



FINAL REPORT

MARCH 2, 2017



CITY OF VILLA HILLS, KENTUCKY

A MUNICIPAL ORDER ADOPTING THE REPORT OF THE VILLA HILLS STUDY AND AUTHORIZING AN APPLICATION TO THE KENTON COUNTY PLANNING COMMISSION FOR AN AMENDMENT OF DIRECTION 2030, KENTON COUNTY'S COMPREHENSIVE PLAN, BY INCORPORATING THE VILLA HILLS STUDY REPORT INTO DIRECTION 2030.

WHEREAS, The owners of the parcels located at 2500 Amsterdam Road, 1100 Amsterdam Road and 2344 Amsterdam Road have separately expressed to city officials desires to sell portions of and/or develop or redevelop their land; and

WHEREAS, the total area encompassed by these three adjacent parcels is approximately 240 acres and represents about 9% of the total land area of the City of Villa Hills, and the land use of these parcels is designated by *Direction 2030* as "Other Community Facilities" which severely limits their potential for future development; and

WHEREAS, a task force was created that contained members from the affected property owners, city officials, and residents to study the area in order to determine the types of development that would best serve the needs of the community and the property owners, and over the course of a year, various studies, developer interviews, and public forums were conducted and formed into the Villa Hills Study Report which was adopted by the task force on January 11, 2017; and

WHEREAS, The City Council of Villa Hills desires to have the Villa Hills Study incorporated into *Direction 2030*;

NOW THEREFORE, BE IT ORDERED, BY THE MAYOR AND CITY COUNCIL OF THE CITY OF VILLA HILLS:

Section I:

The Villa Hills Study is hereby adopted by the City of Villa Hills. The Mayor or City Administrator/Clerk is directed to submit an application to the Kenton County Planning Commission for a corresponding amendment to, and incorporation in, *Direction 2030*, the Kenton County comprehensive plan. A copy of the Villa Hills Study is incorporated into this Municipal Order by reference, and attached as Exhibit A.

Section II:

The effective date of this order is upon its passage and recording per state statute.

ADOPTED THIS 18TH DAY OF JANUARY, 2017. 6 YEAS; 0 NAYS; 0 ABSTAIN; 0 ABSENT

CITY OF VILLA HILLS, KENTUCKY


Irvin T. "Butch" Callery, Mayor

ATTEST:


Craig T. Bohman, City Administrator/Clerk

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Special Thanks To

Public meeting participants, all citizens, and area property owners – for their input throughout the study process.

Key Persons – for their time and input to help staff gather pertinent information for the study area.

Development Experts – for their time and input regarding the study area’s potential.

River Ridge Elementary School – for hosting both public meetings.

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Appendices for this project are available online at www.pdskc.org and www.villahillsky.org.



1.0 INTRODUCTION

Nestled in the northwestern corner of Kenton County, Villa Hills (Figure 1.1) is a predominantly residential suburban community that is almost completely built out. This study examines some of the last land in the city that is suitable for improvements and makes recommendations for strategic changes. The plan seeks to provide recommendations that are intended to be beneficial to residents in Villa Hills, the City, and the private property owners who own land within the study area. The final report represents the culmination of a nearly year-long public engagement and planning effort that took place throughout 2016.

The plan report itself is set up in four key sections; 1.0 Introduction, 2.0 Forming the Plan, 3.0 Site Conditions & Analysis, and 4.0 Recommendations. Section 1.0 introduces the study and provides background information on the study area and the site's history. The Forming the Plan section (2.0) details the planning process with descriptions of the plan's research and public involvement efforts. Section 3.0, Site Conditions & Analysis, describes existing conditions within the study area as viewed through a variety of different research methods. The final section, 4.0 Recommendations, provides specific recommendations for the future development of the site. Additional technical information regarding the site and plan is found at the end of the document in the form of various appendices.

1.1 Small Area Studies

The Villa Hills Study is considered a small area study, by PDS and the Kenton County Planning Commission. Small area studies are more detailed plans incorporated into Direction 2030. Your Voice. Your Choice. (Figure 1.2), the comprehensive plan for Kenton County, Kentucky. These studies are designed to provide a more in-depth examination of a smaller geographic area and examine various elements such as existing conditions, land use, and market potential. It is therefore necessary that the small area study comply with the basic requirements of state law (KRS 100) for updates to the comprehensive plan.

These plans represent the first steps towards instituting positive changes in an area. They set the stage for future changes to an area by providing a broad-brushed direction for the plan's study area; accomplished through the future recommended land use map. Much finer detail can also be achieved through these plans by examining numerous characteristics that apply to a site or neighborhood. The subsequent chapters and sections of this document provide detailed insight and recommendations for this area of Villa Hills.



Figure 1.2 - Direction 2030 Comprehensive Plan Website

1.2 Study Area

The Villa Hills Study planning area encompasses approximately 240 acres in northwestern Villa Hills, at nearly the most northwesterly point of Kenton County (Figure 1.3). The study area is comprised of three parcels, each with unique owners. The largest parcel is owned by the Benedictine Sisters of the St. Walburg Monastery and encompasses slightly more than 200 acres. This parcel, identified as detail areas 1, 3 and 5 on the study area map (Figure 1.3) contains the monastery itself, Villa Madonna Academy, Villa Madonna Montessori, athletic fields, and predominantly vacant land on the hillside and western portion of the study area.

The parcel immediately west of the St. Walburg site encompasses approximately 32 acres and is identified in Figure 1.3 as detail Area 2. This parcel is owned

by Pathfinder Communications Corporation of South Bend, IN who leases the associated AM radio telecommunications facilities to iHeartMedia, Inc. to broadcast ESPN 1530. The remaining part of the study area is an area of approximately 5 acres immediately north of Madonna Manor, identified as detail Area 4.

This study area was identified early in the planning process and refined by the Task Force to incorporate areas of Villa Hills that may experience significant changes as a result of the proposed new development within the study area.

1.3 Project Background

The sisters of St. Walburg began contemplating their financial stability for retirement, and in 2014 sought outside expertise and advice. They commissioned a study from Plante Moran Cresa (Figure 1.4), which determined their best option for funds was to sell a

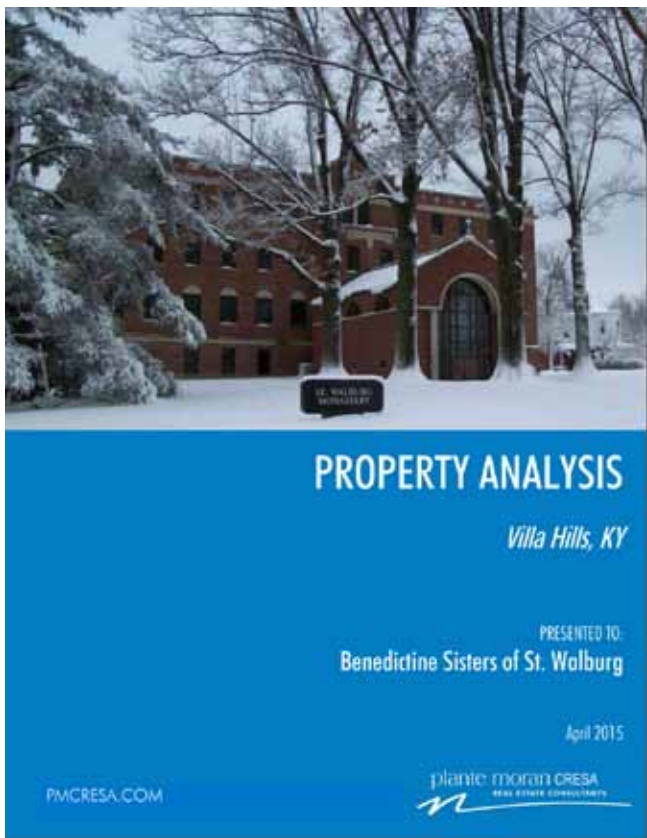


Figure 1.4 - Plante Moran Cresa Property Analysis for Villa Hills

portion of their land. This report's recommendation ultimately provided the impetus for this Villa Hills Study, to determine the best possible future for their land.

While the sisters could have simply put the site up for sale and requested a zoning map amendment they decided to be more forward thinking about possibilities for the area. They began conversations with the City soon after receiving the Plante Moran Cresa report to determine what might be needed to move forward with planning for the area.

In the summer of 2015, representatives from the City of Villa Hills and St. Walburg Monastery contacted Planning and Development Services of Kenton County (PDS) to inquire about the possibility of conducting a small area study for this portion of the city. PDS staff began crafting a statement of work that would eventually constitute the framework of the planning study. The City had also been contacted by representatives of the radio tower site previously, which led to their incorporation into the overall study.

Initial discussions provided insight into the planning process and resulted in the study's official kickoff in early 2016.

1.4 Study Area History

The Benedictine Sisters came to Covington, Kentucky in 1859. Their first monastery building was on Twelfth Street, where they opened Saint Walburg Academy. In 1903 the Benedictine Sisters bought the Collins farm on 'Amsterdam Pike,' which comprises the monastery's present location (Figure 1.5). From here, the sisters created institutions that contribute to the community to this day. Villa Madonna Academy opened in 1904 and its first students were both boarders and day hops from the local area. The Sisters opened Villa Madonna College, now Thomas More College, in 1921 in the Villa Madonna Building. In 1928, the college moved into the building that formerly housed Saint Walburg on Twelfth Street in Covington.

Figure 1.1
Regional Location

Legend

- Interstates
- US Highways
- 5 Mile Rings
- Regional Counties
- Kenton County
- VILLA HILLS
- Study Area Boundary





Vt
Villa Hills Study



LINK-GIS



Parcel data provided by CCPVA,
PCPVA and LINK-GIS.



These GIS data are deemed reliable and every effort has been made to ensure their accuracy. They are, however, provided “as is” without warranty of correctness, timeliness, reliability, or completeness. Map elements do not represent a legal survey of land. Use of these data for any purpose should be with an acknowledgement of their limitations, including the fact that they are dynamic in nature and in a constant state of maintenance. Field investigation may be necessary.

Figure 1.3
Study Area

Legend

-  Study Area
-  Detail Areas



1 inch = 616 feet



LINK·GIS
Parcel data provided by CCPVA,
PCPVA and LINK-GIS.



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Figure 1.5 - The Working Collins Farm

Throughout the 1920s and 1930s, the sisters purchased additional farms on both sides of the former Collins property. The property identified as Area 1 in Figure 1.3 of this document was purchased in 1928. Around that same time, WCKY radio got its start on land immediately west of the monastery and farm (Area 2 in Figure 1.3).

The 1960s and 70s saw changes upon the landscape; both physical and political. The sisters joined with local residents to establish the City of Villa Hills in 1962 and began Madonna Manor to provide care for the elderly in 1964. In 1969 the sisters signed an ongoing lease with the City of Villa Hills for \$1 per year to allow the City to use and maintain the playing fields on the sister's land. When the community's farm closed in 1972 the sisters opened Villa Madonna Montessori in the former dairy barn.

Throughout their ownership of the land the Benedictine Sisters have been positive contributors to the local community. Their efforts have created educational and senior healthcare institutions, provided ground for public fields, and hospitality to walkers and runners. Their presence and property contribute to the quality of life in this local area.



2.0 FORMING THE PLAN (PLANNING PROCESS)

2.1 Direction 2030 Comprehensive Plan

This plan was written to be incorporated into the Direction 2030. Your Voice. Your Choice. comprehensive plan (direction2030.org) as a more detailed analysis of the study area. The Villa Hills Study promotes the Direction 2030 goals, objectives, and recommendations (elements) by working towards implementation of the overarching ideas established by the comprehensive plan. It should be noted that it would be unusual for any plan to be able to meet all the goals, objectives, and recommendations of Direction 2030 because of its varied countywide nature. Notwithstanding, this study utilizes Direction 2030 as the foundation of this planning project and seeks to further the following guiding principles, specific goals, objectives, and elements as directly quoted from Direction 2030:

Guiding principles

The following four guiding principles are provided to assist decision makers in using the statement of goals and objectives effectively:

1. Owner's private property: The legal property rights of property owners are to be protected in accordance with local, state and federal law. Private property interests are to be balanced with the health, safety and welfare of the community.

2. Public engagement: The goals and objectives were primarily derived based on public input from a varied cross section of residents, community, and economic leaders and should be considered in that capacity.

3. Economic considerations: Regardless of economic conditions, these goals and objectives should be used only as a guide with ultimate decisions to be based on economic sustainability. Strong public-private cooperation is highly encouraged throughout the planning period.

4. Goal relationships: The seven goal categories identified are intricately connected and significantly impact one another. The Goal Matrix identifies a primary goal category while the secondary goal category is listed to identify the relationship with other goal categories.

Goals and Objectives

Goal 1: Encourage a variety of housing types throughout the County to meet the needs of all generations and income levels.

Objective A: Promote all aspects of housing including infill, redevelopment and new development where appropriate.

Objective B: Encourage housing in closer proximity to employment centers.

Objective C: Evaluate tools to provide incentives to address housing for all generations.

Objective D: Identify opportunities with measured outcomes and implement innovative development practices while ensuring widest market appeal.

Objective E: Encourage housing that establish strong connectivity within a community, to surrounding communities, and natural systems.

Goal 2: Strive to create and maintain places with a diverse character to draw talent and enhance livability.

Objective A: Encourage opportunities for stakeholders to create unique environments to foster a sense of ownership.

Objective B: Foster a sense of place by including elements that contribute to community pride.

Objective C: Promote mixed use neighborhoods to create a vibrant built environment.

Objective D: Identify opportunities to create unique places that develop, draw and retain talent.

Goal 3: Strive to attract and create new jobs and retain existing jobs.

Objective C: Promote a business friendly environment that is essential to be competitive in the national and global market.

Goal 4: Celebrate the unique identity of communities within Kenton County.

Objective C: Enhance suburban living by offering new attractive and unique amenities that are in closer proximity to established and new residential areas.

Goal 5: Improve the ability of residents to live a healthy lifestyle.

Objective A: Promote safe and convenient non-automobile access to health care, healthy foods and key destinations in strategic locations to encourage physical activity to decrease chronic disease and improve air and water quality.

Objective B: Encourage the provision of both active and passive recreational opportunities to address the needs of different age groups and interests.

Goal 6: Enhance and expand the effectiveness of the transportation system by promoting multimodal approaches that address the needs of all users.

Objective A: Promote increased roadway connectivity between activity nodes to reduce congestion on major thoroughfares.

Objective D: Increase the convenience and efficiency of using multiple modes of

transportation including driving, transit, walking or biking.

Objective E: Promote viable transportation options for all demographics.

Goal 7: Promote adequate access to natural systems to encourage outdoor activities for all generations on public property.

Objective A: Improve access to regional and secondary waterways to promote outdoor physical activities.

Objective B: Promote connectivity within and from surrounding neighborhoods to public parks or natural areas to encourage walking and biking.

Goal 8: Strive to achieve a balance between development and preservation.

Objective A: Encourage innovative design on sites with constraints based on the presence of natural systems and incentivize the protection of quality open space.

Elements (Recommendations)

Concept Map

Recreation Connections

Connecting regionally significant parks to each other will work to strengthen parks on the county level. These connections primarily build upon previous plans such as Riverfront Commons and the Licking River Greenway Master Plan. They also include current efforts such as those to connect Doe Run Lake to Pioneer Park. Recreation connections can be in the form of bicycle and pedestrian trails or even blueway connections (kayak, canoe, or other paddle craft vessels) along the Licking and Ohio Rivers.

Regional

Recommendation 1: Establish policies for housing, mobility, and employment which help maintain the

low cost of living that makes the Greater Cincinnati Metro area a desirable place to live.

Task 1: Collaborate with the development community and community leaders to encourage policies that establish a variety of housing options and prices that support low cost of living.

Task 2: Reduce the combined housing and transportation costs by accommodating different types of housing within environments close to employment centers that are well connected with multiple modes of transportation.

Sub Areas (Suburban)

Recommendation 1: Promote policies and regulations which allow residents to age in place with convenient and accessible housing options, goods and services, and other amenities.

Task 1: Identify the needs of the aging population and determine the challenges in meeting those needs.

Task 2: Identify other strategies where the built environment can play a role in accommodating aging in place.

Recommendation 2: Develop flexible regulations to accommodate, where the market demands, a more active and engaging built environment, with alternative forms of housing, jobs, services, and recreation located within a neighborhood.

Task 1: Coordinate with communities to assess their needs and the desire for mixed use development.

Task 2: Identify strategic areas and proactively pursue regulatory changes to incentivize this form of development.

Recommendation 3: Support the need for a variety of housing options within suburban areas.

Environment

Recommendation 4: Pursue and promote varied approaches for the safe development and preservation of hillsides.

Mobility

Recommendation 1: Enhance connectivity within and between communities to provide increased mobility options for all users.

Task 2: Incorporate complete street programs to encourage intra-community connectivity where appropriate.

Task 3: Parallel secondary access roads should be considered along new or realigned collector or arterial roadways to minimize curb cuts and improve traffic movement.

Task 4: The impact of transportation improvements on land use and the environment should be considered.

Task 5: Assist in identifying locations and resources to retrofit existing residential communities with internal and external connections.

Task 6: Focus connectivity improvements in strategic locations such as schools, parks, libraries and commercial areas or districts.

Recommendation 2: Utilize access management practices along all roadways.

Task 3: Access management techniques such as secondary access roadways, limiting conflict points, and signal optimization should be employed to improve safety and enhance traffic circulation.

Recommendation 8: Increase operational safety and facility opportunities for cyclists and pedestrians.

Task 7: All new roadways should consider opportunities for bicycle and pedestrian facilities.

Task 8: Enhance walkability by planning sidewalks during new construction to achieve a long term vision for improved connectivity.

Task 9: Add sidewalks retroactively in areas where they were not originally constructed as opportunities for redevelopment and network enhancement arise.

Task 10: Enhance pedestrian options around community facilities and key destinations.

Housing

Recommendation 1: Determine the housing demand for different styles of housing throughout Kenton County.

Task 1: Assist jurisdictions in using tools such as the housing demand study, demographics, incomes, and current supply of housing stock to encourage a proactive approach to attracting the types of housing needed.

Task 2: Identify sites that are the suitable for development or redevelopment to meet market demand.

Task 3: Work with experts to understand the physical, financial, and regulatory barriers to providing a wider variety of desired housing products.

Recommendation 3: Encourage new housing developments within close proximity to areas where utilities, commercial activity, and community services already exist.

Task 2: Assist municipalities to be proactive in marketing appropriate locations and developing incentives for residential development.

Community Facilities

Recommendation 3: Ensure adequate emergency response services are provided to protect the public health, safety, and welfare.

