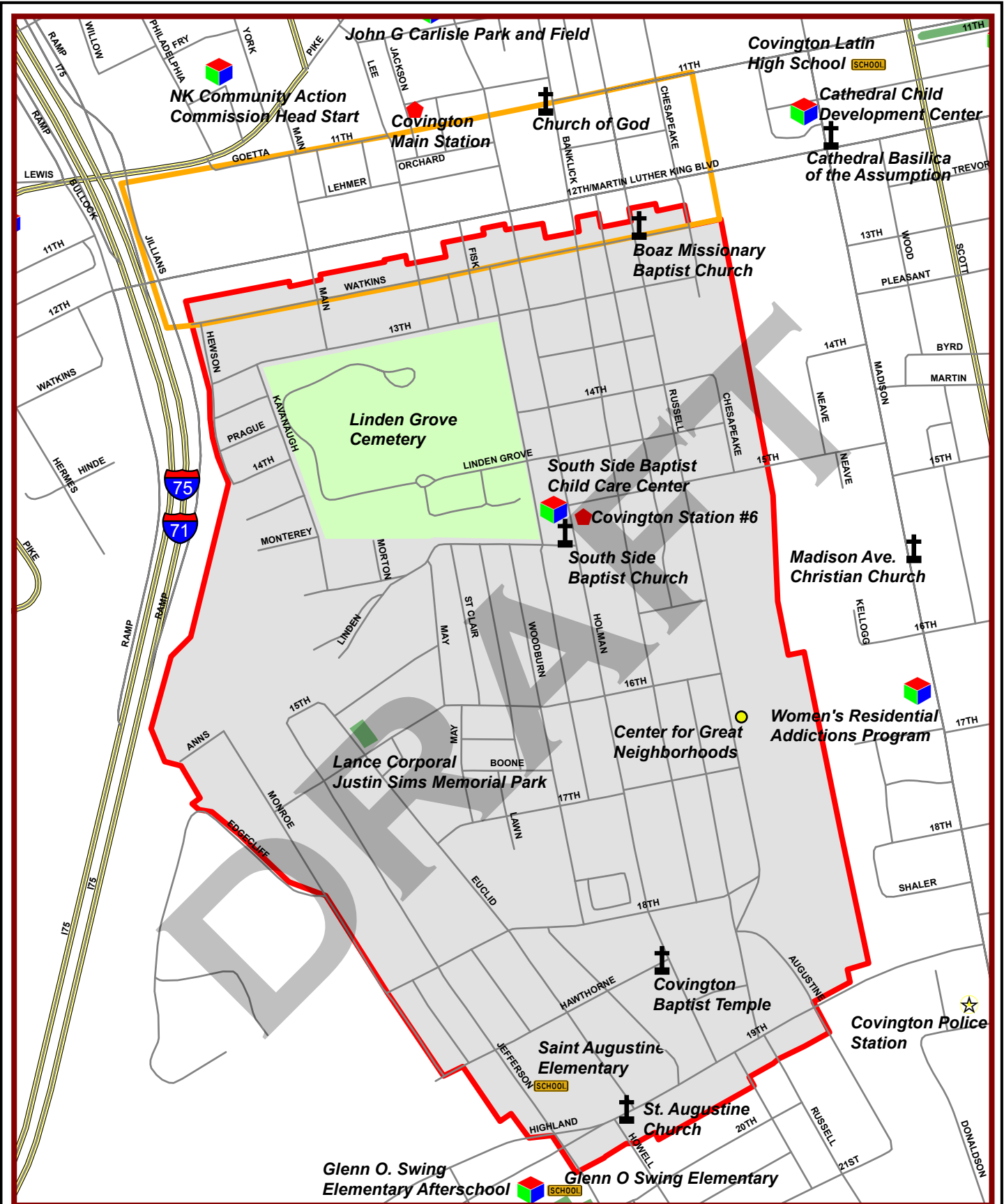
Considerations:

- Enrollment numbers should be closely monitored to ensure all school facilities in the study area operate efficiently.
- The opportunity for small pocket parks on vacant lots or on sites of abandoned buildings in the neighborhoods should be assessed.
- Opportunity to work with new developments/redevelopment within the study area to provide small recreational spaces should be identified.

DRAFT



Map 4: Community Facilities



Linden Gateway Small Area Study



City of Covington
NKAPC

12th Street Redevelopment Plan	Fire Departments	Cemetry
Linden Gateway Small Area Study	Police Departments	Parks
Child Care Facilities	Churches	Schools
Center for Great Neighborhoods		

0 450 900 1,800 Feet





DRAFT



An assessment of the following streetscape elements was conducted – Sidewalks, Lanes, Street Trees and Parking. A field survey was carried out to document the streets that had sidewalk on one side of the street or both and the condition of the sidewalk, number of lanes and the condition of the street, presence of street trees, and presence of parking on one or both sides of the street. The statistics from the streetscape assessment is included in Appendix B.

Sidewalks

Sidewalks exist on both sides of the street on most streets within the study area except along Kavanaugh Street where there is sidewalk only on one side of the street from 13th Street to Monterey, Linden Avenue from St. Clair Street to Holman Street, and Jefferson Street between 15th and 16th Streets. Most of the sidewalks are at or wider than the recommended five feet.

Sidewalks in poor conditions were determined to be those that have significant cracks and/or unevenness in pavement or were not walkable and in immediate need of repair.

While most sidewalks are in good condition, the sidewalks that are in question or in poor condition are those along Watkins Street between Main and Fisk Streets, along Hawthorne Street from Monroe to Holman Streets, 18th Street from Monroe to Jefferson Streets, and along 16th Street from May to Holman Streets. The only street with sidewalks in poor condition is Hawthorne Street.



Sidewalk along Woodburn Avenue

Streets

The street widths and number of lanes varies within the study area. Uneven pavement or cracks were observed in portions a few streets including Watkins, Holman, Banklick, Lee, Fisk, Jefferson, Monroe, 13th, 18th and May Streets. Hawthorne Street from Monroe to Holman Streets was observed to be in poor condition indicating that there were significant cracks and or unevenness in pavement. Brick pavers were observed along a stretch of Watkins Street from Lee to Holman Streets.

Parking

The varied street widths require a variety of parking and traffic lanes configuration. Along the narrower streets parking is either limited to one side or traffic flows in only one direction. In some instances such as on Boone Street, parking is allowed on both sides of the street with two-way traffic however there is enough room for cars to pass in single file only in one direction holding up traffic coming in the other direction. Some streets have parking on one side with two lanes of traffic and the widest streets have parking on both sides of the street and two lanes of traffic. Map 12 – Transportation Systems on page 49 shows the configuration of one way streets within the study area.



Street trees on St. Clair Street

Street Trees

Most of the streets in the study area are not shaded or have very few street trees, although some areas in the eastern side of the study area are well shaded. Many of the streets on the east side of the study area have vegetative strips wide enough for trees. Unfortunately this is not the case on the western side where most of the planting strips are too narrow for trees. There are sections of planting strips that have been filled in with concrete. This increases the area of impervious surfaces (See Chapter 4: Green Infrastructure) and reduces the area available for tree planting and beautification efforts.

Considerations:

- Identify opportunities for a street tree/beautification program.
- Identify sidewalks and streets that are not in good condition.
- Locate the potential for planting strips especially in areas where they have been filled in.
- Develop and implement programs to improve and maintain plantings within streetscape areas.



The City of Covington has a long and rich history which is evident throughout the fabric of the community. As the city has grown, it has recognized the need to preserve significant structures and the character of its neighborhoods. Historic properties provide economic development and tourism opportunities that otherwise may not exist within the urban areas.

National Register of Historic Places

There are several areas within the City of Covington that have individual buildings which contribute to the overall historic character of the community but which would not necessarily be listed on the National Register of Historic Places as an individual site. In cases such as this, an entire district can be nominated to the National Register of Historic Places and each property within that district can enjoy the same economic and investment tax benefits as buildings on the National Register.



Linden Grove Cemetery

The only district that is on the National Register within the study area is the Linden Grove Cemetery District which is approximately 20 acres nominated in 2000 as shown on Map 7. This cemetery is the only major historic green space from the nineteenth century and is the only designated green space within the study boundaries. The Seminary Square Historic District and the Lee-Holman Historic Districts, both located just north of the study area, are primarily residential emphasizing the historic development of the area.

The study area contains three properties listed individually on the National Register of Historic Places. These are the Fifth District School, St. Augustine Church Complex, and the Bavarian Brewery. The Fifth District School has recently been renovated and converted to senior housing.

There is currently one district that is eligible for nomination into the National Register of Historic Places – The Westside Neighborhood Area.

Historic Preservation Overlay Zones

Local Historic Preservation Overlay Zones are intended to protect the value of historic buildings and neighborhoods by regulating exterior design of buildings. Generally, building value in historic areas is enhanced as more buildings maintain architectural features consistent with their historic heritage. Any alterations or work done to the exterior of a building in a historic overlay zone must first be approved through the Urban Design Review Board. There are no overlay zones within the study area, but the Seminary Square Overlay District is located just north of the study area. This overlay zone enforces the conditions specified by “The Historic Covington Design Guidelines” which sets standards for architectural



details, new construction, public streetscape, equipment, utilities, machinery, and demolition.

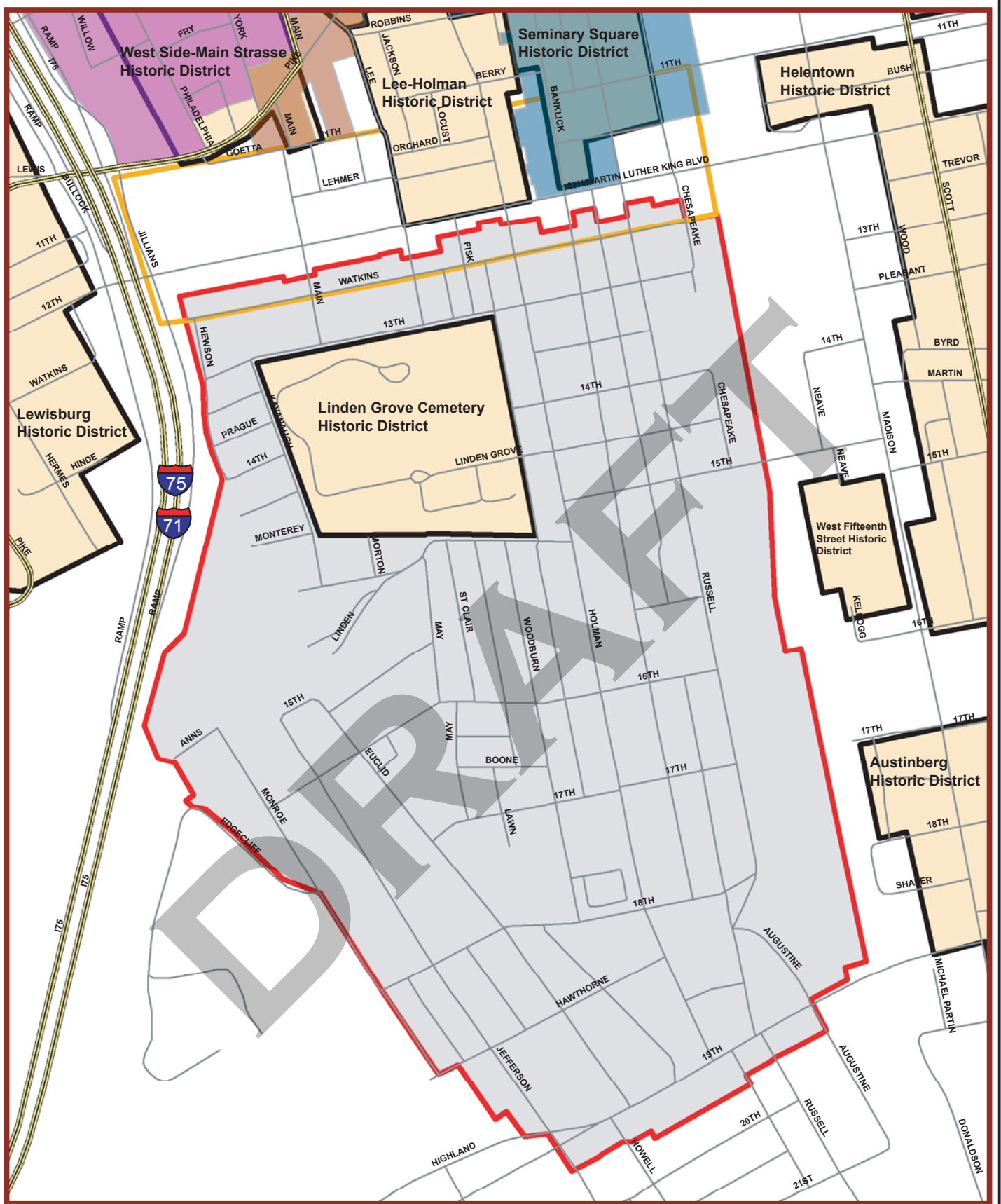
Consideration:

- Survey/Inventory all structures within the study boundary to determine if a new overlay zone or National Register Historic District is appropriate.
- Record survey data forms for use in LINK GIS database using Kentucky Heritage Council approved format.

