

From Blighted to Beautiful:

Covington HOPE VI Final Report

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Acknowledgements

We would like to start by thanking Mayor Sherry Carran of Covington for allowing us the opportunity to examine data, ask questions, and continue our work in Covington. We would also like to thank Former Police Chief Michael “Spike” Jones and current Police Chief Bryan Carter for their help in gathering crime data and sharing their views on community infrastructure improvements that can help reduce crime. Furthermore, we want to thank former Executive Director of the Housing Authority of Covington (HAC) Aaron Wolfe-Bertling and present Executive Director of the Housing Authority of Covington Jeff Rieck for supporting an independent third party evaluation of Covington HOPE VI. This evaluation involved the efforts of many people and is a serious and thoughtful state-of-the-art academic analysis that will be published in a forthcoming book and is expected to be nominated for an award with the American Planning Association and American Institute of Architects. We would like to give special thanks to Chris Bradburn, HAC Director of Resident Services, and Linda DiGirolamo, HAC Construction Manager, for reviewing the drafts and providing input and excellent editing. They were both very helpful; their invaluable suggestions and clarifications have informed our revisions.

We would like to thank the U.S. Department of Housing and Urban Development (HUD) for their support, guidance, expertise, and financial support. We received excellent suggestions from HOPE VI Covington HUD Consultant Patrick Kean, who reviewed an earlier draft and whose contributions and expertise have been widely praised by HAC. My perspective was also influenced by two former HUD Secretaries, Andrew Cuomo and Dr. Henry Cisneros, who I have met with several times to provide consulting services since the mid 1990’s. Secretary Cuomo asked that I develop a report on estimating jobs created via public and private investment in the mid 1990’s, which was later published in *Community Development*, a referenced scholarly journal. The statistical and methodological framework from that report was updated and utilized for our predictions of 17 jobs per million dollars invested. Former Secretary Henry Cisneros wrote the introduction to my book, “Promise and Betrayal: Universities and the Battle for Sustainable Urban Neighborhoods.” Cisneros’ books have been integrated into this report. Dr. Michael Stegman, who I knew as Assistant Secretary of Policy Development at HUD and is currently the Special Counselor to the Secretary of the Treasury for Housing Finance Policy, has given me mostly positive feedback on my research in Covington, Newport, and Louisville. Former HUD Deputy Marilyn Melkonian also advised us.

I also want to thank our consultants: Dr. William Riggs, Dr. Matthew Hanka, Donna Emerson, and Dr. Joshua Ambrosius. Special thanks to our general editor, Dr. Ellen Slaten, who helped edit several versions of this report from start to finish. Gary Watrous, AIA was an important consultant who provided critical commentary and advice on passive solar design. We are also thankful to Jessica

Acknowledgements

Brown, Sydney Brown, and Ron Haney for providing data to let us study the potential of passive and active solar power to reduce energy and maintenance costs at nearby Turkey Foot Middle School. Those who provided input for the report did not encourage us to delete any of our suggested criticisms; however, this does not mean that they endorse our findings. We hope our criticisms will be used to create a discussion about the design and planning of River's Edge at Eastside Pointe and the Eastside Neighborhood. In this report, we strive to go beyond the numbers and show the positive impact of HOPE VI on people's lives. We appreciate HAC's direction, support, tough criticism, and willingness to let us write an independent report. The Departments of Community Development, Business Development, and Property Valuation in Covington were vital in collecting the baseline count of businesses in the Eastside neighborhood. We would also like to thank the students and colleagues who helped us with past reports and whose work is reflected in this final evaluation: Nick York, Wes Grooms, Keith Wresinski, Wesley Meares, Kareem Usher, Brenda Ramsey (Former President Jacob Price Residents Council), William Riggs, RaDesha Williams, Greg Rieck (no relation to Executive Director of HAC), Chad Frederick, and Emmanuel Frimpong-Boamah; their help was appreciated. Erin Hargrove produced all the maps and tables in this final report and was also the graphic designer. The survey was designed by myself, Chad Frederick, RaDesha Williams, Erin Hargrove, and Dr. James Canfield. The survey analysis and interpretation was written mostly by Dr. James Canfield. We thank the University of Cincinnati social workers who worked with Dr. Canfield and me in going door-to-door to complete our surveys. Jennifer Bennett's team also provided crucial follow-up to encourage residents to fill out the surveys. We hope that this report helps point housing and community development policy in the United States in a positive direction. Please note that all errors or omissions are those of the Principle Evaluator, John I. Gilderbloom, Ph.D. (sponsored by private evaluation company: <http://www.gilderbloom.org>), and might not reflect in part or in full the viewpoints of any of those listed here, the University of Louisville, Miller Foundation, City of Covington, the Housing Authority of Covington, University of Cincinnati, U.S. State Department, or U.S. Department of Housing and Urban Development.

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Executive Summary



River's Edge at Eastside Pointe, a HOPE VI development, is a model of affordability and sustainability and provides an opportunity for public housing tenants to transition to a better life. HOPE VI is a major improvement over traditional public housing. River's Edge at Eastside Pointe will reduce car usage and provide better access to jobs and education than traditional public housing in Covington. River's Edge at Eastside Pointe reduces high energy costs that the Housing Authority of Covington previously absorbed and provides an exit strategy for public housing residents through better workforce training and education. The HOPE VI program also provides opportunities for residents to improve their health. It is estimated that roughly one fourth of the public housing households that were part of the original HOPE VI have transitioned out of public housing since 2010. Many residents and service workers believe that former residents who left HOPE VI moved elsewhere for improved job, family, and housing opportunities. There is no evidence that departed HOPE VI tenants "lost housing" and are on the streets or in homeless shelters in greater Covington.

Public housing was never intended to be permanent and HOPE VI has made a serious effort to give a hand up and out of public housing. HOPE VI in Covington has produced one of the best examples of needed reform in our public housing policies that was championed by both Republican and Democratic leaders—most notably former Secretary of Housing and Community Development Jack Kemp and Henry Cisneros. This also includes providing a helping hand up to a surrounding neighborhood on the decline with falling housing values, abandonment, and foreclosures. There is now visual evidence of renewal and rebuilding around this HOPE VI anchor development. This evaluation is fair and objective and also addresses complaints by both national and local HOPE VI critics.

Covington, Kentucky's HOPE VI program is an important example of sustainable housing development for low - to moderate- income people. Development for River's Edge at Eastside Pointe is near completion. The units are beautiful and the community environment is welcoming. Evaluation of the new development's effects on the residents in the neighborhood is now completed. In our final report, we have examined several key benefits to HOPE VI in relation to Covington as a whole, and to the Eastside neighborhood. It is estimated that \$16 million was spent on construction that resulted in 120 units costing roughly \$133,000 each.

All together the average house cost for building 149 single family and multifamily housing units was \$147,000 each using \$19 million in federal funds. Nine single family homes on the north side of River's Edge at Eastside Pointe for moderate income families are subsidized to sell for \$139,000 each. A condition of the HOPE VI grant requires homeownership opportunities that create a mixture of incomes in the target neighborhood. The abandoned and dilapidated houses and rumors that drug sales were happening could have threatened the financial viability of River's Edge multifamily housing. Yet, the price tag for single family housing units is higher than usual and has come under criticism. The cost of acquiring the sites, site prep, building, landscaping, adding a basement, driveway parking, and meeting LEED energy requirements for nine single family units was \$3 million dollars, or \$333,333 for each single family housing unit built. The price of these units has been criticized ---the same plans from River's Edge at Eastside Pointe could have been used to produce 22 housing units across the street instead of just nine standalone units. Nevertheless, this one negative high price tag should not be used to tarnish the entire HOPE VI program which is one of the best in the nation.

In our final evaluation of HOPE VI in Covington we use a mixed-methods approach, which includes quantitative and qualitative analysis. Instruments used in the analysis include surveys, one-on-one interviews, 2010 census data, secondary data from the City of Covington, photography, a survey of 140 HOPE VI

residents and traditional public housing tenants, and GIS mapping. In this final report, we corrected several errors in the GIS mapping done in report 4 and urge readers to use these more accurate and compelling maps. This mixed-method analytical approach aids in the preparation of comprehensive evaluations for HOPE VI.

While traditional HOPE VI studies focus on tracking tenants with before and after analysis, we also added a comparative analysis between River's Edge at Eastside Pointe and a traditional public housing complex (City Heights) several miles away. We found stark differences between the two housing developments. The location is superior to other Public Housing in Covington; River's Edge at Eastside Pointe is positioned closer to downtown with more frequent bus service, and is closer to jobs, medical, and educational opportunities. The problem of dangerous toxins and mold that exists in traditional public housing has been eliminated in River's Edge at Eastside Pointe, although this could become a problem if the developer allows smoking. Moreover, River's Edge at Eastside Pointe provides better access to healthier groceries at a cost that provides roughly \$163 a month savings. The "grocery store" at City Heights provides drug paraphernalia, liquor, unhealthy sweet and salty snacks, and tobacco. No fruit or vegetables were for sale during our visits. In comparison, City Heights, a low income neighborhood, is isolated and segregated. Residents at City Heights complained that crime rates are higher than at River's Edge at Eastside Pointe.

We discuss how physical design shapes health, and therefore, residents' quality of life. We cover several best practices for creating sustainable neighborhoods. We show in Section 1 that most of the social service goals of HOPE VI regarding resident health, education, and job skills were met. A great deal of credit goes to the high quality staff leadership and the social workers who provided effective case management practices.

Another unique approach of our evaluation, unlike others, is that we estimate the number of jobs created. We found that for every million dollars invested in construction-related activities, 17 direct and indirect jobs are created. At the very minimum, at least 323 jobs were created with the HOPE VI funding of \$19 million dollars. Another estimate is that since 2009, Covington has experienced roughly \$42 million dollars in new or renovated housing creating an estimated 731 jobs. Of these jobs, 82% will go to those with a high school diploma or less education. Half of these jobs will also go to minorities. As the population increases, the number of businesses in the area will increase.

HOPE VI residents are more satisfied with the neighborhood's location, quality, and proximity to employers and schools than traditional public housing residents. Our survey of 140 residents found that HOPE VI residents are much happier with their housing than traditional public housing residents. If the purpose of HOPE VI is to integrate the poor into mixed income neighborhoods, River's Edge at Eastside Pointe is the gateway to that goal.

Crime in the city has increased due to the rise in heroin use. Relative to other public housing projects, crime seems to be lower at River's Edge at Eastside Pointe. There is some concern that street drugs, which were a key reason for the decline in the original Jacob Price public housing, could become a problem at River's Edge at Eastside Pointe. The current and past police chiefs of Covington have endorsed our recommendation that the one-way streets in the neighborhood be converted back to two-way streets. Cities that have done this have seen crime cut in half, including drug use and prostitution. Mayor Carran also would like to see this done as well but worries about the costs.

We do note our disappointment and frustration with the developer's refusal to follow HUD's Federal and City of Covington smoke free housing efforts. Indeed, this Fall HUD is proposing new regulations requiring that over one million public housing units become smoke free. There is some debate as to whether this smoke free mandate could apply to River's Edge at Eastside Pointe since U.S. HUD and local government funds financed it (Covington's HOPE VI Washington D.C. consultant believes it might be so).

All available scientific evidence suggests that low income residents' life span will be lowered by several years due to smoking. Additionally, instead of choosing River's Edge at Eastside Pointe, young millennials and middle class residents will choose smoke-free housing available elsewhere. The hope of mixed income housing will be threatened and, consequently, the viability of River's Edge at Eastside Pointe. If this is truly part of the developer's business plan, why don't they consider the higher maintenance cost associated with first-, second-, and third-hand smoke? Or the increased insurance costs for allowing smoking and the threat of fire? Moreover, potential lawsuits from tenants getting sick may also threaten the bottom line. In a recent speech at the University of Louisville, Covington Mayor Sherry Carran expressed regrets about this developer for their refusal to listen to the city, HUD, and the Northern Kentucky Health Department on smoke-free housing and other broken promises in finishing the development. The developer's decision to allow smoking could also affect the development from getting LEED certification.

We would recommend that the Mayor take the lead in passing an ordinance to prohibit smoking in the HOPE VI development and to convert the one-way streets back to two-way in Covington. River's Edge at Eastside Pointe is an anchor building for the neighborhood and needs to be a successful mixed income and racially diverse development that can increase the value of the entire neighborhood. The potential pay-back is enormous for the residents and the neighborhood.

As we write this report, the developers have also broken the promise to install bike racks to encourage more bike use. This is another demand of millennials who want bike friendly neighborhoods. We would also recommend that the original urban "veggie" garden be replanted in the Northeast area by the river.

There is much to learn from the success of HOPE VI in Covington which was awarded a competitive federal grant to show a functional and sustainable model for housing and community development in the 21st century. How do we create stable and energy efficient neighborhoods to meet the challenge of climate change? First, reduce energy costs by adopting LEED building principles. Second, locate developments in walkable downtown neighborhoods. Walkability reduces car dependency for residents and provides active transportation infrastructure options for walking, biking, and bus usage. Tree lined streets with sidewalks and bike lanes/paths also encourage active transportation. River's Edge at Eastside Pointe is far ahead of most other HOPE VI developments, which are car-dependent and located far away from higher education, jobs, bus networks, and bike lanes.

In an era of global warming, building, sighting, and designing sustainable, affordable homes works to the advantage of residents, neighborhoods, cities, and the world. The U.S. has only a handful of multi-family housing communities that are affordable, environmentally friendly, and energy efficient. Covington, Kentucky's River's Edge at Eastside Pointe provides one of the best examples to date on how to design energy efficient, affordable developments. Our criticisms of allowing smoking in the building and the high cost of building single family housing units should not diminish the model effort of how HOPE VI has corrected many of the past errors found in other HOPE VI developments in nearby Cincinnati and Louisville. River's Edge at Eastside Pointe is a development that should be emulated by other cities.

This report will illustrate both the highlights and shortcomings of Covington's HOPE VI sustainable development. The demolition of the original public housing was wise, because it was deteriorating, had smaller room sizes compared to larger "white public housing," had physical design flaws, environmental toxins, and safety issues. In this evaluation, we have illustrated measures to improve the quality of life with green infrastructure by exploring the three environmental/energy programs used in the development: LEED, Enterprise, and Energy Star. While we acknowledge that LEED is a valuable force in teaching sustainable design, we also note its drawbacks by giving marginal credit for "old school" sustainable design. HOPE VI provides a compass for future affordable housing and community efforts. Compared to other HOPE VI developments, River's Edge at Eastside Pointe stands out as one of the best.

PART I: OVERVIEW OF COMMUNITY IMPACT



BUSINESS CREATION

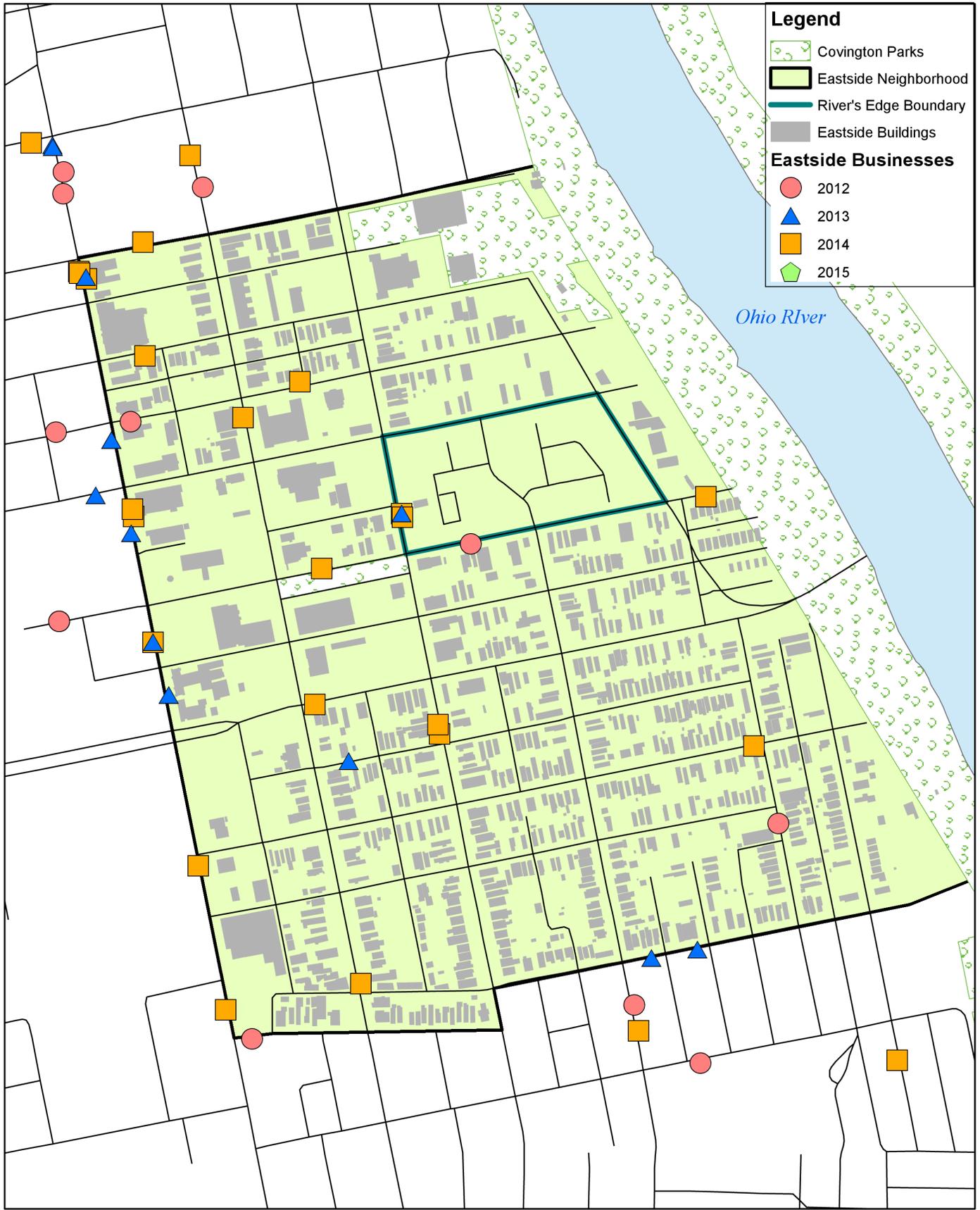
As part of our evaluation we examined how the HOPE VI development may have increased new business development between years 2012 and 2015 in the Eastside neighborhood. Perhaps due to the fact that the River's Edge at Eastside Pointe development is not fully occupied as of this writing, there has not been a dramatic upswing in businesses located in the Eastside neighborhood. Our research in year five shows no new businesses in 2015, but this is due to incomplete data; however, business creation in 2014 does show an increase in businesses. We expect once the apartment homes at River's Edge are fully occupied and the new single family homes are sold, there will be an increase in businesses into the area as there will be a larger market to serve.

Covington's proximity to Cincinnati, OH, the 65th largest city in the United States, provides great spillover benefits in terms of economic opportunities. As Cincinnati's downtown undergoes an urban regeneration, Covington's residential neighborhoods will see improvements in housing values, tax revenue, jobs, and overall business climate. For the fifth year of the HOPE VI evaluation, we provide business data for the preceding five years. We focused on businesses by category and proximity to the Eastside Neighborhood, where the River's Edge at Eastside Pointe community is located.

Our analysis of business development in Covington shows patterns that occur near and within the Eastside neighborhood (Figure 2A). While development of River's Edge began in 2010, the City of Covington was only able to provide accurate data beginning in 2012, as that is when they began to keep digitized records. The types of businesses that have opened in the Eastside neighborhood are varied. In 2014, several restaurants, retail, and construction service establishments opened, all of which are complementary to the goals of HOPE VI neighborhood revitalization. When comparing the businesses located in the Eastside neighborhood to other urban neighborhoods in Covington, there is a much more diverse selection of businesses and the concentration of businesses is much greater.

As of mid-October 2015, 50 of the 120 apartments built at River's Edge are occupied. However, because there are several apartment homes that are vacant as well as several single-family homes that will be completed by the end of 2015, at this point we are unable to show the full effects of HOPE VI on the neighborhood's business development. Nevertheless, the data shows that new businesses are being added to the neighborhood and surrounding areas. Most of the new development is harmonious with the goals of HOPE VI.

It is anticipated that River's Edge will increase the land and property values in the area. Developers who are able to predict the increases in values will be inclined to locate new businesses and/or apartments in these neighborhoods. A housing development of this nature will also have a multiplier effect for employment. HOPE VI will revitalize the physical appearance of the community and will create approximately 15 jobs per million dollars spent (see Appendix I). Using this metric we estimate that employment in the region will increase by 345 to 450 jobs. There are many vacant properties recorded by the City of Covington, as shown in Figure 2B. These properties vary in size and proximity to the River's Edge at Eastside Pointe development. It is our hope that business developers will see the potential in this housing development and consequently rehabilitate and revitalize the vacant properties of this neighborhood.



Data provided by City of Covington
 Map created by Erin Hargrove, University of Louisville

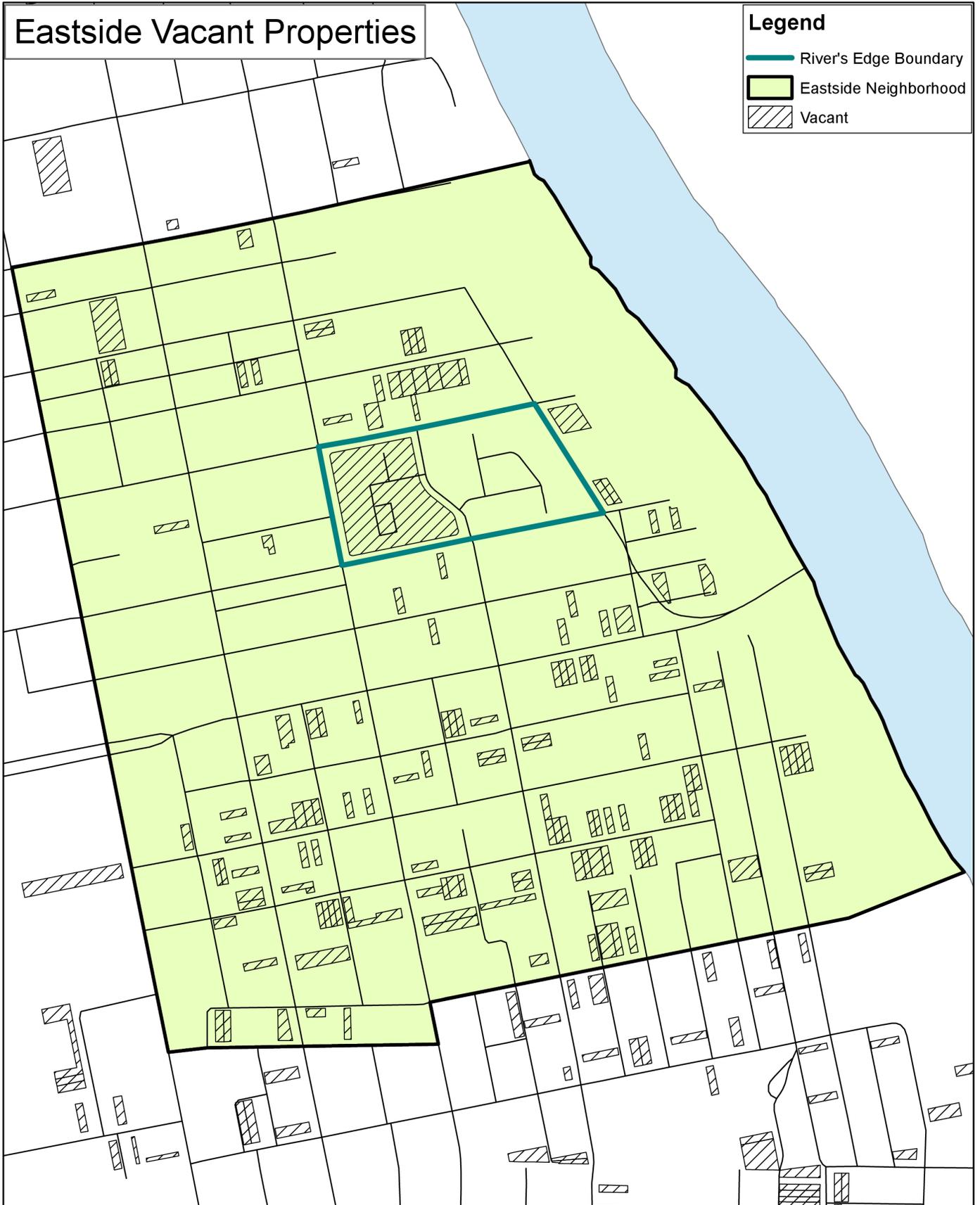
0 0.0375 0.075 0.15 Miles



Eastside Vacant Properties

Legend

- River's Edge Boundary
- Eastside Neighborhood
- Vacant



Data provided by City of Covington Police Department
Map created by Erin Hargrove, University of Louisville

0 0.0375 0.075 0.15 Miles





CRIME

One of the primary goals of HOPE VI is the reduction of crime. The design of the old barracks style housing projects like Jacob Price left grass alleyways between the buildings that could not easily be patrolled by police officers, therefore providing an avenue for illegal activities. The design of the River's Edge at Eastside Point development, as seen in Figure 3A, shows the open design with through streets and accessible courtyards, allowing for officers to easily patrol through the development and thereby decreasing illegal activity in the neighborhood.