Utility Management

Recommendation 4: Assist utilities in reducing the impact of development on natural systems, and promote stormwater management practices to improve the quality and reduce the quantity of stormwater runoff.

Task 1: Provide or seek out education opportunities to better understand Best Management Practices, when they are or are not feasible, and alternative site design techniques.

Task 2: Encourage at all points through the development process the effective optimization of BMPs.

Recommendation 6: As the expansion of cellular technology continues, carefully balance the need for new cellular antenna towers with the impacts new towers have on adjacent land uses.

Land Use

The land use element of Direction 2030 includes numerous recommendations and definitions that apply to the study area. As such, including these sections in their entirety would be too cumbersome for this plan. Please refer to <http://direction2030.org/elements/landuse/> for more information on the following concepts included in this study:

- Agricultural and Rural Use
- Mixed Use
- Residential
- Community Amenities
- Water
- Mobility
- Small Area Studies
- Developmentally Sensitive Area (DSA)

2.2 Timeline

The idea to conduct a study for this area of Villa Hills was first discussed by the City and PDS staff in early 2015. At that time a project proposal was crafted, which outlined a basic timeline and deliverables for the project. In late 2015 the City took steps to authorize the planning project.

The existing conditions analysis and market study began in December 2015. The budgeted time for the market study was 3-4 months, with a final market study analysis completed in April 2016. More details on the market study can be found in Sections 3.2 and 4.2. In January 2016, the transportation study for the area began with its analysis completion targeted for April 2016. Details of the transportation study are located in Section 4.5.

The City of Villa Hills next identified Task Force members, with the first Task Force meeting assembling on March 22, 2016. The Task Force scheduled to meet once a month through August, culminating in an approval of the final draft of the report. The group decided two public meetings would be warranted for the project. The first public meeting was on May 9, 2016 and the second public meeting was held on January 4, 2017.

The original timeline for the project included an aggressive approach for completing the final plan in approximately eight months. The timeline was extended as needed to include interviews of regional developers and the creation of a Task Force survey. After Task Force approval, the plan then was sent to the City for consideration. The plan was officially adopted by the City on January 18, 2017 and by the Kenton County Planning Commission (KCPC) on March 2, 2017. Approval by the KCPC established the *Villa Hills Study* as the official comprehensive plan for the study area.

2.3 Pre-planning

In 2014 the sisters of St. Walburg Monastery began contemplating their long-term future needs. They enlisted the services of Plante Moran Cresa Real

Estate Consultants to research future options and provide recommendations to the sisters. In April 2015 the “Property Analysis: Villa Hills, KY” report was published and provided to the sisters. One of the primary recommendations of the Plante Moran study was to conduct “discussions with city officials regarding zoning to determine future use options as to the vacant western property” (Area 1 on Figure 1.3). The study further elaborates that rezoning “to a classification that makes the land marketable” would be in the sister’s best interests. The Plant Moran study and its associated recommendations constitute the pre-planning effort, which is the impetus for this Villa Hills Study.

2.4 Market Study

The aforementioned Plante Moran study, completed in April 2015, indicated the vacant land on the property could be developed into a residential subdivision. In late 2015 PDS staff sought out potential market consultants to undertake a more detailed market study of the area. This component of the plan was enacted to determine the highest and best use of the property through the examination of all possible land uses. After reviewing three potential consultants, Market Metric\$, LLC. of Dayton, Ohio was selected to conduct this important piece of the study.

The study provided market-based information to develop the plan and make recommendations for future land uses in the study area. The market study began on January 5, 2016 and a final report entitled A Market Analysis for the City of Villa Hills, Kentucky was completed on June 15, 2016. The market study is also described in Sections 3.2 and 4.2 of this report with the full version located in Appendix A.

2.5 Existing Conditions

An inventory of the existing conditions of the study site was conducted between January 2016 and June 2016. This inventory included noting existing facilities, utilities, infrastructure, zoning, and land uses among other items. A detailed description of these can be found under the Site Conditions & Analysis in the next section.

2.6 Public Involvement

Throughout the study process the Sisters of Saint Walburg Monastery indicated their desire to involve their neighbors and the citizens of Villa Hills in the decision-making process. As an organization, PDS strives to create plans that involve the public. The final plan makes every effort to incorporate the desires of the Villa Hills community. The planning process involved the public through multiple avenues as outlined in the following subsections.

2.6.1 Task Force

Task forces are one of the primary forms of public involvement used in PDS small area studies. Task forces primarily work with staff through meetings and work sessions to guide research, review report text, approve final plans, and guide the general direction of the study. In March 2016, a 10-member Task Force was assembled by the City of Villa Hills and Saint Walburg Monastery. The Task Force (Figure 2.1) consists of different representatives of the community including Villa Hills elected officials, City employees, Villa Hills citizens, Saint Walburg representatives, and Madonna Manor officials. This group worked with PDS staff in an ongoing series of monthly meetings which help provide a voice for the community at large.



Figure 2.1 - The Villa Hills Study Task Force works through details of the plan recommendation

The Villa Hills Task Force worked with staff throughout the study to establish key elements of the plan including mobility recommendations, land use, and approved the overall plan document on January 11, 2017. After approving the overall plan document, the Task Force submitted it to the Villa Hills City Council for their consideration.

2.6.2 Key Person Interviews

Key person interviews seek to focus on a more direct approach for public involvement within the community. Task Force members and staff identified key persons and organizations that might have an interest in the development of the study area. Overall, more than 15 interviews took place with representatives from utility companies, public works, local schools, police/fire/EMS, and local business owners. Information and details from the key person interviews can be found in Appendix B.

2.6.3 Public Meeting One

Public meetings are one of the most important aspects of public involvement. A public meeting provides the opportunity for the staff and Task Force to provide information about the project, hear from concerned citizens, and interact with the public to obtain their thoughts on the study. Two public meetings were held during the planning phase of the study. The first meeting was held on May 9, 2016 in the cafeteria of River Ridge Elementary School (See



Figure 2.2 - Attendees at the first Villa Hills Study public meeting on May 9, 2016

Figure 2.2). This meeting experienced outstanding attendance with approximately 250 people present. Attendees heard presentations from staff, market and transportation consultants, and participated in small group discussions to present ideas and information about Villa Hills and the study area. A summary of the results from the small group discussion is provided in Appendix C.

2.6.4 Expert Interviews

The Villa Hills Study Task Force asked PDS staff to conduct interviews with representatives of the regional development community to help determine the potential future land use of the site. The goal of these interviews was to gain the expertise of developers in the region and get insight about the types of development they thought were suitable for the study site. Interviews were conducted in person, on the phone, and via email with regional developers that responded to an inquiry regarding the interview process. Questions during this process focused on the appropriateness of different types of residential and commercial uses for the site, the potential for public amenities, and what their companies envision would be suitable for the development. A summary of the results from the expert interviews is provided in Appendix D.

2.6.5 Public Meeting Two

The final public meeting (Figure 2.3) was held on January 4, 2017, also at River Ridge Elementary School. This meeting was an open house style meeting which provided the public the opportunity to see key points of the final plan and give their thoughts on the document. Over 100 people attended the meeting and provided their thoughts. The open house style meeting provided participants the opportunity to view key sections of the plan including recommendations on land use, housing, amenities, transportation, residential, and commercial for the site.

The recommendations and other information in the plan were presented on display boards that allowed participants to move throughout the meeting at their own pace and ask questions of Task Force members



Figure 2.3 - Attendees at the second Villa Hills Study public meeting on January 4, 2017

and staff who were present at each station. Each participant also had the opportunity to submit comment cards providing their thoughts on the plan. General reaction to the plan, its concepts, and findings were positive and the comments were reviewed by the Task Force. A summary of the results from the open house comment cards is provided in Appendix E.

2.7 Task Force Survey

Surveys are an important tool used to gather information and ideas which can be used to help guide the direction of a plan. To best determine the Task Force's desired uses for the site, a survey was given to the group. The survey was designed to gather information regarding what land uses were desired, along with gaining insight on the types of housing, commercial, amenities, and civic spaces deemed appropriate for the site. Each Task Force member was given the opportunity to complete the survey and the results were used to guide the direction of the plan. A summary of the results from the survey is provided below and the complete results are available in Appendix F.

The Task Force survey contained 29 questions designed to obtain a consensus regarding the developmental principles for the site. The questions dealt with issues on the site including housing, commercial, civic space, amenities, rentals, and connectivity. Based on the responses from the Task Force members, there were clear preferences on many of these issues.



There were 5 key preferences which were indicated in the results of the survey which are listed below.

1. A desire from Task Force members that the site should introduce new housing choices into Villa Hills and provide a mix of residential uses on the site.
2. Support to have the development on the site connected to the surrounding community.
3. A preference to have the amenities on the site be made available to the public.
4. Civic space or focal point should be incorporated into the site.
5. Support for a mixed-use neighborhood commercial and office component on the site.

The Task Force moved forward with these as the developmental principles for the site and used them to help guide the direction of the final plan.

The survey also included visual preference questions which were designed to gather information that may be difficult to obtain in standard survey questions

and to help identify stylistic preferences of the Task Force. The visual preference questions asked the group to rank a series of pictures from most desirable to least desirable. The visual preference pictures included groupings of single-family residential homes, townhomes, and apartments. The results from the visual preference questions indicated a slight preference for traditional style homes, shorter setback distances, pedestrian oriented design, and garages in the rear of the building.

Lastly, Task Force members were given a list of potential commercial and office uses for the site and asked if they thought each use was desirable or undesirable. The goal was to determine what types of commercial and office uses the Task Force thought were most appropriate for the site. Results from this section indicated neighborhood type uses such as coffee shops, bakeries, ice cream parlors, accountant offices, local restaurants, and book stores to be among the most desirable uses. Results from this survey are factored into recommendations in Section 4.0 of this document.

3.0 SITE CONDITIONS & ANALYSIS

Starting in January 2016, PDS staff began analyzing existing conditions for the study area and adjacent environs pertaining to the site (Figure 3.1). Concurrently, efforts commenced to conduct a market study, fiscal impact analysis, and transportation study for the plan. The following subsections of this chapter provide information on these research efforts and offer analysis pertaining to each research effort's findings.



Figure 3.1 - Initial site visit January 2016

3.1 Review of Existing Studies

3.1.1 University of Cincinnati 2000 Study

In 2000, the University of Cincinnati School of Planning undergraduate studio class consisting of six students created a Master Plan for the City of Villa Hills. The analysis for this plan looked at the City as a whole and identified two locations as prime development areas. One of those two areas is western portion of the Saint Walburg property (Area 1 on Figure 1.3), which remains undeveloped today.

In identifying the Saint Walburg property as a location for future development the studio created a master plan of what this area could potentially look like. The plan included a commercial development, single family residential, multi-family residential, recreation and civic spaces. The plan designed these differing land uses into a mixed use type development.

The plan proposed a zone change to the Residential One-D (R-1D) zone with a Planned Unit Development (PUD) Overlay for the area. They indicate that the PUD Overlay allows for a mix of housing, both detached

and attached, as well as for mixed commercial uses, so long as they provide for the general welfare of the community itself.

3.1.2 Plante Moran Cresa 2015 Study

In 2015 Plante Moran Cresa, a real estate consultant, completed a property analysis on behalf of the Benedictine Sister of Saint Walburg. The primary objectives of this study were to assess property utilization, determine the highest and best use, determine future uses, and understand potential value.

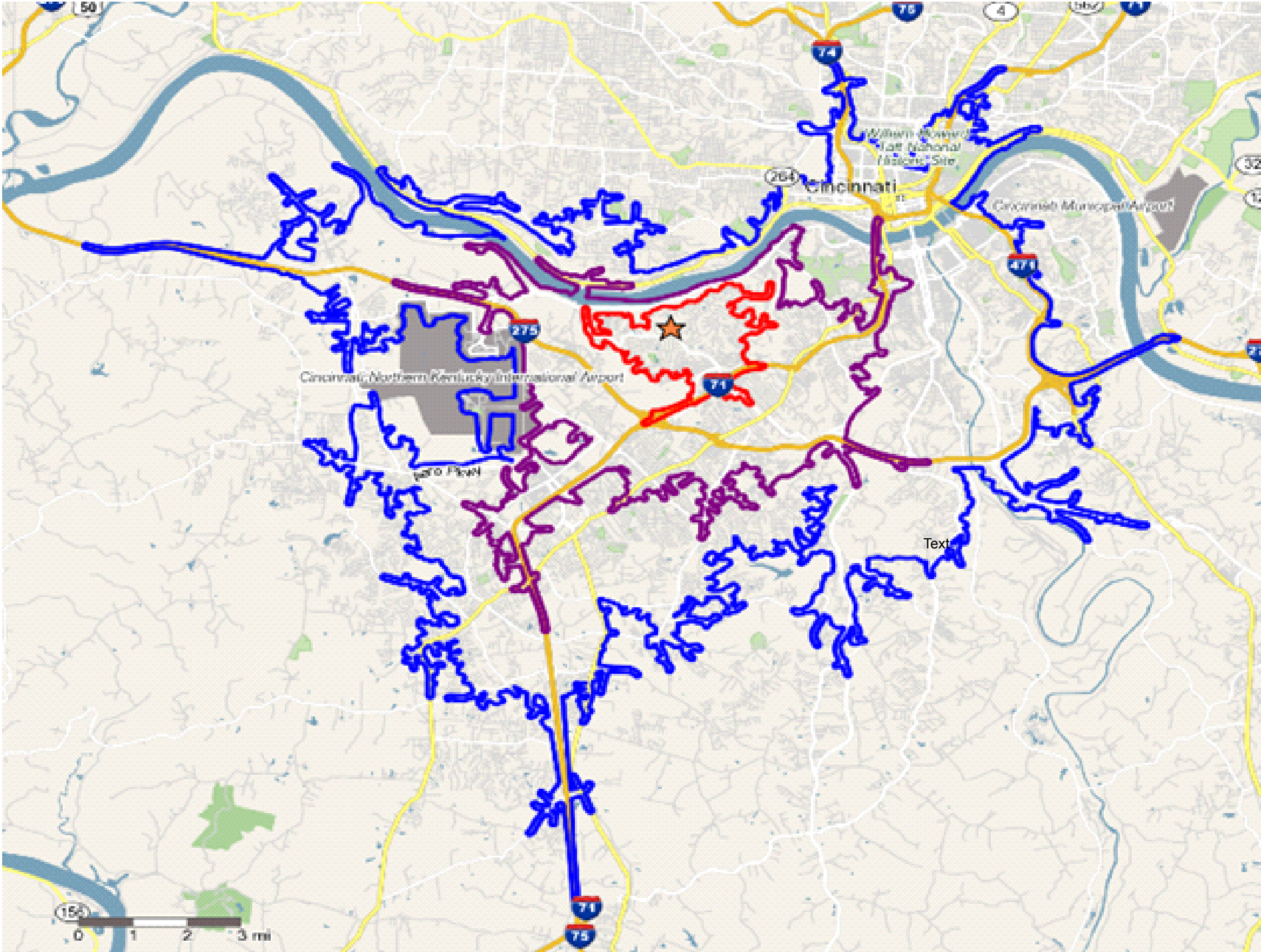
The report analyzed existing conditions on the property, local and regional economic outlook, and demographics among other items. Based on their analysis of the Saint Walburg property, Plante Moran determined the vacant land would most likely become residential. They recommended that a zoning and land use strategy and process for the entire Property should be developed and pursued immediately.

3.2 Market Study

As mentioned in the Forming the Plan chapter, a market study was conducted as part of this planning project. Market Metric\$, LLC described Villa Hills as an upscale, bedroom community, centrally located within the Cincinnati metropolitan area. The detailed market study completed in June 2016 takes into consideration the existing market forces and conditions of the Villa Hills area as a basis for the analysis.

The market analysis described the city as a bedroom community with 78.5% of occupied housing units being in the possession of owner occupants. Only 3% of the total inventory of housing units are vacant, which is much lower than the metropolitan statistical average of 8.9%. The market study also states that households in Villa Hills are aging and affluent. The median age of Villa Hills residents in 2015 was 42.6 years old with the Cincinnati region as a whole being 37.6, a difference of five years. An aging population could suggest the need for step down housing directed toward the senior market.

Figure 3.2
Drive Times



Legend

- 5 Minute Drive Time
- 10 Minute Drive Time
- 15 Minute Drive Time



LINK-GIS
Parcel data provided by CCPVA,
PCPVA and LINK-GIS.



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In determining the highest and best use of the study area, the market analysis analyzed 5-minute (red), 10-minute (purple), and 15-minute (blue) drive times from the study area (Figure 3.2). Drive times look at the distance travelled over a specific time. The 5-minute drive time area includes most of the City of Villa Hills and extends to the Buttermilk Pike interchange on the I-75 corridor (Figure 3.3). This area is populated with substantial commercial and retail businesses that would offer strong competition for any proposed commercial development in the study area.



Figure 3.3 - Retail in Crescent Springs, KY

The market study states that currently, Villa Hills is projected to have modest growth in the number of households over the next five years. Detailed information concerning the market study and its recommendations can be found in Section 4.2.

3.3 Fiscal Analysis

A fiscal impact analysis was conducted in April and May of 2016 by the City of Villa Hills staff and PDS staff. A fiscal impact analysis measures the effects of a proposed development on local government revenues such as taxes and fees as well as the cost to provide services, such as police and fire protection, roadway maintenance and government administrative costs. Local governments need to ensure that revenues will cover costs. Therefore, it is important to accurately project what future public revenues and expenditures are going to be for the planned future development.

3.3.1 Analysis Methodology

The analysis for this study was conducted using the City of Villa Hills specific budget information, including service costs and tax revenues. The analysis utilized specific development scenarios for the study area using the findings of the market study as a basis.

The methodology used for the analysis was the average cost method. At a very basic level, the average cost method takes the total expenditures by the City of Villa Hills needed to provide services to its homes (residential units) and business and divides that cost by the number of businesses and homes it serves. This formula determines the average cost or multiplier per residential unit. This multiplier is then used to estimate the increase in costs to the City of Villa Hills that will be incurred for each additional new worker or home that may come into the City as a result of the proposed development.

The same approach is then applied to City revenues with the exception of property tax revenue. Revenues such as insurance premium taxes, payroll, licenses, and police citations can be estimated using the same per capita process. For the City of Villa Hills, the total revenues from these sources were divided by the number of homes (residential units) and workers in the City to determine the per worker and per residential unit multiplier for these revenues. This multiplier is then used to estimate the increased revenue to the City of Villa Hills that can be anticipated for each new business or homes that may be brought into the City as a result of the proposed development. However, for property tax and the City's road tax, there is a more accurate way to estimate this revenue source. These revenues can be more accurately estimated by calculating the real tax rate that will be imposed on the property by the estimated property value of the proposed development. Staff utilized the assistance of real estate experts and the market study consultant to determine the appropriate estimated property values of the proposed development.