DRAFT



Map 7: Historic Preservation



Linden Gateway Small Area Study



City of Covington
NKAPC

	12th Street Redevelopment Plan		Main Strasse
	Linden Gateway Small Area Study		Pike Street
	National Register of Historic Places		Seminary Square

Historical Preservation Overlay Zones

0 460 920 1,840 Feet

Notice: The information in this product is accurate for planning purposes only. Aerial photography dates: 2004



DRAFT

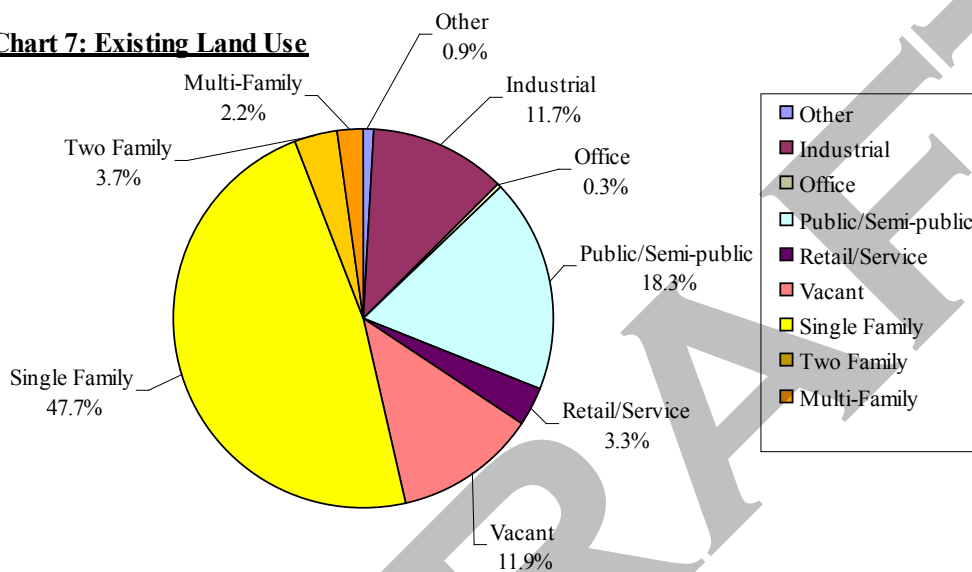


Existing Land Use

The study area is comprised of mostly residential uses (50 percent) with a majority comprising single-family residential homes (44 percent) and a smaller percentage of two-family (3.7 percent) and multi-family (2.2 percent) homes.

Public and semi-public uses occupy the second largest land use at 18 percent. Industrial land along Russell Street occupies approximately 11.7 percent of the land within the study area. Less than 4 percent of the land is within commercial uses as office or retail service. Most of the retail/service uses in the area are served by small neighborhood corner stores, beauty salons, and saloons. See Map 8.

Chart 7: Existing Land Use



Data Source: LINK GIS

Existing Zoning

Existing zoning within the study area is primarily Urban Residential - RU-2 (69 percent) and Limited Industrial – IL-IM (22 percent) as shown in Table 1. The City of Covington’s zoning ordinance, adopted August 2006, specifies that the residential zones within the study area are primarily intended to be applied in built-up areas with excellent transportation access and a full range of urban facilities and services. Special infill development standards apply in built-up areas to ensure development is compatible with the surrounding context. These zones allow for moderate-density residential development consisting of detached and attached housing.

The commercial zones include Commercial – Neighborhood (CN) and the Commercial – Office (CO) zones. The CN zone is intended for mixed-use, neighborhood serving commercial uses with a pedestrian oriented character while the CO zone is intended to accommodate large office park developments in a campus like setting.

The Industrial zone (IL) is intended to accommodate low to moderate impact manufacturing, wholesaling, warehousing, and distribution uses as shown on Map 9.

Table 1: Existing Zoning

Zoning district	Min lot area	In Acres	Percentage of total acreage
<i>Residential Zones</i>			
RU-1	2000	2	0%
RU-2	2000	366	69%
RU-2B	2000	17	3%
RU-2 (P-O)	2000	8	2%
RU-3.5	3500	5	1%
<i>Commercial Zones</i>			
CN-1M	1250	1	0%
CO-5A	500	12	2%
<i>Industrial Zone</i>			
IL-1M	1250	117	22%
Total		528	100%

* Refer to the Covington Zoning Ordinance for specifics of the zoning districts. Acreage included right-of-way

Future Land Use

The *Comprehensive Plan Update: 2006-2026, An Area-wide Vision for Kenton County* identifies the need for this area to be studied. The plan states that “The land adjacent to I-71/75 south of 12th Street, which is the former Jefferson Avenue interchange vacated by the Kentucky Transportation Cabinet, has been acquired by St. Elizabeth Medical Center for redevelopment. The impact of the new medical facility on access and adjacent residential areas should be studied.”

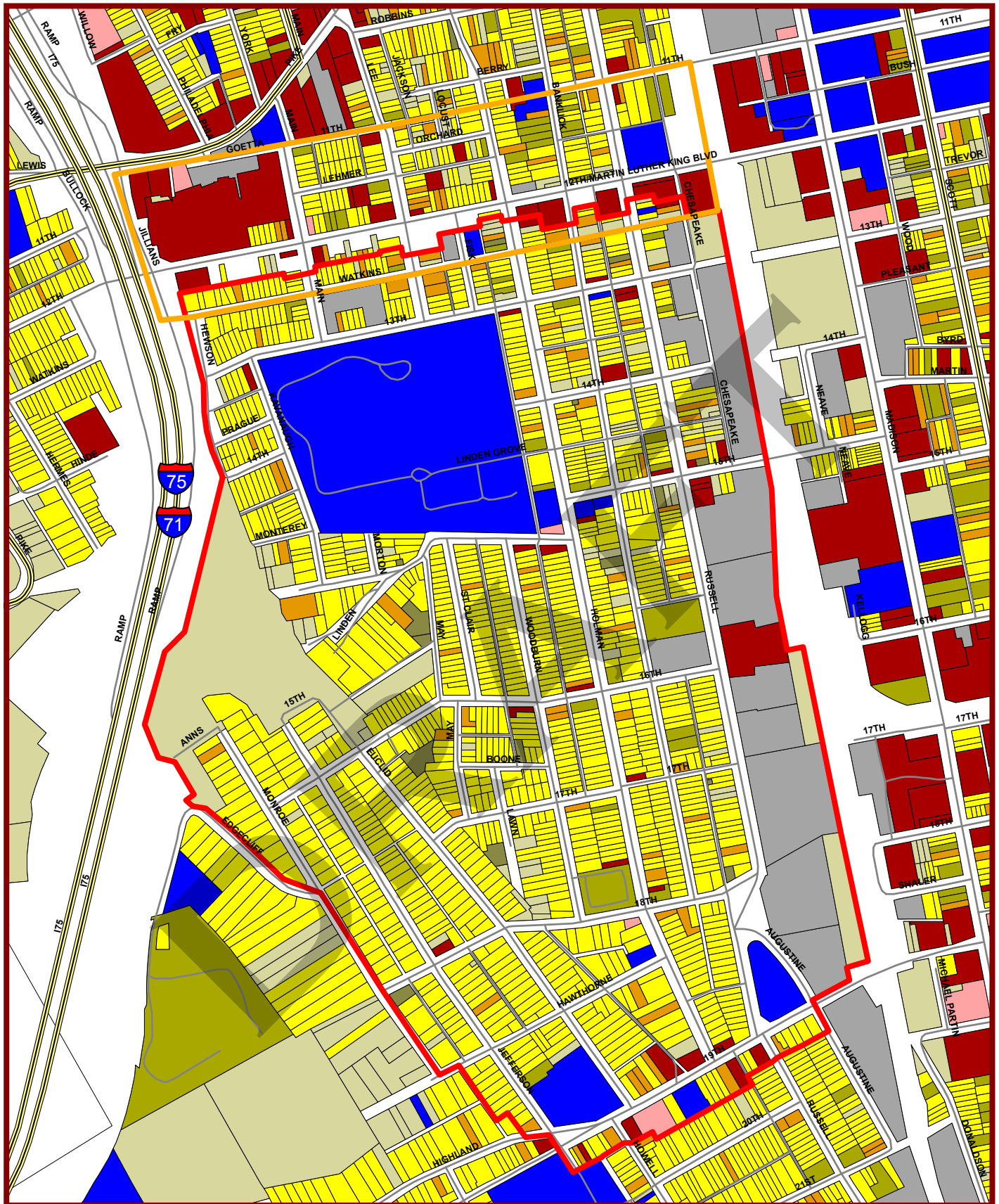
The recommended land use map in the Plan Update currently identifies a majority of land within the study area for residential density ranging from 7.1 to 14 and 14.1- 30 dwelling units per net acre as shown on Map 10.

Considerations:

- There are a very low percentage of existing commercial uses particularly office uses within the study area.
- Most of the retail/service uses in the study area is from corner neighborhood stores. If any additional retail uses are considered for the area, they should compliment the existing neighborhood stores.
- The zoning for the 12th Street corridor should be consistent with the land use recommendations within the *12th Street Corridor Redevelopment Plan*.
- The Comprehensive Plan should be updated to reflect the land use recommendations of this study per the guidelines for small area studies.



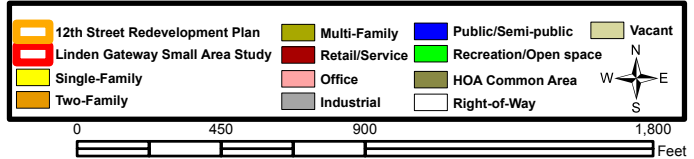
Map 8: Existing Land Use



Linden Gateway Small Area Study

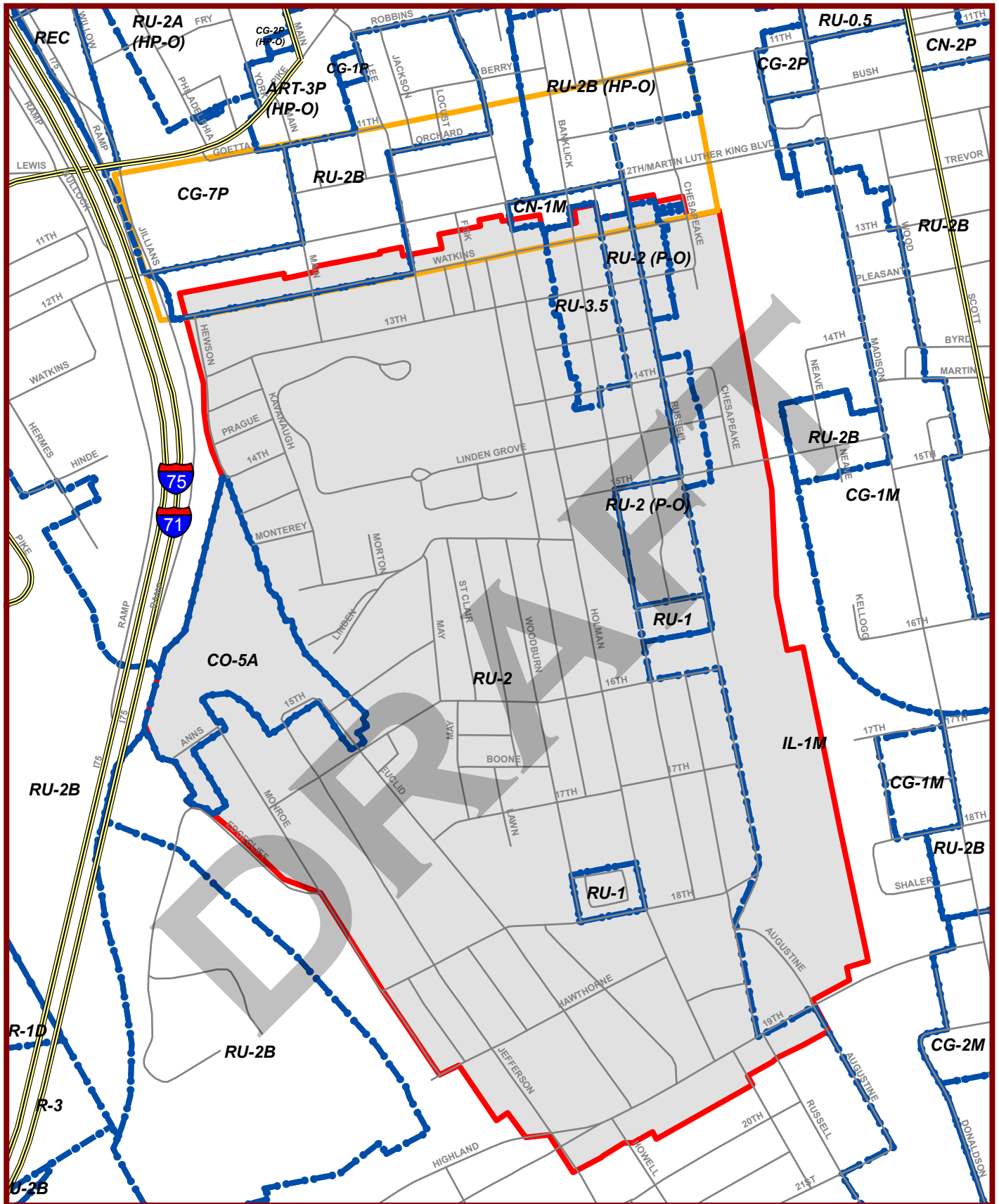


City of Covington
NKAPC



Notice: The information in this product is accurate for planning purposes only. Aerial photography dates: 2004