This section outlines the crime statistics for Covington, with a particular focus on the Eastside Neighborhood. Data in this section was provided by the Covington Police Department and the Federal Bureau of Investigation. From this data we are able to provide three measures of crime. The first is majors crime that occurred within the entire city of Covington, broken down by Uniform Crime Reporting (UCR) statistics. However, this data is not geocoded or broken down by neighborhood. Therefore, it is not currently possible to understand major crime trends within neighborhood boundaries. The second measure of crime is the total number of service calls for crime by police sector. The city contains five sectors and although this will give a better depiction of the crime trends in and around the Eastside neighborhood, the unit of analysis is still too large and the proxy measure of total service calls presents some problems. The third measure of crime is the total number of service calls per neighborhood. This measure serves as a proxy for the amount of crime that occurs in a neighborhood, but as discussed later in the chapter, there are a number of issues with relying on the number of service calls. We again stress the importance of the ability to collect crime data in such a way as to present statistics by neighborhoods or even smaller geographic units. This more fine-scaled data recording capability exists in other jurisdictions and we encourage the Covington police department to implement such capability in order to understand the true challenges and successes of crime reduction efforts.

City of Covington

The first measure investigated is the changes in major crimes in the City of Covington. This data is provided by the US Department of Justice Federal Bureau of Investigation Uniform Crime Reporting Statistics through the voluntary submission of crime data from the city of Covington. The data available for Covington is currently not available past 2012. However, when comparing the major crimes reported in 2010 through 2012, as shown in Table 3A, there is a reduction in all major crimes listed. Additionally, when comparing the annual total of major crimes to annual total of service calls, the percentage decreases by nearly 2 points between 2010 and 2012. While this is just one picture of crime trends in Covington, the data does indicate a decrease in major crimes over the reported years.

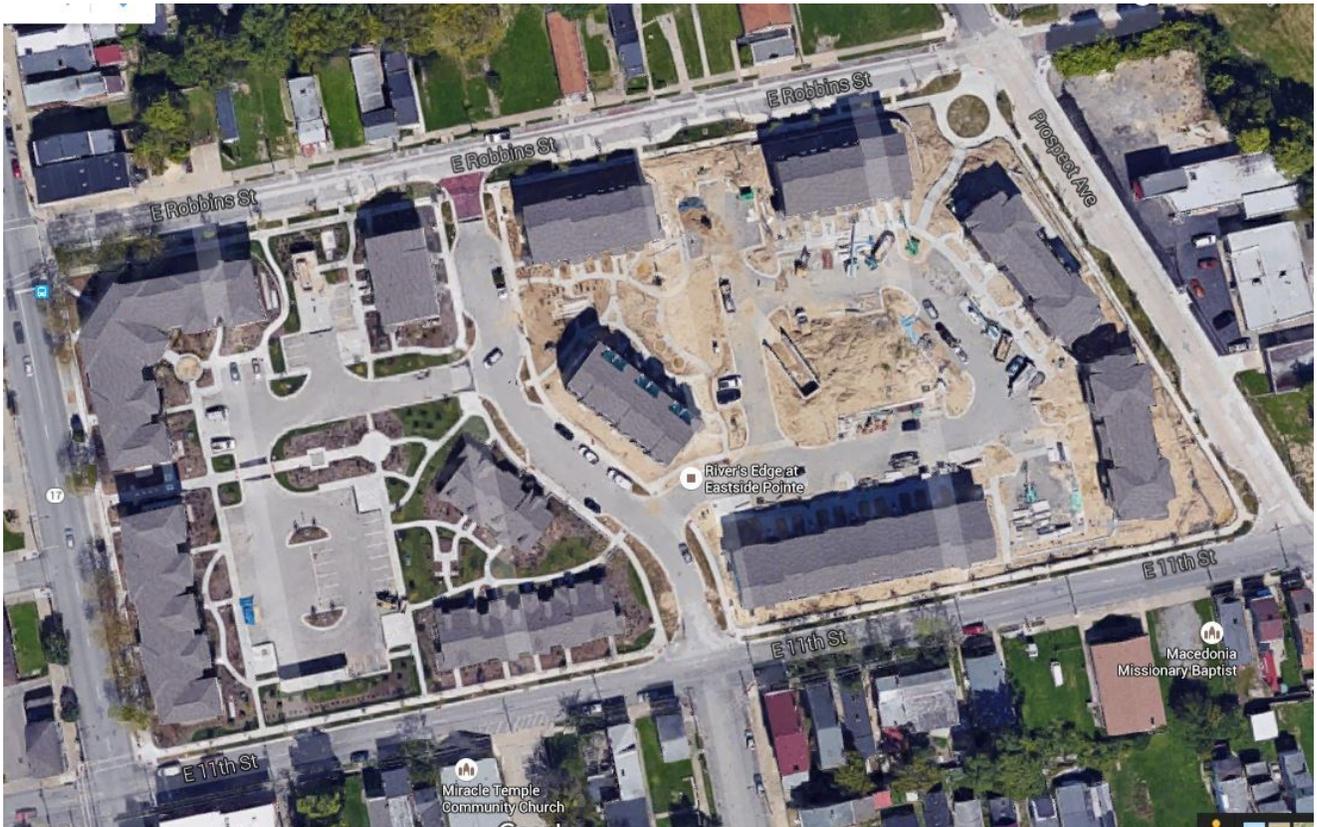


Figure 3A. Aerial photos of River’s Edge at Eastside Pointe and Jacob Price housing developments. The top photo shows the layout of the Rivers Edge at Eastside Pointe development. The bottom photo shows the layout of the Jacob Price housing development that was demolished. The River’s Edge development is designed to be an open, walkable community with easier monitoring for crime as compared to the barracks style development of Jacob Price with poor site lines and ability to monitor for crime in between buildings. Source:

CRIME

Crime Charge	2010	2011	2012	% Change
Murder and nonnegligent homicide	1	1	0	-100%
Forcible rape	40	36	17	-57.50%
Robbery	186	147	105	-43.50%
Aggravated Assault	95	122	51	-46.30%
Burglary	699	723	442	-36.80%
Larceny-theft	1,461	1,472	884	-39.5
Motor Vehicle Theft	182	203	100	-45.10%
Annual Total	2,664	2,704	1,599	-39.98%
Total Service Calls	57,904	55,274	58,989	+1.9%
% Service Calls that were Major Crimes	4.60%	4.90%	2.70%	

Table 3A. Major crimes in Covington. This table shows the most recent 3 years of data on major crime in Covington. The percent change is between the 2010 and 2012 numbers. The percent of service calls for major crimes is based on the annual service calls for major crimes divided by the total number of service calls.

Sectors

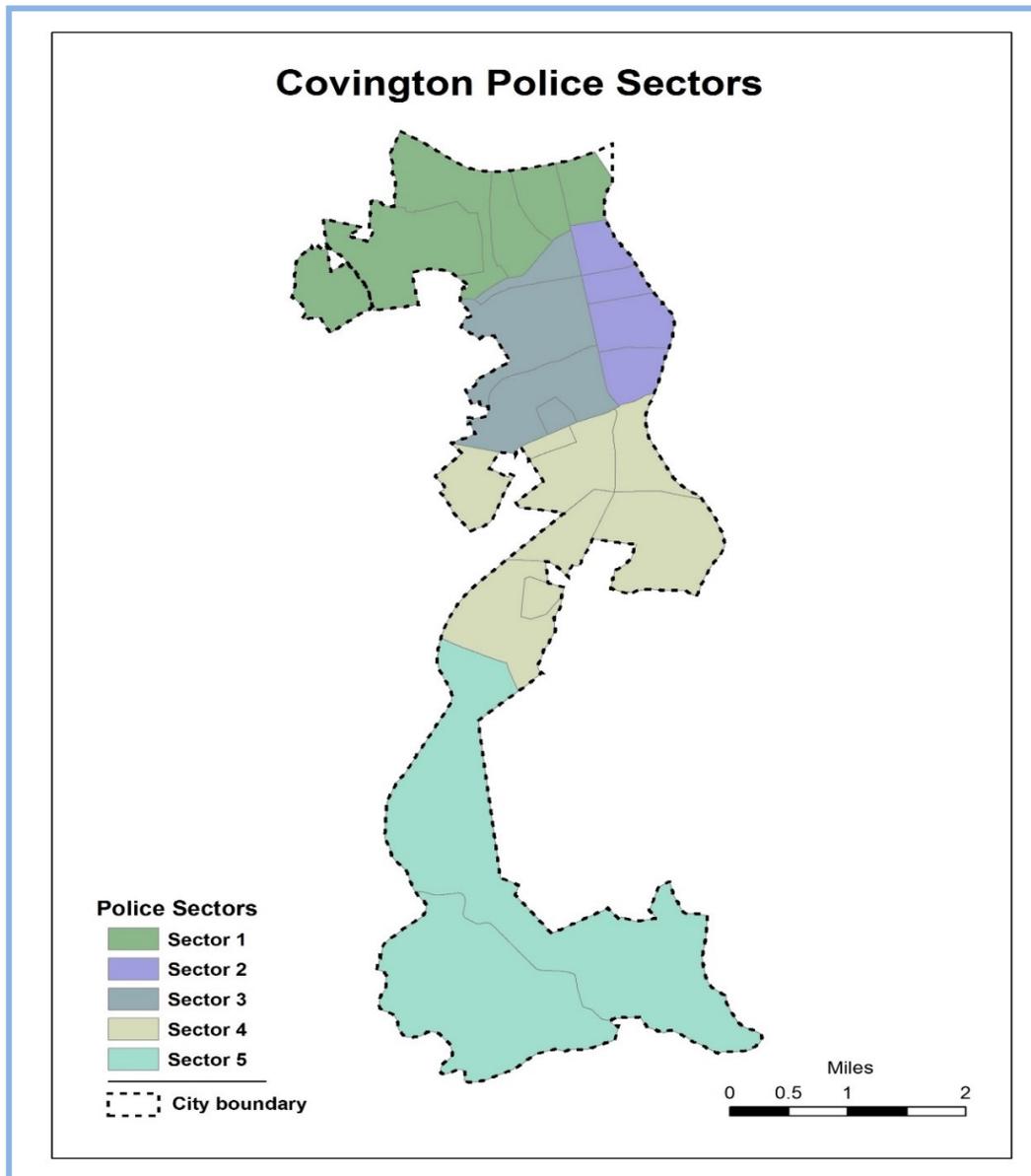
The second measure of crime is the number of service calls per police sector. Covington has a total of five police sectors. The purpose of police sectors is to divide the city into more manageable units that can then be individually controlled, instead of having one main police station in charge of the entire city. Thus, each sector should represent approximately the same population numbers. Figure 3B shows the sectors and their boundaries. The River's Edge development is located in Sector 2. From 2013 – 2014 the number of service calls increased in Sector 2 by just over 1,700, and all sectors saw an increase in service calls. In looking at the percent change of number of service calls since 2002, all sectors increased, with Sector 2 showing an increase of 12.4%. Despite the increases across the board, Sector 2 remains third in the number of service calls placed since 2010.

As stated in previous reports, there are problems with using service calls as a proxy for crime statistics. First, service calls originate where the call for service is made not where police respond. Therefore, the crime could be occurring in another sector but is counted in the sector where the service call was placed. Second, there can be multiple calls of service for a single incident, thereby inflating the actual number of incidents. Third, service calls are not restricted to major crimes but cover all police services (e.g. a traffic accident report).

Sector	2002	2010	2011	2012	2013	2014	% Change 2002 – 14
Sector 1	18,721	16,941	15,459	16,302	18,015	20,474	9.40%
Sector 2	15,294	13,133	12,640	14,044	15,461	17,187	12.40%
Sector 3	16,012	14,538	14,331	15,161	18,313	20,740	29.50%
Sector 4	10,649	10,605	10,208	9,564	10,922	11,941	12.10%
Sector 5	2,213	2,687	2,636	3,918	5,756	5,470	147.20%
Annual Total	62,889	57,904	55,274	58,989	68,467	75,812	20.55%

Table 3B. Police service calls by sector. This table shows the number of service calls received per sector in years 2002 and 2010-2014. The percent change is a comparison between the 2002 and 2014 numbers.

Figure 3B. Map of police sectors in Covington





CRIME

Eastside Neighborhood

The last measure of crime presents the number of service calls by neighborhood (Table 3C and 3D). Neighborhoods are defined by the City of Covington (Figure 3B shows neighborhood boundaries). The Eastside neighborhood, which contains the River’s Edge development, was ranked fourth for most service calls in neighborhoods in 2013. The ranking increased to third in 2014. The Eastside neighborhood has remained in the top five for service calls over the past five years, as seen in Table 3C.

When comparing the data of the Eastside neighborhood to that of City Heights, which contains the City Heights housing project (similar to the former Jacob Price housing project), the crime data shows a decrease in service calls for City Heights from 2010 – 2013, but an uptick in service calls in the Eastside neighborhood. Table 3D shows the population for both neighborhoods in 2010 (from 2010 Census data) and 2013 (from American Community Survey estimates), the number of service calls for each neighborhood in 2010 and 2013, and the average number of calls per person for each neighborhood in 2010 and 2013. This data shows a significant increase in calls for Eastside since the HOPE VI project began; however, it is not conclusive that this is directly correlated with the demolition of Jacob Price or the development of River’s Edge as service calls are a weak proxy for measuring crime data.

	2010 Population	2013 Population	2010 Service Calls	2013 Service Calls	2010 Avg. Calls per Person	2013 Avg. Calls per Person
City Heights	1059	1382	1323	1416	1.2	1
Eastside	2123	1839	3782	5729	1.8	3.1

Table 3C. Number of police service calls per person in Eastside and City Heights neighborhoods. This table shows the populations in Eastside and City Heights neighborhoods, the number of service calls per neighborhood, and the average number of calls per person.

Total number of service calls in Covington has fluctuated since 2002 (see Table 3D). However, 2014 shows the highest number of service calls in the 13 years of data collected. In conversations with the Police Chief of Covington, this may be attributed to many factors, including heroin trafficking and use that has become a major trend in Kentucky and surrounding states. Because police must respond to any emergency call, including medical emergencies related to drug use, this could be part of the spike in calls. Additionally, the national trend in crime and service calls is up, so Covington’s statistics are corroborating with that trend. Lastly, data reporting continues to be refined and thus the increases in calls could be a reflection of more thorough data gathering.

Figure 3B. Neighborhoods in Covington

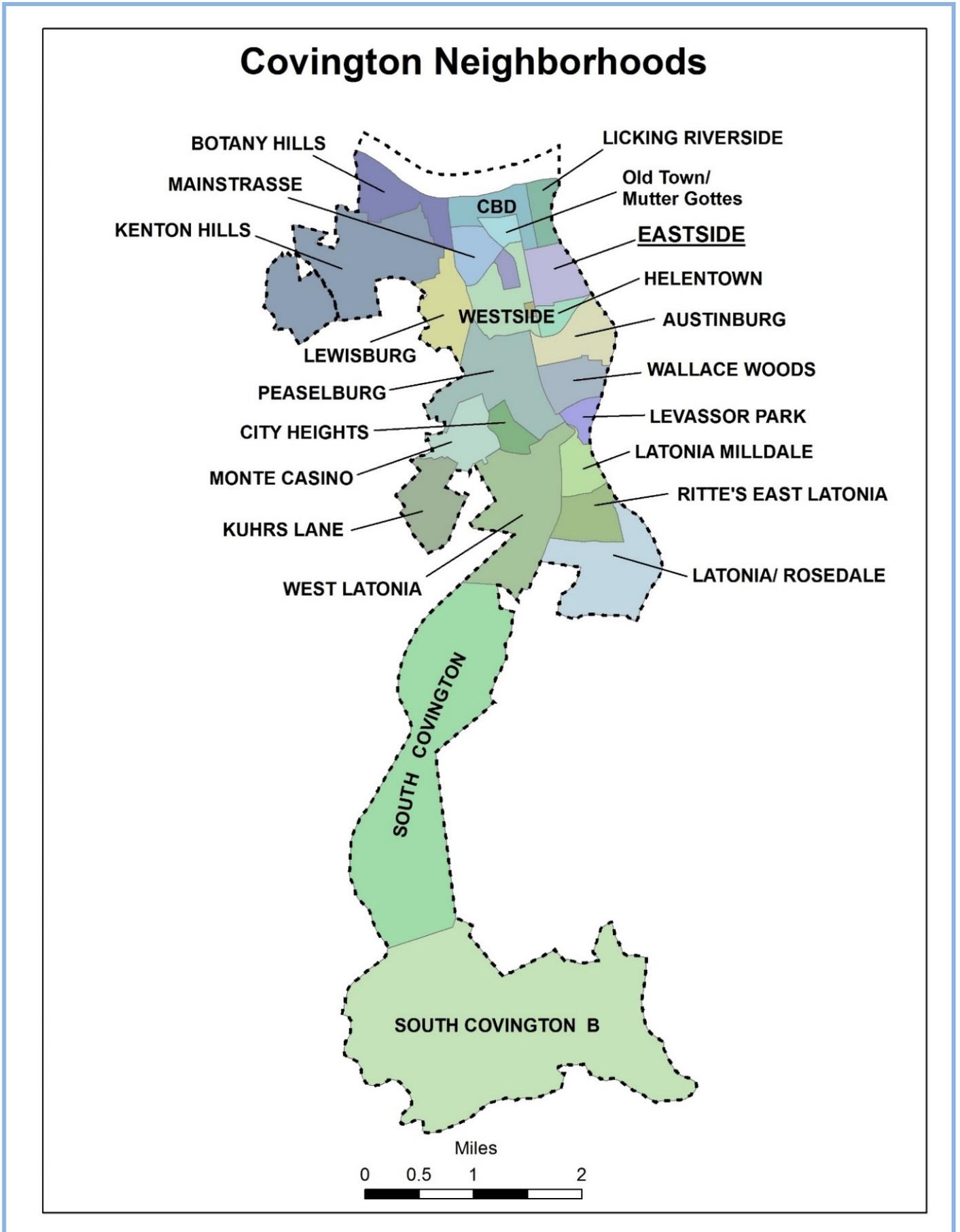


Table 3D. Number of police service calls by neighborhood and year (2002 – 2014)

Neighborhood	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	13-Year Avg.	Change 2002-14	% Change 2002-14
Austinburg	8,095	8,532	9,577	9,451	9,119	8,083	8,318	8,733	7,982	7,779	6,181	6,187	6939	8075.1	-1156	-14.3
CBD	7,552	7,038	7,951	7,707	7,072	6,305	6,442	6,679	6,867	5,989	5,329	6,041	7679	6819.3	127	1.7
West Latonia	4,230	4,500	5,037	4,830	4,822	4,477	4,420	4,492	4,483	4,355	4,767	5,908	6172	4807.2	1942	45.9
Eastside	4,781	4,655	3,997	4,654	4,773	4,866	4,402	3,794	3,782	3,994	4,806	5,729	6418	4665.5	1637	34.2
Westside	5,569	5,445	5,790	5,231	5,296	4,539	4,409	4,292	--	3,702	5,197	5,647	5777	5074.5	208	3.7
Mainstrasse	5,782	5,663	5,975	6,629	6,491	5,984	7,072	5,921	5,364	5,243	5,514	5,453	5789	5913.8	7	0.1
Peaseburg	3,350	3,537	3,608	3,471	3,522	3,244	3,271	3,154	2,933	3,198	3,639	4,846	6002	3675	2652	79.2
S. Covington	1,181	1,010	1,074	1,128	1,126	1,332	1,093	1,156	1,353	1,421	1,927	3,529	4396	1671.2	3215	272.2
S. Covington B	1,890	1,764	1,804	2,073	2,172	2,014	1,808	2,071	1,982	1,893	1,959	2,505	2914	2065.3	1024	54.2
Lewisburg	1,604	1,632	1,694	1,621	1,583	1,617	1,500	1,338	1,305	1,251	1,987	2,471	2981	1737.2	1377	85.8
Wallace Woods	2,170	2,088	2,374	2,290	2,242	2,322	1,906	1,955	1,746	1,850	2,061	2,285	2729	2155.2	559	25.8
Botany Hills	2,157	1,992	2,128	2,016	2,055	1,926	1,621	1,697	1,732	--	1,485	2,224	2303	1944.7	146	6.8
Latonia Rosedale	2,590	2,558	2,718	2,697	2,330	1,992	2,321	2,380	2,167	2,038	1,981	2,141	2506	2339.9	-84	-3.2
Hellentown	1,534	1,537	2,681	1,924	2,008	2,100	1,636	1,555	1,563	1,349	1,642	2,058	1985	1813.2	451	29.4
Old Town/Mutter Gottes	2,163	1,849	1,924	2,230	1,967	1,638	1,599	2,052	1,970	1,840	1,792	1,879	2222	1932.7	59	2.7
Rite's East Latonia	1,860	2,049	1,940	1,824	1,600	1,589	1,620	1,763	1,847	1,873	1,633	1,602	1885	1775.8	25	1.3
Licking Riverside	1,688	1,671	1,540	1,684	1,684	1,517	1,435	1,674	1,576	1,443	1,353	1,485	1509	1558.4	-179	-10.6
City Heights	1,240	1,553	1,386	1,537	1,377	1,279	1,198	1,248	1,323	1,099	1,115	1,416	1783	1350.3	543	43.8
Latonia Milldale	816	1,014	1,130	1,173	1,126	1,064	810	953	1,115	876	905	891	1028	992.4	212	26
Seminary Square	852	773	858	893	757	670	674	546	601	527	671	816	852	730	0	0
Levassor Park	668	874	961	898	1,043	832	681	872	920	1,090	770	605	572	829.7	-96	-14.4
Historic W. 15th	394	381	414	441	405	433	316	241	326	268	392	435	487	379.5	93	23.6
Kenton Hills	341	391	522	301	428	507	334	370	380	295	313	341	398	378.5	57	16.7
Kuhns Lane	113	133	105	127	118	114	120	103	140	104	148	322	282	148.4	169	149.6
Monte Casino	317	308	327	300	484	244	277	269	300	323	300	322	453	324.9	136	42.9
Totals	62,937	62,947	67,515	67,130	65,600	60,688	59,283	59,308	53,757	53,800	57,867	67,138	76061	61497.5	4201	6.7



SOCIAL SERVICES

A featured component of the HOPE VI program provides residents with social services to improve their quality of life while assisting them in reaching self-sufficiency through opportunities that cover a wide range of needs. Our evaluation of these services for the fifth year includes evaluation of the progress of these services relative to previous years and review testimonies of recipients who received services. Because we verified through resident surveys and interviews in year four that services were being rendered as reported, we did not include verification of services in the year five evaluations of service.

