

Park Hill Industrial Corridor Implementation Strategy Louisville, Kentucky

Prepared for
Louisville Jefferson County Metro Government
Economic Development Department

October 2009



Cornerstone 2020 Vision Statement

In our vision of 2020, Louisville and Jefferson County is a community widely recognized for its high quality of life, sense of tradition and competitive spirit. Our children have inherited a livable, vibrant and economically diverse community. We have clearly recognized that the quality of life depends upon continued success in the economic marketplace and an ongoing commitment to the conservation of environmental resources which define our heritage and enhance the livability of our community.

Community residents share a sense of place and take great pride in their established and emerging neighborhoods which are culturally and economically diverse. Residents are proud of their differences in heritage and culture. Economic and educational opportunities are available to all residents, in every neighborhood. Every neighborhood is a safe place to live.

The community enjoys a rich fabric of urban and suburban areas, interwoven with environmental resources, accessible parks, open space and the Ohio River Corridor, all representing a heritage of natural beauty. A multi-modal transportation system serves and ties together the entire community. Unified government services enhance the ability of the community to speak with a single voice in matters related to the investment of human, environmental and capital resources.

The Cornerstone 2020 Vision for Louisville and Jefferson County is nothing less than the best of the past merged with the best of the future, creating a community where all residents can grow and prosper.

Contents

A Central	Opportunity	1-
1.1	Context.	
1.2	Prior Studies.	1-
Neighbor	hood Dialogue	2-
2.1	Advisory Committee	2-
2.2	Stakeholder Engagement	2-
2.3	Key Takeaways	2-
Building a	an Understanding	3-
3.1	Land Use and Community Form	3-
3.2	Transportation and Mobility	3-
3.3	Environmental Concerns	3-
3.4	Crime and Public Safety	3-1
Recomme	ndations	4-
4.1	Programs and Policies	4-
4.2	Land-use Enhancements	4-1
4.3	Transportation Enhancements	4-2
4.4	Public Realm Enhancements	4-2
4.5	Connecting with the Workforce	4-3
Implemer	itation	5-
5.1	Setting Priorities	5-
5.2	Mutually Beneficial Relationships	5-
5.3	Tying Recommendations to Responsibilities	5-
5.3.1	Programs and Policies	5-
5.3.2	Land Use Enhancements.	5-
5.3.3	Transportation Enhancements	5-
5.3.4	Public Realm	5-
5.3.5	Workforce Connections	5-
5.4	Policy Tools	5-1
5.4.1	Development Forecast	5-1
5.4.2	Urban Design Guidelines.	
5.4.3	Rebranding Roadmap	5-2
5.5	Next Steps.	
Acknowle	edgements	5-3
Photograp	oh Credits	5-3



Map illustrating extent of the Park Hill Industrial Corridor.

A Central Opportunity

The purpose of the Park Hill Industrial Corridor Implementation Strategy is to identify and prioritize aesthetic improvements, circulation changes, land-use enhancements, and the policies and programs needed to make the industrial corridor a magnet for businesses and new jobs. If the implementation of improvements is focused and coordinated properly, the result can be more than just a beautiful place to work or an easier place to do business. The cumulative effect can contribute to a healthier community and lay the foundation for Louisville's new "green" economy.

The 1,400-acre study area for the Implementation Strategy is located between Louisville's California and Old Louisville neighborhoods and has suffered from the closures of numerous manufacturing facilities and years of disinvestment. Those closures, their associated job losses, and the neighborhood's simultaneous population decline have resulted in an expansive district of vacant properties and under-utilized resources. Concurrently, new industrial development has largely taken place in suburban and even rural areas where building large facilities seemed easier in the near term. However, these remote locations are becoming scarce, and the long required commutes, the extension of public services,

and the distance to the central business district does not appeal to many businesses. These same businesses could thrive in a area like the Park Hill Industrial Corridor. Because of its unique proximity and characteristic attributes, Louisville Metro sees tremendous potential for the Industrial Corridor to retain and attract these businesses. The area's scale and central location are unparalleled assets to the region. The legacy of established industries in the corridor is strong, and a new generation of innovative business is emerging.

A 2003 National Association of Industrial and Office Properties publication titled *Exceptional Industrial Projects, Beyond the Box* identified nine trends in American manufacturing and distribution. Six of these trends indicate strong potential for the redevelopment of the Park Hill Industrial corridor.

- Speed-to-market demands and the logistics of "just-in-time" shipping
- Strategic importance of proximity to intermodal transportation and suppliers
- Flexibility to accommodate growth and change
- Access to a competitive labor market
- A return to the urban core and adaptive reuse

An increased awareness of energy and environmental issues

The significant downturn in the United States economy and capital markets during the course of this study only reinforces the need for the planning effort. The goals of the implementation strategy aim to create a place where transportation and operation costs are reduced, where reuse of existing structures can lower initial costs of establishing a business and where the new "green collar" workforce can be recruited, trained, and employed. The Park Hill Industrial Corridor can be an economic engine driving Louisville's economy.

The West Louisville economy is complex, and this study cannot address every concern. However, by integrating the recommendations of recent economic and transportation studies and the input of West Louisville stakeholders, the Park Hill Industrial Corridor Implementation Strategy provides a road map for repositioning the corridor as a competitive business center in concert with adjacent neighborhoods and institutions.







Not to scale Downtown Study Area University of Louisville Louisville International Airport / UP3 Worldport Not to scale

The corridor's prime location offers easy access to Louisville's central business district, numerous key transportation corridors, the University of Louisville, and a local work force.

1.1 Context

Study Area and Strategic Proximity

The Implementation Strategy study area has an area of 1,400 acres and is roughly defined by Broadway (US 150) to the north; 22nd Street (US 31W) on the west; Algonquin Parkway (KY 2054) to Winkler Avenue on the south; and 8th, 6th, and 4th Streets on the east. Interstate Highway 64 runs north of the site while I-264 and I-65 are in proximity to the site on its southern and eastern boundaries.

The study area lies directly southwest of downtown Louisville, less than one mile south of the Ohio River and is located less than two miles from the Louisville International Airport and UPS Worldport. Industrial development predominently comprises the urban site, along with occasional small and sporadic pockets of residential development scattered throughout.

Site History

Louisville's central location, nationally, and its proximity to the Ohio River established the strength of its manufacturing and distribution economy long before the construction of the interstate highways that currently cradle the site. The confluence of multiple national rail lines in Louisville's Park Hill neighborhood provided tremendous shipping capabilities to that area and established it as the city's historic industrial center in the late 19th century, but as with manufacturing centers in many other U.S. cities, the area has witnessed rapid decline over the past 30

years. While numerous companies closed their operations in the corridor, legacy industries still remain and thrive, including Brown-Forman, Heaven Hill Distilleries, and Sud-Chemie. These and other area businesses recruit highly-skilled talent and plan to stay and grow in the Industrial Corridor.

The number of plant closures in the study area over the past several decades contributed to the Industrial Corridor's numerous vacant and under-utilized sites. These locations now represent opportunities to reposition the area for future growth.

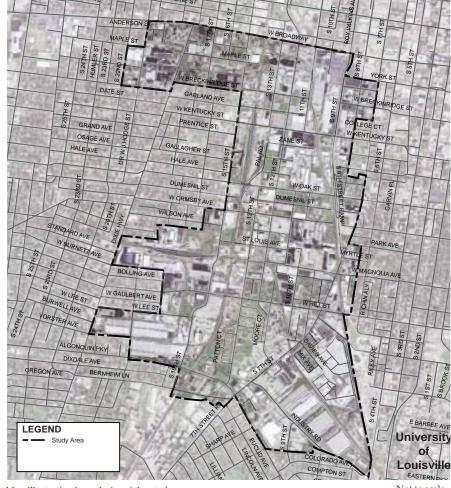
Development Opportunities

The Park Hill Corridor offers unique opportunities for economic development in the Louisville Metro area. The corridor's size, strategic location, and available land are the primary contributors to its potential for redevelopment. The continued growth of the Louisville International Airport and UPS Worldport's operations in conjunction with the area's existing rail and highway infrastructure offers an opportunity to incubate both new export-oriented business and global trade opportunities. Recent businessattraction efforts also spurred investment from companies such as Pro-Liquitech, Great Northern Manufacturing, Consumer's Choice Coffee, and Hosting.com.

The corridor is the only large infill industrial area in Louisville, and its prime location offers easy access to Louisville's central business district, numerous key transportation corridors, and a local work

force. Additionally, the Park Hill Corridor's proximity to the University of Louisville provides further opportunities for growth. Both the university and corridor businesses can benefit from strategic partnerships. Businesses can take advantage of the talent pool, creative research and development potential of students and faculty. The university in turn can benefit from the internship

possibilities, adjunct faculty opportunities, manufacturing potential, and available land within the Industrial Corridor.



Map illustrating boundaries of the study area.

Not to scale



Reusing structures within the Industrial Corridor is an attractive option for growing businesses looking to inexpensively expand or change their location to better serve their clients.

Adaptive Reuse

The existing building stock within the Industrial Corridor is one of its greatest assets. Reusing structures within the corridor is an attractive option for growing businesses looking to inexpensively expand or change their location to better serve their clients. These buildings can be creatively integrated with new development. For example, the historically significant American Standard building is proposed to be used as a parking garage for new housing. Closer to Broadway, existing buildings have been converted into office condominiums and community service enterprises. In many cases the utilities are in place, the structure is sound, and the investment can be focused on altering the building systems or interior spaces to suit the needs of the specific tenant.

Either for sale or for lease, these existing facilities can support a wide range of potential interests. For example, properties like Vogt Industrial Commons include heavy lift cranes, efficient lighting systems, and internet-ready offices. In other areas, flexible space for manufacturing and modern warehousing is available.

Industrial districts in cities, like Baltimore, MD; Durham, NC; and Fredericksburg, VA, offer good examples of how competitive cost and a characteristic architecture can combine to attract new businesses and establish a new sense of place. In many cases, the existing buildings help reduce conflicts with surrounding residential areas as well. Each site has its unique opportunities and challenges, but thinking creatively about existing resources has helped other cities as well as new-comers to the Industrial Corridor augment their business models.















Examples of the adaptive re-use of industrial structures.

1.2 Prior Studies

A number of studies have laid the foundation for the Park Hill Industrial Corridor Implementation Strategy. Since 2001, these efforts have differed in scale and topic of focus, but each contributed to a cumulative technical understanding of the Industrial Corridor and the issues it faces. The Implementation Strategy synthesizes and coordinates the findings of these prior efforts into prioritized action items.

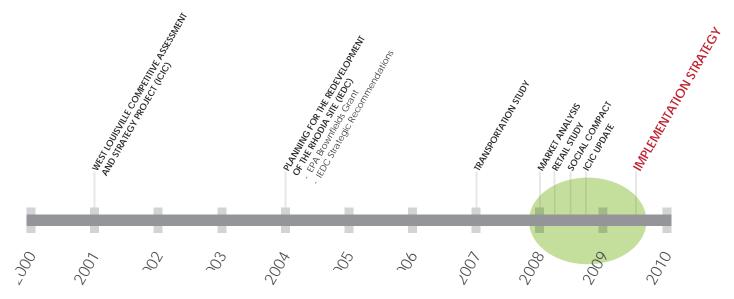
West Louisville Competitive Assessment and Strategy Project

(ICIC) - 2001

The Strategy Project focuses on the industry clusters that offer the most promise for West Louisville and the business environment in which they operate. The Assessment Team and ICIC reviewed the top performing clusters in the region and the existing and potential links to the West Louisville business base. Industry cluster rankings were created based on a number of key variables: regional employment share, growth history, growth potential, West Louisville employment share, ratio of growth rate to employment share, and subjective analysis of inner-city skill sets, entrepreneurial opportunities, and existing inner-city competitive advantages.

Planning for the Redevelopment and Marketing of the Rhodia Site (IEDC) – 2004

The International Economic Development Council (IEDC) plan devised a redevelopment and marketing strategy for the 16.7-acre, city-owned Rhodia chemical plant. The report highlights an analysis of strengths, weaknesses, opportunities, and threats; a strategy of recommended actions for redeveloping and marketing the site; and selected best practices and case studies from other communities. IEDC utilized a peer evaluation panel to conduct an advisory services site visit to Louisville. Panel members were economic development professionals with experience in communities that had faced similar issues and in areas such as industrial real estate, brownfields, and marketing. This effort recommended that the entire Industrial Corridor be studied as a whole.



EPA Brownfields Grant (EPA) – 2007, 2008

The Environmental Protection Agency's (EPA) Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, and environmental job training. EPA selected Louisville-Jefferson County Metro Government for a brownfields revolving loan fund grant in 2007. The assessment grant provides funding to inventory, characterize, and assess various sites within the Industrial Corridor that may have petroleum-related contamination. After an assessment is complete, the revolving loan fund is then available to clean up sites. In 2008. Louisville Metro received an additional assessment grant, for hazardous substances other than petroleum.

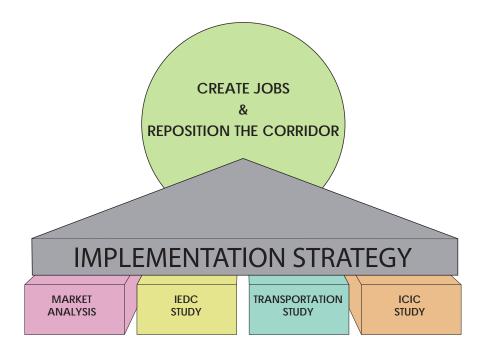
Louisville/Jefferson County Metro Retail Market Study

(Strategy 5) - 2008

The study examines access to retail goods and services as necessary infrastructure on regional, community-wide, and neighborhood levels. The scope of work included the following tasks: stakeholder meetings and site reconnaissance; retail data collection and GIS mapping; consumer survey and analysis; retail market potential analysis; area growth analysis; identification of potential retail nodes and supportable development opportunities; financial analysis of selected development concepts; review of land code in the context of findings, and recommendations on updates; and an implementation strategy.

Louisville Drill Down (Social Compact) – 2008

Social Compact developed the Neighborhood Market Drill Down to address key barriers to private investment in and around inner-city neighborhoods. Their analyses provide alternative assessments of population, income, and housing that do not rely on outdated and potentially-inaccurate decennial census data. The 2008 Louisville Drill Down serves as an additional information source that can aid local government as well as community and business leaders to uncover market strengths and opportunities in the city's underserved neighborhoods. The study aims to complement the city's efforts to attract investment to these areas and inform the comprehensive economic development agenda.



Short-Term Transportation Planning Study (ENTRAN) – 2008

As a precursor to this plan, Louisville Metro elected to initiate work to begin looking at the transportation needs, both existing and future, within the corridor. The primary objectives of the transportation study were to describe opportunities and constraints relative to the movement of goods and services including industrial freight traffic patterns in the corridor. The study also identifies potential improvements to be evaluated and refined by the Implementation Strategy pertaining to transit mobility and roadway and rail infrastructure. Industrial corridor stakeholders participated in the planning process and their feedback was integrated into the report.

Park Hill Industrial Corridor Revitalization - Market Analysis

(ERA) - 2008This market analysis of the Park Hill Industrial Corridor examines the market potential for a variety of real estate uses, including new industrial, office, and retail development. Economics Research Associates (ERA), a leading economic analysis firm, analyzed trends and developed projections for the local resident population, employment, and pipeline development projects. As part of the analysis, ERA also conducted an extensive stakeholder interview process in order to better understand the opportunities and constraints of the site. The goal of the analysis was to identify economic development opportunities for the Park Hill Industrial Corridor that are tied to projected trends for the regional economy and to create new job opportunities for West

Park Hill Corridor Micro-Cluster Analysis (ICIC) – 2008

The micro-cluster analysis uses the cluster framework to identify potential for development of different clusters at the city level. Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and support institutions in the region. Clusters arise because they increase the productivity with which companies can compete. With an emphasis on cluster possibilities, area characteristics are assessed and measured against characteristics that are known for their capacity to sustain and grow individual clusters.

Combining data analysis, on-the-ground information, and stakeholders' observations, the report defines a strategy that will promote economic growth and provide opportunity for Park Hill residents.

Business Clusters Targeted for Growth Potential

Louisville residents.

Business Services

Distribution

Construction

Clean Manufacturing and Research

Processed Foods

Craft Manufaturing

The 2008 Micro-cluster analysis identifies potential for development of different clusters at the city level.

Business sectors that will most likely thrive in the Industrial Corridor:

Target Business Sectors	Projected Employment Growth	Cluster Analysis	Stakeholder Interviews
Automotive		✓	
Building Fixtures, Equipment & Services	✓	✓	✓
Business Services		✓	✓
Chemical Products		✓	
Data centers	✓		✓
Electronics Repair	✓		✓
Entertainment		✓	
High tech start-ups			✓
Metal Manufacturing	✓	✓	
Motor Driven Products		✓	
Plastics	✓	✓	
Prefabricated Enclosures	✓	✓	✓
Processed Foods	✓	✓	✓
Publishing and Printing		✓	✓

Excerpts from 2008 Market Analysis (ERA):

How much new development can the corridor's market support by 2015*?

Industrial and office flex space: 550,00 – 850,000 SF

Retail space: 52,000 – 78,000 SF

How many jobs can the corridor's market support by 2015*?

^{*}Excerpts from the 2008 ERA Market Study. Since the completion of the market analysis in 2008, the forecasts above have been projected for 2015 rather than 2014 to account for the recent economic downturn.

Neighborhood Dialogue

Since its inception, the Implementation Strategy was crafted by extensive interaction with Industrial Corridor stakeholders. Public engagement was developed through a comprehensive approach, incorporating and building upon the extensive stakeholder input that guided recommendations in previous studies.

While the most intensive stakeholder engagement took place throughout the summer of 2008, the planning team continued to interview individuals and conduct community meetings throughout the fall and winter. In this manner, local businesses, residents and institutions could remain informed, and additional opinions could be heard. The Implementation Strategy was informed by a constant dialogue between the planning team and the corridor stakeholders to ensure that the recommendations address the needs and concerns of a broad range of public and private parties.



Louisville Mayor Jerry Abramson speaks at the Implementation Strategy Kick-off Public Meeting in June 2008.







2.1 Advisory Committee

A key component of stakeholder engagement was the active and invaluable guidance provided by the Implementation Strategy Advisory Committee. The committee included 12 Louisville citizens appointed by the Mayor, and each represented a stakeholder organization, business, institution, or neighborhood. Members of the committee were:

- Neville Blakemore, Great Northern Manufacturing
- Bruce Blue, Freedom Metals
- Michael Brooks, California Neighborhood Coalition
- Ralph Fitzpatrick, University of Louisville Signature Partnership
- Carla Hines, California Neighborhood Coalition
- Rev. James Hook, Mt. Hermon Baptist Church
- Dorothy Miles, neighborhood resident
- Richard Power, Sud-Chemie Inc.
- Manfred Reid, Sr., Louisville Metro Housing Authority Board
- Trevor Smith, Brown-Forman
- Marty Snyder, Pro-Liquitech

 Leonard Watkins, former Louisville Metro Council member

The Advisory Committee served as a conduit between the public at large and both the EDAW planning team and Louisville Metro government. The Advisory Committee functions in a two-way manner, allowing for an open knowledge exchange between the project team and the project's primary stakeholders, including:

- New businesses in the corridor
- Legacy corridor businesses
- Residents
- Neighborhood associations
- Local churches

- Community-based organizations including Redefining Brownfields
- University of Louisville
- Louisville Metro Government partners

Face-to-face discussions, phone interviews, Advisory Committee meetings, and public forums all contributed to the multi-faceted stakeholder involvement plan. The project team spoke with additional parties ranging from developers, freight operators, utility companies, private landowners, transit agencies, and former corridor tenants. Multiple modes of media including newspaper, television, and the internet were utilized to disseminate information about the Park Hill Industrial Corridor as well as to attract and encourage input from citizens, businesses, and other interested parties.

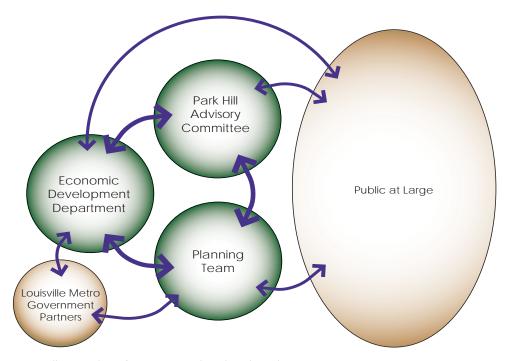


Diagram illustrating lines of communication throughout the study.

2.2 Stakeholder Engagement

The following meetings and interviews were conducted to gather input for the Implementation Strategy:

Advisory Committee Meeting June 24, 2008

The planning team held the first Advisory Committee meeting to introduce the Committee and discuss the Industrial Corridor's greatest assets and liabilities.

Public Kick-Off Meeting

June 24, 2008

Opened by Mayor Abramson, the first public meeting served as the Implementation Strategy kick-off. More than 40 members of the community attended, learning about the upcoming process and discussing their perceptions of the corridor.

Property Owner's Open House

July 29, 2008

In late July, local business and property owners came together to learn about the Implementation Strategy and weigh in on a number of transportation and workforce issues facing the Park Hill Corridor.

Stakeholder Interviews

July 29 - 31, 2008

More than 15 face-to-face interviews were conducted with local property owners, business owners, real estate brokerage professionals, and representatives from Louisville Metro agencies, the University of Louisville, St. Stephen Church and Simmons College.

Advisory Committee Meeting

July 31, 2008

The planning team held the second Advisory Committee meeting to review input from recent stakeholder interviews.

Additional Stakeholder Interviews

August 2008 - March 2009

Throughout the development and refinement of the Implementation Strategy, the planning team met with and conducted 20+ conference calls with additional property owners, constituent groups, work force trainers, businesses, and public agencies to follow up and coordinate recommendations.

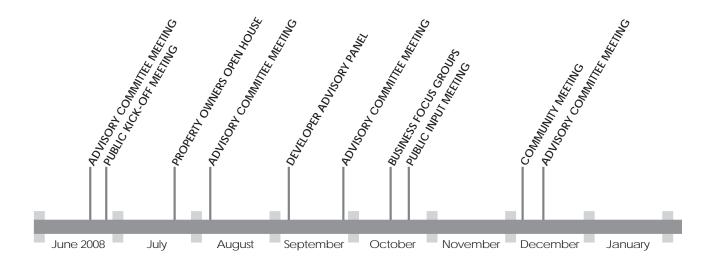
Developer Advisory Panel

September 2 - 3, 2008

The planning team convened a panel of local and national developers to tour the Park Hill Corridor, discuss assets, and develop the best approach to encouraging future investment.

Neighborhood Association Meetings

October 8, 2008 - Old Louisville Neighborhood Association October 13, 2008 - California Federation



Timeline illustrating stakeholder engagement since June 2008.

Advisory Committee Meeting

October 9, 2008

The planning team held the third Advisory Committee meeting to review and comment on preliminary recommendations.

Business Focus Groups

October 13 - 14, 2008

The planning team conducted a series of focus group discussions with existing corridor businesses who fit into the target growth clusters identified in previous studies. The intent of the focus groups was to learn more about the needs of those market sectors best suited for the corridor.

Public Input Meeting October 21, 2008

Based upon input received to date, the planning team held a second public forum to present preliminary recommendations and obtain comment. The public divided into four groups and each took a turn helping to make decisions regarding four aspects of the strategy: truck routing; workforce amenities; neighborhood transitions; and overall improvements.

Community Meeting

December 2, 2008

As a follow-up to the October Public Input Meeting, the planning team met with the residential community near the intersection of 7th and Hill Streets. The goal of the meeting was to learn more about the specific issues facing this neighborhood.

Advisory Committee Meeting

December 3, 2008

The planning team held the fourth Advisory Committee meeting to report on how plans had progressed and discuss how community input had been incorporated into the draft recommendations.





2.3 Key Takeaways

The following concepts, suggestions, and priorities are summarized from extensive public outreach.

Businesses

Many existing businesses have no desire to leave. They want to stay in the corridor and expand their operations.

- Re-establish a network of easily-navigated streets.
- Establish an intuitive near-term truck route to I-65 S that minimizes impacts to neighborhoods and the university.
- Accommodate a variety of building sizes, shapes, and character.
- Repair or upgrade railroad crossings.

Neighborhoods and Residents

Current residents desire change and improvements to the neighborhoods.

- Create a "win-win" situation for both corridor businesses and surrounding communities.
- Establish an intuitive near-term truck route to I-65 S that minimizes impacts to neighborhoods and the university.
- Re-establish a network of easily-navigated streets
- Increase accessibility to transit systems.
- Encourage retail commercial services.