Map 9: Existing Zoning

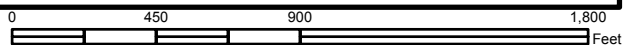


Linden Gateway Small Area Study

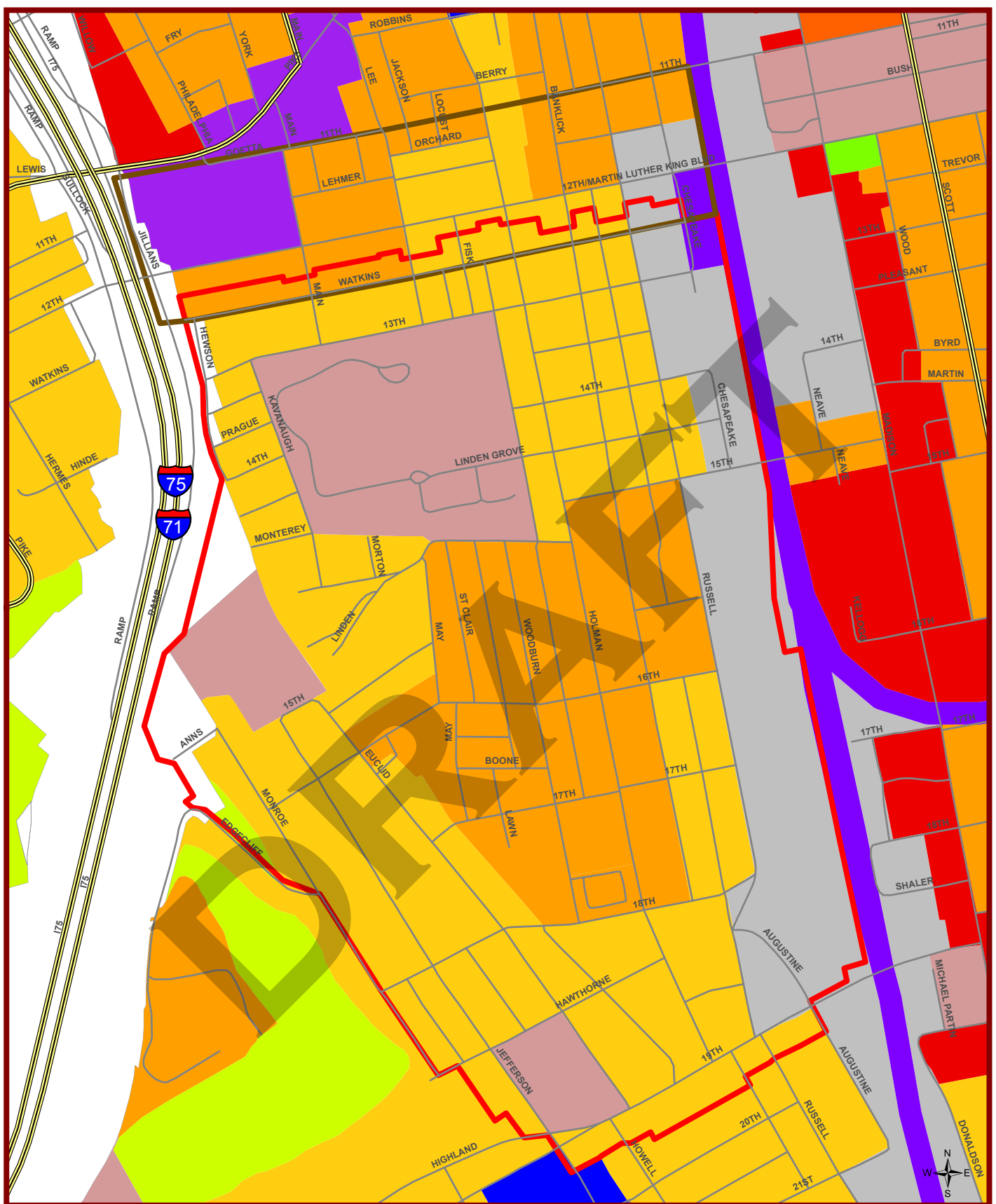


City of Covington
NKAPC

-  12th Street Redevelopment Plan
-  Linden Gateway Small Area Study
-  Kenton County Zoning



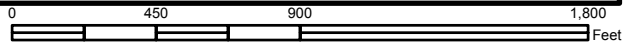
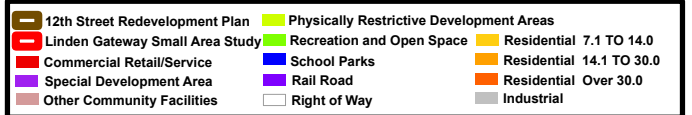
Map 10: 2006-2026: Recommended Land Use



Linden Gateway Small Area Study



City of Covington
NKAPC



Notice: The information in this product is accurate for planning purposes only. Aerial photography dates: 2004



DRAFT



Transportation in the study area is primarily composed of an auto oriented system with supplemental transit and pedestrian facilities. The following sections identify and discuss the existing conditions of the transportation system.

Commuting Patterns

On a regional scale, commuting patterns are primarily concentrated to and from the north to the commercial centers in Cincinnati and downtown Covington. The primary routes to these centers are via I-71/75 from the Pike Street Interchange and Madison Avenue and the Scott/Greenup Street pair via 12th Street. A defined reverse commute also exists to major employment centers to the south such as to locations within the vicinity of the Northern Kentucky Cincinnati International Airport, Industrial Road/US 25 and Hebron. The primary routes to these centers are through Interstate 71/75 through the 12th Street interchange and Madison Avenue and Highland Avenue via 19th Street. Regional activity centers are identified in Map 11-Regional Activity Centers.

On a local scale primary activity centers within the study area include the St. Augustine School and Church on 19th Street and Southside Baptist Church and daycare on Holman Street. In addition, the east side of Russell Street serves as the primary industrial and commercial center in the area, due to its location adjacent to the railroad. Future plans for the south side of 12th Street corridor call for increased commercial and retail activities after completion of the 12th Street widening project. (The impact of these improvements is discussed in Chapter 2 - 12th Street). Activity centers within the local study area are identified in Figure 9.1.

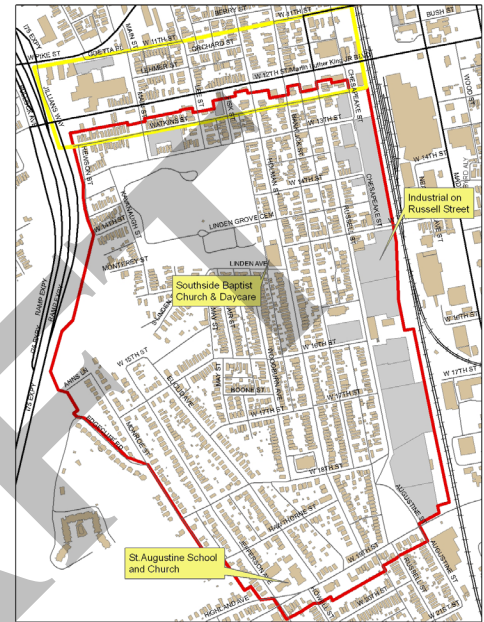


Figure 9.1: Local primary activity centers

Street System

The majority of the streets in the study area are local streets, primarily serving local traffic and providing access to adjacent residences and businesses. 12th Street, located on the northern border of the study area, is a major arterial and provides one of only two interchanges with I-71/75 which serve the City of Covington. Due to this access 12th Street serves as a primary entry point to the city. The southern border of the study area is bounded by 19th Street, which serves as a collector road, providing east-west connectivity from Covington to Fort Wright via Highland Avenue. The street classification according to the Kenton County Comprehensive Plan is shown in Map 12 – Transportation Systems.



Picture showing landscaped median at the intersection of Russell and Augustine Streets.

The street system in the study area is loosely based on a north-south and east-west grid system with intermittent one-way streets. The grid system is interrupted in the northwest quadrant of the study area due to the placement of the Linden Grove Cemetery and Interstate 71/75 and the accompanying topography. To the southwest the grid system is again interrupted due to the topographical conditions of the streets, requiring a departure from the north-south orientation and the creation of longer blocks.

As the study area is bounded by Interstate 71/75 to the west and the CSX Railroad to the east, ingress and egress to the community is primarily maintained from 12th and 19th Streets. Access from 12th Street is primarily provided at Main and Russell Streets. Access from 19th Street to the south is primarily provided via Russell Street/Augustine Street and at Holman Avenue. Russell Street and Augustine Street intersect north of 19th Street, where a landscaped gateway treatment identifies the neighborhood as shown in the picture. However, the skewed approaches and short one-way street sections make this a very confusing and poorly operating intersection(s). Additional access from the south is provided Euclid and Jefferson Avenues but primarily serve

local residential traffic on those streets. East-west access across the railroad was provided via 15th Street; however, structural deficiencies of this timber bridge have caused the city to close this bridge to traffic.

As mentioned previously, an intermittent one-way street system exists within the study area. One-way street pairs are provided with Woodburn Avenue, St. Clair Street and May Street as well as the pair of Euclid Avenue and Jefferson Avenue. The pair Jefferson and Euclid Avenues is located to the southwest where topographical constraints, necessitate longer blocks lengths, reducing the effectiveness of the couplet. In addition, several single one-way streets exist integrated within the two-way street system. These include West 17th Street, a southern section of Russell Street, the northern portion of Banklick Street, and 13th and 14th Streets which maintain one-way facilities in opposite directions on adjacent blocks. The one-way street system configuration is noted on Map 12 – Transportation Systems.

Due to the inconsistencies with the street system layout brought about by the topographical and land use constraints, in conjunction with the unique one-way street system, navigation of the study area by an unfamiliar user can be complicated and confusing. This system may, however, be useful in terms of reducing the amount of cut through traffic and reducing speeds through the area.

The majority of streets in the study area are between 24 and 30 feet wide, providing adequate room to accommodate two-way traffic and parking on at least one side of the street. Several streets such as Monroe Street, Lawn Street and West 17th Street maintain minimal widths below



20 feet. This width is minimal to accommodate the one-way traffic and parking on one side of the street. The primary streets in the area, Lee Street, Main Street, Russell Street and Holman Avenue maintain widths between 39 and 40 feet, providing more than adequate room to supply full width lanes in both directions and adjacent parking on both sides of the street. Streets widths in the area are restricted by available right-of-way as the street width and adjacent sidewalks currently occupy all available right-of-way in most locations. Appendix C shows the pavement widths and right of way widths for the study area.

The primary traffic control in the study area is multi-way stop controlled intersections. Several two-way stop conditions do exist; however, these may cause confusion with regard to the intended control of other users. The skewed street alignment and limited sight distances, specifically in the northwest quadrant of the study area, limit the visibility of some stop signs. This occurrence is mitigated by the low speeds on these roads, but further adds to the complicated navigation through the neighborhood.

Signal control is present on the major routes bordering the study area, specifically on 12th Street and 19th Street. 12th Street has four signal installations serving the study area, at Main Street, Lee Street, Holman Avenue and Russell Street. Four signals are also present on 19th Street serving the study area at Russell Street, Holman Avenue, Euclid Avenue and Jefferson Avenue. Signals on both streets are closely spaced, which can affect the ability to properly coordinate progression along the primary street. Discussions with city staff indicate that the signals on 19th Street have been observed to operate with poor coordination. Map 12 – Transportation Systems shows the

existing traffic control within the study area.

Bike and Pedestrian Facilities

The *Kenton County Bicycle Plan* (June 1999) does not identify any primary bike routes through the Linden Gateway area. No independent bicycle facilities exist in the area, though the low speeds and local use of the street system make the majority of roads amenable to shared use by auto and bicycles.

Most streets within the area have sidewalks on both sides of the street, typically provided parallel to the street system within existing right-of-way. There are a few locations, such as in the vicinity of the Linden Grove Cemetery where sidewalks are only provided on one side of a street.

Sidewalks are available, though conditions and presence of sidewalks varies significantly. Appendix B shows the availability and condition of sidewalks in the study area.

Transit Authority of Northern Kentucky (TANK)

TANK provides service to the Linden Gateway area with its Route Number 5 which traverses the study area on Holman Street. This route originates at the TANK offices/garage on Madison Pike in Ft. Wright and runs to the Covington Transit Center via Wal-Mart in Ft. Wright, City Heights, 19th Street, Holman Avenue, Pike Street, Eighth Street, and Madison Avenue. Ridership on Route 5 ranks seventh among the 26 routes in the TANK system.