City of Villa Hills Expenditures	FY 16 City of Villa Hills Budget	Costs Attributed to:		
		Residents (Approx. 92.5% of Land)	Businesses (Approx. 0.01% of Land)	Institutions (Approx. 7.3% of Land)
Legislative and Administrative	\$328,483	\$304,014	\$338	\$24,131
Contracted Services	\$1,042,500	\$964,843	\$1,072	\$76,585
Public Safety	\$788,275	\$729,556	\$810	\$57,909
Parks and Recreation	\$44,964	\$44,964		\$41,661
Public Works	\$321,350	\$297,412	\$330	\$23,607
Road Repair	\$709,120	\$656,297	\$729	\$52,094
Events and Beautification	\$18,000	\$16,678		\$1,322
Capital Outlay	\$150,774	\$139,543	\$155	\$11,076
Total		\$3,150,003	\$3,434	\$250,029
Number of Dwelling Units / Worker		2877 dwelling units	28 business/ commercial workers	767 institutional workers
Per Unit Multiplier		\$1,095	\$123	\$326

Table 3.1 - Expenditures Analysis

3.3.2 Expenditure Analysis

The first step in fiscal impact analysis is the determination of multipliers for costs or expenditures for each residential unit or worker in the City of Villa Hills. Table 3.1, above shows the allocation of City of Villa Hills expenditures into multipliers for homes and workers. The approximate costs for the City to provide services to each of its 2,877 residential dwelling units is \$1,095 per unit. For institutions, such as schools, nursing homes and churches, it costs the City an estimated \$326 per each institutional worker. For other types of businesses in the City, such as commercial, office and retail, the estimated costs are \$123 per worker. This encompasses the costs to provide services such as police, fire and emergency medical services to those institutions and businesses. While these costs are not necessarily

incurred by the workers, the number of workers is used as a unit of measurement to allocate those costs to the institutions and businesses.

3.3.3 Revenue Analysis

The second step the fiscal impact analysis is calculating the multiplier for City revenues. Property taxes and road taxes were calculated using the estimated property value of the proposed development by the property tax rate for each tax. Property taxes in the City of Villa Hills were applied to the estimated value of the proposed development at a rate of 0.214 per \$100 of valuation. Road taxes in the City of Villa Hills were applied to the total property value of the proposed development at a rate of 0.067 per \$100.

FY 16 of Villa Hills “Other” Revenues	FY 16 City of Villa Hills Budget	Estimated % Revenue Attributed to:			Estimated Revenue Attributed to:		
		Dwelling Units	Businesses	Institutions	Dwelling Units	Businesses	Institutions
Insurance Premium Taxes	\$427,571	100%	0%	0%	\$426,716	\$855	\$0
Payroll	\$230,000	47%	2%	52%	\$106,950	\$4,140	\$118,910
Payroll Tax Committed	\$120,000	47%	2%	52%	\$55,800	\$2,160	\$62,040
Gross Receipts	\$48,546	100%	0%	0%	\$48,546	\$0	\$0
Franchise Taxes	\$5,404	93%	0%	7%	\$4,999	\$11	\$394
Garbage Fee	\$345,878	100%	0%	0%	\$345,878	\$0	\$0
Licenses	\$40,675	96%	4%	0%	\$39,170	\$1,505	\$0
Municipal Road Aid	\$140,000	100%	0%	0%	\$140,000	\$0	\$0
Passport Revenue	\$2,790	100%	0%	0%	\$2,790	\$0	\$0
Penalties and Interest	\$9,268	100%	0%	0%	\$9,268	\$0	\$0
Police Reports / Citations	\$576	93%	0%	7%	\$533	\$0	\$0
Total	\$1,370,708				\$1,180,649	\$8,672	\$181,387
Number of Dwelling Units / Worker					2877	28	767
Per Unit Multiplier					\$410	\$310	\$236

Table 3.2 - Revenue Analysis

Table 3.2 on the previous page shows the allocation of City of Villa Hills “Other” Revenues, except property and road tax, into multipliers for residential dwelling units and workers. These revenues include insurance premium taxes, payroll taxes, gross receipts franchise taxes, garbage assessments, licensees, municipal road aid, and fees collected for issuance of passports, penalties and police citations. These “Other” revenues were allocated to residential units, businesses and institutional uses for this analysis by the City Clerk based on knowledge of these revenue sources regarding which land uses contribute to each revenue type. These other revenues to the City for each of its 2,877 residential dwelling units are estimated at \$410 per dwelling unit. For institutions, the City receives an estimated \$236 per each institutional worker from payroll taxes, franchise taxes and police citations. For other types of businesses in the City, such as commercial, office and retail, the estimated revenue is \$310 per worker. Again, although these revenues may be paid to the City by the business or institutional organization and not by the worker, the number of workers is used as a unit of measurement to attribute these revenues to the businesses and institutions that are contributing the revenues.

3.3.4 Scenario Analysis

After determination of the appropriate multipliers for expenditures, revenues and taxes, three potential development scenarios for Area 1 (Figure 1.3) were analyzed for their fiscal impact to the City of Villa Hills. For each of the three scenarios, it is assumed that 12 acres of the site will be utilized for open space, stormwater management or civic uses. This leaves 66.5 acres remaining for development of additional residential units, businesses or institutions.

Scenario 1: Keep the current institutional zoning

Under scenario 1, it was assumed that the current institutional zoning on Area 1 (Figure 1.3) would serve as a basis for the proposed development. Under this scenario, the land development density, employment and property values for Madonna Manor were used as a basis for the proposed scenario.

This analysis (Table 3.3) shows that a proposed institutional development on the site would result in a net loss to the City of Villa Hills. This is primarily due to the fact that any institutional use would be exempt from property taxes if owned by the religious, charitable or not-for-profit organization, which is anticipated.

New Employees	Estimated Property Value	Estimated Property Taxes to the City	Estimated Other Revenue to the City	Estimated Expenditures by the City	Net Impact
533	\$18.7 Million	Exempt	\$130,000	\$180,000	-\$50,00

Table 3.3 - Scenario One

New Residential Dwelling Units	Estimated Property Value	Estimated Property Taxes to the City	Estimated Other Revenue to the City	Estimated Expenditures by the City	Net Impact
250 Units	\$125,000,000	\$351,250	\$102,594	\$272,723	\$180,121

Table 3.4 - Scenario Two

New Residential Dwelling Units / New Employees	Estimated Property Value	Estimated Property Taxes to the City	Estimated Other Revenue to the City	Estimated Expenditures by the City	Net Impact
284 units / 87 emp.	\$139,419,900	\$391,770	\$143,492	\$321,619	\$213,643

Table 3.5 - Scenario Three

Scenario 2: Residential Development

Scenario 2 assumed the entire site would be developed into a mixed-density neighborhood featuring single family residential homes, attached patio homes or townhomes and condos. This scenario assumed that of the 66.5 acres available for development, 43% would be developed at a density of 3 units per acre, 35% at 5 units per acre and 22% at 8 units per acre.

The scenario 2 analysis (Table 3.4) shows that a residential only development would result in an initial net positive fiscal impact to the City. However, it should be noted that property tax revenue will likely remain flat, while costs to provide City services will increase. Over time, the gap between tax revenue contributions versus City service costs would likely narrow and eventually result in a net negative fiscal impact.

Scenario 3: Mixed- Use Development

The third scenario is modeled after the finding of the market analysis. The scenario assumes that 5 acres of the proposed development will accommodate commercial and office uses, as indicated in the market study, for approximately 15,000 square feet of the commercial space and 12,000 square feet of office space. The balance of the remaining acreage in this scenario is proposed for residential dwelling units at a mix of densities, similar to Scenario 2.

This analysis (Table 3.5) finds that a mixed-use development would likely yield the highest fiscal benefit to the City of Villa Hills. This is primarily due to the significantly higher revenue versus expenditure multiplier for business workers than

for that of institutional worker and residential units. Businesses and business workers contribute more toward property tax and payroll tax than they cost the City in demand for services.

If retail and offices are successfully introduced as a part of the proposed development and there is demand for additional such space, additional space should be considered and accommodated. Any additional office or retail businesses would yield additional positive fiscal benefit to the City of Villa Hills. This future development plan for Area 1 should provide flexibility for additional retail and office space if additional space is demanded within the market.

Scenario 4: Madonna Manor Independent Living

Discussions with representatives of Madonna Manor and Catholic Health Initiatives included information regarding a plan to add approximately 65 units in Area 4 (Figure 1.3). The units would remain titled in the name of their organization and would be exempt from property tax. Assuming 1.5 people per unit it would add 98 people to the city and create 1 institutional job. Due to the independent nature of the residents, this scenario assumes the \$1,095 per unit residential expense with reduced other revenue amounts to the city since it is implied that certain revenue/expenses (insurances and trash service) would be paid for by existing Madonna Manor staff and outside contractors would not be used. Further the offsetting payroll tax revenue from the nurses and other staff who would work in an institutional facility are not present.

3.3.5 Fiscal Impact Analysis Summary

Commercial, office and retail components within the proposed development are likely to yield the most positive fiscal benefit to the City of Villa Hills. Institutional land uses, because they are likely to be exempt from property tax, would result in a fiscal drain to the City. While residential land uses are likely to yield positive fiscal impact initially, over time the costs to provide services to residential land uses are likely to outpace revenue generation.

The fiscal impact analysis conducted as a part of this study was intended to provide very general and high-level information about the possible fiscal implications of the development of the site. This analysis should not be considered to represent actual dollar amounts of revenues or expenditures that any proposed new development would incur for the City. Rather, the analysis provides a rough estimate of the relative costs and revenues associated with various types of land uses. This analysis served as one of many components to inform the decision making process for the sisters, the City and the project Task Force.

3.4 Environment

The study area's physical attributes and environment play a large role in how the site can be developed in the future. The characteristics of topography, geology, natural features, agriculture, and green infrastructure all factor into how a site can be used and the degree of difficult to which development can be achieved. The following subsections describe attributes associated with environmental features found within the study area.

3.4.1 Topographic Analysis

Drainage, geology, and slope define the direction and flow of stormwater. These natural features factor into land development and are also affected by improvements. This section will provide basic information to help define these features within the study area.

Drainage

The patterns formed by the drainage of surface water define an area's watershed. Watershed is a term used to describe the land that water flows across or

through on its way to a common river, lake, or ocean. Watershed boundaries are established along the tops of ridges or hills and determine what direction a drop of rain or snow will fall once it hits the surface.

The study area is located within only one watershed—the Ohio River Watershed, HUC number 05090203-040-010 (Figure 3.4). The entirety of this watershed is massive, covering over 200,000 square miles, parts of 14 states, and a population of nearly 25 million people. While the study area encompasses a small part of the overall landmass, water that runs off the land and into the watershed does contribute to the river's overall health.



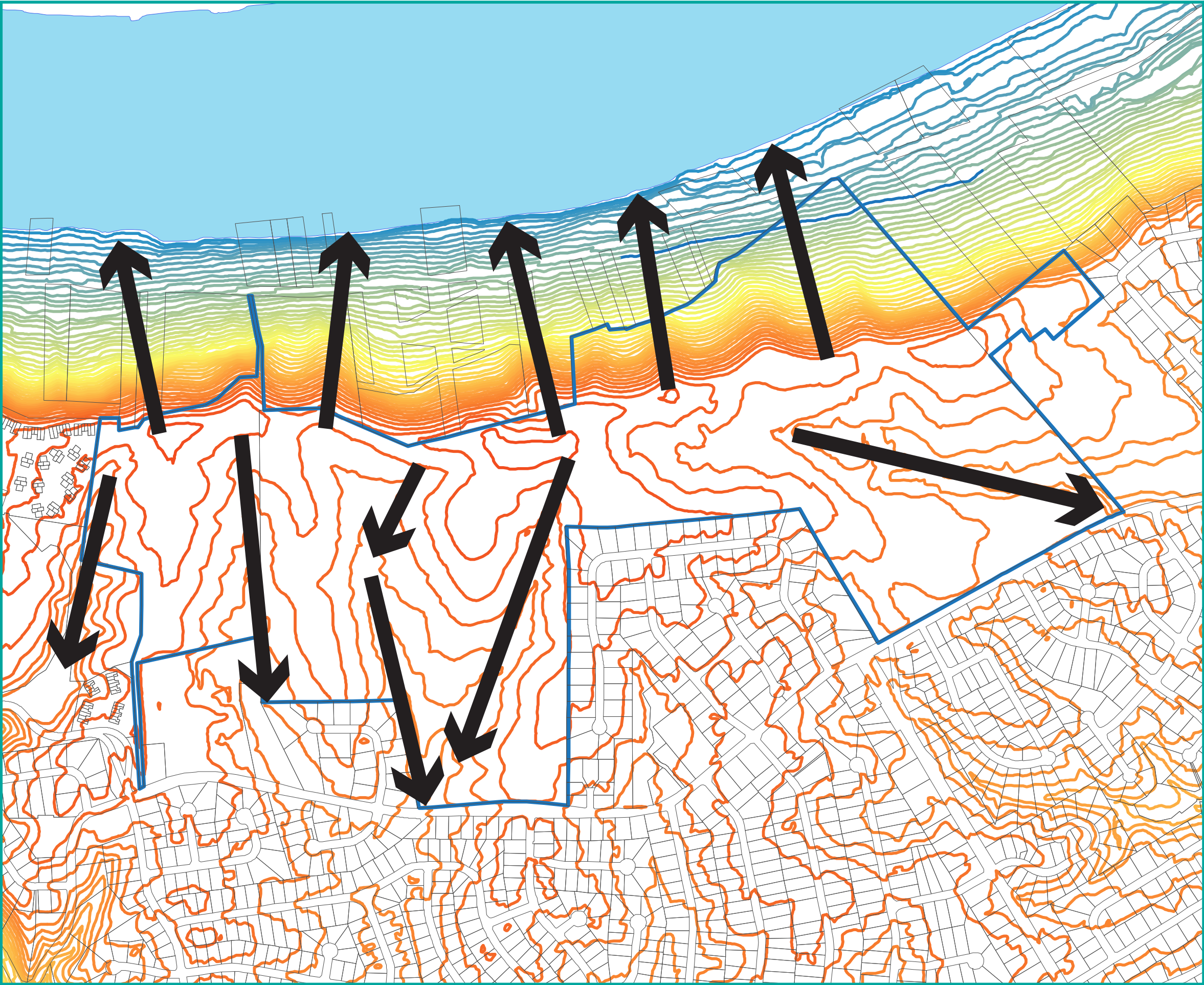
Figure 3.4 - View of the Ohio River from Villa Hills

Figure 3.5 details how water flows in the study area. In general, the map illustrates that precipitation that falls south of the ridgeline flows south. This water eventually flows into Dry Creek and then into the Ohio River. Precipitation that falls to the north of the ridgeline drains directly into the Ohio River.

Geology & Soils

The geology of the study area primarily consists of Bull Fork Formation on the ridgetop. Some Fairview and Kope Formation is found on the steep hillside near the Ohio River. Direction 2030 describes Kope Formation as “slope susceptible to creep and/or landsliding under changing natural and man-made conditions. The Kope Formation also breaks down when exposed to air and water.” As such, any modifications to areas with underlying Kope Formation must be completed carefully.

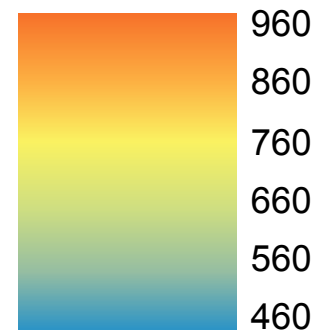
Figure 3.5
Topographic Analysis



Legend

- Parcels
- Study Area Boundary
- River
- Direction of Flow

ELEVATION



1 inch = 600 feet



LINK·GIS





Parcel data provided by CCPVA,
PCPVA and LINK-GIS.



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Figure 3.6
Developmentally Sensitive Areas

Legend

-  Developmentally Sensitive Areas
-  Study Area Boundary
-  Detail Areas
-  Parcels





Vt
Villa Hills Study



LINK-GIS

Parcel data provided by CCPVA,
PCPVA and LINK-GIS.



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Soils on the site are almost exclusively Rossmoyne silt loam of varying slopes. Rossmoyne is characterized by soils that are moderately well drained and are prime for farmland. Other soils such as Eden silty clay loam, Newark silt loam, and Jessup silt loam also exist within the developable study area but comprise only a small portion of the study site. The hillside near the Ohio River is comprised of predominantly Cynthiana flaggy silty clay loam.

Developmentally Sensitive Areas & Slope

Developmentally Sensitive Areas (DSA) is a new term coined by the Direction 2030 comprehensive plan. DSAs identify areas that contain moderate or steep slopes, sensitive geology, or a combination of these characteristics, as well as soils subject to occasional or frequent flooding. These areas may require further site and geologic examination prior to construction and excavation activity. The study area is mostly DSA-free except for a few minor areas, which are detailed in Figure 3.6. The most major concentration of DSA exists in detail Area 5, which encompasses lands that slope to the Ohio River (Figure 3.7). There are no major slope issues (20% or greater) within any of the developable study area.



Figure 3.7 - Study Area Slope as viewed from Ohio

Floodplain

Floodplains were examined as part of the analysis phase of the project. None were found during the GIS mapping analysis of the Flood Hazard Boundary that would affect any portion of the study area.

3.4.2 Agricultural

Figure 3.8 on page 33 illustrates farmland within the study area as identified by the Environment element

of Direction 2030. The map indicates the study area is nearly completely encompassed with either Prime Farmland or Farmland of Statewide Importance.

Prime Farmland is land which consists of soil that has the best combination of physical and chemical characteristics for the production of crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Areas of Kenton County listed as Farmland of Statewide Importance indicates land other than Prime Farmland which has a good combination of physical and chemical characteristics for the production of crops.

While this plan does not intend or recommend for the entire study area to be put into agricultural production, a rather unique opportunity exists to incorporate agricultural amenities upon the site that could benefit the greater community. Please see Section 4.2.5 for recommendations concerning agricultural uses within the mixed use area.

3.4.3 Stormwater Management

Sanitation District No. 1 (SD1) is the local organization that manages and regulates stormwater for major portions of Northern Kentucky. Key person interviews with SD1 regarding stormwater indicates there is currently no infrastructure on Areas 1 or 2 (Figure 1.3) of the site to mitigate stormwater impacts. Infrastructure does exist on other detail areas of the site that are developed, and surrounding the site.

