

Vision Louisville



Vision Public Report Phase 1
November 2012

CONTENTS

00 Acknowledgments

01 Why Do We Vision?

02 Vision Context

2.1 History

2.2 Recent and Ongoing Planning

2.3 Assets, Culture, & Values

03 State of Affairs

3.1 Context

3.2 Projection

04 Research / Best Practices

4.1 Regionalism

4.2 Living

4.3 Connectivity

4.4 Creativity

4.5 Health

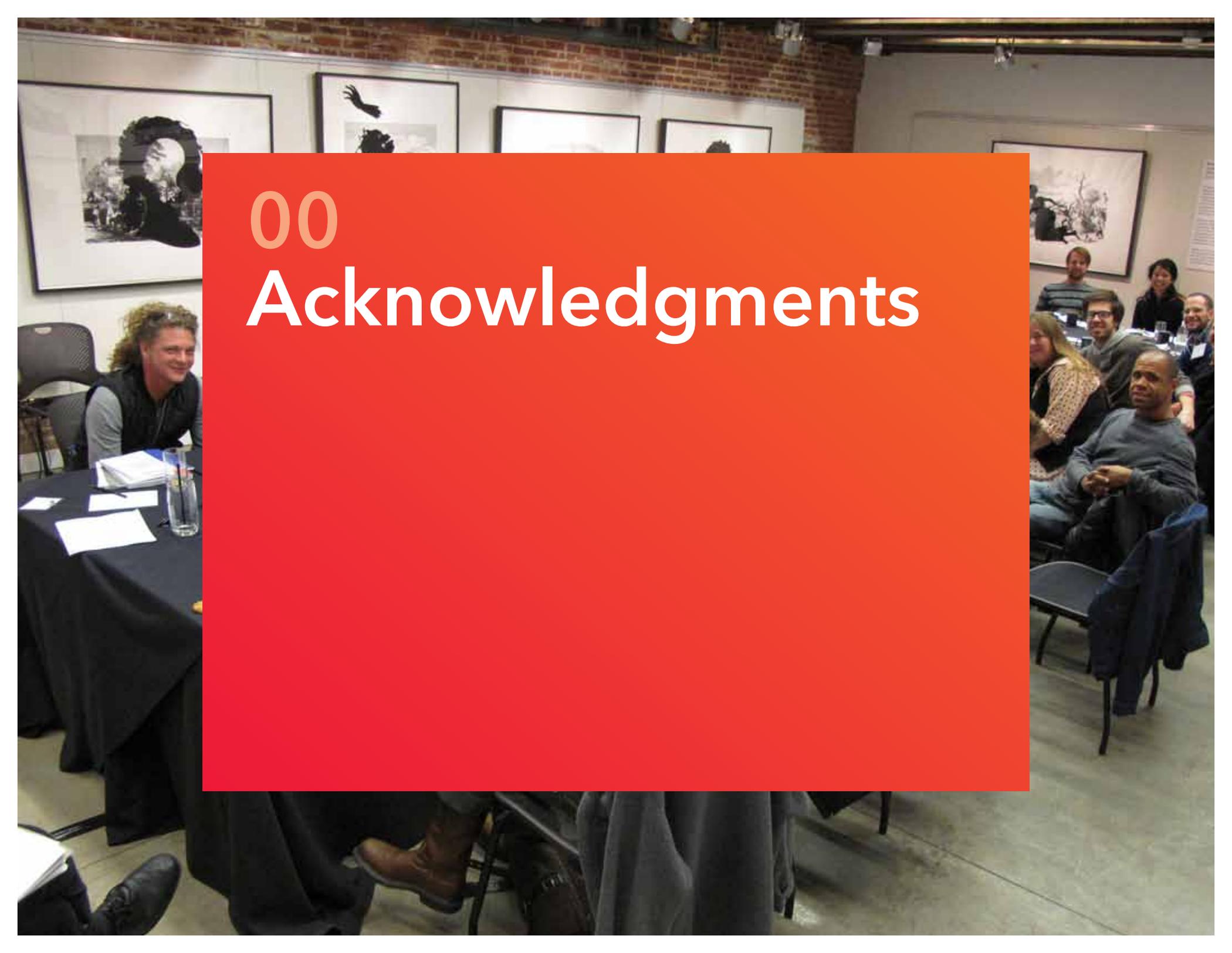
4.6 Energy

4.7 Identity

05 First Steps

06 Campaign

07 Phase 2



00
Acknowledgments

ACKNOWLEDGMENTS

In 2011, the Office of the Mayor of Louisville, Kentucky, spearheaded by Mayor Greg Fischer began a conversation with Michael Speaks, Dean of the University of Kentucky College of Design, regarding a '25-year Vision Plan' for the city. After a series of initial meetings led by the Louisville Metro Government's Department of Economic Growth and Innovation and in consultation with civic leader Matthew Barzun, the Mayor's office, determined to hire a consulting team to develop the vision. In May 2012, Louisville Metro Government's Department of Economic Growth and Innovation and Space Group Architects began negotiations concerning 'Vision Louisville'.

Space Group has for this unique task assembled a team of experts including leaders in, economic projections, brand strategists, and environmental planning.. Through research that considers historical growth and development, existing

plans, precedence studies, and intensive interviews, the Space Group Team will work together with the client representative group to develop multiple future city scenarios for Louisville. The team will test these scenarios through research and design, the result of which will be summarized in a report and public presentation with recommendations for the subsequent phases of work.

The Space Group Strategy team would like to thank Mayor Greg Fischer for setting a Vision in motion. To Matthew Barzun for preparing the stage for our work, without him this would not be possible. To Maria Hampton for her leadership, guidance, and straightforward approach. To Louisville Metro Government's Department of Economic Growth and Innovation for providing the resources and management of this dynamic process.

The background image shows a construction site under a clear blue sky. On the left, a tall red lattice crane stands prominently. In the center and right, a large bridge structure with multiple arches is visible, partially obscured by a large purple rectangular overlay. The foreground consists of a gravel area, possibly a railway track, and some green and yellow foliage. The overall scene is bright and clear.

01 Why Do We Vision?

WHY DO WE VISION?

- Imagine the Future
- Initiate a Collective Discussion
- Catalogue Challenges and Opportunities
- Create a Plan

The Louisville Vision initiative is a broad ranging, open ended, engaged and creative process to inspire big ideas for the future that are authentic to Louisville's culture. The process will include informed dialogue around the future of the city, bringing private enterprise, community and governmental organizations, non-profits, cultural institutions and citizens to the table. The vision initiative is a catalyst for urban transformation.

At the center of any visioning process is people.

A vision is about creating more opportunity, more quality of life, more connections, more possibility. Vision Louisville focuses on the built environment – infrastructure, transportation, streets, architecture – but all these things are manifestations of a culture, its values and priorities. Reciprocally, the built environment inspires actions, attitudes and opportunities.

We see the Vision Louisville initiative as a corollary to the Greater Louisville Project, working to build twenty-first century jobs, quality education and quality of place.

OUR PROCESS

The goal of the initiative will generate guidelines to unify, lead and inspire the twenty-first century transformation of Louisville.

Phase 1 is a process of research and discovery. This includes:

- Understanding the history of urban development in Louisville and current planning in relationship to best practices nationally and internationally.
- Investigating the unique culture of Louisville, its diverse neighborhoods and the needs and desires of its various constituents.
- Accessing the demographic, economic, geographic, and cultural change that is probable and possible in the next 25 years.

The following report identifies areas of consideration for further research, posing big questions and general recommendations to engage an informed advisory board in discussion for future development.

RESEARCH

To understand current and future development, our research draws from many sources:

Government/Planning

- Culture and the Arts
- Housing and Development
- Entrepreneurship/Business
- Nonprofit City Initiatives
- Education/Universities
- Sustainability/Environment

On Louisville

- Louisville history
- Previous planning projects
- Precedents
- Future projects

Larger Context

- Sociocultural trends
- Case studies: Regional, National, Global
- Best Practices

Primary Research

- Interviews
- Documentation

Projections: Economy / Environment

- Feasibility studies

Precedents

- City 2050
- Greater Louisville Project
- Cornerstone 2020
- Downtown Development Project
- Waterfront Development
- City Vitals 2.0
- 22@Barcelona
- Oslo 2030
- Grand Paris
- Incheon Song
- Madrid Centro
- Plain du Var (Nice)
- Milan
- Sustania 2050 CHP
- The Portland Plan

People and Organizations

- John Trawick and the Center for Neighborhoods
- Downtown Plan and Waterfront Development
- Mayor Fischer's Office
- Arts and Festivals
- Homebuilders Association of Louisville
- Norton Commons
- Louisville Loop
- Local Food Economy
- University of Louisville
- Louisville Central Community Center
- TARC
- Logistics and Distribution Cluster
- Suburban Mayors
- Cardiovascular Innovation Institute
- Greater Louisville Project
- Southwest Dream Team
- Metro Department of Health and Wellness
- Jefferson County Public Schools
- Bellarmine University

An aerial, black and white photograph of a city, likely New York City, showing a dense urban landscape with buildings, streets, and a large body of water in the background. A large, semi-transparent green rectangle is overlaid on the left and center of the image, containing white text.

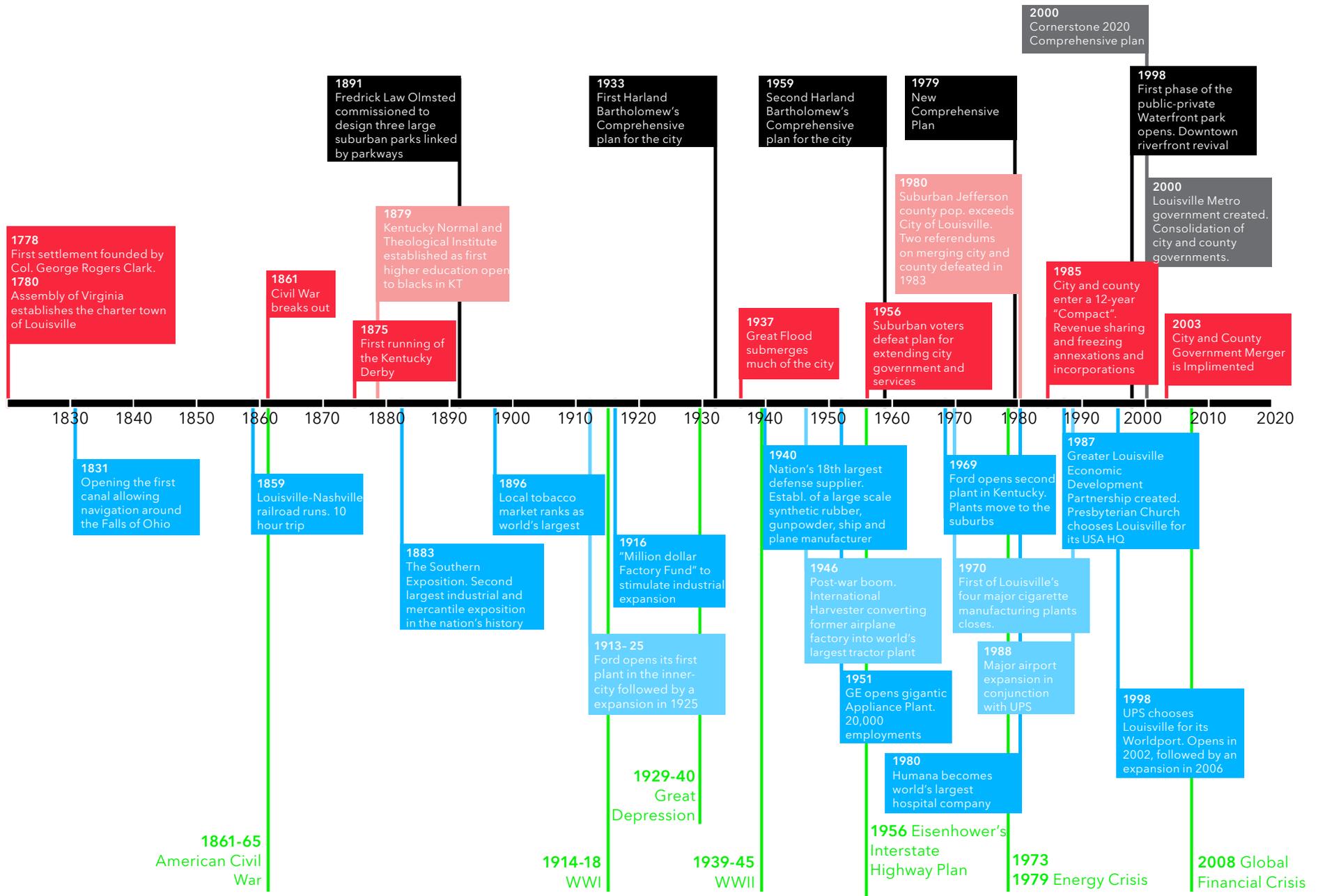
02 Vision Context

2.1 History

2.2 Recent and Ongoing Planning

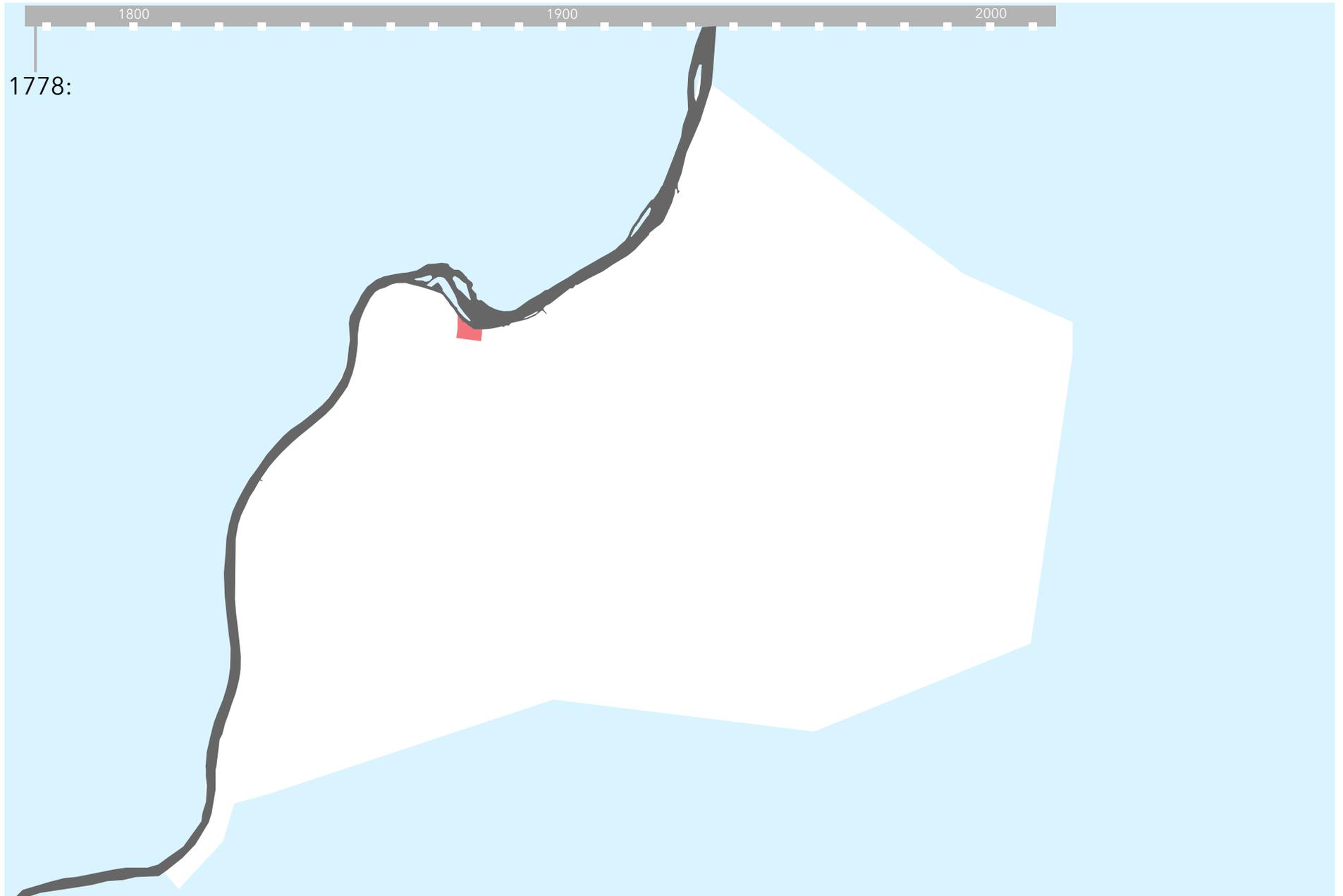
2.3 Arts, Culture, & Values

LOUISVILLE TIMELINE

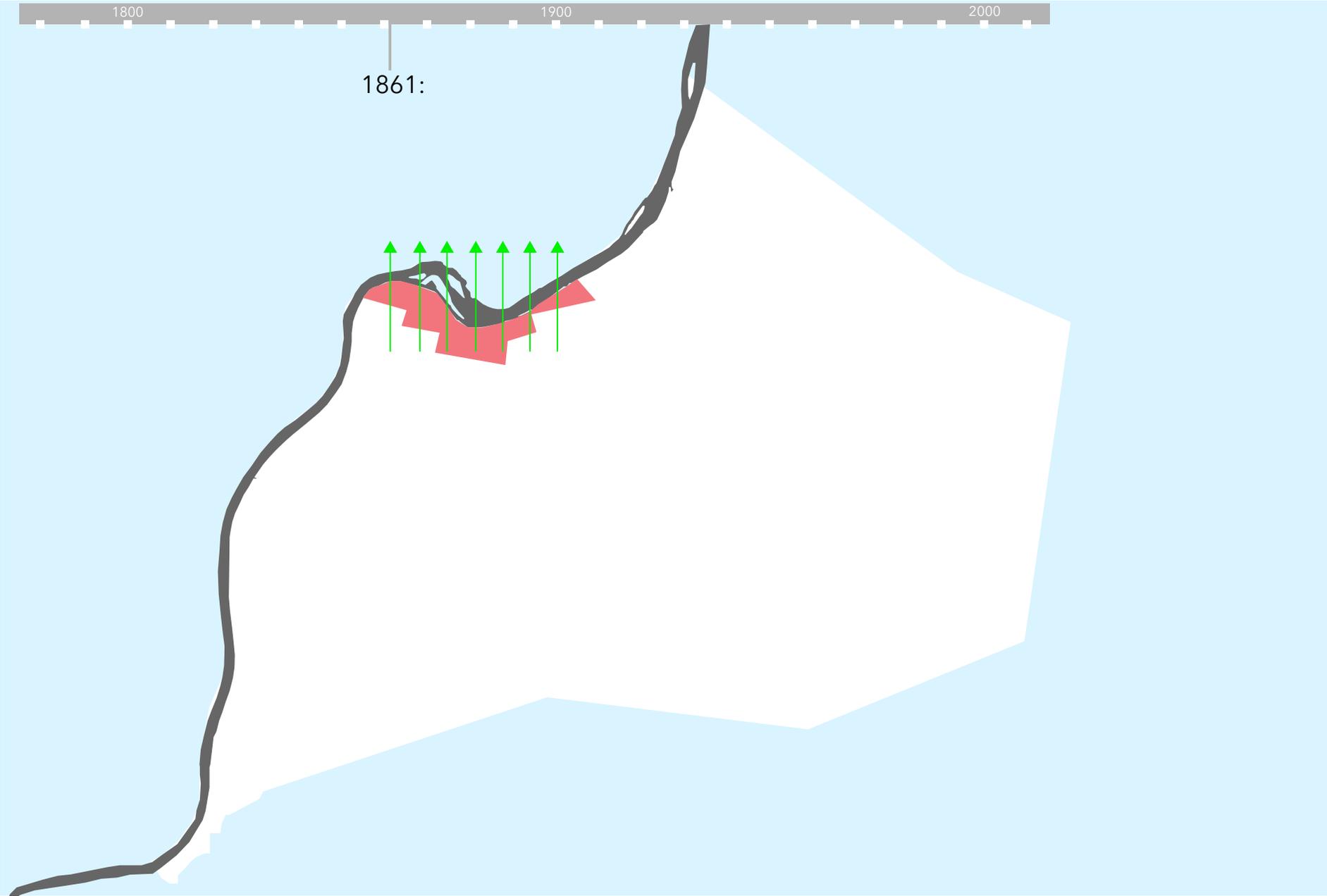


* Some information taken from "Louisville, Kentucky: A restoring prosperity case study," Edward Bennett and Carolyn Gatz. Brookings Institution, September 2008