Social Services Progression

HAC has worked productively toward their goals for family self-sufficiency (FSS). Of the fifteen self-sufficiency services listed, HAC has surpassed nine of their thirteen five-year goals for the HOPE VI program, including financial and family counseling services provided, job readiness classes attended, high school diploma/GED enrollment, entrepreneurship training, and new job attainment (see Table 4A). There are, however, a few services that have not been as productive. For example, HAC's five-year goal for substance abuse is to serve fifteen residents. Unfortunately, the end of year five they have only worked with five residents (meaning they are averaging one client every year for substance abuse services). However, they have made nine referrals for service, indicating that this could be a lack of participation in substance abuse services as opposed to HAC's program acting ineffectively. Likewise, minimal progress has occurred for homeownership counseling, despite four times the referrals made for these services than projected. Lastly, eviction prevention did not reach the five-year goal despite many referrals. All three of these services are unquestionably important to self-sufficiency, so it would be beneficial to the success of the program for HAC to assess the processes and programming involved in providing these services, including how to better encourage referrals to participate. Childcare is the only self-sufficiency service that has declined below the five-year goal. This decrease has two primary causes: 1) the development is incomplete and residents have only recently started to move in, and 2) most children have "aged out" of the 0-5-age category. Yet, HAC is hopeful that the service will be in greater demand as new families move in to the development. HAC has also noted that Head Start recently opened a new preschool facility in the Eastside, only a few blocks from River's Edge. Given these factors, the demand for childcare should continue to increase even after the development is complete. Tables 4A and 4B show enrollment in various programs.

SOCIAL SERVICES

Table 4A. FSS/CSS Goals (July 2010 – September 2015)

	Actual (Yr. 1 – 5 YTD)	Goals (Yrs. 1-5)	Referrals (Yr. 1 – 5 YTD)
Job Readiness	216	135	311
Job Skills	40	35	49
HS Or Equivalent	63 (GED/COLLEGE)	40	121
Child Care	19	25	30
Counseling	69 (FIN/FAM)	50	140
Substance Abuse	5	15	9
New Jobs	176	75	-
Currently Employed	54 Employed/ 41 Verified in September	51	-
Employed 6+ Months	39 Employed/ 31 Verified in September	40	-
Entrepreneurship Training	9	3	13
Homeownership Counsel- ing	4	8	35
Free Tax Services	93 (not tracked yr. 1)	90	53
Eviction Prevention	32	50	19

Table 4B. Workforce Development Fall 2015

GLASS Work Readiness Class	Enrollment	Completion
Module 1: Self Awareness	17	6
Module 2: Life 101	8	7
Module 3: I need a job	13	10
Module 4: Interviewing success	10	10



SOCIAL SERVICES

FAMILY SELF-SUFFICIENCY PROGRAM (FSS) ACCOMPLISHMENTS (THIRD QUARTER 2015):

- 18 are employed, 14 employed 6+ months (78%)
- 3 new job placements
- 7 are attending college/post-secondary education
- 1 made the Dean's List
- 1 began GED study
- 3 received raises and benefits at work
- 1 completed entrepreneurship training
- 2 moved to River's Edge at Eastside Pointe
- 1 started Driver's Education courses
- 2 pending FSS program graduations
- 12 established escrow accounts (48%)
- Balances total \$36,846
- 4 actively accruing escrow every month



Testimonials: Success Stories of Covington's HOPE VI Program

The year four report for Covington's HOPE VI program included several testimonials of clients that were utilizing the services of the Housing Authority of Covington (HAC) and their intentions for moving into River's Edge at Eastside Pointe apartments. The following testimonials share the original piece from the year four report, followed by an update completed in September 2015. We hope that this section shares some of the successes that HOPE VI has enabled in Covington through social services and the development of the River's Edge at Eastside Pointe development.

JOHN DOE 1

John is a 46-year-old single, African American man. He was relocated to City Heights housing from the former Jacob Price community and has been enrolled in HOPE VI services since Fall 2011. His goals since enrolling in services include obtaining his Associate's Degree in Criminal Justice, obtaining full-time permanent employment, and moving into the new development, River's Edge at Eastside Pointe. John has fully participated with a case manager in identifying his goals and receiving information and referrals for additional resources in the community. He has utilized the Center for Great Neighborhoods for free Vita Tax Prep services this year. He previously worked with the HAC Community Health Nurse who assisted with his medical needs at HealthPoint Community Care. He was assisted with his transition to enroll in Gateway Community and Technical College in 2012 and is currently enrolled in coursework to pursue his Associate's Degree in Criminal Justice. John also recently obtained full-time permanent employment in 2014 after being unemployed or working through temporary employment agencies for a year. He immediately was offered a promotion and an increase in wage in a specialty at work that he really enjoys. He is very excited about the progress he's currently making and has established more goals. He wants to improve his financial status by raising his credit score and eliminating all debt. He is interested in enrolling in HAC's Family Self-Sufficiency program to be able to earn an escrow savings account. He has a new goal of becoming a Homeowner in the future and is scheduled to complete a Homeownership class at Catholic Charities in June 2014. He is also on the waiting list for a new apartment at River's Edge at Eastside Pointe. The HOPE VI program has been able to financially assist John directly with bus passes for employment and the purchase of a textbook for his Summer course.

Update 9/15

John continues to accomplish goals that he has set for himself. He obtained a new job in September 2014 and has just celebrated his 1-year anniversary of employment. He has received a 3% raise and is working for a non-profit organization that supports family's economic success. Because of his successes, he will be pursuing additional supports from this agency in regards to Homeownership and Financial Counseling. John has established a budget and maintained it for the past 6 months by working closely with his HOPE VI case manager. He has also paid down debts that he owed. John has also established a checking account for direct deposit and a "Christmas" fund savings account that he's contributing to on a monthly basis. He has purchased a vehicle and is maintaining his car insurance. He also enrolled in the Family Self-Sufficiency program effective March 1, 2015 with expected completion by February 28, 2020. Through this program,

John will have the opportunity to build an Escrow savings account and use it towards increasing his financial independence, such as a down payment for a home. John did take a semester off of school but is re-enrolling for the Spring 2016 semester. He is still pursuing his Associate's Degree in Criminal Justice. John has been approved for a new apartment at River's Edge at Eastside Pointe and has completed a walk-through of the unit. He plans to move as soon as construction is complete.

JANE DOE 1

Jane is a 42-year-old single, African American mother. She has several adult children who have moved out of the home but rely on her heavily. Jane relocated from Jacob Price to Latonia Terrace in the summer of 2011 and has a 17-year-old daughter still living at home. She completed the GLASS (Get Learning and Start Succeeding) job readiness class and began utilizing tutoring services to obtain her GED. She has since obtained her GED and enrolled in Gateway Community and Technical College to earn her Associate's Degree in Early Childhood Development. Jane recently enrolled in HAC's Family Self-Sufficiency program so that she can increase her financial independence and earn an escrow savings account. She has received employment services through her case manager including assistance with her job search and resume completion. She is currently working part-time as a home health aide while she attends college but is seeking employment in the childcare field so that she can earn observation hours to fulfill school requirements. Jane has utilized the Center for Great Neighborhoods for free VITA tax preparation and has been referred to 4Cs for Children for entrepreneurship training. She has a future goal to open her own in-home daycare business. Jane is planning to return to River's Edge at Eastside Pointe and has attended an orientation and submitted all documentation for her application. The HOPE VI program has been able to financially assist Jane with bus passes, criminal background checks, TB test and follow-up, and work uniforms to help her reach her employment and educational goals.

Update 9/15

Jane has had a year of success since our last report. She has obtained a new job in Early Childhood Education and has maintained her job for 16 months. She has been promoted to Lead Teacher in the classroom and recently received a \$3.00 per hour raise. Her income has increased by 58% since starting this job and she reports that she is now earning the highest wage she has ever earned in her life! Jane completed her entrepreneurship training with 4Cs for Children. She is still enrolled at Gateway and has an anticipated graduation date of Spring 2016. Jane continues to pursue her goals in our Family Self-Sufficiency program and has accrued over \$2,500 in her Escrow savings account. Jane has moved into her new apartment at River's Edge at Eastside Pointe. Since she has a very close relationship with her adult children, two of her daughters have moved in with her and her son and his family have been able to move into their own place in River's Edge as well.

JANE DOE 2

Jane is a 30-year-old single, African American woman. She was relocated to an apartment in Covington and lives with her mother. Jane previously obtained her Associate's Degree in computer software technology.

However, she has been working as an In Home Child Care provider for 5 years. She has been working towards the goal of owning her own childcare center. Her business partner is her sister-in-law and they have been able to utilize community resources such as 4C's for Children and Children's Inc. in order to receive training in the childcare field and develop a business and marketing plan. They recently leased a building for their childcare center and presented before the city commission to get zoning approval to use the space for their business. Jane has been able to obtain most of the furnishings for her center but needed assistance to purchase state approved baby cribs. The HOPE VI program has been able to financially assist her with the purchase of 2 baby beds so that her grand opening can occur this Summer 2014. She is interested in returning to River's Edge at Eastside Pointe and is currently on the waiting list.

Update 9/15

Jane's dream of becoming a small business owner has come true! Kiddie City Childcare opened its doors in October 2014. They will celebrate their 1 year anniversary of operation. Her childcare center is operating at full capacity with an enrollment of 25 children. They are seeking a larger building in Covington so that they can expand their business. Jane's income has increased by 67% since the HOPE VI program started. She has also moved into a new apartment at River's Edge at Eastside Pointe and pays Market Rate Rent.

JANE DOE 3

Jane is a 42-year-old single, African American woman. Her children are adults and she has several grandchildren. She was relocated to Latonia Terrace in the summer of 2011. Jane has been able to utilize a variety of HOPE VI services including transportation assistance and financial assistance with items needed for employment such as criminal background check and liability insurance as an In Home Child Care Provider. She has experienced a variety of health issues and HAC's Community Nurse provided ongoing monitoring and referrals. She has explored a variety of career goals and obtained her childcare certification through 4C's for Children and worked as an In-Home Childcare Provider for a year. However, she recently decided to change her career goals and return to over the road transportation, which is employment that she previously held. During this career change, Jane completed HAC's GLASS (Get Learning and Start Succeeding) job readiness class in Spring 2014. She was able to update her resume and participate in mock interviews to improve her job search skills. She has also enrolled in GED classes at Gateway Community and Technical College. Her new goal is to enroll in CDL training and obtaining her CDL certification so that she can reach her employment goal.

Update 9/15

Jane's goals have changed over the past year. She has decided to focus on working full-time and has obtained employment in the manufacturing sector. She maintains her housing and has not utilized many HOPE VI supports this year.

JANE DOE 4

Jane is a 29-year-old single, African American woman who has custody of her 5-year-old nephew. She is a 2nd

tier enrollment for HOPE VI services. She is not an original Jacob Price resident but lives at City Heights and applied to enroll in services because she wanted to receive additional services from HAC to support her goals. She has been a participant of the Family Self-Sufficiency program since February 2012. Jane has completed the Brighton Center CET Construction and Manufacturing Technologies Program and received her OSHA certification in Construction Safety and Health. She also earned her NCCER (The National Center for Construction Education and Research) certification. She has completed GLASS class and GTWO class. Jane has received services through Dress for Success (clothing for work) and the Family Nurturing Center (parenting skills). HAC has assisted with resume preparation and transportation. She worked part-time with HAC as a youth worker and then was hired for a full-time position with HAC in the maintenance department in March 2014. She was originally interested in moving into River's Edge at Eastside Pointe but with further delays in move in dates, she has been approved for a section 8 apartment unit through the City of Covington. Jane has the goal of becoming a Homeowner and is accruing her FSS escrow account on a monthly basis. The HOPE VI program has financially assisted her with obtaining her criminal background check and an expungement petition for employment purposes.

Update 9/15

Jane's family expanded this past year and she made some decisions that better worked for everyone. After working for HAC for 14 months and receiving resume assistance, she recently left and obtained employment in retail. She has been employed for 5 months and has continued supporting her family through some difficult health issues. She continues to participate in the City of Covington's section 8 Family Self-Sufficiency program and has an Escrow savings account. Her family has now received a Housing Choice Voucher and they are looking for a new residence. Her children are off to a great start at school!

JANE DOE 5

Jane is a 30-year-old African American single mother of 4 children and is soon expecting her 5th child. She relocated to a scattered site apartment by utilizing the City of Covington Section 8 voucher program. Jane enrolled in the Family Self-Sufficiency program through the City of Covington in March 2010. She was expected to graduate from the FSS program in February 2015 but completed her goals early. She recently graduated and accrued \$15,705 in her FSS escrow savings account. She has maintained full time employment since November 2010. She received a raise and now earns \$13.75 an hour, which is an increase of 25% from her beginning wage. Jane has utilized a variety of community services including VITA tax preparation, 2 Cents for Finance credit counseling, and health services through HAC's community nurse. She recently attended her New Resident Orientation for River's Edge at Eastside Pointe and will be offered an apartment once construction is completed. She has received a lot of support from her HOPE VI case manager through this lease-up process.

Update 9/29

Jane's past year has been full of changes. She gave birth to a healthy, baby girl and is now a family of 6. She accepted a buy out from her employer, which was a good choice for her due to her commitments with her children and their schedules. Her older kids did well in school and received scholarships for the Boys and Girls

Club over the summer. She graduated from the City of Covington's Section 8 Family Self-Sufficiency program and was able to purchase a larger, newer vehicle for her family. During her employment transition, she has received employment support through HOPE VI. These supports have included resume preparation, job search and leads, and mock interview practice. She has moved into River's Edge at Eastside Pointe and wants to continue to receive supports through HOPE VI.

JANE DOE 6

Jane is a 40-year-old African American mother of several teenage children. She relocated to Latonia Terrace and recently married her husband who has full time employment. Jane enrolled in the Family Self-Sufficiency program in April 2012. She has utilized a variety of services including HAC's community nurse, Lions Club for eyeglasses, and has recently enrolled in healthcare coverage through the Affordable Health Care Act. Jane has completed HAC's job readiness classes (GLASS and GTWO) and received an interview suit through Dress for Success. The HOPE VI program was able to financially assist her with her Certified Nurse Aide Training, the cost of the CNA test, cost of TB testing, and birth certificates. She is still actively pursuing her educational and employment goals. Jane's HOPE VI case manager has assisted with her resume preparation and her active job search. She has enrolled in the Life Learning Center's upcoming employment class to begin in August 2014. Jane and her family have the goal of improving their finances and received assistance with obtaining their credit report to begin the process of credit repair. She is interested in Homeownership and wants to obtain employment to increase her income to reach this goal. Two of her teenagers just successfully completed job placements through HAC's Teen Summer Work Program and did an excellent job at their employment sites.

Update 9/15

In the past year, Jane's family has continued to achieve. Her daughter recently graduated from high school. Jane graduated from the Life Learning Center employment class. She has since been working 2 part-time jobs as a home health care aide. She has maintained one of her jobs for 10 months! Recently, Jane made the difficult decision to pursue a full-time permanent job since she just wasn't getting enough hours at her part-time jobs. She has completed 3 weeks of CNA training (paid for by her new employer) and is well on her way to passing her clinicals. She and her husband continue to work hard and raise their teenagers. Jane relies heavily on her church home for support and counseling needs for finances and marriage. She is still active in our Family Self-Sufficiency program and has accrued over \$9,000 in her Escrow savings account.

JANE DOE 7

Jane is 30-year-old African American single mother of three young children. She is a 2nd tier enrollment in HOPE VI services. She is not an original Jacob Price resident but lives at City Heights and applied to enroll in services because she wanted to receive additional services from HAC to support her goals. Before moving into HAC housing, Jane had a sporadic work history. She utilized a variety of services through HAC, including HAC's job readiness classes (GLASS and GTWO), Dress for Success to obtain an interview suit, and transportation assistance. She also completed financial literacy classes while attending GLASS class. After completing job readiness programs, Jane obtained employment for 5 months. After a job loss, she decided to

focus on her educational goals and enrolled at Gateway Community & Technical College for GED study. She participates in the Work & Learn program and receives support through benefits and transportation assistance. She has the goal of obtaining her GED and an Associate's Degree in Human Services from Gateway Community & Technical College. She has experienced some health issues and utilized HAC's community nurse and HOPE VI case manager for assistance. Jane recently established a new goal of enrolling in HAC's Family Self-Sufficiency program and improving her family's financial situation. She continues to receive intensive case management services through HOPE VI services to support her in achieving her goals.

Update 9/15

Jane has had some health issues that prevented her from completing her educational goals this past year. Instead, she gained employment but was recently laid off. She is utilizing HOPE VI supports for resume preparation and job search. She is also enrolled in employment services with the NKY Career Center. She also recently completed our Good Housekeeping Class.

PART II: DESIGN AND LOCATION NEEDS OF HOPE VI

Social critic Paul Goodman (1960:17) wrote in *Growing Up Absurd*, “A man has only one life and if during it he has no great environment, no community, he has been irreparably robbed of a human right.” This is the compass that continually informs my work and fuels the commitment to creating healthy, safe, affordable, just, and sustainable neighborhoods.

River’s Edge at Eastside Pointe (also known as River’s Edge for writing purposes) is one of the best green housing developments for low- and moderate-income in the country. From blighted to beautiful, the new revitalized urbanist style community includes 11 buildings made up of 120 housing units, that conform to the green recommendations from Enterprise Green Communities, LEED for Homes V. 2008 (Leadership Energy Environmental Design), and Energy Star Version 3. The development follows U.S. Government mandates to create mixed income housing instead of the more traditional segregated low-income housing found several miles away at City Heights. River’s Edge at Eastside Pointe will have 43 public housing units; 47 units are considered affordable housing due to tax credits and another 30 are “market rate” based on neighborhood rent level.

The cost to build these units is approximately 16 million dollars. North of River’s Edge at Eastside Pointe is the location of 9 new homes which are part of the homeownership program. These homes comply with Enterprise Green Communities criteria and have construction financing of 3 million dollars. Rent includes utilities and ranges from \$360 for public housing tenants to \$674 for those who qualify for affordable



The view of the Cincinnati skyline as seen from Covington.

housing. Market rate rents, which include views of downtown Cincinnati, will start at \$725 for a one-bedroom unit and up to \$1,100 for more bedrooms excluding utilities. The objective is for public housing residents and those qualified for affordable housing to pay 30% or less of their income for housing. As I have noted elsewhere, most low- and moderate-income renters pay a much higher percentage of income into housing, creating shelter poverty in which they are unable to pay for other needed necessities. (Gilderbloom and Appelbaum, 1997; Gilderbloom, 2008). The average cost of building an apartment of one to three bedrooms is \$133,333 and, given the environmental gadgetry required by LEED, this is affordable.

Not so affordable was the average cost of building a single-family home, totaling \$333,333 for each home. Several elected officials and community leaders have expressed concern about this cost. Similar single-family homes have been built in Newport and Louisville for significantly less (Gilderbloom and Mullins, 2005: 93; Gilderbloom 2008). In Louisville’s East Russell neighborhood, the cost of building similar cottage style housing was \$49,000 to \$69,000 twenty years ago (Gilderbloom and Mullins, 2005:93). Neighboring Newport single-family housing was built on smaller lots for significantly less seven years ago (Gilderbloom et. al, 2008; Gilderbloom, 2008). Are labor and material costs responsible for the increase? It might be tied to the 20% higher cost of trying to be LEED certified (Wagner: 2008: 39). The price of single-family housing

could have also been reduced by building multi-family condominiums or town homes where shared walls, floors and ceilings would have cut down the price of homeownership by one-half and would have been more LEED and energy friendly.

The other part of this story is that the HOPE VI development at River's Edge has caused nearby housing to be renovated with homeowners and landlords thinking the neighborhood has a brighter future. Similarly, the surge in renovating abandoned housing along restaurant row on Main Street is indicative that Covington is on the rebound, with several investors making good returns.

How successful is this kind of development with diverse surroundings, sustainable design rich with environmentally lush landscaping, neighborhood friendly accessibility, lower energy and transportation costs, and a mixture of incomes and races? People vote with their feet: 189 are on a waiting list for public housing, 30 are on a waiting list for tax credit housing and 86 are looking for market rate housing (Paeth, 2015).

River's Edge boasts a beautiful and welcoming community that illustrates how peace, equality, health, and justice can be achieved through physical design. When actively planning the redevelopment of the Jacob Price projects in 2009, quality of life and energy efficiency issues were a part of the design concept. Green design is synonymous with community development, so the Housing Authority of Covington (HAC) designed these 6.72 acres to be walkable and bikeable and included streetscape components such as sidewalks that incorporate some old growth trees and new underground utilities. Additionally, the nine new homes add another .92 acres. It is expected that more new housing will be built around this development using HOPE VI funds as well as private investors who see that the neighborhood is on the rise.

River's Edge deserves national recognition for its commitment to the pursuit of happiness, attacking the stigma of conventional public housing. HAC increased community vitality through beauty and accessibility, thereby providing a path out of poverty for a neighborhood that was otherwise lost in decrepit buildings, water quality issues, and deadly carcinogens found inside the original Jacob Price public housing. Hand-up economic opportunities abound in this riverside community that's only 1.5 walking miles south of downtown Cincinnati, Ohio, including: immediate access to major bus lines; accessible health and social services; "live, work, learn" employment; and educational opportunities.

The HAC and River's Edge developers have taken a blighted, barracks-style development and turned it into a model for public-private partnerships. In our 4th year report in 2014, we evaluated several measures of fiscal prosperity. In relation to Cincinnati, which is one of the most beautiful cities in the country, the anticipated outcomes for a bustling Covington will be hundreds of direct and indirect jobs created through this development as well as new businesses, and that there will be less crime than in other neighborhoods with public housing and low income residents.