Stormwater management is a significant concern for development in all areas of Kenton County. However, infill-type improvements constructed in close proximity to existing homes, businesses, and schools introduce a different dynamic that must be considered. Any new development within the study area will need to meet SD1 requirements for water runoff and discharge into the existing system. Full information on stormwater recommendations can be found in Section 4.3.

Green infrastructure is a term used to describe innovative on-site stormwater best management practices (BMPs) including ideas like rain gardens, bio-retention systems, and green roofs. These systems are significant because they perform many valuable functions, typically cost less in the long run than manmade infrastructure, and are major contributors to on-site stormwater management. The following subsections provide information on existing stormwater management, tree canopy, and impervious surface conditions within the study area.

Tree Canopy

Trees provide many benefits from cooling the ground and buildings, to reducing flooding, and even helping to clean the air. American Forests, a nationally recognized forestry research organization, recommend 50 percent canopy coverage for suburban residential. A GIS analysis (Figure 3.10 on page 35) was conducted as part of this study and found there is currently approximately 37 percent tree coverage across the entire study area (Figure 3.9). It should be noted that significant tree canopy exists within the study area along the hillside adjacent to the Ohio River. This area is not expected to experience any significant development demand within the planning horizon.

Closer examination of the detail study areas finds the following percentages of canopy coverage:

- **Area 1:** 18.07 acres canopy coverage / 84.98 acres = 21.26%
 - **Area 2:** 19.36 acres canopy coverage / 32.68 acres = 59.24%
 - **Area 3:** 7.52 acres canopy coverage / 20.91 acres = 36.00%
 - **Area 4:** 1.83 acres canopy coverage / 5.41 acres = 33.83%
 - **Area 5:** 43.18 acres canopy coverage / 101.30 acres = 42.63%
- Complete study area:** 88.80 acres canopy coverage / 239.97 acres = 37.00%

Area 2, the radio site, is currently the only detail area meeting the recommended 50 percent canopy coverage for suburban residential areas. Efforts to retain existing canopy is encouraged as development on the site takes place. Obviously trees will need to be removed to allow for development of the site to progress. This plan encourages reforestation, either in large contiguous groves or through street trees, to increase tree canopy wherever possible.



Figure 3.9 - Existing tree canopy within study area

Impervious Surfaces

Impervious surfaces are hardscape surfaces that impede precipitation's ability to saturate into the soil where water can be cleansed and slowly released into the surface drainage system. These surfaces can include buildings, driveways, parking areas, or sidewalks and are a contributing factor for flooding. Currently, there is limited impervious surface coverage within the study area.

Closer examination of the detail study areas finds the following percentages of impervious surfaces:

- **Area 1:** .94 acres impervious surface / 84.98 acres = 1.14%
 - **Area 2:** 0.66 acres impervious surface / 32.68 acres = 2.02%
 - **Area 3:** 1.17 acres impervious surface / 20.91 acres = 5.60%
 - **Area 4:** 1.70 acres impervious surface / 5.41 acres = 31.42%
 - **Area 5:** 9.41 acres impervious surface / 101.30 acres = 9.29%
- Complete study area:** 13.80 acres impervious surface / 239.97 acres = 5.75%

Figure 3.8
Prime Farmland

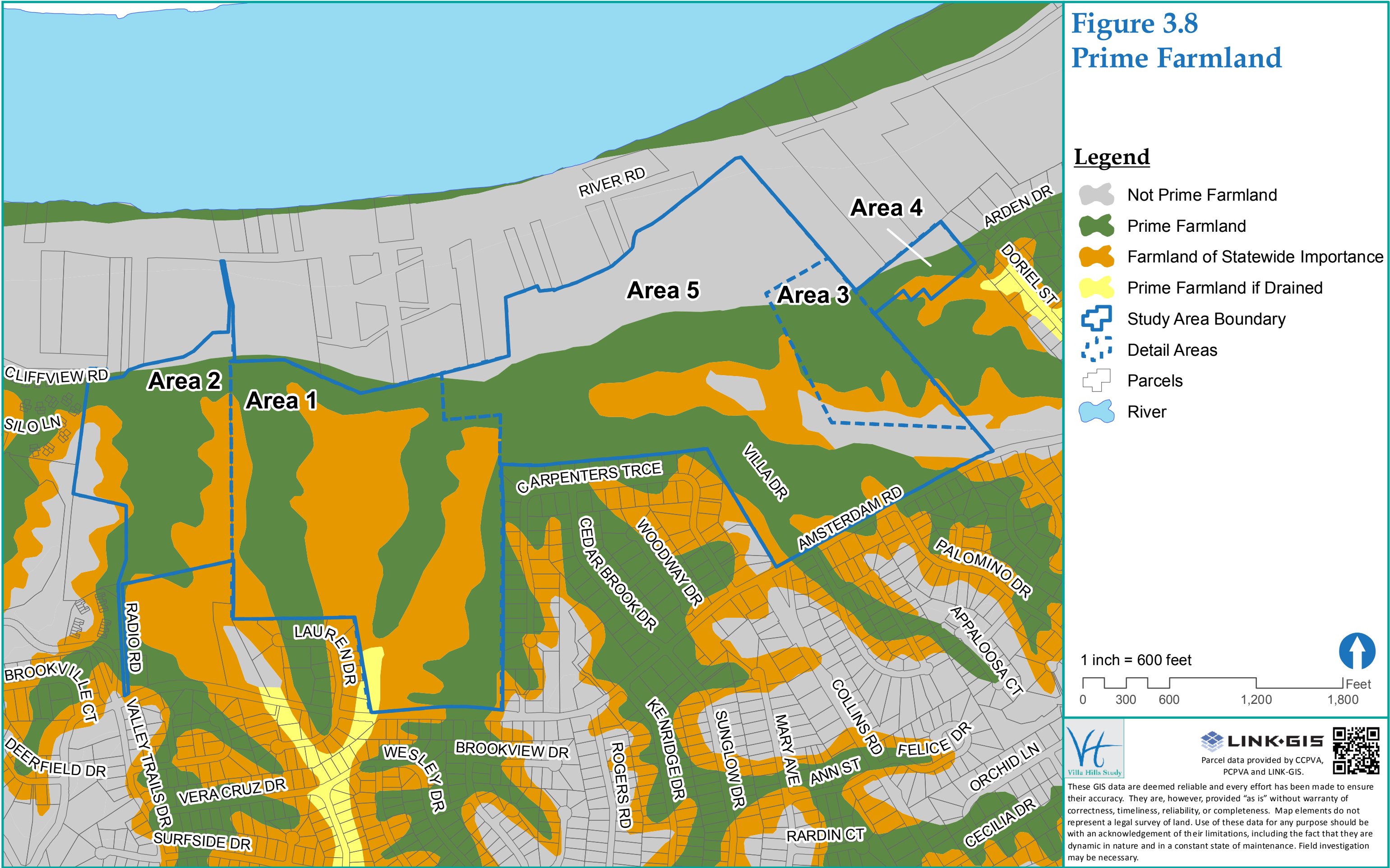
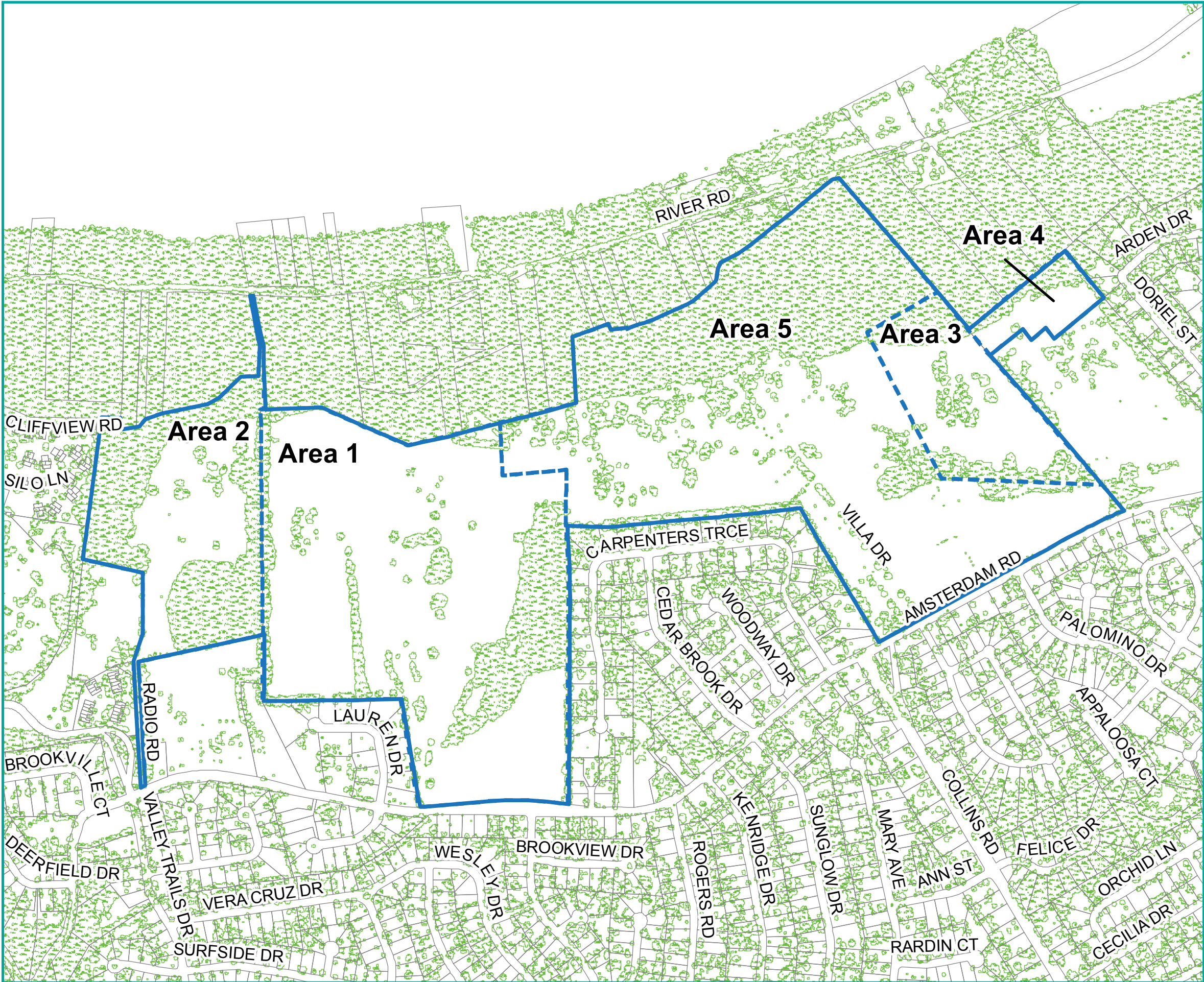




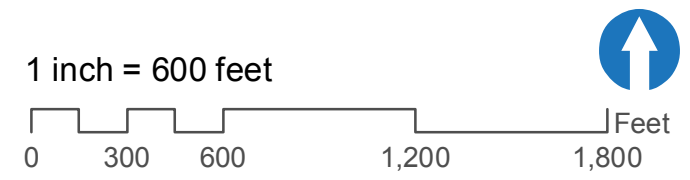



Figure 3.10
Canopy Cover




Legend

-  Study Area Boundary
-  Detail Areas
-  Parcels
-  Tree Canopy






Villa Hills Study



Parcel data provided by CCPVA, PCPVA and LINK-GIS.



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Development of the site will increase impervious surface percentages. This plan encourages the use of green infrastructure best management practices, as outlined by SD1, to mitigate the impacts of impervious surfaces on the site and neighboring properties. Details regarding these practices can be found in section 4.3.

3.5 Community Facilities and Utilities

Community facilities encompass a wide array of amenities and services such as educational facilities both public and private, parks and public spaces, police and fire protection, and religious institutions. Utilities refer to items such as sewer, storm sewer, water, electric, and natural gas infrastructure.

This section contains information pertaining to these facilities and utilities that are wholly contained within the study area or those that are close enough to provide services into the area. Information contained within this chapter was obtained through key person interviews with representatives of the agencies or organizations or through public information.

3.5.1 St. Walburg Monastery

Saint Walburg Monastery of Benedictine Sisters (Figure 3.11) began in 1859 with five sisters arriving to teach English to German immigrants in Covington, Kentucky. In 1903 a group of sisters moved into the previously purchased Collins' home. In 1904 they accepted the first Villa Madonna Academy students. The current property looks much different than it did in 1904 as many expansions and additions have taken place. Today, the Saint Walburg property contains approximately 200 acres, which include the monastery, infirmary, and five houses used for residents and guests. Saint Walburg Monastery currently has 47 members, with enough space to comfortably accommodate 52 members. The non-licensed infirmary has 24 beds and is used to care for the sick members of the monastery. Other items to note about the property include a large pond located on the east side of the property near Villa Madonna Academy and an existing access drive that goes from monastery to the western portion of the property.



Figure 3.11 - Saint Walburg Monastery building

Representative from Saint Walburg Monastery initiated the discussion regarding the sale of a large portion of their property and served as members of the Task Force overseeing the development of this study. This study serves as a plan for the future of their property and will help facilitate the sale of the land and ultimately, the funding of their retirement. Their primary goal with the study and the future of the property is to leave a lasting positive legacy with the City of Villa Hills and provide a development that is beneficial to the City and community. The sisters will remain on their current campus within the study area and will remain residents and members of the Villa Hills community.

3.5.2 Schools

Villa Madonna Academy

Villa Madonna Academy (Figure 3.12) is a private Catholic co-ed school located on the Saint Walburg Monastery property that ranges from kindergarten through 12th grade. The school facility is located



Figure 3.12 - Villa Madonna Academy

to the east of the existing monastery and includes the primary classroom building, gymnasium, and athletic fields.

Key person interviews were conducted with the high school and elementary school principals in May 2016. This interview indicated the school has room to add approximately 100 new students, which is part of the 5-10 year goals for the school. They indicated that the majority of classroom activities occur on the current campus and rarely do students leave that area.

Currently, the school does not provide a bus service and all students are driven to school, causing traffic to be a significant concern. The principals expressed the interest in building a new running track located on the current campus for their track and field teams. Outside of increasing enrollment there were no future expansions in the plans for the school.

River Ridge Elementary (Kenton County Public Schools)

Kenton County Public School district currently has one school located within Villa Hills, immediately adjacent to the study area--River Ridge Elementary School (Figure 3.13). This school is the public elementary school that services the Villa Hills Area. Two other schools to note, Turkeyfoot Middle School and Dixie Heights High School also provide public school needs to the study area.



Figure 3.13 - River Ridge Elementary School

Key Person Interviews were conducted with the Kenton County Public Schools in May 2016. The school district indicated that River Ridge Elementary has a capacity of 1,200 students, with 900 students currently enrolled in the school. The district is working on a new master plan, however, so updated projections for school enrollment were not available at the time of publication. Finally, they indicated the need for more play space near the school but had no current plans for expansion.

3.5.3 Recreation

Saint Walburg Monastery currently leases an approximately 14-acre area of their property to the City of Villa Hills for use as a city recreation area (Figure 3.14). This area includes 3 baseball fields, 3 soccer fields and a parking area and is located on the eastern portion of the property near Amsterdam Road. The City of Villa Hills maintains the recreation area and is responsible for its upkeep. This portion of the study area is not intended to change within the timeframe of this plan.



Figure 3.14 - Recreation in the study area

3.5.4 Safety and Emergency Services

Fire, police and EMS provide service to the City of Villa Hills and surrounding areas. Currently, the study site is largely vacant and does not require significant service from emergency organizations. However, if the site were to be developed, the amount of service to this area would increase. Key person interviews were conducted with the Crescent Springs/Villa Hills Fire & EMS and the Villa Hills Police Department to better understand their concerns. Details of these interviews are provided in the following subsections.

Police

A key person interview conducted with the Police Chief in May 2016 indicated there are very few calls to the study area. The Chief stated that he believes the biggest potential issue with the study area will be traffic. The police department currently has a traffic officer at River Ridge Elementary School during morning drop-off and afternoon pick-up times to help with congested traffic on Amsterdam Road but with the potential development of the study area, this traffic issue may increase.

Finally, the Police Chief indicated the level of coverage and service for a proposed development based upon market study findings would be similar to what currently exists within the city and would not challenge the department.

Fire and Emergency Medical Services

The City of Villa Hills fire and EMS is provided by the Crescent Springs/Villa Hills Fire & EMS, which services Crescent Springs, Villa Hills, and a part of Unincorporated Kenton County via contract (Figure 3.15). During the key person interview with the Fire and EMS service in May 2016, they indicated concerns about low water pressure in Prospect Point for fire hydrants. This concern prompted the suggestion that this may be an issue for any proposed development in the study area.

Emergency personnel also highlighted there is currently only one access into Prospect Point, which is accessed over a dam. If the dam were to fail these residents could potentially be stranded. Fire and EMS recommended that the new development have multiple access points and another road through the radio property connecting to Prospect Point is desirable.

The fire department indicated they have a 110' ladder truck and further elaborated that structure's 4 stories or higher would require additional staff. They indicated that they average about 1 call per month to the monastery and that any proposed assisted living facility would increase the number of calls they



Figure 3.15 - Crescent Springs/Villa Hills fire truck

receive. Finally, the department indicated that they averaged approximately 8 calls per month in 2015 to Madonna Manor. The department indicated it has the staff and equipment to handle potential development scenarios.

3.6 Other Community Facilities

The following subsections provide information on “other community facilities,” or assets outside of more traditional community facilities defined by Kentucky Revised Statutes (KRS) 100.187. The aforementioned section of Kentucky state law defines contents of comprehensive plans and serves as the guiding principles for this document. The following subsections describe existing conditions for other community facilities within the study area.

3.6.1 Radio Array

Pathfinder Communications of Ft. Wayne, Indiana owns the westernmost parcel in the study area (identified as Area 2 on Figure 1.3). This approximate 32-acre parcel contains several large radio towers and associated transmitting facilities used to transmit the signal for WCKY, an AM station better known locally as ESPN 1530 (Figure 3.16).

Key person interviews were conducted with representatives of the site owner in March and April 2016. Currently the facility is leased to iHeartMedia, Inc. (formerly known as Clear Channel) of San

Antonio, TX. iHeartMedia, Inc. has leased the site since 1995 and recently renewed their lease in 2015. The Pathfinder Communications representative made it clear that the site would remain a telecommunications facility as long as iHeartMedia, Inc. wanted to lease the site.

In the event that iHeartMedia, Inc. decides to cease communications for WCKY, Pathfinder Communications will likely sell the site for a use other than a radio station. It is the belief of the owner's representative that finding a viable replacement AM broadcaster to lease the equipment is unlikely and that their financial interests would be better served by selling the property. Timing of this potential future sale of the parcel would likely mean that any future redevelopment of the site would occur in a later phase of the plan.