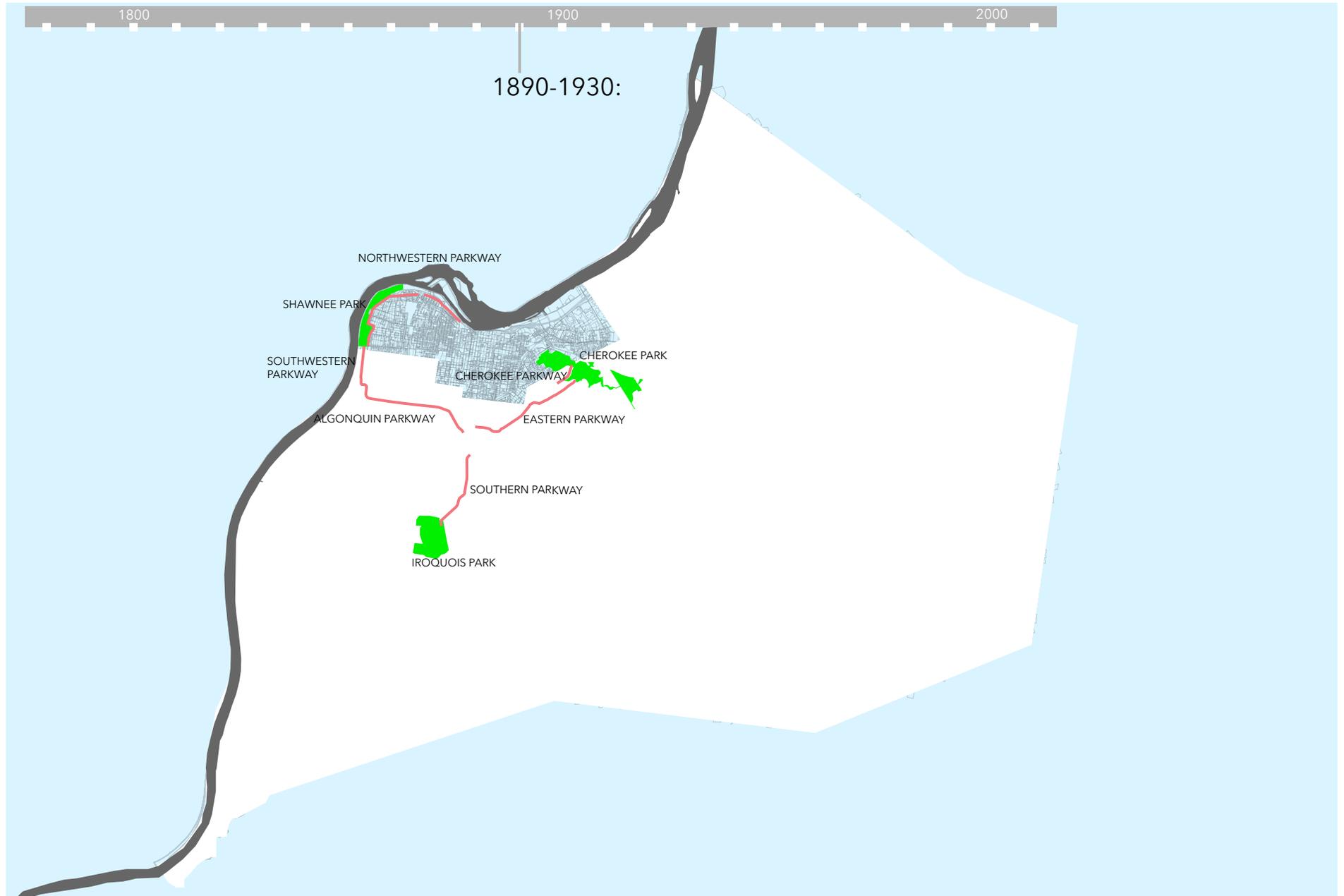
First settlement is Founded by Col. George Rogers Clark



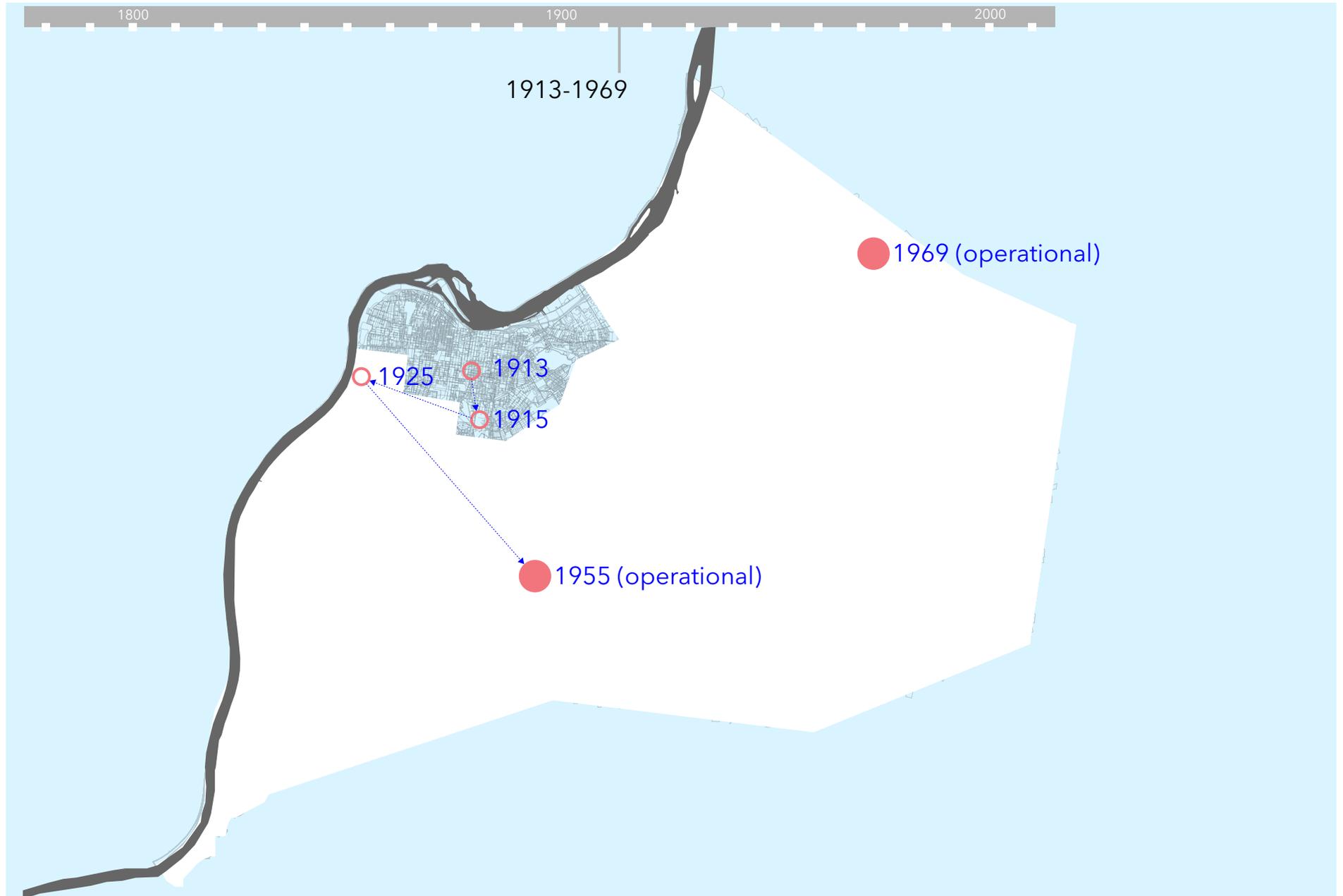
American Civil War (Louisville is a Portal to the Free North)



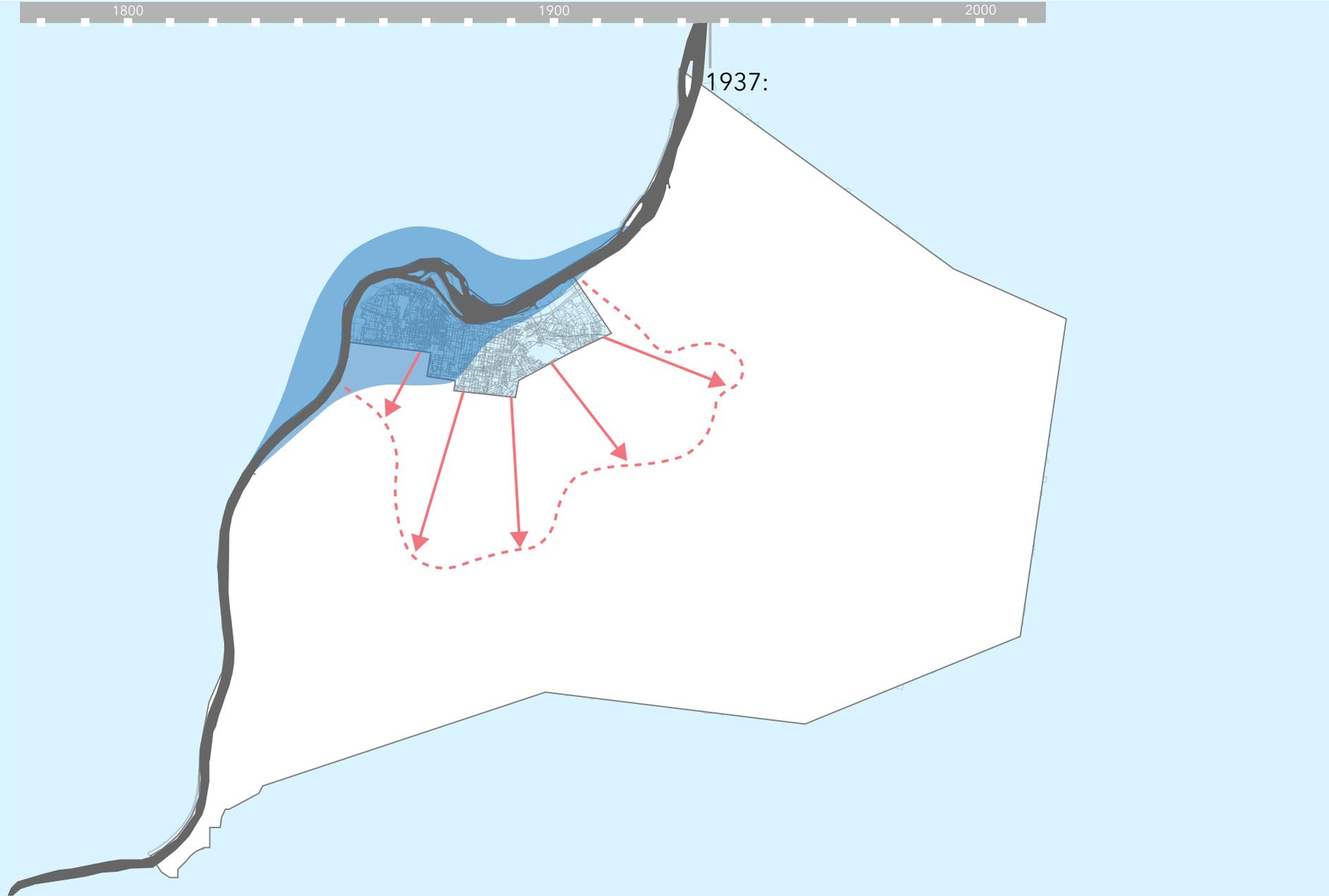
Olmsted Parks and Parkways are Planned and Implemented



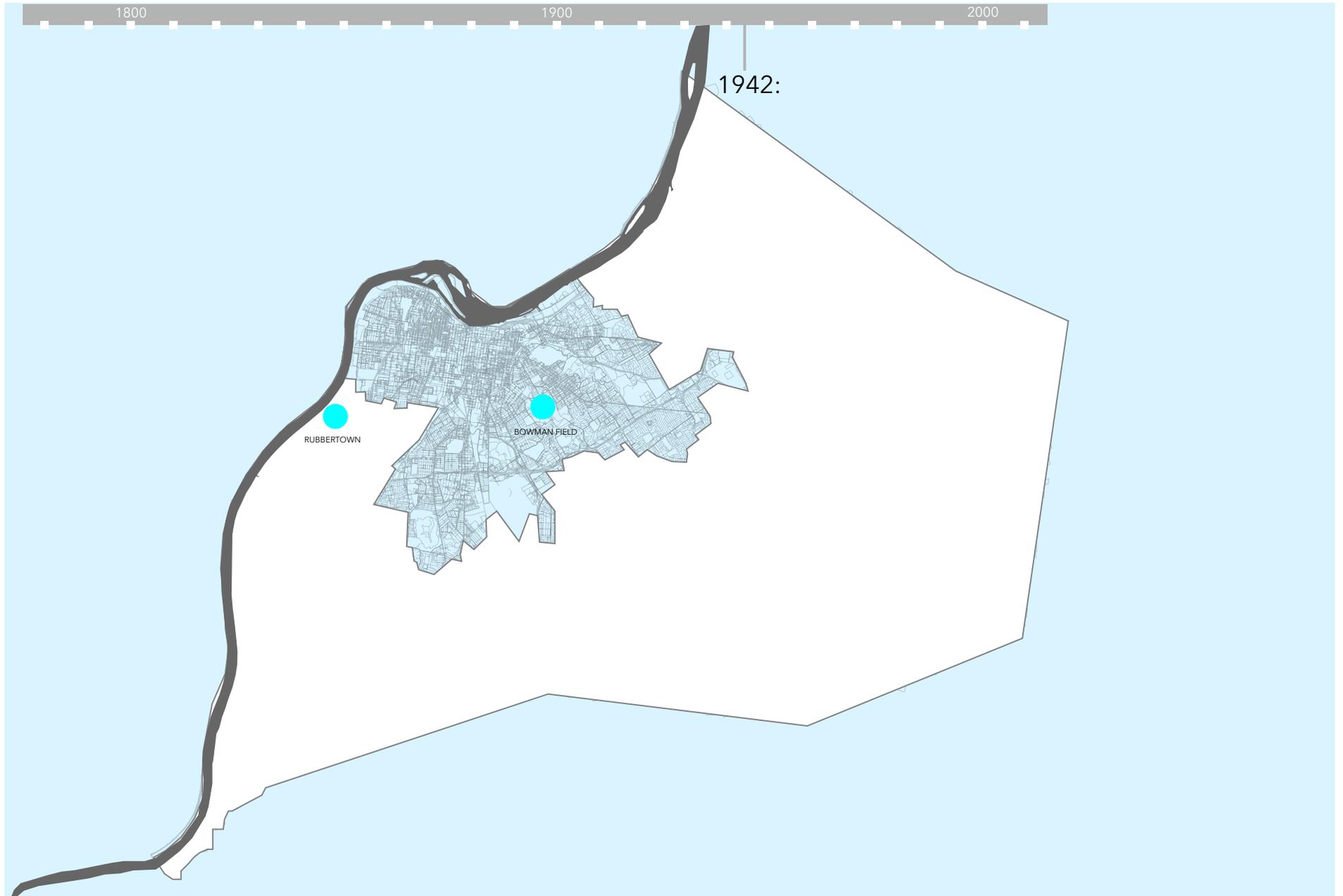
Ford Manufacturing Plant: 100 Years of Relocation



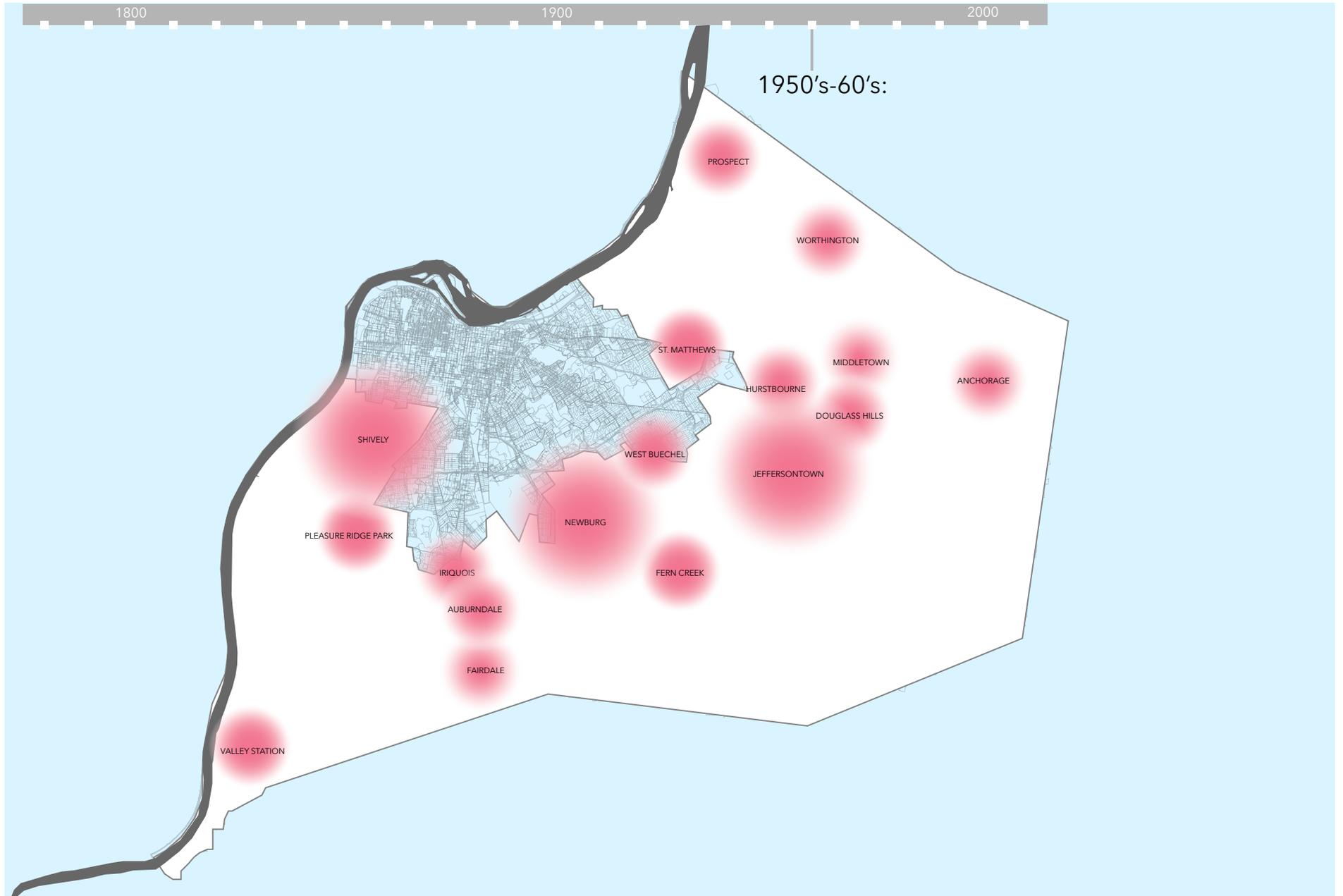
The Great Flood: Suburban Flight to the East



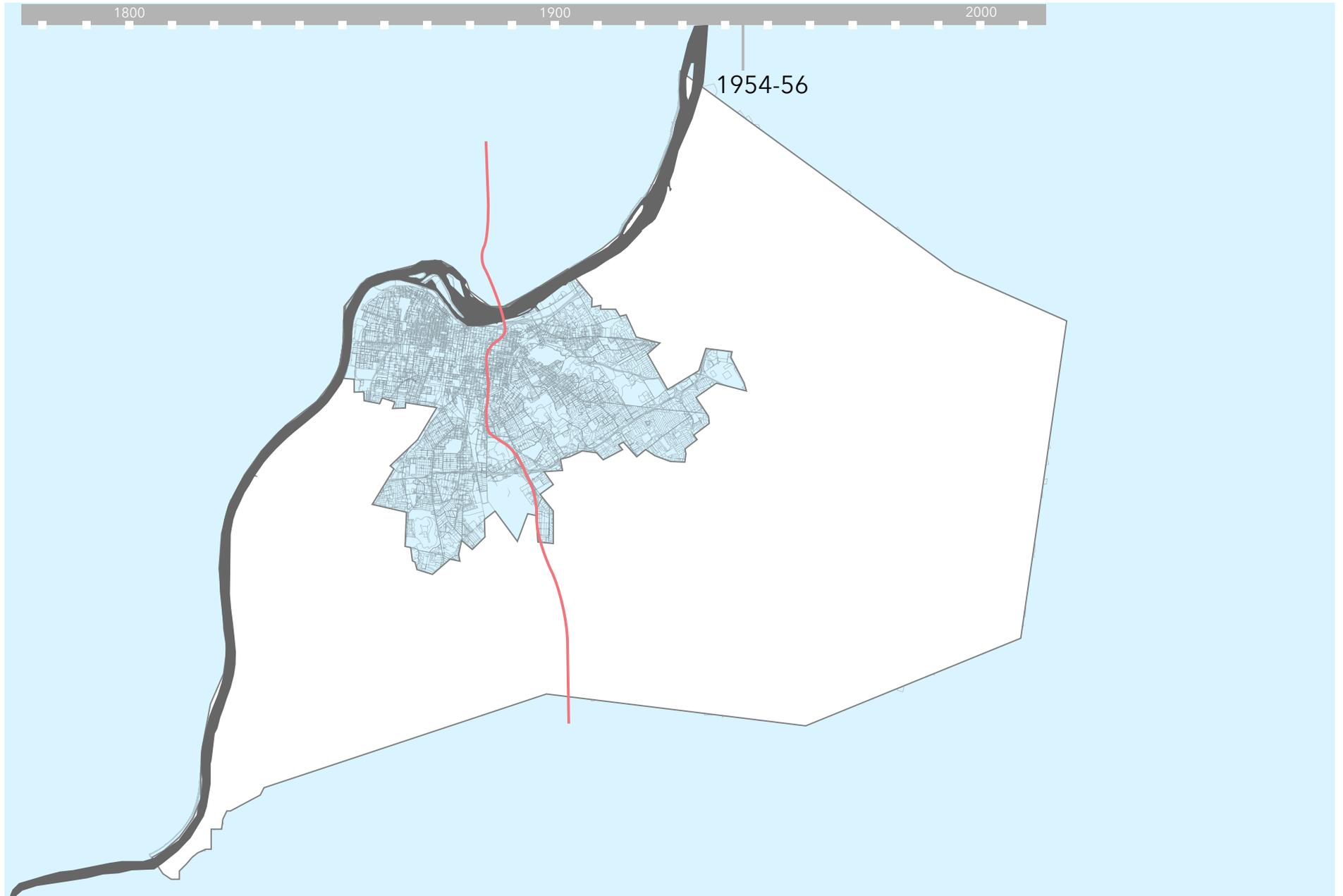
WWII War Production and Exportation in Rubbertown and Bowman Field