Residents and employees within the northern part of the area, who are within a short walk of Pike Street, may also use Route 1 which runs on Pike Street just north of the study area. Residents further south in the study area can use Route 5

and transfer to Route 1 at Pike Street. This route has the highest ridership within the TANK system and provides service from the Covington Transit Center and Florence Mall area via Dixie Highway. Table 9.1 identifies ridership information for these two routes.

Accessibility to TANK Routes is very good for residents and businesses within the Linden Gateway area. One half mile is considered the maximum walking distance for pedestrians to traverse on a daily basis for goods and services. Approximately ninety-five percent of properties are within one-fourth mile of these routes.

Table 9.1: TANK Service to Study Area

August 2006 to July 2007			
Route Number	Route Name	Ridership	
		High Month	Year
5	Holman/ City Heights	May 2007 (13,760)	139,386
1	Florence/ Erlanger	August 2006 (53,041)	598,909

Crash Experience

Crash Records for the study area were reviewed for a three year period from January 1, 2004, to December 31, 2006, from data provided by the Kentucky Transportation Cabinet. This analysis identified a total of 563 crashes, including a total of 299 crashes located along the 12th Street corridor. It is assumed that the roadway project

by KYTC on 12th Street will address many of these crashes, leaving a total of 264 crashes within the study area. No fatalities were reported; however, 23 crashes resulted in a total of 26 injuries. Analysis of the crash types indicates that approximately 50 percent of the crashes involved a vehicle striking a parked car not in a parking lot or driveway. A total of four pedestrian and seven bicyclist crashes were reported, resulting in eight injuries; four each involving pedestrians and cyclists. When examined spatially (See Map 13 – Crash Data) crashes are shown to be concentrated to the north and south, specifically on Russell Street and Holman Avenue. However, no specific patterns or locations can be identified which identify a significant concern.

Infrastructure Conditions

In 2006, the Covington Engineering department conducted a citywide pavement inventory as part of the pavement management system. The inventory surveyed and evaluated each street in the city by block and assigned a PCI (Pavement Condition Index) to rate the pavement condition. The PCI is a numerical index between 0 and 100 and is used to indicate the condition of a roadway. PCI is based on a visual survey of the pavement with 100 representing an excellent pavement. The average PCI of the roadways in the study area is 80, indicating relatively good pavement performance.

A total of 27 sections received a score 100 indicating excellent pavement conditions; these included most pavement in the southwest quadrant of the study area including Jefferson Avenue, Euclid Avenue and 16th, 17th, and 18th Streets near Euclid Avenue. Russell Street was also rated high with the majority of sections receiving a PCI of 100. Several sections in the study area were also rated



poorly with 13 sections receiving a PCI of less than 50; the lowest PCI of 30 was received by W 14th Street east of Russell Street. Other poorly rated streets included 13th Street, 18th Street, Holman Avenue, Hawthorne Avenue and May Street.

Future Plans

Current plans for by the Kentucky Transportation Cabinet (KYTC) will widen 12th Street to a 5-lane section with a raised median within the next two years. This plan will remove several signals on 12th Street which currently serve the study area. In addition, the placement of the median along 12th Street will affect existing turning movements at Lee Street and Banklick Street. Further discussion of the challenges and opportunities provided by this plan is presented in the Chapter 2 - 12th Street.

Current plans by the city and KYTC, including redirecting of KY 17 away from the Wallace Woods neighborhood to 20th Street. Consideration and preliminary planning by the city has identified a possible extension of 19th Street from Madison Avenue to Scott Street, to provide movement of KY 17 from Scott Street back to Madison Avenue. This may also increase the attractiveness of using W 19th Street to access Highland Avenue and Fort Wright, by providing a direct connection and avoiding congestion on Interstate 71/75.

The Brent Spence reconstruction/replacement project will likely impact the study area and adjacent roadways to north. According to KYTC alternatives under consideration may add an additional seven lanes to the existing seven lanes near the 12th Street Interchange. While the majority of the widening would be to the west, some minor encroachment may be expected within the study area in the vicinity

of the proposed St. Elizabeth Medical Center. In addition, the widening may also impact the local street network between 12th Street and Pike Street. As the preferred alternative has yet to be determined, the final impacts of the projects are still undefined.

The proposed St. Elizabeth Medical Center will reconfigure the street system at Main Street, 13th Street and Kavanaugh Street to provide direct access to the proposed facility. A concept of this plan is shown in Figure 9.2 on next page. As proposed this plan will designate Main Street to be the primary through street by reconfiguring the existing 'T' intersection with 13th Street. The proposed configuration may have an impact on circulation patterns and access to local residents when combined with the proposed changes to access on 12th Street.

The proposed St. Elizabeth site development may also impact additional streets within the study area. Under the plan, the northern section of Euclid Avenue, which connects with Jefferson Avenue will be closed. Euclid Avenue and Jefferson Avenue will be dead ended and must be converted to two-way traffic. Additionally, the alley between May Street and Euclid Street north of W 16th Street will be closed with no access.

Long term plans for the region also include the incorporation of light rail transit from 12th Street to the Northern Kentucky/Cincinnati Airport. While the exact alignment of this section of the light rail plan is not defined, it is proposed to run near or through the study area, parallel to Interstate 75. The light rail plan is identified

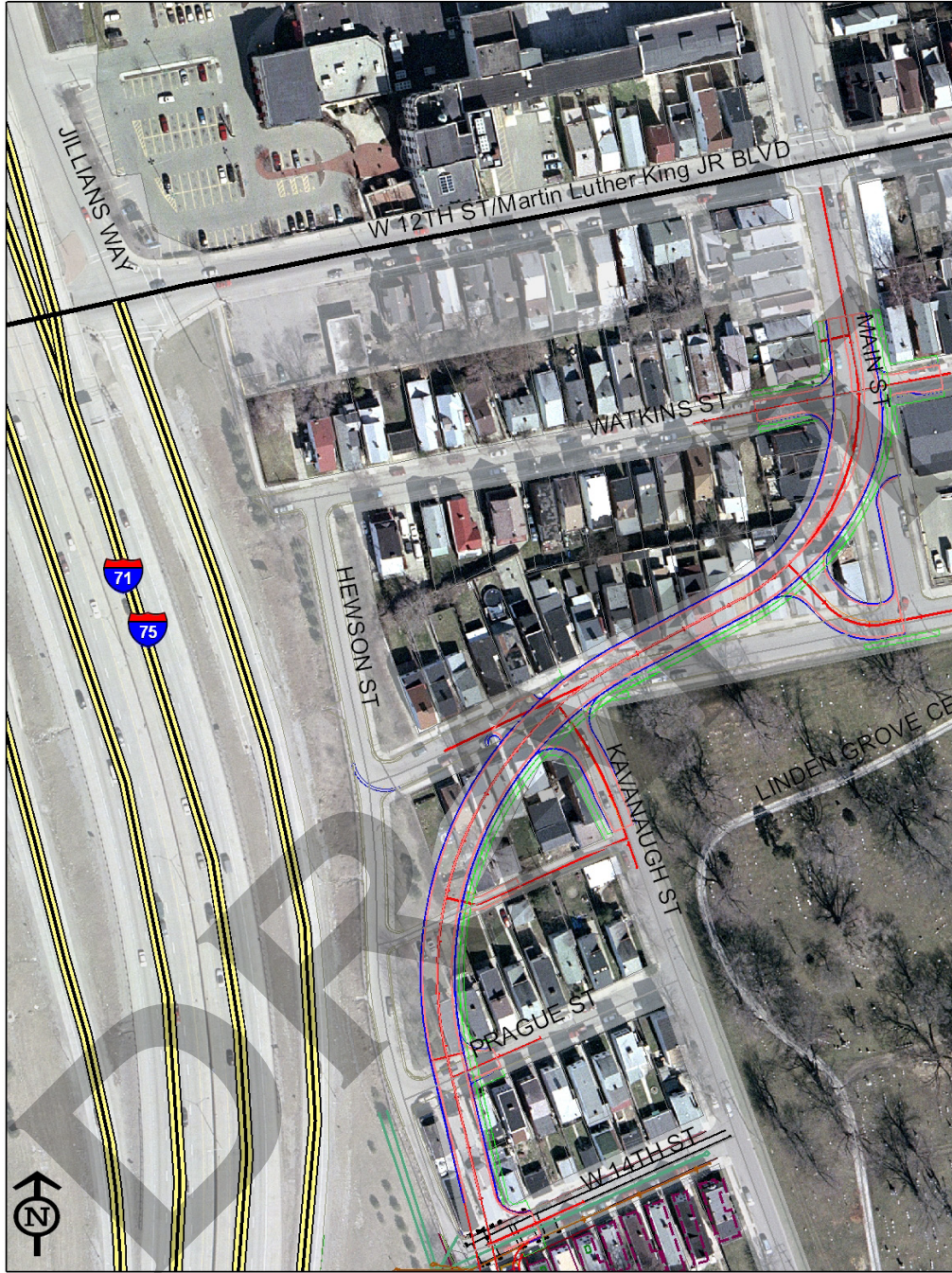


Figure 9.2: Configuration of proposed access road from 12th Street to St. Elizabeth Medical Center



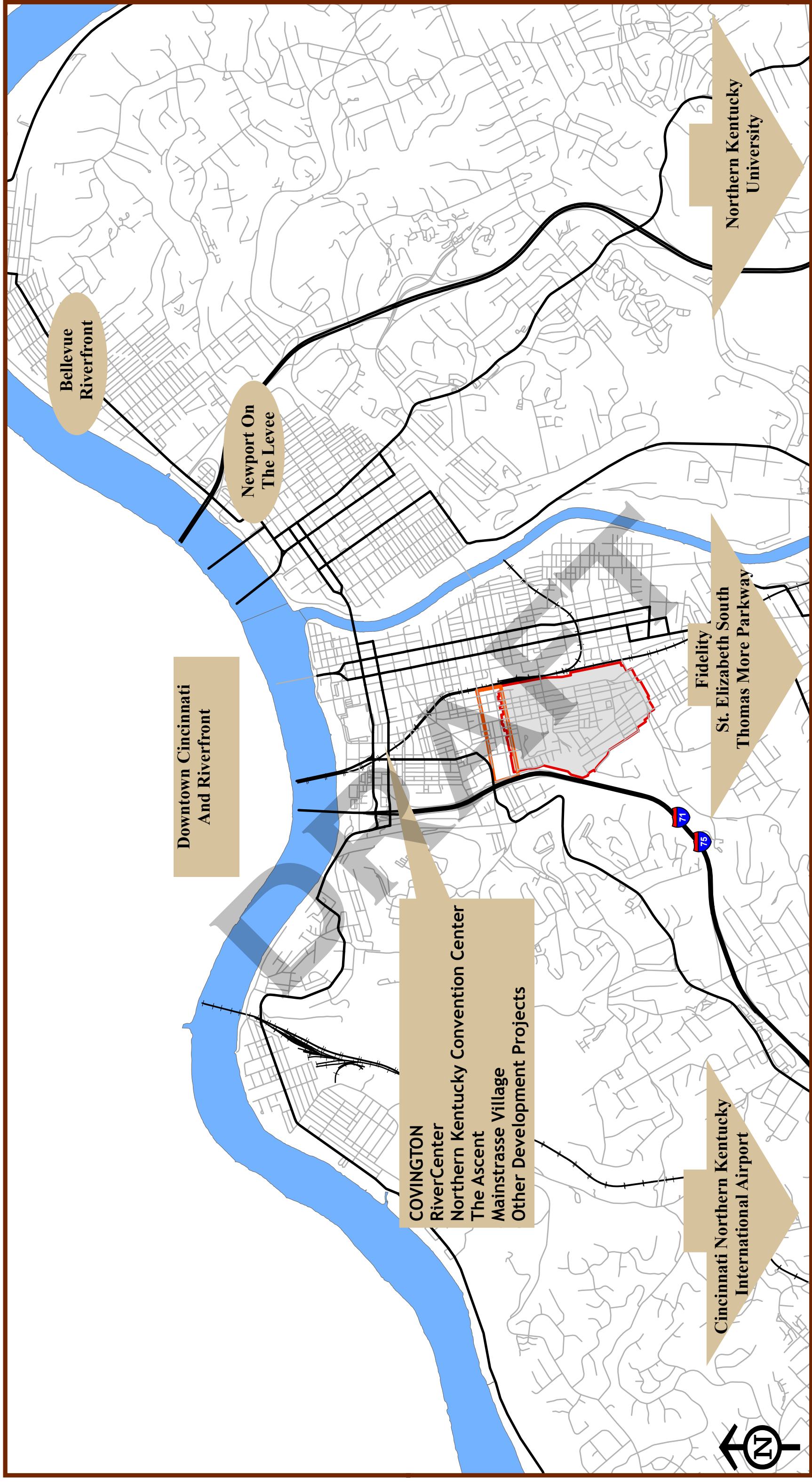
in the OKI 2030 Regional Transportation Plan; however, the section in Northern Kentucky is not contained in the fiscally constrained portion of the plan. Instead, this section is included in the Rail Transit Vision Plan.

Discussions with city staff also indicated a potential desire of the Linden Grove Cemetery to relocate the main entrance and accompanying iron gates from its current location on 14th Street to a new entrance at Lee Street.