Institutions

Churches want to help train or prepare the workforce.

- Look for strategic partnerships with the churches and schools.
- Engage the University of Louisville as a partner.

Development Advisors

The corridor has many strengths and much potential.

- Focus attention on the most visible and accessible areas first.
- Accommodate a variety of building sizes, shapes, and character.
- Streamline the zoning and site plan approval process for new development.

Public at Large

Lack of awareness is as much of a problem as negative perceptions.

- Increase accessibility to transit systems.
- Area feels neglected. Clean it up!
- Find a new name/identity for the Industrial Corridor—Park Hill and Parkway Place have become interchangeable.



Building an Understanding

A meaningful understanding of the Park Hill Industrial Corridor requires consideration of the myriad needs of the local residents, businesses, and workforce, while also maintaining a realistic perspective of the Louisville business market. The redevelopment of the Industrial Corridor offers tremendous opportunities to capitalize on the area's competitive advantages and to make strategic improvements that build momentum for ongoing future development activity. The site's geographical features, the numerous prior studies, and the findings of this study serve as a lens by which to view the corridor, resulting in a set of recommended actions that stems directly from the analysis of site conditions and stakeholder interests. Additionally, recommendations put forth in prior studies were evaluated cumulatively and incorporated into the analysis to help provide logical and actionable solutions to the corridor's redevelopment challenges.

Analysis of the site is outlined into the following four categories:

- Land Use and Community Form
- Transportation and Mobility
- Environmental Hazards
- Crime and Public Safety



Many user groups and viewpoints exist within the Industrial Corridor.







3.1 Land Use and Community Form

The Park Hill Industrial Corridor is primarily composed of industrial and commercial land, much of which is vacant or underutilized. Several small pockets of residential dwellings as well as institutional, office, and government properties are scattered sporadically throughout the study area. The site includes or is proximate to 11 schools, 3 colleges/universities, 6 government centers, 12 health department clinics, 9 public parks, 3 fire stations, 1 police station, 1 public library, a post office, and numerous churches

Residential development borders the Industrial Corridor on its western, southern, and eastern sides, and the relationship between the industrial development and adjacent institutional and residential development is often incompatible. The majority of the residential development adjacent to the corridor is comprised of single-family dwelling units without driveways or dedicated parking. Street parking is common throughout the corridor to support the need of these neighborhoods.

The scale of the Industrial Corridor creates a combination of opportunities and constraints relating to business attraction. The vast acreage can seem overwhelming, and vacant or available parcels can be found often enough to diffuse a sense of progress. Investments on many properties would go unnoticed by the general public because they are not visible from highly-traveled streets. In many ways the Industrial Corridor lacks an identifiable "center of gravity" that could demonstrate the future character of the

corridor to the marketplace. Furthermore, the vast scale could be broken down into smaller pieces, each with their own identity and purpose.

Along with these constraints come a number of assets, the first being the momentum created by ongoing development at the edges of the Industrial Corridor. The 11-acre Phillip Morris site east of 18th and Broadway has recently gone on the market including a number of adaptive reuse and infill development opportunities. Across 18th Street, the New Bridge Crossing development is planned to include 300,000 square feet of retail commercial, office, and residential development. The LG&E property at 7th and dOrmsby Streets is considered for redevelopment as well. On the former American Standard Site and adjoining properties, 900 new housing units are currently being built



Industrial land-uses bordering residential areas.



Existing single-family homes in the California neighborhood.



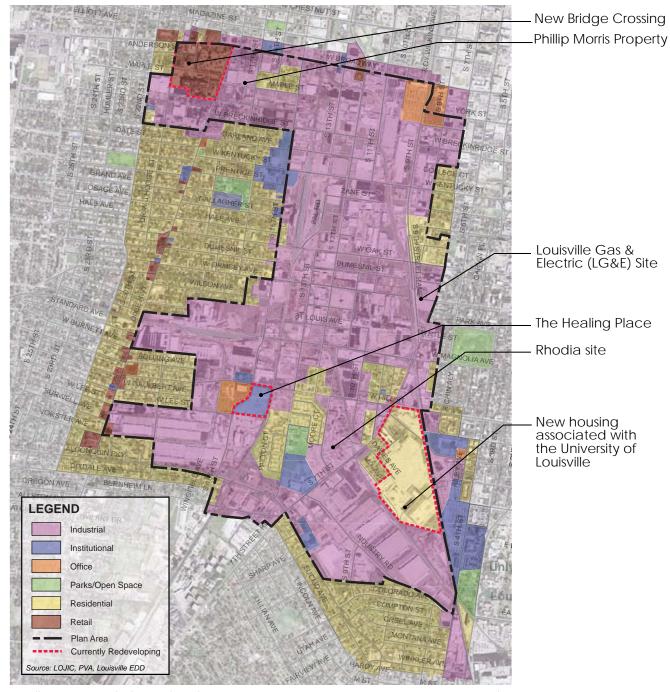
Many buildings in the corridor are vacant or underutilized.

for students of the University of Louisville. Areas near these investment areas can benefit from the adjacent improvements.

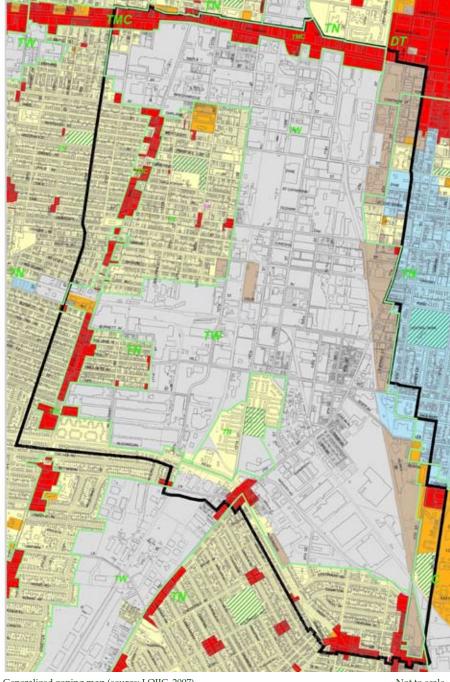
In addition, many properties south of Hill Street represent near- and long-term potential for growth. The former Rhodia Chemical site, currently owned by Louisville Metro, is being prepared for future marketing and redevelopment. Immediately west of the Rhodia site is the Louisville Metro Housing Authority's (LMHA) 35-acre Parkway Place Apartments public housing complex. LMHA has instituted a policy that all new public housing be transitioned to a "scattered site" model to address the social problems that have resulted from concentrated poverty in one place. This means that the 637 housing units at Parkway Place Apartments will one day be moved to other locations throughout the city. The eventual vision for the Parkway Place property is undetermined at this point but its size and location create a compelling opportunity for the Industrial Corridor. Simultaneously, the 8-acre property southwest of Hill and 13th Streets is available for sale and could complement the eventual redevelopment of the Parkway Place site.



Southern portion of the Rhodia site.



Map illustrating existing land uses in the study area.



Generalized zoning map (source: LOJIC, 2007)

Not to scale

The Industrial Corridor is predominantly zoned EZ1, Enterprise Zone. This flexible zone allows for a variety of commercial and industrial uses, and development scenarios. Areas along the Eastern edge of the Corridor are zoned for industrial purposes and the frontage of Broadway is zoned Commercial. The only area within the Industrial Corridor zoned for residential purposes is Parkway Place Apartments.

The form district associated with the industrial area zoned EZ-1 is TW, Traditional Workplace. The corresponding form district to the commercial zoning is TMC, Traditional Marketplace Corridor. The area surrounding the corridor is largely residential and part of the Traditional Neighborhood form district., TN. The Land Development Code includes additional development and buffering criteria for businesses adjacent to the residential areas.

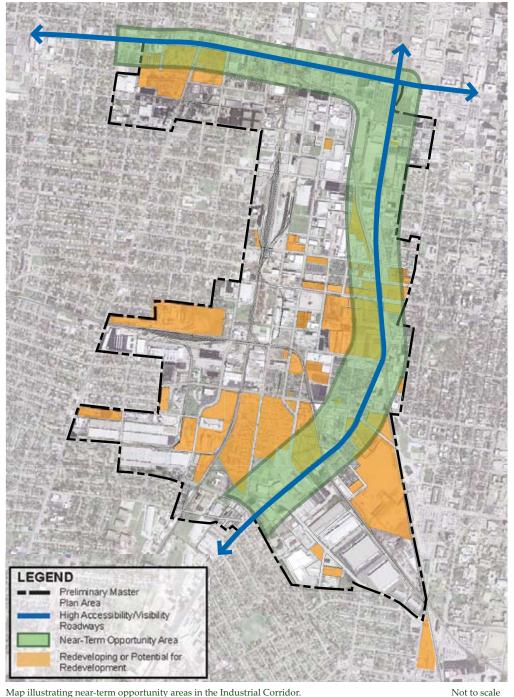


Generalized zoning legend:

The 7th/9th Street corridor is the most heavily traveled route through the Industrial Corridor and provides access to the major interstate routes. Not only are properties along these roads more accessible but investments made here will also be more noticeable to more people and symbolize positive change for the corridor's future. The cumulative effect of these investments will add up to more than the sum of their parts because of the high visibility and recognition potential.



The 7th/9th Street corridor is the most heavily-traveled route through the Industrial Corridor.



Map illustrating near-term opportunity areas in the Industrial Corridor.

3.2 Transportation and Mobility

Park Hill's historical emergence as the primary industrial center in Louisville is due in large part to its location at the convergence of multiple national railways. Today, the existing rail network in the study area serves as both a benefit and an obstacle to new development. Rail access can provide an immediate shipping connection to new industrial tenants, but as some crossings currently exist, the rail system is a major impediment to traffic flow throughout the area.

ENTRAN's Short Term Transportation Study points out that the corridor's street grid is an extension of the urban grid network of downtown Louisville and that most major vehicular traffic flow bypasses the area to avoid the many non-continuous streets, on-street parking areas, at-grade railroad crossings, and narrow roadways. The study also notes that the east-west streets through the Industrial Corridor are disconnected due to the reconstruction of 9th Street and the vast rail network. The same can be said for the north-south streets through the study area. Continuous north-south travel through the area is limited to the 7th/9th Street corridor and 15th Street. In the east-west direction, Kentucky, Oak, and Hill Streets traverse the study area, although Kentucky Street currently has two at-grade rail crossings, one which crosses multiple tracks at the rail yard.

Direct freeway access to the study area is limited. Magnolia Avenue, St. Catherine Street, and Broadway provide ingress into the study area, and Oak Street provides egress east from the study area to I-65. 9th Street (Roy Wilkins Avenue), 22nd Street and 21st Street provide the study area ingress and egress north to I-64. Virginia Avenue and Oak Street provide ingress and egress to I-264 (Shawnee Expressway) to the west.

While the study area is relatively well-connected to the surrounding major highways, each of the routes requires travel through established residential areas, a less-thandesirable condition for truck traffic accessing the study area. The transportation study identifies inadequate southbound access from the corridor to I-65 and UPS Worldport as a major transportation deficiency. The study shows that truck traffic primarily follows 15th, 7th, and 9th Streets as northsouth freight routes, due to the corridor's current lack of a central "spine". Currently some trucks also weave southbound through the corridor on under-sized secondary streets to access I-65, often causing traffic

congestion and confusion for local traffic in the corridor. These constraints, verified by stakeholder input, make establishing northsouth access within the Industrial Corridor a short-term transportation priority.

Pedestrian and alternative transportation facilities are sparse in the study area, although some streets have bicycle lanes. East-west bicycle connectivity is limited to Kentucky Street and Garland Avenue, and there are currently no north-south facilities that pass completely through the study area.

Like the bicycle network, the pedestrian network of crosswalks, sidewalks, and pedestrian paths is fragmented and incomplete. Many residents currently walk along the edges of streets to access their jobs and neighborhood services where accessible sidewalks are unavailable.



According to the 2008 ENTRAN study, more than 40% of corridor households do not own a vehicle, most relying heavily on public transit.

The surrounding neighborhoods rely heavily on public transportation as a significant portion of residents do not have access to personal vehicles. The Transit Authority of River City (TARC) currently operates a number of bus routes that serves portions of the study area. However, as the area redevelops, there will be a need to re-evaluate the service provided. In particular, accessibility to current and future jobs and homes should be considered.



At-grade rail crossings and a discontinuous street network hinder efficient freight passage through the corridor.



Lack of public realm in some areas of the corridor leads to public safety hazards.



Discontinuous and broken sidewalks lead many residents and workers to walk in the streets.



Magnolia Avenue is one example of a fragmented, dangerous roadway.

Table 6-1: Summary of Roadway Improvement Recommendations

Key	Potential Projects	Recommendation	Location
1	Construct interchange for access to I-65 from Hill Street	Recommended for further study	East of Floyd Street
2	Construct at-grade rail crossing on Cardinal Boulevard west of 4 th Street	Defer to Master Plan	West of 4th Street
3	Construct 12 th Street extension to Industry Road at 7 th Street	Defer to Master Plan	Between 7th Street and Hill Street
4	Improve the intersection of Hill Street at 7 th Street	Recommended for further study	7th Street intersection with Hill Street
5	Replace rail underpass on Hill Street between 4 th and 7 th Street	Recommended for further study	Between 7th Street and 4th Street
6	Improve 7 th Street between Algonquin Parkway and Hill Street	Recommended for further study	Algonquin Parkway to Hill Street
7	Relocate rail line on Magnolia Avenue between 7 th Street and 12 th Street	Defer to Master Plan	Between 7th Street and 12th Street
8	Construct rail grade separation on Kentucky Street between 13 th and 15 th Street	Defer to Master Plan	Between 13th and 15th Street
9	Replace rail underpass on Oak Street east of 15 th Street	Recommended for further study	Between 13th Street and 15th Street
10	Convert Oak Street / Virginia Avenue to two-way between 16 th Street and I-264 (Shawnee Expressway)	Defer to Master Plan	Between 16th Street and I-264
11	Add bicycle lanes to 15 th Street from Hill Street to Algonquin and Broadway to Riverwalk	Recommended for further study	Algonquin to Hill Street, Broadway to the Ohio River
12	Reconnect Ormsby Avenue between 10 th Street and 15 th Street	Defer to Master Plan	10th Street to 15th Street
13	Reconnect 10 th Street between Magnolia avenue and Ormsby Avenue	Defer to Master Plan	South of West Ormsby Avenue
14	Reconnect 11th Street between Oak Street and Kentucky Street	Defer to Master Plan	Between Oak Street and Kentucky Street
15	Reconnect 13 th Street between Oak Street and Kentucky Street	Defer to Master Plan	Between Oak Street and Kentucky Street
16	Create three-lane street section 18 th Street between Broadway and Hill Street	Recommended for further study	Hill Street to Broadway
17	Convert Kentucky Street to two-way between 8 th and I-65, Breckenridge to two- way between 9 th and I-65	Recommended for further study	East of 8th Street / 9th Street
18	Open Kentucky Street to through traffic west of 15 th Street	Defer to Master Plan	West of 15th Street

The Short-Term Transportation Planning study prepared in 2008 by ENTRAN identified improvements which would improve access and mobility within the Industrial Corridor. Table 6-1 from that study summarizes the recommended improvements and breaks them into two categories. The improvements listed as "Recommended for further study" were suggested for future analysis by Louisville Metro. The Items listed as "Defer to Master Plan" are to be evaluated and potentially incorporated during development of the Implementation Strategy.

Summary of improvements excerpt from the ENTRAN Short Term Transportation Study, 2008.

3.3 Environmental Concerns

Park Hill's historic success as an industrial center has yielded a number of noteworthy industrial innovations over the years, but the industrial process also posed significant implications to the environmental well-being of the study area.

Over the last decades, the path of least resistance for industry has been to develop suburban "greenfields" partly to avoid the need to address potential contamination of existing industrial sites. Now, "brownfield" redevelopment becomes a significant opportunity as demand for shorter commutes and smarter growth shifts development interest back to the heart of the city.

The US Environmental Protection Agency (EPA) defines a "brownfield" as real prop-

erty, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or containment. Louisville Metro government has developed expertise and tools to assist landowners in evaluating the potential contamination issues of "brownfield" sites and developing business strategies to address them. For instance, the EPA assessment grant program is a tool that can help identify environmental concerns and open the door to properties that offer significant business advantages to employers, and additionally, the EPA revolving loan fund is an implementation tool which can assist in the clean-up of contaminated sites.

Virtually all sites within the Industrial Corridor require contamination assessment prior to their redevelopment. However levels of contamination vary greatly from site to site. Some sites will require little or no remediation. In areas where contamination exists, innovative remediation techniques and environmental insurance policies can be used to address liabilities and overcome obstacles. Many previously-contaminated sites have completed or are under active remediation, including:

- Philip Morris
- American Standard
- Rhodia
- Corhart Refractories

New "green infrastructure" technology also offers innovative strategies to responsibly mitigate industrial contamination while creating new specialized jobs that benefit multiple stakeholders. By developing this expertise further, the Industrial Corridor can serve as an exemplar of clean, green industry for Louisville and the United States.



The Rhodia site is one example of an industrial parcel to have completed mitigation of previous environmental contaminants



Mitigation of contaminants on the American Standard Site.

3.4 Crime and Public Safety

Crime was identified during the public involvement process as a major concern which affects area perceptions. The recognition of crime as an issue in the corridor led to additional analyses of both the area's actual crime data as well as the negative perceptions of the corridor's safety to the general public.

Louisville Metro Police Department provided 12 months of complete crime data for the corridor to provide a representative picture of the corridor's actual crime activity. Metro Police also provided crime data for Old Louisville and the Original Highlands as a basis for comparative analysis. The crime data was mapped by crime category (drug-related crime, violent crime, non-violent crime, etc.) and analyzed to reveal crime "hot spots" relative to specific areas, neighborhoods, and streets within the Industrial Corridor. The data revealed that high densities of drug-related

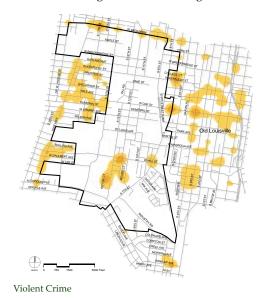
crime typically occur in areas of residential development that are surrounded by non-residential uses. Parkway Place, a public housing development south of Hill Street and west of 11th Street, is an especially good example of an isolated cluster of residential development surrounded by industrial land. Parkway Place exhibits significantly higher densities of drug-related crime than most other areas.

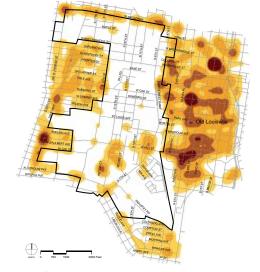
Interviews with Metro Police suggest that the concentration of drug activity and sales in areas like Parkway Place Apartments creates the impetus for a broad range of other crimes generally associated with, or stemming from, drug-related crimes to arise in adjacent neighborhoods. These associated crimes can range from assault and robbery to prostitution and rape.

The maps below show a graphic representation of all reported crimes in the Park Hill Industrial Corridor between May 2007 and May 2008. A comparison of the cumulative

crime reported in Park Hill versus those reported in both Old Louisville and the Original Highlands reveals that the three neighborhoods are relatively similar in their intensity of crimes reported, and while the frequency of reported crime is higher at Park Hill, Metro Police suggests that crime in the residential areas surrounding the Industrial Corridor is not significantly worse than in Original Highlands, a neighborhood generally believed to be safe.

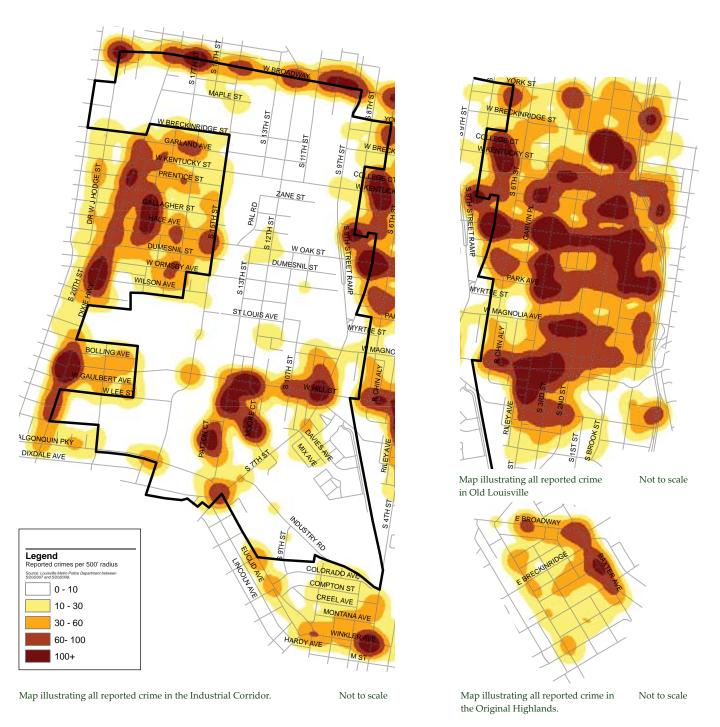
The drug-related crime in and around the corridor would likely decrease if housing units at Parkway Place were redistributed elsewhere throughout the city. From a crime prevention standpoint, redevelopment of the Parkway Place public housing complex would be a win-win result for the Industrial Corridor and Old Louisville. Principles of Crime Prevention Through Environmental Design (CPTED) should be followed as physical improvements are made within the Industrial Corridor.







Drug-Related Crime



Recommendations

The input received from the Industrial Corridor stakeholders, as well as the analysis of the existing conditions, tells a story of opportunity. However, there are a number of hurdles to overcome in order for the Park Hill Industrial Corridor to realize its potential. Simply addressing concerns such as ease of mobility or public safety perceptions individually will not be sufficient for generating or sustaining long-term success.

Stimulating the meaningful creation of jobs in the Industrial Corridor can only be accomplished by addressing multiple constraints comprehensively and concurrently. This involves simultaneously creating the

infrastructure needed to open the corridor to further investment, making physical changes and public relations investments needed to change negative or ambivalent perceptions, providing amenities to attract and support the business community, and developing a link between the jobs created and the neighboring workforce.

Recommendations have been informed by the stakeholder outreach efforts, the work of prior studies, the suggestions of development professionals, and the need to efficiently overcome constraints in the nearterm. Success can be best achieved through a comprehensive approach. Visible, physical

improvements must be paired with complementary policies and public relations. To adequately address the issues, recommendations are grouped into five categories:

- Programs and Policies
- Land-use Enhancements
- Transportation Enhancements
- Public Realm Enhancements
- Connections with the Workforce

Each category contributes to a cumulative demonstration of Louisville Metro's commitment, will help build confidence within the marketplace, and will set the stage for future private investment. A summary of recommendations follows:







4.1 Programs Policies:

- 4.1.1 Initiate an Industrial Corridor Business Association.
- 4.1.2 Establish a new brand identity for the Industrial Corridor.
- 4.1.3 Establish a Property Enhancement Zone.
- 4.1.4 Define the Industrial Corridor as a center for "green" practices, products, and services.
- Define the Industrial Corridor as an industrial art exhibit.

4.2 Land-use Enhancements:

- 4.2.1 Eliminate zoning conflicts.
- 4.2.2 Focus on catalyst development sites.
- Establish districts within the Industrial Corridor.
- Pursue revitalization through residential infill.

4.3 Transportation Enhancements:

- 4.3.1 Establish an improved near-term connection to I-65.
- 4.3.2 Develop a central spine road.
- 4.3.3 Improve connectivity between the university campus and the Industrial Corridor.
- 4.3.4 Alleviate conflicts with crossing the rail yard.
- Strengthen the existing road network.
- Improve comfort and convenience for bicycle commuting.
- 4.3.7 Increase access to transit services.

4.4 Public Realm Improvements:

- 4.4.1 Create pedestrian friendly streetscapes in priority areas.
- 4.4.2 Reinvent Parkhill Park.
- 4.4.3 Provide additional amenities for transit commuters.
- 4.4.4 Develop a linear park linking the university with downtown and the waterfront.

4.5 Connecting with the Workforce:

- 4.5.1 Focus churches and community-based organizations on one-on-one outreach.
- 4.5.2 Convene a knowledge exchange forum for workforce preparedness and training.
- 4.5.3 Develop training and related amenities within the Industrial Corridor.
- 4.5.4 Increase interaction with local businesses.

4.1 Programs and Policies

The following proposals are intended to lay the groundwork for job retention and creation by addressing the lack of awareness of Industrial Corridor opportunities, changing negative perceptions and building relationships between existing businesses.