Figure 3.16 - WCKY AM radio transmitting facility

3.6.2 Madonna Manor

Madonna Manor (Figure 3.17) is a Catholic senior living community that is located immediately east of the study area. The facility, started by the St. Walburg Monastery in Villa Hills more than 40 years ago, is now owned and operated by Franciscan Living Communities, a member of Catholic Health Initiatives. Madonna Manor features independent living, assisted living, memory care, rehabilitation, and skilled nursing on the 28-acre site.

Representatives from Madonna Manor and Franciscan Living Communities served as Task Force members and were consulted throughout the study.



Figure 3.17 - Madonna Manor

Conversations with the organization's leadership in key person interviews revealed the facility wishes to refine and grow its operations. Their primary request of the study was to examine existing zoning and work towards a designation that was more suitable to their current mission and future plans.

3.7 Utilities

Direction 2030 defines utilities as services that are usually funded by taxes and/or fees for the provision and maintenance of infrastructure such as electricity, natural gas, water, sewage, telephone, telecommunications and internet. The following subsections provide information on the study area's existing utility infrastructure.

3.7.1 Gas and Electric

Duke Energy provides gas and electric service to the entirety of the study area. Key person interviews were conducted with Duke Energy via email and phone correspondence in May 2016 to determine current capacities, future plans in the area, and potential utility impacts a new development might incur.

Future gas service into the site would require installation of gas mains on the public drive with small branch lines connecting down adjacent streets to individual users. The company would have to run tests based upon anticipated development numbers to determine the true natural gas capacity. It was reported that any needed upgrades for gas service to the site would be assumed by Duke Energy.

The company reported abundant electrical service to the site with no need for upgrades. This study anticipates the need for buried utilities within the study area. Any buried electrical utilities would be a viable option for the site, however, the difference for any additional costs associated with burying the utilities would be paid by the developer of the site.

3.7.2 Northern Kentucky Water District (NKWD)

The Northern Kentucky Water District provides water to the study area and the surrounding properties. An interview conducted with the NKWD in May 2016 indicated adequate service to the existing site and community with no major upgrades needed or planned in the immediate future based upon current development and usage. Currently there are two water mains immediately adjacent to the site, running parallel to Amsterdam Road.

Future development of the site could impact the utility's level of service in the community if any appropriate needed upgrades were not installed concurrently with construction. While the NKWD believes the existing infrastructure to be adequate the only way to ensure a high level of service would be to run tests on the existing systems. If additional infrastructure upgrades were needed to meet the site's development needs the NKWD would identify and craft solutions to the water supply problems.

3.7.3 Sanitation District No. 1 (SD1)

SD1 is the local authority that manages stormwater and sewage for major portions of Northern Kentucky. Interviews with SD1 indicated adequate sanitary infrastructure around the study area, which could likely support development in its current configuration. Wastewater could either be routed directly to the Dry Creek Treatment Plant to the west or sent east to the Bromley Pump Station. Flow meter testing is the only way to fully ensure the proposed development could fully be serviced by the existing infrastructure. However, SD1 indicated that there are several sewer mains near the site, and flows could be diverted toward multiple sewer mains if needed.

Any development occurring on the site over one acre in size will require review, approvals, and inspections by SD1 for storm water permitting. Early discussions involving the future property owner(s) and SD1 regarding storm water management on the site are encouraged. SD1 indicated during the interview process that a regional detention basin, to serve the entire study area is a recommended approach to storm water management for the site. The lowest point, the southwestern portion of the site is the most logical location for a regional basin. More details regarding recommendations pertaining to stormwater and sanitary sewer topics can be found in section 4.3.

3.7.4 Jet Fuel Line

In the early 1970s, the St. Walburg Monastery management entered into an agreement with Chevron for a jet fuel line to be installed across the property. The contract stipulated the company was granted a 20-foot wide easement across the St. Walburg grounds, aligned from the pipe's centerline. The general alignment of this pipeline, as determined by engineered drawings from 1970, is displayed on Figure 3.18 on page 41. Throughout the history of the pipeline, ownership of the easement and transmission line changed from Chevron to Trans Montaigne, the current owners of the line.

In the early 1970s a 6-inch steel pipeline was constructed through the easement. The pipeline originates at the Trans Montaigne terminal on River Road in Villa Hills, travels up the hill to the St. Walburg Monastery, continues through Villa Hills and parts of northern Boone County, and ultimately terminates at the Cincinnati/Northern Kentucky International Airport (CVG). The line was used for approximately 15 years before being idled in 1992. When the use of the pipeline was terminated, it was "pigged" and "purged" of any fuels. A portion of the pipeline is currently filled with pressurized nitrogen to preserve its integrity.

Trans Montaigne, during a June 2016 interview, expressed confidence that no fuels have ever leaked from the pipeline and that the pipeline sections are

preserved and remain in usable condition. The owners also consider the line idle, not abandoned. They currently inspect the line yearly and intend to reactivate the facility in the future.

In the early 2000s Villa Madonna Academy upgraded their school facilities, which included construction of a new gym over the existing jet fuel pipeline. At that time, a section of the pipeline was removed and a new easement was granted, which roughly followed the southern edge of the retention pond. No new pipeline has been constructed in the easement to date.

Language in the Grant of Easement, recorded in Miscellaneous Book 570, page 556 of the Kenton County Clerk's records at Covington, Kentucky, is of particular interest to future development of the land. The specific section states:

"The said Grantors, their heirs, successors and assigns, shall have the right to use or enjoy said easement areas except for the purpose herein granted to Grantee, its successors and assigns, which shall be deemed to prohibit the erection of any building or structure on the right of way. In the event the grantor desires to construct or erect a road, building or structure of any kind on the abovementioned right-of-way, the grantee will cause the pipe line of lines and all other equipment which would impede such construction to be relocated, at the grantee's expense, in a new right-of-way provided by the grantor over some other portion of the grantor's property."

This language was enacted with the construction of the Villa Madonna Academy gymnasium in 2000 wherein St. Walburg Monastery (the Grantor) built a new facility over the existing line and provided Trans Montaigne (the Grantee) a new right-of-way around the building. This plan strongly recommends verifying the rights of the Grantor are transferrable to new ownership before final purchase and transfer of the land is complete. Complete copies of the 1970 Grant of Easement and 2000 Right-of-Way Easement Grant can be found in Appendix G at the end of this document.

3.8 Existing Land Use

The Villa Hills Small Area Study is unique in that the primary study area is owned by one property owner and entire study area is owned by three property owners. Saint Walburg Monastery owns all but 38 acres of the 240-acre study site. 32 acres are owned by Pathfinder Communications and contains multiple radio towers identified as Area 2 in Figure 1.3. The remaining 5 acres are owned by Madonna Manor, Inc. and are identified as Area 4. Due to the fact that the study area is owned by only three property owners and its relatively undeveloped state there is only one existing land use in the study area—public/semi-public uses (Figure 3.19).

Public/semi-public uses typically include civic spaces, fire and police stations, schools, churches, funeral homes, and in this instance a monastery. The area directly to the east of the study site is Madonna Manor, which is also classified as public/semi-public uses. The land surrounding the study area to the south and west are classified as residential uses. Villa Hills is a residential community and the vast majority of uses within the City are residential in nature. Finally, the northern area of the study site is classified as vacant or residential uses.

3.9 Existing Zoning

Two zoning districts exist within the study area and are displayed in Figure 3.21. The two zoning districts are the Institutional (INST) Zone and Residential One-D Zone (R-1D). The R-1D Zone comprises the radio tower site (Area 2 on Figure 1.3) and consists of approximately 32 acres. The R-1D zone permits single family residential dwellings at a moderate density. The remaining portions of the study area are located in the INST Zone. The INST Zone permits institutional uses such as churches, schools, and nursing homes.

As with the western most portion of the study area, the areas to the south and peripheral east are also located in varying residential zones (Figure 3.20 on page 47). These residential zones, R-1C, R-1D, and R-1E all permit single family residential uses at low

Figure 3.19
Existing Land Use

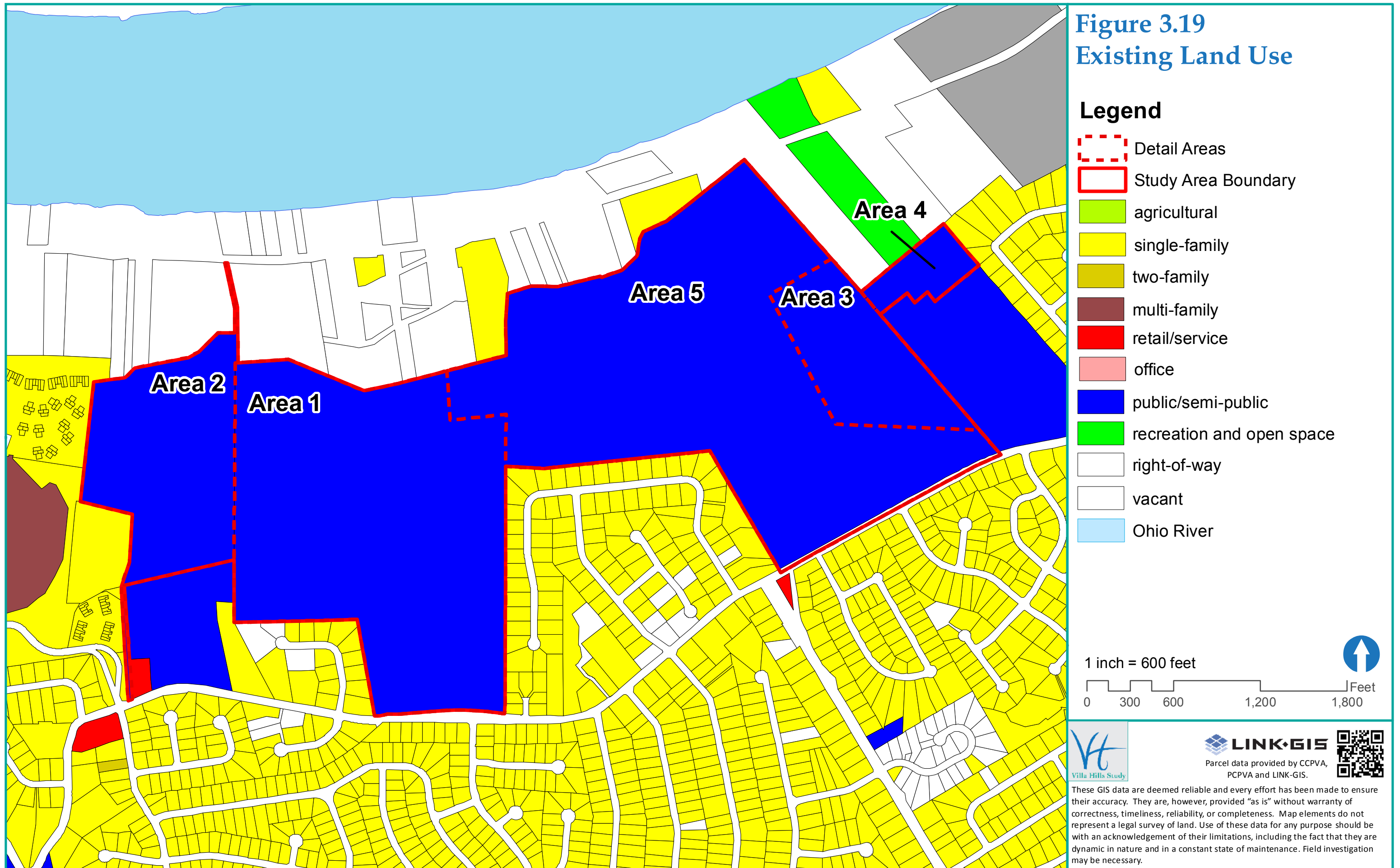
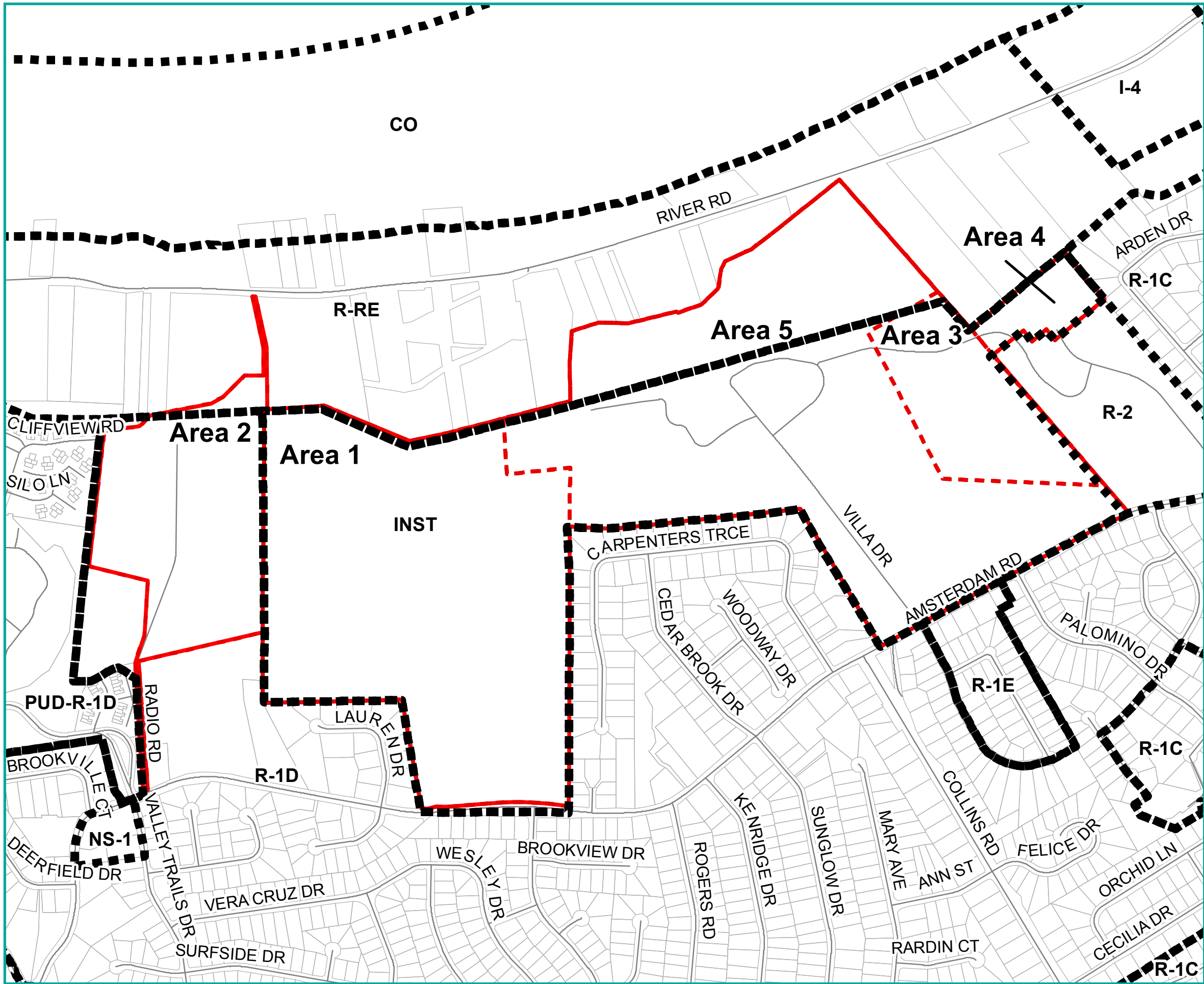
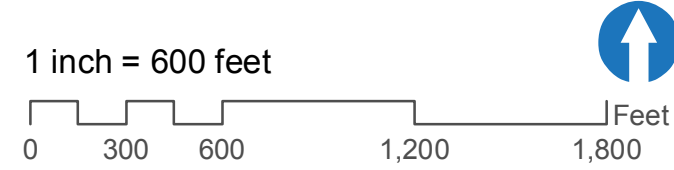


Figure 3.20
Existing Zoning



Legend

- Existing Zoning
- Detail Areas
- Study Area Boundary
- Parcels



LINK·GIS
Parcel data provided by CCPVA,
PCPVA and LINK·GIS.



These GIS data are deemed reliable and every effort has been made to ensure their accuracy. They are, however, provided "as is" without warranty of correctness, timeliness, reliability, or completeness. Map elements do not represent a legal survey of land. Use of these data for any purpose should be with an acknowledgement of their limitations, including the fact that they are dynamic in nature and in a constant state of maintenance. Field investigation may be necessary.

to moderate densities. The area located directly to the east of the study area, consisting of the Madonna Manor property, is zoned Residential-2 (R-2). The R-2 Zone permits two-family and multi-family residential dwellings at a moderate density. Finally, the area located to the north of the study area is located along River Road and is in the Residential Rural Estate (R-RE) Zone. The R-RE Zone provides for single family residential dwellings and agricultural uses at a low density.

3.10 Mobility

This section details the existing transportation conditions within the study area and provides analysis of future conditions in and around the study area. The mobility analysis is designed to evaluate the potential impact development within the study area will have on the surrounding area. Two development scenarios are evaluated based on the results of the

market study documented in other sections of this report. The overall objectives of the transportation study are to:

- Identify existing capacity constraints
- Determine location and design of access points to Areas 1 and 2 (Figure 1.3)
- Identify development constraints based on existing transportation issues
- Identify necessary improvements to the transportation infrastructure to support background traffic growth and development of the subject property.