Considerations:

- The potential for transit service to the new St. Elizabeth Medical Center area and locations for sheltered bus stops should be analyzed.
- Concentration on safe pedestrian and bicycle mobility within the study area, to serve local residents and children, maintaining at a minimum safe routes to school, as well as safe routes to local businesses, with a concentration of proposed redevelopment along 12th Street. Pedestrian/bike connectivity should be examined to infiltrate into the existing community, across 12th and 19th Streets.
- A review of internal circulation, including one-way streets, and traffic control to analyze if the road network is still appropriate and to determine if any problems arise or other issues are solved, specifically in regards to the St. Elizabeth Medical Center access plan should be conducted.
- Review of external access points to and from the study area to provide proper access, in light of the access changes proposed by the 12th Street reconstruction plan and St. Elizabeth Access plan.

Map 11: Regional Activity Centers



City of Covington

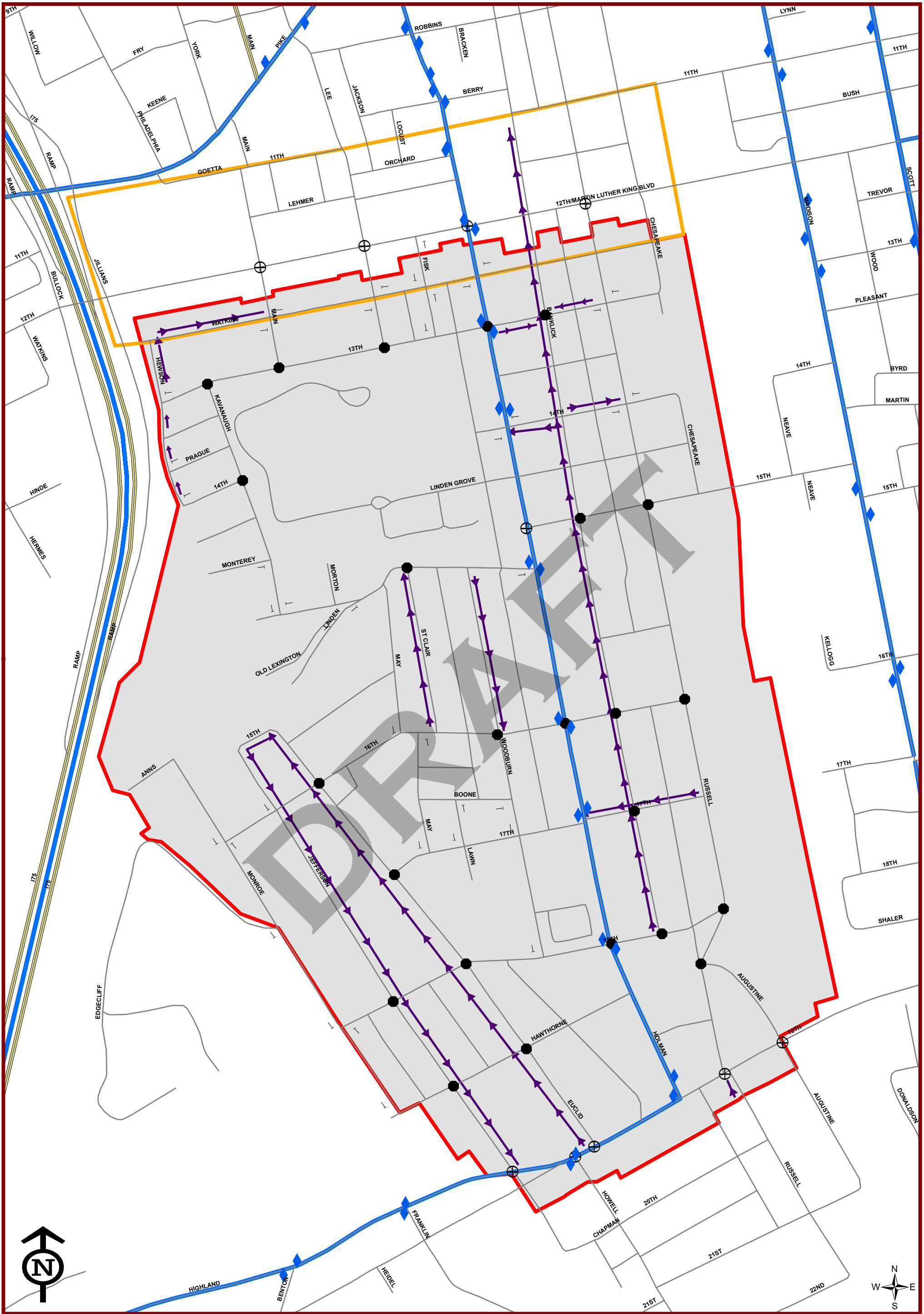
NKAPC

12th Street Redevelopment Plan
Linden Gateway Small Area Study



Notice: The information in this product is accurate for planning purposes only. Aerial photography dates: 2004

Map 12: Transportation Systems



Linden Gateway Small Area Study

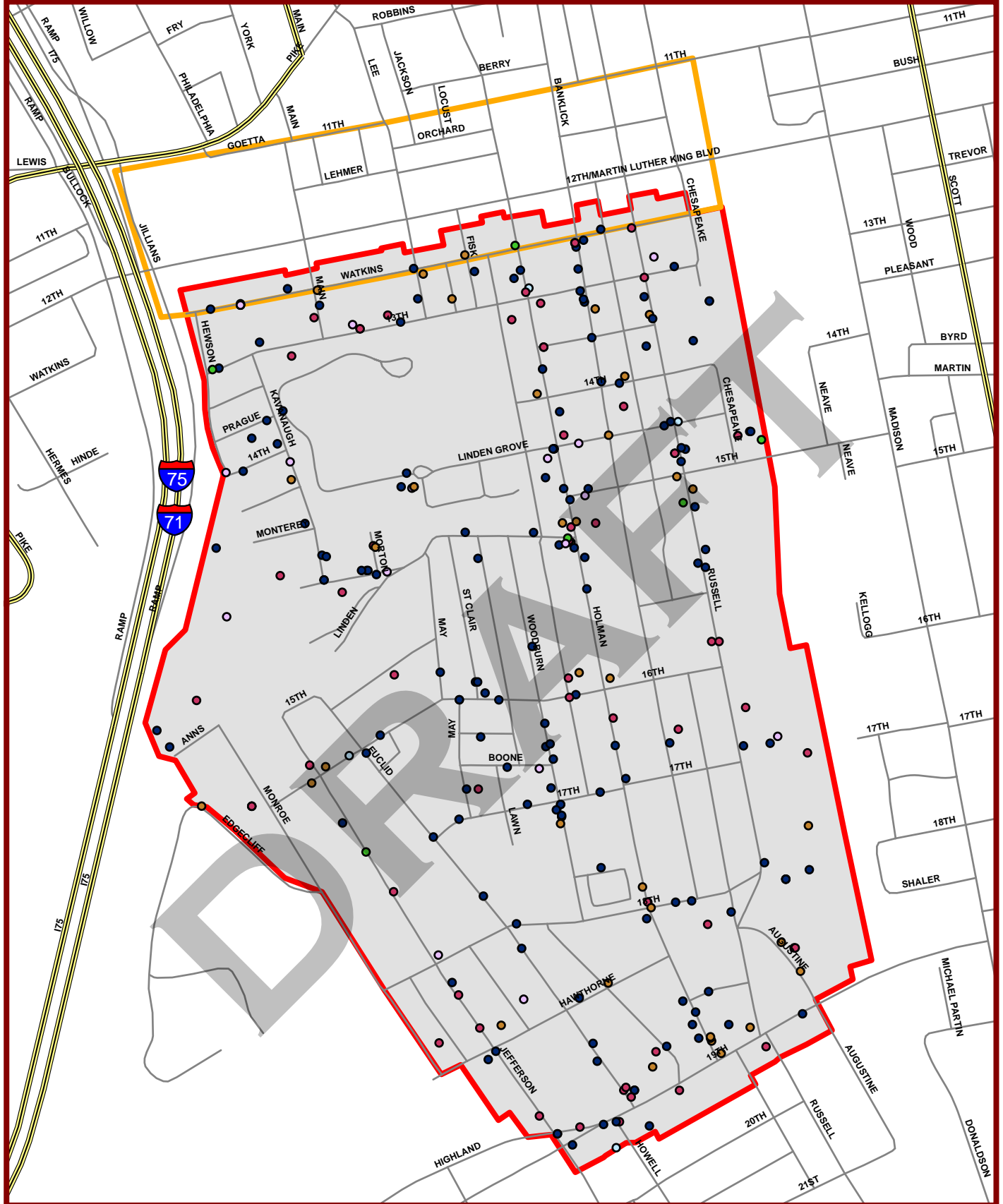


City of Covington
NKAPC

12th Street Redevelopment Plan		TANK		Road Classification		Traffic Control	
	12th Street Redevelopment Plan		TANK Bus Stops		Collector		All Way Stop
	Linden Gateway Small Area Study		TANK Routes		Arterial		Directional Stop
					Local		Signal
							One-way

Notice: The information in this product is accurate for planning purposes only. Aerial photography dates: 2004

Map 13: Crash Data



Linden Gateway Small Area Study



City of Covington
NKAPC

	12th Street Redevelopment Plan		Other
	Linden Gateway Small Area Study		Parked Car
	Angle		Pedestrian
	Bicycle		Single Vehicle

0 450 900 1,800 Feet

Notice: The information in this product is accurate for planning purposes only. Aerial photography dates: 2004

A building conditions survey was carried out in the study area to collect information on land use, vacant buildings, and the external condition of the building.

Methodology

After researching several methods and survey forms used for similar projects, a study done by the Community Planning Workshop at the University of Oregon was determined to be the most applicable and best suited to this study. Using the housing condition survey form as a starting point, the evaluation criteria was determined and then reviewed by staff from both the Center for Great Neighborhoods and the Northern Kentucky Area Planning Commission.

The building condition worksheet on page 54 was prepared. The survey was designed to obtain the necessary information quickly, and accurately. All properties were visually inspected from the sidewalk. If necessary, and where possible, the surveyor would observe the back of the property for out building inspection. A worksheet was filled out for every property. If there was no structure on the property this was noted on the worksheet concluding that survey.

The worksheet is comprised of four sections. The first has the date the survey was taken, the surveyor, address of the property, and whether the observed land use matches the recorded land use. This last item was performed in the office.

The second section covers the use, occupancy, size, construction, exterior surface, and existence and condition of outbuildings. The use of the structure is divided by type of residential, store, or other. Given their historic importance to residential neighborhoods a special selection was made for stores on a corner so the data of these structures can be quickly gathered together if desired. If the use did not match one of the provided selections the use was written out in the 'other' space. This data is broken down and provided below.

The third part of the survey is the evaluation of five major elements for each property. A matrix was developed that was modeled after the housing condition survey conducted by the University of Oregon's Community Planning Workshop. This matrix assigned a numerical rank to the condition of each major housing element. The five elements included in the assessment were:

1. foundation
2. stairs, rails, and porches
3. roof, gutters, downspouts, and chimney
4. exterior surfaces
5. windows and doors

Each of the criteria was given a numerical ranking that coincides with the following short explanations: well maintained, moderate maintenance, minor repair, moderate repair, major repair, and not salvageable.

The short explanations/rankings, beginning on page 55, came directly from the study done by the University of Oregon and were defined within the matrices; with 6 being the “best” score and 1 being the “worst”.

The numerical ranking was a tool that allowed the evaluator to quickly assess the condition of a home and obtain a value for the overall condition. The highest score a house can receive is 30, meaning all of the elements are rated as well-maintained. The following are the five overall condition categories:

1. good condition (24-30 points)
2. minor deterioration (18-23 points)
3. moderate deterioration (12-17 points)
4. substantial deterioration (6-11 points)
5. dilapidated (0-5 points).

Where an element could not be seen, the element received a ‘0’ ranking. If an element received a ‘0’ ranking, the overall condition was determined accounting for the missing score of the unevaluated element.

The last section is space for the surveyor to write down comments on the structure. The data from each worksheet was put into a database for statistical analysis and integration into a Geographic Information System.

Results

Total parcels surveyed – 1315

Structures:

Parcels with Structures	1209
Parcels without Structures	103
Nothing Recorded	3

Occupancy

Occupied Structures	1096
Unoccupied Structures	109
Not Sure	4

Construction Type

Wood	435
Brick	756
Stone	5
Other	6
Nothing Recorded	7

Exterior Surface

Brick	572
Wood	55
Veneer	3
Aluminum/Vinyl	476
Stucco	9
Asphalt Shingle	26
Brick & Alum/Vinyl	41
Brick & Other	9
Alum/Vinyl & Other	12
Other	6

Household Type

Single Family	963
Multi Family	179
Apartment Building	3
Apartments & Business	10
Store (corner)	16
Store (other)	27
Business	5
Garage	2
School	2
Church	2



Building Conditions Survey

Overall Condition

Good	669
Minor Deterioration	421
Moderate Deterioration	101
Substantial Deterioration	15
Dilapidated	3

Average condition = 22.8

Given the age of most of the structures in the study area the average condition is quite good. This indicates that most of the structures have been well maintained. As expected the vast majority of the structures are residents, and the majority of these are single family.