4.1.1 Initiate an Industrial Corridor Business Association

Building on the desires of many Industrial Corridor businesses to stay and grow in the area, an association of businesses could accomplish a range of benefits. First, the association would foster increased potential for profitable business-to-business relationships. Second, it could be a united, strengthened voice advocating for the needs of the area's business community. Thirdly, it could be a vehicle for increased communication, partnership, and collaboration with adjoining neighborhoods, railroads,

workforce developers, and institutions like the University of Louisville and Greater Louisville, Inc.-the metro chamber of commerce. As a first step, the association could play an important role in perpetuating job growth in the Industrial Corridor by influencing its own development and pushing for subsequent recommendations.

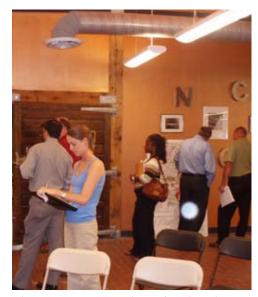
The Louisville Metro Economic Development Department can assist in creating the association, discuss how businesses can share resources to sustain the group and work with its members to implement future enhancements.

4.1.2 Establish a new "brand identity" for the Industrial Corridor

Creating a new identity for a place is a proven technique in Louisville for encouraging positive change while demonstrating a new beginning. The redevelopment of the Cotter and Lang public housing complexes

and recasting of it as The Village of Park DuValle, has been a recent success story. A similar rebranding effort in the Industrial Corridor could create new awareness of the area's assets and concurrently overcome the negative publicity associated with the interchangeable names "Park Hill" and "Parkway Place".

Establishing a new brand identity should be more than coming up with a new name. This rebranding can directly influence the future marketing of area properties and their appeal to potential employers. This new identity should relate to the strengths of the Industrial Corridor, perhaps its historic role as an economic engine within the city or the technological innovations and cutting-edge products manufactured there. For example, the Industrial Corridor is currently a hub for recycling and metal re-use. Air filters have been engineered, improved and manufactured there for over 100 years. Sud-Chemie



A business association can advocate for Industrial Corridor interests.



Environmentally sensitive development as well as "Green" products and services resonate in the marketplace.

develops and produces the catalysts that make clean diesel engines and fuel-cells possible. Environmentally sensitive development and "green" products and services resonate in the marketplace and should play a definitive role in the shaping of the Industrial Corridor's identity. (A model "road map" for the necessary rebranding effort is described in greater detail in Chapter 5, Implementation.)

The business and residential communities alike identified the need to "clean up" the area. Currently, derelict structures, broken windows, overgrown lawns, or debris in the street convey a sense of neglect. Conversely, basic building and landscape maintenance convey a sense of pride to community members as well as to potential investors. Once maintenance expectations are set, a

type of social pressure between landowners can help continue upkeep efforts.

The Louisville Metro Property Maintenance Code governs these issues and requires basic maintenance of structures and property. The regulation and enforcement process is based upon inspections, penalties, and liens if necessary; appeals and hearings are components of the process as well. While the process is comprehensive, its application to individual properties throughout the city can dilute its intended effect. In addition, the code has only been revised to pertain to industrial properties within the last 18 months. A focused blight abatement effort within the Industrial Corridor is necessary to clear away unsafe and derelict structures and to elevate property maintenance expectations. This could be accomplished

by establishing a temporary pilot *Property Enhancement Zone.*

In this priority area, new inspectors from IPL, possibly supported by the "Clean Teams" from surrounding communities, would conduct a publicized education and awareness campaign focused on Industrial Corridor properties. This would then be followed by a series of inspections, notices, and remedies. The focused effort in one specific area will raise awareness of Louisville Metro's current policies, streamline the improvements, and leverage the cumulative benefits to change perceptions. The location of the *Property Enhancement* Zone could then periodically shift to other areas within the city in order to make more substantive changes in key areas.







4.1.4 Define the area as a center for "green" practices, products, and services A proposal to complement the rebranding effort, this recommendation grows out of innovations currently taking place in the Industrial Corridor and a number of initiatives launched by both Louisville Metro and the Commonwealth of Kentucky. First of all, in November 2008, Kentucky Governor Steven L. Beshear released Intelligent Energy Choices for Kentucky's Future, a seven point strategy for energy independence. The plan aims to restructure Kentucky's energy

> 1. Improve the energy efficiency of Kentucky's homes, buildings, industries, and transportation fleet

portfolio in a way that utilizes energy as an

economic development tool. The Intelligent

Energy Choices plan's seven strategies are:

- 2. Increase Kentucky's use of renewable Energy
- 3. Sustainably grow Kentucky's production of biofuels
- 4. Develop a coal-to-liquids industry in Kentucky to replace petroleum-based liquids
- 5. Implement a major and comprehensive effort to increase gas supplies, including coal-to-gas in Kentucky
- 6. Initiate aggressive carbon capture/sequestration (CCS) projects for coal-generated electricity in Kentucky
- 7. Examine the use of nuclear power for electricity generation in Kentucky

At the local level.Louisville Metro Government has, to date, adopted energy efficiency as its primary strategy for conserving energy, reducing fossil fuel emissions, and achieving sustainable practices, both for its own operations and as a community focus. Metro Government is focusing on achieving and promoting energy efficiency in the building sector, fuel efficiency in its fleet operations and in the public transportation sector, improving air quality, and providing assistance for green job and business development.

Louisville's efforts are being implemented under the auspices of the Partnership for a Green City, a partnership of Louisville Metro Government, University of Louisville and Jefferson County Public Schools, three of Louisville's largest public entities. Louisville Mayor Jerry Abramson signed the U.S. Conference of Mayors Climate Protection Agreement in 2005, which obligates the community to undertake an

effort and process to reduce the community's greenhouse gas emissions by 7% below 1990 levels by 2012. In an effort to strategically meet this goal, the Louisville Climate Change Committee was formed to prepare a report back to the leadership of the Partnership. The Committee created seven working groups to look at various areas and develop recommendations for the report. The working groups are: Greenhouse Gas Emissions Inventory and Mechanisms; Land Use, Transportation, and Urban Forestry; Energy Efficiency and Renewable Energy; Education and Outreach; Utility Regulations, Policies and Practices; Local Impacts and (Municipal Solid) Waste. What followed was the Partnership for a Green City Climate Action Report, released in April 2009. The report includes recommendations from each of the working groups that can be implemented over time to help the City reach the goals of the U.S. Conference of Mayors Climate Protection Agreement.

Louisville Metro currently has several programs underway that are aimed at energy efficiency and sustainability.

- Louisville was selected by ENERGY STAR as a Model City and is developing programs that can be adopted by other communities. Louisville co-founded the non-profit Louisville Energy Alliance (LEA) with three commercial real estate associations, with a phase- one goal of promoting energy efficiency in the commercial building sector. LEA is currently sponsoring the 2009 Kilowatt Crackdown, a year-long competition to reduce energy use among the 244 participating buildings, using ENERGY STAR tools and resources. The competition received national recognition with designation as a Best Practice by the 2009 Mayors' Climate Protection Awards, sponsored by the U.S. Conference of Mayors.
- Louisville Metro launched GO GREEN LOUISVILLE, an outreach program to raise awareness and educate the public on techniques to improve energy efficiency and reduce carbon emissions. One particular program, the Community of Trees, was started to establish a citizenry who value trees as a needed community asset. It seeks to create and fund a comprehensive master plan that will preserve and proliferate trees.
- The Metropolitan Sewer District (MSD)
 has set forth a plan to minimize impacts
 resulting from the combined sewer overflows that periodically take place.

The Park Hill Industrial Corridor can play a significant role relative to Louisville Metro's mandate to become a more sustainable city and can contribute to the majority of Kentucky's intelligent energy plan's strategies. First and foremost, the Industrial Corridor is uniquely positioned for smart

growth due to its central location, proximity to public transit, existing utility infrastructure, and potential for adaptive re-use, infill, and redevelopment.

Existing and new businesses can be part of the solution due to the Industrial Corridor's scale. The cumulative effect of 1,400 acres of renewable energy generation, stormwater mitigation, and commuter travel is significant, and environmentally sensitive development practices and business operations within the Industrial Corridor could have an equally significant positive impact.

The Industrial Corridor could serve as a model for brownfield redevelopment; energy conservation, efficiency, and generation; innovative water quality management; carbon capture technologies; and combined sewer overflow abatement by showcasing demonstration areas for innovative "green" infrastructure.



Filtering roof draining before it reaches the municipal storm sewer sytem improves water quality.



Green roofs can reduce buildings' energy consumption.

The emergence of the Industrial Corridor as a demonstration area for innovative ideas fits seamlessly with the University of Louisville's research into sustainable technologies. A partnership between the recently funded Conn Center for Renewable Energy, Research, and Environmental Stewardship and Industrial Corridor businesses could be mutually beneficial in many ways:

- The urban context of the corridor offers the possibility to study solutions where they are needed most worldwide—in cities.
- The scale of the Industrial Corridor and acreage of rooftops allows for many different technologies to be studied within close proximity and with similar control conditions.
- Louisville's climate allows for studying solutions that are effective, even in less than ideal conditions.
- The mix of industry, office, commercial, and housing allow for study of creating and using affordable alternative energy.
- The ability to develop innovative patented technology, manufacture it, and ship it across the globe all in one place is a unique feature.
- By taking part in the research, corridor property owners can lower their operating costs, keeping the corridor on the forefront of affordable technology.

A report issued by the U.S. Conference of Mayors entitled "U.S. Metro Economies: Current and Potential Green Jobs in the U.S. Economy" explored the economic benefits of the green economy, particularly green jobs and the potential growth areas.

The report defines Green Jobs as "any activity that generated electricity using renewable or nuclear fuels, agriculture jobs supplying corn or soy for transportation fuel, manufacturing jobs producing goods used in renewable power generation, equipment dealers and wholesalers specializing in renewable energy or energy-efficiency products, construction and installation of energy and pollution management systems, government administration of environmental programs, and supporting jobs in the engineering, legal, research and consulting fields."

Of particular interest to this Implementation Strategy, the report states "Metropolitan economies are the engines of U.S. economic growth; if investment in green industries is to successfully transform the U.S. economy, it must happen at the metropolitan and local level. This investment is critical to our competitiveness in the global economy, to our living standards, indeed, to our future." And, "the vast majority of Green Jobs are not location dependent, so future Green Jobs will be located in cities and metropolitan areas that are currently the most attractive for investment, or in areas that actively increase their attractiveness relative to competing areas."

To this end, the Park Hill Corridor is ripe to position itself for the emerging green economy.



Example of green roof technology applied to an industrial structure.

The first step in achieving an identity as a "green" employment center and a respective market niche can be to develop a number of visible demonstrations of "green infrastructure". In this way the Industrial Corridor can be an example of best practices for the metro area as a whole while improving the surrounding environment.

Potential "green infrastructure" demonstration partnerships include:

 Retrofit the Louisville Metro Archives building at the corner of Industry Road and 7th Street with a green roof to insulate the building, reduce heat island effect, and provide a rooftop garden from which to view and market Industrial Corridor properties to potential employers.

- Retrofit and/or build sections of 12th Street as a "green" street that includes bio-retention cells behind the curb to filter stormwater run-off.
- Creating a constructed wetland at Park Hill Park to remove pollutants from area stormwater and to increase infiltration.
- Retrofit the recreation center at Parkhill Park with a water harvesting and re-use system to be used for grounds maintenance, toilet flushing, etc.
- Create an incentive program for businesses that install a means of reducing energy demand, increasing energy efficiency, or producing renewable energy on site. (Solar, wind, geothermal, etc.)

- Incentivize businesses to generate their own renewable power and supplement the local energy grid through strategies like net metering.
- Develop relationships with the University of Louisville and the Conn Center for Renewable Energy, Research, and Environmental Stewardship to use the Industrial Corridor as an "urban laboratory". The scale and variety of buildings, multiple land-uses, and proximity offer flexible opportunities for researching the development and application of new technologies.
- Collaborate with LG&E to develop a program where roof space or land of Industrial Corridor businesses is used to provide electricity for the metro area.



An example of a cistern integrated into the entry landscape of an office building.



The context of the corridor offers the possibility to study urban renewable energy solutions.



Wind-generated power can capitalize on large roof areas.

Energy easements could be developed; space could be leased; or simply the generated power could offset the land owner's demand.

- Build on the existing recycling businesses in the Industrial Corridor to create
 a collection and distribution center for
 salvaged and or recycled construction
 materials. As more and more development
 incorporates "green building" principles,
 demand will increase for locally recycled
 and salvaged construction materials.
- Develop design standards which do not limit the economic potential of a piece of property but set limits on the maximum percentage of impervious coverage for a site and minimum tree canopy to be established during infill or redevelopment activities.
- Develop agricultural infrastructure, such as aggregation, cold storage, distribution and other facilities, within the Corridor to provide critical links between supply and demand for regionally produced agricultural food products, leveraging its location and Louisville's growing interest in regional and urban agriculture.
- Explore urban forestry as an interim use on underutilized property. The northern half of the Louisville Metro owned Rhodia site could be a temporary demonstration site where trees are used to sequester carbon. This use illustrates the asset value of brownfields prior to their redevelopment.
- Work with private landowners to plant urban forests as interim uses on landbanked properties. Expanding the urban

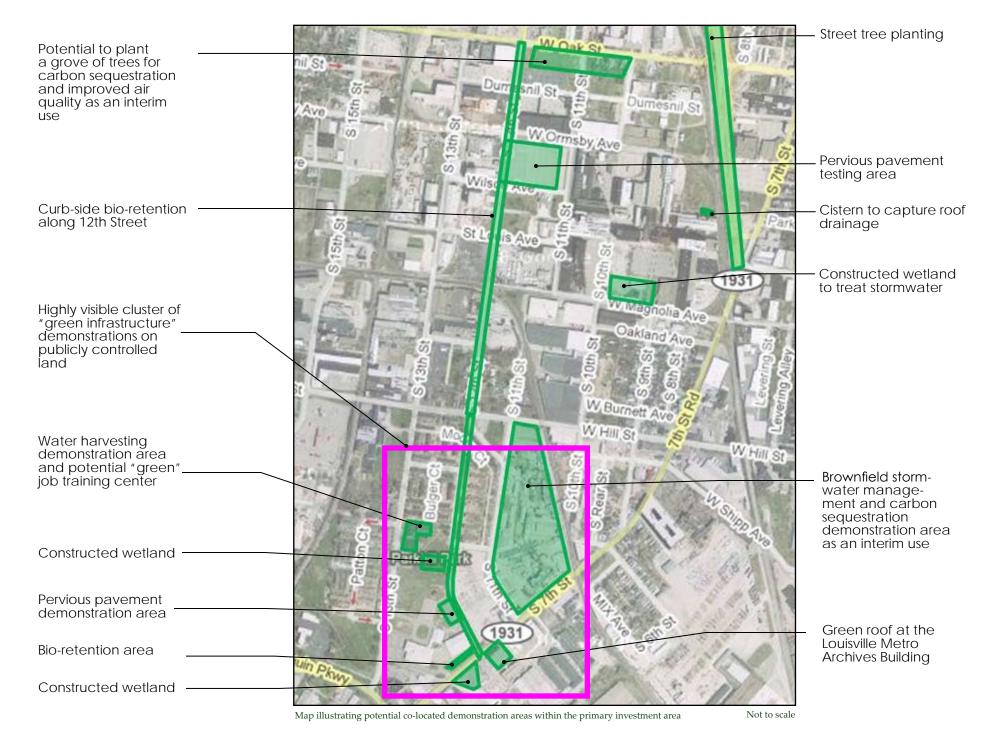
- tree canopy will have an immediate positive effect on air and water quality and will assist in sequestering carbon.
- Require street trees to be planted along any newly constructed or renovated public or private street to reduce heat island effect and provide for a more hospitable pedestrian environment.

Many of these proposals serve to reduce the burden on the combined sewer system by limiting the amount of run-off that enters the pipes. Many also contribute to reduced emissions, a more efficient power supply, lowering operating costs and improving air quality. It is important to note that the demonstration areas can be completed as components of public works renovations or construction projects that would have been necessary anyway. They represent a more responsible way of maintaining public land and building civic infrastructure.

Additionally, these demonstration areas can have the greatest effect when grouped close to each other. A cluster of demonstration areas can tell a powerful story and show how many small, inexpensive improvements can have a substantial cumulative effect. In many cases these small interventions at the beginning of a system can reduce the need for more costly infrastructure improvements at the end of the system.



The corridor can utilize urban forestry as an interim use on underutilized property.



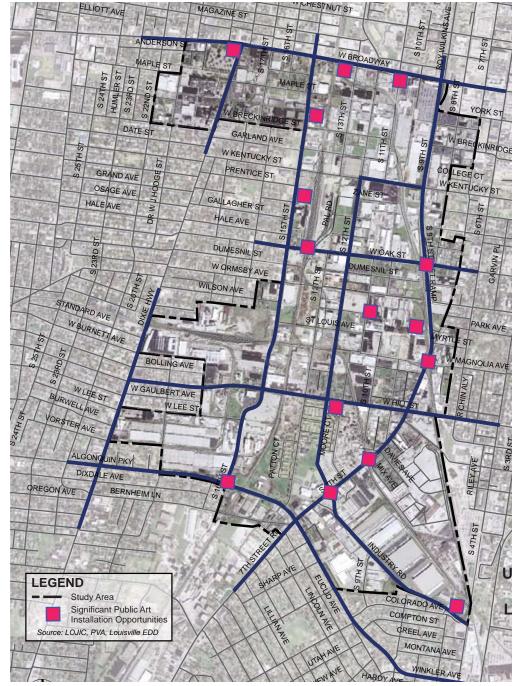
4.1.5

Establish the Industrial Corridor as an Industrial Art exhibit

Throughout the world there are examples of how the elements of an industrial landscape can be celebrated and enhanced as art. Be it the use of lighting and pedestrian paths in Germany's Landschaftspark, the facades of the Tate Modern museum in London or the Brown-Forman bottle above their 18th Street distillery, art can create a positive sense of place.

Starting with West Main Street, Louisville has transformed itself into a city known for its appreciation of the arts, and the ongoing Public Art Master Plan is further evidence of this commitment. The Industrial Corridor represents a compelling artistic opportunity. While a subtle artistic atmosphere can be achieved in many places throughout the city, the Industrial Corridor's structures offer a unique monumental canvas. At another level, public art installed at highly visible intersections or as part of overpasses can demonstrate that the Industrial Corridor is a place people are proud of. The Industrial Corridor can establish itself as one of Louisville Metro's public art exhibits in a number of ways:

- Hold a competition, as part of the rebranding effort, in which a highly visible site within the Industrial Corridor is either the subject of the work or the canvas on which the art would be displayed. Perhaps banners could be hung from the consolidated grain and barge silos on 15th street or murals could be painted on manufacturing facilities in need of exterior maintenance.
- Hold a competition to design and fabricate new bus shelters that celebrate the Industrial Corridor's history of innovation.



Map illustrating opportunities for significant public art installations.

Not to scale











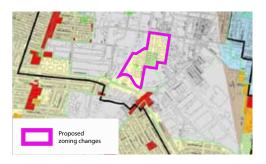


4.2 Land-use Enhancements

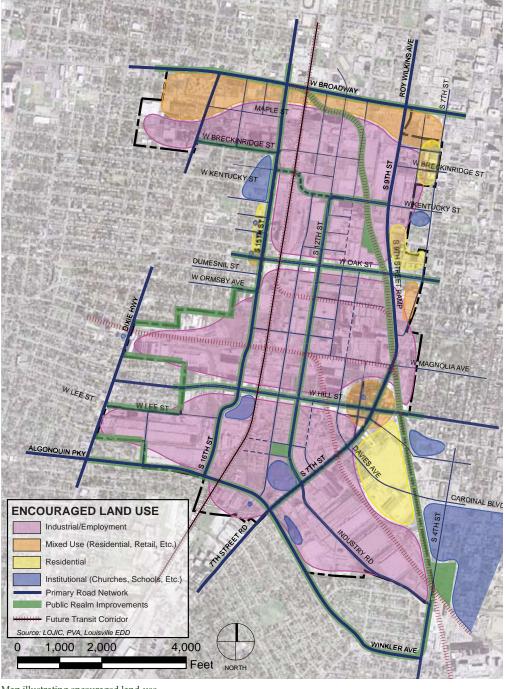
The location of and relationships between manufacturing facilities, warehouses, offices, residences, and commercial uses within the Industrial Corridor currently affect potential job creation both positively and negatively. Proximate shipping facilities take advantage of similar infrastructure needs while shared streets between residences and industrial traffic cause conflict. Appropriate land-use pattern recommendations should facilitate job creation by resolving conflicts and supporting the physical parameters of businesses within the target economic clusters identified in previous market studies. These businesses require building footprints of varying sizes, different loading requirements, and a range of parcel sizes.

4.2.1 Eliminate zoning conflicts

The zoning map must be updated in order to see the encouraged land uses come to fruition. Specifically, Parkway Place Apartments should be rezoned from Residential to EZ1, Enterprise Zone, and its form district should be amended as well from Traditional Neighborhood (TN) to Traditional Workplace (TW). These changes will bring the property into alignment with surrounding properties.



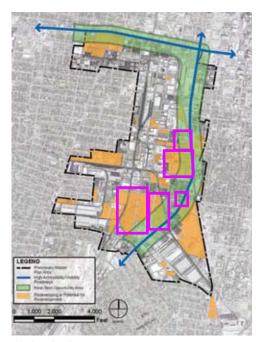
Existing zoning legend: FORM DISTRICTS METRO PARKS Generalized Zoning Classes EZ1 ENTERPRISE ZONE INDUSTRIAL (M1, M2, M3, CM) COMMERCIAL (C1, C2, C3) MISCELLANEOUS COMMERCIAL (CR. CN. OTF) RESIDENTIAL OFFICE-RESIDENTIAL (OR1, OR2, OR3) MISCELLANEOUS RESIDENTIAL/OTHER (TNZD, UN)



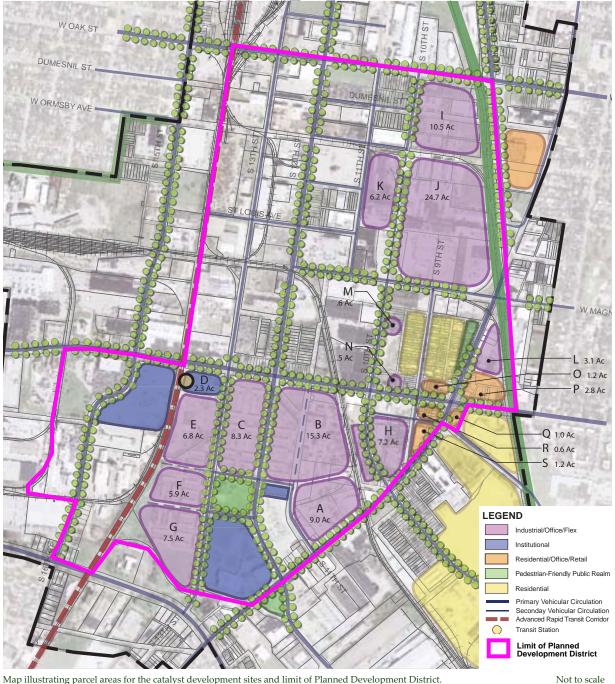
Map illustrating encouraged land-use.

The rezoning could be accomplished as part of creating a Planned Development District (PDD) in a portion of the Industrial Corridor This planning tool, described in the Land Development Code, is used to create a master approval for development within the corridor which could then allow streamlined staff approval of individual site plans within the PDD. The resulting time and cost savings to landowners would further incentivize locating within the Industrial Corridor. This PDD should coincide with the properties that have the greatest potential to catalyze new investment elsewhere.

4.2.2 Focus on Catalyst Development Sites Within the Industrial Corridor, individual properties stand out as development opportunities that can stimulate additional investment in the corridor. Redevelopment of these catalyst sites can build a noticeable



Catalyst development sites.



Map illustrating parcel areas for the catalyst development sites and limit of Planned Development District.

critical mass because of their visible location, size, and proximity to current redevelopment. The Implementation Strategy's development advisors suggested that grouping catalyst projects close together will make a stronger positive statement. This hub of new activity can change perceptions, invite new businesses, create market confidence, and build demand for additional property in the Industrial Corridor. In this way, multiple short-term investments in close proximity can leverage even greater future investment.