There is much to learn from this model of green development in terms of how to reduce energy costs in the home. Moreover, there is another important lesson to learn as well: Locate the development in a neighborhood that has everyday needs within a 10-minute walking distance. Walkability reduces car dependency for residents and provides active transportation infrastructure options for walking, biking and bus usage. Tree lined streets with sidewalks and bike lanes/paths also encourage walking and bike use.

River's Edge is far ahead of many other HOPE VI developments that are car-dependent and located far away from higher education, jobs, bus networks, and bike lanes. For example, Louisville's first HOPE VI project was Park DuValle, which was isolated and located 20 minutes from downtown with poor performing schools, high crime, infrequent bus service, hyper-segregation, and proximity to Rubbertown, known for its "toxic soup of pollutants." Louisville later redeemed itself with a new HOPE VI project called Liberty Green, which has many of the winning characteristics of River's Edge at Eastside Pointe. A major goal of HOPE VI is to break up racial

and income segregation of black neighborhoods and create greater opportunities. The first generation of HOPE VI developments was not thinking “green” in terms of location, integration, or energy efficiency (Cisneros and Engdahl, 2009).

In an era of climate change, building, siting, and designing sustainable, affordable homes work to the advantage of residents, neighborhoods, cities, and the world. The U.S. has only a limited number of multi-family housing communities that are affordable, environmentally friendly, and energy efficient. Covington, Kentucky’s HOPE VI development provides one of the best examples to date on how to design energy efficient, affordable developments, both inside the home and in locating the development in a place that reduces car dependency by encouraging walking, biking, and public transit.

This evaluation illustrates both the highlights and shortcomings of Covington’s HOPE VI green development. The demolition of the original public housing was wise, because it consisted of unattractive barracks style housing that shouted urban blight, including poor lighting, tiny rooms, physical design flaws, dysfunctional one-way streets that encouraged vice, and environmental issues. These conditions were documented in the original HOPE VI application (which is summarized later on in this Section) along with follow-up studies done by the North Kentucky Department of Public Health, John Hopkins University, and the University of Louisville Center for Sustainable Urban Neighborhoods.

This evaluation described measures to improve the quality of life with green infrastructure by exploring the three environmental/energy programs used in the development: LEED, Enterprise, and Energy Star. While we



Some of the sustainability features included in the construction of River’s Edge at Eastside pointe include shade trees and vegetation to decrease stormwater runoff.

acknowledge that LEED is a valuable force in teaching sustainable design, we also note its drawbacks by giving marginal credit for “old school” passive solar design. Engineering products that consume electricity are favored over solutions found in nature that don’t consume electricity. Harnessing the sun’s energy can do what many of the recommended mechanicals can do: dry our clothes, cook our foods, heat our homes, and keep the lights on. In other words, why give credits for dishwashers that needlessly increase energy usage, and not for passive solar clotheslines and green roofs that decrease energy use through harnessing nature? Or, why reward a home through LEED credits in the countryside that encourages the use of cars and eliminates any small fuel savings, as opposed to rewarding developments built close to employers and schools?

In this report, we show what works well and what could be improved upon. Our efforts applaud the transition of an unhealthy public housing development into a safe and sustainable place. HOPE VI provides a compass for future affordable housing and community efforts. In 2010 HAC entered into a partnership with Integral Development, LLC to replace the Jacob-Price development with River’s Edge at Eastside Pointe. Integral is respected by other developers, such as Marilyn Melkonian, former Deputy Secretary of Housing

and Urban Development under President Jimmy Carter, who now heads up Telesis, which has built 16,000 housing units in 23 different cities for a total investment of \$2.5 billion dollars.

There is little doubt that Covington's HOPE VI is one of the best green housing developments for low- and moderate-income persons in the country. In an era of climate change, this deserves high praise. River's Edge is pursuing LEED Certification and is further pursuing LEED Silver Level. HAC could also compete for LEED—ND (Neighborhood Development) because of its walkability and proximity to basic necessities such as employers, schools, places of worship, grocery stores, bus lines, and bike lanes. Higher income residents usually occupy LEED certified housing. River's Edge is a major accomplishment and provides a compass for affordable and green housing advocates. A review of other HOPE VI developments by Cisneros and Engdahl (2009) shows that the Covington HOPE VI development is superior over all others.

How do we define housing affordability that includes transportation and energy costs? Most urban experts believe the answer lies in our downtowns, where energy and transportation costs can be lowered. In the past, affordability was simply measured as someone who pays 25% or less of their monthly income into housing costs, though the Housing Commission under President Reagan the rent to income ratio for affordability was raised to 30% (Gilderbloom and Appelbaum, 1987; Gilderbloom, 2008). Using this percentage of income-to-rent, study after study shows that half the poor and a large percentage of moderate-income households had unaffordable housing. Affordable housing is more often prevalent farther from downtown, yet the higher costs of transportation and energy consumption are not factored into the affordability equation (Gilderbloom, 2008).

As a result, the definition of affordable housing must be expanded to include both transportation and environmental costs. That is, for an affordable housing development to be sustainable, it is dependent upon transportation and energy costs. River's Edge is on track to be today's ideal low- to moderate-income housing development. The Housing Authority of Covington (HAC) is productively working toward healthier, more affordable, and more equitable neighborhoods.

Several "sustainability" frameworks are being pursued for River's Edge, including Leadership in Energy and Environmental Design (LEED), Enterprise Green Communities (Enterprise), and Energy Star approved appliances. For a government-funded development, this is a productive step in the direction of sustainable neighborhoods and environmental design. River's Edge is deserving of great praise because of what it is replacing and it's a triumph for HUD, the Housing Authority of Covington, advocacy groups, and the University of Louisville Center for Sustainable Urban Neighborhoods (<http://sun.louisville.edu>).

The development of River's Edge at Eastside Pointe is near completion. We won't know the outcome of LEED certification until after this report is completed but it does deserve it. This is confirmed by LEED housing specialists Dr. William Riggs and Bill Farr, AIA. The units are beautiful and the community environment is welcoming. Evaluation of the new development's effects on the residents in the neighborhood has been added to this year five (final) report.



Sustainable Communities: The Ecological Impacts of Housing and Neighborhood Design

By 21st Century standards, the old Jacob Price development was unlivable and needed to be replaced with modern, energy-efficient structures for mixed-income families. This was evident in the HOPE VI Jacob Price Application (2009):

Virtually every major mechanical, electrical and plumbing system at Jacob Price Homes was either original to the 1939 construction or had exceeded its useful life expectancy. Like the units already demolished or taken out of service, many of the currently occupied units suffer from deteriorated systems, design deficiencies, inaccessibility, and density far exceeding any modern standard for urban living. The extent and nature of infrastructure and project site deficiencies, and fundamental design flaws preclude these facilities from rehabilitation. The structures contain inefficient mechanical systems that do not provide air conditioning or adequate insulation; and unit interiors that are inadequate to meet the needs of today's families, with undersized rooms, grossly inadequate closet space and no washer/dryer hook-ups; and the site's outdoor spaces are dehumanizing, lacking any semi-private or private spaces.

The former Jacob-Price development originally had 167 tiny apartment units that were constructed in 1939 using a federal government standardized building framework. This mundane design was called barracks style and had no great architectural features. The units were poorly insulated, were outfitted with inefficient appliances, lighting, and heating systems, and were in poor physical condition. The goal of the revitalization project was to tackle these design flaws and enhance the lives of HOPE VI residents and the Eastside:

The redevelopment of Jacob Price Homes through the HOPE VI Program provides Jacob Price residents, the City of Covington and the Housing Authority with a unique opportunity to reclaim and revitalize the Jacob Price site, create a new mixed income community, catalyze the redevelopment of the surrounding neighborhood and provide employment and educational opportunities to Jacob Price residents (HOPE VI Jacob Price Application, 2009).

Demolition of the former Jacob Price Homes was necessary to set a new standard of functional, affordable housing in Covington:

The Eastside Neighborhood, as demonstrated by the following data, has suffered a long and continuous downward spiral of social, economic and physical distress. Jacob Price Homes, built 70 years ago, has been a contributor to this decline and distress, as made evident from the significant number of vacant properties immediately adjacent to the site, and on surrounding blocks. The demolition of Jacob Price Homes and its replacement with a new mixed-income community, combined with new construction and renovation off-site in the neighborhood, will remove this negative influence and create a positive catalyst for neighborhood renewal and regeneration (HOPE VI Application, 2009).

Before demolition, the crime rate in the Jacob Price community had been high for years. Crime has decreased since then, largely due to the reductions in the number of tenants. One explanation for the high rate of crime is the high rate of unemployment among residents. A vast number of residents were, and still are, unemployed. A likely cause of the high rate of unemployment is that many of the residents interviewed do not have high school diplomas and many are without vocational training. When under-education is mixed with the absence of a computer or email account, employment opportunities become scarcer – many

minimum wage job applications now require a computer in order to apply. Jacob Price public housing was surrounded on all four sides by one-way streets, which made it ideal for prostitution and the sale of drugs and stolen items. According to the current and former Covington Police Chiefs, one-way streets made surveillance more difficult and created more crime opportunities.

Nearly everyone who relocated to other public housing communities has indicated a desire to move back to the new HOPE VI development. The residents who lived in the old Jacob Price development support the new urbanist design. This support was evident not only from interviews of former residents but also in the application for HOPE VI in which Resident Council President, Brenda Ramsey, endorsed the development. For roughly three years, residents, neighbors, consultants, city officials, social workers, preservationists, designers, planners, HUD, and business leaders met with 20-40 people to haggle, debate, discuss, vote, and design a dynamic neighborhood that would deliver pride, ownership, hope, and a sustainable future. While a strong majority wanted new housing, some adamantly wanted it to be demolished and left to market forces to develop without government intervention. Others called for the unrealistic demand to simply keep things as they were despite the history of high crime, health problems, a deteriorating physical structure, and the negative consequences of racial segregation. Residents who were relocated to other Covington public housing communities expressed a strong desire to move back to an attractive housing development closer to downtown and public transit and with more living space.

Some residents also perceived that the new development would offer a safer and healthier environment. The Community Building at River's Edge at Eastside Pointe will have a computer center and a small gym for exercise. Residents appreciated the fact that the new development will include more attractive landscaping and more green options such as nearby community gardens and opportunities to walk and bike. They welcomed the opportunity to live in a mixed income neighborhood that would take away the stigma of living in a housing "project." The often-stated claim that HOPE VI causes tenants to go homeless has never been verified in Covington or in next-door Newport (Gilderbloom, 2008). HOPE VI tenants were all offered three opportunities to move to other public housing developments in Covington or to receive Section 8 vouchers. HOPE VI residents were also offered an array of services that provided opportunities to improve health, learn job skills, or earn a higher degree so that they could transition out of public housing.

Comparing Existing Public Housing to HOPE VI River's Edge at Eastside Pointe

While traditional HOPE VI studies focus on tracking tenants with before and after analysis, we also added a comparative analysis between River's Edge and a traditional public housing complex (City Heights in Covington) several miles away. We found stark differences between the two housing developments. The River's Edge location is superior; it is positioned closer to downtown with more frequent bus service and is closer to employers, medical facilities, and educational opportunities. Unlike Jacob Price public housing, the problem of environmental toxins and mold does not exist at River's Edge, although this could become a problem if the developer allows smoking. Moreover, River's Edge provides better access to healthier groceries, saving residents roughly \$163 a month. The "grocery store" at City Heights provides drug paraphernalia, liquor, unhealthy sweet and salty snacks, and tobacco. No fruit or vegetables were for sale during our visits at City Heights. If the purpose of HOPE VI is to integrate the poor into mixed income neighborhoods, this is a laudable goal. In comparison, City Heights, a low-income neighborhood, is isolated and segregated. Finally, residents at City Heights complained that crime rates are higher than at River's Edge.

One important concern raised by the survey was that roughly three-fourths of the residents interviewed showed signs of smoking. While a majority of respondents interviewed opposed a smoke-free policy in the buildings, we will argue that such a policy is appropriate for a development that promotes itself as "green" (with better insulation, lighting and appliances). Integral Property Management (IPM) has an

opportunity to remove the threat of carcinogens found in cigarette smoke through thoughtful tenant policies that will protect the health of residents as well as property values. As of this writing, IPM has declined to go smoke free despite a waiting list of 306 persons for only 120 units. IPM need not worry that smoke free policy will keep them from filling up units; rather, it is often a magnet for those wanting healthy housing environments. To encourage a healthy lifestyle, the Community Center (building #2) will also have a fitness center. Some believe that if IPM maintains its stance, LEED certification will be threatened.

One of our more significant findings is that most residents do not own cars. Many walk or use bikes for transportation, which supports recent U.S. Census data. River's Edge is an ideal community for walking and riding bikes. The city should build or improve sidewalks within and around the perimeter of the development to ensure easy pedestrian access to surrounding educational, cultural, and recreational amenities. The city should also add bicycle lanes to make it easier for those who own bikes to use them for work or school. Since only 20 percent of public housing residents own an automobile, the number of parking spaces allocated for the new development may be reduced in the future to incorporate more green spaces and bicycle parking. The city may likewise choose to allocate nearby street parking for residents only. This too could increase the amount of green space while limiting the number of outsiders coming into the community.

HOPE VI Environmental Promise

The HOPE VI program has four important objectives: 1) change the stigmatization of barracks-style housing with new urbanist design, 2) reduce the concentration of poverty, 3) provide support services, jobs, education, and health services to residents, and 4) develop partnerships between public and private agencies and organizations (Gilderbloom and Hanka, 2006; Brazley and Gilderbloom, 2007; Gilderbloom, 2008). Affordable, mixed-income housing is seen as the key to sustainable neighborhoods.

River's Edge at Eastside Pointe: Urban Green Design: Enterprise, LEED, and Energy Star

The new urbanist green design attacks the stigma of conventional public housing and incorporates a pleasant ambiance into neighborhoods (e.g. bike racks, nearby community gardens, trees, modern architecture, attractive accommodations, and many other urban amenities). Covington's HOPE VI offers a new start for public housing tenants who desire a lift out of poverty, with opportunities to improve employment, housing, education, and health. HOPE VI takes blighted development and turns it into new, energy-efficient, beautifully landscaped neighborhoods.

Covington's paid LEED consultant told us in a meeting that with the gadgetry, appliances, insulation, shared walls, ceilings, and floor that River's Edge has the potential to significantly reduce energy costs. Proper insulation in walls, ceilings, and floors, as well as Energy Star mechanicals, can cause significant reductions in energy usage. The use of Energy Star qualified products reduces electricity bills for residents while offering higher-quality products. The LEED certification specialist we interviewed for this study believes that the average cost of gas and electricity for tenants paying market rents will average \$65 a month. This means energy costs for residents might be slashed by as much as 50%. Our efforts to verify these savings with Duke Energy officials were unsuccessful, citing privacy concerns. While not part of the LEED credits, the ceiling fans installed in every unit reduce the need for air conditioning and can create a reduction of up to five-degrees in air temperature, according to a recent presentation at a LEED seminar.

Many cost-saving and ecological methods of building design can have indirect effects on health. Although the recommendations are voluntary, and based on developer preference, they are becoming highly visible in the construction world, as they recognize the impact of physical design and the green environment on human health. Site selection for new structures must be made in a manner sensitive to the ecosystem. Buildings should be designed using footprints that minimize sprawling land use, while improving the well-being and

fitness of building occupants. LEED certification offers “credits” for both density and mix of uses, as well as improved indoor air quality, temperature control, and ambient lighting.

A well-designed community is a healthy community because regular physical activity such as walking, running, or cycling becomes desirable. Similar in purpose to LEED, the mission of Enterprise Green Communities (Enterprise) is, “To create opportunity for low- and moderate-income people through affordable housing in diverse, thriving communities” (Enterprisecommunity.com). River’s Edge is required to conform to Enterprise, which specifies the need for green design and affordable housing. To operationalize the requirement, Enterprise is structured around a certification and “credit,” or “point” based system. Specifically, an Enterprise community must meet all mandatory affordable housing criteria as well as achieve an additional 35 points. The structure of Enterprise is similar to LEED’s structure: meet several of the criteria in the design and construction stage and the development becomes “sustainable.”

LEED and Enterprise serve distinct functions to provide a framework for sustainable, green-building design. The two organizations are distinct in their practice, yet LEED is generally cited as the higher-level certification program. Thus, most of the research focus is on LEED. Before explaining the basic structure of LEED certification, as well as River’s Edge at Eastside Pointe’s role in certification, it is important to understand the process by which credits are approved and codified. All people can “propose a credit” through the USGBC online interface. The USGBC considers these proposals – and creates their own – at which point the proposal is reviewed at three levels: the technical advisory group, the board of directors, and the steering committee. The last step is for the USGBC Members to vote to accept or reject a proposal.

LEED certification is categorized into four levels based on the number of points a project achieves: LEED Certified (45 points), LEED Silver (60 points), LEED Gold (75 points), and LEED Platinum (90+ points). Wagner (2008: 39) notes that there are 64 points available in the following categories: (1) sustainable sites [14 points]; water efficiency [5 points]; energy and atmosphere [17 points]; materials and resources [13 points]; and indoor environmental quality [15 points]. A “Council” made up of professional builders and corporations that supply appliances and materials weights these categories. These weights change due to the power of industries that have a key interest in selling their products. Critics like Donovan Rypkema (1997), a consultant to the National Trust for Historic Preservation, notes that LEED gives minimum credit to historic preservation efforts despite the fact that the “greenest house is the oldest house” because it recycles old materials and stays on the same footprint (Gilderbloom, 2010). Rypkema claims that preserving one 2,000 square foot house is the equivalent to recycling 1 million aluminum cans because of the embedded energy. Similarly, LEED-ND evolved to give points if the location of the development is in a walkable community. Some LEED consultants, such as Dr. William Riggs, believe that LEED should not be granted if located in a faraway farm pasture. Because River’s Edge is not complete, we are unable to report on the development’s level of certification; the goal of Silver is plausible given that they started in 2008 and it should meet those standards because of its location and because it targets low-income residents.

Energy Star specializes mostly in energy efficient technology design for residential appliances (e.g. refrigerators, ovens, washers/dryers, etc.). The appliances installed at River’s Edge include washing machines, dishwashers, refrigerators, ceiling fans, light fixtures, HVAC systems, and windows. The list excludes incidental fixtures in service areas, such as in attics and mechanical rooms. Appliances that conserve water (part of LEED certification requirements) are also included, such as low flow toilets, faucets, and showers.

Improving LEED Guidelines: Emphasizing Nature over Mechanicals

LEED is not the be-all and end-all for environmental design. A LEED certified development or neighborhood suggests the essence of sustainability. However, there are still items that LEED misses that reduce energy consumption. While LEED provides extensive benefits in sustainability, health, equitability, and design, we can identify missing elements of sustainable design. A few examples include: expanding the interplay between city policy and a solar oriented development's simple mechanics that reduce energy consumption, as opposed to Energy Star products; comprehensive effects of well-planned landscaping; and scale.

Some of the best examples of energy efficient design would never qualify as LEED certified. Most notably, because LEED is bound by its focus on engineering solutions that consume electricity, rather than harnessing nature (e.g. wind, sun, and trees) to reduce energy costs, LEED gives minimal credit for recycling an old building. For example, the new development does not receive equal credit for reusing the brick waste of the old Jacob-Price Homes. When the old units were demolished, the evaluator asked the dump truck drivers where the bricks were being taken. We were told they would be placed along the riverbed! Ideally, HAC could have been a "good neighbor" and offered these used bricks to homeowners and landlords wanting to put in room additions, patios, and sidewalks in the neighborhood. Several pallets of the old bricks have been saved and there are plans to use them in constructing the gazebo and memorial garden for Jacob Price Homes.

Current LEED requirements include "environmental tobacco smoke control" and if smoking is allowed in the units, it might prevent HOPE VI in Covington from getting LEED certification. All to say, LEED is an excellent and productive model to follow for environmental design, but it does not capture the complete spectrum of environmentally healthy and sustainable design over time and space.

Harnessing the Solar Resource

The solar resource is underutilized and misunderstood by most in the development industry. Harnessing the sun's energy falls into two primary categories: passive solar and active solar. Several implementation methods and technologies exist for each category, but they all relate to either 1) designing a structure to utilize irradiation *as is*, and 2) capturing and transferring the irradiation into a generated form of energy (e.g. electricity and heated liquid). Aside from the harnessing technique used, solar energy is captured at various scales – from a single residential unit to solar farms that reside on thousands of acres.

Passive Solar Design can reduce building costs, energy costs, and maintenance costs considerably, yet LEED never really factors in these energy saving items. The proof is in the pudding just up the street from Covington: Turkey Foot Middle School should be emulated everywhere for its rousing success. In brief, this Green School several miles away outperforms every other school nearby and statewide in every important metric.

What is the impact of a green school concerning taxes, costs, pollution, educational achievement, health, and grades? Oddly this has never been seriously studied. The goal was to produce a cost effective state of the art green building demonstration project for which the rest of Kentucky could learn. What are the environmental, economic, and educational outcomes of this demonstration project? Rob Haney was in charge of evaluating the before and after consequences of students moving from an energy consuming school to a green school, namely: (1) enormous energy savings, which means more money to invest in learning and a reduction in taxes from taxpayers; (2) sun lit classrooms resulting in higher grades, test scores, less violence, and healthier, happier students; (3) the cost of building a "green school" is less than a "normal" energy inefficient school; (4) schools don't need the fancy and costly energy saving gadgets and mechanicals that LEED requires to be green; (5) water conservation techniques from rain water reduces water costs and reduces flooding threats; (6) electric companies are writing checks back to the school for \$3,500 a month,

though Turkey Foot has still not reached the goal of being a net zero building (where more energy is produced than consumed), but that is the larger aim; and (7) maintenance costs are lower.

The first conventional wisdom has it that green schools cost more to build and cost taxpayers more money, but we found just the opposite. The total cost of building a Green School was lower than a traditional school building with a conventional heating system.

The second conventional wisdom has it that green energy systems are expensive and do not really produce any real cost savings. This might be true with solar panels on a suburban house, but with smart leadership that avoided costly LEED requirements (it's not LEED rated) the energy savings were spectacular, saving taxpayers thousands of dollars on average. During the summer, the schools were selling energy back to the electric companies, earning checks of \$3,500. The intention was to achieve net zero—meaning whatever energy expended would be zeroed out with the school's massive solar collectors selling back energy. They have not met that goal but it's impressive nevertheless.

The third conventional wisdom is that "smart classrooms" with high tech flat screens and no windows work better than sun lit classrooms. At Turkey Foot academic performance was shown to be superior. The longer students stayed in the green school (three years), the more academic performance improved, especially in math. Part of the reason is that the school's lighting system relies on shading of the sun, and many studies show that sun lit schools have better academic performance. Moreover, the school provides a living scientific experiment so that students can engage in more science, math, numbers, biology and so forth. They also have a roof top garden and gray water conservation systems.

The fourth conventional wisdom has it that conventional schools are healthier. Yet we found that at Turkey Foot attendance was better in sun lit classrooms. Additionally, staying in the sun makes us healthier, both mentally and physically.