Evaluation Worksheet

Date: _____
Evaluator: _____

Parcel ID: _____
Street Address: _____
Recorded Land Use:
1. Correct
2. Incorrect
Observed Land Use: _____

Structure (circle one)
1. Yes
2. No

Occupancy (circle one)
1. Occupied
2. Vacant

Number of floors (circle one)
1 2 3 4 5 6+

Construction Type (circle one)
1. Wood
2. Brick
3. Stone
4. Other

Exterior Surface (circle one)
1. Brick
2. Wood
3. Veneer
4. Aluminum/Vinyl
5. Stucco
6. Asphalt shingles
7. Other

Household Type (circle one)
1. Single-family
2. Multi-family
3. Apartment Building
4. Store
 a. Corner
 b. Other

Name of Business: _____

Outbuildings (circle one)
1. Yes Condition:
2. No 1. Good 2. Adequate 3. Poor

Elements of Residence	Score (0-6)	Observed	
		Yes	No
Foundation			
Stairs, Rails, Porches			
Roof, Gutter, Downspouts, Chimneys			
Exterior Surfaces			
Windows and Doors			
Total			

Overall Condition
1. Good condition (24-30)
2. Minor deterioration (18-23)
3. Moderately deteriorated (12-17)
4. Substantially deteriorated (6-11)
5. Dilapidated (0-5)

Notes: _____

Linden Gateway Small Area Study



Building Conditions Survey

Evaluation Criteria and Definitions

EVALUATED ELEMENTS	6 Well Maintained	5 Moderately Well Maintained	4 Needs Only Minor Repair	3 Needs Moderate Repair (up to ¼ of element)	2 Needs Major Repair (up to ½ of element)	1 Not Salvageable (majority of element needs repair)	0 Not Witnessed
Foundation	Does not need immediate maintenance.	Some peeling or cracking in the protective surface over only a small portion	A few small cracks, small amount of missing mortar, a small hole over a small area of the surface.	Cracks, missing mortar, loose or broken surface over a moderate portion. No evidence of settling or out of vertical alignment.	Cracks, missing mortar, loose or broken surface over a large portion. Some evidence of settling or out of vertical alignment.	Cracks, missing mortar, loose or broken surface over a majority of the foundation. Evidence of major settling or out of vertical alignment.	
Stairs, Rails, Porches	Does not need immediate maintenance.	Paint needs minor touch ups.	One missing, broken, or cracked step, riser, baluster, handrail, or railing that needs minor repairs or paint.	More than one missing, broken, or cracked steps, risers, balusters, handrails, or railings that need minor repairs or paint. Not a serious safety concern.	Between ¼ to ½ of the steps, risers, balusters, handrails, or railings are missing, broken, rotting, or cracked. Hazard of tripping or falling because of disrepair.	A majority of the steps, risers, balusters, handrails, or railings are missing, broken, rotting, or cracked. Hazard of tripping or falling because of disrepair.	

<p>Roof, gutters, downspouts, chimneys</p>	<p>Does not need immediate maintenance.</p>	<p>Small leaves on the roof or gutters that may need to be cleaned out.</p>	<p>Need minor repairs to correct a missing or sagging shingle, gutter, or downspout; cracked or missing brick or mortar in chimney; or moss growing on roof.</p>	<p>More than one missing or sagging shingle, gutter, or downspout; cracked or missing brick or mortar chimney or rotting fascia affecting less than ¼ of the roof and chimney elements.</p>	<p>Missing, buckling, or sagging shingles; holes in the roof or chimney; missing or loose gutters or downspouts; chimney settling or leaning; cracked or rotting fascia affecting between a ¼ and 1/2 of the roof and chimney elements.</p>	<p>Missing, buckling, or sagging shingles; holes in the roof or chimney; missing or loose gutters or downspouts; chimney settling or leaning; cracked or rotting fascia affecting the majority of roof and chimney elements.</p>	
<p>Exterior Surfaces – paint, siding, or other material and the structural elements that add strength, bear weight, or insulate the structure</p>	<p>Does not need Immediate maintenance.</p>	<p>Isolated areas where some touch up painting is needed.</p>	<p>Paint and/or siding need some repair work, but there is no evidence of structural decay.</p>	<p>Paint and/or siding need repair work and there is evidence of some structural decay, such as dry rot, affecting up to 1/4 of the surface.</p>	<p>Major repair work is needed to correct paint, siding, or other parts of the protective surface. There are areas of structural decay affecting up to 1/2 of the surface.</p>	<p>A majority of the protective surface is missing, loose, rotting, or broken allowing weather to reach the structural elements of the structure.</p>	



Building Conditions Survey

<p>Windows and Doors</p>	<p>Does not need Immediate maintenance.</p>	<p>All doors, frames, and glass present; may have an isolated instance needing a touch up, such as replacing a latch or other hardware.</p>	<p>Need minor repairs to correct a broken or cracked frame, re-hang a door, or other small hole related to a door or window.</p>	<p>There are missing or broken panes, broken or rotting window or door frames, or other holes related to a door or window failure affecting up to 1/4 of all of the windows and doors.</p>	<p>There are missing or broken panes, broken or rotting window or door frames, or other holes related to a door or window failure affecting between a 1/4 to 1/2 of all the windows and doors.</p>	<p>A majority of the windows and doors are failing. There are missing or broken panes, broken or rotting window or door frames, or other holes related to a door or window.</p>	
---------------------------------	---	---	--	--	--	---	--



APPENDIX A: 12TH STREET CORRIDOR EXISTING ZONING (See Map A on page X)

For the complete set of regulations refer the Covington Zoning Ordinance.

Location	Zoning District	Permitted Uses
North side of 12 th Street from I-75 to Main Street	CG-7P Commercial - General	Commercial uses such as restaurants, offices, small & medium entertainment establishments, car wash, hotels and so on with a floor area ratio of 7.0 and a minimum lot area of 400 square feet. However dwelling units in mixed use buildings are also permitted. The “P” designation denotes that buildings must be placed within 5 feet of the front and street side property lines. No drive-through uses are permitted in this zone. This zone is generally intended to apply to sites adjacent to arterial streets.
North side of 12 th Street from Main Street to Lee Street	RU-2B* Urban Residential	Residential uses such as detached & attached single-family houses, two-unit & multi-unit buildings, residential care facilities, neighborhood parking lots and so on with a minimum lot area of 2,000 square feet for single family homes and a minimum lot area of 6,000 square feet for multi-family uses. This zone also permits artist studios and neighborhood retail sales & service uses. Offices are permitted as a conditional use in this zone. The maximum permitted density is 21.8 dwelling units/net acre. This zone is intended to accommodate moderate-density residential development consisting of a wide variety of housing.
North side of 12 th Street between Lee, Holman, 11 th and Orchard Streets		
South side of 12 th Street from I-75 to Lee Street		
North side of 12 th Street between Lee, Orchard, Holman and 12 th Streets. (Inclusive of properties east of and facing Holman Street)	RU-2 Urban Residential	Residential uses such as detached & attached single-family houses, residential care facilities, neighborhood parking lots and so on with a minimum lot area of 2,000 square feet for single family homes and a minimum lot area of 6,000 square feet for multi-family uses. The maximum permitted density is 21.8 dwelling units/net acre. This zone is intended to accommodate moderate-density residential development consisting of detached and attached houses.
South side of 12 th Street between Lee and Holman Streets		
South side of 12 th Street from Russell Street to mid-block between Banklick and Russell Street		
North side of 12 th Street between Banklick and Russell Streets (Inclusive of properties west of and facing Banklick Street)	RU-2B (HP-O) Urban Residential With a Historic Preservation Overlay	The uses permitted and density is the same as explained above for RU-2B. The Historic Preservation Overlay (HP-O) zone applies additional regulations from the Covington Design Guidelines, for the exterior of buildings. Demolition of buildings or structures are prohibited unless they are reviewed and approved by Covington’s Urban Design Review Board.
North side of 12 th Street between Russell Street and the CSX railroad and midblock between 11 th and 12 th Streets.		
North side of 12 th street between Russell Street and the CSX railroad and midblock between 11 th and 12 th Streets	IL-1M Industrial - Limited	Among other uses this zone permits industrial uses such as recycling facilities, indoor and outdoor warehouse and freight movement, general and limited industrial service and so on. The “M” designation denotes that at least 60 percent of the building facade must be placed within 5 feet of the front and side property lines. No drive-through uses are permitted in this zone. This zone is intended to accommodate low to moderate impact manufacturing, wholesaling, warehousing and distribution uses.
South of 12 th Street between Russell Street and the CSX railroad		

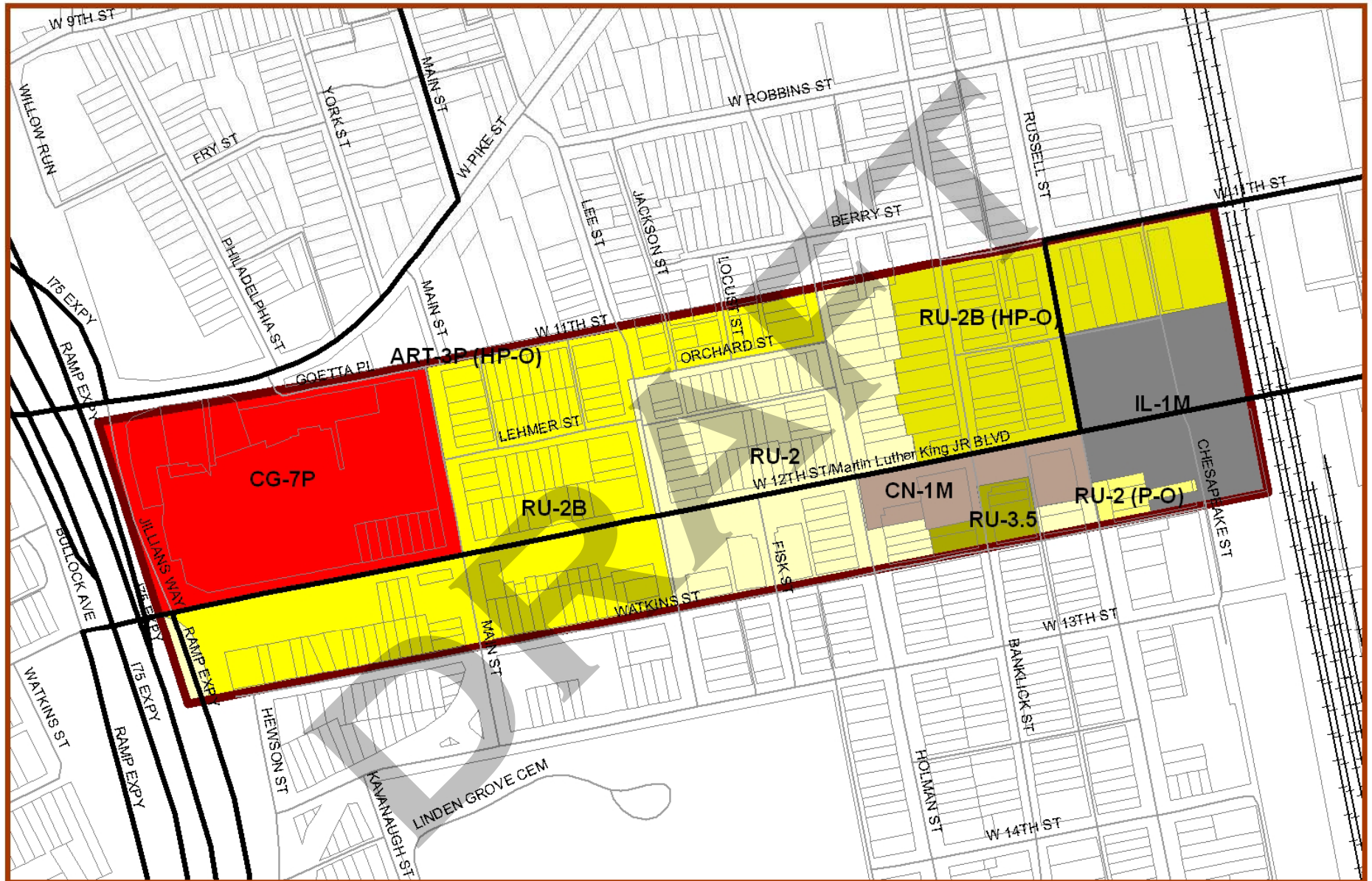
* Within the RU-2B Zone, the minimum lot area per dwelling unit is 2,000 square feet, except that in the case of an existing residential building, one dwelling unit shall be permitted for each 1,000 square feet of gross floor area in the building, not including the basement.