Catalyst sites can potentially trigger additional development in three phases:

Phase I by 2015

The following sites have the greatest nearterm catalytic potential:

• The southern Rhodia site—9 acres owned by Louisville Metro, currently being prepared for development. This site is highly visible from 7th Street, easily acces-

- sible and a prime site for multiple industrial and office/flex sectors.
- Infill sites at the intersection of 7th and Hill Streets—Infill development in the vacant parcels and adaptive re-use of existing structures could reinforce the mixed-use nature of the area. This blend of residential and retail/commercial can provide necessary services for Industrial Corridor businesses, existing neighborhoods, and the new housing associated with the University of Louisville.

Phase II by 2018

Redevelopment of Phase I sites could stimulate activity on the following properties:

• The northern Rhodia site and Parkway Place east of 12th Street—If the relocation of public housing units takes place from east to west, then these properties could be combined to offer a 15-acre site for new businesses or an expansion of the operations on the southern Rhodia site.

- The properties between Hill and 7th Streets east of the railroad —7.5 acres of underutilized land could be redeveloped, opening up opportunities for small-scale businesses in need of incubator space, offices, or a location proximate to the university campus.
- The area between Ormsby, Oak, 9th, and 10th Streets—10.5 acres currently controlled by multiple private landowners. Much of these properties are currently underutilized. If consolidated, this area could accommodate a secured campus for one user or multiple smaller businesses with easy access to the 9th and Oak Street interchange.

Phase III by 2023

In turn, redevelopment interest could then spread to the following sites:



Phase I development sites.

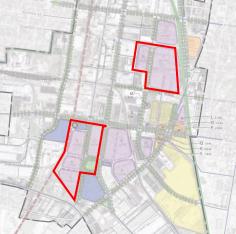
Not to scale



Phase II development sites.



Not to scale



Phase III development sites.

Not to scale

- Western Parkway Place At the point when all public housing units are relocated elsewhere, the remainder of Parkway Place represents more than 28 acres of potential industrial development.
- The Vogt Commons site—This 30+ acre site includes opportunities for adaptive
- re-use, redevelopment, and infill development which build on the jobs already present on the site. Depending on the contamination of the site, this property may have near-term potential as well.
- Additional property throughout the corridor—Many other properties, such as

the Louisville Industrial Park, are available, but lack the visibility, proximity, or immediate accessibility that create catalytic potential. Demand for these properties will increase as the eastern portions of the corridor develop, perceptions of crime and neglect change, and transportation corridors improve.



Aerial view of proposed near-term improvements.

The following graphics illustrate potential site plans for two of the catalyst sites; the southern Rhodia site (Parcel A) and a consolidation of the parcels south of Oak Street and east of 10th Street (Parcel I). Of course a single user could be located on either site. However, the 2008 ERA Market Analysis and input from developers suggest that accommodating a series of smaller users is more economical and aligns better with the near-term market (see section 5.4.1 Development Forecast).

The plans are intended to be examples of how a series of buildings can be arranged, on both sites, to take advantage of visibility and share common infrastructure. Sharing stormwater management facilities can help maximize buildable area and creating areas of shared parking can reduce costs. Individual companies only have to build the parking they need most often because peak demand can be met by the shared parking areas. These techniques allow for more efficient use of land.



Location map

Not to scale



Illustrative plan of a potential development scenario on the southern half of the Rhodia site (Parcel A.).



RECOMMENDATIONS / 4-17

The scale of the Industrial Corridor also creates a combination of opportunities and constraints relating to business attraction. The vast acreage can seem overwhelming, and vacant or available parcels can be found often enough to diffuse a sense of progress. Investments on many properties would go unnoticed by the general public because they are not visible from highly traveled streets. In many ways the Industrial Corridor lacks an identifiable "center of gravity" that can demonstrate the future character of the area to the marketplace. However, the vast scale could be broken down into small pieces, each with their own identity and purpose.

4.2.3 Establish Districts within the Industrial

The previously discussed opportunities influence the proposed land-use and transportation framework by creating districts based upon near-term market potential and long-term vision. Once the Industrial Corridor is broken down into the following component districts, recommendations can facilitate job retention, attraction, and creation.

The **Broadway District** is characterized by a number of adaptive re-use opportunities anchored on the west by New Bridge Crossing and on the east by the TARC transit hub and the L&N office building. The properties along Broadway are well-situated for retail, commercial, office, and mixed-use development based upon their proximity to the central business district, transit services, and the existing blend of restaurants, stores, and offices. While the current market conditions do not support the intensity of mixed-use development at this time, Broadway is the gateway to West Louisville, and as central business district development radiates outward, the Broadway district will be positioned to absorb long-term demand.

The **Distillery District**, while largely built out, includes adaptive re-use potential as well as infill parcels for smaller businesses. This area is best suited for small- to medium-sized businesses that can benefit from the services along Broadway.

The **SoBro West** district represents an area where business interests and residential

interests conflict. A series of form districts in this area were defined in the SoBro Neighborhood Plan to encourage a mix of employment and residential uses with attention to appropriate buffering. The issue causing greatest conflict is truck traffic through the neighborhoods to the east. The transportation recommendations discussed in following sections of this report help address those issues and support the land-use recommendations within the SoBro Neighborhood Plan.

The Cardinal Commons district is changing dramatically and new housing there (both planned and under construction) will require additional services. The residents along 9th Street north of Hill Street, need of neighborhood-serving retail. The four corners adjoining the 7th and Hill intersection can help meet those needs. This location is well-positioned for retail/commercial infill development that could include daily services, in addition to the gas station and bank, needed by the residential community as well as Industrial Corridor businesses.



Character of the Broadway District.



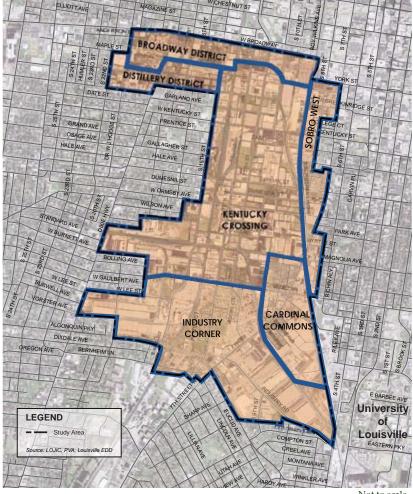
Character of the Distillery District.



Character of the Kentucky Crossing District.

The Kentucky Crossing District is best suited for industry that can function on smaller parcels. While parcel consolidation opportunities exist, the blocks are smaller in this area, creating a finer-grain development pattern.

The **Industry Corner** district is less constrained by the city street grid and can accommodate industry that operates on a larger footprint. At the point when the public housing units are relocated elsewhere in the city, the Parkway Place property should be used to develop a cluster of businesses.







Character of the Sobro West District.



Character of the Industry Corner District.



Character of the Cardinal Commons District.

4.2.4

Pursue revitalization through residential infill development

While the initial development sites are located within the eastern portions of the Industrial Corridor, the western edge holds a different type of stimulus opportunity. Vacant parcels within the California neighborhood and along the western span of 15th Street could become infill development sites for new mixed-income housing development.

These units could either take the form of single family homes or small apartment buildings which could accomplish three objectives. First, the homes would help the California neighborhood by replacing vacant or dilapidated properties, improving community morale, and potentially reducing crime. Secondly, the new units could help transition the scale of buildings between the Industrial Corridor and the residential neighborhood. Lastly, a portion of the new development could be used to relocate the eastern sections of Parkway Place, demonstrating a commitment to change and opening up mid-term redevelopment opportunities sooner.

Along the western edge of 15th Street, underutilized parcels can accommodate this housing model based upon the architectural precedents that already exist along that street. This new "front door" to California can help that community's ongoing regeneration efforts and simultaneously open up opportunities within the Industrial Corridor.



Many infill opportunities exist within the Industrial Corridor.



A "front door" approach can help California's ongoing regeneration efforts



An example of transitional multi-family housing units.



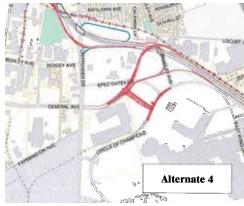
An example of infill development that could transition between the Industrial Corridor and residential neighborhoods.

4.3 Transportation Enhancements

Successful land-use enhancements and development patterns are possible only when supported by the necessary transportation network. In the case of the Industrial Corridor, the circuitous network, poor paving conditions, and inadequate rail crossings limit the potential for business attraction and job creation. In addition, the Industrial Corridor's transit-oriented location merits new facilities which better 4.3.2 Develop a Central Spine Road link the workforce with alternative transit options. The following actions can efficiently improve mobility and remove barriers to future job growth:

4.3.1 Establish a Near-term Connection for Truck Traffic to I-65 South

The most intuitive route that is also least consequential to residential neighborhoods is to follow 4th Street south from Industry Road to Central Avenue, then follow Central Avenue east to Crittenden Drive and I-65 South. This same route works in reverse but in the near-term would require signage upgrades to guide north-bound truck traffic to Crittenden Drive south. Also in the near-



Proposed Central Avenue interchange Not to scale from the I-65 Corridor Study.

term, the northeast corner curb radius at 4th Street and Central Avenue must become larger to allow easier right turns. Initially, 4th Street and Central Avenue would need to be restriped to allow wider, center through lanes with smaller outside lanes for parking. Eventually, 4th Street could become a more substantial traffic collector and feed into the Central Avenue interchange planned north of the fairgrounds in the I-65 Corridor Study.

Connecting 12th Street directly to Industry Road can create a continuous central spine through the Industrial Corridor. Connecting Industry Road all the way to Broadway, this spine would provide improved access to legacy companies as well as make a number of underutilized parcels viable business attraction opportunities. Truck traffic, transit services, and commuters would no longer have to negotiate the current twists and turns to access properties in the heart of the Industrial Corridor. This connection would be realized by realigning the northern end of Industry Road, and creating a new intersection at 7th street near the Louisville Metro Archives building. 12th Street would then be



Proposed 12th Street realignment.

Not to scale

extended south, following eventual relocation of the Parkway Place housing complex to align between McFerran Elementary and the LG&E property. (Shifting of some LG&E facilities, reconfiguring the school parking lot, and creating new accesses to the lot are anticipated.)

Improve Connectivity between the **University Campus and the Industrial** Corridor

Stronger linkages between the University of Louisville and the Industrial Corridor will benefit both the residents of the new housing west of the railroad and help support retail/ commercial development along the Cardinal Boulevard corridor. The most efficient means of making this connection is to extend Cardinal Boulevard to the west, across the tracks via an at-grade crossing and to connect it to the Davies Avenue right-of-way leading to 7th Street. The right-of-way for this concept is already provided by the planned housing developments west of the railroad; however, an underutilized building east of the tracks must be demolished to make the connection.

A second step would involve realigning 10th Street south of Hill Street to intersect at

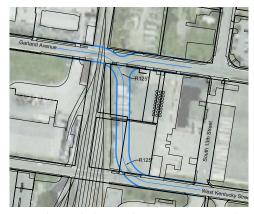


Freight trains often block at-grade crossings and contribute to the Industrial Corridor's need for a primary central spine road.

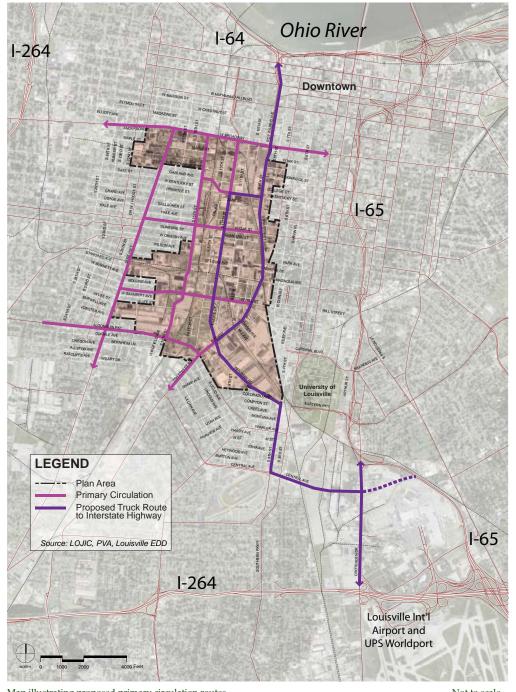
7th, across from the Cardinal Boulevard extension. This would facilitate simplified connectivity to the university, potential office/industrial properties south of Hill Street, and the Vogt Commons site north of Magnolia Avenue. Overall north-south circulation within the priority development area would greatly improve.

Alleviate Conflicts with Crossing the Rail Yard

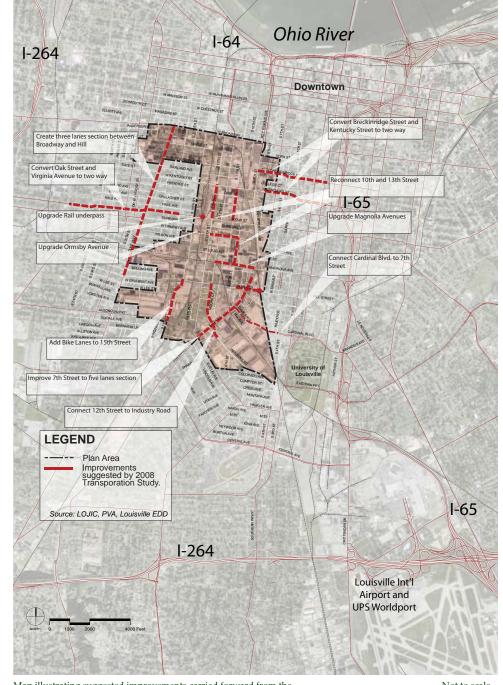
Tunneling Kentucky Street under the P & L rail yard as suggested in the Short-Term Transportation Study would be extremely costly and time consuming, and closing the street altogether would disconnect one of the few remaining east-west transportation routes across the Industrial Corridor. By rerouting Kentucky Street to the north, west of 13th Street, the rail yard conflict can be minimized. Kentucky Street would align with the existing Garland Avenue right-of-way and cross three tracks north of the rail yard instead of 9 tracks at its center. The property needed for the realignment is a vacant rail yard parcel and a parking area for a local manufacturer. The parking could easily be reconfigured to accommodate the new road.



Proposed Kentucky Street realignment. Not to scale



Map illustrating proposed primary circulation routes.



Map illustrating suggested improvements carried forward from the 2008 Transportation Study.

Not to scale

In addition, the redundant vehicular travel lanes on Magnolia street could be consolidated along the northern edge of the right-of-way and the rail traffic could be aligned along the southern portion of the right-of-way (P7 below). Properties south of Magnolia could be accessed via a small service road connected to 9th and 10th Streets. This would eliminate at least one at-grade Norfolk-Southern railroad crossing along Magnolia street.

Strengthen the Existing Road Network The following projects, described in greater detail in the 2008 Short-Term Transportation Study, would efficiently remove inconve-

nient barriers and promote better access to all properties within the Industrial Corridor.

- P2 Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street and acquire the Standard Oil building at that location.
- P4 Widen Hill and 7th Streets at their intersection to provide left turn lanes.
- P6 Widen 7th Street between Algonquin and Hill Streets to a five-lane section.
- P7 Relocate rail line on Magnolia Avenue between 7th and 12th Streets.
- P9 Replace rail underpass on Oak Street.
- P10 Convert Oak Street / Virginia Ave to 2-way traffic (16th Street - I-264).
- P12 Upgrade Ormsby between 10th and 13th.
- P13 Reconnect 13th Street between Oak and Kentucky Streets.
- P16 Three-lane street section on 18th Street between Broadway and Hill Streets.
- P17 Convert Kentucky Street to 2-way (8th Street -I-65) & Breckinridge to 2-way (9th Street - I-65).

Additionally, milling and resurfacing 9th Street from Hill Street to Magnolia Avenue would improve the quality of life for neighborhood residents.

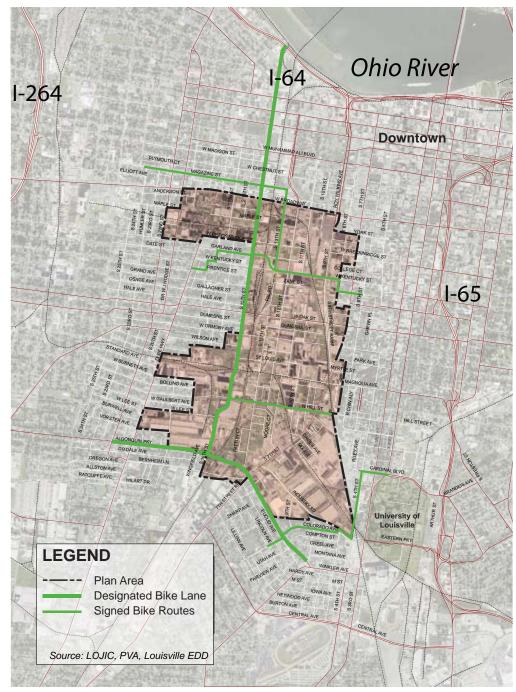
4.3.6 Improve Comfort and Convenience for Bicycle Commuting

The Industrial Corridor's location and its level grade make bicycle commuting a viable alternative to driving. Facilitating easier bicycle commuting will make the Industrial Corridor more competitive in the future as the costs of commuting increase. Discussions with existing business owners revealed higher bicycle ridership among employees during the 2008 rise in gas prices. Demand for bicycle commuting is expected to only rise over time, especially in areas with low car-ownership rate. Businesses will want to be located where their workforce can easily reach them and less cars mean less land needed for parking.

Adding new bicycle lanes to the realigned Kentucky Street, as well as completing the bike lane connection along 15th Street to between Hill Street and Algonquin Boulevard will make the network more intuitive and safer for cyclists. With the addition of bike lanes north of Broadway on 15th Street, cyclists could safely ride from the University of Louisville to the Ohio River waterfront.



An example of a successful bike lane.



Map illustrating proposed bicycle infrastructure.

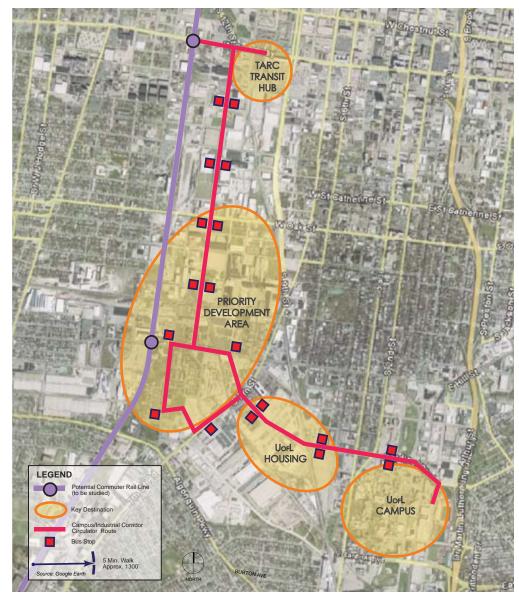
4.3.7

Increase Access to Transit Services

While cross-town and radial routes pass briefly through the Industrial Corridor, the #12 bus route is the only north-south route that serves the interior of the Industrial Corridor. This route runs hourly and requires a transfer to connect to the TARC station on Broadway. Despite its transit-friendly location, the corridor is functionally underserved. Similarly, no shuttle service is planned for the new housing affiliated with the University of Louisville.

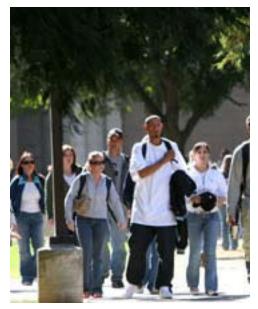
The #12 bus route could be altered to connect the TARC station directly to the university campus via the Industrial Corridor. By combining functions, the route could be supported by consistent ridership from multiple sources. The frequency of service along the route could be increased during commuting hours, also coinciding with high demand for trips to and from the university. Beyond the significant end destinations, this circulator service can connect to stations along the P & L railroad corridor if commuter rail service is developed. The Industrial Corridor, as well as the California and Park Hill neighborhoods, would be well-served if these stations were located at Broadway and at Hill Street.

Even with attractive and accessible transit service, it will be necessary to consider parking of passenger vehicles. A system of satellite parking locations, linked to the transit system, could provide access to local businesses while efficiently storing vehicles off-site. This would help maximize land for business or public realm enhancement purposes.



Map illustrating proposed transit improvements and considerations.

Not to scale



A circulator bus could link new student housing west of the railroad to the University of Louisville.



Commuter rail service can play a role in the long-term growth of the corridor.



A circulator bus could connect the university to downtown and the riverfront.

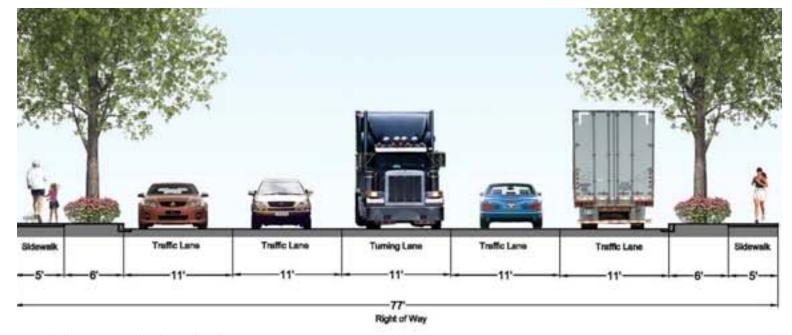
4.4 Public Realm Enhancements

Improvements within the right-of-ways and public spaces in the Industrial Corridor have an impact beyond simply improving the visual appeal. Streetscape features and open spaces play a key role in defining a location's sense of place, positively or negatively. Currently, the deteriorated sidewalks, nonexistent street trees, and inhospitable open spaces contribute to perceptions that the Industrial Corridor is a forgotten place. In addition, the lack of bus shelters hinders the potential for increased transit ridership; the impervious character of the streetscape compounds the combined sewer overflow issue; and the lack of shade increases the urban heat island effect, affecting Louisville Metro air quality. Strategic public realm improvements within the priority focus

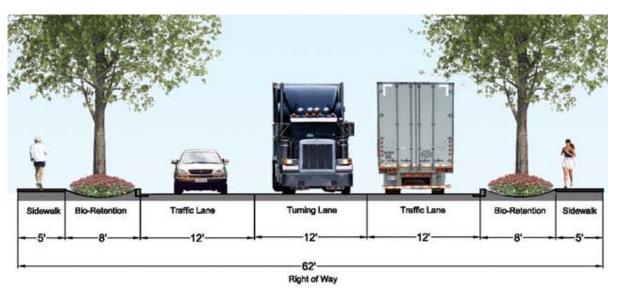
area can improve quality of life for local businesses and residents, attracting future investment.

Create Pedestrian-friendly Streetscapes Streetscapes that address the needs of pedestrians create the kind of atmosphere and sense of place businesses are looking for. Pedestrian-oriented streetscapes include features like street trees to create shade, seating areas for respite, and sidewalks buffered from vehicular lanes by a landscape strip. More and more, employees are looking for exercise opportunities at lunch. A walkable network of streets can address that need without occupying the valuable land of an individual company. Pedestrian-oriented lighting creates even illumination levels, making it easier to recognize faces, leading to a safer pedestrian environment.

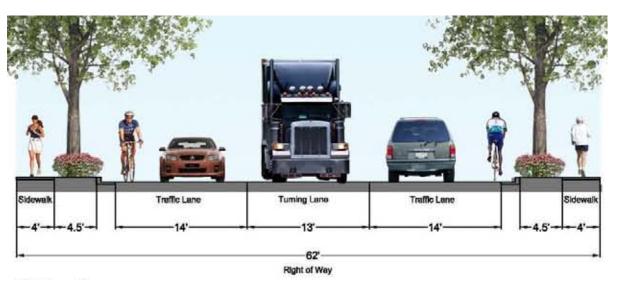
Overhead utility lines also affect pedestrian safety and the sense of place. Utility poles can interrupt sidewalks and cause conflicts with the accessible route required by the Americans with Disabilities Act. In addition, overhead lines are more susceptible to wind and ice damage than below-grade utilities. Newly constructed streets in the Industrial Corridor shall be built with underground utility connections to avoid these concerns. In cases where streetscapes are to be renovated, burying utilities should be considered. If not feasible, sidewalks should be shifted or widened to maintain accessible route clearances, and smaller street tree species shall be chosen to avoid conflicts with the lines. Excess existing sidewalk can be cut away in these areas to allow street tree planting.



Example of a major street with pedestrian-friendly streetscape.



Example of a street with bio-retention technology.



Example of a street with incorporated bike lanes.

Not to scale



Existing successful public realm elements near Brown-Forman.