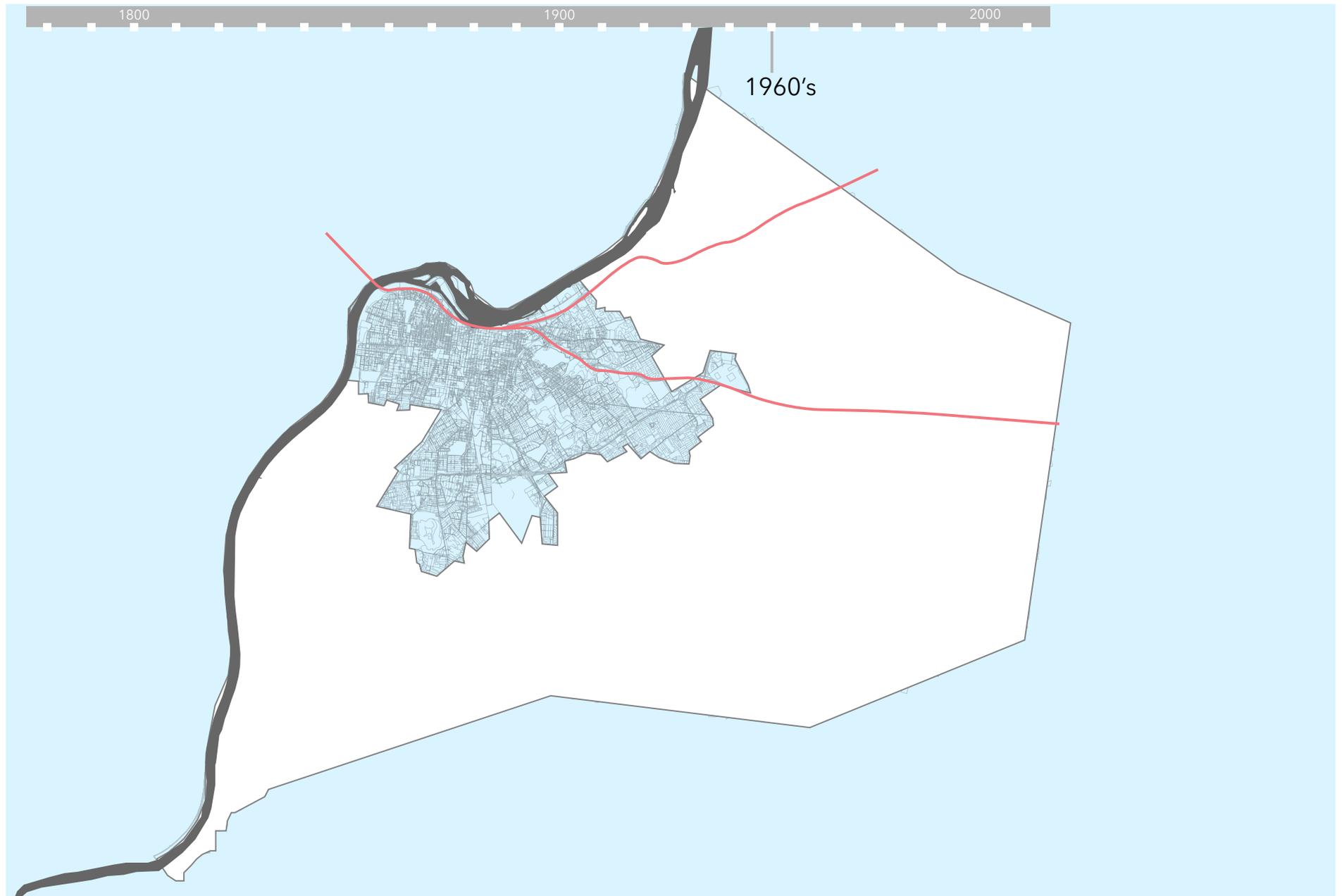
Evacuation to the Suburbs



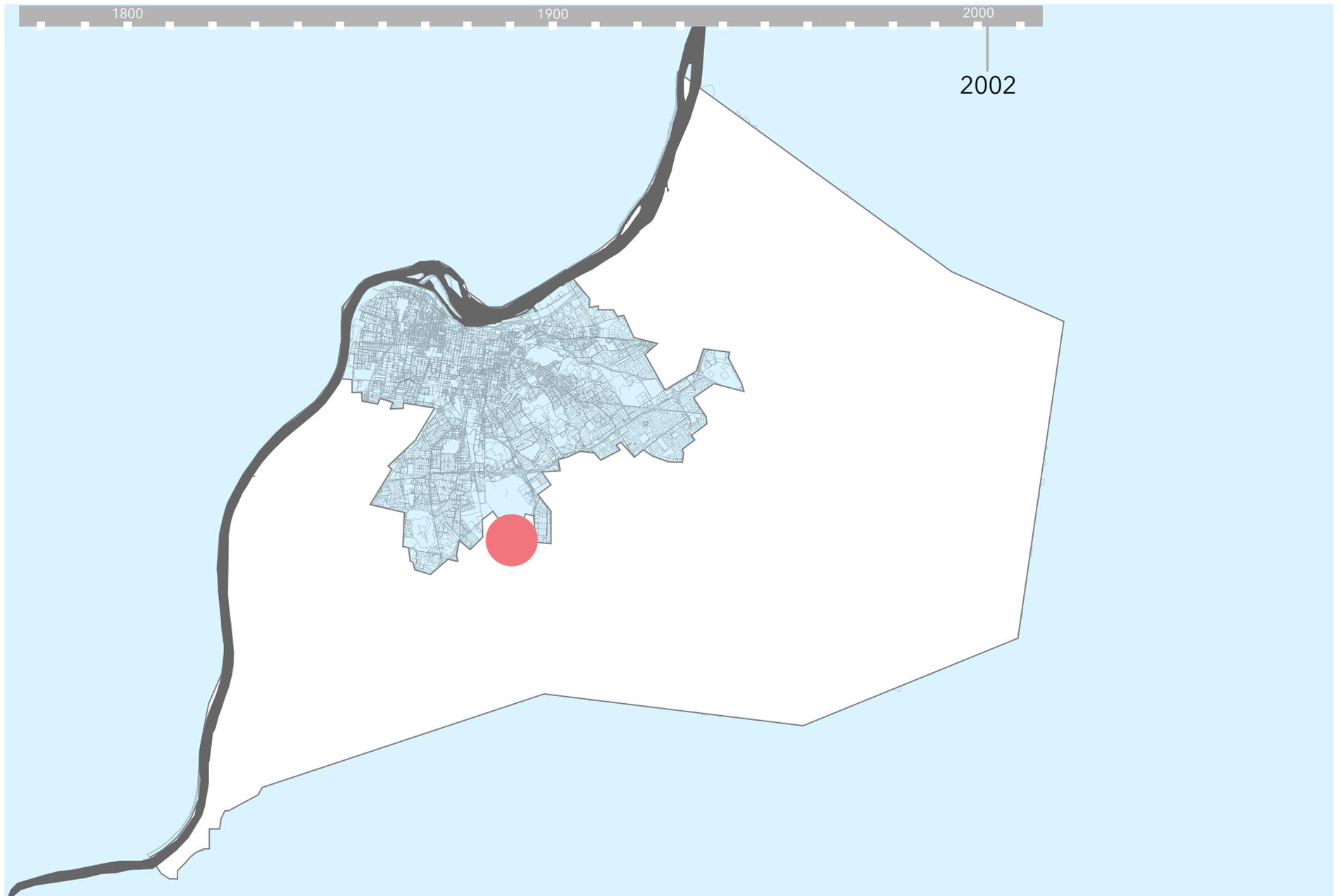
Interstate 65 Divides Louisville into East and West



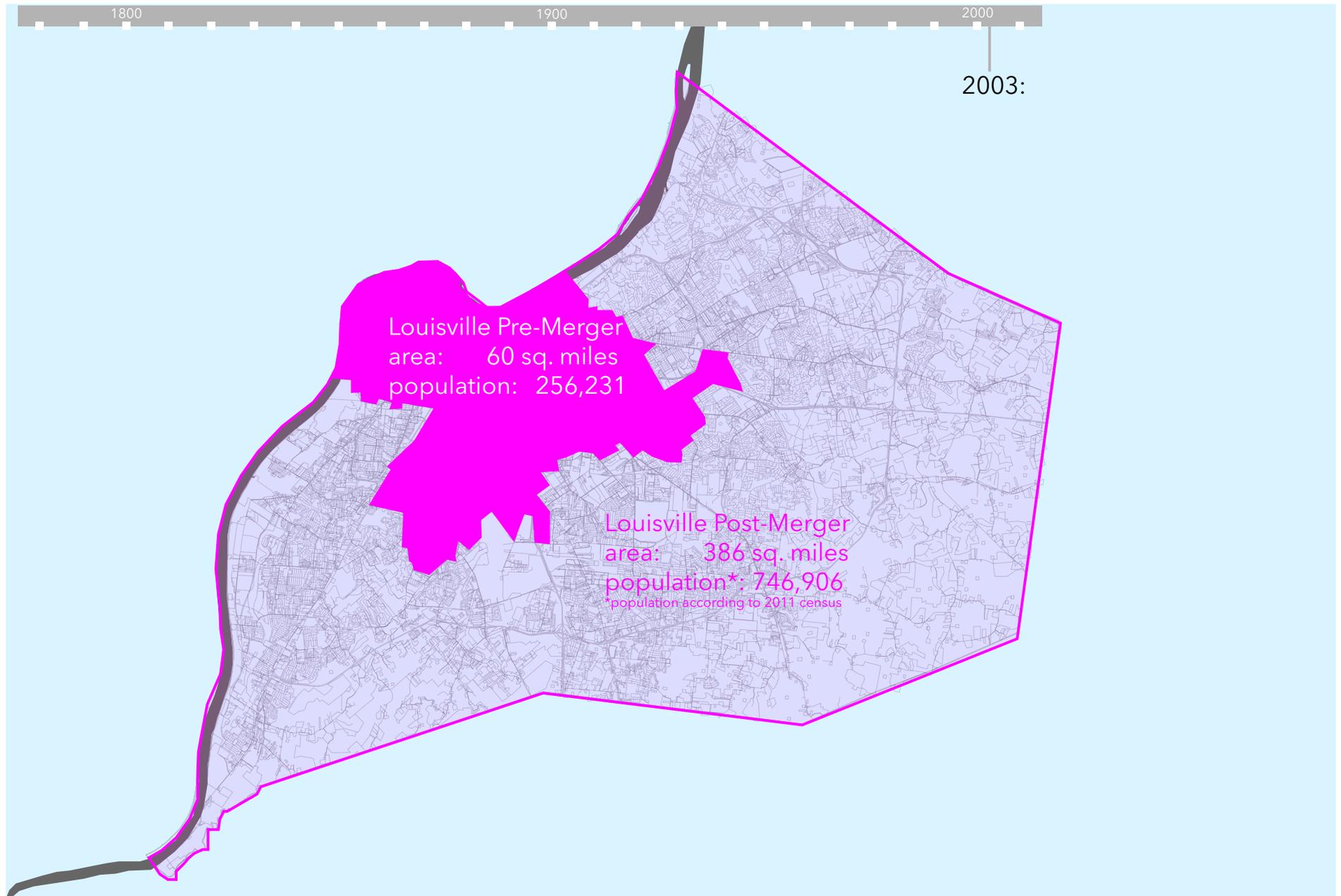
Interstate 64 and 71 Separate Louisville from the Waterfront



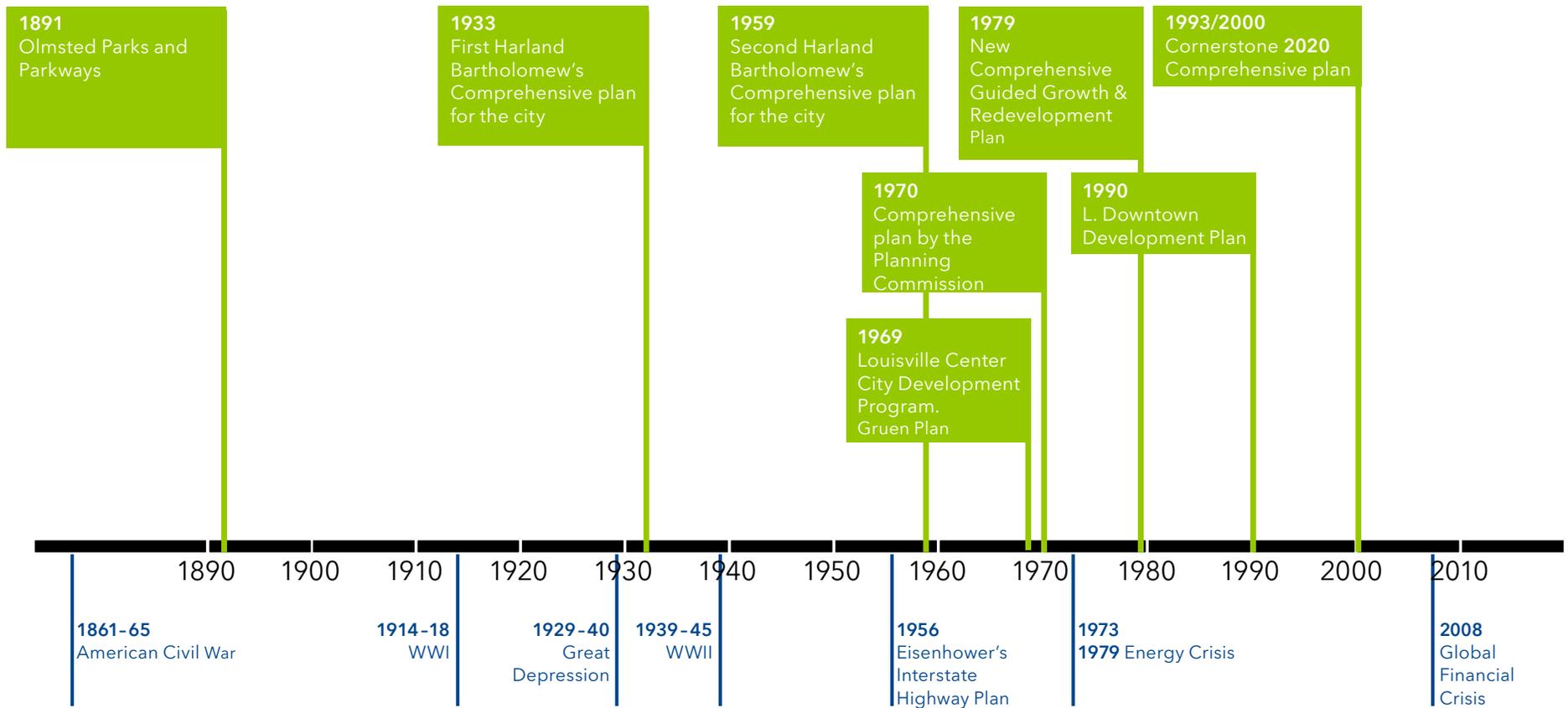
UPS Locates its Worldport in Louisville



Louisville Urban-Metro Governments Merge



PREVIOUS PLANNING REPORTS



Planning Timeline

Previous planning reports can help us understand the historical social momentums in Louisville. The Olmsted Parks System was an attempt to build a more livable city after the American Civil War; the first Bartholomew Plan of 1933 was a response to the need for a modern city after the automobile revolution

and the country's devastation in the Great Depression; the 1957 plan after WWII aspired to accommodate industrial growth, suburban sprawl and the baby-boomer generation; more recently, the 1970 and 1979 plans attempted to control sprawl and restore ordered growth to Jefferson County.

PREVIOUS PLANNING REPORTS

Olmsted Parks System, 1891

The Olmsted Park System consists of three major parks, 15 neighborhood parks and 6 parkways connecting the major park areas.

Olmsted's plan was the first serious attempt to shape the future of the city, responding to the city's recently doubled population. More than a



system of parks, the plan was a 50-year vision for a modern city.

The plan was commissioned by a group of citizens (The Salmagundi Club) interested in upgrading the city in order to make it a livable city.

Harland Bartholomew and Associates Comprehensive Plan, 1933

The Planning Commission was created in 1927 by architect J.C. Murphy and the Louisville General Council.

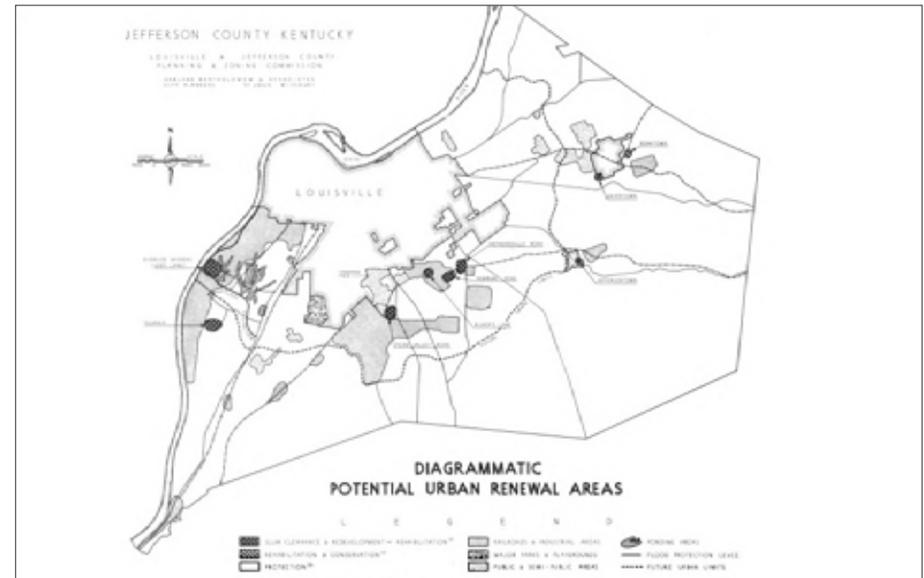
In 1929, the Commission hired Harland Bartholomew and Associates to elaborate a Comprehensive Plan for the city. The Plan included the city center and a 3 mile stretch of land into the unincorporated Jefferson County. The Comprehensive Plan was described as "modernist", attempting to make the physical layout of the city more practical and functional, following a systematic and scientific approach. It also created regulatory tools such as subdivision control regulations, building restrictions and zoning. The Plan also tried to give order to the city and stabilize property values.

The Plan was commissioned during the beginning of the Great Depression, which delayed part of its implementation. Harland Bartholomew and Associates was hired because the company could offer specific expertise in automotive traffic. However, a new plan would

be necessary less than 30 years later due to an unforeseen rise in car and cargo traffic on the city's highways. Harland Bartholomew and Associates Comprehensive Plan, 1957 After the WWII and the explosion of industry and sprawl, the Planning Commission called Harland Bartholomew and Associates again in order to revise and re-envision a new Comprehensive Plan for Louisville. The Plan suggested demolishing many of the pre-1925 houses on the western districts. It

also reorganized the C.B.D. and the suburban area as subordinate to it. The new Comprehensive Plan created a new zoning ordinance and subdivision regulations imposed to the whole city and the county.

Sprawl and strip shopping centers appeared around the new interstate highways. The residential area grew from 27,000 acres in 1956 to 57,000 in 1960, while the population grew only 17%. By the mid-1960s, the plan was already outdated. Sprawl



PREVIOUS PLANNING REPORTS

Gruen Plan for Downtown, 1969

That plan was adopted as a way to combat the exodus of retail from downtown into the new shopping malls. It included a pedestrian mall (today's Fourth Street), a convention center, hotels, office buildings and a large retail center. The urban shopping district was finally built in the 1980s (the Galleria and today's Fourth Street Live!). The Galleria attempted to introduce a suburban experience downtown.

New Comprehensive Plan, 1970

The Comprehensive Plan of 1970 was the first Plan made by the Planning Commission itself. The effort tried to remediate the use of land, ever increasing sprawl and the effects of the interstate highways. The Comprehensive Plan focused on developments around "nodes" located around the highway intersections. It attempted to provide a future land use map and write strict and detailed rules for land use.

Comprehensive Guided Growth and Redevelopment Plan for Louisville and Jefferson County, 1979. Also created by the Planning Commission, the Comprehensive Guided Growth and Redevelopment



Plan hoped to succeed where the previous planning report failed, by neglecting to create zoning laws with enough flexibility.

Instead of a detailed land-use map, the Plan was a set of broad ranging development guidelines and core graphics.

Louisville Downtown Development Plan, 1990

The Downtown Development Plan called for an established West Main Street Cultural Arts District, the Convention Center Expansion, the Louisville Downtown Management District, the Downtown Development Overlay District, a Downtown Convention Center Hotel, and the creation of the Downtown Housing Fund. Its goal was to bring com-

mercial and restaurant activities back to the urban center and to revitalize Louisville's historic architecture and urban characters.

Cornerstone 2020 Comprehensive Plan, 2000

Cornerstone 2020 was commissioned in 1993, founded by the City government and the Louisville Chamber of Commerce (Greater Louisville inc.)

This planning effort aspired to be "Broad enough and flexible enough

to guide our development for the next twenty-five years". The most substantial innovation in the Cornerstone 2020 report was the replacement of traditional zoning districts with twelve distinct "form districts," each with its own set of guidelines to preserve the district's character.

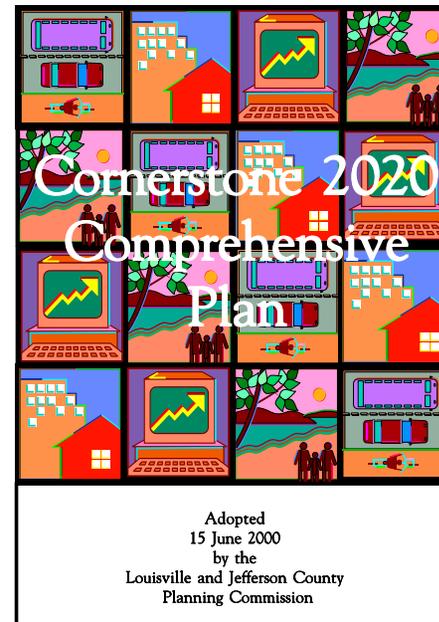
The Plan implements a "form based zoning code", with emphasis on the visual character of a community. Where strong visual characteristics emerge, the plan enhances them; where non-existent, it endeavors to "transplant" characteristics from other successful areas.

"It introduced the need to review the building design as part of development approval, forcing to produce detailed architectural plans before the right to use property was even discussed in public".

The Plan's main focuses are: mobility, community form, livability and marketplace.

* The Encyclopedia of Louisville. Edited by John E. Kleber.