Location	Zoning District	Permitted Uses
South side of 12 th Street between Russell Street and Chesapeake Street (Includes only few properties)	<p style="text-align: center;"> RU-2 (P-O) Urban Residential with Phased Overlay Zone </p>	<p>The uses permitted and density is the same as explained above for RU-2. The P-O designation denotes a phased overlay where the regulations of the overlaid zone are currently being enforced based on the general existing land use, but on the attainment of all the requirements of the zone that corresponds to the adopted Comprehensive Plan that area could be rezoned.</p>
South side of 12 th Street from Holman to Russell Streets (Includes only few properties north of Watkins Street)	<p style="text-align: center;"> CN-1M Commercial - Neighborhood </p>	<p>Commercial uses such as restaurants, offices, small entertainment establishments, bed and Breakfasts and so on with a floor area ratio of 1.0 and a minimum lot area of 1,250 square feet. However dwelling units in mixed use buildings are also permitted. The “M” designation denotes that at least 60 percent of the building facade must be placed within 5 feet of the front and side property lines.</p> <p>This zone is generally intended to apply in compact nodes at the intersection of 2 or more streets or in a cohesive linear fashion along streets characterized by slow traffic speeds and low to moderate traffic volumes.</p>
South side of 12 th Street to Watkins Street, inclusive of few properties east and west of Banklick Street	<p style="text-align: center;"> RU-3.5 </p>	<p>Residential uses such as detached & attached single-family houses, residential care facilities, neighborhood parking lots and so on with a minimum lot area of 3,500 square feet. The maximum permitted density is 12.4 dwelling units/net acre. This zone is intended to accommodate moderate-density residential development that is in keeping with the established character of some areas of the city.</p>

DRAFT

MAP A

12TH STREET: EXISTING ZONING



APPENDIX B: STREETSCAPE ASSESSMENT

--	--	--	--	--	--	--	--

STREETSCAPE ELEMENTS:

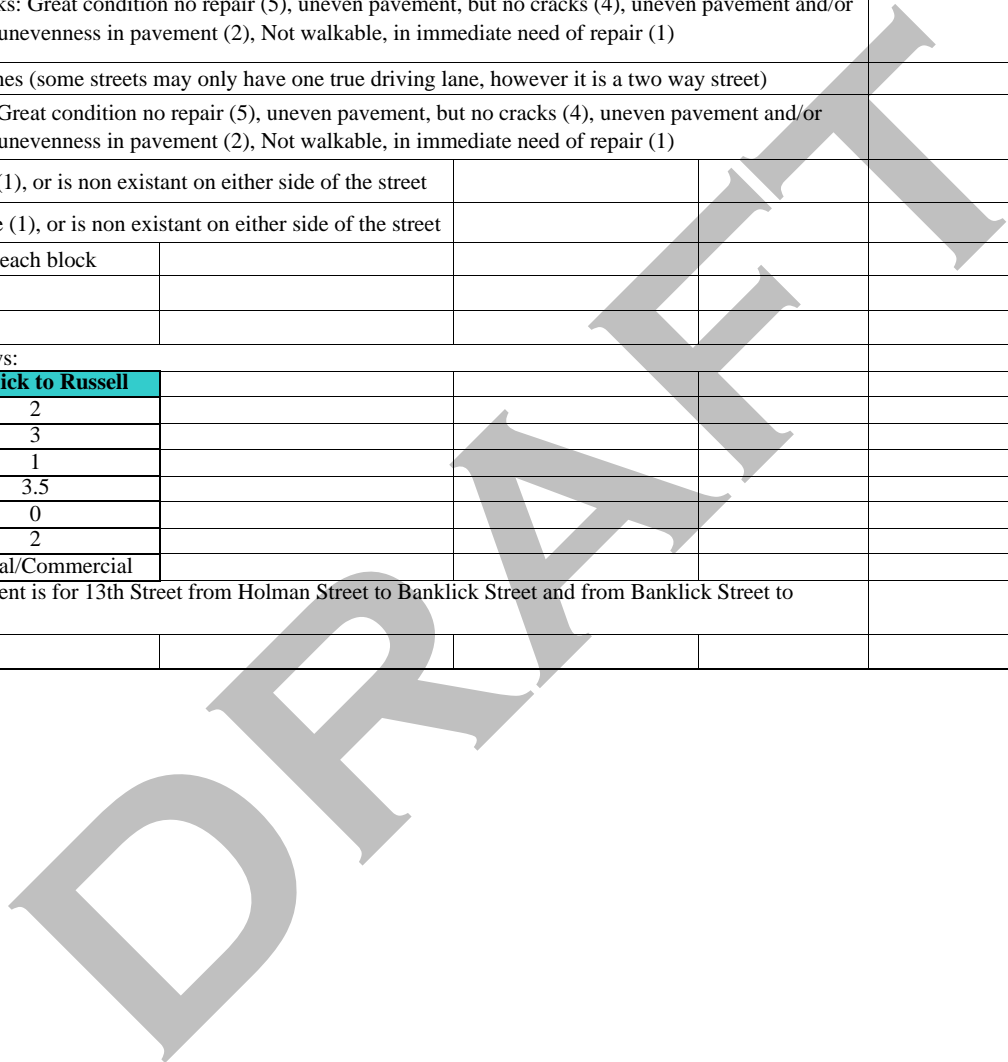
Sidewalk	Denotes if sidewalks are on both (2), one (1), or is non existant on either side of the street						
Condition	Denotes the condition of the sidewalks: Great condition no repair (5), uneven pavement, but no cracks (4), uneven pavement and/or cracks (3), Significant cracks and/or unevenness in pavement (2), Not walkable, in immediate need of repair (1)						
Street Lanes	Denotes only the number of street lanes (some streets may only have one true driving lane, however it is a two way street)						
Condition	Denotes the condition of the streets: Great condition no repair (5), uneven pavement, but no cracks (4), uneven pavement and/or cracks (3), Significant cracks and/or unevenness in pavement (2), Not walkable, in immediate need of repair (1)						
Trees	Denotes if trees are on both (2), one (1), or is non existant on either side of the street						
Parking	Denotes if parking is on both (2), one (1), or is non existant on either side of the street						
Land use	Denotes the primary land uses along each block						
(0) denotes absence of any streetscape elements.							

The table on the following pages is arranged as follows:

13th Street	Holman to Banklick	Banklick to Russell
Sidewalk	2	2
Condition	3	3
Street Lns	2	1
Condition	3	3.5
Trees	0	0
Parking	1	2
Land use	Residential/Commercial	Residential/Commercial

The above table indicates that the streetscape assessment is for 13th Street from Holman Street to Banklick Street and from Banklick Street to Russell Street.

--	--	--	--	--	--	--	--



13th Street	Holman to Banklick	Banklick to Russell	Russell to Chesapeake	Kavanaugh to Main	Main to Lee	Lee to Fisk	Fisk to Holman
Sidewalk	2	2	2	1	2	2	2
Condition	3	3	2.5	4	4	4	4
Street Lns	2	1	1.5	1	2	1.5	2
Condition	3	3.5	3	4	3.5	3	3.5
Trees	0	0	0.25	1	2	0	2
Parking	1	2	2	1	2	2	2
Land use	Residential/Commercial	Residential/Commercial	Residential/Commercial	Residential	Residential	Residential/Commercial	Residential
Prague	Hewson to Kavanaugh						
Sidewalk	2						
Condition	5						
Street Lns	1						
Condition	5						
Trees	0						
Parking	2						
Land use	Residential						
14th Street	Hewson to Kavanaugh	Holman to Banklick	Banklick to Russell				
Sidewalk	2	2	2				
Condition	4	4	4				
Street Lns	1	1	1				
Condition	4	3.5	3.5				
Trees	2	0	0				
Parking	2	2	2				
Land use	Residential	Residential	Commercial/Residential				
Monterey	Kavanaugh to end						
Sidewalk	2						
Condition	5						
Street Lns	1						
Condition	4						
Trees	0						
Parking	1						
Land use	Residential						
15th Street	Holman to Banklick	Banklick to Russell					
Sidewalk	2	2					
Condition	4	3					
Street Lns	2	2					
Condition	4	4					
Trees	2	2					
Parking	1	1					
Land use	Residential/Institutional/Civic	Residential					
Linden	Kavanaugh to Morton	Morton to St. Clair	St. Clair to Holman				
Sidewalk	2	2	1				
Condition	5	5	5				
Street Lns	2	1.5	2				

Condition	5	5	4					
Trees	2	0	0					
Parking	1	0	1					
Land use	Residential	Residential	Residential					

DRAFT

16 Street	Euclid to May	May to St Clair	St Clair to Woodburn	Woodburn to Holman	Holman to Banklick	Banklick to Russell		
Sidewalk	2	2	2	2	2	2		
Condition	3	2.5	2	2.5	4	4		
Street Lns	2	2	1	2	2	2		
Condition	4	3.5	4	3.5	3.5	3.5		
Trees	0	0	0	0	2	2		
Parking	1	1	1	1	1	1		
Land use	Residential	Residential	Residential	Residential/Commercial	Residential	Residential/Industrial		
Boone	May to Lawn	Lawn to Woodburn						
Sidewalk	2	2						
Condition	4	3						
Street Lns	1	1						
Condition	4	4						
Trees	0	0						
Parking	2	2						
Land use	Residential	Residential						
17th Street	Euclid to May	May to Lawn	Lawn to Woodburn	Woodburn to Holman	Holman to Banklick	Banklick to Russell		
Sidewalk	2	2	2	2	2	2		
Condition	4.5	5	4.5	4.5	4.5	3		
Street Lns	2	1	1	1	1	1		
Condition	5	4	4	4	3.5	4		
Trees	0	2	2	2	0	0		
Parking	0	2	2	2	1	1		
Land use	Residential	Residential	Residential	Residential	Residential	Residential		
18th Street	Monroe to Jefferson	Jefferson to Euclid	Euclid to Woodburn	Woodburn to Holmans	Holmans to Banklick	Banklick to Russell		
Sidewalk	2	2	2	2	2	2		
Condition	1&3.5	4	4.5	4	3	3.5		
Street Lns	1.5	1.5	2	2	1.5	1.5		
Condition	3	3	3	3.5	3	3		
Trees	0	0	0	0	1	1		
Parking	2	2	1	1	2	2		
Land use	Residential	Residential	Residential	Residential/Commercial	Residential	Residential		
Hawthorne	Monroe to Jefferson	Jefferson to Euclid	Euclid to Holman					
Sidewalk	2	2	2					
Condition	2	2	2.5					
Street Lns	1.5	1.5	1.5					
Condition	2.5	2.5	2.5					
Trees	0	0	0					
Parking	2	2	2					
Land use	Residential	Residential	Residential/Institutional					
Highland/19th	Jefferson to Franklin	Euclid to Jefferson	Holman to Euclid	Russell to Holman				
Sidewalk	2	2	2	2				
Condition	4	3.5	2	2				
Street Lns	2	2	2	2				

Condition	4	5	4.5	4.5				
Trees	0	0	0	0				
Parking	1	2	1	1				
Land use	Residential	Residential	Residential/Commercial	Residential/Commercial				

DRAFT

Watkins	Main to Lee	Lee to Fisk	Fisk to Holman					
Sidewalk	2	2	2					
Condition	2.5	2.5	2.5					
Street Lns	1.5	1	1					
Condition	3	brick	brick					
Trees	2	1	1					
Parking	2	1	1					
Land use	Residential/Commercial	Residential	Residential					
Holman	12 to 13	13 to 14	14 to 15	15 to Linden	Linden to 16	16 to 17	17 to 18	
Sidewalk	2	2	2	2	2	2	2	
Condition	4	4	4	4	4	4	4	
Street Lns	2	2	2	2	2	2	2	
Condition	4	3.5	3.5	3	3	3.5	3	
Trees	2	2	2	2	2	2	2	
Parking	2	2	2	2	2	2	2	
Land use	Residential	Residential	Inst/res	inst/res	Residential	Residential	Residential	
Holman	18 to Hawthorne	Hawthorne to 19						
Sidewalk	2	2						
Condition	3	3						
Street Lns	2	2						
Condition	3	3						
Trees	1	1						
Parking	2	2						
Land use	Residential	Residential						
Banklick	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18		
Sidewalk	2	2	2	2	2	2		
Condition	4	3	3	3.5	4	4		
Street Lns	1	1	1	1	1	1		
Condition	3	3.5	3	3	3.5	3.5		
Trees	0	0	2	1	2	2		
Parking	1	1	1	1	1	1		
Land use	Residential	Residential	Residential	Residential/Multi-family	Residential	Residential		
Russell	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	
Sidewalk	2	2	2	2	2	2	2	
Condition	3.5	4	4	4	4	4	4	
Street Lns	2	2	2	2	2	2	2	
Condition	4	4	4	4	4	4	4	
Trees	yes	2	2	1	2	2	2	
Parking	2	2	2	2	2	2	2	
Land use	res/inst	res/indust	res	res/inst	res/indust/inst	res/indust	res/indust	
Kavanaugh	13 to Prague	Prague to 14	14 to Monterey	Monterey to Linden				
Sidewalk	1	1	1	2				
Condition	4	4.5	4	4				
Street Lns	1	2	2	2				
Condition	4	4	4	4				

Trees	1	1	1	1				
Parking	1	1	1	1				
Land use	Residential	Residential	Residential	Residential				