Example of bio-retention elements incorporated into an urban streetscape.



Existing conditions along South 12th Street.

Bio-retention facilities and other innovative stormwater management techniques can be integrated into the streetscape in a manner that has a positive impact on aesthetics and water quality. Bio-retention cells filter run-off, remove pollutants, and encourage ground water recharge. The image on the right shows how a pedestrian-friendly streetscape with curb-side bio-retention would calm traffic along an existing stretch of South 12th Street (shown above), as well as improve the street's character, offer shade for employees and residents, and aid in reducing urban heat island effect.



View of proposed improvements to South 12th Street.

4.4.2 Reinvent Parkhill Park

A defining urban design feature of Louisville neighborhoods is their organization around signature park spaces. The Park Hill Industrial Corridor has the opportunity to embrace a central park space as well. Parkhill Park, currently associated with Parkway Place Apartments north of McFerran Elementary, is located so that after the residential units are eventually redistributed, it could become the core of a neighborhood of new companies. The revitalized amenity could be a place for workers to recreate at break times, as well as serve as a stormwater filter, offering ecological education opportunities associated with the school, and providing a home for job training relative to building and maintaining "green" infrastructure.

4.4.3 Provide additional amenities for transit commuters

To reiterate the suggested improvements in the Short-Term Transportation Study,

additional facilities are necessary to facilitate greater transit ridership within the Industrial Corridor. These amenities include bus shelters, appropriate lighting at bus stops, comfortable seating, waste and recycling receptacles, and potential emergency phones at key locations. These facilities can encourage year-round use of alternative transportation, reducing the need for parking lots. This effectively increases the land available for business operations and improves the connection between the local workforce and jobs within the Industrial Corridor.

Develop a linear park linking the university with downtown and the waterfront
The CSX rail line, aligned along the eastern edge of the Industrial Corridor, offers a unique opportunity to link two of the city's centers of activity. By means of excess railroad right-of-way, easements on adjacent parcels, and portions of adjoining public rights of way, the corridor could

become a continuous linear park which connects the university with downtown via a pedestrian and bicycle greenway. It is anticipated that this facility would parallel active tracks and be separated from them by fences and buffers. This new recreational resource would allow students, residents, and commuters to safely travel between Industrial Corridor destinations, unimpeded by vehicular traffic.

A new connection to the bicycle lanes on 15th street north of Broadway could lead to the waterfront, completing the link. This project could be started in the near-term but most likely would be completed over a number of years in segments as properties become available and the necessary easements are negotiated. Some properties along the route are available for sale today. Other sections may need to be built as part of future redevelopment efforts.



Example of a linear park along a rail corridor.



Example of a park within an industrial context.



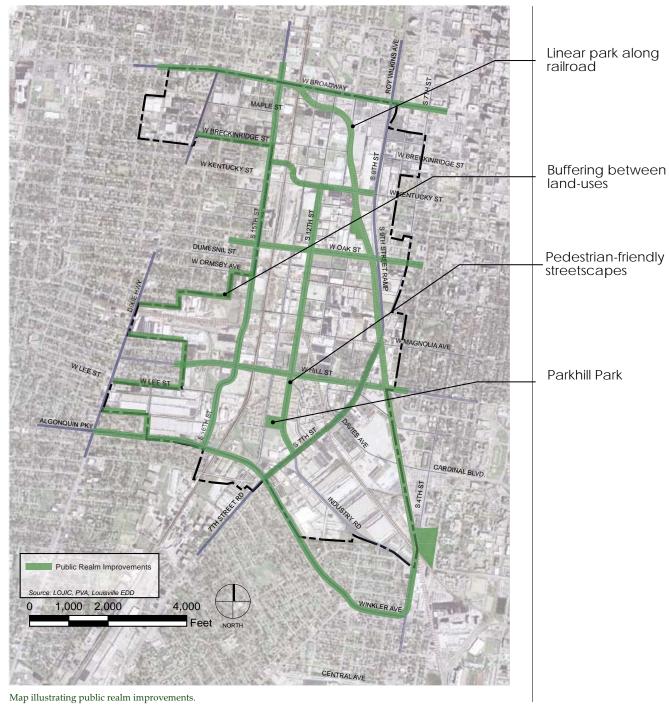
Public realm improvements can serve both residents and the corridor workforce.



"Green" infrastructure incorporated into public park space.



Pedestrian/Bicycle paths along the rail road can connect the Industrial Corridor to downtown and the riverfront.



4.5 Connecting with the Workforce

Comments from existing businesses within the area suggest that at this point, the Industrial Corridor is not able to capitalize fully on the available workforce in surrounding communities due to lack of job training and job preparedness. If this can be addressed, the prepared, convenient workforce can play a significant role in attracting new businesses. Workforce development holds the greatest potential for linking nearby residents to new job opportunities that will emerge within the Industrial Corridor.

Workforce Perspectives: Business Advantage and Neighborhood Goals Workforce issues were identified early in the Market Assessment Study undertaken by ERA as a significant factor contributing to the competitiveness of the Industrial Corridor as a location for existing businesses. By extension, workforce availability was seen as a prospective asset and strength for attracting new businesses to a redeveloped corridor, particularly for target industry clusters.

2000

Workforce availability is seen as a prospective asset and strength for attracting new businesses.

The Industrial Corridor's central location—while a self-evident locational advantage from a transportation standpoint—also suggests a business advantage for accessing employees across a wide range of skill levels, both from the immediate adjacent residential areas as well as from the region as a whole. A number of corridor companies, interviewed individually and in focus groups, reported drawing employees from nearby neighborhoods. Employers also indicated that the corridor was able to draw employees equally from more distant locations south, north (Indiana), and east, including employees from suburbs and adjacent counties.

However, interviews with community leaders as part of the Implementation Plan process, and subsequently with members of the Park Hill Advisory Committee, underscored a different perspective on the workforce question—one related to the goal of providing greater opportunities for residents of nearby, economically depressed neighborhoods in order to increase their access to jobs in the corridor, both current and future.

The strong sense of urgency regarding "access to job opportunities" voiced by neighborhood residents, church leaders, and active community organizations, underscored the fact that even when the economy is strong and corridor businesses are hiring, residents of the surrounding areas still face obstacles in finding employment. They pointed to potential constraints in the system of workforce development, when viewed from a neighborhood and Park Hill Industrial Corridor level.

Issues to Explore

Framed from this vantage, the question to be answered became: How will the Implementation Strategy for the Park Hill Industrial Corridor—and the significant public and private investments that are anticipated as a result—translate into new employment opportunities for residents of the adjacent neighborhoods? Stated differently, how can the Implementation Plan help these neighborhoods benefit economically from the strategies being proposed to make the Industrial Corridor a competitive business location and a "next generation job hub"? The challenge identified through this



Including a strong but practical workforce development strategy as part of the Implementation Plan can create a win-win situation

stage of the research was how to streamline and build on the existing workforce development programs and services to improve their effectiveness in meeting the employment needs of residents who live adjacent to the Industrial Corridor.

The stakeholder input for this topic was approached through two avenues: first, interviews were conducted with the principal organizations providing a range of workforce development services in the metropolitan area and to the Industrial Corridor. These interviews identified how different kinds of services currently are provided to residents of the nearby Park Hill neighborhoods, as well as to Industrial Corridor businesses. This inquiry focused on how links can be created to jobs in the corridor and sought ideas for ways to build on the capabilities provided by existing services to achieve that goal.

Second, additional stakeholder interviews were held with corridor businesses to confirm the understanding of their current skill mix and source of employees. These

interviews sought to validate the assumption that employers in the Industrial Corridor view access to nearby residents as an advantage to locating within the area and that these existing businesses would be open to participating in some form of a workforce development initiative as a resource for their businesses.

Workforce training organizations interviewed as part of the Implementation Strategy outreach effort:

- Workforce Investment Board Governance. strategy & administer federal funds
- Jefferson Community and Technical College - One-stop intake, assessment, referral; training provider under State mandates & funding
- Jefferson County Public Schools Adult Ed / GED; skills development & training
- · Louisville Metro Housing Authority -Focused support system for residential clients

- Sullivan University (private) Technical training, certification; customized programs
- Making Connections Louisville Community outreach; holistic approach to family services



Employers view access to nearby residents as an advantage to locating within the corridor.





Key Findings

A great range and variety of services and programs currently exist to serve the entire population of Louisville Metro. Despite the large number of organizations involved, the system is well-coordinated and the agencies interviewed all embraced the challenge of trying to find innovative ways to approach the question of linking jobs opportunities in the Park Hill Industrial Corridor with the needs and desires of nearby residents.

Delivery of employment and workforce development support services in Louisville essentially follows the mandates of federal and state authorizing legislation. These provide a majority of the funding and set regulations for how individuals or companies may participate in their programs.

Governance and administrative oversight is provided at the community level through the multi-county Workforce Investment Board. Under Kentucky law, the Community and Technical College System is designated as the State's "workforce delivery arm". Locally, Jefferson Community and Technical College has been contracted by the Workforce Investment Board to provide "One Stop Career Centers" that offer skills assessment and referrals to job opportuni-

ties, in addition to its role as a training provider.

Within this framework, many public, private, and non-profit organizations are involved in providing a wide range of employment and workforce development services, some targeted to specific populations (such as at-risk high school students, the residents of public housing or publicly subsidized housing programs) and others designed to serve all residents of the metro area.

However, at its most fundamental level, the workforce challenge for residents living near the Industrial Corridor is shaped by the fact that the delivery of federal and state employment and workforce programs is not geographically focused. Rather, the services have been established to serve all residents and all businesses at all locations. Programs are not targeted to provide training to specific populations on a geographic basis but rather on an individual basis—most funding for training "follows the individual". In general, individuals may enroll in the assessment process, may be recommended to a menu of career preparedness and/or training services, and then may

choose those services that are most suitable to their needs.

This feature of the current federally-and state-funded programs leads to the overarching conclusion that any special effort to benefit residents of the neighborhoods near to Industrial Corridor businesses should focus on initiatives to identify individuals within those neighborhoods who can benefit from services that are available and to find new ways to encourage and support their participation.

The one significant exception to this reality that federal and state programs are organized to serve the "community as a whole" rather than focus on specific neighborhoods is the privately funded Making Connections Louisville initiative (Casey Foundation). Making Connections, which has targeted four Louisville neighborhoods, including the California neighborhood immediately west of the Park Hill Industrial Corridor, embraces a focus on the family and provides intensive one-on-one services that work through personal relationships between outreach workers and individuals seeking employment or needing workforcepreparedness training. Their approach attempts to "connect the dots", to ensure

that these individuals are put in touch with the services available and are supported in their continued progress in seeking jobs and advancing their employment potential. The *Making Connections* approach, if expanded to cover a wider geography and with a delivery capability that includes other community-based organizations, may offer an example of how a program that actively works at the level of neighborhoods and individuals can be organized to fill the gaps in the current workforce delivery system.

Additional Constraints

The interviews with employment and workforce service providers additionally reveal a number of specific issues that prevent some individuals from participating in or benefitting from the programs currently available. Foremost among these is the requirement for most of the specific skill or professional training programs (e.g. welding, plumbing, nursing, et al) that the individual possess a high school degree or GED equivalent. Therefore, the initial assessment process directs such applicants toward GED programs offered by the Jefferson County Public Schools (JCPS). Additionally, entrance to some skills-training programs may require proficiency in basic math, literacy, and English as a Second

Language—all of which may be obtained through the job preparedness courses that are available through the Adult Education division of JCPS.

However, beyond these requirements, many participants needing one or more of these services are prevented from taking advantage of them by additional barriers, such as distance to the One-Stop or other training sites, or the lack of support services such as transportation, child care, or stipends to cover the cost of such assistance. As a result, professionals in the field indicate that the greatest challenge is getting people who need the services into the programs that exist and then helping them to complete the programs. In short, the need is for greater outreach and support systems, not for "more training programs".



Building on these findings, the Park Hill Industrial Corridor Implementation Strategy can help to focus attention and additional resources on expanding the capacity for outreach to identify individuals who need and are seeking to take advantage of the various employment and workforce development programs, and on strengthening the support systems for individuals who have entered such programs.

4.5.1 Focus churches and community-based organizations on one-on-one outreach Mechanisms to achieve this goal may include working with local churches, community-based organizations (CBO) and independent education institutions located within the corridor (such as Simmons College). These organizations can be enlisted to help develop the one-on-one outreach that is needed to bridge the gap between people and the training and job preparedness services that are currently available—in short, making it easier to grab the first rung of the ladder and to enter the pipeline of services that can lead to new skills and an enhanced job opportunity.

> Consideration should be given to ways that the model for one-on-one outreach, developed and tested by Making Connections Louisville, can be adopted by other CBOs. Engaging these other organizations, including churches, can help multiply the resources available and expand the application of this approach so as to touch more individuals living in neighborhoods adjacent to the Industrial Corridor.

Convene a workforce preparedness and training knowledge-exchange forum A forum could be established where *Making* Connections' knowledge and experience with

this approach can be shared with representatives from local churches and CBOs interested in building a stronger network between individuals seeking work and companies seeking employees. The discussion topics could include the lessons learned delivering neighborhood-focused, one-on- 4.5.4 Interact regularly with local businesses one outreach, the nuances of the training assessment and assistance system, and how to build the expectation of success.

Such local resources should also be focused to the greatest extent possible on helping individuals obtain the job readiness skills that are needed to get a job and to perform successfully to keep that job. This includes not only basics such as obtaining the GED or strengthening reading and math skills, but also achieving a range of life skills and activities such as resume writing and interviewing techniques.

Develop job training and related amenities within the Industrial Corridor Future planning with the various providers of workforce services should seek to locate as many training and support programs within the corridor itself, to make them readily available to residents of nearby neighborhoods or to individuals working or seeking work within the Industrial Corridor.

Interviews with workforce service providers indicated a great openness and flexibility regarding the opportunity to develop customized, on-site training programs at employers, or to locate existing future training programs at schools, churches, or other public facilities where they may be easier to reach. A connection to emerging trends in other aspects of the Industrial Corridor would be to locate training programs specific to "green jobs" within the area. Perhaps, as Parkway Place Apartments is relocated elsewhere, the Parkhill Park Community Center could be renovated to provide this training and the childcare needed to take advantage of the program.

Finally, businesses within the Industrial Corridor have a key role to play. Knowing the types of available jobs may help individuals entering the assessment process in making informed choices about the types of career preparedness or skill training they will undertake and may provide greater motivation for remaining in and completing those programs. Having the prospects to obtain a real job at the end of the program would serve as the primary and overarching motivation.

An Industrial Corridor Business Association is one way to bring Industrial Corridor employers together for mutual support and advocacy on behalf of their needs, including workforce. A focused effort to engage corridor employers in identifying their workforce needs, training and job preparedness requirements, and other aspects about the jobs that exist in the corridor should be a focal point around which the Louisville Metro Economic Development Department and Greater Louisville, Inc., among others, can mobilize resources and create the foundations for a successful workforce development initiative.





Example of new "green collar" jobs.



Locating training programs specific to "green jobs" within the Industrial corridor would connect to emerging national trends and federal initiatives.

Implementation

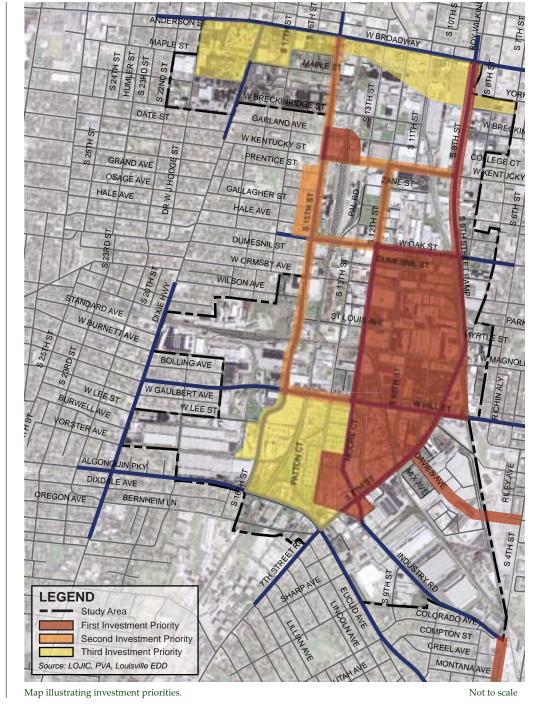
The recommendations for the Industrial Corridor provided in Chapter 4 rely on a comprehensive Implementation Strategy to ensure their realization. The guiding tools provided in this chapter will serve as a framework to ensure that those recommendations are equally realistic, actionable, and valuable to the corridor's long-term redevelopment vision.

Successful implementation will build on the progress of currently redeveloping projects and set the stage for continued investment in the corridor, reestablishing the industrial corridor as a thriving employment center.

Implementation will be based on:

- Setting Priorities
- Developing Mutually Beneficial Relationships
- Tying Recommendations to Responsibilities
- Utilizing Policy Tools





5.1 Setting Priorities

Priority investment areas in the corridor are primarily dictated by the value they add to the corridor's operation as an industrial district and the connection of the corridor to key sites and transportation corridors. The adjacent map illustrates priority investment areas within the Park Hill Industrial Corridor.

First Investment Priority

Many of the properties designated as a first priority capitalize on previous or current redevelopment projects in the corridor, fundamentally building on their progress. The Cardinal Boulevard extension forges a valuable connection to both the University of Louisville and the currently redeveloping American Standard site, setting the stage for future investment in the corridor. Improvements along the 7th/9th Street corridor will be highly visible and hold significant value in changing perceptions of crime and disinvestment in the Park Hill.

Second Investment Priority

Once the key infrastructure changes of the first phase are complete, the second phase of development will extend from the high-visibility focus areas, creating new transportation connections and providing additional amenities and development opportunities along Hill Street.

Third Investment Priority

The final phase of priority investment will focus primarily on two areas: the Broadway Corridor, strengthening the connection between Park Hill and the central business district; and the southwest corner of the study area, extending west from the Rhodia site.

5.2 Mutually Beneficial Relationships

A variety of stakeholders can benefit from forming partnerships with businesses and residents in the corridor:

Metro Sewer District (MSD)

The corridor offers ample space for the demonstration of responsible stormwater management technology, which can reduce overflow events within the Louisville Metro combined sewer system.

University of Louisville

Connecting University programs with businesses in the corridor can create a mutually rewarding relationship similar to what exists between Silicon Valley and Stanford University, as well as Research Triangle Park and Duke University, North Carolina State University, and the University of North Carolina. Businesses benefit from the innovative potential and talent pool of the higher-learning institutions while schools benefit in terms of faculty recruiting, grant wins, and real-world applications for their students.

Greater Louisville, Inc. (GLI)

The combination of available site and prime existing re-use structures offers realtors and land brokers in the Metro Louisville region tremendous potential for business growth in the "green economy".

Louisville Metro Housing Authority (LMHA)

The housing authority can benefit from the residential infill development potential in neighborhoods surrounding the Industrial Corridor while the area benefits from the phase relocation of Parkway Place Apartments.

The Interdenominational Ministerial Coalition (IMC)

The IMC can play a pivotal role in organizing community organizations and local churches to provide the one-on-one outreach needed to prepare the workforce in neighborhoods surrounding the Industrial Corridor.

Industrial Corridor Business Association

A new business association within the Industrial Corridor can build on the corporate community's role in the shaping of the Implementation Strategy by participating in and informing the re-branding effort.

Mayor's Advisory Committee on Public Art (MACOPA)

Design competitions within the corridor can utilize industrial relics as unique public art installations while also providing amenities to the corridor that can mitigate negative public perceptions.

Redefining Brownfields

The redefining brownfields group can continue its outreach and communications efforts to help coordinate components of the rebranding effort and property clean-up programs.

The California Collaborative

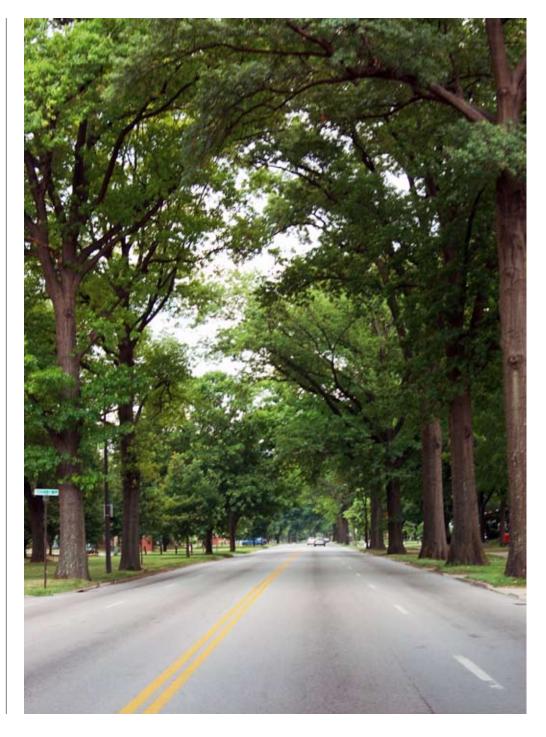
As an organization that unites stakeholders with the common goal of revitalizing the California neighborhood, the Collaborative is working towards a "green and wireless community with a vibrant arts beat." Through the various partnerships, residents also hope to improve housing, cleanliness and appearance within their neighborhood.

West Louisville Economic Alliance Advisory Committee

This organization was appointed by Mayor Jerry Abramson to enhance the business climate in West Louisville. They bring a multi-disciplinary approach to developing long-term strategies for West Louisville businesses.

Leadership West Louisville Institute

The Leadership West Louisville Institute operates with a mission to identify, support, and help implement strategies to improve West Louisville and its residents. The institute fulfills its mission by conducting community forums, commissioning research studies, writing position papers and ultimately activating its constituencies to execute improvement strategies in economic development, health, education, and social issues.



5.3 Tying Recommendations to Responsibilities

To make the most progress, multiple recommendations must be implemented concurrently. This creates the need to coordinate and assign responsible parties for key improvements in the near- and long-term. The following charts outline the recommendations, propose respective funding sources, and list partners responsible for making the enhancements happen.