Another powerful example of sustainable development is in how Gary Watrous AIA redesigned an unlivable third floor, 600 square foot attic apartment in a Victorian home in Louisville's historic Highlands area. Watrous used higher than normal insulation materials, ripped off the low ceiling creating an upside down V shape so hot air could float to the top, expanded the air duct release system, used red brick and reflective roofing materials that don't absorb heat, put in sky lights facing the South, and preserved the 100 year old trees that also faced the South. The result was a testament to passive solar, and the energy costs have averaged \$29 a month over the past five years, compared to neighboring, similarly sized locations with gas and electric bills of \$158 a month. A key factor was old growth trees that protected the apartment from the hot summer sun and allowed the sun to warm the house in the winter. Watrous, who has won numerous regional awards for his leadership in sustainable design, called this his best example of using passive solar to reduce energy costs. He also advocates for the use of modern skylights in other designs but they were unnecessary because of the dramatic tree shade.

Unfortunately, a great deal of passive solar benefit is already forgone as the construction at River's Edge nears completion. Designing for utilization of the sun in a passive manner has tremendous benefits and paybacks over the life cycle of the housing unit. All that is required is a devoted planning team during the design phase that should work toward future development. Cities, through their policing power in zoning, have the legal capacity to dictate that all new development is solar-oriented, and the city gets to define "solar-oriented development." The power and effect of such a policy is that it enables residents to save money on energy bills, but most importantly, it also mobilizes a person in their ability to harness the solar resource for the future. That is, a development that is not solar-oriented cannot be retrofitted to become solar oriented without demolition. Retrofits for expanded window surface area can be accomplished, but the



The gazebo at River's Edge provides beautiful landscaping and a space for social interaction.

baseline of the structure cannot be shifted to increase its sun-angle. If the City required solar-oriented developments, it would eliminate the need and burden of “policing” sustainability design elements from designers’ shoulders. It is consistent with HAC’s broader interests to advocate for solar orientation policy for housing.

Active solar is a different ballgame. It is fair that HAC has valued the benefits of energy savings in favor of Energy Star appliances and against, for example, solar photovoltaic (PV) installation. Solar PV’s are not cheap, but HAC has managed to install PV’s on the main Community Building which is a good demonstration of how several rooms can be taken off the grid with solar panels. Prices for PV installation have fallen significantly over the past several years and are now a viable option for long-term financial and energy savings. HAC expects

significant energy savings because of Energy Star products; still, savings could be extended in the long term with complete installation of solar PV’s – especially because Kentucky permits net metering (getting paid for excess energy sent to the grid).

Landscaping: Creating a Healthy and Vibrant Community

The original Jacob Price Homes development had no landscaping other than turf and several trees on the property. Landscaping is another critical component of creating a vibrant community. Landscaping serves to attract native wildlife, beautify neighborhoods, raise property values, and encourages residents to interact with their environment by drawing them outdoors.

Research indicates that landscaping improves the health and wellbeing of people when properly executed. A report titled *Public Health and Landscape: Creating Healthy Places* by Robert Wood Johnson Foundation (<http://www.commissionhealth.org>) explores the dimensions in which landscaping has a positive impact on health and community life. In five principles, they state that *Healthy Places*:

Improve air, water, and soil quality, incorporating measures that help us adapt to, and where possible, mitigate climate change.

Help overcome health inequalities and promote healthy lifestyles.

Make people feel comfortable and at ease, increasing social interaction and reducing antisocial behavior, isolation, and stress.

Optimize opportunities for working, learning, and development.



The park-like atmosphere of River's Edge encourages outdoor play and social gathering.

Are restorative, uplifting, and healing for both physical and mental health conditions.

HAC and the developers have included landscaping into the comprehensive development design. Before construction began the site had to be clear-cut due to site-grade issues. The presence of trees is principal to sustainable development for several reasons, and to mitigate the loss of the existing trees, new trees are being planted along sidewalks, roads, and around the new buildings. The trees will improve soil and water quality, decrease air pollution, provide added drainage, cool the surrounding area (thereby reducing energy bills spent for air conditioning), provide outside shade, minimize the heat island effect, encourage walking and biking during the summer months, and increase property values in surrounding neighborhoods.

The River's Edge landscape plan calls for the planting of non-invasive, drought-tolerant plants and the creation of green spaces for resident use and enjoyment. Drought-tolerant plants are a good choice for landscaping because they require less water, are more resistant to pests and disease (cutting down on the use of herbicides and pesticides), and in general require less maintenance than non-drought-tolerant plants. Drip-irrigation will be used on less water-intensive plantings to conserve water.

At River's Edge, the landscape design will be park-like, with benches, a gazebo, a playground, and outdoor grills. These social spaces will encourage physical activity and social interaction between residents and provide a safe place for children to play. Green spaces will encourage residents to explore their surroundings and interact with each other.

Landscaping is often overlooked as a component in creating vibrant communities; however, it is one of the most cost-effective methods of enhancing the value of homes and improving quality of life. In this regard, the River's Edge development demonstrates a strong commitment to creating a beautiful neighborhood that will provide economic, environmental, and social benefits.

Sustainable Drainage Systems

Many parking lots and roadways are designed with useful gutters and storm drains to manage rainwater runoff, but this method of storm water control also has many downsides. Rainwater mixes with various harmful chemicals and pollutants, carrying them into sewers. When sewers overflow into streams and rivers the pollutants contaminate waterways. A more sustainable option is directing drainage toward quasi-natural features (e.g. bioswales, rain gardens, and rainwater cisterns). Rainwater runoff collected in bioswales and rain gardens infiltrates the soil, recharging groundwater and removing pollutants, and rainwater captured in cisterns can be used for irrigation of the landscape. Bioswales were recommended in the baseline report along with rain barrels for sustainable drainage systems.

A garden located at River's Edge would have provided physical activity suitable for all ages and allowed residents to socialize. There is evidence that suggests community gardens yield more than just fruits and vegetables. Research conducted by the Colorado School of Public Health and Denver Urban Gardens indicates that those who garden tend to be healthier and are involved in more social activities. Community gardens also stimulate citizen engagement. Workshops would allow residents to not only learn how to grow their own food but prepare delicious and healthy dishes using it. We encourage HAC and the developers to recreate the old garden that was nearby in the park.

Additional Recommendations & Insights

There are not enough examples of affordable, energy-efficient housing developments in Middle America that are not car dependent. River's Edge might be one example of housing that is sustainable, not only because it

is energy efficient and affordable, but also because where it is located—near downtowns and transit modes. As a model for affordable and sustainable housing, River’s Edge has many positive qualities. Still, there is room for improvement that would help to reverse the stigma of public housing.



Using light colored roofing could have made this development more energy efficient.

Environmentally preferred products. For all future construction/renovations, we urge the use of environmentally preferred products that reduce the developer’s carbon footprint. These include locally manufactured, low emission, and environmentally friendly products/materials. Granite, for example, is often used in housing development projects; however, its use is controversial because of the horrific conditions in which child labor is allegedly utilized. Countertops are developed here in the USA and, like granite, made in Indiana and New York. We learned that HAC urged the builder to buy products within 500 miles of Covington, such as LEED cabinets, paints, carpet, and flooring; 20% of the cabinets were recycled with mandates of little or no formaldehyde in the new cabinets. Carpeting was green label.

Rooftop gardens could have been incorporated into the design as well. Not only are landscaped rooftops attractive, they are sustainable in terms of filtering storm water and temperature control. Traditional roofing material, whether light or dark, absorbs and radiates energy, contributing to an urban “heat island” and increasing energy costs via air conditioners. Constantly running air conditioners also contribute to the “heat island” effect. Rooftop gardens are appealing to all income groups, which is important when competing against other middle-income developments. Given the design of the Hope VI development, it would have been impractical to install a rooftop garden; however, we hope that the garden that was across the street in the park by the river will be replanted.

Dog parks contribute to sustainable neighborhoods via aesthetics, safety, and increasing property values. They also present a welcoming environment for dogs, which could be important for health as it has been shown that dogs, as companions, correlate with decreasing blood pressures. The presence of dogs can also decrease crime and robbery. Dog parks also appeal to residents who want to stay for longer periods of time – a key element of sustainability. The developers should be encouraged to create a dog park next to the vegetable garden on the edge of the River’s Edge at Eastside Pointe community. Dog parks are highly popular with moderate and middle-income tenants living in multi-family housing.

Areas for improvement not addressed by LEED or Developers:

Reflective surfaces. Dark-colored materials absorb more heat than light-colored materials and release it throughout the night, contributing to the urban heat island effect and higher energy costs. By changing dark-colored shingles to light-colored shingles on roofs and using light-colored materials for sidewalks, parking lots, and roadways, more sunlight is reflected back, reducing temperatures in the surrounding area and lowering air conditioning costs during the summer. Several experts (including the co-author of this report) have found that it can lead to a 20% reduction in energy costs, including Kentucky’s leading green designer and the author’s paid architecture consultant Gary Watrous AIA.

Wagner (2008:11) argues that: “Black shingles reflect only about 5% of the sun’s heat whereas gray shingles reflect back about 20% and white shingles around 25%. Black roofs get about 9 degrees hotter than white roofs. The EPA has found that just changing the color of a roof can reduce cooling costs by 10 to 30% and hot roofs actually drive up the amount of pollution created when electricity is generated to power those air-conditioning units.” Yet LEED only gives one point towards certification for light-colored roofing, and River’s Edge has black roof shingles instead of the recommended white shingles. Black tiles encourage energy waste (Wagner, 2008; McKay and Bonnin, 2009).

Permeable surfaces. Instead of asphalt parking lots, we urge the developers to use porous concrete for all paving. Not only is it permeable (allowing storm water to seep through it), but it also has a high albedo (solar reflectance level), reducing the urban heat island effect (Wagner, 2008: 189).

Beautiful buildings are rarely demolished. They are preserved and reused and transformed into different uses, and their beauty holds value in the community. However, if buildings are ugly, dirty, and look like prisons, then they will likely have a short life. Building demolition is a waste of resources and not an example of a sustainable community. River’s Edge is by all measures beautiful, strong, and fits the fabric of the community with its use of brick, greenery, and stone.

Protected and artistic bike racks. Weather-protected bike racks should be installed, with an optional surveillance camera to deter thieves. Promoting biking for recreation and transportation will make River’s Edge a more vibrant, healthy community.

Protected bike lanes. Bike lanes should be created with a formal barrier between the rider and traffic. This will make biking safer in the Eastside Neighborhood and promote the community as not only walkable but bikeable, too. Bike parking will make the unit more attractive to tenants. LEED again gives nearly zero credits for this.

Roof rainwater management. We had recommended that roof guttering be redirected from sewers to the vegetation and community garden. We also recommended rain barrels for the development. This was not done.

Reducing Heat Costs with Fans. Fans are known to reduce the temperatures in a room by five degrees and increase temperatures by two degrees during winter according to Lexington, Kentucky’s Big Ass Fans, whose name says it all.

Tall Ceilings. In the South, before air conditioning was used, fans, transoms, and high ceilings were installed to lower temperatures in homes, with the coolest rooms being on the first floor. In conjunction with fans reducing energy use, tall ceilings (nine foot minimum) help reduce room temperatures. Warm air rises and keeps lower areas cooler, thus also reinforcing less energy use. LEED is neutral on ceiling height, but tall ceilings are a proven way of lowering energy costs in the South according to sustainable architect Gary Watrous. High ceilings also give an upscale look and are consistent with a culture of the South. It is not a written rule but something developers were asked to do to fit with the historic legacy of the neighborhood.

Three Story Face of the Building Lining the Sidewalk/Street. We disagree with some officials, including the former Police Chief of Covington, who wanted the front of the building to be pushed back to accommodate a large parking lot facing the street. New urbanist design principles show that having buildings near the street creates a better sense of community (Gilderbloom, 2008). Crime prevention through environmental design shows that there will likely be less loitering, crime, and vice because of the absence of a parking lot. LEED-ND provides points for building frontage that is adjacent and facing

the street. This is good new-urbanism practice. Some balconies and porches have been included in the development but we would like to have seen balconies in all of the above ground units and private patios in the first floor units. In Amsterdam, the policy is that every new unit built must provide a balcony because of its many benefits. Balconies would have made River's Edge more attractive to moderate and middle-income renters. There are several reasons for this that are important: (1) it helps reduce crime by having people on a porch to observe what is going on in the setting; (2) it provides a space for crafts, art, hobbies, painting, gardening, bike storage, and growing plants; (3) it creates additional space that does not require additional energy usage; and (4) it creates greater socialization among residents and a feeling of oneness. Many high-end apartment units have found a high consumer demand for balcony space. We are pleased to note that some units at Rivers Edge at Eastside Pointe include porches, decks, and Juliet balconies.

Traffic Calming. Traffic calming designs such as two-way streets, bike lanes, and tree planting have been shown to reduce crime, increase business, increase housing values, and decrease housing foreclosure as we later document (see Louisville case study; Gilderbloom et. al., 2014). Slower traffic likewise increases walkability and pedestrian traffic, which facilitates a prosperous business environment. Both the Mayor and the police chief of Covington support traffic calming because it reduces crime. A key to green residential community development is turning multi-lane one-way streets into two-way streets with bike lanes and narrower traffic lanes. Community participation in this effort is also key. One unanticipated finding was that contrary to the conventional claim made by traffic engineers, traffic counts increased in the streets that were calmed. This is because of a perception that it was a safer, more pleasant drive. Two-way streets can mean more businesses and thus more customers for morning, afternoon, and evening commutes. But is this old historic neighborhood the exception or the rule? This new study expands our research by looking not just at one neighborhood but 190 of them in the same midsize city of the original study and we more fully measure traffic calming approaches such as lower speed limits, speed bumps, walkability, bike lanes, and narrower streets which can positively impact urban living.

Sustainable Neighborhoods: Complete Streets and Neighborhoods for All

The City should build or improve sidewalks within and around the perimeter of the development to ensure easy pedestrian access to surrounding employment and educational, cultural, and recreational amenities. Also, the city should add bicycle lanes to make it easier for those who own bikes to use them for commuting to work or school. Project funds were used to replace sidewalks around the building.

A growing body of work shows that walkable neighborhoods have intrinsic economic value by encouraging economic transactions and social exchanges (Gilderbloom, 2008) and bolstering real estate property values (Cortright, 2009, 2007), in addition to promoting health benefits (Gilderbloom et. al, 2014; Gilderbloom, 2015). A new and useful tool for determining walkability is Walk Score. "Walk Score measures walkability based on distances to nearby restaurants, grocery stores, and other amenities, plus other analyses of pedestrian friendliness" (Cortright, 2009). Although street quality variables are important to consider, the Walk Score methodology does not take these variables into account. River's Edge at Eastside Pointe (1044 Greenup St.) has a Walk Score of 77, meaning it is Very Walkable, and that most errands can be accomplished on foot.



ADA compliant, tree-lined sidewalks provide continuous connectivity in the River's Edge community.

Additionally, River's Edge has a Transit Score of 48, which means it has some transit, and that there are a few nearby public transportation options. In contrast, the walk score and transit score at City Heights are rated as non-walkable.

A walkable area has a greater potential for spillover effects, especially as it relates to economic transactions and housing values. Recent surveys by the National Realtor Association have discovered the desire for neighborhoods that are conducive for walking have trumped traditional housing preferences. Furthermore, neighborhoods that are considered walkable encourage more economic transactions. Individuals that use alternative modes of transit are more likely to spend more money on groceries, eating at restaurants, and shopping per month than those who use automobiles. In contrast, users of alternative transportation modes tend to spend less per trip.

River's Edge will incorporate the following pedestrian-friendly features, which we expect will bolster its Walk Score. These design features will encourage residents to walk, creating a pedestrian-oriented community.

- Continuous sidewalks linking apartments with amenity areas

- Buffer zones between sidewalks and the street (i.e., grass and trees)

- Trees and other landscaping to provide shade and visual interest

- Sitting areas and levee sidewalks to encourage older residents to walk

Sidewalks will have curb cuts and safer crosswalk designs, which are American Disabilities Act (ADA) compliant (Gilderbloom, 2008). Another option that allows residents to live car-free is public transportation. Transit availability at River's Edge will allow residents to choose between walking, biking, and riding the local bus. The Transit Authority of Northern Kentucky (TANK) indicates that all their buses are wheelchair accessible, which ensures all residents of River's Edge have the option of using public transit. Inclement weather affects the use of modes of transportation; bike riders and walkers will tend to use public transit more, while drivers will tend to use it less, during inclement weather. Covered bus stops can help retain riders that might drive otherwise, and capture bike riders and walkers as well. Currently, it is not clear whether a covered bus stop will be provided for residents of River's Edge.

With the recently funded Licking River Greenway & Trails running through the Eastside Neighborhood just a short walk away, there is a great need for bike friendly parking facilities at River's Edge. Not only is biking a healthy form of recreation, it is also a viable means of transportation. Residents of bike-friendly neighborhoods could potentially save up to \$4,000 to \$8,000 per year by ditching their cars and commuting by bike. For the poor, the cost of owning and operating a car can average around 20% of a household budget. The American Automobile Association estimates that the average cost per year of operating a car averages \$8,000 when you factor in car payments, repairs, maintenance, insurance, and gas (see Gilderbloom et. al, 2015b). Tenants who use active transportation (biking, walking, bus and bus transit) will spend more money on the local neighborhood economy (Gilderbloom et. al, 2015b). Recent U.S. Census reports show that low income persons ride bikes more than any other income group, 2015).

Some argue that bike riders should use sidewalks in the absence of dedicated bike lanes and other bike infrastructures; however, the motorist poses the most threat to bike riders. The risk of fatality increases as motorist speed increases, rising to 80% at speeds of 40mph (Pucher and Dijkstra, 2003; Pucher and Buehler, 2012; Pucher et. al. 1999). Simply put, bike riders need the safety of bike lanes. By providing appropriate bicycle facilities, River's Edge can market itself as a bike-friendly community, encourage more residents to ride their bikes, and promote the health of their residents.

Designing Homes for the Elderly and Disabled

Livable communities are those that consider and address the basic needs of all people in the city. Planning for the needs of the future is at the crux of the concept of sustainability. Yet LEED is weak in addressing the needs of all people, including the elderly or disabled. This is generally applied to the needs of future generations, but it is highly relevant to the elderly and disabled. Thus, sustainability in physical design must convey a welcoming environment for the gamut of social groups. Both the elderly and disabled require basic infrastructures (e.g. ramps, railings, access to cabinets/closets, additional bathroom and kitchen space, etc.), that, when not available, can deter participation in employment, health care, shopping, and social and recreational activities (Gilderbloom, 2008). The majority of the elderly and disabled require grab bars and ramps in their homes to assist with mobility—it is predicted that by the time a person reaches the age of 85, 75% will require these basic structural requirements (Gilderbloom, 2008). It is important to note that elderly- and disabled-infrastructure requirements extend beyond HAC's jurisdiction. The City of Covington should ensure a safe environment by improving transportation-related infrastructure (e.g. sidewalks, curb-cuts, and bus shelters) in line with the Access Board's Right of Way guidelines for the disabled as well as planned zoning policies that locate parks, recreational areas, shopping, and employment options in proximity to elderly and disabled residences. Such policies, in turn, result in safer environments concerning violent crime—while the elderly and disabled may not be at greater risk for violent crime, they self-perceive the inability to react effectively, which hinders their contribution to society and the economy (Gilderbloom, 2008).

Architectural and Location Needs

“Aging in place” is a senior movement to create and design housing for seniors so they can live out their lives in a familiar setting filled with family, neighbors, and medical personnel (Cisneros et. al., 2012). The phrase refers to living where you have lived for years, not typically in a health care environment or nursing home, and using products, services, and conveniences that allow you to remain in your home as your circumstances change. In other words, “You continue to live in the home of your choice safely and independently as you age” (Gilderbloom, 2008, quoted from Aging in Place, 2014; Cisneros et. al., 2012). Forcing people to move out of their homes because of a developing condition of one kind or another can create physical and mental stress. Experts have long agreed that a person who is forced to move from his or her neighborhood can undergo considerable psychological stress from the loss of community or reference groups. Depression is correlated with sudden shifts or changes in social support networks, and this may be particularly true for lower-income groups.

Place matters. But place is not just about location in a city or a neighborhood. Place is also about the kind of housing in which we live and how it shapes us as people. At River's Edge, six of 120 units will be built to the Uniform Federal Accessibility Standards (UFAS) and three will be built to suit the visually impaired. Additionally, all ground-floor units (roughly 50 units) will meet the requirements of the Fair Housing Act. The UFAS-compliant homes will have grab bars installed, elevated toilets, lowered kitchen and bathroom cabinets, and areas for wheelchairs to move under countertops. All other ground-floor units have blocking installed for any prospective resident that may require elderly and disabled infrastructure installation in future years. Overall, portions of the development are adequately suited for disabled and elderly residents. Ready-to-install infrastructure is a critical component for all ground floor units. Until the development is complete, we are unable to fully evaluate the environment for elderly and disabled residents.

Mayor Carran of Covington told us the low number of disabled units at River's Edge disappointed her and we agree. We recommend that 10% (not 5%) of the units be made accessible, and senior units should all be designed with grab bars, elevated toilets, lower cabinets and ramps so residents can age in place. Six units are designed for disabled residents; this includes extra space and railing for wheel chairs. All seniors will eventually need bars and ramps to move around in their housing. Moreover, physical disabilities increase with age, and more so among low-income persons. There is a great need for independent living homes given the demographic surge of baby boomers with health issues such as diabetes. All the senior/disabled units and first floor units are accessible without steps and code compliant.

A substantial number of elderly and disabled persons require architectural modifications in their homes (Gilderbloom, 2008). The needs of the elderly and disabled can be estimated by looking at a major study conducted by Gilderbloom (2008) in Houston. In a study of 1,650 Houston residents, roughly one-third of seniors and more than one half of the disabled needed grab bars in their homes. At least twenty percent of the elderly and disabled wanted ramps placed in their homes. Not surprisingly, the desire for ramps and rails increases with age and severity of disability. The desire for ramps and rails will double as elders move between the 60-65-age group and the 75 years and older category. Our research found that for seniors over the age of 75, almost one out of three desired ramps and over one-half wanted rails. For persons with severe disabling conditions, one-third needed rails and two-fifths required ramps.

Inaccessible cabinets, closets, and bathtubs further amplify the problem of architectural barriers within the household. Even with the provision of stools, one out of three disabled and one out of seven elderly were unable to use cabinets and closets within their homes. Bathtub grab bars are installed in the six handicap-accessible units, but the tub itself is difficult to get in and out with the standard height of the tub.

One out of every twenty residents had a disabling condition. One out of every ten residents in Houston and elsewhere require special architectural modifications in their homes to enable them to have complete access to all parts of their home (Gilderbloom, 2008). Close to one-third of the disabled, and fifteen percent of the elderly, could not use cabinets and closets in their own homes. Outside of the home, substantial transportation and environmental barriers often prevented the disabled and elderly from participating in the economic and social life of the community (Gilderbloom, 2008).

When away from their residences, the elderly and disabled desire certain amenities that foster greater mobility. Over three-fourths of the elderly and disabled have indicated that the presence of sidewalks and a first floor location were important. Persons with a severe disability strongly desire a first floor location. Location is a major issue for elderly and disabled persons when considering a residential move. In general, our research indicated that a significant number of disabled and elderly persons want the amenities found inside the city. Close to one-half wanted to be located near Metro bus stops and over three-fourths wanted to be near medical services. The desire to be close to medical facilities increases with age and severity of disability. Eighty percent wanted to be near shopping areas. Two-fifths of the disabled and one third of the elderly indicated that being close to work and near a public park were important in their decision to choose a residence. A final important factor for more than eight out of every ten persons interviewed was proximity to family.