3.10.1 Transportation Study Area

The transportation study area was established to include primary intersections near the study area and evaluate impacts to minor streets. In total, seven intersections (Figure 3.21) were included within

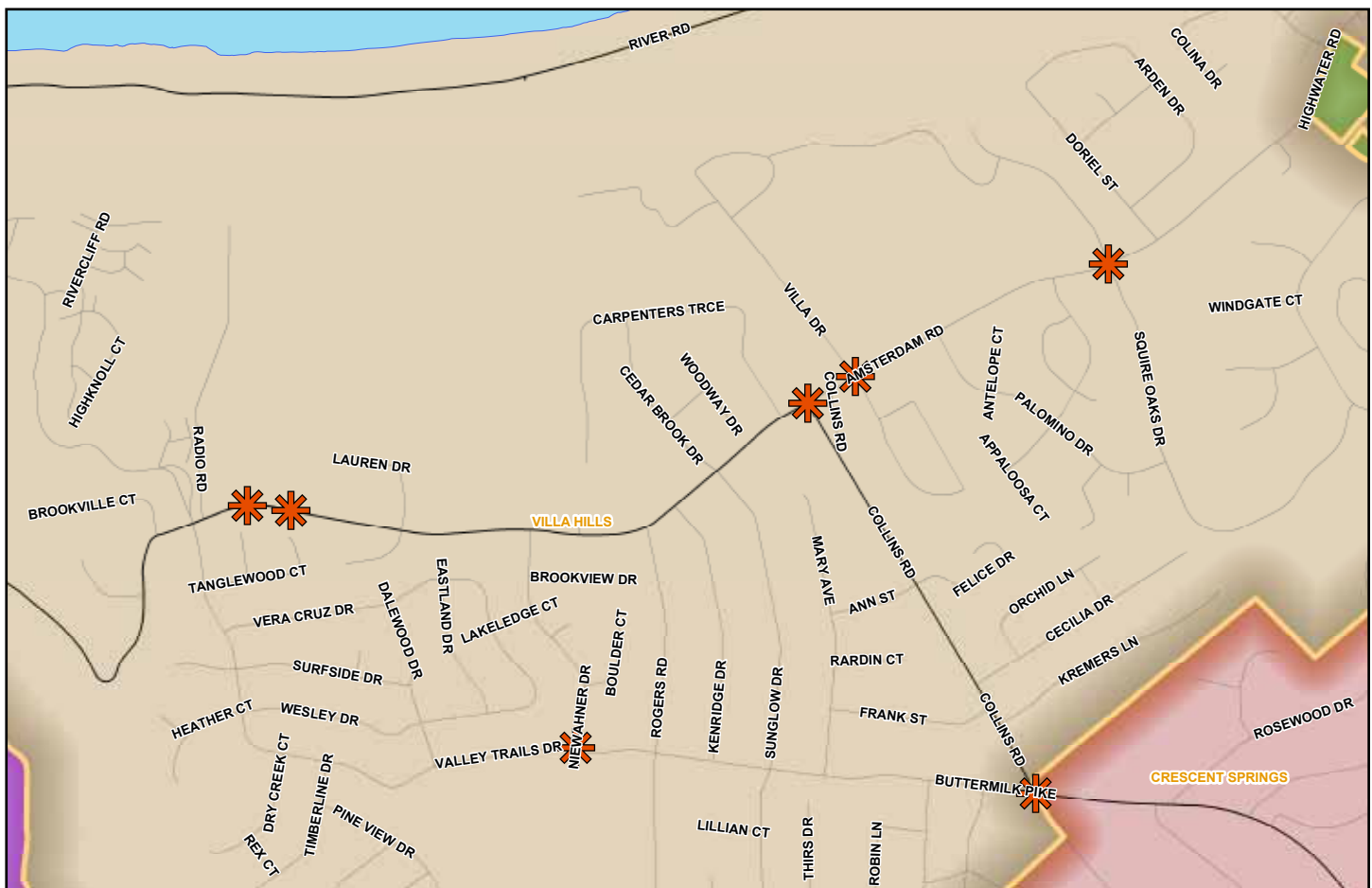


Figure 3.21 - Study Intersections

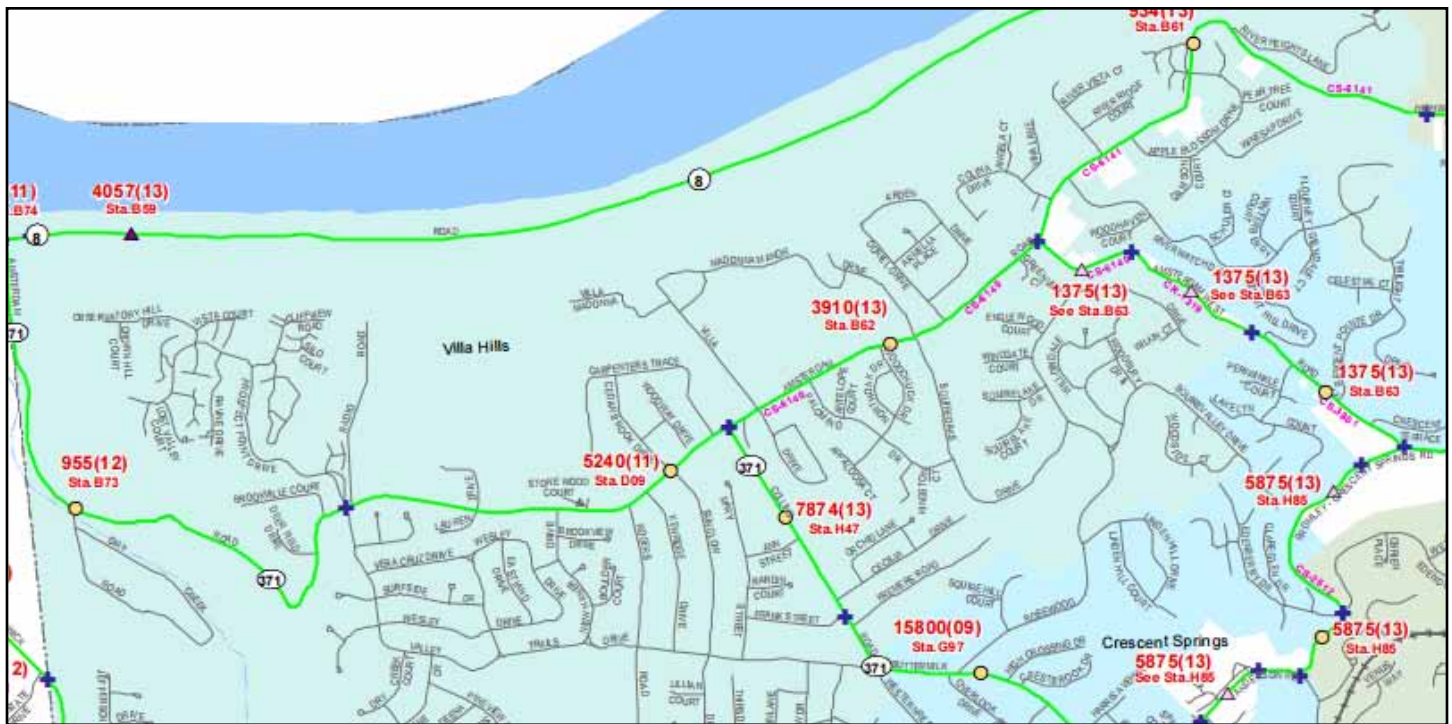


Figure 3.22 - Average Daily Traffic

the study area primarily along Amsterdam Road and Collins Roads. The intersection of Niewahner Drive and Valley Trails Drive was also included to identify the potential impact of cut through traffic within the lower order street system. The full list of study intersections is detailed in the list below and displayed in Figure 3.21.

- Amsterdam Road at River Road
- Amsterdam Road at River Ridge Elementary School Drive 1
- Amsterdam Road at River Ridge Elementary School Drive 2
- Amsterdam Road at Collins Road
- Amsterdam Road at Villa Drive
- Amsterdam Road at Madonna Manor/Squire Oaks Dr.
- Collins Road at Buttermilk Pike

3.10.2 Existing Conditions

The primary roadways within the study area, (Collins Road and Amsterdam Road) are state maintained and both are designated as KY 371. Figure 3.22 summarizes Average Daily Traffic Volume counts

collected by the Kentucky Transportation Cabinet within the area. As can be seen in Figure 3.22, volume on Amsterdam Road varies greatly from 955 vehicles per day (VPD) west of Villa Hills to 5,240 VPD near the intersection with Collins Road. Collins Road maintains the highest traffic volume in the area with a count of 7,874 VPD recorded in 2011. Despite the fact that these roadways serve as the primary access to and from Villa Hills, they also provide unrestricted residential access to single family properties on both sides of the street via driveway access points.

Amsterdam Road is a narrow roadway measuring nominally 22 feet in width with little to no shoulder. Collins Road maintains a 23-foot cross section with a 3- to 4-foot shoulder through the study area. Remaining roadways within Villa Hills have been designed as residential streets with unlimited access and on-street parking.

Figure 3.23 on page 51 shows the typical section of Amsterdam Road in the vicinity of the study area. The narrow lanes and minimal shoulders are easily recognizable. Moreover, several sections of the



3.23 - Existing Conditions (Amsterdam Road)

roadway demonstrate poor pavement conditions with failing pavement and potholes. These conditions have been observed to force vehicles towards the center lane away from the road edge.

Based on existing traffic volumes, level of service analysis was conducted at all fully controlled intersections. Level of Service (LOS) is a letter grade designation based on the delay users experience waiting at intersections and ranges from LOS A to F. LOS A has less than 10 seconds of delay at all intersections, whereas LOS F has greater than 50 seconds of delay at stop controlled intersections and greater than 80 seconds of delay at signal control intersections.

Intersection	Existing	
	LOS	Delay
Buttermilk at Collins	B	19.6
Collins at Amsterdam	D	25.3
Amsterdam at Vallet Trails	A	8.5

Table 3.6 - Existing LOS Analysis

The results of the LOS analysis for this study are summarized below in Table 3.6. As can be seen from the table, the intersections of Collins Road at Buttermilk Pike and Amsterdam Road at Valley Trails Drive currently operate with a high LOS. However, the current 3-way stop at the intersection of Amsterdam Road and Collins Road is shown to operate at LOS D, indicating that during the peak hours it operates close to capacity.

3.10.3 Mobility Impact Analysis
Scenario 1 – Market Based Analysis

The market analysis for this study identified primarily residential uses with some neighborhood commercial development designed to support the area. In addition, the market analysis determined that approximately 10 acres of the 82-acre site was assumed to be reserved for park and/or civic uses.

Based on these recommendations, a trip generation analysis was conducted to evaluate the total number of trips that may be expected to be generated by the development of the property. Trip Generation analysis was conducted using the TripGeneration.xls tool used by the Kentucky Transportation Cabinet (KYTC). This tool estimates the number of trips based on empirical data collected by the Institute of Transportation Engineers (ITE) and documented in the ITE Trip Generation Manual.

In total, utilizing the market study analysis the site is expected to generate approximately 600 trips, both entering and exiting. Table 3.7 on the next page summarizes the proposed land uses and entering and exiting trips. It should be noted that commercial trips resulting from neighborhood shopping centers and/or office or medical uses may not necessarily be additional trips placed on the network, but may replace existing medical or shopping related trips currently travelling outside the area.

Additionally, the number of trips generated by residential uses can also vary depending on the type

ITE Land Use Code	Land Use Description	Ind. Var. (X)	Ind. Var. Units	Entering / Exiting	Trips Generated
TOTAL	ALL	--	--	Total entering	307
		--	--	Total exiting	293
820	Shopping Center	10	1000 sf GLA	entering	66
				exiting	71
720	Medical-Dental Office Building	6	1000 sf GLA	entering	11
				entering	16
710	General Office Building	6	1000 sf GLA	entering	15
				entering	71
851	Convenience Market (Open 24 Hours)	1	1000 sf GLA	entering	27
				entering	26
210	Single-Family Housing	238	Dwelling Units	entering	154
				entering	86
220	Apartment	68	Dwelling Units	entering	36
				entering	23

Table 3.7 - PM Peak Hour Trip Generations (Scenario 1, Market Analysis)

of residence, such as detached single family having higher peak hour trip generations than retirement communities. However, in order to provide a robust analysis higher ends of the trips generation were used and displaced trips were not addressed in the analysis.

Scenario 2 – High-Intensity Analysis

In addition to the trip generation analysis listed above, an additional exploration was performed to reflect a “worst-case” scenario for traffic impact. This analysis doubles the level of commercial trips and introduces higher density residential uses. In addition, the remaining 30 acres along Radio Tower Drive adjacent to the development is also assumed to be redeveloped as residential property. This analysis is detailed in Table 3.8.

As can be seen from this analysis, the “worst-case” scenario only adds approximately 180 trips during the peak hour. This additional traffic is largely due to the increased residential properties assumed and not related to the commercial uses, as commercial uses typically operate with higher volumes outside of the peak hours.

3.10.4 Scenario LOS Impacts

Based on the trips generated in both Scenarios 1 and 2, a level of service analysis was again conducted to determine the impact of the development over the existing conditions. This LOS analysis indicates what would occur on the existing roadway if no improvements were implemented. Generated trips were distributed to the roadway network based on existing traffic patterns with the majority of the

ITE Land Use Code	Land Use Description	Ind. Var. (X)	Ind. Var. Units	Entering / Exiting	Trips Generated
TOTAL	ALL	--	--	Total entering	402
		--	--	Total exiting	388
820	Shopping Center	20	1000 sf GLA	entering	104
				exiting	113
720	Medical-Dental Office Building	12.5	1000 sf GLA	entering	22
				entering	34
710	General Office Building	12.5	1000 sf GLA	entering	16
				entering	77
851	Convenience Market (Open 24 Hours)	1	1000 sf GLA	entering	27
				entering	26
210	Single-Family Housing	200	Dwelling Units	entering	132
				entering	74
220	Apartment	250	Dwelling Units	entering	102
				entering	65

Table 3.8 - PM Peak Hour Trip Generations (Scenario 2, High-Intensity)

Intersection	Existing		Proposed (Alt 1)		Proposed (Alt 2)	
	LOS	Delay	LOS	Delay	LOS	Delay
Buttermilk at Collins	B	19.6	C	23.4	C	24
Collins at Amsterdam	D	25.3	F	57.2	F	58.5
Amsterdam at Valley Trails	A	8.5	B	13.8	C	15.6

Table 3.9 - Combined Level of Service Analysis

traffic traveling east towards Interstate 75 along Amsterdam Road and Collins Road. LOS analysis for these scenarios is presented in Table 3.9, along with the existing conditions LOS for comparison.

As can be seen from this analysis, the only intersection that demonstrates a significant increase

in operational delay is the intersection of Collins Road at Amsterdam Road. It is noted that there is very minimal difference between the delay in both development scenarios with only 1.3 seconds of delay difference between Scenarios 1 and 2, even though Scenario 2 is considered a higher-intensity use.



4.0 RECOMMENDATIONS

4.1 Guiding Principles

As with the Direction 2030 comprehensive plan, there are guiding principles that were crafted throughout this plan that have focused the report's recommendations. The following subsections within this recommendation chapter have been crafted to reflect the desires of the community and the property owner as demonstrated through multiple public input opportunities, staff research and significant discussion among the Task Force, an independent market study, expert interviews with regional development companies, and a survey of Task Force members.

Key recommendations and principles should be kept in mind as information in this chapter is considered. The guiding principles for the Villa Hills study include these following points, which the Task Force desires and encourages to be incorporated into the ultimate design and development of the site.

Variety of Housing – Throughout the plan, incorporating a variety of housing options was described as a key benefit of new development within the study area. Public meeting responses, expert interviews, and the independent market analysis all indicated having multiple housing options was preferable. New housing within the study area is encouraged by this plan to incorporate a variety of single- and multi-family units, detached homes, attached homes, townhomes, patio homes, and ranches. The mix of housing will ideally allow for accessible floorplans, which not only allow for accessibility for individuals needing enhanced interior mobility, but are also inviting to almost all demographics. Housing in the study area is also encouraged to include varying floorplan sizes to address different residential needs for potential residents.

Incorporating Active Transportation – This guiding principle reflects the planned inclusion of diverse facilities dedicated to biking and walking. Public comments indicated a strong desire for the ability to

walk and bike upon the site. This idea was further refined through expert interviews, which suggested creating beautiful streets that invited people to walk and congregate, rather than solely relying on multiuse paths for these active travel modes. The idea also extends to the broader community and encourages connections to existing areas of Villa Hills wherever possible.

Value Adding Commercial/Office – Encouraging the inclusion of commercial and office uses into the study area was carefully considered and significantly researched through this plan. The idea was explored through the market study, staff research, public meetings, expert interview phase, and Task Force survey. Throughout this investigation, the Task Force determined that commercial and office uses were feasible and desired, providing they were the correct size and scale to match the character of Villa Hills and new development within the study area. Conversations with experts indicated these types of uses would add value to the community and make the new development even more attractive to a wide-range of current and future residents.

Community Amenities – Crafting amenities that are open to both existing Villa Hills residents and new residents that move to the site is encouraged by this plan. Interviews with experts indicated that a successful new development would be welcoming to the existing Villa Hills community. The idea of creating a place that was a gathering point for all Villa Hills residents was a recurring theme from these interviews.

Traditional Neighborhood Development (TND) – TNDs are a style of development that focuses on a comprehensively planned approach for a site. Many Task Force members expressed interest in a TND for the study area. Several on the group also visited Norton Commons, a TND in Louisville, Kentucky, and found that type of traditional neighborhood development as an appealing and desirable example for Villa Hills. Although TND is not a requirement for the study area, a proposed development on the

site containing traditional neighborhood design elements would be desirable and is encouraged by the Task Force.

Sites implementing TND utilize varying housing types and styles that complement each other and provide housing opportunity to residents of all ages and of varying economic backgrounds. Residential areas in TNDs typically have streets with on-street parking, tree-lined sidewalks, houses oriented closer to the street, and alleyways in the rear that provide access to driveways, garages, and service areas of residences.

TNDs also incorporate a variety of uses in a well-planned community. Such uses could include civic amenities like parks and community facilities, as well as commercial and office uses that add convenience and appeal to the neighborhood by serving the needs of its residents. These areas are also identified by their distinct center, often incorporating a square or green that is oriented to the community. Most TNDs strive to orient their concentration of dwelling units near the community core so that the area is walkable within 5-7 minutes. Small plazas, parks, and playgrounds are often interspersed throughout the overall development so that residents do not have to walk more than a tenth of a mile to reach these amenities.

In summary, these guiding principles form the basis from which recommendations for the plan were crafted. The guiding principles are encouraged to be kept in mind as the following detailed recommendations are considered. The remainder of this chapter provides details and information regarding specific recommendations encouraged by the Task Force.

4.2 The Market

This section of the plan describes the assets and constraints that exist within the Villa Hills market. The market study was conducted by Market Metric\$, LLC in early 2016 to examine the competitive advantages and potential constraints within 5,

10, and 15-minute drive times of the site. This analysis was instrumental in determining the range of potential land uses that could be accommodated in the study area now, and in the future, based on the needs demonstrated by the greater marketplace. The objective of the analysis was to provide market-based information on all appropriate land uses to assist PDS, the City, and Task Force in developing strategies, initiatives, and plans to serve the needs of the community.

The following subsections represent a summary of the full market study found in Appendix A. As such, they should be viewed as a general overview of the complete market study, which was published in June 2016. The full market study report contains significantly more details, should be viewed as a companion document to this plan, and is available on the PDS website at www.pdskc.org.