5.3.1 Programs and Policies

ACTION ITEMS	Near-Term Cost	Mid / Long-Term Cost	Funding Source	Implementation Partners
4.1.1- Initiate an Industrial Corridor Business Association.				
Utilize City Staff expertise in setting up Business Association Charter and By Laws	N/A			Economic Development and Business Assoc.
4.1.2- Establish a new brand identity for the Industrial Corridor.				
1.1.2 Establish a new state definity for the industrial contast.				
Step 1 Business Analysis	\$8,000		Louisville Metro	
Step 2 Strategy Step 3 Translation	\$8,000 \$8,000		Louisville Metro Louisville Metro	Economic Development and Business Assoc.
Step 4 Execution	\$85,000		Louisville Metro	
4.1.3- Establish a Property Enhancement Zone.				
· · · · · · · · · · · · · · · · · · ·				
Initiate awareness campaign of existing laws and future enforcement efforts Initiate "Property Enhancement Zone" program (2 FT employees and equipment)	\$20,000		Grant Funding	Property Maintenance Dept. & Clean Teams
initiate Property Emilancement Zone program (2 PT employees and equipment)	\$150,000		Grant Funding	
4.1.4- Define the Industrial Corridor as a center for "green" practices, products, and services.				
Incentives to encourage the utilization of roof areas for solar & wind energy generation.	TBD		LGE	LGE
Develop "net-metering" demonstration site (McFarren Elementary)	TBD		LGE	LGE
Bio-retention demonstration area at Park Hill Park (1AC)	\$150,000		MSD CSO Abatement	MSD
"Green" Street demonstration area on 12th street extension (700 lf)	addressed in 5.3.3			MSD, Public Works, JCPS, LGE
Water harvesting demonstration area at Archives Building (cisterns, water re-use)	\$100,000		MSD CSO Abatement	MSD
Reforestation on underutilized land (temporary use) (4 ac) Urban-forestry on Northern Rhodia Site (temporary use) (8 ac)	\$50,000		MSD CSO Abatement	MSD
Greenroof on Archives Building - used to market whole corridor	\$50,000 \$300,000		MSD CSO Abatement	MSD MSD, Archives
Work with private property owners to implement CSO abatement strategies.	\$400,000		MSD CSO Abatement	MSD, Economic Development
Work with private property switches to implement occo abatement strategies.	Ψ400,000		WISD CSC Abatement	MOD, Economic Development
4.1.5 Define the Industrial Corridor as an industrial art exhibit.				
Literate Ded IIII die det de en his est en de en les	NI/A			MOORA
Integrate Park Hill sites into thepublic art master plan.	N/A		Orant Fronting	MCOPA & Business Association
Develop an art competition for a significant site in the corridor Develop an art competition to design and build bus stops for the corridor	\$75,000 \$150,000		Grant Funding Grant Funding	MCOPA & Business Association MCOPA & TARC
Develop an air competition to design and build bus stops for the contdor	φ150,000		Grant Funding	WICOFA & TARC

5.3.2 Land Use Enhancements

	S	Near-Term Cost	Mid / Long-Term Cost	Funding Source	Implementation Partners
4.2.1- Eliminate	e zoning conflicts.				
	stablish a Planned Development District ezone the Parkway Place Property	\$50,000	\$50,000	Louisville Metro Louisville Metro	Planning and Design Planning and Design
4.2.2- Focus on	n catalyst development sites.				
Co	omplete all improvements in catalyst areas to establish a district within the corridor	addressed in 5.3.1- 5.3.5			All Metro Partners
Lin	nk improvements in catalyst areas to rebranding language	addressed 5.3.1			GLI, Economic Development
4.2.3- Establish	n districts within the Industrial Corridor.				
	ncourage larger development footprints in the Industry Corner district and smaller ore urban model in the Rail Yard district.				
Su	ubdivide publicly controlled property south of Hill St (once Parkway Place is relocated)	\$20,000	\$20,000	Louisville Metro	Planning and Design
	einforce a mix of employment and residential uses between 7th & 9th streets. (as per e Sobro Plan)				
Su	upport Sobro Plan initiatives	N/A			Planning and Design
En	ncourage mixed-use, mixed income infill development at the edges of the corridor.				
	upport New Bridge Crossing development	N/A			GLI and Planning and Design
	upport Phillip Morris Property development	N/A			GLI and Planning and Design
Su	upport LGE Property Development	N/A			GLI and Planning and Design
Do	ninforce mixed use development at the intersection of 7th and Hill Ct				
	einforce mixed-use development at the intersection of 7th and Hill St. eet with intersection property owners to discuss their plans and common goals	N/A		Louisville Metro	Norton Healthcare, Bank, Private Landowners
IVIC	set man med desired. property difficient discussed from plants and definition goals	14//		23001110 1110110	Total Todal Todal Carlo Barne, 1 Trace Editiowine S
4.2.4- Pursue re	revitalization through residential infill.				
infi	rengthen adjoining neighborhoods and begin the Parkway Place transition through fill housing.				
	alifornia infill housing & renovations	TBD		TBD	Private Land Owners
15	ith St. infill housing	TBD		TBD	Private Land Owners

5.3.3 Transportation Enhancements

TION ITEMS	Near-Term Cost	Mid / Long-Term Cost	Funding Source	Implementation Partners
1- Establish an improved near-term connection to I-65.				
Resurfacing and restriping of 4th St (3200LF)	\$150,000		Louisville Metro	Public Works
Larger curb radius at Central Avenue intersection.	\$100,000		Louisville Metro	Public Works
Signage along I-65, Crittendon, Central, and 4th St.	\$250,000		Louisville Metro	Public Works
2- Develop a central spine road. (Connect South 12th Street directly to Industry Road.)				
Shifting LGE infrastructure to allow for new road.		\$1,200,000	TBD	LGE
Changing parking lot access point on school property and reconfiguring parking lot		\$600,000	Transportation Funds	JCPS
New road way (2600LF)		\$2,500,000	Transportation Funds	Public Works
"Green" streetscape (2000 LF)		\$380,000	Transportation Funds	Public Works, MSD
3- Improve connectivity between the university campus and the Industrial Corridor.				
Connect Cardinal Blvd to 7th/9th (2400LF)	\$2,000,000		Stimulus Funding	Chevron Property, Place Properties
Connect 10th St to Davies St./Cardinal Blvd. (1000LF)		\$2,000,000	Transportation Funds	Metro Properties, Public Works
Property acquisition (6.5 AC) Demolition	TBD	TBD TBD		Metro Properties, Public Works Public Works
- Alleviate conflicts crossing the railyard. (Connect Kentucky Street to Garland Avenue between 1	3th and 15th Streets.)			
635 LF new roadway (50' r.o.w.) Property acquisition (.66 AC)	\$195,000 TBD		Louisville Metro	Public Works, Porter Paint, P&L RR Porter Paint
Strengthen the exciting read natural, //D# indicates projects to be implemented from 2000 Cha	rt Torm Transactation			
(y)	, 			
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street.	\$2,000,000		Stimulus Funding	CSX, Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes.	, 	\$10,000,000	Stimulus Funding	Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section	\$2,000,000 \$2,000,000	\$10,000,000	Stimulus Funding Transportation Funds	Public Works Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes.	\$2,000,000	\$10,000,000 \$11,000,000	Stimulus Funding Transportation Funds Louisville Metro and CSX	Public Works Public Works CSX, Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets.	\$2,000,000 \$2,000,000	. , ,	Stimulus Funding Transportation Funds	Public Works Public Works CSX, Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th	\$2,000,000 \$2,000,000	\$11,000,000 \$3,000,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Wor
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St.	\$2,000,000 \$2,000,000 \$700,000	\$11,000,000 \$3,000,000 \$3,000,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Wor Public Works Public Works Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets.	\$2,000,000 \$2,000,000 \$700,000	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Wor Public Works Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets. P17 - Convert Kentucky St to 2-way (8th St - I-65) & Breckenridge to 2-way (9th St - I-	\$2,000,000 \$2,000,000 \$700,000	\$11,000,000 \$3,000,000 \$3,000,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Wor Public Works Public Works Public Works Public Works Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets.	\$2,000,000 \$2,000,000 \$700,000	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Wor Public Works Public Works Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets. P17 - Convert Kentucky St to 2-way (8th St - I-65) & Breckenridge to 2-way (9th St - I-65). Mill and resurface 9th St (Hill to Magnolia)	\$2,000,000 \$2,000,000 \$700,000 \$1,000,000	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds Transportation Funds Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Works Public Works Public Works Public Works Public Works Public Works
P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets. P17 - Convert Kentucky St to 2-way (8th St - I-65) & Breckenridge to 2-way (9th St - I-65).	\$2,000,000 \$2,000,000 \$700,000 \$1,000,000	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds Transportation Funds Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets. P17 - Convert Kentucky St to 2-way (8th St - I-65) & Breckenridge to 2-way (9th St - I-65). Mill and resurface 9th St (Hill to Magnolia) S- Improve comfort and convenience for bicycle commuting. Bicycle lane improvements along 15th Bicycle lane improvements along Kentucky St	\$2,000,000 \$2,000,000 \$700,000 \$1,000,000 \$50,000 addressedin 5.3.4 addressed in 4.3.4	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds Transportation Funds Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Works Public Works Public Works Public Works Public Works Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets. P17 - Convert Kentucky St to 2-way (8th St - I-65) & Breckenridge to 2-way (9th St - I-65). Mill and resurface 9th St (Hill to Magnolia)	\$2,000,000 \$2,000,000 \$700,000 \$1,000,000 \$50,000	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds Transportation Funds Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Works Public Works Public Works Public Works Public Works Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets. P17 - Convert Kentucky St to 2-way (8th St - I-65) & Breckenridge to 2-way (9th St - I-65). Mill and resurface 9th St (Hill to Magnolia) S- Improve comfort and convenience for bicycle commuting. Bicycle lane improvements along 15th Bicycle lane improvements along Kentucky St Linear Park along Railroad	\$2,000,000 \$2,000,000 \$700,000 \$1,000,000 \$50,000 addressedin 5.3.4 addressed in 4.3.4	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds Transportation Funds Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Works Public Works Public Works Public Works Public Works Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets. P17 - Convert Kentucky St to 2-way (8th St - I-65) & Breckenridge to 2-way (9th St - I-65). Mill and resurface 9th St (Hill to Magnolia) S- Improve comfort and convenience for bicycle commuting. Bicycle lane improvements along 15th Bicycle lane improvements along Kentucky St Linear Park along Railroad	\$2,000,000 \$2,000,000 \$700,000 \$1,000,000 \$50,000 addressedin 5.3.4 addressed in 4.3.4	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds Transportation Funds Transportation Funds	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Works
P2 - Construct at-grade rail crossing on Cardinal Boulevard west of 4th Street. P4 - Widen Hill and 7th Streets at their intersection to provide left turn lanes. P6 - Widen 7th Street between Algonquin and Hill Streets to a five-lane section P7 - Realign pavement on Magnolia Avenue between 7th and 12th Streets. P9 - Replace rail underpass on Oak St. P10 - Convert Oak St / Virginia Ave to 2-way traffic (16th St I-264). P12 - Upgrade Ormsby between 10th and 13th P13 - Reconnect 13th Street between Oak and Kentucky St. P16 - Three-lane street section on 18th Street between Broadway and Hill Streets. P17 - Convert Kentucky St to 2-way (8th St - I-65) & Breckenridge to 2-way (9th St - I-65). Mill and resurface 9th St (Hill to Magnolia) S- Improve comfort and convenience for bicycle commuting. Bicycle lane improvements along 15th Bicycle lane improvements along Kentucky St Linear Park along Railroad	\$2,000,000 \$2,000,000 \$700,000 \$1,000,000 \$50,000 addressed in 5.3.4 addressed in 5.3.4	\$11,000,000 \$3,000,000 \$3,000,000 \$500,000	Stimulus Funding Transportation Funds Louisville Metro and CSX Transportation Funds Transportation Funds Stimulus Funding Transportation Funds Transportation Funds Transportation Funds Louisville Metro	Public Works Public Works CSX, Public Works Norfolk Southern, P&L, CSX, Public Works

5.3.4 Public Realm

ACTION ITEMS		Near-Term Cost	Mid / Long-Term Cost	Funding Source	Implementation Partners
4.4.1- Create pedestrian-friendly streetscapes in priority areas (Costs do not include utility relocation if necessary)					
7th St./9th St. (Industry Rd to Oak St.) 7th St./9th St. (Oak St. to Broadway) 7th St./9th St. (Algonquin Pkwy to Industry Rd) Kentucky St. (13th St to 15th St) Kentucky St. (9th St to 13th St) Hill St. (12th St. to 15th St.) Hill St. (7th St. to 15th St.) 15th St. (Hill St. to Broadway) 15th St. (Algonquin Pkwy to Hill St.) 12th St. (Oak St. to Broadway) 13th St. (Algonquin Pkwy to Hill St) 9th St. (Algonquin Pkwy to Hill St) 9th St. (Algonquin Pkwy to Hill St) 9th St. (Hill St. to Magnolia) Magnolia (9th to 12th) Underground utility lines	5,000 LF 4,800 LF 950 LF 1,200 LF 1,900 LF 1,400 LF 7,000 LF 2,100 LF 3,000 LF 3,500 LF 2,500 LF 1,000 LF	\$575,000 \$172,800 \$138,000 \$207,000 \$345,000 \$115,000	\$109,250 \$218,500 \$161,000 \$805,000 \$241,500 \$402,500 \$287,500	Grant Funding MSD CSO Abatement Louisville Metro Grant Funding Louisville Metro Louisville Metro Grant Funding Louisville Metro Louisville Metro Grant Funding Louisville Metro Grant Funding Louisville Metro Consiville Metro Louisville Tunding Grant Funding Grant Funding Grant Funding Economic Development Association Disaster Preparedness Grant	Public Works, Brightside Public Works, Brightside, MSD Public Works, Brightside
4.4.2- Reinvent Parkhill Park.				r roparounicos Grant	
Landscape improvements (3 AC) Building renovations (Community center) Innovative stormwater management demonstration area (1 AC)		Addressed in 5.3.1	\$700,000 Addressed in 5.3.5	Louisville Metro	Metro Parks Public Works MSD
4.4.3- Provide additional amenities for transit commuters.					
Bus shelters Pedestrian lighting improvements Safety call boxes Benches Recycling/trash receptacles	13 ea 13 ea 13 ea 13 ea 13 ea	\$130,000 \$39,000 \$19,500 \$13,000 \$6,500	\$130,000 \$39,000 \$19,500 \$13,000 \$6,500	Grant Funding Grant Funding Grant Funding Grant Funding Grant Funding	TARC, Public Works
4.4.4- Develop a linear park linking the university with downtown and the waterfront.					
13,500 10' asphalt multi-use trail Lights Recycling/trash receptacles Bike racks Benches Groundcover/grasses Signage Pedestrian bridges	135,000 SF 135 ea 4 ea 4 ea 8 ea 17,280 SF Allowance 2 ea		\$540,000 \$675,000 \$4,000 \$4,000 \$16,000 \$69,120 \$50,000 \$1,500,000	Grant Funding	CSX, Metro Parks, Public Works
Easements and R.O.W.	Allowance	\$1,000,000		Louisville Metro	CSX, Metro Parks, Public Works

5.3.5 Workforce Connections

ACTION ITEMS	Near-Term Cost	Mid / Long-Term Cost	Funding Source	Implementation Partners
4.5.1- Focus churches and community-based organizations on one-on-one outreach.				
Work with the Interdenominational Ministerial Coalition (IMC) to discuss the role of local churches and CBOs.	N/A			Annie E. Casey Foundation, Kentuckiana Works, IMC, Local churches, and CBOs
4.5.2- Convene a knowledge-exchange forum for workforce preparedness and training.				
Economic Development staff assist in the creation of a knowledge-exchange forum.	N/A			Economic Development
4.5.3- Develop training and related amenities within the Industrial Corridor.				
Convert Parkhill Community Center into a resource for childcare, employee recreation, and "Green Collar" job training.		\$5,000,000	Louisville Metro	Housing Authority, Metro Parks, MSD, LGE
4.5.4- Increase interaction with local businesses.				
Establish a biannual business association summit with Kentuckiana Works and Making Connections Louisville to discuss workforce issues in the corridor.	N/A			Kentuckiana Works,Local CBOs, Churches (Business Association to facilitate.)



5.4 Policy Tools

The Implementation Strategy suggests three guiding policy tools be used to realize the transformation of the Industrial Corridor.

A DEVELOPMENT FORECAST can be utilized to determine the appropriate time frame for each phase, to verify the development feasibility of particular parcels and to quantify the estimated benefits to potential developers and Metro Louisville.

URBAN DESIGN GUIDELINES will serve as a general framework for making design decisions within the corridor and will supplement the design standards already found in the form district sections of the land development code. The guidelines will include site planning and architectural recommendations for development of industrial parcels. The guidelines will serve to protect the visual and functional quality and appeal within the Industrial Corridor.

THE REBRANDING ROADMAP facilitates the positioning of the corridor as the premier location for industrial development in Louisville Metro.

5.4.1 Development Forecast

The implementation strategy includes a phased development program for four uses—industrial, office, retail, and residential, and this section provides recommendations for phasing and development based on the Industrial Corridor's market potential.

The key strategy to making development models work within the Industrial Corridor is to combine an element of office development with industrial space to achieve the right revenue stream.

The business clusters identified in the 2008 Micro-cluster Analysis and ERA study present tremendous opportunity for the

growth of the corridor. The clusters with the most potential for growth as identified in the analysis are listed in the box below.

These clusters typically require development footprints ranging in size from 20,000 to 150,000 sf and include some office space component. The success of the corridor's development program relies heavily on development models that can accommodate these types of businesses while also providing for growth in other business sectors.

The ERA market analysis provides a long-term projection for the local real estate development potential in Louisville. The data was collected in April 2008, prior to the onset of the economic recession of 2008.

The financial and real estate assumptions that underlie the market analysis represent ten-year historical trends for the local Louisville market. The market analysis relies upon some socioeconomic trends and projections that are only marginally affected by economic conditions, such as population growth. Other data points, such as employment growth, retail spending, and office demand, have been negatively affected by the economic downturn. While the economic recession may postpone the timing of development due to slowed growth and tightened credit markets, the market demand forecasted in this analysis should be achievable once the economy rebounds. Additional time has been allocated in the near-term phase to account for current conditions.

Target Business Sectors	Projected Employmen Growth	nt Cluster Analysis	Stakeholder Interviews
Automotive		✓	
Building Fixtures, Equipment & Services	✓	✓	✓
Business Services		✓	✓
Chemical Products		✓	
Data centers	✓		✓
Electronics Repair	✓		✓
Entertainment		✓	
High tech start-ups			✓
Metal Manufacturing	✓	✓	
Motor Driven Products		✓	
Plastics	✓	✓	
Prefabricated Enclosures	✓	✓	✓
Processed Foods	✓	✓	✓
Publishing and Printing		✓	✓

Excerpts from the 2008 ERA Market Study.

Business Clusters Targeted for Growth Potential

Business Services

Distribution

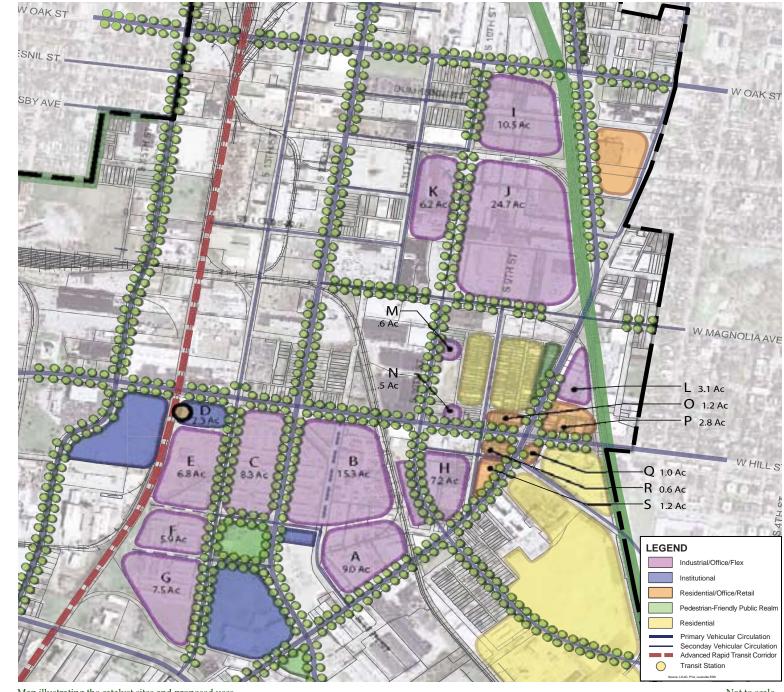
Construction

Clean Manufacturing and Research

Processed Foods

Craft Manufaturing

The 2008 Micro-cluster analysis identifies potential for development of different clusters at the city level.



Map illustrating the catalyst sites and proposed uses.

Not to scale

Phasing Schedule

The Implementation Strategy recommends the following phasing schedule in order to allow for absorption of new development program without flooding the market. The phasing time frames were determined based on absorption estimates calculated in the Park Hill Real Estate Market Analysis and assuming both a 2011 start date and a one-year construction period for near-term development. The phasing is planned so that each stage of development has anticipated market support.

Near-term: 2011 to 2015
 (Parcels A, L, O, P, Q, R, S)

• **Mid-term**: 2016 to 2018 - (*Parcels H, I, B*)

Long-term: 2019 to 2023
 (Parcels J, K, C, D, E, F, G)

Financial Feasibility Analysis

Redevelopment of the Park Hill Industrial Corridor will be a long-term initiative and its success will depend on early wins and new development projects that win the approval of banks, developers, and the local market.

The financial feasibility analysis considered local and regional trends and projections for each development sector and provided recommendations for a development program for the corridor.

Development Program Alternatives

This study evaluates the financial feasibility of three development typologies that were considered for the southern portion of the Rhodia Site (Parcel A) and other parcels of similar size and location: SCENARIO A Single-story +/- 134,000 sf industrial slab building on the 9-acre parcel by 2015.

SCENARIO B Single-story industrial slab building with moderate office space—under this scenario, the entire 134,000 footprint available for development would be used for a single story industrial space that has offices built-in. This scenario assumes that 85 percent of the building would be used for industrial space, with the remainder allocated to office use. This development option offers a low-cost structure that could be subdivided. This development model is currently used in the Park Hill corridor and closely matches existing buildings such as Consumer Choice Coffee.

Parcel	Phase	Acreage	Industrial (Footprint sf)	Office (Footprint sf)	Retail/Commercial (Footprint sf)	Residential (sf)
Α	Near-Term	9.0	113,900	20,100		
В	Mid-Term	15.3	244,000			
С	Long-Term	8.3	159,000			
D	Long-Term	2.3		Potential Multi-M	Iodal Transit Station	
E	Long-Term	6.8	90,000	30,000	10,000	
F	Long-Term	5.9	74,000			
G	Long-Term	7.5	71,000			
н	Mid-Term	7.2		50,000		
I	Mid-Term	10.5	171,000			
J	Long-Term	24.7	То Ве	Determined Followin	ng Near-term Improvements	
K	Long-Term	6.2	То Ве	Determined Followin	ng Near-term Improvements	
L	Near-Term	3.1	74,000*			
M	Near-Term	0.6	15,000			
N	Near-Term	0.5	11,000			
0	Near-Term	1.2			13,000	13,000**
P	Near-Term	2.8			23,000*	
Q	Near-Term	1.0			11,000*	11,000**
R	Near-Term	0.6		19,000		
S	Near-Term	1.2			12,000	

Proposed Development Program.

^{*} Adaptive re-use of existing structure. ** Residential on second floor.

SCENARIO C Multi-story industrial/flex space with office on upper floors—under this scenario, a multi-story building with a 25,000 square foot footprint is constructed that has industrial operations on the first floor and office-using operations on the upper floors. A building of this sort would be more expensive to construct (on a per square foot basis), however would generate higher returns since a larger proportion of the building is dedicated to office space and both the office and industrial spaces could command higher rents.

The market analysis suggests that several business types that would be interested in the Park Hill location and could occupy an industrial/flex development. Potential users include:

- Business service companies such as printers and data centers, which could serve downtown businesses but cannot afford CBD rents
- Companies that provide just-in-time printing of checks, credit cards, financial statements, and other bank services

 Technical repair and service companies, such as call centers and consumer product maintenance (e.g. cell phone repair)

Assumptions

For each typology, the analysis used a use-specific cost and revenue assumptions and determined the scale and mix of uses that would make the project most viable. The *Global Assumptions* table below provides a detailed overview of the assumptions used in the financial analysis. The analysis derived inputs to the financial model from primary market research, secondary sources, and institutional knowledge concerning property management and real estate development. The analysis considered existing real estate market conditions and interviewed local experts to understand market support and absorption issues.

Findings

Three development scenarios were evaluated using the assumptions detailed in the *Global Assumptions* table below. The residual values of the three development scenarios

are shown on page 5-15 and reflect the net capitalized sales value of development costs and a 15 percent developer return. The findings of the financial analysis of the three development scenarios are summarized below:

scenario A Industrial development alone generates a negative residual value in Park Hill (the sale value of the proposed development is less than the cost of construction and required developer return) The 134,000 square foot industrial slab building that is proposed for the southern Rhodia site generates a negative residual value of -\$1.2 million.

scenario B Including moderate amounts of office space in a flex building can help to boost the financial feasibility of development of the Rhodia site. Industrial rents in the Park Hill corridor are substantially lower than office rents (approximately \$5 per square foot for industrial space, as compared to \$15 per square foot for office space). Dedicating 15 percent of the building to

	A: Single-Story Industrial	B: Single-Story Industrial with	C: Multi-Story Industrial/Flex
		Office	
Operational Revenues & Expenses			
Industrial Rent per SF (Annual, NNN)	\$5.25/sf	\$5.25/sf	\$6.50/sf
Office Rent per SF (Annual, NNN)	\$12.50/sf	\$12.50/sf	\$15.00/sf
Management Fees	3.0%	3.0%	3.0%
Development Costs			
Development Costs (Hard + Soft)	\$55/sf	\$55/sf	\$100/sf
Tenant Improvements Office	\$10/sf	\$10/sf	\$10/sf
Cap Rates			
Industrial Capitalization Rate	7.5%	7.5%	7.5%
Office Capitalization Rate	6.5%	6.5%	6.5%
Vacancy Rates			
Industrial Vacancy	7%	7%	7%
Office Vacancy	8%	8%	8%

Table illustrating Global Assumptions.

office use by adding roughly 22,500 square feet of office space to the industrial slab building generates a positive residual value of 463,000, or approximately \$51,000 per acre (assuming the entire 9-acre parcel is purchased).

SCENARIO C While a multi-story industrial/ flex building is more expensive to construct on a per-square-foot basis, such a building can command higher rents that can offset development costs. A two-story industrial/ flex building with office space on the second floor generates a positive residual value of 112,000.