Indoor Air Quality: The Issue of Tobacco Smoke

This Fall, the United States Department of Housing and Urban Development proposed that all public housing will be smoke free by 2016. Covington passed such a ban in July 2014. This was done for health, liability, and maintenance reasons. HAC's public housing apartments were evaluated by John Hopkins University; they found that many apartments had dangerous and deadly carcinogens from first, second, and third hand

smoke. The high rates of smoking in Kentucky are part of the reason why Kentucky, according to the Center for Disease Control, has one of the shortest lifespans in the nation (see Gilderbloom and Squires, 2014). Initially, there was a push for a no smoking policy at River's Edge. Unfortunately, after a lot of uncertainty we have learned that the property management group at River's Edge will not ban smoking. HAC does not own River's Edge; rather, Integral Property Management (IPM) has the final decision, and a no smoking policy is not a part of their business model. While HAC is striving for sustainability in design, this single variable that the developers control may hurt the chances of River's Edge at Eastside Pointe from receiving any LEED certification. LEED 2008 certification has no requirement of smoke free buildings, but this requirement was added in later versions. In contrast, HAC has instituted a smoke free policy in all of their rental properties in compliance with the Northern Kentucky Department of Health's position on indoor smoking.

Because tobacco smoke causes serious illness and death, it affects more people than just the smoker; it also negatively affects current neighbors and future tenants, especially young children and the elderly. Studies in 2004 by the Urban Institute estimated that 25% of HOPE VI households (double the national estimate) had children with asthma. Again, having more than 9% of adults with asthma, Kentucky is among the top ranking states with a high adult asthma population (Northern Kentucky Department of Public Health, 2013).

Our prior survey found that Jacob Price residents were against restrictions on indoor smoking; however, we believe it would be a prudent decision for IPM to eliminate smoking indoors and outside in public spaces. The dangers of smoking have been well documented for decades, but a large body of research has also concluded that second-hand smoke exposure diminishes the health of non-smoking adults and children. It has been proven that smoke and its harmful effects can travel through floors, ceiling, and walls, causing additional health hazards. In addition, emerging research on the residue of tobacco smoke that lingers in a room long after smoking has occurred indicates an additional health hazard known as third-hand smoke. Walls, ceilings, and carpets absorb the harmful particulate matter from cigarette smoke and chemical compounds are created that continue to emit dangerous toxins even when smoking has stopped. Further, there is evidence that when smoking occurs indoors, it decreases the value of the home. Eliminating smoking in the development would also decrease the risk of fires and fire-related deaths and injuries since cigarettes are the number one cause of house fires.

A recent Harvard study, which examined 49 low-income multi-unit residences, detected nicotine in 89% of non-smoking homes studied (Schoenmarklin, 2010). The article also concludes that eliminating smoking in public housing units positively impacts the bottom line. Smoking is the leading cause of fires in multi-unit housing and these fires kill more people than any other type of fire. Additionally, prohibiting smoking indoors saves on cleaning and maintenance costs, and helps Integral Property Management (IPM) save money for other projects that can improve living conditions for their tenants.

Another study conducted by UCLA estimates that California Apartment Association members (n= 343) could save up to \$18 million a year if they were to ban smoking on their properties (Rivero, 2011). In closing, Schoenmarklin (2010) states, "We owe our elderly, our children, and those with chronic illness a safe shelter that does not include secondhand tobacco smoke. When we adopt a smoke-free policy, we have a rare opportunity to do what is right while saving money and preventing lawsuits." It is not only legal to prohibit smoking in public and HUD-assisted housing, but it also protects against lawsuits from tenants exposed to secondhand smoke or harmed or killed by fires caused by smokers.

In short, tobacco smoke is a known health hazard and is detrimental to the wellbeing of both smokers and non-smokers. By enacting a smoke-free policy, a positive difference can be made for residents' health and the developer's bottom line at River's Edge. We recommend that the Mayor and City Council consider an ordinance that bans smoking in housing developments of at least 100 units or more.



Jobs Created by Housing Investment in Covington: The Impact Analysis for Planning (IMPLAN) System

Covington is in a position to see large increases in employment from HOPE VI and other investments in the Eastside neighborhood. Over the past twenty years, there have been dramatic improvements in predicting jobs created by investment. In the past, these estimates did not include indirect and induced job creation. The job estimator was based on limited citywide census data and was not developed using zip codes that generated more accurate numbers. IMPLAN (2012) is the standard statistical package used by HUD, EPA and National Parks.

One of the widely used analytical methods, Input-Output Analysis is a part of a larger group of methods known as Social Accounting Models. This analysis builds a model of existing interdependencies in a regional or national economy—where output of one industry becomes input of other industries—in order to estimate economic multipliers. These multipliers can then be used to forecast economic impact of an individual project or policy over the broader economy. The modeling system for Input-Output Analysis used in this study is IMPLAN, which was originally developed for the U.S. Forest Service. It was later privatized under the Minnesota IMPLAN Group (MIG) and was further expanded through a partnership with the University of Minnesota.

The IMPLAN system is now considered state-of-the-art in estimating job creation from investments and is used by a number of agencies and institutions. A range of published academic studies has used IMPLAN as a measurement system, (see Hanka, et. al. 2015b) illustrating that it is an accepted measurement tool. However, it is rarely used in any HOPE VI studies (Hanka et. al. 2015b). Gilderbloom et al. (2015b) provides a critical discussion on the use of IMPLAN for Input-Output analysis and compares the results produced by IMPLAN with other studies. IMPLAN multipliers are, as expected, sensitive to geographical scale of analysis and are also generally consistent with estimates produced by other related methods.

In their comparison of IMPLAN with other Input-Output modeling systems, Rickman and Schwer (1995) found IMPLAN multipliers to be consistent with the ones estimated by other systems. As a result of these and many similar studies, IMPLAN is considered one of the preeminent platforms to conduct fiscal and economic impact analyses for a wide range of projects and programs.

However, there are also some limitations to the IMPLAN system. As it relies on Input-Output modeling, areas such as rural counties—with much smaller economic diversity and export base compared to urban areas—may not be suitable for IMPLAN analysis (Gilderbloom, 2015; Hanka et. al, 2015b). For urban areas, however, it continues to be widely used to evaluate fiscal and economic impacts of various projects and programs on municipalities and metropolitan regions.

We have tested the IMPLAN system ourselves to determine its accuracy. We used the IMPLAN's direct job estimates and compared it with the actual number of persons hired in a development. We used a development in Louisville and found that it was within one or two workers of accuracy (Gilderbloom and Mears, 2013). This helps to demonstrate the accuracy and precision of this system (Clinch, 2011). IMPLAN offers two types of data: countywide and zip code based. Although the countywide data is known to be accurate, the zip code-based data set provides finer granularity, which is better suited for our analysis.

According to City of Covington officials, there has been an estimated \$42 million invested directly in Covington for new construction and building renovations for government buildings, libraries, private renewal

efforts, HAC maintenance, and HOPE VI. Using this estimate, we were able to create an analysis to predict the number of jobs that will be created from the construction in the area of interest (see Table 1 below). It is estimated that the direct effect from the project will produce 242 jobs (a labor income of roughly \$20 million) in addition to the approximately \$22 million in value to the City’s industries, resulting in a total output of almost \$42 million.

Table 1. Estimated construction investment in Covington

	Total Employment	Total Labor Income	Total Value Added	Output
Direct Effect	242	\$19,792,734	\$22,166,145	\$41,958,879
Indirect Effect	43	\$1,860,109	\$2,689,081	\$4,549,190
Induced Effect	95	\$3,497,138	\$7,012,945	\$10,510,083
Total Effect	380	\$25,149,981	\$31,868,171	\$57,018,152

The indirect effect from the project will lead to the production of 43 jobs and the generation of \$1.86 million in labor income. Also, Covington’s industries will gain approximately \$2.7 million in value and an output of roughly \$4.5 million. The induced effect will increase jobs by 95, spawn an additional \$3.5 million in labor income, add approximately \$7 million in value, and have an output of approximately \$10.5 million. Overall the project will add 380 jobs to the city, generate approximately \$25.1 million in labor income, and add approximately \$31.9 million dollars of value to Covington and its industries, with an overall output of approximately \$57 million (Hanka, 2015b).

Table 2 identifies the ten industries that will experience the largest increase in job growth from the HOPE VI program in Covington. Other industries will still see growth; however, our goal is to highlight the effects in the ten industries expected to see the most growth. The direct effect of the \$42 million investment into the Covington project can be seen through potential job growth in the local economy. This growth includes 125 jobs in construction of new residential structures and 116 in maintenance and repair of existing residential structures. The creation of employment opportunities in these two industries equates to the 242 new jobs in Covington. These jobs are a direct result of the initiative to build, renovate, and revitalize the city.

Through creation of these jobs, the residential construction industry would experience a roughly \$8 million increase in labor income, and the maintenance industry would see an \$11 million increase – totaling the estimated \$19 million increase in labor income as a direct effect. The total value added for each of these industries, roughly \$10 million and \$12 million respectively, equal the \$22 million projection of total value added to Covington’s industries.

The remaining eight industries represented in Table 2 will see job growth as a result of the indirect and induced effect of the program. Food services and drinking establishments will see the largest increase out of the seven remaining categories, with the creation of 16 new jobs, \$328,633 in labor income, and almost \$485,000 added to the local industry. The next largest increase in job growth would be in retail stores that sell food and beverages. It is estimated to increase its employment by 11, amplify the labor income by over \$283,000, and add over \$402,000 in value to the industry. Real estate establishments should experience an increase of 10 workers, which will add over \$124,000 to the labor income and increase the value of the industry by approximately \$756 million.

Table 2. Top Ten Industries for Employment in Covington

Sector	Description	Total Employment (number of Jobs)	Total Labor Income	Total Value Added
37	Construction of new residential permanent site/ single multiple structures	125.3	\$8,669, 818	\$10,048,560
40	Maintenance and repair construction of residential structures	116.5	\$11,147,734	\$12,144,622
413	Food service and drinking establishments	15.8	\$328,633	\$484,937
324	Retail Stores: Food and Beverage	10.8	\$283,211	\$402,391
360	Real estate establishments	10.3	\$124,297	\$756,438
320	Retail Stores: Motor Vehicle and Parts	6.4	\$339,582	\$372,378
331	Retail Stores: Direct and Electronic Sales	6.3	\$91,210	\$153,357
398	Nursing and Residential Care Facilities	5	\$173,014	\$200,196
369	Architectural, engineering and related services	4.9	\$300,583	\$305,898
397	Private Hospitals	4.6	\$316,205	\$341,247

Furthermore, retail for motor vehicles and parts is expected to add six positions, increasing labor income by \$339,582, while adding \$372,378 to the value of the industry. Retail stores for electronics will increase their employment by six, causing labor income to increase by \$91,210 for this sector, adding over \$153,000 in value to the industry. Nursing and residential care facilities are expected to experience an increase of five employees and labor income for this sector will increase by approximately \$173,000. The value added to this sector is \$200,000.

Architectural, engineering, and related services are expected to see an increase in employment by five, with around \$300,000 added to the industry's labor income, and it will experience an increase in value of almost \$306,000. Finally, private hospitals are expected to experience an increase of five employees, and labor income for this sector will increase by approximately \$316,000. The value added to the sector is more than \$341,000.

The same multiplier can be used to estimate the number of direct and indirect jobs created via the \$19 million dollars in construction of Hope VI in Covington. The cost of construction only with HOPE VI in Covington results in 323 direct and indirect jobs. Most of the jobs created as a result of the HOPE VI will go to individuals who have an education attainment of a high school diploma or less -- nearly 81% (Clinch, 2011). Roughly half of these jobs will have retirement benefits. Two-thirds of the jobs created will teach employees skills for job training. Roughly 20% of the jobs will go to people with college diplomas (Clinch, 2011; Gilderbloom and Meares, 2013). In addition to neglecting to include job multipliers in HOPE VI evaluations, evaluators also often fail to look at the one group who gets the jobs: individuals without a high school diploma, who have one of the highest unemployment rates for any group.

State and local taxes from the project will total more than \$1.7 million in additional revenue for the city of Covington. The largest gains in tax revenue would come from the indirect business tax (approximately \$927,000), followed by approximately \$757,000 in tax revenue from newly created households (income tax, motor vehicle licenses, property taxes, etc.), and \$76,000 in revenue from corporate taxes.

Although we calculate the estimated effect from the initial investment of \$42 million into the Covington development, we expect that more money will be invested into the community, specifically from existing homeowners and existing business owners who will be inspired by the revitalization and the cleanup of the neighborhood to improve their properties. It is expected that new businesses will be drawn to the revitalized neighborhood, which also creates more jobs and cycles more money through the local economy. Our research also shows that community development investment creates twice the number of jobs than expanding a freeway (7 jobs per million) or investing in an automobile plant (5 jobs per million) (see Hanka et al., 2015b).

HOPE VI has been one of the factors in generating several hundred jobs in Covington. Despite the vast literature concerning HOPE VI over the past 20 years, no study has attempted to document the impact of the HOPE VI development on job creation and its potential economic impact on the community. This study is a unique contribution to the literature on renewing neighborhoods with jobs while providing attractive and affordable housing that makes downtown living sustainable. Further research should be undertaken to analyze the leveraging effects of federal government intervention programs like HOPE VI. Additionally, small cities should be encouraged by the success of Covington to seek federal program funding and use that funding to leverage other private investments to improve the housing of the city and create needed jobs for poorly educated persons with high unemployment.



Conclusion

There is much to learn from the success of HOPE VI in Covington, which was awarded a competitive federal grant to show a functional and sustainable model for housing and community development in the 21st century. How do we create stable and energy efficient neighborhoods to meet the challenge of climate change? First, reduce energy costs by adopting LEED building principles that are located in walkable downtown neighborhoods. Walkability reduces car dependency for residents and provides active transportation infrastructure options for walking, biking, and bus usage. Tree lined streets with sidewalks and bike lanes/paths also encourage active transportation. River's Edge at Eastside Pointe is far ahead of most other HOPE VI developments, which are car-dependent and located far away from higher education, jobs, bus networks, and bike lanes.

In an era of global warming, building, sighting, and designing sustainable, affordable homes works to the advantage of residents, neighborhoods, cities, and the world. The U.S. has only a limited number of multi-family housing communities that are affordable, environmentally friendly, and energy efficient. Covington, Kentucky's HOPE VI development provides one of the best examples to date on how to design energy efficient, affordable developments - both inside the home as well as by locating the development in a place that reduces car dependency and encourages walking, biking, and public transit. This report illustrates both the highlights and shortcomings of Covington's HOPE VI green development.

The demolition of the original public housing was wise, because it was dysfunctional and had physical design flaws, environmental toxins, and an overall unsafe environment. In this evaluation, we have illustrated measures to improve the quality of life with green infrastructure by exploring the three environmental/energy programs used in the development: LEED, Enterprise, and Energy Star. While we acknowledge that LEED is a valuable force in teaching sustainable design, we also note its drawbacks by giving marginal credit for "old school," sustainable design. HOPE VI provides a compass for future affordable housing and community.

PART III: SURVEY OF HOPE VI RESIDENTS

One of the federal government's largest housing programs over the past twenty years, the HOPE VI (Housing Opportunities for People Everywhere) program has helped reduce the concentration of poverty, change the physical shape of housing, and provide residents with support services. HOPE VI has leveraged a mixture of government funds and private investment with the goal of revitalizing neighborhoods throughout the country. The sheer magnitude of the program has created an outpouring of research concerning HOPE VI and its effects.

HOPE VI was a program created by the U.S. Department of Housing and Urban Development (HUD) to revitalize severely distressed public housing. Originally known as the Urban Revitalization Demonstration program, HOPE VI was created in 1992 as a response to a report published on August 10, 1992 by the National Commission on Severely Distressed Public Housing. This report demonstrated that approximately 6% of the nation's housing stock (86,000 units) were considered severely distressed.

The HOPE VI program has four important objectives: 1) change the physical shape of public housing; 2) reduce the concentration of poverty; 3) provide community and support services to HOPE VI program participants; and 4) develop partnerships between public and private agencies and organizations.



An example of one of the single-family homes that will be for purchase.

LITERATURE REVIEW: HOPE VI FAILURE TO MEASURE JOB CREATION

In 2000, the U.S. Department of Housing and Urban Development published its first evaluation report of HOPE VI, which examines the accomplishments of HOPE VI development in eight major U.S. cities. According to this report, HOPE VI fulfilled its main goals and objectives of community building by helping residents achieve self-sufficiency through improving education, job training, and homeownership through case management. Community partnership helped increase the HOPE VI Community and Supportive Services (CSS) program, employment opportunities and income, reduced crime and violence, improving the physical shape of the housing, and increase community policing and crime prevention programs.



Elements like this shared community space increase a resident's sense of place.

Place and geography have enormous impacts on people's success. Where people live plays a significant part in determining whether people become homeowners. Removing public housing residents from their place and location through "scattered-site" housing not only deconcentrates poverty, but it also removes the sense of identity residents have toward the public housing in which they live. Residents have used identity as a way to affirm their attachment to a particular place, and lifestyle. Thus, the demolition of public housing through HOPE VI is seen as an attack on their identity and the displacement from their homes would ultimately disrupt their friendship ties and social networks. On the other hand, scattered-site housing has been found to produce high levels of neighborhood satisfaction among former public housing residents, has reduced fears of crime, provided better employment opportunities for adults, increased educational opportunities for children, increased neighborhood social interaction, and reduced the cost burden of housing.



Summary of HOPE VI Resident Surveys

This evaluation asks residents whether HOPE VI makes a positive difference in their quality of life. Are HOPE VI residents better off compared to residents in traditional public housing? This research finds that critics of HOPE VI are wrong in arguing that HOPE VI hurts residents. This research shows that HOPE VI residents are much happier than those still living in traditional public housing. To better understand how residents of HOPE VI viewed the project, we used survey methodology to gather information from the residents' perspective. Over the course of two months, we attempted to contact every HOPE VI resident to complete a survey about their experience. In addition, we made several field note observations regarding what we observed while in the communities.

HOPE VI Survey Methodology

Measures

We used a 106-item survey divided into nine sections including demographics. These sections included questions about Neighborhood Satisfaction (20 items), Community and Safety (21 items), Community Activity and Involvement (6 items), Available and Affordable Housing (5 items), Technology (6 items), Education (7 items), Health and Fitness (7 items), Green Features (8 items), and Demographics (15 items). The survey took approximately 10 to 15 minutes to complete. Every item, save for demographics, was on a five-point Likert-type scale ranging from Strongly Disagree to Strongly Agree.

Neighborhood Satisfaction

Neighborhood Satisfaction was a 20-item section that began the overall survey. The questions all pertained to perceptions of the neighborhood and asked questions regarding how content the residents were with their neighborhood. These included questions about how much the resident liked living in the neighborhood, their perceived level of pride, and questions about the cleanliness and appearance. The section also included questions about neighborhood accessibility and the presence of nearby employment opportunities.

Community and Safety

This section included 21 items about how the resident perceived their sense of community in their neighborhood and how safe they feel in their homes. The section begins with several questions asking whether the resident has reliable neighbors to help out with basic needs of living (e.g. borrow a car, babysit, etc.). Following these questions, the section asks about the perception of crime and whether residents are comfortable allowing their kids to play outside. Finally, the section asks about lighting, police response, and rules about smoking in the units.

Community Activity and Involvement

This short, 6-item section differed from the previous section by focusing more on how much the resident was involved in community events and agencies, rather than their interaction with their neighbors. It asked questions about whether the HOPE VI project was good for Covington and if the resident voted. It also asked if the resident is a member of a community organization or group and if they have attended community events.

Available and Affordable Housing

This was the fourth section of the survey and included only five questions. It was about perceptions of affordable housing, but included a question about the presence of a community garden.

Technology

Section five of the survey was about technology. It focused on access to a computer and internet, but also asked questions about whether the resident had an email address (it did not ask for one, merely if the resident had one). The section also asked for the resident's perception of their ability to use technology.

Education

This section was for those with school-aged children and asked seven questions about the schools in the community. Residents were asked about the satisfaction with the schools and their involvement in school functions. The section concluded with a couple of questions about early childhood education.

Health and Fitness

The next section focused on health and fitness perceptions over seven questions. Most of the questions asked about the impact of health over the last 30 days or how stress has impacted life in the last 12 months. The section also asks about quality health insurance and a primary health care provider.

Green Features

The final non-demographic section was the 19-item green features part. The section asked questions about bus usage, bicycling, and walking usage in their daily lives. The section asks about utility usage and the impact of the unit on energy consumption. The section includes items about whether components of the community or neighborhood were conducive to reducing energy consumption. For example, residents were asked about their ceiling fan usage or whether natural light is available to their unit.

Demographics

A short demographic section concluded the survey. It included standard questions about age, race/ethnicity, gender, and education. Residents were also asked the number hours worked a week and their estimated monthly income. The section also questions the number of days residents used a car or bike and in which community the resident currently resided. The number of years lived at Jacob Price was asked as was whether or not their rent was subsidized.

Data Collection

Prior to study commencement, the Housing Authority of Covington (HAC) asked the 99 HOPE VI residents if they would participate in an exit survey, with 95 of them giving consent to be contacted. They were divided across several communities: River's Edge, City Heights, Golden Tower, Latonia Terrace, and in scattered sites across Northern Kentucky and Cincinnati. In order to make comparisons, every unit in both City Heights and River's Edge also received a survey to help better understand any differences between communities and impact of HOPE VI activities. HAC and institutional review board approval was obtained prior to commencement of the study.

At River's Edge and City Heights, we left a copy of the survey either in the mailbox or taped on the door of every resident (only the HOPE VI residents were surveyed at Latonia Terrace). The following day, we returned and knocked on every door in an attempt to collect completed surveys. We then returned to each HOPE VI residence at minimum two additional times in an attempt to collect completed surveys. At Golden Tower, surveys were slid underneath the door of each HOPE VI resident with instructions to return the survey to the main office. HOPE VI residents in scattered HAC-run locations were given a phone call and an option to take the survey over the phone.

We made sure every HOPE VI resident, including those at scattered sites, had at a minimum, three points of contact in an attempt to collect a completed survey. Once we made, again at a minimum, three points of attempted contact for every HOPE VI resident, we then requested the help of the social service staff to complete a survey. Because of their rapport, this aided in collecting completed surveys. The case managers gave the surveys to clients that had not returned them to the research team along with an unmarked envelope.

After the resident completed the survey, they were instructed to seal it in the envelope provided. The envelopes were all put into a larger envelope and given to the research team. The case manager reported which resident completed the survey, but because the envelope was blank, they were unable to connect the contents to a resident.

To spur participation, everyone completing a survey received a \$5 gift card to a local grocery store, sponsored by HAC. Further, if the resident chose to, they could complete a detachable form at the end of the survey to be entered into a drawing for a flat-screen television, a phone, and a microwave.



The survey team including Dr. Gilderbloom and Dr. Canfield.