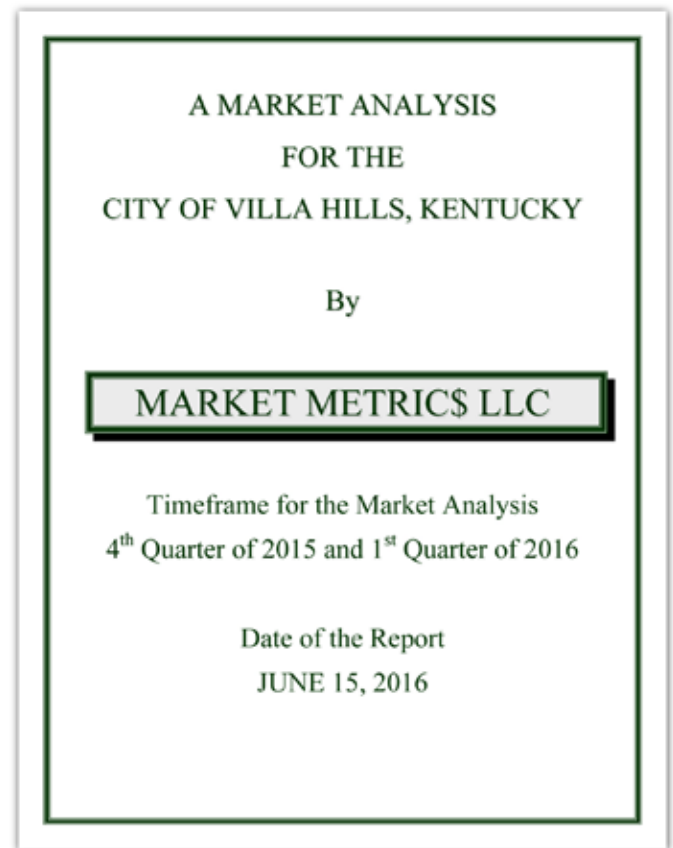


Figure 4.1 - Market Study Report Cover

4.2.1 Executive Summary

The subjects of the following market analysis comprise all, or portions of, two, irregularly shaped, essentially undeveloped parcels encompassing 115 acres, more or less, subject to confirmation by survey. The primary parcel encompassing 82 acres, more or less, is a portion of a 201.98 acres property owned by the Benedictine Sisters of St. Walburg and represents the residual acreage of a campus consisting of multiple institutional uses serving the needs of the owners as well as schools, a monastery, senior care facilities, houses, and ancillary buildings. A secondary parcel comprising 32 acres, more or less is contiguous to the west of the primary parcel, but separately owned. The subject parcels represent the last significant development opportunity in the City of Villa Hills, Kenton County, Kentucky. The parcels' limited, primary road frontage is along the north side of Amsterdam Road west of the terminus of Collins Road. While road frontage is relatively minimal, the parcels have a substantial amount of Ohio River overlook. The neighborhood is essentially upscale residential in character.

The purpose of this analysis is to determine if there is a market for community expansion and economic growth on the two subject parcels in the immediate future. Four major land use groups will be examined in the framework of "Highest and Best Use". The four groups are residential, industrial, office, and retail uses. Note that only those uses deemed to be representative of the "Highest and Best Use(s)" of the subject parcels will be considered in this analysis. As such, the tests of "Highest and Best Use" are prerequisite tests to any land use being included in the market analysis.

The objective of this analysis is to provide market based data and information that will enable public officials and property owners to determine if they want to place all, or portions, of the subject parcels in the marketplace for development.

The analytical questions to be answered in the following report are:

1. Are the subject parcels currently marketable for development?
2. What land uses represent the most likely choices in the marketplace?
3. Are there specific segments of the market that should be emphasized for development?

The following analysis was conducted during the fourth quarter of 2015 and first quarter of 2016. The findings represent conclusions that can be drawn based on market conditions at the time of the analysis. Given the dynamics of the marketplace and the economy at large, the conclusions contained herein may or may not be applicable in the future.

The demographics for the City of Villa Hills, the five minute and ten-minute drive-time market areas point to a growing market of aging but affluent households. The modestly growing number of Villa Hills households projected over the next five years coupled with very low vacancy rates and slowing turnover of existing households bodes well for the addition of new housing in the City of Villa Hills; i.e., the subject parcels. The relatively strong household income characteristics of households in the City of Villa Hills, the five minute and ten-minute drive-time market areas also indicate that affordability of new construction should not be a market hurdle.

4.2.2 The Residential Market

The aging population and households suggests that many households are already, or soon will be, moving into their retirement years and may wish to make housing changes that support changing lifestyles and possibly physical limitations. The indicators point to the need for housing products that suite the aging households.

Although this more aged segment of the market appears to be the most significant segment of the market for the projection period and this segment of the market may have specific housing needs, the products developed to meet these needs should not be so specialized that it is not flexible in the future based on fluid household characteristics that may emerge at that time.

The magnitude of the potential market is substantial although the size of the market potential in Villa Hills remains a very small component of potential development in Kenton County and an almost immeasurable percentage of overall projected growth in the Cincinnati metropolitan area.

The demographics of the primary market suggest that the population is aging with the most substantial growth projected to occur in households headed by persons between 65 and 74 years of age. The next most significant growth age bracket was for households headed by persons 75+ years of age. The third most significant growth age bracket was for households headed by persons between 55 and 64 years of age. This would indicate that the “heart” of the market for the next five years, and possibly beyond, would be for “empty nester” households that are downsizing and/or households that simply want a more carefree lifestyle.

Housing products that address this segment of the market are likely to be in high demand. Smaller home sizes may be in order as well as smaller lots, or higher density multi-unit dwellings that reduce or eliminate the care needed to maintain a home.

While addressing the growth segment of the market in the near term, flexibility of design will be important so as not to create housing products that are so specialized in their target market that they are not attractive to other age groups of home buyers that may emerge in the future. Flexibility of design is a key phrase.

Addressing transitions of households in the marketplace cannot be de-emphasized while focusing on the expanding senior population. Attracting younger households to homes vacated by seniors as well as capturing a segment of the younger market that has not made a home purchase decision will be equally important. Providing an array of amenities desired by the various segments of the younger market will be essential to attracting younger renters and/or home buyers to the City in the future.

Maintaining and expanding the future demand for housing in Villa Hills will be critical to the future of the community. Maintaining value becomes more critical as the built environment ages and the “built out” status of the City emphasizes the importance of vitality maintenance in the future.

Regardless of the segments of the potential market that developers choose to address, the number of units that appear to be supportable in the marketplace ranges from a conservative estimate of slightly more than 50 units to a more aggressive yet sustainable estimate in excess of 250 units. The estimate of 250 units is indicative of a figure that should not negatively impact vacancy rates in the surrounding community. Higher numbers of units are likely within the study area and were expressed as desirable by several respondents in the expert interview phase of this project (Section 2.6.4 and Appendix D). Given suitable land constraints and the need for more alternative housing products in the inventory in Villa Hills a higher density approach to new residential development is favored.

Before closing the discussion regarding the housing market, institutional, residential uses must be addressed. A senior care facility is already in operation on a portion of the grounds adjacent to the subject parcels. There is a growing market for senior care and the most successful of these types of facilities offer a continuum of care from independent living to assisted living to skilled nursing care. In addition, many facilities have expanded their scope of services to include memory care and hospice care. Amenities typically include a dining room and health and fitness centers. Some campuses have expanded the range of amenities to include salons and spas along with bars and restaurants with banquet facilities. In some cases, these amenity facilities are open to the general public as well as residents. Potential expansion of the existing senior care facilities at the subject location is another alternative institutional residential use that could be accommodated on at least a portion of the subject parcels and the market for these uses have already been demonstrated.

While there are existing institutional uses adjacent to the subject parcels, the location is not now known as a commercial venue. Thus, the introduction of retail and/or office uses would introduce yet another commercial competitor in an already crowded competitive landscape. This does not mean that retail and office uses could not find a home on portions of the subject parcels, but the range of uses and magnitude of commercial development has to be tempered by the existing competitive environment. As has been stated previously in this report, Villa Hills residents are older than the population in the more general market and more affluent. Existing commercial establishments increase dramatically beyond a five-minute drive-time from the subject location as a function of the subject's proximity to the I-75 corridor.

4.2.3 The Retail Market

For future development purposes, segments of the local retail market centered on convenience or upscale, "luxury" goods and services would appear to be the best positioned to attract customers to the subject site. In addition, more emphasis should be placed on dining and entertainment than on consumer goods. Merchandise outlets that can be easily supplanted by internet based sources are not good candidates for the subject site. Large-scale establishments of all types are not good candidates for the subject site. In searching for businesses that could populate a retail venue, established, well-recognized, local, business operators who have a proven ability to draw consumer traffic would likely be the best candidates for a retail venue at the subject location.

Many of these potential candidates are likely to be relatively small businesses with limited space requirements. As such, any structures should be configured in such a way as to be subdivided into small storeroom spaces. Based on the definitions of the primary, secondary, and tertiary markets at the outset of this analysis, the intensity of existing competition, and the observation that large-scale users are not appropriate for the subject site, retail space demand

will likely be in a range from 10,000 square feet to 20,000 square feet. Given the unproven commercial drawing power of the subject location, an incremental approach to development is recommended. An initial project encompassing 10,000 square feet should be capable of accommodating multiple small-scale tenants. As the market evolves, an additional phase, or phases, of development could add to the retail space on the landscape as market recognition and consumer demand increase. In essence, an incremental approach to development that allows for the re-deployment of land for alternative uses if the location does not establish itself as a commercial venue.

It should be noted that there is an overarching assumption that City leaders want to see commercial development on the subject properties. For purposes of this analysis it is assumed they do and the appropriate measures will be taken to enable it to occur.

4.2.4 The Office Market

Office uses are also a possible alternative for portions of the subject properties. Once again, proximity of the subject location to the I-75 corridor means that there are numerous competitive office venues already on the landscape to provide intense competition to new office development on the subject parcels. Convenience will again be an important facet of generating demand for office space at the subject location. Given the demographics of the population and households in the City and short range drive-times, neighborhood health care and financial services could both be of interest. The local area demand for both of these services is well above national baseline levels. That is not to say that potential demand is limited to these two categories of office users, but Villa Hills residents would appear to be attracted to both health care and financial services in a convenient location in the City.

Potential office users may be small-scale establishments providing professional services while health care users tend to require larger spaces. An

incremental approach to serving the non-health care segments of the office market is recommended; however, a larger scale structure is likely if health care users are attracted to the site. A space increment of 10,000 square feet could accommodate multiple office users in a variety of service categories in the general office market at the subject location. Health care buildings are typically larger than general office structures in neighborhood venues. Many medical office buildings accommodate multiple practice groups spanning a range of medical specialties with ancillary diagnostic services contained in the same building. Buildings between 10,000 square feet and 40,000 square feet are not uncommon. Most medical office complexes today are being built by medical centers not individual practice groups. As such, the major medical center entities in the local market would have to see a need to building such a health care facility at the subject location for such a development to occur. The medical centers would also oversee the range of medical specialties and/or services to be offered in any new complex.

A portion, or portions, of the subject parcels likely adjacent to the Amsterdam Road frontage of the subject parcels would be the potential site for retail and/or office development. The total acreage consumed will ultimately be a function of market acceptance of the subject location as a commercial venue.

In summary the conclusions of the market analysis are as follows:

Residential uses:

Single and/or multi-family structures

Retail uses:

Focused on neighborhood convenience and upscale goods and services
Small scale tenants totaling between 10,000 and 20,000 square feet of space

Office uses:

Focused on financial services, professional services, and health care
One or more small office structures totaling between 10,000 and 40,000 square feet

Industrial uses:

Industrial and/or warehouse uses of all types are deemed inappropriate for the site and have been eliminated from any consideration in this analysis

Detailed information concerning the market study and its recommendations can be found in Appendix A.

4.3 Recommended Land Use

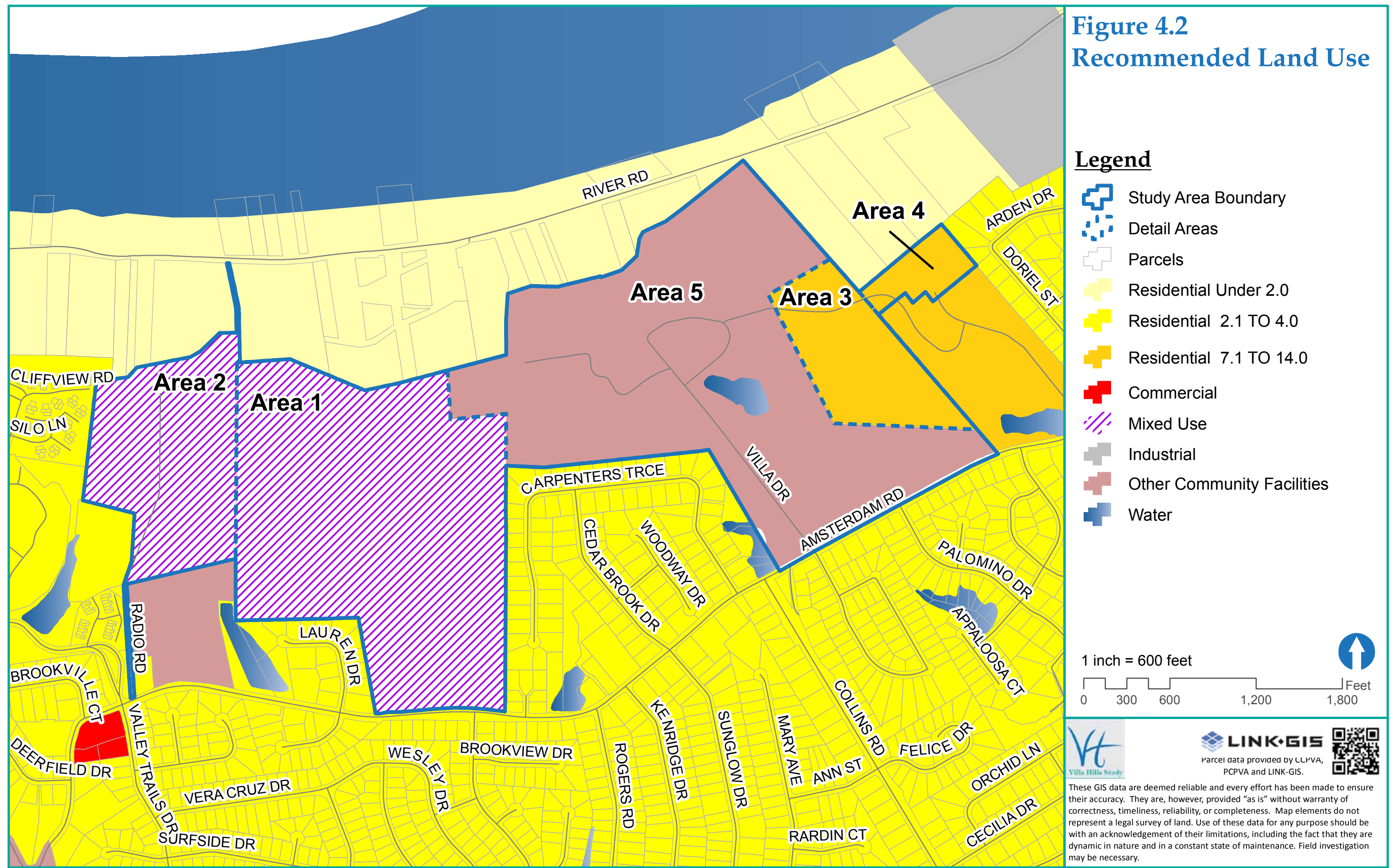
An area's recommended land use is one of the primary elements that helps to determine the future of a site. In general, the recommended land use designates uses for an area from a high level on a broad scale (i.e. residential, commercial, industrial, institutional, etc.). These designations help facilitate the harmonious development of land and work to avoid land use conflicts. The land use definition is vital because it guides decision makers in making recommendations upon the physical landscape and sets the broad direction for zoning revisions that come after the planning process has ended.

4.3.1 Current Recommended Land Use

As Section 3.8 detailed, the current recommended land use for a majority of the site is Other Community Facilities. Other community facilities are broadly defined by the Direction 2030 comprehensive plan as "a wide array of resources dedicated to protecting and enhancing the daily lives of Kenton County residents."

This designation has served the site well over its lengthy history because of its intended future use by the St. Walburg Monastery. Today, however, that intended use is changing, warranting modifications as recommended by this plan. The revised focus as

Figure 4.2
Recommended Land Use



outlined by the market study (Section 4.1), public involvement (Section 2.6), and direction set forth by the study's Task Force (Section 2.6.1) all recommend new uses outside of the other community facilities designation upon the site.

4.3.2 Revised Recommended Land Use

Figure 4.2 on page 61 provides a visual representation of the new recommended land use designation for the study area. The sections designated as Areas 1 and 2 are indicated as Mixed Use, a new land use designation that first appeared in Direction 2030, Kenton County's comprehensive plan. The comprehensive plan defines mixed use areas as "three or more significant uses that, in well planned projects, are mutually supporting."

In terms of this plan, mixed use is further refined to include commercial retail, restaurants, entertainment, office, mixed-style residential, and/or civic, cultural, or recreational uses. Utilizing mixed styles of residential units was identified by the Task Force as being desirable through both the expert interviews analysis (Section 2.6.4) and Task Force survey (Section 2.7). These residential styles include detached single family residential, attached single family residential, landominiums, senior living options, step-down housing, flats, studios, and apartments among others. Incorporating different housing styles on the site is encouraged and can be used to meet the mixed use requirement of the zone (for example, 3 different densities of residential would meet the mixed use criteria for this plan). More information on housing is described in Section 4.2.5. This plan recommends the number of housing units in Area 1 be limited to 750 units, and 250 units in Area 2. A mix of residential densities is encouraged across Areas 1 and 2.

Designating Areas 1 and 2 within the site as mixed use gives more flexibility for the future owner and allows for more creativity in terms of use placement across the site. This flexible designation was determined by the Task Force to be the most desirable course of action because of the options it provides to a future developer.

Furthermore, responses from the expert interview process (Section 2.6.4) indicated that a mixed use commercial and office component is feasible on the site, but that a greater number of housing units would be needed to allow these uses to fully reach their potential and be successful. Specifically, the respondents noted that a neighborhood-scale commercial component would be most appropriate and that it must be done in the right balance and context. Types of commercial and office uses indicated that may be appropriate for the site include neighborhood restaurants, bakery, coffee shop, dry cleaners, and real estate offices among others. With a lesser number of housing units on the site, a commercial component would not be profitable for the site.

Significant research was conducted regarding the potential for a mix of uses upon the site, including specialist analysis conducted both in the form of the market study (Sections 2.4 and 4.2) and expert interviews (Section 2.6.4). The market study defined commercial and office development possibilities that are encouraged to set the minimum standards for mixed use in the area:

- 12,000 square feet or more of commercial space
- 15,000 square feet or more of office space

As the site develops and the future for small, neighborhood oriented commercial retail and office uses becomes more defined, more space may be needed to meet additional market demand. As such, the use of flexible spaces that could remain open and undeveloped in early phases of the project is encouraged.