* Bizjournal, July 6, 2012. Clifford H. Ashburner

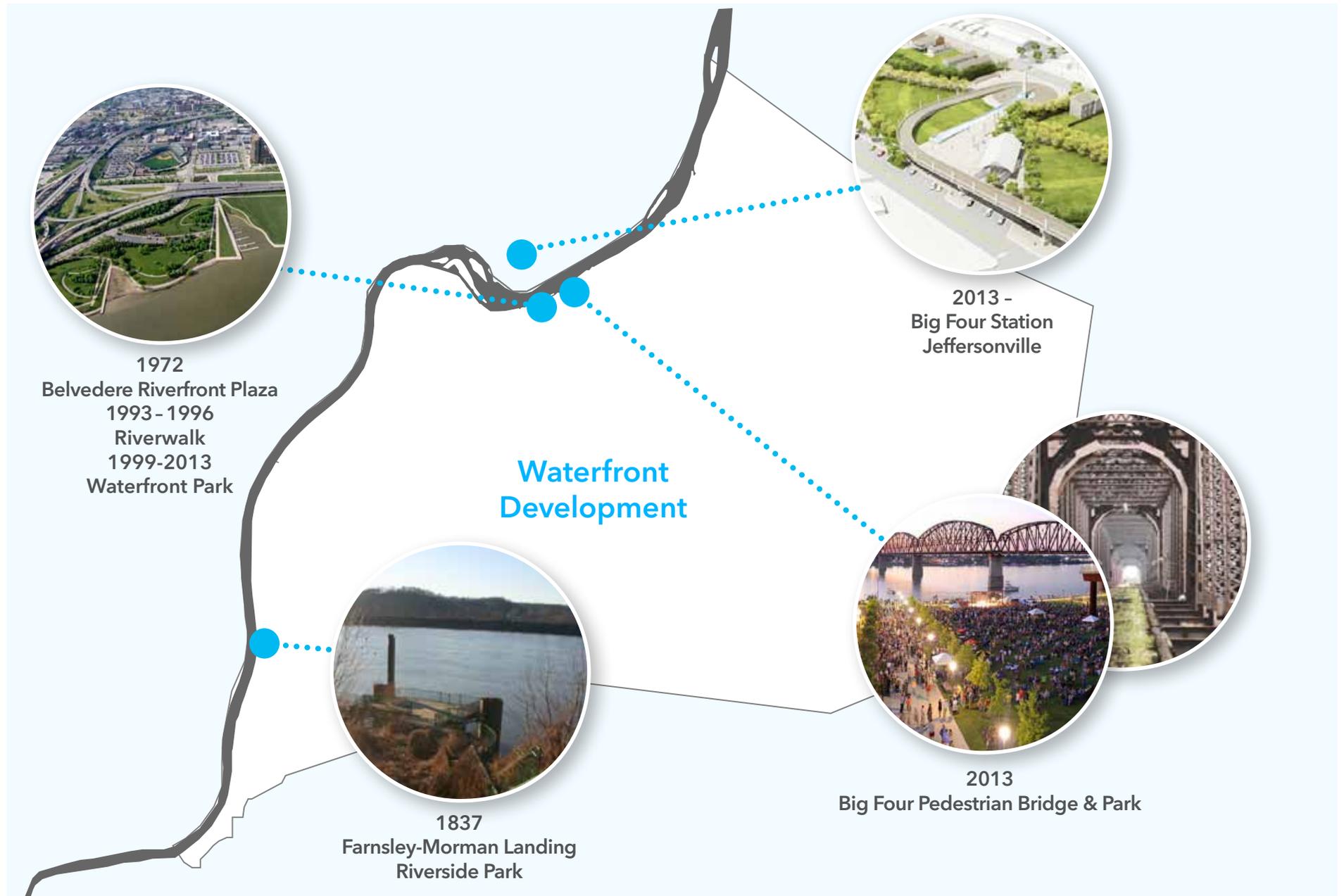


Plans are currently underway (or recently completed) that will ...

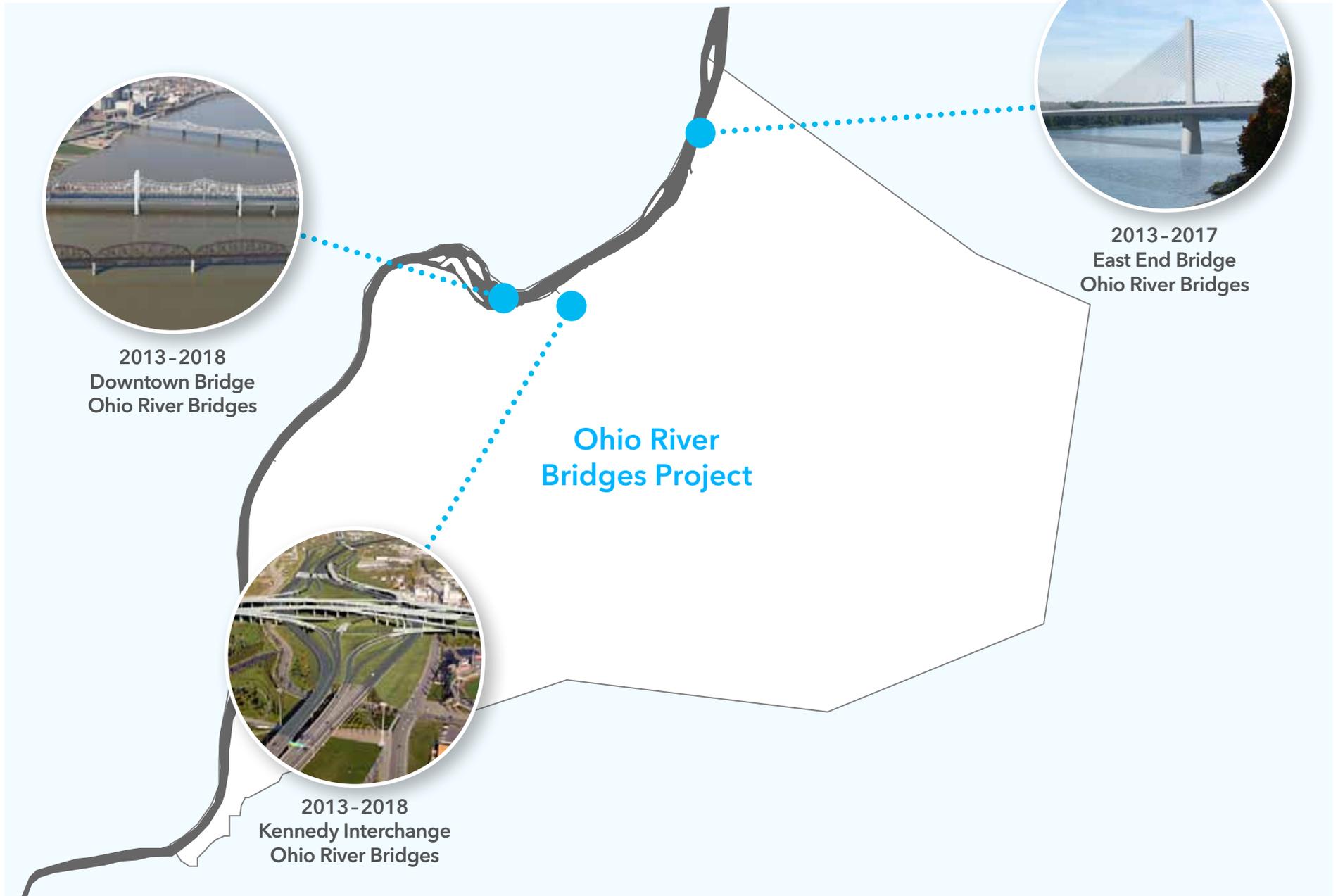
Densify and Activate the Urban Core



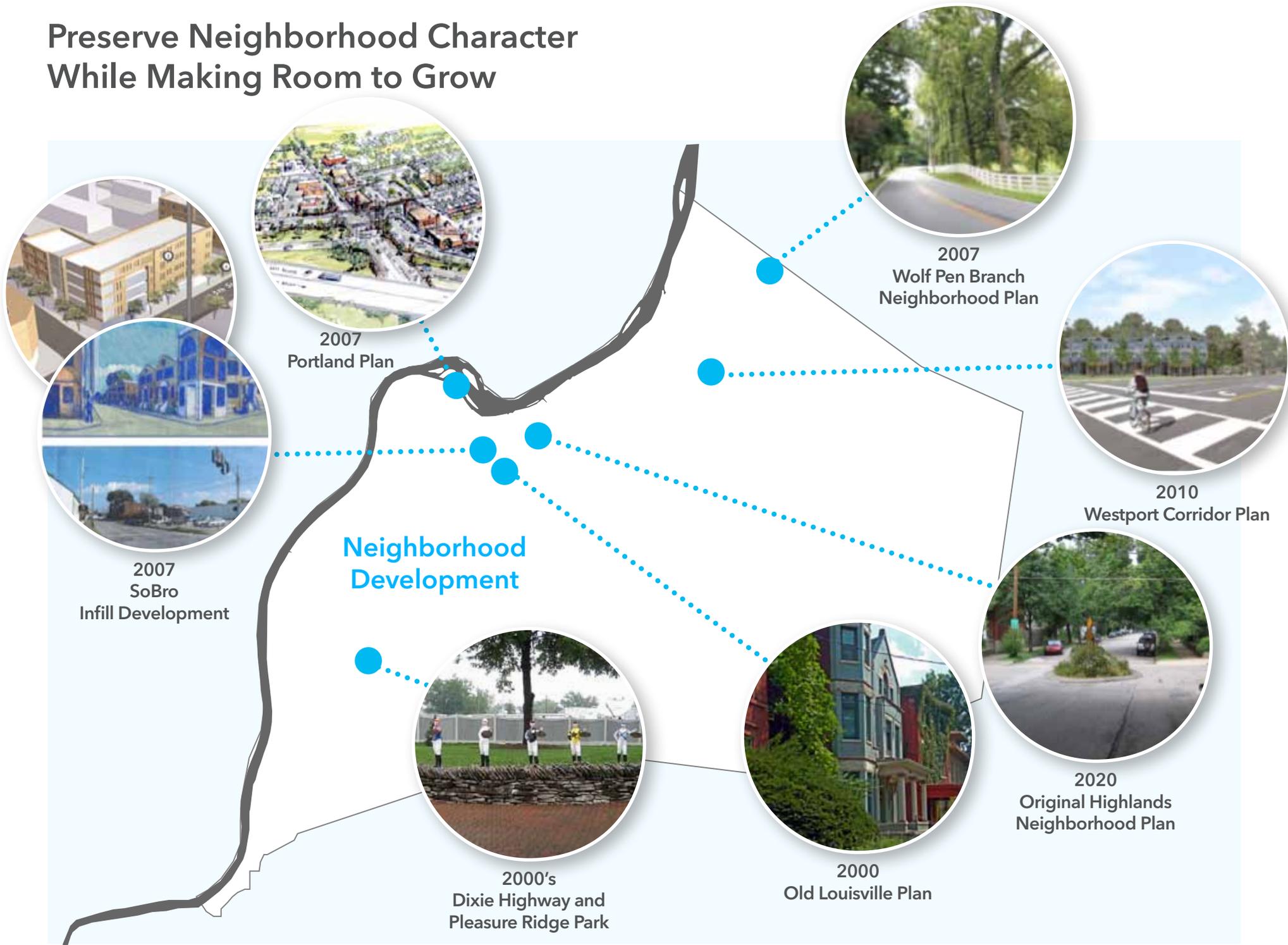
Reconnect the City to the Ohio River



Improve Traffic and Connectivity Between Kentucky and Indiana



Preserve Neighborhood Character While Making Room to Grow



2007
Portland Plan

2007
Wolf Pen Branch
Neighborhood Plan

2007
SoBro
Infill Development

2010
Westport Corridor Plan

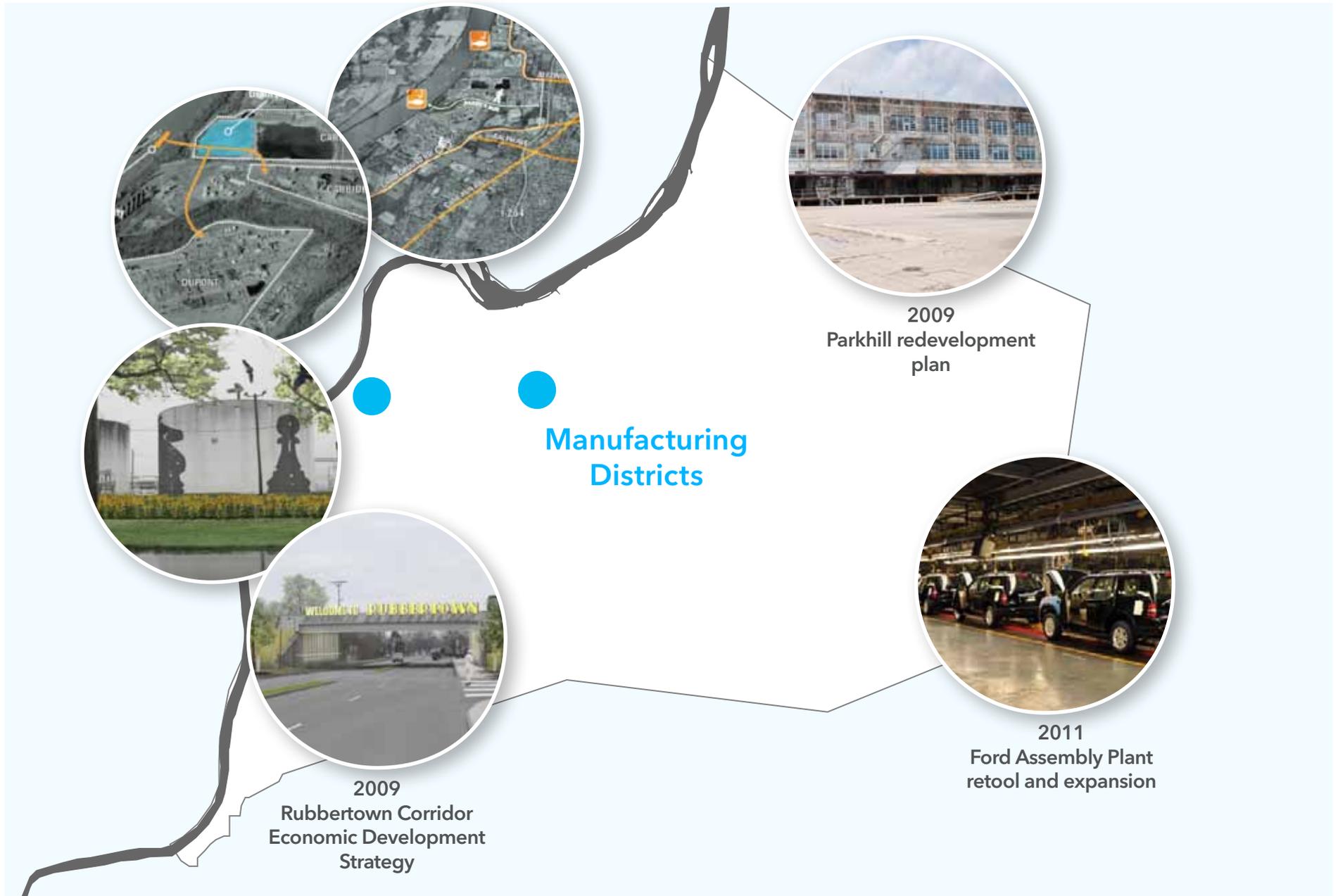
Neighborhood
Development

2000's
Dixie Highway and
Pleasure Ridge Park

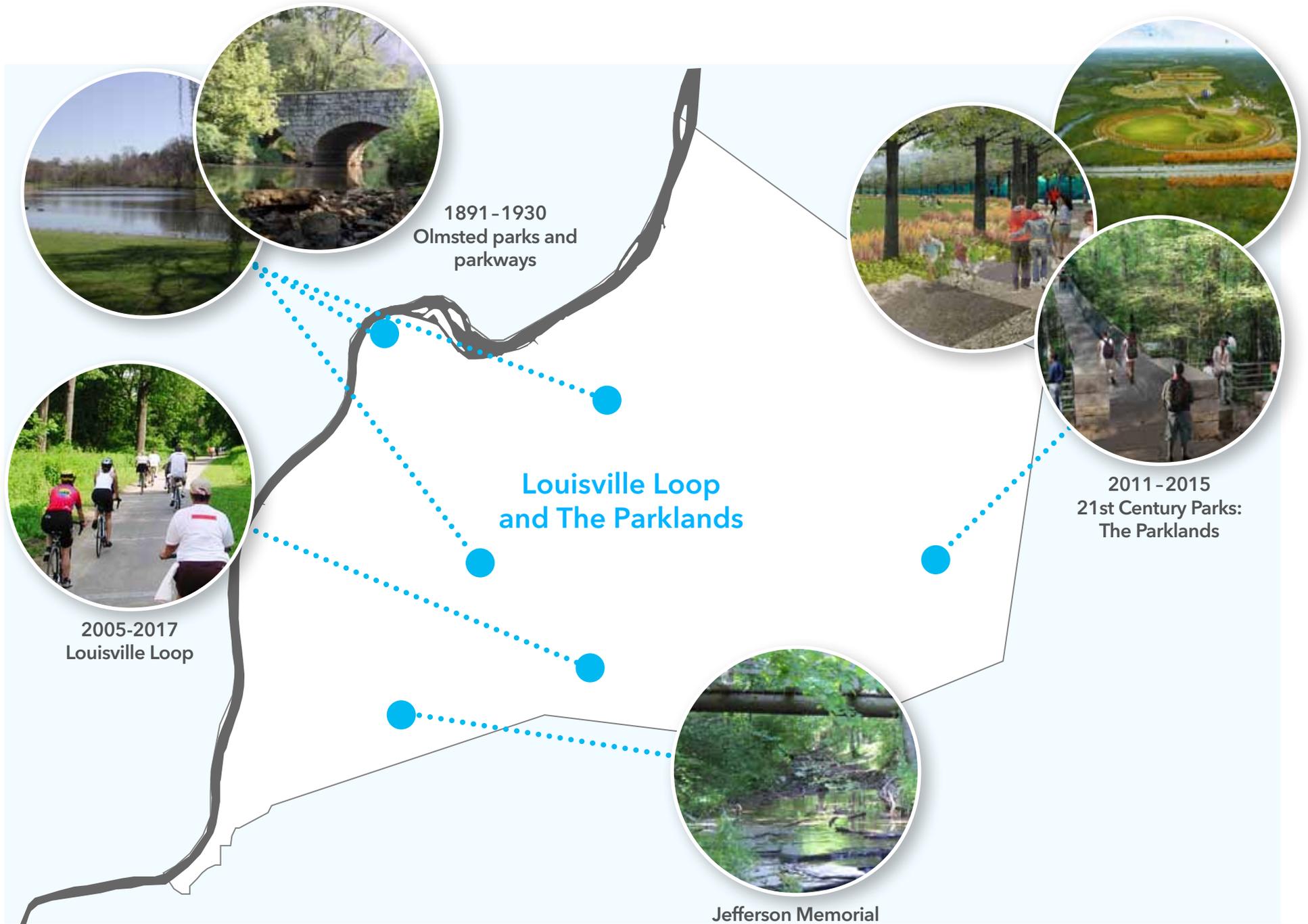
2000
Old Louisville Plan

2020
Original Highlands
Neighborhood Plan

Reintegrate industrial sites and discover new potentials



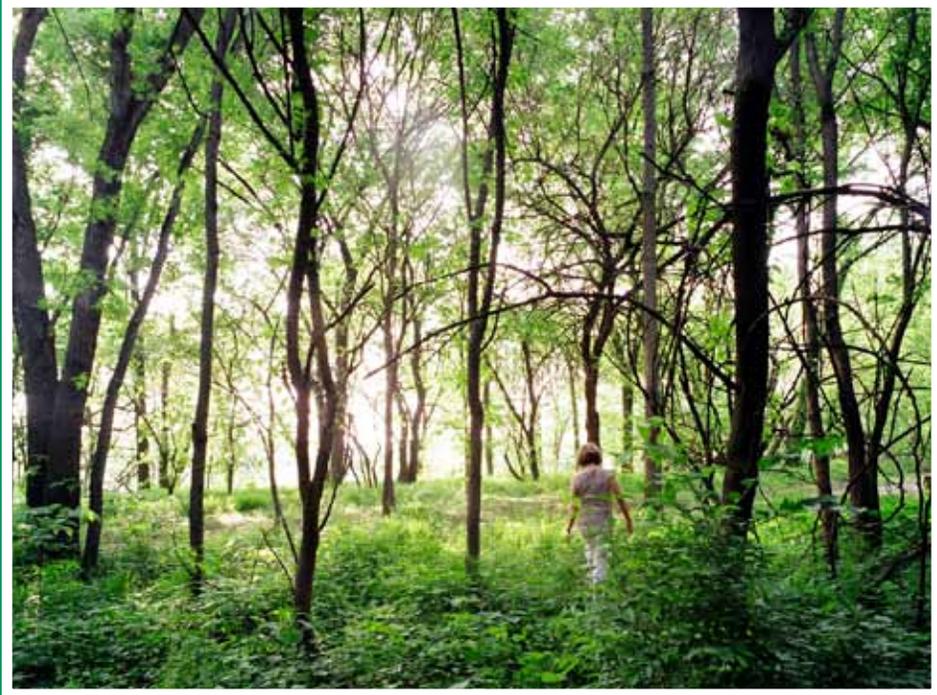
Weave parks and green space into the city fabric



Assets: Natural Resources



Space



Natural resources



A legacy of parks



Ohio River

Assets: Culture



Community engagement



Kentucky Derby



Whiskey Row



Bourbon



Creative thought leaders



Pioneer spirit



Idea Festival

Assets: Opportunity



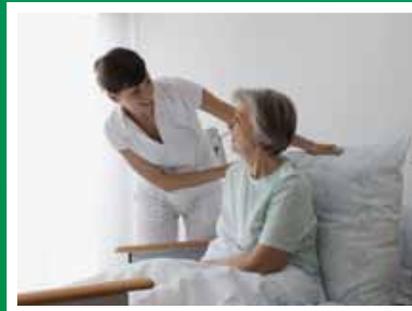
Growth & re-use opportunity



UPS WorldPort



Advanced manufacturing



World leading aging care

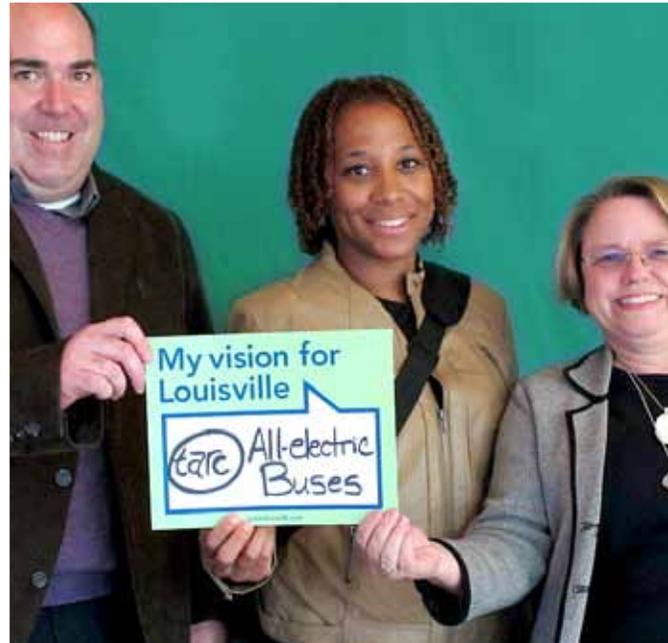


Food and Beverage

What are Louisville's Values & Aspirations?