Data Input

Each survey was individually numbered and then entered by hand into a Statistical Processing for Social Sciences v. 23 (SPSS) dataset. The dataset was then checked for accuracy by randomly selecting 20% of the cases and comparing the hard copy survey responses with what was inputted into SPSS. In total, 140 completed surveys were obtained overall and 35 HOPE VI residents returned a completed survey.

Data Analysis

We conducted several data analytic techniques. First, we ran frequency and descriptives to examine the basic nature of the data. Each measure was checked for normalcy and if any of the data was coded incorrectly. From there, we collapsed many of the variables down into an “agree” or “disagree” bivariate variable to clearly present how the residents perceived each item. We also conducted independent t-tests to examine differences between HOPE VI residents and others. In addition, we also utilized independent t-tests to examine the differences between HOPE VI residents, River’s Edge residents, and other respondents.



Findings of HOPE VI Resident Surveys

Demographics

Tables 1 and 2 provide the demographic information for those who completed a survey. In total, we reached 35 HOPE VI residents after attempting to contact each person at least three times. Further, we reached an additional nine more residents who lived in River's Edge, but were not HOPE VI clients. Overall, we reached 140 total residents. That overwhelming majority (83.2%) of respondents were female, Black/African American (66.7%), and had subsidized rent (87.1%). Many did not own a car (78.1%) or bike (86.9%). Most reported they were single (81.5%) with children under 17 years of age (68.6%). The average age for a respondent was 37.38 years old (SD=13.33). They reported living at Jacob Price around four years (M=3.73, SD=7.01). On average they worked from zero to five jobs (M=.79, SD=.7) and had an average monthly income of \$703 (SD=1,018.06).

HOPE VI Residents Perceptions of Neighborhood Satisfaction

Of the 35 HOPE VI residents returning a completed survey, many of them felt fairly satisfied with their neighborhood. In particular, as noted in Table 3, the majority had a favorable opinion of HAC (85.7%) and took pride in their community (91.4%). An overwhelming majority like the appearance of the housing units (80%) and felt that the public transportation was easy to use (85.7%). Many of the residents reported having a grocery store within walking distance (82.4%) and felt there was adequate health care near the neighborhood (85.7%). There were some areas of concern in regards to safety, with many reporting they were afraid to ride their bike or walk safely in their neighborhood. In addition, more than half (63.6%) did not feel that they knew their neighbors.

HOPE VI Residents Perceptions of Community and Safety

While there were some concerns regarding feeling safe using a bicycle in the neighborhood, the overwhelming majority felt safe in their neighborhood (80%), as reported in Table 4. In addition, while the residents reported they may not know their neighbors, nearly three-quarters of people do have others in the community they talk to on a regular basis (74.3%). Further, of the neighbors they do talk to regularly, the residents feel that they do relate well with each other (77.1%). Over half have a confidant with whom they can discuss personal matters (57.1%). More than half feel that there has been a decrease in crime compared to their old neighborhood (51.4%) and that there is an adequate police presence (71.4%). A majority of the residents do support rules that do not allow smoking inside units (68.6%).

HOPE VI Residents Perceptions of Community Activity

Table 5 reports the responses to questions pertaining to community activity. Most do attend events in the neighborhood (70.6%) or in Covington (77.1%), but are not a member of a community organization or group (68.6%). Nearly nine of ten residents completing the survey reported they are registered to vote (91.4%) and eight of ten reported voting in the 2012 presidential election (79.4%). Finally, and importantly, nine out of ten HOPE VI residents felt that the HOPE VI/Jacob Price Revitalization Project was good for Covington.

HOPE VI Residents Perceptions of Affordable Housing

The HOPE VI residents felt that the houses were affordable (88.6%) and well-maintained (80%) in their neighborhood. Three-quarters (74.3%) felt there are opportunities to purchase housing and many (60%) reported that a community garden was in their neighborhood.

HOPE VI Residents Perceptions of Technology

Two-thirds of the residents reported having access to a computer and close to 80% (79.4%) believe or

perceive they can easily use one (See Table 6). Slightly more than half (52.9%) have internet access whenever they need it. Unsurprisingly, nearly all residents reported owning a cellular phone and three-quarters (76.5%) had an email address.

HOPE VI Residents Perceptions of Education

Of the residents reporting children in school, most reported they volunteer and are involved in after-school activities (80% for both). All but one resident reported that they are satisfied with the early childhood education and most of them (92%) were able to get their child into such a program. Over three-quarters were satisfied with their child's school.

HOPE VI Residents Perceptions of Health and Fitness

As reported in Table 8, every resident reported having a primary health care provider. Most felt their insurance was high quality (94.3%). In the past thirty days, roughly half of the residents reported a physical illness or injury (61.8%), issues related to stress (47.1%), and being unable to do usual activities due to physical or mental health issues (50%). In the last year, 62.9% worried about having enough money to pay their rent or mortgage, but less than half (48.6%) were worried about having enough money to buy nutritious food for their family.

HOPE VI Residents Perceptions of Green Features

The residents overwhelmingly like living in places with diverse people (90.9%). Many felt that they can walk to do errands or meet with people (70.6%) and over half felt they could use a bike (52.9%). Most felt that their utility bills were lower in their current location (58.8%) and many use natural light (81.8%) and ceiling fans (54.4%) to aid in energy consumption and conservation. The communities were perceived to have outdoor spaces by nearly three-quarters of residents (74.3%). Further, many reported that they felt the community made recycling easy (58.8%).

Comparisons between HOPE VI Residents and Non-HOPE VI Residents

There were several areas where HOPE VI residents reported better outcomes than their non-HOPE VI neighbors. Specifically, the residents significantly differed in thirteen areas as reported in Table 11. HOPE VI residents took significantly more pride in their community than others. Further, they liked their community more than non-HOPE VI residents and felt their community was cleaner. There was less fear about riding a bike and less perceived crime from HOPE VI residents. More HOPE VI residents owned a cell phone, were registered to vote, and had a grocery store in walking distance than their non-HOPE VI neighbors. More program participants had a primary health care provider and residents reported less stress about having money to purchase food.

Comparisons between HOPE VI and River's Edge Residents and Non-HOPE VI Residents

To gain a better perspective on the impact of the new development in Covington, we also examined residents of HOPE VI combined with River's Edge residents for their differences between neighbors in other communities. Residents who lived in River's Edge or were part of HOPE VI combined had thirty two outcomes where they were significantly different than their neighbors in other communities. Again, the combined residents significantly had more pride and liked living in their neighborhood than non-HOPE VI residents. They felt their neighborhoods were significantly cleaner and liked the appearance of the housing much more. Those in either HOPE VI or in River's Edge also felt safer walking or riding their bike and had easier access to public transportation. More of the combined group wanted to stay in their current neighborhood and appreciated the easier access to the grocery store. Those living in River's Edge or in HOPE VI also had a significantly more positive perception of the revitalization of Covington. The combined group was more active at their children's school, felt there was less crime, and had quality health insurance. Walking is perceived to be easier for the combined group and as is the use of natural light. Further, those in the combined group enjoy living in places with diverse people.



Survey Field Notes

In addition to the quantitative analysis, several field note observations were made. Through unstructured interviews and observations made during survey collection, the research team was able to make some commentary on life in public housing and the various communities in Covington. This shed some insight into the daily lives of residents and into areas that may have fallen outside of the survey's scope.

Response to Strangers in the Community

An interesting phenomena arose during data collection that highlights differences between the older communities, specifically Latonia Terrace and City Heights, and River's Edge. When the research team was on-site to collect completed surveys, there were multiple instances in which the main door to a unit was open (the screen door was still closed) and evidence of someone in the home was evident (several times the person could be seen watching television). However, the residents at City Heights and Latonia Terrace would still not come to the door. Even when the research team would announce that they were there to collect surveys and had gift cards, residents would still not come to the door. In addition, when a resident from a different community would knock on the door, the residents would still not open the door, even though it was clear someone was home. At River's Edge, if there was evidence that someone was home, the resident would open the door and greet the research team.

This highlights difference in responses to outsiders in the community. At the older communities, either through a history of mistrust to outsiders or stigma from the surrounding community, residents were much more hesitant to interact with the research team without official sanction from those living in the community. For example, during an initial lull in survey collection, one resident at City Heights established a rapport and a modicum of trust (she stated that we were honest in giving her the gift card with "no strings attached" in exchange for a completed survey and called all of her neighbors. This led to a dramatic increase in the number of surveys we received. At River's Edge, the stigma and unease was not present. It seemed that people were much more open and willing to talk. Even when residents did not want to participate in the study, they would say this directly and often pleasantly. The most common response in this example was "come back later," often with a day in mind.

Interviews on the Playground

At River's Edge, a couple of interviews actually took place at the playground. This indicates the parents were comfortable allowing minimal supervision to their children around strangers in the community. This inferred ease regarding the safety of their children, which was not present at Latonia Terrace or City Heights. In the other communities there were several instances when children were mildly scolded for wandering too far away from either the unit or parent. In one instance at Latonia Terrace, a parent in the midst of completing the survey told their child that they had to wait to play at the playground roughly ten to twenty feet away until after they completed the survey. At River's Edge, one parent had no qualms sitting at the benches next to the playground (roughly the same distance as in the Latonia Terrace example) while we completed a survey.

Nobody Likes or Wants the Convenient Store at City Heights

It is known in the community that residents at City Heights face some geographically-related challenges to purchasing food and other items commonly bought at a grocery store. The convenience store at the Heights was one of the universal areas of discussion that would arise from even minor conversation from the residents. No one likes or wants that store, as it is currently run, in City Heights, but because of geography (being at the top of a hill) the store is an unfortunate necessity. The residents gave some very colorful examples of

issues with the store. However, to set a baseline, the research team did collect the prices of items at the store, the same items at a nearby dollar store, and at a major grocery chain. We found that residents in the Heights paid roughly a dollar more for almost everything. Our survey found that when you compared the prices of Kroger / Dollar Store located near River's Edge for several bags of groceries, residents paid \$36.86 more for groceries compared to Rivers Edge residents, which equates to \$164.30 for a month's worth of groceries (see Table 13 for detailed cost comparisons).

Further, the residents often reported that the prices would fluctuate based upon how much money the resident had available. Every resident reported that there was no fresh food and that many of the packages of food were expired. Several also indicated that the market was selling pizzas, despite orders to cease and desist from the health department (as reported by residents).



Photos showing the conditions of the City Heights convenience store. The picture on the right shows the conditions inside of the store, while the picture on the left shows the entrance to the store..

They Miss the Community

What was clear in conversations with residents is that they missed the community and camaraderie that Jacob Price provided. Many were generational residents and they considered it home. While “conventional” wisdom may indicate that newer, cleaner, and greener units are better, there is a human component that must be included. Nearly every resident concurred that the units were better in nearly every way. They were cleaner, they were greener, they were just better, but they missed the people. Further, many people felt that HAC does a good job, but that more could have been done to help with the community transition. More space could have been created to allow residents to grieve for a lost home, even though their replacement was going to be, at least from a structural perspective, an improvement. Community will happen, but it will happen over time. Support must continue to be given to help further forge and develop the community at River's Edge and the other HAC locales.

Discussion

Limitations

There are several limiting factors to this study. First, we used an acquiescent response set. This may artificially inflate agreement scores. Next, we had a relatively small, but acceptable, response rate of 37% (35/95). While it would be ideal to have more responses, we did attempt to contact everyone a minimum of three times and some residents had as many as five and six attempts. Next, we may have artificially inflated some scores by enlisting the help of the case managers. While we made attempts to mitigate this through offering unlabeled envelopes, there is a risk that scores are artificially higher. Despite these limitations, we are confident our findings have merit and do describe the experience of going through HOPE VI.

HOPE VI Residents Want to Live in Diverse Communities

Our findings that the vast majority of HOPE VI residents agree with wanting to live in diverse neighborhoods coupled with the finding that they want diverse communities at a significantly higher rate provides support for these efforts.



The Jacob Price development is picture at left, while the new and beautiful River's Edge at Eastside Pointe is pictured on the right.



Conclusion

Overall, HOPE VI Residents are Satisfied with Their Neighborhoods

Our findings indicate that HOPE VI residents are satisfied with their current living conditions. Except for a few areas, the residents agreed that many of the indicators of neighborhood satisfaction were met. Many of the key ideas about revitalizing the neighborhood, such as creating green options, easy ways to access resources, and creating pride in the community were successfully done by HAC.

Units can be Built, but Communities Take Time

It is clear that HOPE VI residents like the aesthetic portion of their neighborhood. They feel they are cleaner, more attractive, and offer more green features than in past, but they still long for the community that Jacob Price hosted. Community will develop at River's Edge, but it will take time. Thus, it necessitates continued funding of the efforts to offer support and development. Further, it undercuts often short-sighted views of the HOPE VI program and its efficacy. Revitalization efforts may take place over the course of a few years, but the true impact and development of community will take longer. Building fantastic and beautiful units increases pride, as evidenced by our findings, which will help with revitalizing the area, but building community will be an ongoing process for River's Edge.

Appendix I. Survey Data Tables

Table 1. Demographics (N=140)

Hope VI Resident	n	%
Yes	35	25
No	105	75
Hope VI or River's Edge	n	%
Yes	44	31.4
No	96	68.6
Gender	n	%
Male	22	16.8
Female	109	83.2
Race and Ethnicity	n	%
Caucasian/White	37	28
Black/African American	88	66.7
Hispanic/Latino	2	1.5
Other	5	3.8
Rent Type	n	%
Subsidized	108	87.1
Not Subsidized	16	12.9
Owns a Car	n	%
Yes	30	21.9
No	107	78.1
Days a Week Using Car	n	%
1-2 Days Per Week	5	16.1
3-4 Days Per Week	3	9.7
5-6 Days Per Week	8	25.8
7 Days a Week	15	48.4
Owns a bike	n	%
Yes	17	13.1
No	113	86.9
Days a Week Using Bike	n	%
1-2 Days Per Week	11	61.1
3-4 Days Per Week	4	22.2
5-6 Days Per Week	2	11.1
7 Days a Week	1	5.6
Marital Status	n	%
Single	110	81.5
Married	12	8.9
Separated	3	2.2
Divorced	7	5.2
Widowed	3	2.2
Children under 17	n	%
Yes	94	68.6
No	43	31.4

Table 2. Demographics Continued

	Min.	Max.	M	SD
Age	16	73	37.38	13.33
Years lived in Jacob Price	0	45	3.73	7.01
Gross Monthly Income	0	9000	703.5 5	1018.0 6
Number of Jobs	0	5	.79	.7
Number of children 17 or younger	0	6	2.11	1.28

Table 3. HOPE VI Residents Perceptions of Neighborhood Satisfaction (N=35)

I like living in my neighborhood	n	%
Agree	26	74.3
Disagree	9	25.7
I take pride in the community where I live	n	%
Agree	32	91.4
Disagree	3	8.6
I don't know my neighbors very well	n	%
Agree	21	63.6
Disagree	12	36.4
I like the appearance of my housing	n	%
Agree	28	80
Disagree	7	20
My neighborhood isn't very clean	n	%
Agree	20	58.8
Disagree	14	41.2
I am afraid to ride my bike in my neighborhood	n	%
Agree	27	77.1
Disagree	8	22.9
I can walk safely in my neighborhood	n	%
Disagree	24	70.6
Agree	10	29.4
I feel my bike can be safely locked up outside in my neighborhood	n	%
Agree	18	51.4
Disagree	17	48.6
Public transportation in my neighborhood is easy to use	n	%
Agree	30	85.7
Disagree	5	14.3
I am satisfied with the recreation/entertainment activities available in my neighborhood for children (playgrounds, parks, basketball courts etc.)	n	%
Agree	20	57.1
Disagree	15	42.9
I am satisfied with the recreation/entertainment activities available in my neighborhood for adults (movies, sports events, etc.)	n	%
Agree	21	60
Disagree	14	40
I have few choices for employment in my neighborhood	n	%
Agree	22	62.9
Disagree	13	37.1
There are options for job training and placement programs in my neighborhood	n	%
Agree	30	85.7
Disagree	5	14.3

Table 3. HOPE VI Residents Perceptions of Neighborhood Satisfaction (Continued)

I have a favorable opinion of the Housing Authority of Covington	n	%
Agree	30	85.7
Disagree	5	14.3
My neighborhood is inaccessible to people who are elderly or disabled	n	%
Agree	22	64.7
Disagree	12	35.3
I wish to move out of my Covington neighborhood in the near future	n	%
Agree	27	77.1
Disagree	8	22.9
I wish to stay in my current neighborhood for the foreseeable future	n	%
Agree	19	54.3
Disagree	16	45.7
There is a grocery store I can walk to in my neighborhood	n	%
Agree	28	82.4
Disagree	6	17.6
I do not like the schools in my neighborhood	n	%
Agree	25	75.8
Disagree	8	24.2
There is adequate health care near my neighborhood	n	%
Agree	30	85.7
Disagree	5	14.3

Table 4. HOPE VI Residents Perceptions of Community and Safety (N=35)

	n	%
I relate well with my neighbors		
Agree	27	77.1
Disagree	8	22.9
I have neighbors who I talk to on a regular basis	n	%
Agree	26	74.3
Disagree	9	25.7
It is difficult to make new friends where I live	n	%
Agree	19	54.3
Disagree	16	45.7
I have neighbors I could borrow a car from if needed	n	%
Agree	10	28.6
Disagree	25	71.4
I have neighbors that would babysit my children if needed	n	%
Agree	22	62.9
Disagree	13	37.1
I have neighbors who would bring me medicine or food if needed	n	%
Agree	22	62.9
Disagree	13	37.1
I have neighbors I can discuss personal matters with	n	%
Agree	20	57.1
Disagree	15	42.9
I have neighbors who would lend me \$100 if needed	n	%
Agree	13	37.1
Disagree	22	62.9
I have neighbors who is good at using the computer	n	%
Agree	24	70.6
Disagree	10	29.4
I have neighbors who gives good advice about job opportunities	n	%
Agree	20	57.1
Disagree	15	42.9
I feel safe in my neighborhood	n	%
Agree	28	80.0
Disagree	7	20.0
There is more crime in my neighborhood now than where I lived previously	n	%
Agree	17	48.6
Disagree	18	51.4
There is adequate police presence in the neighborhood	n	%
Agree	25	71.4
Disagree	10	28.6
There is a lot of drug use in my neighborhood (Selling/Purchasing)	n	%
Agree	23	67.6
Disagree	11	32.4

Table 4. HOPE VI Residents Perceptions of Community and Safety (Continued)

There is too much violent crime in my neighborhood (Murders, Assaults)	n	%
Agree	22	62.9
Disagree	13	37.1
There is too much property crime in my neighborhood (Graffiti, Broken Windows, Vandalism)	n	%
Agree	16	45.7
Disagree	19	54.3
I am comfortable allowing my kids to play outside in the neighborhood, during the day	n	%
Agree	26	74.3
Disagree	9	25.7
I am comfortable allowing my kids to play outside in the neighborhood, during the night	n	%
Agree	15	42.9
Disagree	20	57.1
There is inadequate street lighting at night in my neighborhood	n	%
Agree	25	71.4
Disagree	10	28.6
I would support rules that do not allow smoking inside apartment units	n	%
Agree	24	68.6
Disagree	11	31.4
The police respond quickly when called	n	%
Agree	27	77.1
Disagree	8	22.9

Table 5. HOPE VI Residents Perceptions of Community Activity (N=35)

I am a member of a community organization or group	n	%
Agree	11	31.4
Disagree	24	68.6
I have attended events, festivals, and meetings in my neighborhood	n	%
Agree	24	70.6
Disagree	10	29.4
I have attended events, festivals, and meetings in Covington	n	%
Agree	27	77.1
Disagree	8	22.9
I am registered to vote	n	%
Agree	32	91.4
Disagree	3	8.6
I voted in the 2012 Presidential Election	n	%
Agree	27	79.4
Disagree	7	20.6
I believe HOPE VI/Jacob Price Revitalization Project is good for Covington	n	%
Agree	30	88.2
Disagree	4	11.8

Table 6. HOPE VI Residents Perceptions of Affordable Housing (N=35)

The houses and apartments on my street are well maintained in my neighborhood	n	%
Agree	28	80.0
Disagree	7	20.0
There is affordable housing in my neighborhood	n	%
Agree	31	88.6
Disagree	4	11.4
There is available Section 8 housing in my neighborhood	n	%
Agree	29	82.9
Disagree	6	17.1
There is a community garden in my neighborhood	n	%
Agree	21	60.0
Disagree	14	40.0
There are opportunities to buy housing in my neighborhood	n	%
Agree	26	74.3
Disagree	9	25.7

Table 7. HOPE VI Residents Perceptions of Technology (N=35)

I read a daily newspaper or local weekly newspaper at least once a week	n	%
Agree	20	60.6
Disagree	13	39.4
I have access to a computer	n	%
Agree	22	66.7
Disagree	11	33.3
I can easily use a computer (Typing, Using the Internet)	n	%
Agree	27	79.4
Disagree	7	20.6
I have internet access whenever I need it	n	%
Agree	18	52.9
Disagree	16	47.1
I have an e-mail address	n	%
Agree	26	76.5
Disagree	8	23.5
I own a cell phone	n	%
Agree	34	97.1
Disagree	1	2.9

Table 8. HOPE VI Residents Perceptions of Education (N=27)

My children miss school on a regular basis	n	%
Agree	3	11.1
Disagree	24	88.9
I'm satisfied with my children's school	n	%
Agree	21	77.8
Disagree	6	22.2
I read to my children every night	n	%
Agree	24	88.9
Disagree	3	11.1
I volunteer my time at my children's school (PTA, On-Site Decision Making Board, Parent Teacher Conferences)	n	%
Agree	20	80.0
Disagree	5	20.0
My children are involved in after-school activities	n	%
Agree	20	80.0
Disagree	5	20.0
My children were in an early childhood education program (Preschool program)	n	%
Agree	23	92.0
Disagree	2	8.0
I am satisfied with the early childhood education program my children receive	n	%
Agree	24	96.0
Disagree	1	4.0

Table 9. HOPE VI Residents Perceptions of Health and Fitness (N=35)

I have a primary health care provider	n	%
Agree	35	100
My family has quality health insurance	n	%
Agree	33	94.3
Disagree	2	5.7
During the past 30 days my physical health was not good due to physical illness and injury	n	%
Agree	21	61.8
Disagree	13	38.2
During the past 30 days I suffered from mental health issues such as stress, depression, or problems controlling emotions	n	%
Agree	16	47.1
Disagree	18	52.9
During the past 30 days poor physical or mental health kept me from doing my usual activities, such as self-care, work, or having fun	n	%
Agree	17	50.0
Disagree	17	50.0
In the past 12 months I have been worried or stressed about having enough money to pay my rent/mortgage	n	%
Agree	22	62.9
Disagree	13	37.1
In the past 12 months I have been worried or stressed about having enough money to buy nutritious meals for myself or my family	n	%
Agree	17	48.6
Disagree	18	51.4

Table 10. HOPE VI Residents Perceptions of Green Features (N=35)