Recommendations

In order to improve the financial feasibility of the proposed development program, this study recommends creating a broader mix of uses on the Rhodia site by incorporating more office/flex space in addition to industrial development. Based on the financial feasibility analysis, this study recommends the following development strategies:

- Single story industrial slab building with office space built-in – Under this development scenario, this study recommends that Parcel A is fully built-out with 134,000 square feet of industrial space and 25,000 square feet of office space. The ratio of industrial to office space proposed is in line with office space usage within existing industrial buildings in Park Hill. The industrial facilities can be subdivided among up to seven users, assuming that industrial users require a minimum of 25,000 square feet of space. The building should have high ceilings (26' clearance) so that there can be two stories of office space within the building.
- Multi-story industrial/flex building with industrial operations on first floor and office space on upper floors – Under this scenario, this study recommends that a two-story industrial/flex building with a 25,000 square foot footprint be built on Parcel A. Although the residual value of the building would be higher as a three

story building with two stories of office space, the Park Hill market cannot support more than one story of office development (25,000 square feet) in the short-term.

Although the total residual value of the industrial/flex building described in Scenario C is lower than the industrial slab building of Scenario B, the flex building footprint is one-fifth the size of the slab building. Multiple industrial/flex buildings could be built upon the nine-acre southern Rhodia parcel, whereas only one industrial slab building could be accommodated on the site. If multiple buildings are built, development should be phased with at least three years separating the construction of each industrial/flex building.

	J	A: Single-Story Industrial	B: Single-Story Industrial with Office	C: Multi-Story ndustrial/Flex
Program				
Industrial		134,000 SF	134,000 SF	25,000 SF
Office		0	22,500 SF	25,000 SF
Residual Values				
Industrial Residual Value	\$	(1,182,000)	\$ (1,182,000)	\$ (1,176,000)
Office Residual Value	\$	<u>-</u>	\$ 1,645,000	\$ 1,288,000
Residual Land Value	\$	(1,182,000)	\$ 463,000	\$ 112,000

Table illustrating residual land value.



Not to scale

5.4.2 Urban Design Guidelines

The Park Hill Corridor encompasses a large swath of land containing a variety of uses, primarily commercial and industrial. The character of the corridor changes from north to south, both in terms of the building massing and architectural character, as well as the ways the existing buildings address the street and adjacent properties. In addition, there are cohesive residential neighborhoods abutting the corridor on the east, west, and south, and the transition from a residential character to industrial character is often abrupt. In short, while the corridor has significant current assets and positive future potential, its lack of a distinct and unified character within its industrial districts along with its lack of strong and graceful transitions between industrial areas and adjacent residential neighborhoods, will ultimately reduce its marketability and potential.

Form districts and urban design guidelines are two tools that will enable districts within the corridor to achieve a unified character that will appeal to new businesses. Louisville's form district guidelines serve as an extension of the municipal zoning code to address design issues like building height, orientation, and setback. The Urban Design Guidelines set forth in this document complement the form district guidelines, further addressing design issues as they relate to specific locations within the Industrial Corridor. For the purposes of the guidelines, the corridor is broken down later in this section into component districts based on size, scale, architectural form, and adjacent uses. The guidelines build on existing characteristics to establish or strengthen the

sense of place for each district, offering a variety of options that will attract a diverse range of businesses and employers to Park Hill.

The development of a set of urban design guidelines to institute and reinforce a strong positive image for the corridor is critical. The challenges faced and the obstacles that must be overcome in order to develop a positive and recognizable identity for the overall corridor, and more specifically for the sub-areas within the corridor, are formidable. This is in part due to the history of the corridor's development, the tension and incompatibility among various transportation systems (e.g. rail, truck, auto, pedestrian), and its de facto status as an area that serves as a separation point between more cohesive neighborhoods. As a result of these circumstances, the following conditions exist throughout the corridor:

- Incompatible land uses and often harsh transitions between them.
- Lack of a rational and easily navigated circulation system.
- Incomplete and in some cases non-existent pedestrian and bicycle facilities.
- Lack of linkages with other neighborhoods.
- Absence of positive streetscape elements.
- Separation imposed by rail lines (especially 15th Street and the 7/9th Street corridors.)
- Lack of neighborhood amenities.
- Lack of corridor identification, gateways, recognizable ingress and egress points.

These challenges and obstacles, while substantial, can be dealt with through a variety of interventions. These interventions include the establishment of specific urban design guidelines that can—if followed by

those making both public and private investments in the corridor—facilitate the transition of the Park Hill area from a corridor with a lack of cohesion and identity to one that projects a positive image and "brand," encourages further investment and reinvestment in the area, proves a rational and efficient circulation system, and provides an improved overall environment for those who work and do business within it, and improve the quality of life for its adjacent neighborhoods.

Urban Design Guideline GoalsThe goals of the Park Hill Urban Design Guidelines in general are as follows:

- To develop, reinforce, and enhance a "sense of place" for the corridor and the sub-areas within it.
- To seek out and identify opportunities to establish a number of nodes and gateways as the corridor develops further to signify its status as a 21st century employment complex with a focus on clean, modern, energy efficient, and sustainable activity occurring within it.
- To develop a rational, hierarchical street and circulation system (with certain streets prioritized for commercial traffic) where the local streets provide a pleasant, safe, and efficient pedestrian environment, through the use of sidewalks, bike lanes, trees and landscaping, and boulevard treatments in certain subareas.
- To minimize the harsh transition between industrial and residential areas; to introduce new residential and mixed-use development prototypes as a way to transition between the two; and to provide new housing, commercial, and retail opportunities.
- To highlight and celebrate the industrial history and character of the corridor in a manner that encourages reinvestment and adaptive reuse where appropriate.

Corridor Sub-areas

The Park Hill Corridor Implementation Strategy specifies a number of sub-areas within the overall corridor that each have a distinct character. For the purposes of the development of the corridor's Urban Design Guidelines, these sub-areas have been aggregated into the following five groupings:

- Broadway District
- Kentucky Crossing District
- Industry Corner District
- Cardinal Commons District
- Residential Transition Zones (includes Distillery and Sobro West Districts)

Broadway District

The Broadway District is a strong, mixed-use corridor with a concentration of commercial uses along its length. While a number of the most heavily used transit routes travel along its length, the character of the corridor is primarily auto-oriented. However, the mix of older- and newer-style buildings effectively signals that this is the most important commercial district within the corridor. Its location on the northern edge of Park Hill, however, de-emphasizes its connection to



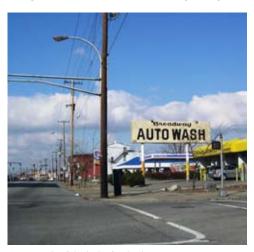
Several opportunities for building reuse exist along Broadway.

the large portion of the corridor just to its south. The recommended design guidelines for the Broadway District are as follows:

STRENGTHEN PEDESTRIAN AND TRANSIT ORIENTATION Broadway is served by the greatest concentration of transit lines within the TARC system, and there are numerous bus shelters and stops along its length. There is also a good deal of pedestrian movement along Broadway, with some areas having adequate sidewalks and others lacking. The overall orientation and amenities provided for pedestrians and transit users needs to be strengthened and made more continuous and uniform.

RESPECT THE EXISTING BUILDING SETBACK PATTERNS A pattern of commercial setbacks has been established along the corridor. This pattern should be reinforced and respected by future development.

DEVELOP REGULAR LANDSCAPING PATTERN
BETWEEN THE STREET AND PARKING
AREAS While there are significant setbacks
along the street, there is not a strong or regular



An example of the lack of setback continuity.

pattern of landscaping to provide an attractive buffer between the street and the parking areas and to provide a pleasant environment for pedestrians.

DEVELOP A CONSISTENT WAYFINDING
SYSTEM Identity of the district should be
reinforced by distinctive landscaping, banners,
and defined entryways and signage. There is
currently a lack of signage or district identification along the corridor, and there are not

consistent streetscape elements that reinforce

a sense of the character in the area.

ENCOURAGE NEW INFILL

DEVELOPMENT with first floor retail/commercial and possibly upper-floor residential. New prototypes that include residential units in upper stories should be encouraged Existing large-scale buildings—such as the Philip Morris property—should be encouraged as reuse with commercial/retail at ground level and residential above.

MASSING The most prevalent building types along the corridor are either one-story commercial buildings or low, multi-story properties. This is an appropriate scale for new development and can reinforce the area's character.

HIGHLIGHT THE CONNECTIONS WITH IMPORTANT KENTUCKY CROSSING AND INDUSTRY CORNER DISTRICT STREETS Special entry gateway elements should be developed at 18th/Broadway; 15th/Broadway; 12th/Broadway; and 9th/Broadway signaling the significance of the entrance south into Park Hill.

Kentucky Crossing District

The Kentucky Crossing District has a more traditional urban pattern of development symbolic of early 20th century industrial development and opens up as it transitions south. The building character along some of the streets is strong and conveys an interesting commercial character. These properties tend to be smaller in scale than elsewhere in the district and convey a finergrain development pattern. The area has potential for significant building re-use for both 21st century commercialization, mixeduse development, and a more eclectic user base. The recommended design guidelines for the Kentucky Crossing area as follows:

ENCOURAGE THE REUSE OF SIGNIFI-CANT PROPERTIES FOR A NEW MIX OF USES Encourage the preservation and reuse of existing buildings in this district, espe-

cially those with significant architectural

character and those that reinforce the early 20th century district character. Retain where feasible distinctive features such as chimneys, stacks, silos, and exterior mechanical systems.

RETAIN A CLOSE STREET WALL WHERE
POSSIBLE Buildings in this district tend to
be built fairly close to the street and in some
cases present a strong urban feel that should
be reinforced when possible.

REINFORCE THE EXISTING STREET PATTERN AND SCALE AND PROPORTION OF THE BUILD-INGS Retain when possible the existing relationship between building and street, the proportions of the building and facades, and significant building features.

PROVIDE NECESSARY PARKING BEHIND
THE BUILDINGS WHERE POSSIBLE Locate
parking and loading facilities behind build-

ings and screened from the street. If this is not possible, they should be screened from the right-of-way. Parking and circulation should be designed to avoid the need for trucks and service vehicles to use the street in order to access service docks or other parts of the building.

DO NOT ATTEMPT TO RECREATE THE OLD Design building additions or major alterations in a manner to read as modern improvements rather than attempts to recreate the original building. The use of contemporary materials and energy systems should be encouraged, resulting in a dynamic blend of new and old.

HIGHLIGHT THE DISTINCTIVE INDUSTRIAL CHARACTER OF THE PROPERTIES WITHIN THE AREA Special attention should be paid to the special characteristics of industrial buildings. These should be emphasized



The properties in the Kentucky Crossing District tend to display a finer grain development pattern than elsewhere in the corridor.



Numerous buildings within the district display unique industrial character.

where appropriate, through accent lighting, restoration, etc.

ACTIVATE LARGE, BLANK WALLS Consider "activating" large, featureless building wall areas through the use of public art and innovative lighting, particularly where such walls are highly visible from the street.

IMPROVE EXTERIOR LIGHTING

Exterior lighting is strongly encouraged, both as a safety measure and as a way to highlight the character of the buildings.

EMPHASIZE PROPERTY'S FRONT DOOR

Provide visual identification of the "front door" of the building, through means such as awnings, canopy signage, increased use of glass, etc. Encourage the entry and office uses to be visible from the street if possible.

PROVIDE A CONSISTENCY OF STREETSCAPE ELEMENTS THROUGHOUT THE AREA; EMPHASIS ON PEDESTRIAN, TRANSIT, BIKE USE The rights-of-way should be consistent throughout the area, with their streetscape elements reinforcing the character of the area. Pedestrian amenities, bike lanes, and access to transit facilities should be given the highest priority.

ENCOURAGE "GREEN" REINVESTMENT Seek out opportunities to introduce green and sustainable operating systems into older, existing properties.

Industry Corner

The Industry Corner district is less constrained by the city street grid and can accommodate industry that operates on a larger footprint. Its character—particularly on its southern end—is more analogous to a planned industrial park than a part of a traditional city neighborhood. This is consistent with the type of existing businesses and those that may be attracted in the future due to the advantages of this inner city location. The design guidelines of this corridor should encourage this industrial park character as one of modern, clean, efficient use of land and a positive, consistent overall aesthetic image. The recommended design guidelines for the Industry Corner area are as follows:

PROVIDE A CONSISTENT, UNIFYING CENTRAL "BOULEVARD" Provide a public right-of-way with a continuous aesthetic, incorporating street pavement and curbing, district-focused lighting standards, landscaping, sidewalks, transit stops, etc. While primarily designed to provide a clean, modern feel for those driving through, the right-of-way should also provide a comfortable scale for pedestrians walking to work or waiting for the bus. Landscape buffers and building setbacks can help accomplish this. Consistency of signage, graphics, banners, lighting, and other elements will unify the corridor and present a "business park" environment.

SET BACK BUILDINGS AWAY FROM THE

STREET Buildings in this area are generally set back from the street with berms and landscaped buffers, which are used to screen unattractive activities from the street. This pattern should be continued and reinforced, consistent with the "business park" model.

USE LANDSCAPING TO REINFORCE AREA IDENTITY Significant attention should be paid to landscaping, both the design and landscaping of road rights-of-way and entrance landscaping to individual properties. Landscaped buffers along street rights-of-way should include sidewalks and areas for bus stops and shelters. Coordinate street-side landscaping elements in order to have the district read as a continuous "green" corridor rather than a piece-meal approach.

CAREFULLY DESIGN STREET/BUILDING INTERFACE Carefully design the interface between the building and the street, with clear, direct pedestrian entries, well-designed landscape treatment of the front setback, and signage integrated with the architecture and landscape treatment.

ENCOURAGE CONSISTENCY OF BUILDING HEIGHTS WITH MIX OF MATERIALS The character of this area is one of large, mostly single-story or two-story buildings. This is appropriate and reinforces the newer, modern character of the area. To enhance

visual interest, encourage a mix of building materials for building facades where possible, and use contrasting materials as accent elements in other cases. Some architecturally distinct features can be included even on relatively simple building types to minimize blank walls facing the street.

MINIMIZE THE VISUAL IMPACT OF LARGE PARKING AREAS Large parking lots should be divided into a series of smaller lots where possible through the use of landscaping and buffering to reduce the visual impact of large parking areas. Parking at the back of buildings is preferable.

VIEW Loading docks should be located in a manner that screens them from the public rights-of-way, most appropriately at the rear of the building.

ENCOURAGE THE INCLUSION OF OUTDOOR EMPLOYEE AMENITIES For industrial complexes that include multiple buildings,

encourage opportunities for shared space for plazas, seating areas, gardens, public art, etc. This provides an aesthetically appealing focal point for what may be otherwise be featureless buildings at the same time providing an employee amenity.

INCORPORATE MORE SIGNIFICANT "GREEN" ELEMENTS, INCLUDING STORMWATER MANAGEMENT, ENERGY EFFICIENT LAND-SCAPING, AND SUSTAINABLE BUILDING SYSTEMS This area provides the most potential to introduce and highlight green and sustainable building practices. Encourage more interesting industrial design that can increase the aesthetic interest of the corridor and also serve as a model for sustainable building practices. Where possible, attempt to make such sustainable systems visible from the street.

ENCOURAGE THE USE OF INNOVATIVE STORMWATER RETENTION SYSTEMS The buffer zone between streets and buildings—comprising a large area as a result of

increased setbacks—can serve as a location for innovative stormwater retention systems. While providing a means of conserving energy and controlling flooding, the systems can provide an aesthetically pleasing buffer between the street right-of-way and the location of large industrial buildings set back from the street.

PROVIDE ACCESS TO TRANSIT AND BICYCLE USE FOR COMMUTING The design of the major streets or boulevards in Industry Corner must accommodate auto and truck traffic, but the area will be a major employment center. The needs of pedestrians, transit riders, and bicycle riders as daily commuters must be accommodated and given just as high a priority as vehicular traffic.







Cardinal Commons

The Cardinal Commons District is relatively small compared to the other districts within the corridor and has a much more compact, mixed-use pattern of land use and development. Given its mix of uses, with the long-standing residential neighborhood to its north, the commercial quality of the "four corners" of the Seventh/Hill Streets intersection, and the new university-related housing under construction south of Hill, there is opportunity to stabilize the area and utilize it to serve the retail/commercial needs of the larger corridor as well. The recommended design guidelines for the Cardinal Commons area are as follows:

STRENGTHEN THE SEVENTH AND HILL STREET AREA AS A RETAIL AND COMMERCIAL NEIGHBORHOOD HUB. Existing gaps and vacant lots should be encouraged and supported to be filled in with neighborhood-scale retail and commercial uses. Work cooperatively with existing institutions such as Norton Health Care and the University

of Louisville. A streetscape improvement program at the intersection should be established to reinforce it as a neighborhood center rather than a series of automobileoriented businesses.

IMPROVE PEDESTRIAN CONNECTIONS TO THE RESIDENTIAL AREAS TO THE NORTH AND SOUTH. The strongest markets for retail/commercial uses in this district are the existing residential neighborhood immediately to the north and the new residential development under constriction to its south. Stronger pedestrian links should be established, which will encourage new neighborhood-based business development and discourage businesses that rely primarily on through vehicular traffic.

PROMOTE AND ENCOURAGE REHABILITATION OF EXISTING RESIDENTIAL PROPERTIES IN THE DISTRICT. A number of the residential structures are in need of significant repair. Many have been converted to rental or questionable non-residential uses, others

have been demolished, weakening the fabric of the community. Interventions should be encouraged that retain and stabilize the existing single-family character of the neighborhood's houses. Fully enforce Metro permitting and code enforcement mechanisms to prevent further de-stabilization of the neighborhood.

ENCOURAGE NEW INFILL THAT RESPECTS
THE PREVAILING ARCHITECTURAL SCALE,
CHARACTER AND PATTERN OF THE NEIGHBORHOOD. New infill development—especially retail/commercial—should respect the character of its neighborhood orientation, rather than assume a strip auto-oriented character. This is especially important as a way to encourage the new university-related residents to frequent neighborhood businesses. Such development must pay attention to existing building setbacks and reduce the visual impact of parking, including transit and bicycle amenities where possible.



Successful landscape buffers in the Distillery District.

Residential Transition Zones

The transitions between the Park Hill Corridor and the adjacent residential neighborhoods are currently somewhat abrupt and jarring, and there are many instances where small, single-family houses are facing large commercial and industrial properties. These transition areas need to be carefully analyzed for opportunities to reduce landuse incongruities, to provide more aesthetically pleasing transition gateways, and to provide much needed affordable housing opportunities in a scale and massing that provides the necessary transition between districts. Opportunities exist along Fifteenth Street and east of Seventh-among othersthat can be gracefully introduced in a more appropriate multi-family scale. The recommended design guidelines for the Residential Transition Zones are as follows:

ENCOURAGE VISUAL "GATEWAY" TREAT-MENTS AT SIGNIFICANT TRANSITIONAL INTERSECTIONS that announce the transition from a residential to a non-residential area. While in general there is a need to ease the transition between the residential and industrial areas, in certain key locations it is appropriate to provide a gateway element that "announces" the transition. These elements—smaller in scale than those on Broadway—can indicate transition from one positive neighborhood identity to another.

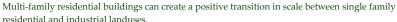
MINIMIZE THE IMPACTS OF LARGE-SCALE INDUSTRIAL PROPERTIES on adjacent residential streets and neighborhoods through landscaping. Where sufficient right-of-way exists and/or in cooperation with private property owners, strong landscape buffers should be introduced to screen residential areas as shown in the open space buffer diagram on the follow page, particularly on

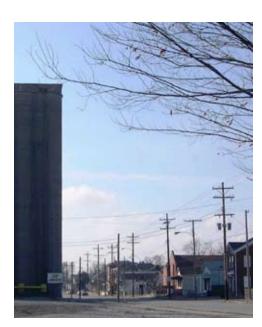
the east side of 15th Street and the east side of 9th/7th Streets.

MINIMIZE THE IMPACTS OF LARGE-SCALE INDUSTRIAL PROPERTIES on adjacent residential streets and neighborhoods through transitional building prototypes. Certain new architectural prototypes and building envelopes can address and reference both the residential and the industrial character of the location. The design and development of such building types should be strongly encouraged in appropriate locations.

ENCOURAGE SMALL-SCALE MULTI-FAMILY DEVELOPMENTS IN THESE TRANSITIONAL LOCATIONS A small-scale, multi-family development can be an appropriate transition between a primarily single-family neighborhood and an industrial area as illustrated in the diagrams on the following page. This can also provide much needed afford-







able housing in units that may be in demand but not available in these neighborhoods.

RESPECT THE PREVAILING ARCHITECTURAL SCALE, CHARACTER AND PATTERN OF ESTAB-LISHED RESIDENTIAL DEVELOPMENTS New development models, especially of a somewhat larger scale and density, must respect the character of the neighborhood, in providing a coherent transition between fine-grained residential buildings and larger-scale industrial properties. Such development must pay attention to existing building setbacks and reduce the visual impact of parking. In addition, larger buildings should provide differentiations in the façade fronting the street in regular intervals that relate to the width of adjacent residential properties.

UTILIZE TRANSITION HOUSING PROTO-TYPES AS AN "INFILL" DEVELOPMENT STRATEGY Seek out vacant lots along major streets as appropriate infill locations that fill in existing building gaps over time.

ENCOURAGE SMALL-SCALE NEIGHBORHOOD RETAIL AND COMMERCIAL USES ON THE GROUND FLOOR. In addition to providing an appropriate transitional building envelope, these also provide ground-floor space at an appropriate scale for neighborhood, small retail and commercial activity.

PROVIDE IMPROVED PEDESTRIAN AND BICYCLE AMENITIES AS WELL AS TRANSIT STOP LOCATIONS. While the locations of these transitional prototypes will primarily be those streets with non-residential character on the opposite side, the needs of the street still must be prioritized for neighborhood residents. Full pedestrian, bicycle, and transit use amenities must be incorporated into the street character.



an industrial development.



Illustration of a streetscape buffer between a residential neighborhood and an industrial development.



Many locations throughout the corridor can benefit from enhanced buffering. .



Illustration of an open space buffer between a residential neighborhood and an industrial development.



Illustration of a transitional multi-story housing between a residential neighborhood and an industrial development.

5.4.3 Rebranding Roadmap

A strong brand identity can help attract new investment and build value for Industrial Corridor businesses. Places like Research Triangle Park, North Carolina, and Silicon Valley, California, are just two of the examples of how an employment center's brand can help sustain its success. The Park Hill Industrial Corridor holds tremendous potential for the development an equally strong brand identity rooted in the green economy, capitalizing on its unique architectural and locational assets. This section outlines the steps required to create a unique, ownable brand that captures the essence of the industrial corridor and connects—via clear communications—the corridor's features and benefits to appropriate audiences, positioning the corridor as the location of choice for both existing and new business and development opportunities.

The Power of Branding

A successful brand for the Industrial Corridor has the extraordinary power to shape consumer and employer decisions. It should combine a precise blend of tangible and intangible qualities to create a perceived value in the minds of customers and investors—and prompt them to act. Far from accidental, it is rooted in business analysis, sound strategy, precise execution, and attentive care over the long-term.

A branding program cannot solve the challenges facing the corridor. It cannot improve transit access, eliminate crime, or address traffic issues, but it can become a rallying cry for the community and bring to life the opportunities for the corridor.

Branding the Industrial Corridor isn't just about launching a logo or a tag line; it's about coordinated activity and a united approach to attract all the corridor's audiences. A successful brand for the corridor must address the families living there and the out-of-town businesses looking to relocate. It must accurately reflect the culture, spirit, and potential of the community, utilizing defining strategies such as the development of the corridor as an industrial gallery of art.

Branding this corridor entails much more than the big picture. It is about intricate

details—as small as clean streets and as deep as getting the area's residents to feel proud of being an ambassador of the neighborhood. The brand will truly come to life only when residents are proud and businesses feel safe.

This section details the road map for developing the industrial corridor brand, as well as initial tactical recommendations based on the findings to date.

The Branding Process

Every successful brand consists of both a promise and a personality. This combination is necessary to connect with consumers and build strong emotional bonds. The 4-step integrated process detailed on the following pages addresses the business challenges facing the Park Hill corridor with strategic communications solutions designed to fuel the growth of the brand for long-term success:

- 1. Business Analysis
- 2. Strategy
- 3. Translation
- 4. Execution

A general overview for each phase follows, as well as the associated activities, deliverables, and recommendations.