- Quality of Place
- Lifelong Learning
- Health
- Sustainability
- Connectivity
- Independence
- Authenticity
- Innovation
- Diversity
- Entrepreneurship
- Creativity
- Tradition
- Tolerance
- Collaboration
- Identity

What is your vision for Louisville?



The background of the slide is a photograph of an urban scene. On the left, a tall wooden utility pole stands with several power lines extending across the sky. Behind it is a multi-story brick building with several windows, some of which appear boarded up or broken. In the foreground, there is a chain-link fence and a paved area with yellow parking lines. The sky is clear and blue.

03 State of Affairs

3.1 Context

3.2 Projection

Severe shifts are driving how we approach living and designing in our cities.

DRIVERS OF CHANGE



An increased concentration of capital markets focuses energy and creates competition. A changing economy makes it difficult to assess value & risk.



Rising temperatures, severe weather, and rising seas will put increasing strains on infrastructure.



Deferred maintenance can lead to catastrophic failures. Communication networks create new opportunities and operational challenges. Urban sprawl creates unsustainable patterns.



Fresh water sources are increasingly vulnerable and dwindling. Pollution run-off spreads unpredictably and beyond political borders.



The need to reduce emissions creates a new market. Peak Oil changes transportation. Relying on imported energy is not an option.



The population is growing, aging, diversifying, and increasingly transient and urban. Household sizes are shrinking.

LOUISVILLE OVERVIEW

Addressing the challenge of growth may require targeting regional cooperation, focusing on local and regional strengths such as local food, arts and entertainment, and livability.

Louisville has a long history of stasis. The current population of the core city (excluding the expansion into Jefferson County), is barely larger than it was in 1900. At its height, in the 1960s, the population was barely 50% larger. This has occurred as other cities have grown significantly. In 1900, Louisville was the 18th city in the nation, while cities such as Atlanta, Columbus and Memphis were 43rd, 27th and 37th respectively: it has now fallen to 66th place.

Nevertheless, the city is well positioned to change this trend in the coming years. The economy is reasonably strong. It has weathered the recent recession better than many other cities, and it has a robust and diverse employment base. There is room for expansion, both in the outer areas of Jefferson County, and, with redevelopment within the urban core. The region continues to be attractive to new employers, through

economic incentives such as tax concessions and a relatively low cost workforce, and through other factors such as an attractive setting, good transit routes, and good year round weather.

The city has also been successful in developing new cultural offerings, ranging from the Bourbon trail to new arts, entertainment and food. These create a strong sense of vitality, particularly in the urban core, and should prove attractive, particularly to the younger adult population, a critical element of any urban revitalization. The city is home to a number of universities including the University of Louisville, an institution that has committed to becoming a center of excellence and a preeminent metropolitan research university, which will support the development of the educated workforce of the future. While the city has strong possibilities and opportunities, there are chal-

lenges to be addressed. Perhaps the most significant is the limited range of tools available to catalyze change and growth. The city, like most US cities, has a structural budget deficit. Unlike most, however, it has limited capacity to generate new revenue without State legislative approval. This means that it has little ability to spend ahead of growth. As a result, investments must be very carefully designed to achieve the maximum impact.

As with many cities, the infrastructure is aging and, particularly in the outer county areas, inadequate to support large scale growth. If the growth is not managed and directed towards existing infrastructure capacity, it is likely that congestion and degradation of services will diminish the quality of life both for the new and the existing residents. This may require managing zoning and imposing impact fees in a way that is not popular

with the development community.

Another significant challenge is that many cities are competing for growth. A review of urban vision plans shows that the vast majority are seeking to become the most business friendly, the most attractive, the new Silicon Valley, or the new Research Triangle. Competition is at the core of most vision plans, and typically that is competition within a zero-sum setting, recognizing the limited overall US growth available for distribution. While Louisville has many strengths, it may not be strong enough or have sufficient critical mass to compete in such an environment. Addressing this challenge may require targeting regional cooperation rather than competition, and focusing on local and regional strengths, such as local food/farming, arts and entertainment, and livability.

CURRENT ECONOMIC CONDITIONS

The population of Louisville is significantly less diverse than the overall US population.

Population

The current population of the city of Louisville is around 746,906. The population of the broader Louisville Metropolitan Statistical Area (MSA) is approximately 1.3 million. The Louisville Metropolitan Area is defined by the US Census Bureau as containing the counties of Bullitt, Henry, Meade, Nelson, Oldham, Shelby, Spencer & Trimble in Kentucky, and Clark, Floyd, Harrison and Scott in Indiana, in addition to Louisville/Jefferson County.

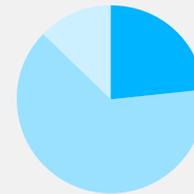
As can be noted, while the population of Louisville is significantly more diverse than the large MSA and the state of Kentucky, it is significantly less diverse than the overall US

population, and in particular the cities in the fastest growing cohort.

It is also worth noting that the total percentage of minority or women owned businesses is lower than the national average and the cities in the fastest growing cohort.

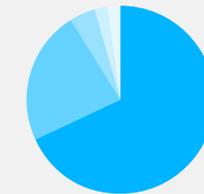
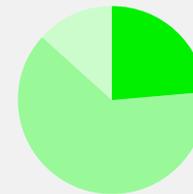
While the Louisville rate of Bachelor's degree or higher is not significantly lower than the overall USA population, it is markedly lower than many other metropolitan areas, particularly those in the fastest growing cohort. An analysis by the Brookings Institution using 2006 census data indicated that Louisville ranked 82 of metropolitan areas.

Louisville by Numbers: Population
Louisville / Jefferson County / USA
 % of population (2010 Census)



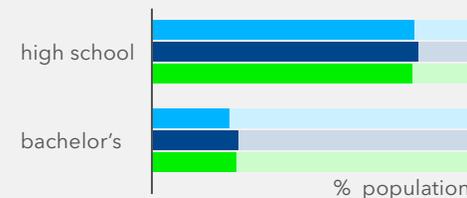
Age Distribution

Under 18	23.6	23.0	23.7
18-64	63.8	63.5	63.0
65 and over	12.6	13.5	13.3



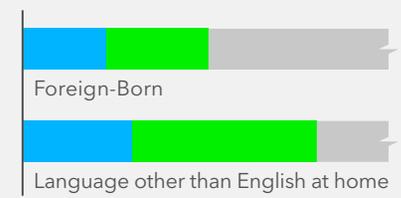
Racial Distribution

White	68.3	70.5	63.4
Black	22.9	21.0	13.1
Hispanic/Latino	4.5	4.5	16.7
Asian	2.2	2.3	5.0
Other	2.1	1.7	1.8



Educational Distribution

High School Degree	85.5	86.9	85.0
Bachelor's Degree	25.3	28.5	27.9



Ethnic Diversity

Foreign-Born Population	5.7	5.7	12.7
Language other than English spoken at home	7.5	7.5	20.1

CURRENT ECONOMIC CONDITIONS

The loss of one of these key employers would have a significant impact on overall employment.

Economic Factors

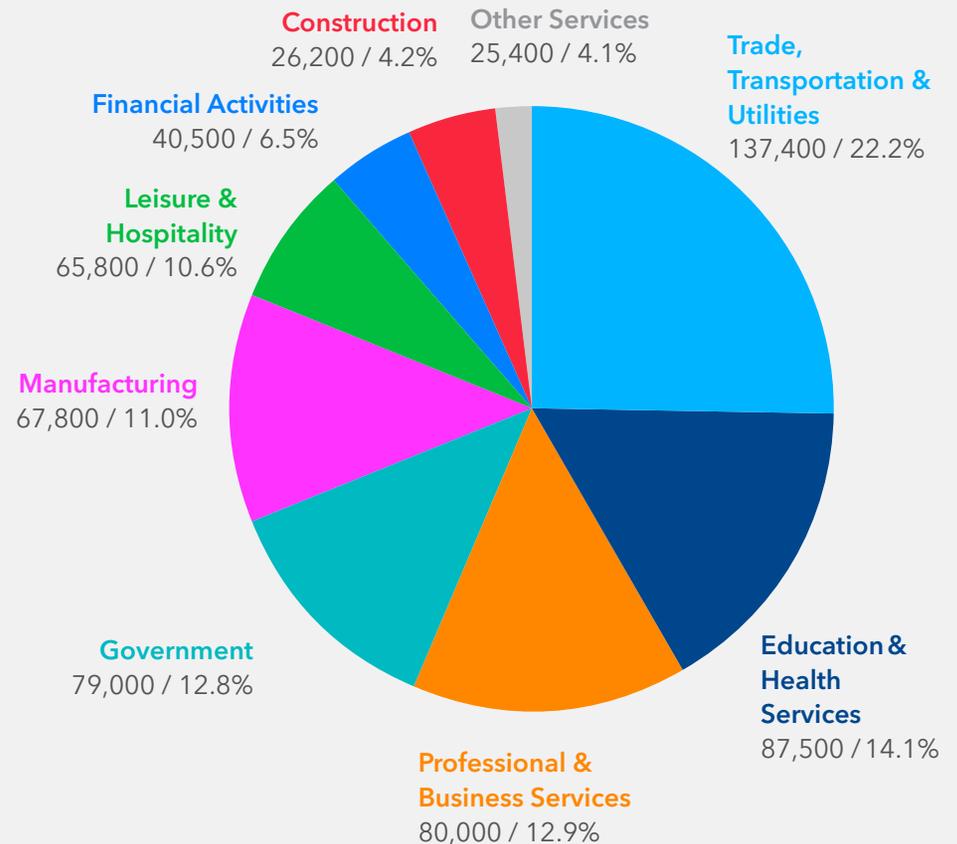
The economy of the Louisville MSA is relatively highly diversified, with significant employment in most sectors, and no one sector dominating. The largest employment sector is Trade, Transportation and Utilities, but that accounts for only 22% of total employment.

While the distribution of employment is relatively diverse, the employment is fairly highly dependent on a limited number of key employers, including UPS, Ford, Human, General Electric and Fort Knox. The loss of one of these key employers would have a significant impact on overall employment in the region.

The region weathered the recent recession relatively well. Employment has grown slightly in the past year, and job losses were less than experienced in many parts of the country. News reports indicate an expectation of strong hiring in the near term, suggesting a relatively rapid recovery.

- ¹ US Census Bureau estimate for 2011 is 746,906
² <http://bls.gov/sae/eetables/taled2.pdf>
³ <http://bizjournals.com/louisville/news/2012/01/24/jobs-outlook-for-2012-looks-promising.html>

Louisville by Numbers: Employment
Based on August 2012 Employment



FUNDING CAPACITY

The Louisville city funding comes primarily from two sources, employment tax and property tax.

These contribute approximately 70% and 12% respectively. The balance is made up of miscellaneous fees, charges, fines, and intergovernmental transfers.

Major transportation developments are funded through State appropriations. The city has an appreciable structural deficit on current account and no opportunity to increase revenue sources.

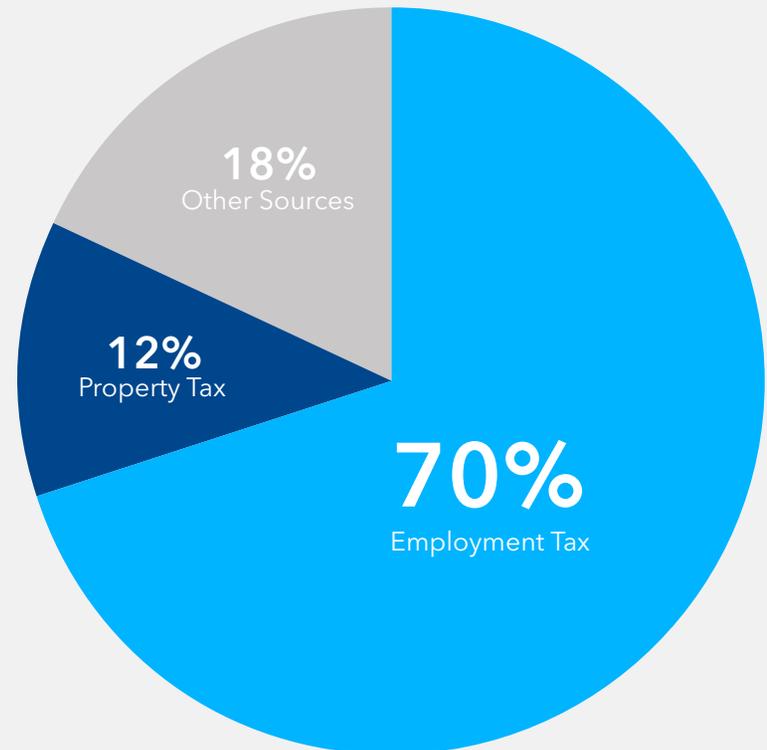
Property taxes have an annual growth cap for the existing portfolio. New properties are not subject to the cap.

Employment taxes include a new business incentive, eliminating tax obligations for new employers for up to ten years.

The city is seeking State legislative permission to introduce a sales based tax to support capital improvements (Local Option Sales Tax). Total potential revenue in current dollars is around \$50 million per year.

Louisville by Numbers: Funding Sources

Louisville City Funding



It is essential for a city to create an environment that will foster growth and provide the best possible conditions for economic development.

A NEW ECONOMY

A Brookings report concluded that Louisville has radically transformed critical economic engines to foment positive transformation.

First, the city consolidated its urban core and surrounding suburbs to create coordinated governance and an adequate tax base. The business community rallied to support regional initiatives and established a chamber of commerce that serves as a nationally recognized public-private economic development agency.

Additionally, the state government of Kentucky set into place a "New Economy" initiative and substantial support to forward the University of Louisville campaign to become a leading research university. And yet,

they concluded that this is still not sufficient to propel the city into an "innovation-based" economy.

Seeing beyond borders seems to be an important aspect of the new economy. This has multiple scales. The downtown needs to imagine itself as one of many rather than the center. The city's image is tied inextricably to the region's cultural assets. In the greater region, Louisville competes with several small cities with relatively similar assets, quality of life, and opportunities.

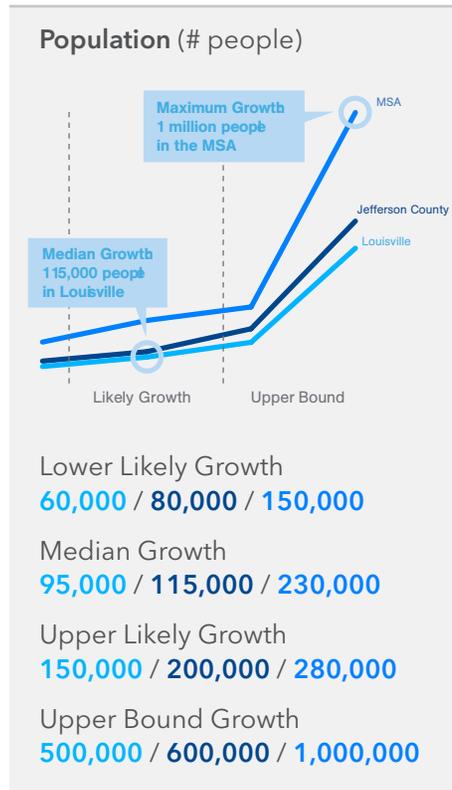
Where, then does Louisville stand in the new economy?

The future will depend on collaboration between cities rather than the current model of competition.

LOUISVILLE IN 25 YEARS

Population

The Kentucky State Data Center of the University of Louisville has prepared population projections that indicate a population growth of around 115,000 for Jefferson County, and around 230,000 in the MSA over the next 25 years. This would be an increase of 0.6% per annum for the county and 0.9% per annum for the MSA. Any projection over such a period relies heavily



on assumptions and has a high degree of uncertainty. For reference, the fastest growing metropolitan areas over the past twenty years (for example, Charlotte NC, Raleigh Durham NC, Provo UT, and Austin TX) have experienced sustained growth rates in the range of 1.5% to 2.5% per annum. Were Louisville able to replicate such a growth rate, the population growth would be in the range of 400,000 to 800,000 for the city. While this is unlikely, it does represent the possible upper bound of growth. While contraction in population is possible, it is similarly unlikely that Louisville would experience sustained contraction over the next twenty five years, even if the city were to lose one of its key employers.

The bulk of the growth under this scenario is in the retirement age population, with over half of the growth falling in this cohort. This cohort is likely to be the most consistent in any growth scenario, since it is likely to come primarily from aging of the existing population. This means that if growth falls short of the KSDC projections, the shortfall is likely to come disproportionately from the school age and working age populations. Similarly, should growth exceed the KSDC projections, the added growth is likely to occur more in those cohorts.

Households

Based on the KSDC projections,



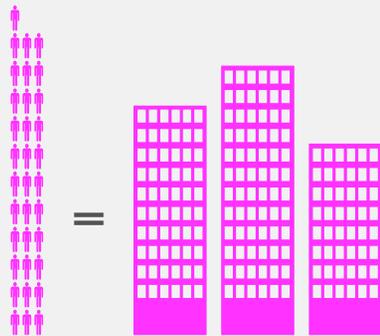
household growth projected at an additional 60,000 households, with a slight drop in household density from 2.35 to 2.28 - indicating increasing trend to smaller households. If the dominant development pattern remains as current patterns, with development mainly in the R4 subdivisions where minimum lot sizes are .25 acres, the added 60,000 households will demand in the range of 12,000 acres of new development, or roughly 18 square miles. This would be significantly less if development is in higher density development in the existing urban areas. If the population growth tends towards the higher bounds, land demand could be as high as 30 square miles for the county.

Employment

Based on KSDC projections, the working age population growth is projected at around 31,000, with a reasonable range of 20,000 to 60,000. At 150 SF per worker, the added work space demand is in the range of 2 to 6 million square feet, with a likely band of some 3 million square feet. Assuming a continuing employment profile, the mix is likely to be around 1.5 million SF of low rise office/light industrial/commercial development in the south and east,

LOUISVILLE IN 25 YEARS

Employment



31,000 new workers will fill 2 to 4 urban office buildings in the next 25 years.

1 million SF of commercial and retail in the urban core. For calibration, a large urban office building contains around 200,000 to 400,000 square feet. A new high rise contains up to 1 million SF. The urban growth therefore is in the range of 2-4 new or renovated office buildings over the coming 25 years.

In order to support this employment growth, it will be necessary to capture of two to four new major employers, in addition to growing small local enterprises.

Infrastructure to Support Growth

While many of these improvements will be funded by private development or by fee-for-service

entities, such as utility companies, there will be a significant local and state government expense required for schools, libraries, parks, transit, etc. In the case of natural systems, the cost is more related to reducing the overall impact of the population on the natural systems to allow them to provide the needed services.

These costs include improving air quality, reduction of storm water surges, added flood management, etc. A brief analysis, based on the KSDC growth projections indicated the likely demand for added infrastructure.

Schools

The added population will require around 2.2 million SF of K-12

New 12-K Schools



2.2 million ft² of new schools

schools. Added investment for new schools in the range of \$450 million.

Health care

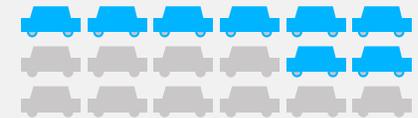
Kentucky (Louisville specific data not immediately available) has 3.3 hospital beds per 1,000 people. The national average is 2.6. On that basis, there should be adequate total bed count. However, Kentucky has a higher total admissions, longer stays and more a Emergency Room visits than national averages. Louisville Emergency Room visits are significantly above the national average, largely believed to be due to uninsured patient demand – reducing bed demand to national average may not be possible. The aging population will increase demand for health care. Population over 80 is expected to grow by greater than 50%. Increasing demand for elder care/sheltered facilities/skilled nursing: significant opportunity for new employment and investment.

Transportation

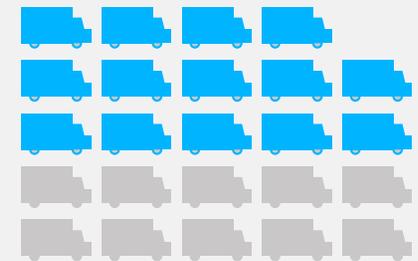
KIPDA regional transit plan, anticipates growth in commercial traffic of 223%, and an increase in car traffic of around 180%. Projects needed to address the added capacity have been identified, but funding has not been secured for all projects.

Increased Traffic

+180% more cars



+223% more commercial traffic



The expectation is that current funding sources will not be adequate to address growth in traffic requirements without changes in Kentucky statutes to permit road tolls and/or Public Private Partnerships (PPP, or P3) funding mechanisms. Transportation infrastructure is likely to experience decreased performance due to lag in funding and development, particularly due to unbalanced housing growth. Current transportation plans do not envisage light rail or other mass transit systems additions: current residential growth patterns do not readily support the cluster requirements of mass transit.