While this mixed use approach is somewhat new by local standards, it is a recommendation of Direction 2030's Suburban Sub Area. Recommendation 2 of that section states "Develop flexible regulations to accommodate, where the market demands, a more active and engaging built environment, with alternative forms of housing, jobs, services, and recreation located within a neighborhood." The City

and the future developer should work together to determine details of the area's zoning once a suitable development plan has been established.

Areas 3 and 4 are recommended to change from Other Community Facilities to Residential 7.1 to 14.0. Changing to this residential designation better matches with Madonna Manor's plans for future expansion into Area 3 and redevelopment within Area 4. Area 5 is recommended to remain designated Other Community Facilities as both St. Walburg Monastery and Villa Madonna Academy are expected to remain on the property they will continue to own.

4.3.4 Other Community Facilities and Mixed Use

In addition to the land use elements recommended by the market study, certain community facilities are envisioned for the site. Civic amenities like parks, a city campus, recreational facilities, and public gathering spaces (amphitheater, event lawn, etc.) were all identified as desirable uses throughout the public meeting process and/or Task Force discussions. These uses are all acceptable within the study area and are encouraged to be incorporated into the final plan wherever possible. The Task Force encourages amenities to be open to the greater public to better allow this new development to serve as the identifiable center of Villa Hills.

One specific amenity mentioned throughout the study was the idea of a public overlook space at the northern edge of the study area. This amenity would provide a civic overlook space to the Ohio River from the ridgetop. Ideally this amenity would be connected to Amsterdam Road through the study area in the form of a linear park, separated shared use path, or other civic amenity connection. Connecting from Amsterdam Road to the northern ridge area would work towards unifying the existing community with the new development area and create a civic space that connects to natural areas, which is truly designed for the overall community. Appendix H provides images that were considered as part of this study, which the Task Force found appealing.

4.3.5 Housing

The Market Study and expert interview responses recommends residential uses of varying densities and product types. Throughout the planning process, the need for a variety of housing options was voiced and the public identified a strong desire to introduce new housing options not currently seen in Villa Hills. A diverse array of housing styles on the site will ideally appeal to a broader market, increasing the long-term viability of the development. Currently, typical residences in Villa Hills can present maintenance challenges for older individuals, or are cost prohibitive for younger buyers. Housing that is accessible for a wider range of potential owners in terms of layout and price-points would allow the City to expand its demographics while providing more choices for existing residents.

Housing options discussed in public comments, Task Force dialogue, and expert interviews include variations of single-family and multi-family units. Single-family residential uses included traditional detached homes, detached and attached townhomes, patio homes, or ranches. Further research and discussion encourages streets with on-street parking, tree-lined sidewalks, houses oriented closer to the street, and alleyways in the rear that provide access to driveways, garages, and service areas of residences.

Patio home and ranch options would allow for accessibility for individuals requiring enhanced interior mobility options on a single floor plan. Multi-family residential uses include two to four story buildings, senior living and vertical mixed-use buildings with ground level commercial and/or office. These mixed-use units could resemble studios, lofts, or flats. The location and mix of housing should optimize benefits to the city, allow older residents to age in place, invite in younger residents, and integrate with the existing community.

Expert interview responses (Section 2.6.4) also indicated that varying styles of residential units would help to ensure the long-term viability of the site. By providing varying styles of residential units the site

will appeal to a larger section of the market and sell more quickly and be more insulated in the event of any future uncertainty in housing markets. Many developers noted that residential units on the site should appeal to everyone from first time homebuyers to empty nesters. Also, the developers stated that a single family residential only would work well on this site but may not be the highest and best use.

4.3.6 Commercial and Office

As previously described, the inclusion of commercial and office uses on the site was carefully researched throughout the plan. The idea was scrutinized through an independent market study, public comments, staff research, Task Force discussions, expert interviews, and ultimately a Task Force survey. The result of this research encourages the mindful inclusion of commercial and office uses that complement the site and add value to both the overall development and existing fabric of Villa Hills.

The aforementioned Task Force survey helped further define the most and least desired uses for the area. Table 4.1 below detail these uses. Full information on the Task Force survey can be found in Appendix F.

4.3.7 Agricultural Uses

As defined in Section 3.4.2 in the Site Conditions & Analysis chapter the site is almost completely covered with either Prime Farmland or Farmland of Statewide Importance. The site, while containing excellent farmland resources, should not be considered solely for agricultural uses. The proximity to existing infrastructure, nearby amenities, and longstanding residential uses make the study area a prime candidate for infill development that achieves numerous Goals, Objectives, and Elements of Direction 2030.

However, new development within the study area does have a high potential to incorporate agricultural amenities as part of the overall site design. Several successful developments around the country are now incorporating either development supported agriculture or community supported agriculture as part of predominantly residential sites. These projects emphasize locally grown food, which is also often organic. An added benefit of these developments is the preservation of a portion of land that would otherwise be developed.

Most Desired Uses	Least Desired Uses
Coffee Shop	Car Wash
Bakery	Gas Station
Ice Cream Parlor	Movie Theater
Accountant Services	Arcade
Local Restaurant	Video Game Store
Book Store	Drive-In Restaurant
Barber Shop/Beauty Salon	Drive-Thru Restaurant
Florist	Tobacco Shop
Insurance Agency	Hardware Store
Financial Services	Contractor Office

Table 4.1 - Desired and Undesired Commercial Uses



Figure 4.3 – Development supported agriculture next to single family homes in Gilbert, AZ

<http://images.huffingtonpost.com/2015-08-05-1438791935-1854092-Agritopia2.jpg>

In developmentally supported agricultural communities and agricultural enterprise is supported by an HOA type fee that applies only to newly developed properties (Figure 4.3). Homeowners pay a fee and in return receive fresh site-produced foods. Farmers markets are also typically included, which can sell excess produce to the larger community. Community supported agriculture is similar to developmentally supported agriculture, however, the buy-in is available to the larger community and not just newly developed properties. Essentially, local residents in the greater community can buy shares of the agricultural venture and receive locally sourced foods.

These agricultural concepts were explored by the Task Force in multiple meetings. Future development on the site could include agricultural amenities designed into the site to serve as preservation areas and buffer zones between existing residential areas as one potential component of a mixed-use plan.

4.4 Green Infrastructure

As described in Section 3.4, this plan mainly examines green infrastructure best management practices (BMP) such as on-site stormwater management like rain gardens, bio-retention systems, and green roofs.

A robust array of BMPs are available to allow for creative ways to retain stormwater onsite. BMPs are coordinated by SD1 and detailed in the district's Storm Water Best Management Practices Manual (2012).

This plan recommends coordination with SD1 for onsite stormwater early in the development process. Early coordination will allow for a more comprehensive stormwater plan that addresses green infrastructure needs across detail areas 1 and 2 (Figure 1.3). Regional retention is an approach to stormwater mitigation that would allow for retention basin(s) to service the entirety of these detail areas. Doing so would potentially allow for fewer basins, thus producing more usable land within the study area. The most logical location for such a basin is at the low point of the site, on the southwestern corner of Area 1.

4.5 Community Facilities and Utilities

4.5.1 Recreation

Recreation refers to parks, open space, and active amenities that play a vital social and economic role in the viability and health of a community. They provide necessary spaces for gathering, interaction, and recreational activities, which helps shape the identity of a community. The following subsections provide recommendations on recreational amenities within the study area.

During the expert interview process (Section 2.6.4), respondents indicated that open space, walkable congregation points, and the capitalization of natural amenities are typical amenities for a development. There is a trend to go away from the standard amenities such as swimming pools and playgrounds and to provide amenities that are more attractive to the broader community. Developers also indicated that livable streets are a great amenity and well-designed streets can be a substitute for walking trails.

Active Transportation

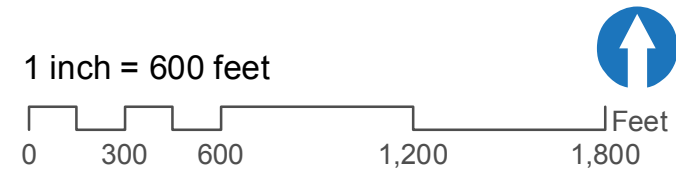
One of the most prevalent topics discussed by respondents at the public meeting was the desire to

Figure 4.4
Active Transportation



Legend

- Active Connection Opportunities
- Existing Sidewalks
- Study Area Boundary
- Detail Areas





Villa Hills Study



LINK GIS

Parcel data provided by CCPVA,
PCPVA and LINK-GIS.



These GIS data are deemed reliable and every effort has been made to ensure their accuracy. They are, however, provided "as is" without warranty of correctness, timeliness, reliability, or completeness. Map elements do not represent a legal survey of land. Use of these data for any purpose should be with an acknowledgement of their limitations, including the fact that they are dynamic in nature and in a constant state of maintenance. Field investigation may be necessary.

have bicycle and/or pedestrian trails in the area. These amenities are an important part of Kenton County communities and are recognized by the Direction 2030 plan's Mobility element as infrastructure that provides transportation options and increases an area's quality of life. Providing facilities that promote safe active transportation options has been found to encourage healthier lifestyles, reduce CO₂ emissions, and reduce delay associated with vehicular congestion.

The topic of including active transportation amenities also arose numerous times throughout the expert interview phase of the project (Section 2.6.4). Responses ranged from suggestions to include separated shared use paths to incorporating sidewalks as a primary design element in the creation of neighborhood streets. The latter responses indicated well-designed streets would be inviting to residents and visitors to the study area, and would encourage front porch interactions and congregation points for the community.

The eventual development plan for the site encourages the provision of active transportation amenities (Figure 4.5), which are integrated into the design. The mixed use nature of the site and close proximity of residential and neighborhood commercial uses offer an ideal environment to encourage active transportation trips over the use of automobiles. The combined Areas 1 and 2 of the site



Figure 4.5 – Example of sidewalk amenities for active transportation in Suwanee, GA



Figure 4.6 – Secure bicycle parking

<http://www.dero.com/wp-content/uploads/images/products/hoop-rack/hoop-rack-3.jpg>

at their widest dimension are slightly over 0.75 miles (approximately 4,000 feet) in length. This distance is well within the ideal walkability threshold of 1 mile, established under Kenton County's current pedestrian plan.

Furthermore, Figure 4.4 (page 67) identifies potential connections (represented by blue circles) to other existing sidewalks near the site. Providing such connections will allow for maximum connectivity between new development and existing homes and amenities. Additionally, the plan encourages the use of sidewalks throughout residential areas of all types to provide people a safe and inviting environment in which to walk and reside.

This study also recommends the City explore a potential bicycle and pedestrian trail that connects from Area 1 down the hill to River Rd. (KY 8). River Rd. is a significant bicycle route in Northern Kentucky that offers mostly flat topography along the Ohio River from Boone County to Campbell County.

Lastly, secure bicycle parking options (Figure 4.6) are encouraged to also be included as the site develops. Future zoning for the study area is encouraged to require bicycle parking amenities and could potentially offer reduced vehicular parking incentives.

Community Center

Community centers offer amenities for the greater community like meeting rooms, community art galleries, senior centers, and/or potentially aquatic or exercise facilities. A facility of this type would provide a known gathering spot and would ideally be located adjacent to a park/plaza to allow for expanded outdoor uses. Providing this type of amenity within the study area would be a great asset to Villa Hills and strengthen the city's image as a great place to live.

Public Overlook/Open Space/Amphitheater

As mentioned in the Other Community Facilities section of the Recommended Land Use chapter (Section 4.3), public meeting respondents indicated the desire for a public overlook on the northern edge of the property. Seeing as the property is currently not open to the public, the community expressed interest in having a civic amenity that would allow local residents to view the Ohio River valley from the study area. This study recommends inclusion of a public overlook area on the northern portion of the property that would utilize the view as a public amenity.

To better incorporate a public overlook area into the surrounding development and larger existing community, this study also recommends inclusion of public open space in the new development. The study envisions a linear style park or plaza that would extend from Amsterdam Road to the northern overlook area. Incorporation of this type of amenity in the final design would provide a public recreation space connecting the existing neighborhood, new development, and viewpoint asset. Incorporation of an amphitheater, pavilion or other similar type public recreation and gathering point would ideally also be incorporated in the final design.

4.5.2 Schools

Schools, whether public or private, are important attributes of the Villa Hills community. Key person interviews were conducted with Kenton County

Public Schools and Villa Madonna Academy (VMA) as part of the research phase of this project. These conversations indicated sufficient capacities in both school facilities located in the immediate study area, River Ridge Elementary and VMA. No specific school improvements are recommended at this time, however, improving active transportation access to both facilities from the existing neighborhood and any new development would be a beneficial result of this study.

4.5.3 Utilities

Utilities refer to items such infrastructure as sewer, storm sewer, water, electric and natural gas infrastructure. This section provides recommendations for changes to utilities as the plan moves forward.

Underground utilities

Overhead utility lines can add to visual clutter and make an area appear disorderly and unattractive. This plan recommends prohibiting overhead utilities via amended zoning for the study area. As such, the City and future owner(s) of the site should be aware that additional costs for burying utilities would be offset by entities other than Duke Energy.

Telecommunications

High speed telecommunications have become an integral community amenity in today's fast-paced world. The City of Villa Hills has historically recognized these facilities as a community asset and were among the first adopters of micro-cell towers in the Greater Cincinnati region. This plan encourages the implementation of additional high-speed telecommunications facilities that also focus on community character.

Care should be taken to incorporate new wireless micro-cell transmission facilities in a way that helps them blend more seamlessly into the community. Wherever possible, incorporation of this equipment into building features should be encouraged rather than using standalone towers.

Also, the incorporation of high-speed internet services is recommended. As development occurs the area will ideally be wired for the most up-to-date transmission equipment. Transmission lines for these services should also be located underground.

4.6 Mobility

Based on the level of service analysis in Section 3.10, the level of delay and operations on the existing roadway network would be unacceptable to accommodate the long-term development potential within Villa Hills. Therefore, alternatives were evaluated to determine the levels of improvement necessary to accommodate the increased traffic. Based on both development scenarios, total average daily traffic (ADT) along Amsterdam Road would be between 12,000-13,000 vehicles per day, which is still within the operational threshold of a two-

lane roadway. However, the critical intersection of Amsterdam Road at Collins Road, will need improvements. Two alternative improvement schemes were evaluated for the intersection.

The first alternative looked at traditional intersection improvements, including the addition of traffic signal control and the addition of auxiliary turn lanes for all approaches. A schematic of this design is shown in Figure 4.7. Based on these improvements, the intersection is anticipated to operate at LOS C with an average of 26.9 seconds of delay.

The second alternative examined the implementation of a modern roundabout at the intersection. This type of design would minimize impacts to the residential property on the southwest quadrant of the intersection by removing the need to develop auxiliary turn lanes. The special geometry of the



Figure 4.7: Amsterdam Road at Collins Road (Alternative Improvement 1)

roundabout would necessitate increased impacts to the AT&T property on the opposite side of Collins Road. This alternative is shown in Figure 4.8. The roundabout alternative is anticipated to operate at LOS A with less than 10 seconds of delay.

After detailed discussion of mobility options for the Amsterdam Road and Collins Road intersection, the Task Force recommends utilizing the roundabout alternative displayed in Figure 4.8.

4.6.1 Other Mobility Recommendations

In addition to the improvements detailed above, other improvements are summarized below to minimize the impact of the development to enhance the transportation in and around Villa Hills.

1. A primary consideration for the proposed development is the placement of the access from

the property to Amsterdam Road. The primary frontage of the property is between Valley Trails Drive and Niewahner Drive. However, this southern side of Amsterdam Road in this area has many residential access points. Providing the primary access to the development near these access points could impede access to residential properties or cause safety concerns. Therefore, this study recommends that access be aligned across Niewahner Road to consolidate major intersections along the corridor.

Due to the size of the development it is also recommended that secondary access be provided to the parcels. It is recommended that any street system be designed to connect with Prospect Point subdivision through Cliffview Court, where a street stub currently exists.



Figure 4.8: Amsterdam Road at Collins Road (Alternative Improvement 2)



Figure 4.9: Potential Corridor Traffic Control

2. Trip generation analysis for both development scenarios indicates that a traffic signal may be warranted at the new primary access point based on peak hour traffic signal control warrants. However, delay may be manageable without a signal.

Like the intersection at Collins Road, an alternative would be the use of a roundabout at the new access point to the development. In addition to serving intersection traffic volumes efficiently, roundabouts have also been shown to be effective in speed management and traffic calming and may blend well within the residential nature of Amsterdam Road within Villa Hills. It may even be possible to create a roundabout corridor, with additional installations at Amsterdam Road and Valley Trails Drive, possibly extending east to include Villa Madonna Drive as well (Figure 4.9).

These installations could serve as a gateway to Villa Hills and enforce the lower speed limits and enhance the residential nature of the area.

Subsequent discussions with the Task Force regarding traffic control at the development's new intersection with Amsterdam Road indicated a preference for a roundabout. Consequently, this study recommends utilizing a roundabout to access the site.

3. As indicated in the review of the existing conditions, Amsterdam road maintains a narrow section with little to no shoulders and poor pavement conditions. It is recommended that Amsterdam Road be reconstructed from Prospect Point/Valley Trails to Madonna Manor to provide minimal shoulders 1-2 feet with improved pavement conditions.



5.0 IMPLEMENTATION

Villa Hills finds itself in the enviable position of being able to determine its long-term future through the implementation of this study. The presence of a major landowner interested in providing enduring amenities for the community has the potential to yield a unique environment with a defined sense of place. Nevertheless, active implementation efforts will be needed to take the plan from concepts and ideas to final construction. The following subsections provide recommendations for transitioning from the planning process to final construction.

5.1 Request for Proposals

It is recommended that the Benedictine Sisters issue an open request for proposals (RFP) to developers following the plan's adoption by KCPC. This RFP is encouraged to use criteria defined in the Villa Hills Study as a basis for development plan submittals.

The extent to which development proposal conform to the recommendations of this study is encouraged to serve as a determining factor in the selection process. Ideally, at the end of this process, there will be a clear choice for implementing the study.

5.2 Zoning Amendments

KCPC's adoption of this plan as an amendment to the Direction 2030 comprehensive plan at the March 2, 2017 public hearing rendered this document the official plan for the study area. As such, this plan becomes the prerequisite step for zoning map and text amendments that may be needed to conduct future development on the site. This plan recommends waiting until the RFP process has been finalized before amending zoning for the area. The city should then work cooperatively with a developer or multiple developers to institute the appropriate zoning.



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