DRAFT

Lee	12 to 13						
Sidewalk	2						
Condition	4						
Street Lns	2						
Condition	3.5						
Trees	2						
Parking	2						
Land use	Residential						
Fisk	12 to 13						
Sidewalk	2						
Condition	4						
Street Lns	1.5						
Condition	3						
Trees	0						
Parking	2						
Land use	Residential/Commercial						
Monroe	15 to 16	16 to 18	18 to Hawthorne				
Sidewalk	2	2	0				
Condition	3	2.5	0				
Street Lns	1.5	2	1.5				
Condition	4	3	3				
Trees	0	0	0				
Parking	2	2	1				
Land use	Residential	Residential	Residential				
Jefferson	15 to 16	16 to 18	18 to Hawthorne	Hawthorne to 19th			
Sidewalk	1	2	2	2			
Condition	1.5	2.5	3	3			
Street Lns	1	1	1	1			
Condition	4	3	3	3			
Trees	0	2	1	1			
Parking	2	2	2	2			
Land use	Residential	Residential	Residential	Residential			
Euclid	16 to 17	17 to 18	18 to Hawthorne	Hawthorne to 19th			
Sidewalk	2	2	2	2			
Condition	3.5	3	3.5	3.5			
Street Lns	1	1	1	1			
Condition	4	4	4	4			
Trees	0	0	2	2			
Parking	2	2	2	2			
Land use	Residential	Residential	Residential	Residential			
Morton	Linden to end						
Sidewalk	2						
Condition	4						
Street Lns	1						
Condition	4						

Trees	0							
Parking	2							
Land use	Residential							

DRAFT

May	Linden to 16	16 to 17					
Sidewalk	0	2					
Condition	0	3					
Street Lns	1	1					
Condition	3	3					
Trees	0	0					
Parking	2	1					
Land use	Residential	Residential					
St. Clair	Linden to 16						
Sidewalk	2						
Condition	5						
Street Lns	1						
Condition	4						
Trees	2						
Parking	2						
Land use	Residential						
Woodburn	Linden to 16	16 to Boone	Boone to 17				
Sidewalk	2	2	2				
Condition	5	5	4				
Street Lns	1	1	1				
Condition	4	4	4				
Trees	2	2	1				
Parking	2	2	2				
Land use	Residential	Residential	Residential				
Lawn	Boone to 17	17 to end					
Sidewalk	2	0					
Condition	4	0					
Street Lns	1	1					
Condition	4	4.5					
Trees	0	0					
Parking	2	0					
Land use	Residential	Residential					

APPENDIX C: STREET WIDTHS AND PAVEMENT CONDITION

Street Name	Section ID	From	To	Surface	Length (ft)	Width (ft)	Area (ft ²)	Pavement Condition Index	Type
12th St West	4	Jillian's	Main	AAC	610	36	21,960	100	KY
12th St West	5	Main	Lee	AAC	450	36	16,200	100	KY
12th St West	6	Lee	Holman	AAC	470	36	16,920	100	KY
12th St West	7	Holman	Banklick	AAC	255	36	9,180	100	KY
12th St West	8	Banklick	Russell	AAC	265	36	9,540	100	KY
12th St West	9	Russell	Bridge	AAC	155	30	4,650	100	KY
13th St West	1	Hewson	Kavanaugh	AAC	205	27	5,535	93	COV
13th St West	2	Kavanaugh	Main	AAC	320	27	8,640	91	COV
13th St West	3	Main	Lee	AAC	475	27	12,825	96	COV
13th St West	4	Lee	Fisk	AAC	220	27	5,940	39	COV
13th St West	5	Fisk	Holman	AAC	230	27	6,210	31	COV
13th St West	6	Holman	Banklick	AAC	260	27	7,020	51	COV
13th St West	7	Banklick	Russell	AAC	265	27	7,155	85	COV
13th St West	8	Russell	Chesapeake	AAC	240	27	6,480	86	COV
14th St West	1	Hewson	Kavanaugh	AAC	275	27	7,425	87	COV
14th St West	2	West Alley	Holman	AAC	130	27	3,510	74	COV
14th St West	3	Holman	Banklick	AAC	225	30	6,750	95	COV
14th St West	4	Banklick	Russel	AAC	275	27	7,425	95	COV
14th St West	5	Russel	East End	AAC	225	27	6,075	30	COV
15th St West	3	Neave	Russell	ABR	670	27	18,090	59	COV
15th St West	4	Russell	Banklick	ABR	300	27	8,100	89	COV
15th St West	5	Banklick	Holman	ABR	215	27	5,805	95	COV
15th St West	6	Euclid	Jefferson	APC	200	27	5,400	55	COV
15th St West	7	Monroe	West End	ABR	145	27	3,915	100	COV
16th St West	2	Russell	Banklick	ABR	290	27	7,830	80	COV
16th St West	3	Banklick	Holman	ABR	225	27	6,075	82	COV
16th St West	4	Holman	Woodburn	ABR	300	27	8,100	89	COV
16th St West	5	Woodburn	St. Clair	ABR	270	27	7,290	80	COV
16th St West	6	St. Clair	May	ABR	160	27	4,320	67	COV
16th St West	7	May	Euclid	ABR	430	29	12,470	90	COV
16th St West	8	Euclid	Jefferson	ABR	220	29	6,380	100	COV
16th St West	9	Jefferson	Monroe	ABR	260	29	7,540	100	COV
17th St West	2	Russell	Banklick	AAC	285	17	4,845	83	COV
17th St West	3	Banklick	Holman	AAC	190	17	3,230	91	COV
17th St West	4	Holman	Woodburn	AAC	280	27	7,560	84	COV
17th St West	5	Woodburn	May	AAC	400	27	10,800	89	COV
17th St West	6	May	Euclid	AAC	180	27	4,860	100	COV
18th St West	2	Russell	Banklick	AAC	265	27	7,155	74	COV
18th St West	3	Banklick	Holman	AAC	220	27	5,940	63	COV

Street Name	Section ID	From	To	Surface	Length (ft)	Width (ft)	Area (ft ²)	Pavement Condition Index	Type
18th St West	4	Holman	Woodburn	AAC	300	27	8,100	64	COV
18th St West	5	Woodburn	Euclid	AAC	325	27	8,775	36	COV
18th St West	6	Euclid	Jefferson	AAC	325	25	8,125	70	COV
18th St West	7	Jefferson	Monroe	AAC	240	25	6,000	57	COV
19th St West	2	Augustine	Russell	PCC	270	30	8,100	97	COV
19th St West	3	Russell	Holman	AAC	265	30	7,950	77	COV
19th St West	4	Holman	Euclid	AAC	440	28	12,320	85	COV
19th St West	5	Euclid	Jefferson	AAC	350	25	8,750	100	COV
Augustine	2	Russell	19th W	PCC	485	28	13,580	100	COV
Banklick St	6	12th W	13th W	AAC	435	23	10,005	76	COV
Banklick St	7	13th W	14th W	AAC	450	23	10,350	89	COV
Banklick St	8	14th W	15th W	AAC	450	23	10,350	83	COV
Banklick St	9	15th W	16th W	AAC	870	23	20,010	60	COV
Banklick St	10	16th W	17th W	AAC	440	23	10,120	77	COV
Banklick St	11	17th W	18th W	AAC	540	23	12,420	68	COV
Boone	1	Woodburn	May	AAC	390	17	6,630	100	COV
Euclid	1	15th W	16th W	APC	320	27	8,640	44	COV
Euclid	2	16th W	17th W	AAC	520	27	14,040	100	COV
Euclid	3	17th W	18th W	AAC	505	27	13,635	96	COV
Euclid	4	18th W	Hawthorne	AAC	455	27	12,285	100	COV
Euclid	5	Hawthorne	19th W	AAC	515	27	13,905	100	COV
Hawthorne	1	Monroe	Jefferson	APC	270	25	6,750	36	COV
Hawthorne	2	Jefferson	Euclid	APC	360	25	9,000	37	COV
Hawthorne	3	Euclid	Holman	APC	505	28	14,140	35	COV
Hewson	1	Watkins	13th W	AAC	270	25	6,750	99	COV
Hewson	2	13th W	Prague	AAC	305	25	7,625	98	COV
Hewson	3	Prague	14th W	AAC	160	25	4,000	40	COV
Holman	5	12th W	13th W	AAC	425	39	16,575	70	COV
Holman	6	13th W	14th W	AAC	450	39	17,550	70	COV
Holman	8	14th W	15th W	AAC	450	39	17,550	74	COV
Holman	9	15th W	Linden	AAC	200	39	7,800	83	COV
Holman	10	Linden	16th W	AAC	690	39	26,910	76	COV
Holman	11	16th W	17th W	AAC	435	39	16,965	67	COV
Holman	12	17th W	18th W	AAC	555	39	21,645	57	COV
Holman	13	18th W	19th W	AAC	740	42	31,080	30	COV
Jefferson	1	15th W	16th W	AAC	300	27	8,100	100	COV
Jefferson	2	16th W	18th W	AAC	975	27	26,325	100	COV
Jefferson	3	18th W	Hawthorne	AAC	450	27	12,150	100	COV
Jefferson	4	Hawthorne	19th W	AAC	565	27	15,255	95	COV
Jefferson	5	19th W	South End	AAC	320	24	7,680	28	COV
Kavanaugh	1	13th W	Prague	APC	275	23	6,325	97	COV

Street Name	Section ID	From	To	Surface	Length (ft)	Width (ft)	Area (ft ²)	Pavement Condition Index	Type
Kavanaugh	2	Prague	14th W	APC	165	23	3,795	100	COV
Kavanaugh	3	14th W	Monterey	APC	370	23	8,510	91	COV
Kavanaugh	4	Monterey	Linden	APC	235	23	5,405	97	COV
Lawn St	1	South End	17th W	AAC	225	15	3,375	100	COV
Lawn St	2	17th W	Boone	AAC	185	20	3,700	95	COV
Lee	5	12th W	Watkins	AAC	225	39	8,775	95	COV
Lee	6	Watkins	13th W	AAC	215	39	8,385	98	COV
Lehmer	1	Main	Lee	AAC	430	23	9,890	74	COV
Linden Ave	1	Holman	Woodburn	AAC	280	27	7,560	100	COV
Linden Ave	2	Woodburn	St. Clair	AAC	275	27	7,425	83	COV
Linden Ave	3	St. Clair	May	AAC	135	27	3,645	88	COV
Linden Ave	4	May	Morton	AAC	240	27	6,480	99	COV
Linden Ave	5	Morton	Kavanaugh	AAC	240	27	6,480	93	COV
Linden Ave	6	Kavanaugh	West End	AAC	105	27	2,835	95	COV
Main Street	1	13th W	Watkins	ABR	210	40	8,400	85	COV
Main Street	2	Watkins	12th W	ABR	220	40	8,800	91	COV
May	1	16th W	Linden	AAC	640	25	16,000	31	COV
May	2	16th W	17th W	AAC	500	20	10,000	44	COV
Monroe	1	15th W	16th W	APC	450	28	12,600	100	COV
Monroe	2	16th W	Edgecliff	APC	440	27	11,880	97	COV
Monroe	3	Edgecliff	18th W	AAC	520	27	14,040	50	COV
Monroe	4	18th W	Hawthorne	APC	440	13	5,720	51	COV
Monterey	1	Kavanaugh	End	AAC	265	20	5,300	94	COV
Morton Rd	1	Linden	North End	AAC	170	24	3,995	82	COV
Orchard	1	Lee	Holman	AAC	420	23	9,660	86	COV
Prague	1	Hewson	Kavanaugh	AAC	265	20	5,300	73	COV
Russell St	10	12th W	13th W	AAC	445	39	17,355	100	COV
Russell St	11	13th W	14th W	AAC	460	39	17,940	99	COV
Russell St	12	14th W	15th W	AAC	460	39	17,940	100	COV
Russell St	13	15th W	16th W	AAC	880	39	34,320	90	COV
Russell St	14	16th W	17th W	ABR	430	39	16,770	99	COV
Russell St	15	17th W	18th W	AAC	510	39	19,890	96	COV
Russell St	16	18th W	Augustine	AAC	190	39	7,410	100	COV
Russell St	17	Augustine	19th W	AAC	420	35	14,700	100	COV
St. Clair	3	16th W	Linden	AAC	710	25	17,750	50	COV
Watkins	1	Hermes	12th W	AAC	695	23	15,985	88	COV
Watkins	2	Hewson	Main	ABR	520	23	11,960	90	COV
Watkins	3	Main	Lee	ABR	440	23	10,120	79	COV
Watkins	4	Lee	Fisk	BR	210	23	4,830		COV
Watkins	5	Fisk	Holman	BR	210	23	4,830		COV
Woodburn	1	Linden	16th W	ABR	750	27	20,250	57	COV

Street Name	Section ID	From	To	Surface	Length (ft)	Width (ft)	Area (ft ²)	Pavement Condition Index	Type
Woodburn	2	16th W	Boone	AAC	290	27	7,830	74	COV
Woodburn	3	Boone	17th W	AAC	145	27	3,915	67	COV
Woodburn	4	17th W	18th W	AAC	525	27	14,175	63	COV

Source: City of Covington



DRAFT