LOUISVILLE IN 25 YEARS

Infrastructure

According to KIDPA data, three of the four Louisville/Jefferson county wastewater systems are overloaded by roughly 10%. Many county areas are not currently served by wastewater systems.

Air Quality

Louisville currently is out of compliance (non-attainment) for both Ozone and PM2.5. The overall air quality ranks among the more polluted in the country. Much of the pollution comes from out of the area, but much can be attributed to energy use in the county. Increasing traffic and congestion will increase both ozone and PM 2.5.



Energy Consumption

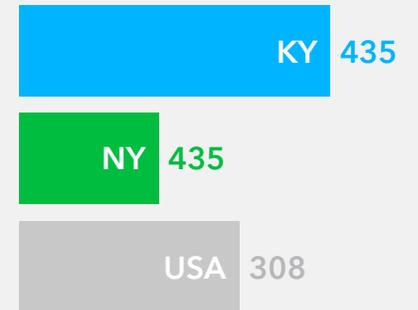
Kentucky uses on average 435 MBtu per capita. This is above the national average of 308 MBtu, and over twice New York, the most efficient state at 195 MBtu.

If energy intensity does not change, the added energy demand from the added population is 50 Trillion Btu. Approximately 2/3 of this is consumed in buildings, equivalent to around 2000 Mw of generating capacity.

If energy intensity is reduced to the national average, no added energy will be required.

⁴ <http://ksdc.louisville.edu/kpr/projections.htm>

Energy Consumption



Mbtu per capita

Business as Usual
Louisville in 25 Years

2037

New Louisvillians

AT LEAST
115,000

Population at
Retirement Age

58%

The number of
people over 80

2x

New Households

60,000

New Housing
Development

12,000
ACRES

New Workers

31,000

New Office Space

3
MILLION
SQ FT

New Major Employers

2-4

New K-12 Schools

2.2
MILLION SQ
FT

Increase in Commercial
Traffic

223%

Increase in Car Traffic

180%

New Mass
Transit Systems

0

Added Energy Demand
(well above national average)

50
TRILLION BTU

Overloaded Water
Systems

3/4

Increasingly Poor
Air Quality
(ranked among the worst in US)



CATALYZING CHANGE

Most successful cities have an educated and diverse workforce, strong infrastructural provisions, and economic incentives.

In many cases, the trigger for a city's success has been the fortunate confluence of circumstances and conditions. Although the current trend analysis seems bleak, Louisville's planning efforts can alter the course of these circumstances. It is therefore essential for a city to create the environment that will foster positive growth, and provide the best possible conditions for economic development.

An Educated and Diverse Workforce

Looking at the more successful metropolitan areas, it is evident that they are characterized by educated and diverse workforces. While it is not possible, analytically, to demonstrate causal linkages, it is clear that the cities that have been the most successful in growth have both very high post-secondary education achievement and very high levels of diversity, both ethnically and in nationality of origin. The majority of the high growth cohort have around 40% of the population with a bachelor's degree or higher. They also have more diverse and integrated populations, with, typically, no one ethnic

group making up more than 60% of the population, and with good representation across the major groups. Surprisingly they also have very high levels of population who were born outside the United States, or who speak a language other than English at home, with percentages in the latter cohort in the range of 12% to 20%. These percentages compare with Louisville's nearly 70% white population, and less than 10% Asian, Hispanic, Native, or multiple race identification; a post-secondary percentage of around 25%, and 7.5% speaking a language other than English at home.

Infrastructure Provisions

Growth is dependent on infrastructure in two ways. Good infrastructure will encourage growth, and poor or inadequately planned infrastructure will discourage it. In particular, regional infrastructure needs to be able to accommodate the growth, without transferring burdens to existing developments, potentially driving away established businesses. Addressing this can include both development of new infrastructure

to support growth, and policies that promote growth in areas with adequate existing infrastructure.

Of particular concern is the current trend and expressed desire by developers for unlimited access to suburban development in the east and south east of the city, together with the expressed desire that the city take more responsibility for developing infrastructure such as schools, fire stations, roads, etc. These developments require the addition of expensive infrastructure not only in the location of the development, but also across the region, and even then are likely to lead to decreased performance of roads, storm water systems, sewer systems, etc. As has been noted above, the KIDPA has established that four of the five sewer treatment plants are over capacity.

While the rural areas have inadequate capacity, there is excess or spare capacity within the existing urban cores, both in terms of vacant building stock and in supporting infrastructure. Policies that encour-

age development in existing areas, or which ensure that suburban developments fully address the cost of their environmental impact can serve to foster and catalyze growth.

Incentives

A common approach across the nation is the use of incentives, and the State of Kentucky currently offers such an incentive to new major employers in the form of employment tax relief.

Unfortunately, there is little room for further incentives. The City does not have adequate funds to provide large additional tax relief, nor does it have the legislative authority. Even if incentive funds were available, it is likely that, in the current competitive setting, other jurisdictions would seek to match them, leading to an internecine bidding war for new employers.

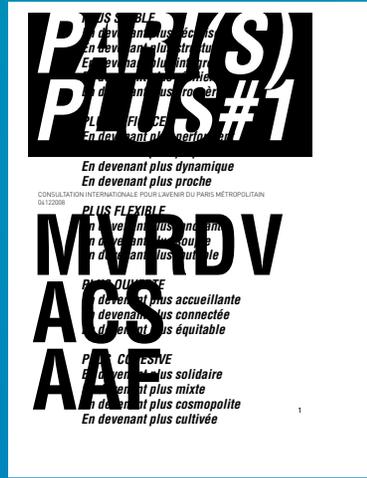
04 Focus Areas

- 4.1 Regionalism
- 4.2 Living
- 4.3 Connectivity
- 4.4 Creativity
- 4.5 Health
- 4.6 Energy
- 4.7 Identity

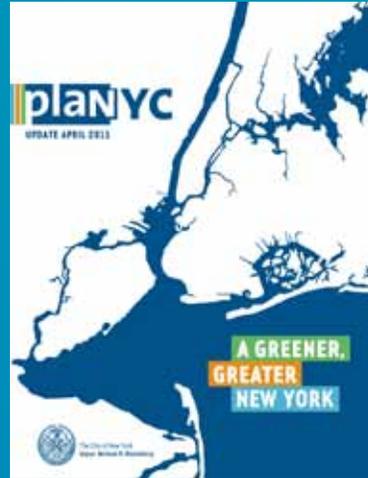
PRECEDENT RESOURCES



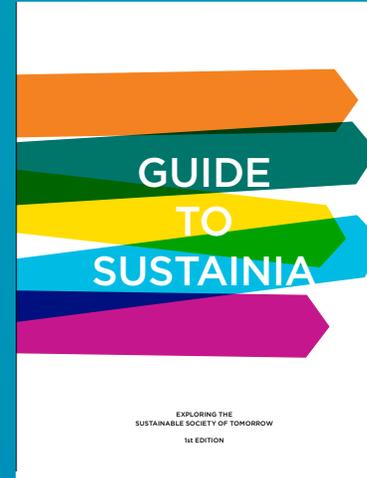
Imagine Austin



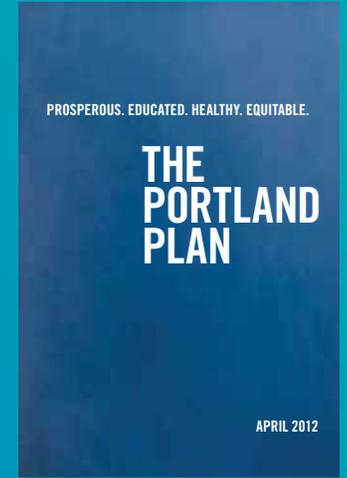
Pari(s) Plus



Plan NYC



Guide to Sustainia



The Portland Plan



Copenhagen Bicycle Strategy



Oslo le Grand Fast and Beautiful



Projecto Madrid Centro



Milano

PRECEDENTS

PARTNERSHIPS

INDUSTRIAL
TRANSFORMATION

FINANCIAL GOALS

LOGISTICS AND
TRANSPORT

CULTURE

EDUCATION

ARCHITECTURE

URBANISM

HEALTH

SUSTAINABILITY

IDENTITY

CONNECTIVITY

INNOVATION

TALENT

ACCESSIBILITY

Best Practices for
Louisville

2037

REGIONALISM

CONNECTIVITY

LIVING

CREATIVITY

HEALTH

ENERGY

IDENTITY

04 Research

- 4.1 Regionalism
- 4.2 Living
- 4.3 Connectivity
- 4.4 Creativity
- 4.5 Health
- 4.6 Energy
- 4.7 Identity

REGIONALISM

With globalization, we recognize the shift from a world of scale to one of agglomeration.

Many unique parts, which when combined, give new qualities to the environment in which we live. On the scale of the city, the relevance of the 'parts', the regional influence, is more important in today's economy than ever. The mid-size cities of the United States are flexible, accessible, unique, dynamic and charged with potential. Arguably this is why they are driving the American economy. In collaboration with the other cities, both larger and smaller, cities gain a market advantage catalyzing growth and change.

How are Lexington/Cincinnati/Indianapolis different? Maybe their similarities outweigh their differences. In many respects, regional cities share resources, assets, challenges, and heritage. Perhaps the unit of city is not as exclusive as it once was, the competition not as divisive.

Louisville is within 2 hours drive of three other major metropolitan areas, placing it on the border of the Midwest region (the 5th largest

economy of the world). It is the furthest western city in the Eastern Time zone. Both a center and a border, Louisville is a gateway between the Mid-West and Southeast economic regions. Its location along the Ohio River, three major interstates, and an existing North-South rail corridor have made the city a very attractive logistical hub. The United Parcel Service's creation of UPS Worldport, adjacent to the airport on the periphery of the city's historic urban center is testament to this.

UPS Worldport handles 4.3 billion pounds (2,150,000 tons) of cargo each year, making it the 3rd largest cargo airport in North America, 9th largest in the world. Many companies have now relocated headquarters or handling facilities to the airport vicinity in order to take advantage of the potentials offered by such an operation. This type of collaboration provides Louisville with unique business opportunities. New industries, better exposure, fresher goods, newer technologies

are brought directly to Louisville. Approximately 10% of all employment in Louisville is directly connected to the UPS Worldport.

The existing rail and interstate systems surrounding Louisville are reaching their maximum capacity. The paradox is, however, the endless need for expansion, combined with an often-detrimental impact on city development. At what point does 'optimal' access promote flight from the same areas that it aims to serve?

Cargo transport on the Ohio, a cornerstone of Louisville, is the most energy efficient of the existing cargo transport systems; it is also by far the slowest. Today, over 230,000,000 tons of cargo is transported through the Shippingport Levy on the Ohio River. 70% of this cargo is energy related (the majority being coal). What can the river industry learn from the Worldport example?

During our many conversations with Louisvillians, we heard a similar description of the city: it's a great

place to live and work. This quality of life can be linked to ease of movement, the physical communication of the city. This mobility however will be threatened if traffic continues to increase as has it has over the past 50 years. Commercial traffic alone is projected to increase by 223% over the next 25 years; car traffic is projected to increase by 180% in the same time. This increase coupled with the current state restraints on funding mechanisms for infrastructure points to a significant lag in transport performance. The convenience of car travel will cease to be an attribute of the city, rather a weakness. Nevertheless, the idea that Louisville is a livable, mobile, connected city need not diminish. We have the chance now to influence the future intra-city transport by densifying nodes and corridors strategically, and simultaneously providing new options of public transport. What is important at this stage is PREPARING for this future - just in time planning.

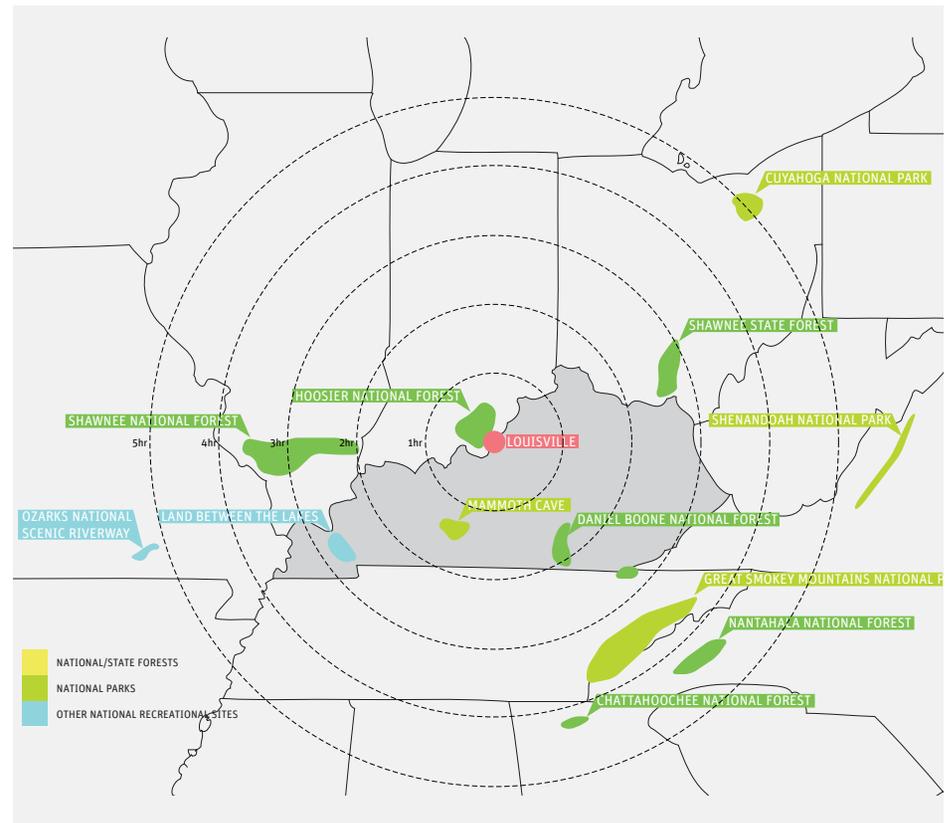
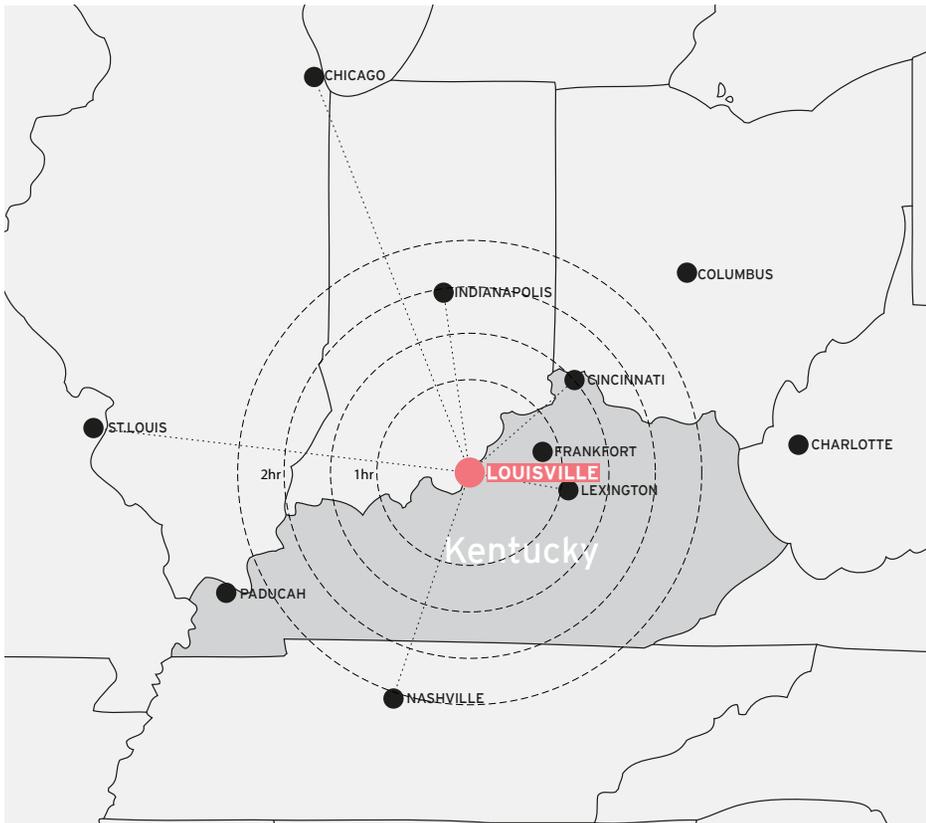
As competition between cities increases, the pooling of economic, cultural, and educational resources within a visible, branded region can strengthen diverse assets into a united whole.

REGIONAL CONNECTIVITY

Louisville's location is ideal for logistics and livability.

Louisville is centrally located in the United States along the Ohio River, three major interstate routes and an active rail cargo transport network. It is 5 hours driving distance from

13 state or national recreational areas. It is one day's drive from 90% of the United States. Its location is optimal for both logistics and livability.



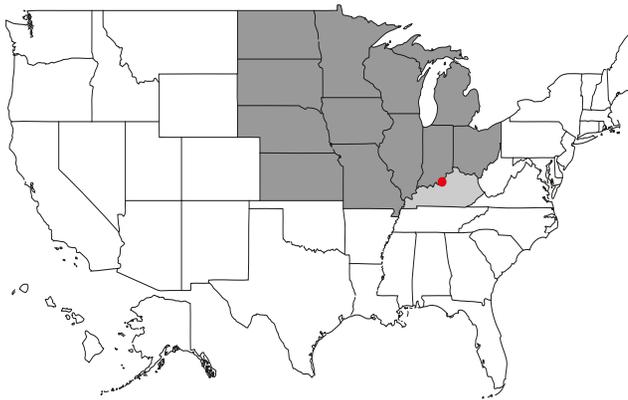
MIDWEST REGION

Louisville produces more GDP per person than competing Midwest cities.

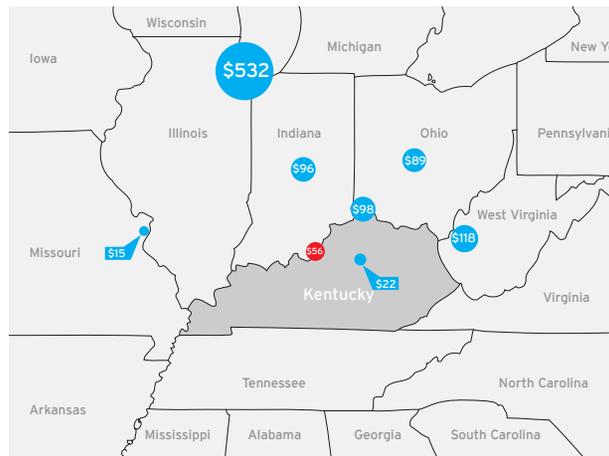
The Midwest Region of the United States is the 5th largest economic region in the world, behind the U.S. itself, China, Japan and Germany, producing approximately 2.6 trillion USD annually (Michigan Association of Railroad Passengers).

The Midwest is defined by the United States Census Bureau as one of the four U.S. Geographical

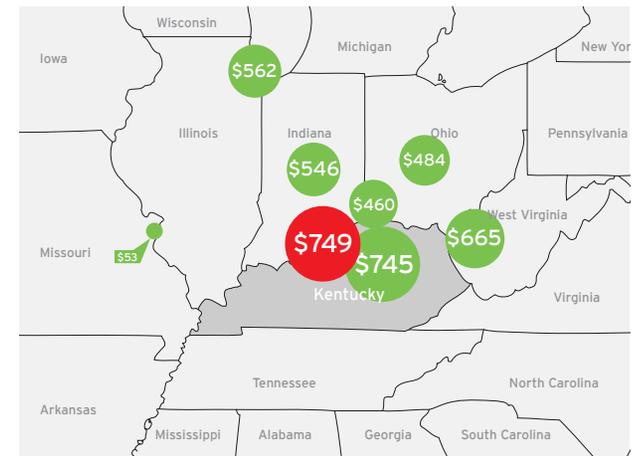
Regions: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin. Though Kentucky is technically included in the South by the US Census Bureau, Louisville is strategically located along the border of the Midwest and South regions.



Midwest Region



Gross Domestic Product by city



GDP per person

BLUEGRASS SUPER REGION AND BEAM

44% of the state's GDP is produced within in the Bluegrass Economic Advancement Movement zone.

The Bluegrass Economic Advancement Movement is a partnership seeking to connect the metro economies of Lexington and Louisville.

Taking advantage of regional business, the initiative focuses on the development of an advanced manufacturing super region. The Toyota plant in Georgetown near Lexington, the two Ford manufacturing plants in Louisville, GE in Louisville, Raytheon and Lexmark in both Lexington and Louisville are the generators for the plan. BEAM supports the growth of high-quality jobs in advanced manufacturing.

The mayors of Lexington and Louisville have secured support from the Brookings Report to substantiate the task.