I rarely ride the bus	n	%
Agree	18	52.9
Disagree	16	47.1
If I want to, I can walk to do errands or to meet with people	n	%
Agree	24	70.6
Disagree	10	29.4
I rarely ride the bus	n	%
Agree	18	52.9
Disagree	16	47.1
If I want to, I can walk to do errands or to meet with people	n	%
Agree	24	70.6
Disagree	10	29.4
If I want to, I can ride my bike to do errands or to meet with people	n	%
Agree	18	52.9
Disagree	16	47.1
It is impractical for me to walk to do errands or to meet with people	n	%
Agree	17	50
Disagree	17	50
It is impractical for me to bike to do errands or to meet with people	n	%
Agree	20	60.6
Disagree	13	39.4
My utility bills at my current home are lower than they have been in previous homes	n	%
Agree	20	58.8
Disagree	14	41.2
I rarely have to adjust the temperature controls in my home	n	%
Agree	19	61.3
Disagree	12	38.7
Since moving to this home, my utility bills have increased	n	%
Agree	21	65.6
Disagree	11	34.4
I open my windows to help cool my home	n	%
Agree	26	76.5
Disagree	8	23.5
This housing development makes recycling easy	n	%
Agree	20	58.8
Disagree	14	41.2

Table 10. HOPE VI Residents Perceptions of Green Features (Continued)

This home has more natural light than my last home	n	%
Agree	22	64.7
Disagree	12	35.3
I use natural light to try to reduce my energy consumption	n	%
Agree	27	81.8
Disagree	6	18.2
The workmanship in this home is of low quality	n	%
Agree	26	78.8
Disagree	7	21.2
I have gained weight since moving to this home	n	%
Agree	22	66.7
Disagree	11	33.3
I like living in places with diverse people	n	%
Agree	30	90.9
Disagree	3	9.1
It is too noisy in my neighborhood at night	n	%
Agree	19	55.9
Disagree	15	44.1
There are places nearby where I can enjoy the outdoors	n	%
Agree	26	74.3
Disagree	9	25.7
I use the ceiling fan to increase my comfort	n	%
Agree	19	54.3
Disagree	16	45.7
I think about my energy consumption living in this apartment	n	%
Agree	24	68.6
Disagree	11	31.4

Table 11. HOPE VI Residents Compared to Other Residents

	HOPE VI Resident	M	SD
I take pride in the community where I live <i>t=1.847, df=134, p<.1</i>	Yes	3.71	1.073
	No	3.33	1.069
I like the appearance of my housing <i>t=3.343, df=136</i>	Yes	3.80	1.324
	No	3.01	1.167
My neighborhood isn't very clean <i>t=-2.333, df=129</i>	Yes	2.74	1.238
	No	3.32	1.263
I am afraid to ride a bike in my neighborhood <i>t=-2.157, df=133</i>	Yes	2.06	1.301
	No	2.59	1.234
There is a grocery store I can walk to in my neighborhood <i>t=2.435, df=133</i>	Yes	3.53	1.212
	No	2.86	1.435
There is more crime in my neighborhood now than where I lived previously <i>t=-2.154, df=136</i>	Yes	2.54	1.221
	No	3.07	1.254
I am comfortable allowing my kids to play outside in the neighborhood, during the night <i>t=-1.984, df=138</i>	Yes	2.31	1.278
	No	2.81	1.279
I am registered to vote <i>t=2.638, df=135</i>	Yes	4.34	1.136
	No	3.71	1.263
I own a cell phone <i>t=3.011, df=136</i>	Yes	4.60	.695
	No	4.05	1.004
I volunteer my time at my children's school (PTA, On-Site Decision Making Board, Parent Teacher Conferences) <i>t=1.787, df=117, p<.1</i>	Yes	3.12	.781
	No	2.70	1.096
I have a primary health care provider <i>t=3.438, df=95.225</i>	Yes	4.31	.758
	No	3.71	1.220
In the past 12 months I have been worried or stressed about having enough money to buy nutritious meals for myself or my family <i>t==2.31, df=138</i>	Yes	2.51	1.337
	No	3.12	1.357
Since moving to this home, my utility bills have increased <i>t=.2248, df=128</i>	Yes	3.06	1.458
	No	2.49	1.177

Note: All *p*-values are below .05 unless otherwise noted

Table 12. HOPE VI and River's Edge Residents compared to City Heights Residents

	Resident of HOPE VI or River's Edge	M	SD
I like living in my neighborhood	Yes	3.68	1.360
	No	3.17	1.125
<i>t=2.298, df=134</i>			
I take pride in the community where I live	Yes	3.89	1.039
	No	3.21	1.033
<i>t=3.584, df=134</i>			
I don't know my neighbors very well	Yes	3.38	1.447
	No	2.89	1.296
<i>t=1.955, df=132</i>			
I like the appearance of my housing	Yes	3.93	1.336
	No	2.87	1.060
<i>t=5.024, df=136</i>			
My neighborhood isn't very clean	Yes	2.81	1.350
	No	3.34	1.212
<i>t=-2.251, df=129</i>			
I can walk safely in my neighborhood	Yes	3.55	1.302
	No	3.09	1.246
<i>t=1.978, df=134</i>			
I am afraid to ride a bike in my neighborhood	Yes	2.12	1.349
	No	2.62	1.203
<i>t=-2.178, df=133</i>			
I feel my bike can be safely locked up outside in my neighborhood	Yes	2.80	1.472
	No	2.36	1.197
<i>t=1.824, df=133, p<.1</i>			
Public transportation in my neighborhood is easy to use	Yes	4.14	1.287
	No	3.69	1.199
<i>t=1.969, df=133</i>			
I wish to stay in my current neighborhood for the foreseeable future	Yes	3.00	1.447
	No	2.50	1.268
<i>t=2.063, df=136</i>			
There is a grocery store I can walk to in my neighborhood	Yes	3.70	1.264
	No	2.72	1.369
<i>t=3.969, df=133</i>			
I do not like the schools in my neighborhood	Yes	3.33	1.203
	No	2.94	1.210
<i>t=1.772, df=135, p<.1</i>			
There is adequate health care near my neighborhood	Yes	3.82	1.206
	No	3.32	1.090
<i>t=2.422, df=136</i>			

Table 12. HOPE VI and River's Edge Residents compared to City Heights Residents (Continued)

I have neighbors who would lend me \$100 if needed <i>t=2.591, df=69.608</i>	Yes	2.75	1.496
	No	2.08	1.200
I feel safe in my neighborhood <i>t=2.51, df=135</i>	Yes	3.64	1.241
	No	3.10	1.143
There is more crime in my neighborhood now than where I lived previously <i>t=-2.373, df=136</i>	Yes	2.57	1.265
	No	3.11	1.231
The police respond quickly when called <i>t=2.16, df=136</i>	Yes	3.48	1.248
	No	2.99	1.231
I am registered to vote <i>t=3.509, df=100.828</i>	Yes	4.36	1.059
	No	3.63	1.284
I voted in the 2012 Presidential Election <i>t=1.959, df=135</i>	Yes	3.98	1.422
	No	3.49	1.318
I believe HOPE VI/Jacob Price Revitalization Project is good for Covington <i>t=2.782, df=134</i>	Yes	4.16	1.111
	No	3.61	1.053
The houses and apartments on my street are well maintained in my neighborhood <i>t=3.45, df=137</i>	Yes	3.57	1.129
	No	2.86	1.117
There is a community garden in my neighborhood <i>t=2.361, df=136</i>	Yes	3.18	1.281
	No	2.67	1.140
I own a cell phone <i>t=3.93, df=136</i>	Yes	4.64	.685
	No	3.98	1.005
I volunteer my time at my children's school (PTA, On-Site Decision Making Board, Parent Teacher Conferences) <i>t=2.533, df=117</i>	Yes	3.20	.805
	No	2.65	1.088
My family has quality health insurance <i>t=2.271, df=137</i>	Yes	4.27	.949
	No	3.86	1.006
If I want to, I can walk to do errands or to meet with people <i>t=1.838, df=132, p<.1</i>	Yes	3.30	1.440
	No	2.86	1.243

Table 12. HOPE VI and River's Edge Residents compared to City Heights Residents (Continued)

My utility bills at my current home are lower than they have been in previous homes <i>t</i> =-2.787, <i>df</i> =66.84	Yes	2.81	1.402
	No	3.49	1.094
Since moving to this home, my utility bills have increased <i>t</i> =2.446, <i>df</i> =59.449	Yes	3.07	1.523
	No	2.43	1.086
I use natural light to try to reduce my energy consumption <i>t</i> =2.016, <i>df</i> =131	Yes	3.74	1.289
	No	3.31	1.072
I like living in places with diverse people <i>t</i> =3.334, <i>df</i> =131	Yes	4.02	1.024
	No	3.36	1.080
There are places nearby where I can enjoy the outdoors <i>t</i> =2.078, <i>df</i> =134	Yes	3.55	1.355
	No	3.09	1.126
I use the ceiling fan to increase my comfort <i>t</i> =3.562, <i>df</i> =65.829	Yes	3.23	1.553
	No	2.29	1.120

Note: All *p*-values are below .05 unless otherwise noted

Table 13. Comparison of City Heights Grocery Store Prices with River's Edge Nearby Grocery Stores: Kroger and Dollar Store.

Item	City Heights Grocery	Size	Dollar General	Size2	Kroger	Size3	Average**
Ajax Bleach Alternative	2.69	12.6 fl oz	1	12.6 fl oz	1	12.6 fl oz	1.845
Pine Sol	3.49	24 fl oz	2	24 fl oz	1.99	24 fl oz	2.74
Ajax Comet Cleaner	1.89	14 oz	1	14 oz	1	25 oz	1.445
Ammonia	1.99	32 fl oz	1	64 oz	1.47	64 oz	1.73
Fit and Active Bacon	5.99	12 oz	4.85	12 oz	2.99	12 oz	4.49
Pak Premium Ham	5.99	20 oz	4	8 oz	5.29	20 oz	5.64
Kraft Singles American Cheese	4.99	12 oz	3.25	12 oz	3.99	12 oz	4.49
Happy Farms Sharp Cheddar	4.49	12 oz	0.5	8 oz	1.99	12 oz	3.24
Personal Care Antibacterial Soap	1.25	per bar	0.5	per bar	0.5	per bar	0.875
Sun Soap Powder	4.99	41.6 oz	6	41.6 oz	5.99	41.6 oz	5.49
Crisco Pure Vegetable Oil	4.89	48 fl oz	3.25	48 fl oz	2.99	48 fl oz	3.94
Del Monte Sweet Peas	1.49	15 oz	1	15 oz	1	15 oz	1.245
Uncle Bens Instant Brown Rice	3.89	14 oz	EXPIRED 5/2014	14 oz	2.89	14 oz	3.39
Jiffy Corn Muffin Mix	1.39	3.5 oz	0.5	3.5 oz	0.5	3.5 oz	0.945
Morton Iodized Salt	0.99	26 oz	0.5	26 oz	0.83	26 oz	0.91
Quaker White Corn Meal	3.19	24 oz	EXPIRED 3/10/14	24 oz	2.39	24 oz	2.79
French's Taco Mix	1.99	1.25 oz	0.55	1.25 oz	0.69	1.25 oz	1.34
Motts Apple Sauce	2.49	24 oz	\$1.95 EXPIRED 8/14/14	24 oz	2.59	24 oz	2.54
Jif Peanut Butter	2.49	16 oz	3.05	16 oz	2.69	16 oz	2.59
Ortega Taco Mix	2.29	1.25 oz	0.55	1.25 oz	0.89	1.25 oz	1.59
Mueller Spaghetti	2.89	16 oz	1.5	16 oz	0.89	16 oz	1.89
Bush Baked Beans	2.59	16.5 oz	1.65	16.5 oz	1.69	16.5 oz	2.14
Hunt's Sauce	2.19	15 oz	1	15 oz	0.99	15 oz	1.59
Angel Soft	2.49	4 rolls	2.25	4 rolls	1.39	4 rolls	1.94
Charmin	2.49	4 rolls	2.75	4 rolls	3.99	4 rolls	3.24
Total Grocery Price	75.51		42.65		52.62		64.065

KP=Kroger Brand, SP=Special Price



Appendix II. Survey Design

Dear Resident:

We have a **\$5 Kroger gift card** for you along with a chance at a drawing for a flat screen TV, toaster, microwave, and other appliances! This offer is yours if you agree to participate in our neighborhood needs, likes and dislikes survey. The survey will only takes 15 minutes or so and you might find it fun. Your views will be combined with the voices of hundreds of people like yourself on how to improve our neighborhoods. We have been working with residents, city leaders, and developers to understand what works and doesn't work. If we don't pick up the survey, please deliver to the Housing Authority of Covington office on the premises or leave it in the mail box for us to pick up.

To participate, you must be the head of household and at least 18 years of age. Only one gift card will be offered per household and each household will only have one chance to win prizes. Your gift card will be handed to you or delivered to you by Gilderbloom and Associates within 14 days following completion of the survey. Additionally, if you win the prize drawing, your prize will be delivered to you but please be sure you clearly print your contact information on the last page of this survey.

This survey has undergone a comprehensive review to ensure your answers will be kept confidential. At the end of the survey, you will see a statement with contact information of the evaluator, as well as campus and community counseling services. Should you have any questions or concerns regarding this survey, please contact: Dr. John I. Gilderbloom, Director, Sustainable Urban Neighborhoods, 426 W. Bloom St., University of Louisville, Louisville, KY 40208, 502-852-8557. Again, your opinions are important to our research and will remain confidential.

If you would like a copy of the findings, please let us know. I am confident you will find our questions interesting and not intrusive—even fun. Let your voice be heard!

Thank you for your time and participation.

Sincerely,

John I. "Hans" Gilderbloom and Professor James Canfield (University of Cincinnati)

Professor, Urban and Public Affairs

Director, Center for Sustainable Urban Neighborhoods

University of Louisville

Center for Sustainable Urban Neighborhoods

502-852-8557

HOPE VI Survey

On a scale of 1-5, with 1 meaning “Strongly Disagree” and 5 meaning “Strongly Agree,” please circle the answer that best describes your opinion.

I. Neighborhood Satisfaction	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I like living in my neighborhood.	1	2	3	4	5
2. I take pride in the community where I live.	1	2	3	4	5
3. I don't know my neighbors very well.	1	2	3	4	5
4. I like the appearance of my housing.	1	2	3	4	5
5. My neighborhood isn't very clean.	1	2	3	4	5
6. I can walk safely in my neighborhood.	1	2	3	4	5
7. I am afraid to ride a bike in my neighborhood.	1	2	3	4	5
8. I feel my bike can be safely locked up outside in my neighborhood.	1	2	3	4	5
9. Public transportation in my neighborhood is easy to use	1	2	3	4	5
10. I am satisfied with the recreation/entertainment activities available in my neighborhood for children (playgrounds, parks, basketball courts etc.).	1	2	3	4	5
11. I am satisfied with the recreation/entertainment activities available in my neighborhood for adults (movies, sports events, etc.).	1	2	3	4	5
12. I have few choices for employment in my neighborhood.	1	2	3	4	5
13. There are options for job training and placement programs in my neighborhood.	1	2	3	4	5

I. Neighborhood Satisfaction (continued)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
14. I have a favorable opinion of the Housing Authority of Covington.	1	2	3	4	5
15. My neighborhood is inaccessible to people who are elderly or disabled.	1	2	3	4	5
16. I wish to move out of my Covington neighborhood in the near future.	1	2	3	4	5
17. I wish to stay in my current neighborhood for the foreseeable future.	1	2	3	4	5
18. There is a grocery store I can walk to in my neighborhood.	1	2	3	4	5
19. I do not like the schools in my neighborhood.	1	2	3	4	5
20. There is adequate health care near my neighborhood.	1	2	3	4	5

II. Community and Safety	Strongly	Disagree	Neutral	Agree	Strongly
1. I relate well with my neighbors.	1	2	3	4	5
2. I have neighbors who I talk to on a regular basis.	1	2	3	4	5
3. It is difficult to make new friends where I live	1	2	3	4	5
4. I have a neighbor(s) I could borrow a car from if needed.	1	2	3	4	5
5. I have a neighbor(s) that would babysit my children if needed.	1	2	3	4	5
6. I have a neighbor(s) who would bring me medicine or food if needed.	1	2	3	4	5
7. I have a neighbor(s) I can discuss personal matters with.	1	2	3	4	5

II. Community and Safety (continued)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8. I have a neighbor(s) who would lend me \$100 if needed.	1	2	3	4	5
9. I have a neighbor(s) who is good at using the computer.	1	2	3	4	5
10. I have a neighbor(s) who gives good advice about job opportunities.	1	2	3	4	5
11. I feel safe in my neighborhood.	1	2	3	4	5
12. There is more crime in my neighborhood now than where I lived previously.	1	2	3	4	5
13. There is adequate police presence in the neighborhood.	1	2	3	4	5
14. There is a lot of drug use in my neighborhood. (Selling/Purchasing).	1	2	3	4	5
15. There is too much violent crime in my neighborhood. (Murders, Assaults).	1	2	3	4	5
16. There is too much property crime in my neighborhood. (Graffiti, Broken Windows, Vandalism).	1	2	3	4	5
17. I am comfortable allowing my kids to play outside in the neighborhood, during the day.	1	2	3	4	5
18. I am comfortable allowing my kids to play outside in the neighborhood, during the night.	1	2	3	4	5
19. There is inadequate street lighting at night in my neighborhood.	1	2	3	4	5

II. Community and Safety (continued)	Strongly	Disagree	Neutral	Agree	Strongly
20. I would support rules that do not allow smoking inside apartment units.	1	2	3	4	5
21. The police respond quickly when called.	1	2	3	4	5

III. Community Activity and Involvement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I am a member of a community organization or group.	1	2	3	4	5
2. I have attended events, festivals and meetings in my neighborhood.	1	2	3	4	5
3. I have attended events, festivals and meetings in Covington.	1	2	3	4	5
4. I am registered to vote.	1	2	3	4	5
5. I voted in the 2012 Presidential election.	1	2	3	4	5
6. I believe the HOPE VI / Jacob Price Revitalization Project is good for Covington	1	2	3	4	5

IV. Available and Affordable Housing	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The houses and apartments on my street are well maintained in my neighborhood.	1	2	3	4	5
2. There is affordable housing in my neighborhood.	1	2	3	4	5
3. There is available Section 8 housing in my neighborhood.	1	2	3	4	5
4. There is a community garden in my neighborhood.	1	2	3	4	5
5. There are opportunities to buy housing in my neighborhood.	1	2	3	4	5

V. Technology	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I read a daily newspaper or local weekly newspaper at least once a week.	1	2	3	4	5
2. I have access to a computer.	1	2	3	4	5
3. I can easily use a computer. (Typing, Using the Internet)	1	2	3	4	5
4. I have internet access whenever I need it.	1	2	3	4	5
5. I have an e-mail address.	1	2	3	4	5
6. I own a cell phone.	1	2	3	4	5

VI. Education (If you have children that are of school age, please answer these.)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. My children miss school on a regular basis.	1	2	3	4	5
2. I'm satisfied with my children's school.	1	2	3	4	5
3. I read to my children every night.	1	2	3	4	5
4. I volunteer my time at my children's school. (PTA, On-Site Decision Making Board, Parent Teacher	1	2	3	4	5
5. My children are involved in after-school activities.	1	2	3	4	5
6. My children were in an early childhood education program. (Preschool program)	1	2	3	4	5
7. I am satisfied with the early childhood education program my child(ren) receive.	1	2	3	4	5

VII. Health and Fitness	Strongly	Disagree	Neutral	Agree	Strongly
1. I have a primary health care provider.	1	2	3	4	5
2. My family has quality health insurance.	1	2	3	4	5
3. During the past 30 days my physical health was not good due to physical illness and injury.	1	2	3	4	5
4. During the past 30 days I suffered from mental health issues such as stress, depression, or problems controlling emotions.	1	2	3	4	5
5. During the past 30 days poor physical or mental health kept me from doing my usual activities, such as self-care, work, or having fun.	1	2	3	4	5
6. In the past 12 months I have been worried or stressed about having enough money to pay my rent/mortgage.	1	2	3	4	5
7. In the past 12 months I have been worried or stressed about having enough money to buy nutritious meals for	1	2	3	4	5

VIII. Green Features	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I rarely ride the bus.	1	2	3	4	5
2. If I want to, I can walk to do errands or to meet with people.	1	2	3	4	5
3. If I want to, I can ride my bike to do errands or to meet with people.	1	2	3	4	5
4. It is impractical for me to walk to do errands or to meet with people.	1	2	3	4	5
5. It is impractical for me to bike to do errands or to meet with people.	1	2	3	4	5
6. My utility bills at my current home are lower than they have been in previous homes.	1	2	3	4	5
7. I rarely have to adjust the temperature controls in my home.	1	2	3	4	5
8. Since moving to this home, my utility bills have increased.	1	2	3	4	5
9. I open my windows to help cool my home.	1	2	3	4	5
10. This housing development makes recycling easy.	1	2	3	4	5
11. This home has more natural light than my last home.	1	2	3	4	5
12. I use natural light to try to reduce my energy consumption.	1	2	3	4	5
13. The workmanship in this home is of low quality.	1	2	3	4	5
14. I have gained weight since moving to this home.	1	2	3	4	5
15. I like living in places with diverse people.	1	2	3	4	5
16. It is too noisy in my neighborhood at night.	1	2	3	4	5
17. There are places nearby where I can enjoy the outdoors.	1	2	3	4	5
18. I use the ceiling fan to increase my comfort.	1	2	3	4	5
19. I think about my energy consumption living in this apartment.	1	2	3	4	5

IX. Demographic Information (We want to know a little about you.) Please fill in or circle your answer.

1. What is your age? _____
2. How would you describe your race/ethnicity? _____
3. How do you identify your gender? _____
4. What is the highest level of education you have completed? _____
5. How many persons live in your household (include yourself)? _____
6. A. Do you have children 17 years of age or younger?
 - Yes
 - No
- B. If so, how many? _____
7. A. Are you employed?
 - Yes
 - No
- B. If yes, how many hours a week do you work? _____
8. How many jobs do you currently have? _____
9. What is your gross monthly household income per month: \$ _____ per month
10. A. Do you own a car?
 - Yes
 - No
- B. If yes, how many times a week do you use your car?
 - 1-2 Days Per Week
 - 3-4 Days Per Week
 - 5-6 Days Per Week
 - 7 Days Per Week
12. A. Do you own a bicycle?
 - Yes
 - No
- B. If yes, how many times a week do you use your bike?
 - 1-2 Days Per Week
 - 3-4 Days Per Week
 - 5-6 Days Per Week
 - 7 Days Per Week

13. What is your marital status?

- Single
- Married
- Separated
- Divorced
- Widowed

14. How many years did you live in the Jacob Price community? ____ years

15. In what community do you currently live?

- City Heights
- Latonia Terrace
- Golden Tower
- River's Edge at Eastside Pointe
- Other Covington
- Newport
- Cincinnati
- Other

16. Is your rent:

- Subsidized
- Not subsidized

Once again, thank you for participating in this survey. We are very grateful for your input. If you have any other information you would like to share with us, please do so in the space provided below.

Your opinions will not be associated with your name or any other identifying information.

If you would like to get a summary of the survey results, please provide your name, email address (if you have one), and mailing address on the separate slip of paper provided, which will not be linked to this survey.

If you want your gift card or a chance to be part of the drawing for appliances, please leave your name and address with the apartment number so we can mail it to you along with a summary of the results.

Name _____

Street address/apartment number _____

City and Zip Code _____

Daytime Phone # for delivery of appliances (flat screen TV, micro-wave and other items)

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