Business Analysis

Gathering the intelligence that reveals opportunities

The goal of this phase is the development of an objective foundation of critical insight for the corridor's brand, using a rigorous process that builds on existing research, and fills in any gaps with key customer group and influencer interviews that build upon previous public outreach activities:

- Public Sector
- Major Stakeholders
- Corporate Sector
- Real Estate and Investor Sector

This additional research will be accomplished efficiently and quickly in one or two sessions where participants participate in white board brainstorming exercises and respond to initial branding thoughts. Additionally, an audit that objectively evaluates the competitive landscape and existing materials should be conducted during this phase.

The Business Analysis phase culminates with the delivery of a document embodying the strategic insights and reveals the brand's strengths and opportunities. These insights

form the basis for the brand and set the stage for translating strengths and opportunities into communications.

Activities

- Review existing research
- Review any materials currently being used to promote the corridor
- Review marketing materials of key competitors
- Conduct additional interviews to fill information gaps

DELIVERABLES

Brand Principles document

- Objective snapshot of current brand position
- Identification of meaningful differentiators and brand success drivers
- Critical insights into opportunities to create value for the organization, and customer
- Basis for brand positioning and translation
- An audit of how competitors communicate (relevance, differentiations, consistency, and memorability)

RECOMMENDATIONS

To fully understand the competitive landscape and subsequent development of

the industrial corridor brand, additional research is required to supplement the research to date, particularly with influential audiences not yet addressed. These groups include:

- Site Locators
- Developers
- Investment Sector
- Real Estate Brokers

As audiences that are crucial to the selling of the industrial corridor, the goal of these interviews is to understand exactly what messages and tools they need to do so. Their input will ensure that the content needed to motivate their decision making process is front and center in the positioning of this initiative. This phase will also identify, review, and evaluate other successful corridors of opportunity, and determine the "best practices" that have contributed to their success.

Strategy

Turning insight into go-to-market brand strategy

Based on the Brand Principles document from phase one, a facilitator will lead the brand team—consisting of representatives from all key stakeholder sectors—through the creation of strategic branding tools. This will take place over several sessions. Upon completion of these sessions, a complete Brand Guide—encompassing all recommendations in directing the visual and verbal translation of the brand—is delivered.

This phase concludes with nomenclature recommendations based on the insights from the branding sessions. A list of 10-15 names will be provided for refinement and legal review. It is recommended that an edited list of names (and the refined positioning platform) be tested with focus groups prior to implementation.

Activities

- Establish brand team (comprised of representatives from all key stakeholder sectors)
- Meet with brand team to craft the core strategic branding tool (Brand Guide)
- Review / edit name recommendations
- Validate selected corridor name via market research (optional)
- Legal review and final name selection

DELIVERABLES

Brand Guide

- Brand Equity Pyramid: Summarizes the desired perception of the brand and it's ownable messages in the market by establishing Points of Parity and Points of Differentiation. (See generic example A)
- Brand Positioning Platform: A succinct statement that defines the brand for the

- corridor's target customer, and articulates its uniqueness (an "elevator talk"). Answers the customer's question: "What's in it for me?"
- Brand Message Track: A comprehensive document detailing the key features and benefits—and the "reasons to believe" that back them—behind the brand's core positioning line. This document keeps all brand ambassadors "on message" and provides them the facts and figures needed to discuss the brand with any audience. This document is frequently updated as the "reasons to believe" become increasingly more robust. (See generic example B)
- Brand Personality Board: A collection of attitudes and characteristics (in words and pictures) that embodies the personality of the corridor brand. What goes on a personality board? Color palette, descriptive words or phrases, typography, imagery of people, locations, architecture. Textures, bits of design elements. Anything and everything that when collected, portrays the very essence of what the corridor represents. (See generic example C)
- 10-15 Nomenclature options

RECOMMENDATIONS

Brand Ambassadors

• With a complex initiative involving diverse audiences and interests, it is critical to gain buy-in from as many of these audiences as possible. To this end, strategically selected representatives from all key stakeholder sectors will not only serve on the brand team, but be named brand ambassadors as well. By "giving them a seat at the table" and having an active role in shaping the industrial corridor brand, they will have a heightened sense of ownership and pride in the success of the project and ultimately serve as enthusiastic brand champions throughout the community. They will also serve as a free resource for spreading the word in the early days of the initiative.

Corridor Nomenclature

The corridor brand has to be genuine and based on reality or else it is just like a nice haircut—it might look good for a while, but it doesn't create a new personality or last over time.

The selected brand name must honor the heritage of the neighborhood and come to symbolize the corridor as clearly as Old Louisville, Crescent Hill, and The Highlands do in other parts of the city. Additionally, the negative connotations of the name currently used to represent the corridor in many circles—Park Hill—must be avoided. Yet the word "park" does have a nice double meaning: a green area for public use, as well as an industrial complex, so it should be considered as part of a new name as long as it doesn't initiate any possible connection with the "Park Hill" name.

The brand developed for the industrial corridor needs to honor and amplify these opportunities:

- History of area (legacy of established industries)
- Green practices, products, and services (the opportunity to "build green" from the ground up)
- Innovation
- Industrial art gallery
- Logistical benefits (UPS Worldport, proximity to downtown, University of Louisville and workforce, location within expansive regional infrastructure network)

Translation

Bringing the brand to visual life and translating it consistently across all communications

In this phase, brand is brought to life by translating it into its core branding tools: a logo / wordmark and tag line. Building from the Brand Guide, multiple options that express the selected name and brand personality are explored via multiple visual directions. Clients participate in selection and / or market research to determine the most relevant and powerful direction.

The final choice is further refined if needed, and then demonstrated in a series of prototypical applications, ranging from core identity communications such as signage, banners, and business cards, to ongoing communications such as trade ads, web sites, and trade exhibits. The broad visual representation helps key decision makers understand the comprehensive nature of brand application and function. In addition, it can be utilized in the development of brand standards that will guide future implementation.

Activities

- Team with a graphic artist to develop multiple logos, wordmark, and tag line options
- Review with brand team and refine selected options
- Validation of selected branding tools via market research (optional)
- Present selected direction via a series of 6-9 prototypical applications.

DELIVERABLES

- 3-5 logos and/or wordmark options
- 3-5 tag lines
- Refined logo / wordmark / tag line selection
- Brand standards (the tools and rules to guide the implementation of all brand communications)

RECOMMENDATIONS

The Benefits of an Umbrella Brand Given the diverse audiences, goals and messaging for this initiative, an umbrella branding approach may best suit this initiative. An umbrella brand has a single core voice, but unlike a traditional brand, it allows for a more robust presentation of a brand's multiple attributes by establishing and uniting a series of sub-brands within the core voice. This approach leaves room for each sub-brand to engage in sub-conversations relevant to more precisely targeted markets.

Shown below is one approach for the industrial corridor umbrella brand, focusing on the corridor's green, innovative, and historic attributes. To the right is an example of how this approach could translate (generically) to a letterhead.

These three sub-brand "buckets" have resonated strongly throughout the research to date, but until the more in-depth review is completed in phase one, the exact sub-brand buckets cannot be determined. For example, the idea of the corridor as a hub may resonate more strongly than the idea of innovation.





Execution

Producing, launching, and monitoring brand communications

A brand reaches its potential only if it is consistently and thoroughly embraced and executed, from launch through ongoing post-launch communications. In this phase the strategic and visual program is made operational.

The launch of the corridor's brand will be a unique and valuable opportunity to leverage the brand story and create powerful rollout experiences. Launch events, ground-breaking ceremonies, internal meetings—each offers an exceptional opportunity to capitalize on the intrinsic value of a brand launch as a means to tell the story of the Industrial Corridor.

Post-launch, a brand steward is critical to periodically monitor communication effectiveness, consistency, and adherence to standards.

Activities

- Establish Timetables and Budgets
- Team with a graphic artist to develop launch and post-launch materials
 - Content outlines, messaging, design, layout, copy, and photography or illustration are developed for each component across all brand touch points
- Plan and execute launch events and activities
 - Launch meeting deliverables are created for both internal audiences and external customers
 - Monitor brand communications' effectiveness and adherence to brand standards

RECOMMENDATIONS

For this brand to hit the ground running, communications need to be grouped into brand launch- and post-launch buckets for all audiences—public, corporate, and real estate.

The launch communications must provide information about the industrial corridor from day one, and be inexpensive and easily updatable given how the corridor may be developed district by district. Most importantly, they must answer the question "Why this corridor?". They are critical to building and momentum for the project during it's infancy stage.

Post-launch communications should provide more robust information, but should also be relatively easy and cost-effective to update. A flexible approach that can be phased in and modified over time is needed.

To leverage the branding work currently reshaping the way Kentucky is perceived, The brand should also capitalize on the state's 'Unbridled Spirit' and the city's "Possibility City" campaigns.

Public Sector / Major Stakeholders / Community Opinion Leaders / Influencers and Non-Profit Sector

Audiences

- General public / residents
- Area churches
- Area schools
- Area neighborhood-based organizations
- Media
- Chamber of Commerce
- U of L
- LG&E
- Government Sector (including Metro council, Metro government and agencies and staff, TARC, MSD, Governor's office, State Legislature, Kentucky State agencies, Economic Development cabinets, Kentucky Federal delegation)

Messaging / Ideas

- Build pride via "legacy of success" message.
- Create "Aha" moments by posing "did you know?" questions regarding the corridor's history of innovation and financial impact on the city
- Define context for the scope of the corridor by comparing it to east and west coast landmarks ("as big as mid-town Manhattan")
- Incorporate "Training the next generation of workers" via U of L and existing corridor companies
- Develop the corridor in smaller districts and infuse them with inviting names such as Whiskey River, Pedestrian Pathways, Historical Homage, Catalyst Community, etc. to further define and celebrate the history / diversity of the corridor

Launch Tactics

- Establish Brand Ambassadors
- Brand launch news conference led by Louisville Mayor.
- Armed with the Message Track developed in phase one, brand ambassadors will be fully trained, informed and ready help launch, promote, and support the brand during the first year of launch. As part of a "buddy system" with other ambassadors, they will help residents in the area buy into the new identify and the strategies for developing the corridor. This ambassador approach could be modeled on the Derby ambassadors who blanket the city during Derby time. Ambassadors should hold regular meetings to track progress and prepare information for the audiences identified in this grid.
- Pole banners, community association meetings, ads in church bulletins, school directories, etc.
- Website A temporary website featuring a topline overview of the corridor should be quickly established to provide content (flyers in downloadable .pdf formats) for the brand ambassadors, with information segmented for appropriate audiences. These templated flyers will be easily updatable to accommodate content updates.
- Topic-specific flyers (downloadable from website) will be an accessible communication vehicle appropriate to low-income populations
- Stationery system
- To create the strongest impact for the corridor, stationery should be strongly branded with the corridor's identity, with the "city" brand supporting it
- PR efforts with Business First / Courier Journal ads & articles
- Trade pubs / general awareness campaign
- A series of ads illustrating the surprising nature of the corridor (size, financial impact,

- history of innovation, etc.) should be developed to heighten awareness of the significance of this initiative
- Community pride T-shirts, coffee mugs, etc. that celebrate the diversity of the corridor ("I am <brand name>")
- The launch event should ideally take place at a corridor site that has a development deal in place, is in the process of being renovated, or has historic significance

Post-Launch Tactics

- · Quarterly e-mail newsletter
- Ongoing upgrades to website
- Built around a robust community graphic displaying districts of information that mirror the umbrella brand approach, the website should be the workhorse communication vehicle for the brand and provide information in engaging ways (site tour videos, an "ask the expert" resource, etc.) Targeted categories on the home page (developers, brokers, site locators, etc.") will quickly connect every audience to the information they need. The website should also continue to be a resource for the downloadable information (in .pdf format) that brand ambassadors can distribute. This technique will provide cost-effective, current information. (see example D)
- Ground-breaking events at new facilities
- Quarterly progress meetings that update ambassadors and keep the public informed (meetings rotate from business to business within the corridor)
- The Message Track is updated as a result of these meetings
- Signage program (wayfinding, gateways, attractions, billboards)
- A brand steward should be established to monitor the ongoing effectiveness of the brand, utilizing brand awareness and recall surveys

Corporate Sector

Audiences:

- Companies in corridor
 - Headquarter functions (national or regional)
 - Manufacturing
 - Warehousing / Logistics
 - Technology
 - Service
 - Retail
- Companies not in corridor
 - UPS customers (globally)
 - Companies currently elsewhere in Louisville region
 - Companies currently outside Louisville region
 - Suppliers or service providers to existing corridor companies
 - Out-of-town headquarters of companies in corridor

Messaging / Ideas

- "A Smarter Growth Solution" building from an existing infrastructure, preserving remaining open spaces without further massive destruction and environmental damage, and proximity to primed workforce.
- Priming and training the community workforce for success, conducted by corridor companies

- Leveraging "green" amenities and infrastructure to support and attract the range of businesses and employees associated with a green industry center.
- Emphasizing iconic industrial art projects as brand-building opportunities for new businesses in the corridor.

Launch Tactics

Same tactics as public sector, plus:

- Addition of a section within the interactive website map to profile current corridor businesses, logistics benefits, state incentives and resources, economic development tools and resources, etc.
- Awareness ads in key trade journals
- Priming the Workforce program brochure

Post-Launch Tactics

Same tactics as public sector, plus:

- Success stories
- Insert sheets / downloadable .pdfs that showcase best practices for industry, workforce, green technology taking place in the corridor

Real Estate and Investor Sector

Audiences

- Property Owners (not operating companies)
 - Land
 - Buildings and land
- Developers
 - Industrial / Warehousing
 - Commercial/Retail
 - Housing (for fringe area potential)
 - Currently in corridor (example: Exeter)
 - Not currently in corridor
- Real Estate Brokers (based in Louisville region)
 - Currently listing corridor properties
 - Representing companies not currently in corridor
- Site Locators (based outside Louisville region)
- Greater Louisville Inc. staff
- Banks (that lend to companies operating in the corridor, or to purchasers and developers)
- Institutional Investors (i.e. insurance investments in real estate, venture capital for young companies)
- Individual Investors (in either real estate or companies)

Messaging / Ideas

- "A Smarter Growth Solution" building from an existing infrastructure, preserving remaining open spaces without further massive destruction and environmental damage, and proximity to primed workforce
- An affordable, available, and underutilized resource proximate to downtown, UPS Worldport, U of L, and workforce
- Opportunities for unique adaptive reuse projects that can showcase the corridor's architectural character and industrial heritage as a means to attract a variety of businesses, employees, and institutions.
- Proposed transit nodes, park spaces, and pedestrian amenities that can attract and catalyze redevelopment.
- Emphasizing industrial art development as a brand opportunity for investors in the corridor.

Launch Tactics

Same tactics as public sector, plus:

- Addition of corporate buttons within the interactive website map to include profiles of current businesses, logistics benefits, state incentives and resources, economic development tools and resources, etc.
- Awareness ads to run in key trade journals

- Identity announcement
- A dimensional mailer that could include a piece of the corridor's history (piece of railroad tie, etc.)
- Establish and promote a "Relocation coordinator" to provide the expertise to act as a go-between with businesses and developers / businesses / city agencies / utilities ("We make it happen"). Support this tactic with case studies showing what has already happened in the corridor by working together and leverage existing neighborhood and non-profit associations.

Post-Launch Tactics

Same tactics as public and corporate sectors, plus:

- Prospectus package that includes overview of workforce development progress, including profile of workers and successes, economic feasibility of locating to the corridor, cost / bargain ratio, air quality, etc. This package should dovetail with downtown, city economic development plans, and consist of a topline overview brochure with a series of insert sheets that can be tailored to various audiences.
- Virtual tour CDs

POP

POP POP

POD

POD

Generic Company **Brand Message Track**

Feature & Benefit Statement #1

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut

Feature & Benefit Statement #2

• "Reason to believe" statement

Location to believe statement.

Location is the second to quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

· "Reason to believe" statement

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo conseguat.

• "Reason to believe" statement

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

Core **Brand Positioning** Line

Feature & Benefit Statement #3

"Reason to believe" statement
 Loren ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisi ut aliquip ex ea commodo consequat.

"Reason to believe" statement

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

"Reason to believe" statement

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo conseguat

Brand Equity The sought-after provider for all broadband services

Strategic Equities

Wi-Fi service to more than 7,000 company-operated POD

More broadband customers than any other provider

Service to 100% of our traditional residential

Brand Character

Recognized leader & innovator, delivering great value and mobility

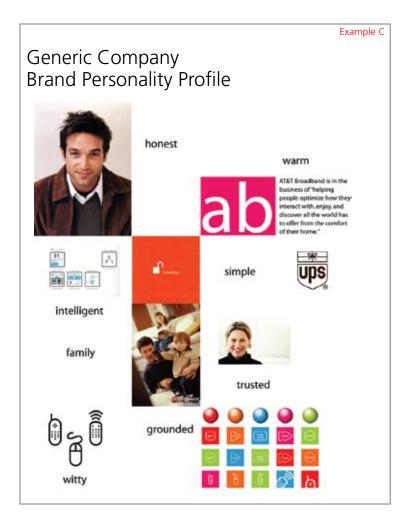
Full service capabilities

Cost-effective

service regions

Established global presence

Starbucks locations nationwide





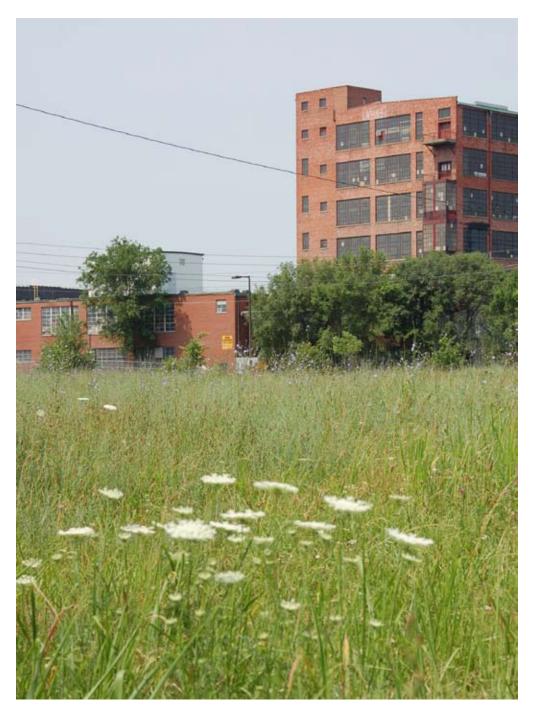
5.5 Next Steps

Once the Park Hill Implementation Strategy and its executive summary have been finalized, the documents will be submitted for review and adopted by the Planning Commission and the Metro Council.

Approval Process Phase

Similar to the Neighborhood Plan Process (as defined by the Louisville Metro Neighborhood Planning Citizen Handbook), the Planning Commission will hold a public hearing which will be the final opportunity for community feedback on the finished document and the recommendations it makes. The Planning Commission will review the plan and its recommendations to confirm that they are consistent with the goals, objects, and policies of Cornerstone 2020. Then, based on its own review and the results of the public hearing, the Commission will make a recommendation to the Metro Council regarding adoption of the complete plan.

The last step in the Approval Process Phase is a final review of the plan by the Metro Council. Upon approval, the plan is legislatively adopted and becomes an official amendment to Cornerstone 2020.



Acknowledgements

Louisville Metro Economic Development Department

C. Bruce Traughber, Director Susan Hamilton, Assistant Director Kristi Ivey, Economic Development Officer

Advisory Committee

Neville Blakemore, Great Northern Manufacturing Bruce Blue, Freedom Metals Michael Brooks, California Neighborhood Coalition

Ralph Fitzpatrick, University of Louisville Carla Hines, California Neighborhood Coalition

Rev. James Hook, Mt. Hermon Baptist Church

Dorothy Miles, neighborhood resident

Richard Power, Sud-Chemie Inc.

Manfred Reid, Sr., Louisville Metro Housing Authority Board

Trevor Smith, Brown-Forman

Marty Snyder, Pro-Liquitech

Leonard Watkins, former Louisville Metro Council member

Development Advisory Panel

Barry Alberts, City Properties Group David Block, The Community Builders Alex Nyhan, Forest City Enterprises Terry Romero, IRG Development Partners Zuhairah Scott, MacFarlane Partners

Consultant Team

EDAW, Inc. **Economics Research Associates** City Visions Associates Point A Consulting Bandy Carroll Hellige TBD Design

Mapping Data Sources

The Louisville/Jefferson County Information Consortium (LOJIC) map data is copyrighted by Louisville Metro Government, the Louisville and Jefferson County Metropolitan Sewer District, the Louisville Water Company and the Jefferson County Property Administrator. ALL RIGHTS RESERVED.

Photograph Credits

Photographs credited by page, top to bottom and left to right.

Cover

Image provided by http://maps.live.com/

1-1

- Image provided by EDAW
- Image provided by EDAW
- Image provided by EDAW

1-6

Image provided by EDAW

1-7

- Image provided by EDAW

2-1

- Image provided by EDAW

2-4

- Image provided by EDAW
- Image provided by EDAW

2-5

Image provided by EDAW

3-1

- Image provided by EDAW
- Image provided by EDAW

- Image provided by EDAW
- Image provided by EDAW

3-2

- Image provided by EDAW
- Image provided by EDAW
- Image provided by EDAW

3-3

Image provided by http://maps.live.com/

3-5

Image provided by EDAW

3-6

Image provided by EDAW

3-7

- Image provided by EDAW

3-9

- Image provided by EDAW
- Image provided by EDAW

4-1

- Image provided by http://i.pbase.com/ g3/96/675696/2/87968650.fsPK3ptV.jpg
- Image provided by EDAW
- Image provided by http://www.kernhome.de

4-2

- Image provided by EDAW
- Image provided by www.sitephocus.com

4-3

- Image provided by http://www.americantobaccohistoricdistrict.com/
- Image provided by EDAW

4-5

- Image provided by EDAW
- Image provided by EDAW

4-6

Image provided by EDAW

4-7

- Image provided by http://www.theage.com. au/ffximage/2008/05/16/svSOLARPANELS_ wideweb__470x333,0.jpg
- Image provided by http://www.werf.org/ livablecommunities/images/CHI_4.jpg
- Image provided by http://oregonstate.edu

4-8

Image provided by EDAW

4-11

- Image provided by EDAW
- Image provided by http://www.kern-home.de
- Image provided by http://www.tate.org.uk/ modern/exhibitions/streetart/
- Image provided by http://www.buffalo.edu/ news/hires/bus_shelter.jpg
- Image provided by EDAW

4-18

- Image provided by http://www.americantobaccohistoricdistrict.com/
- Image provided by EDAW
- Image provided by EDAW

4-19

- Image provided by EDAW
- Image provided by EDAW
- Image provided by EDAW

4-20

- Image provided by EDAW
- Image provided by EDAW

4-21

- Image provided by City Visions Associates
- Image provided by City Visions Associates

4-22

Image provided by EDAW

4-25

 Image provided by http://agitcorp.com/ images/greg-schatz-saint-claude-bike-lane. jpg

4-27

- Image provided by http://www.csus.edu/ news/images/students.jpg
- Image provided by http://siissalo. it.helsinki.fi/alppirata/arpics/est_evr_ dr1bnr3715_tapa_2007_2560.jpg
- Image provided by EDAW

4-29

- Image provided by EDAW
- Image provided by http://artfulrainwaterdesign.net/

4-32

- Image provided by http://www.flickr.com/ photos/papakiesel
- Image provided by EDAW

4-33

- Image provided by EDAW
- Image provided by EDAW
- Image provided by EDAW

4-34

- Image provided by http://www.louisvillecitizen.com/
- Image provided by EDAW

4-35

Image provided by EDAW

4-37

 Image provided by http://www.louisvilleky.gov/NR/rdonlyres/670DE1CF-168B-483F-AAE3-1423718E89C6/0/444building. JPG

4-39

- Image provided by EDAW
- Image provided by http://action.1sky.org/ images/green-jobs-225x188.jpg

 Image provided by http://www. ibabuzz.com/education/wp-content/ uploads/2008/04/greenjobs2.jpg

5-1

Image provided by EDAW

5-4

Image provided by EDAW

5-17

- Image provided by City Visions Associates
- Image provided by City Visions Associates

5-18

- Image provided by City Visions Associates
- Image provided by City Visions Associates

5-20

- Image provided by City Visions Associates
- Image provided by City Visions Associates
- Image provided by City Visions Associates

5-21

Image provided by City Visions Associates

5-22

- Image provided by City Visions Associates
- Image provided by City Visions Associates

5-23

Image provided by City Visions Associates

5-34

Image provided by EDAW