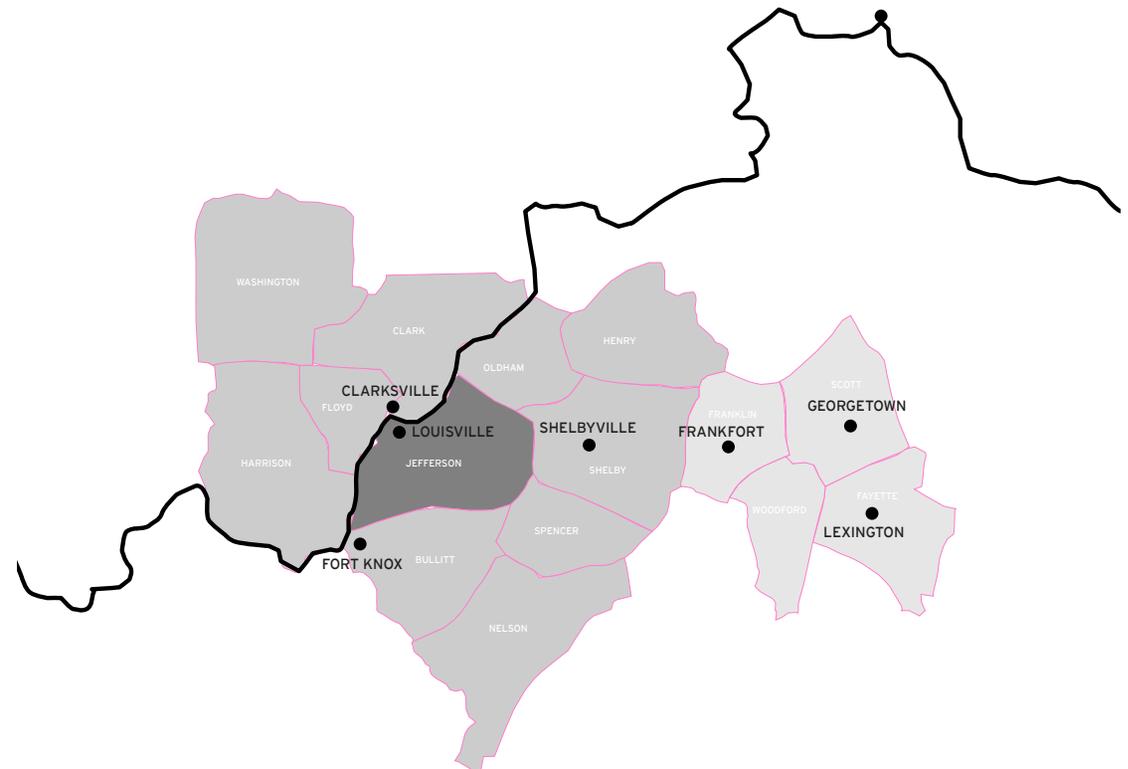
Louisville Area

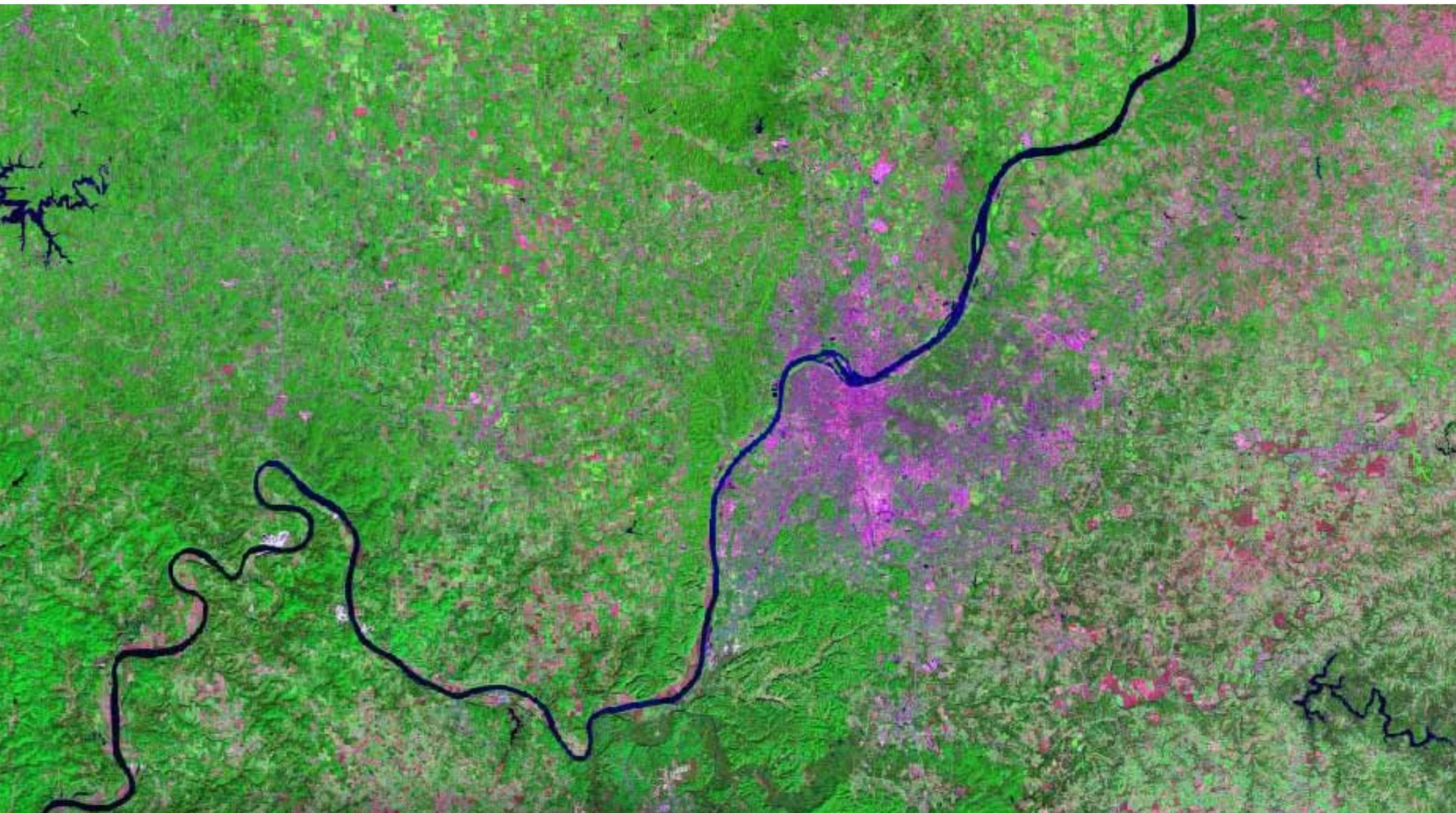
Fort Knox
Humana
Ford
UPS
Lantech
Brown-Forman
Raytheon
GE
University of Louisville
YUM!

Lexington Area

Toyota
University of Kentucky
AT&T
Lexmark
Tempur-Pedic
Lockheed Martin

Bourbon Trail





Regionalism

Can regional partnership create new economic prosperity?

Louisville has a fortunate logistical connection to the rest of the country through rail, interstate, airport and river transport capabilities.

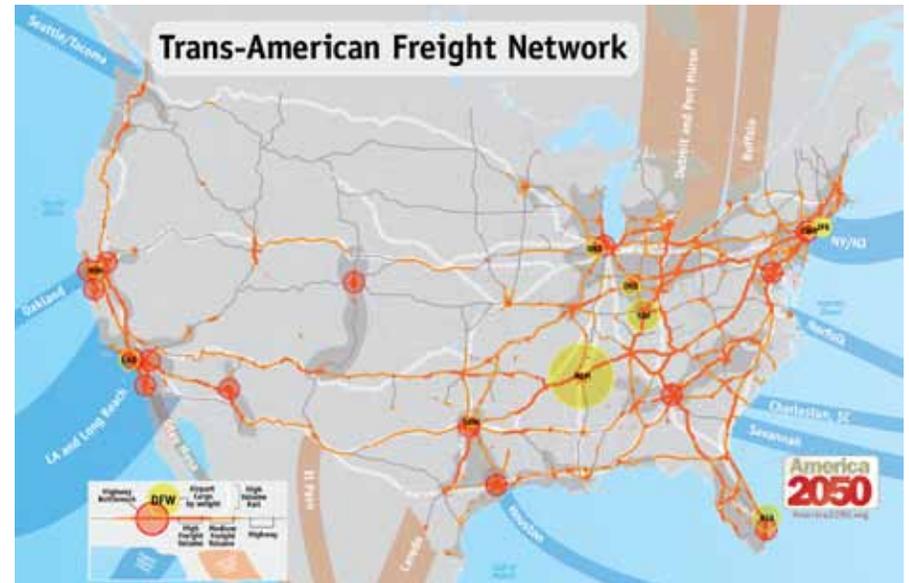
As the interstate and rail corridors reach their maximum carrying capacities, Louisville will have the opportunity to re-define its logistical position.

CARGO NETWORKS

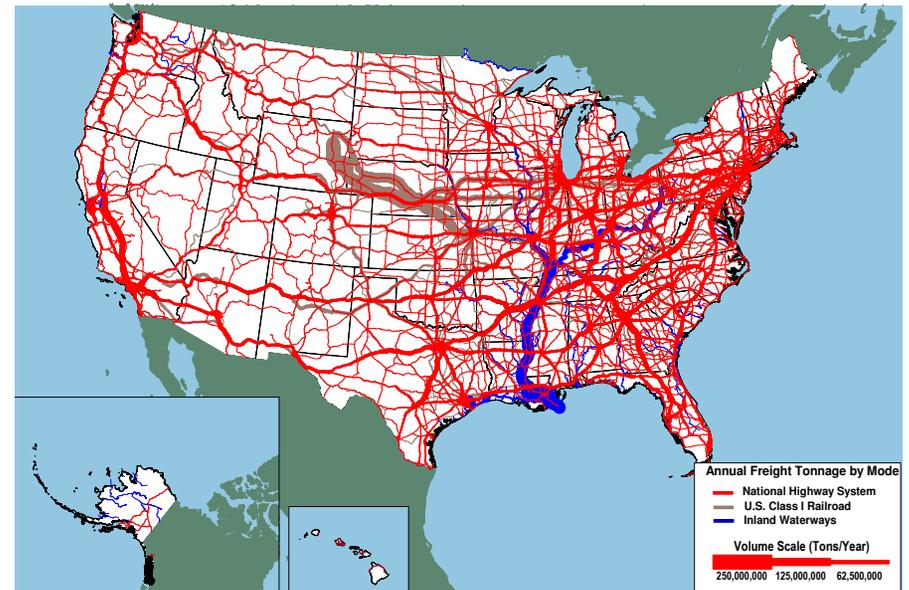
Louisville is strategically located along river, rail, airport and interstate cargo transportation networks.

Louisville has a strategic position at the cross-roads of the Ohio River, national rail lines, two interstate highways and the UPS Worldport air hub.

Both the highway systems and the cargo rail networks around Louisville are reaching maximum capacity. The UPS Worldport has recently expanded its operations due to increased traffic. The integration of logistical networks around Louisville is a great potential for the region. The city could develop a regional strategy, making Kentucky the biggest specialized inland port and Louisville its multi-modal port.



National Freight Hubs



National Freight Capacity

AMERICA 2050

America 2050 is laying the foundation for the future high speed passenger rail connection and an alleviated highway and rail corridor strategy.

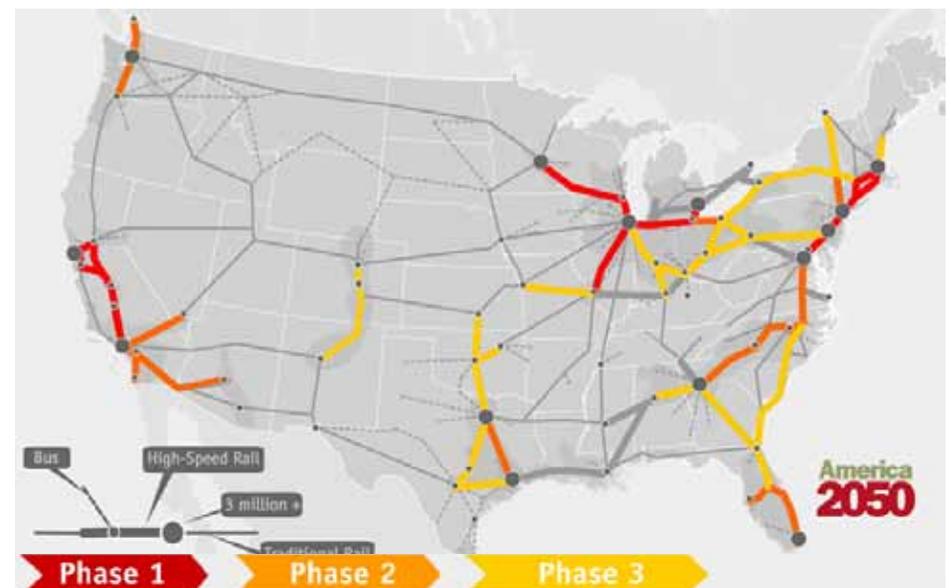
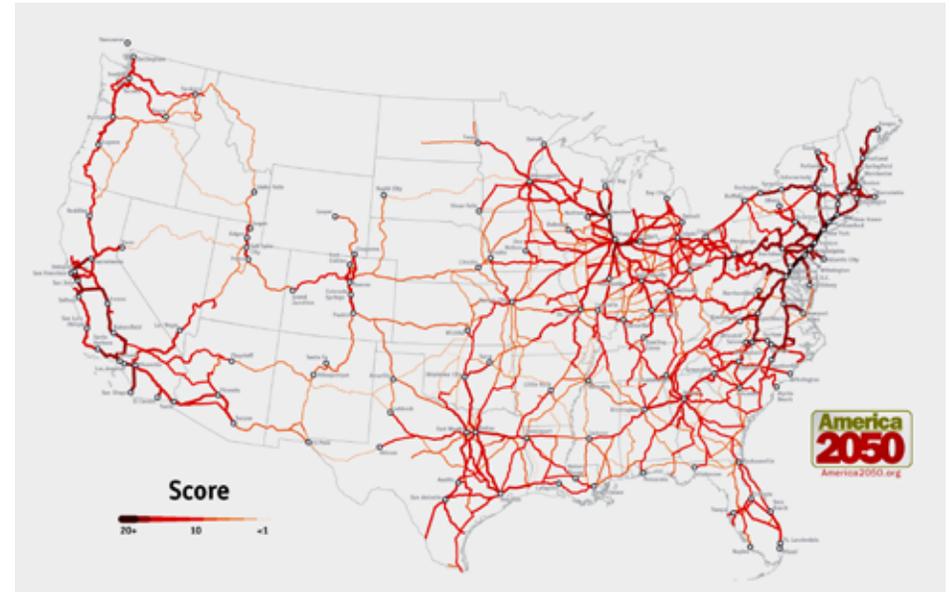
'America 2050' released a study which identifies high speed rail corridors with the greatest potential to attract passenger traffic based on the nation's mega-regions.

'Corridors connecting populous regions with large job centers, rail transit networks, and existing air markets scored best. The study also recommends that the federal government adopt a quantitative approach to evaluating future investment in high speed rail.'

—America 2050

Louisville is included in the Great Lakes 'Megaregion' network. The high speed rail connection to Louisville is scheduled for phase 3 in a 4 phase process, and would directly connect Louisville to Indianapolis, Cincinnati and St. Louis.

America 2050 calls for a Trans-American Freight network with investments that will alleviate highway and rail bottlenecks, electrify the rails, and green the nation's seaports. These investments should foster the growth of our economy, reduce the systems impact on the natural environment and help to offset the impact of the freight system on local communities. To accomplish these goals the federal government needs to articulate a national freight policy.

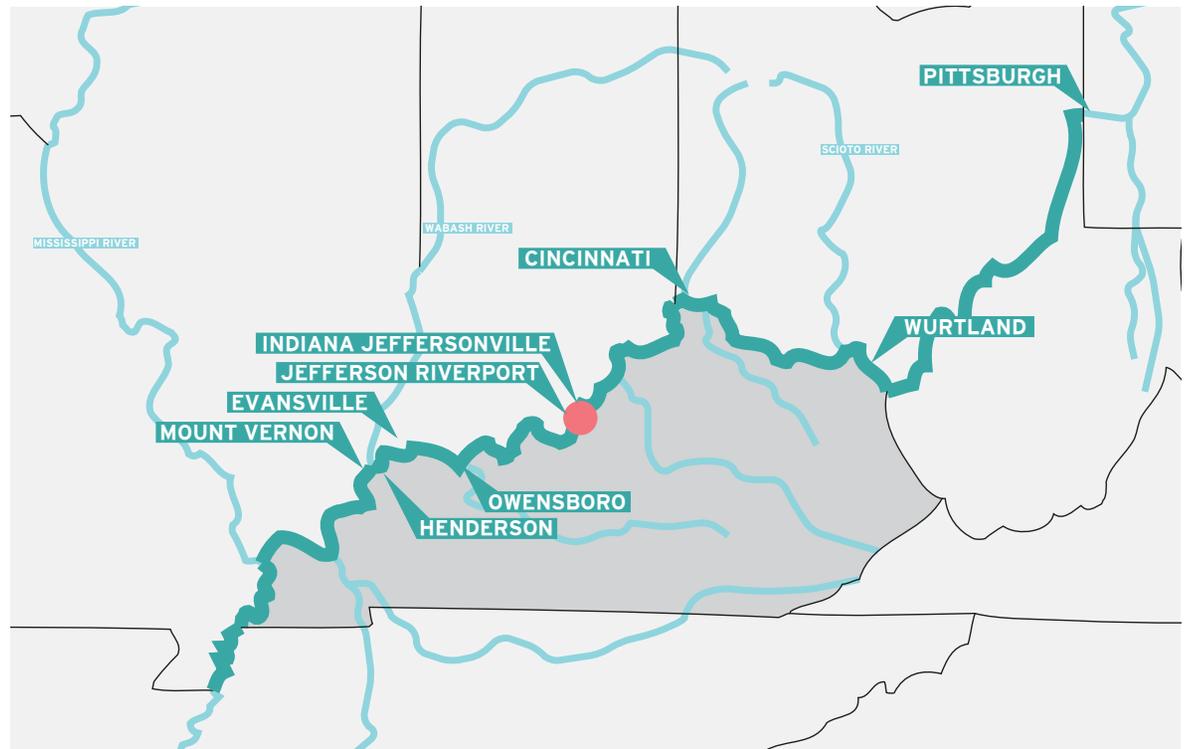


OHIO RIVER

The Ohio River network is a central artery for the region.

Louisville was founded on the banks of the Ohio River as a navigational port for river traffic avoiding the Falls of the Ohio. Since then, the city has continued to rely on the river for commerce and transportation. The Great Flood of 1937 complicated the city's relationship to the waterfront and reshaped the growth of the city, but the river has continued to contribute to the economy and identity of Louisville.

As a major transport artery connected to Louisville's other hubs of commerce, the Ohio River can be a link that connects the city to the rest of the US and beyond.

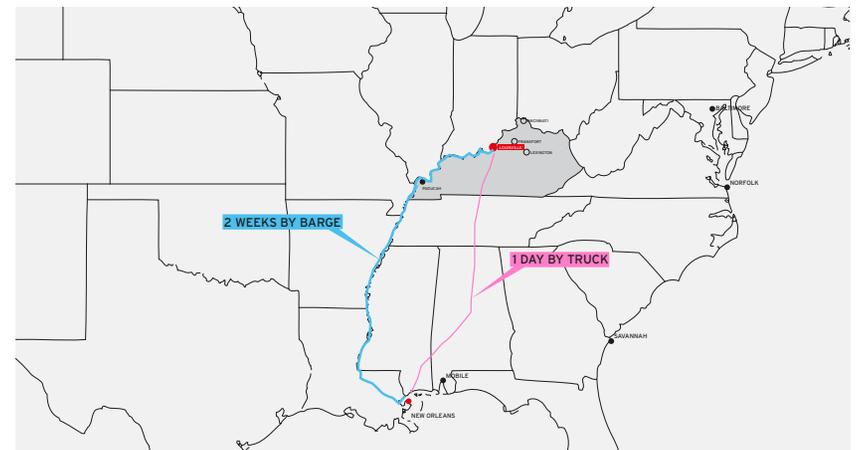


Ohio River Ports

As the Panama Canal expansion is redirected through the Gulf of Mexico, Louisville is ideally situated to connect to this global transport route. The city could develop a logistical strategy, making Louisville the biggest specialized inland port.



Future Panama Routes

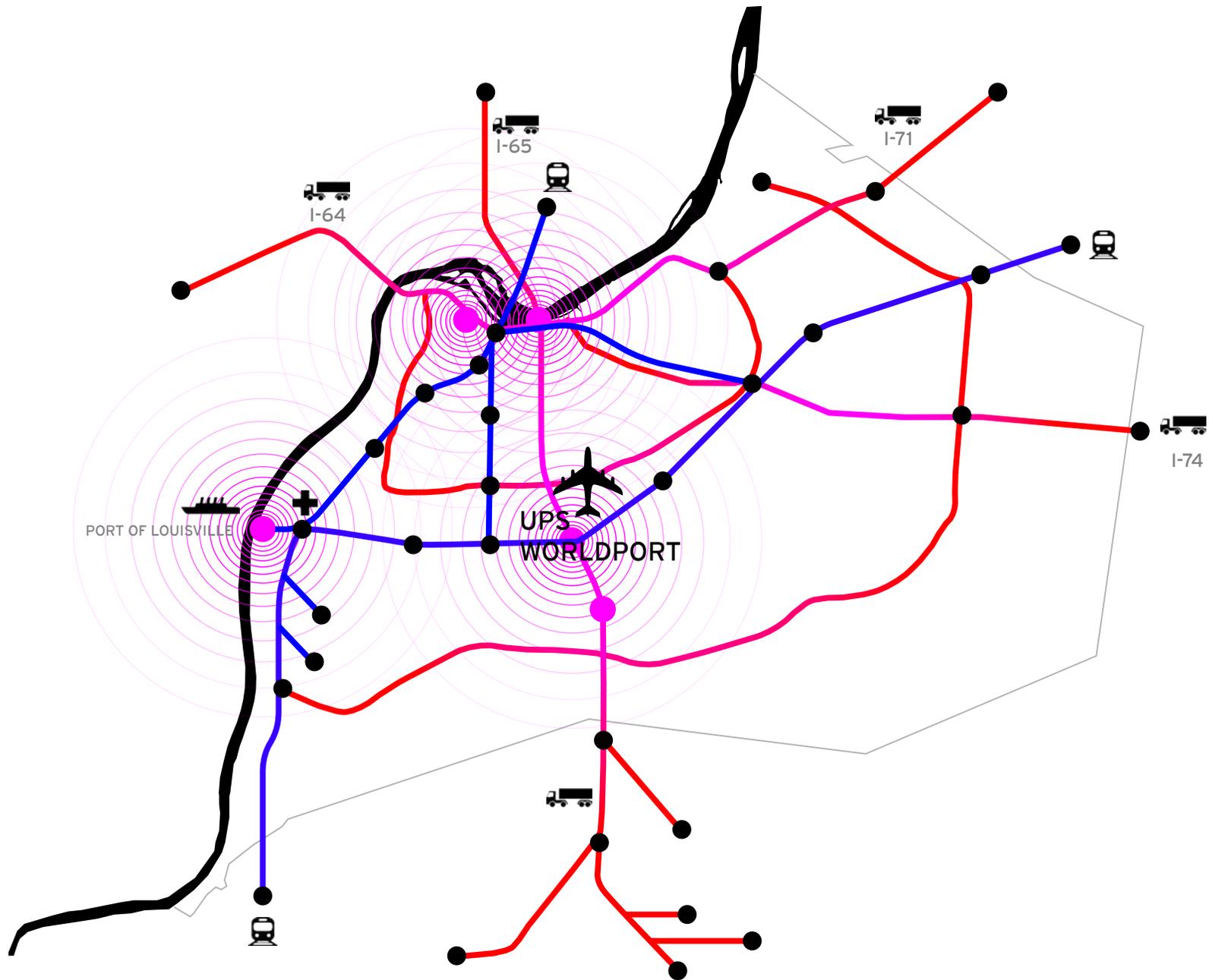


Louisville Connection through Port of New Orleans



What possibilities exist in creating a multi-modal, national cargo hub?

PROPOSAL: MULTI-MODAL CITY



UPS has made Louisville a nodal point within the global network of commerce.

If airports reflect the concentration of capital and movement of goods, then Louisville is limited by its weak passenger air links within the region and US.

UPS PARTNERSHIPS

The UPS Worldport has inspired other companies to locate headquarters in Louisville and create partnerships with the logistics hub.

“Many benefit from the airports’ economic activity, whether they work at the airports or not. Amgen, Ann Taylor, Clearwater Fine Foods, the Geek Squad, Johnson & Johnson and Zappos are among the companies that are located in the Louisville area to take advantage of the logistics offered by Worldport—UPS’s global air hub.

“Louisville’s airports helped generate 55,608 jobs. That means **almost one in every 10 jobs is attributable to airport-related activities.** The airports also generate nearly \$2 billion in payroll; over \$5.6 billion in economic activity; and more than \$277 million in state and local tax revenues. In addition, in 2008, Louisville International Airport handled more than 3.6 million passengers; 158,356 landings and takeoffs; and 4.3 billion pounds of cargo, making it the **3rd largest cargo** airport in North America and 9th in the world. The volume of goods shipped through Louisville International Airport more than quadrupled from 1986 to 2008.”
 – Louisville Regional Airport Authority



AIRPORTS

Both the passenger and cargo airports continue to expand.

“In 1988, after reviewing more than two dozen alternative proposals, the Airport Authority Board chose to expand Standiford Field (now Louisville International Airport) and build an entirely new airfield on top of the one built in the 1940s.

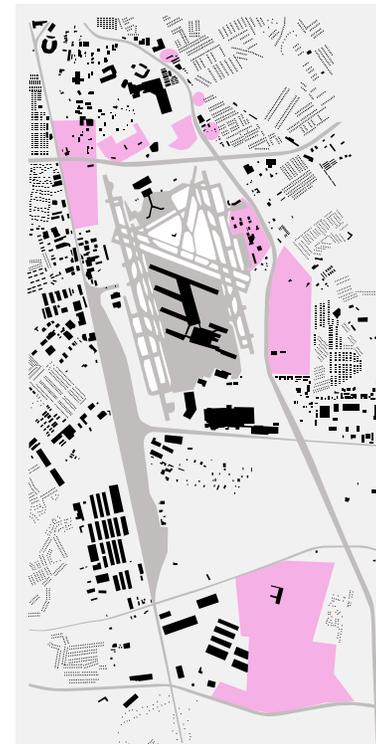
“The community embarked upon one of the **largest aircraft-noise residential** acquisition and relocation programs ever carried out in the United States. Under the Louisville Airport Improvement Program (LAIP) and the Voluntary Residential Relocation Program, the community is engaged in relocating 3,740 families.

“In 1991, the FAA approved the expansion of Louisville International Airport as part of the Louisville Airport Improvement Program,

which included the relocation of more than 4,000 people in 1,581 homes in Standiford, Prestonia, Highland Park and Tuberosa, as well as 150 businesses on 100 business properties. Also at that time, the Airport Authority gave 136 homeowners in Edgewood an opportunity to **participate** in what became the Voluntary Residential Relocation Program.

“Today, the Voluntary Residential Relocation Program has two distinct components, the traditional purchase program and the Heritage Creek Program. In either case, families are offered an opportunity to move from their noise-affected homes. Vacated homes are then demolished.”

– Louisville Regional Airport Authority



AIRPORTS

Passenger and cargo airports have competing needs, making it difficult for airports to accommodate both programs optimally.

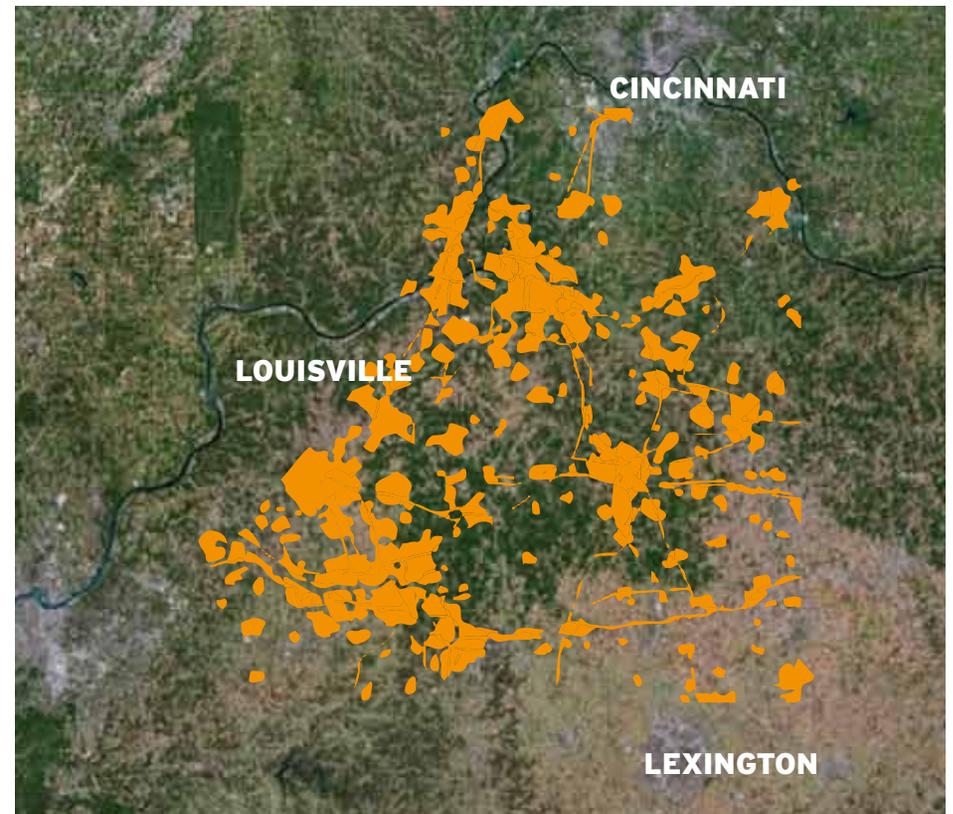
	Cargo Airline	Passenger Airline
Reliable weather	Crucial	High Importance
Center Location	High Importance	Non-Critical
City with big OD market	Disadvantage	Advantage
Noise constraints at night	Crucial Low	Crucial High
No Congestion	Crucial	High Importance
Peak Hours of Operation	Incapable	Capable
Infrastructural Needs (within Airport)	Needs Capacity to grow	Needs "Connecting" buildings

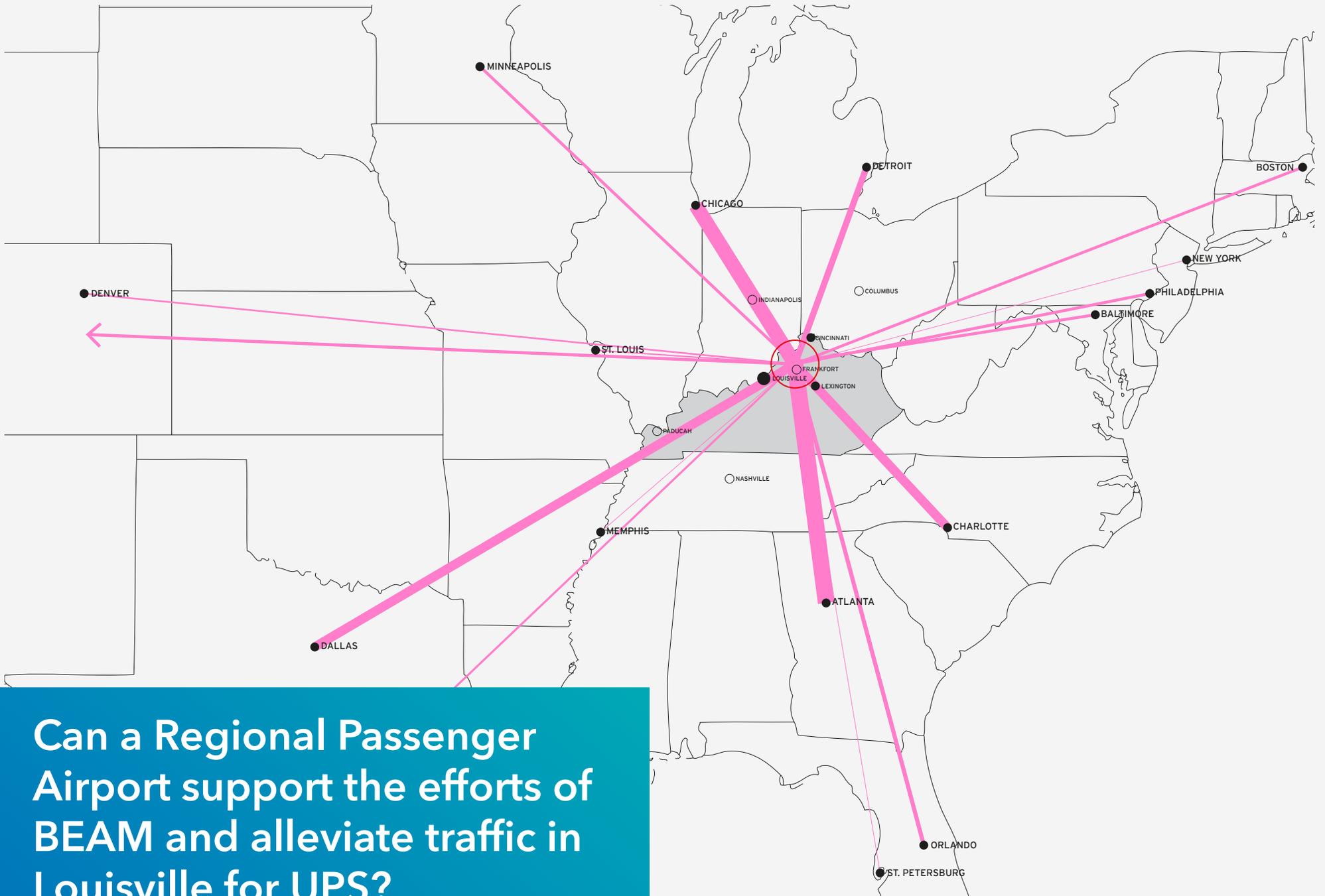
Reference: Cosmas and Martini, UPS and FedEx AirHubs: Comparing Louisville and Memphis Cargo Hub Operations. December 14th, 2007

REGIONAL AIRPORT

Schiphol Passenger Airport in Amsterdam services the four most populous cities in the Netherlands.

The Schiphol airport serves the whole Randstadt/Deltametropol area in the Netherlands. Randstadt consists of the four largest cities in the country: Amsterdam, Rotterdam, Den Haag and Utrecht (combined population approximately 7.1 million) and has a similar geographical footprint between Louisville, Cincinnati, and Lexington (area population appx. 4 million).





Can a Regional Passenger Airport support the efforts of BEAM and alleviate traffic in Louisville for UPS?

SUMMARY

- Collaboration and regional partnerships are the future of economic prosperity.
- The Ohio River is an under exploited resource to expand connectivity and regional economic activity and the logistic expertise of Louisville and should be activated to create new opportunities.
- The airport is a pivotal site in increasing flow and potential in and out of Louisville and the region and is currently perceived as an obstacle in supporting the high-knowledge economy activity.

04 Focus Areas

- 4.1 Regionalism
- 4.2 Living
- 4.3 Connectivity
- 4.4 Creativity
- 4.5 Health
- 4.6 Energy
- 4.7 Identity

Cities are surprisingly robust; while the energy of the city is attenuated by a decline in density, the diversity represented is unparalleled.

Suburban flight in the '60s and '70s significantly changed the dynamics of many American cities. With a depleted tax base, public transport models were deemed unsustainable. Louisville is no exception.

Cities are surprisingly robust, and while the energy of the city is attenuated by a decline in density, the diversity represented is unparalleled. And it is this diversity, which inspires the return to the downtown. The restaurants of NuLu, 21C, Muhammed Ali Center, the CBD, and Waterfront Park all within walking distance of one another. What story does Louisville tell?

Growth is a paradox. With growth comes jobs, and economic growth. Yet is growth sustainable? If the current growth prognosis ('Business as Usual') holds, Louisville will need to

develop some 60,000 new housing units. A recent study on suburban development in Melbourne, Australia showed that for every 1,000 dwellings constructed in existing suburbs, the cost of infill development is 309 million USD. By comparison, the cost of infill development in rural or fringe development sites is 653 million USD for every 1,000 dwellings. Generally speaking, 60,000 new housing units in existing suburban neighborhoods would cost the city 18.5 billion dollars in infill development costs. By contrast, 60,000 units in new suburban neighborhoods on the fringes of the city would cost 39.2 billion dollars in development costs.

Not only downtown has been affected by flight. Suburban sprawl finds the increasing pressure for space giving rise to suburban cities,

agglomerations of housing and supporting amenities in increasingly diverse urban ecologies. While suburbia 'profited' from a notion of individuality in surprisingly similar packaging, the desire for uniqueness still remains strong.

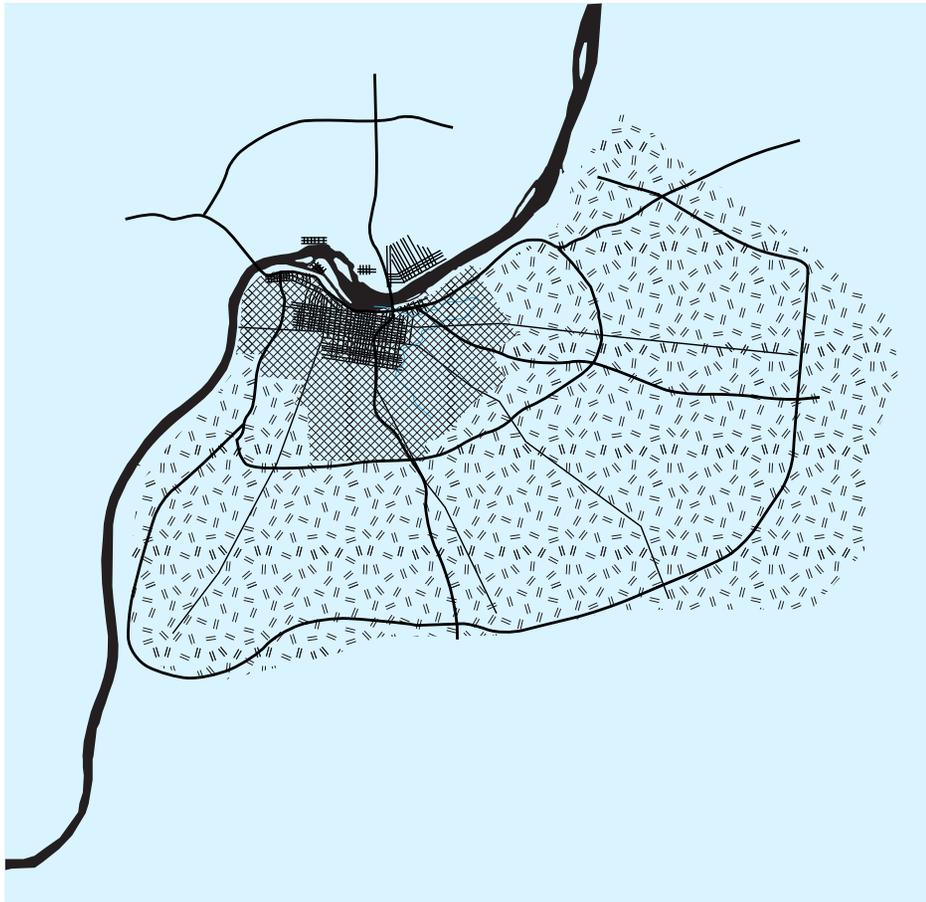
New typologies for downtown and ex-urban 'cities' must be explored. If the infamous Levittown was predicated on prefabrication, will the next generation of housing take advantage of today's technology or local intelligence such as advanced manufacturing?

Strategies that fully exploit the physical resources of the city is imperative. We can't just build more city, we have to build a better city, a more intelligent city, and a better integrated city.

Neighborhoods are urban microcosms unto themselves, with different opportunities for growth and culture; each neighborhood should have access to desirable amenities and activities, regardless of their geographical location.

LOUISVILLE PATCHWORK

Louisville is not defined by its center or periphery but by its patchwork nature.



CURRENT ARTERIAL GROWTH

Growth has been concentrated through specific nodes and corridors.



Downtown



Frankfort Ave. / Shelbyville Road



Bardstown Road



Dixie Highway

CORRIDOR DENSITY

Identity drops off sharply as we move out along these corridors.



Downtown, Central

Downtown, Western Edge



Frankfort Ave. / Shelbyville Road, Central

Frankfort Ave. / Shelbyville Road, Periphery



Bardstown Road, Central

Bardstown Road, Periphery



Dixie Highway, Central

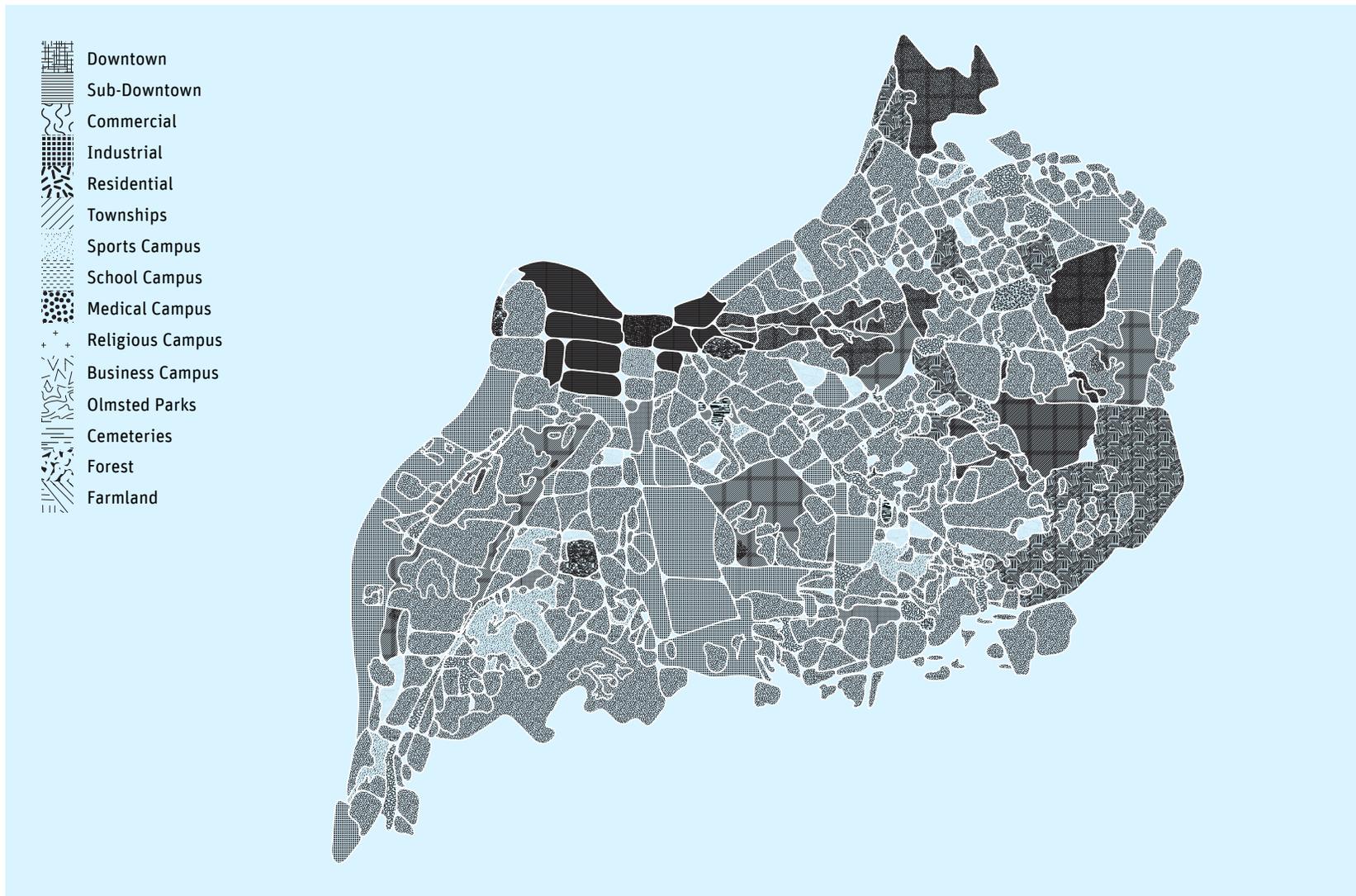
Dixie Highway, Periphery



What does quality growth look like?

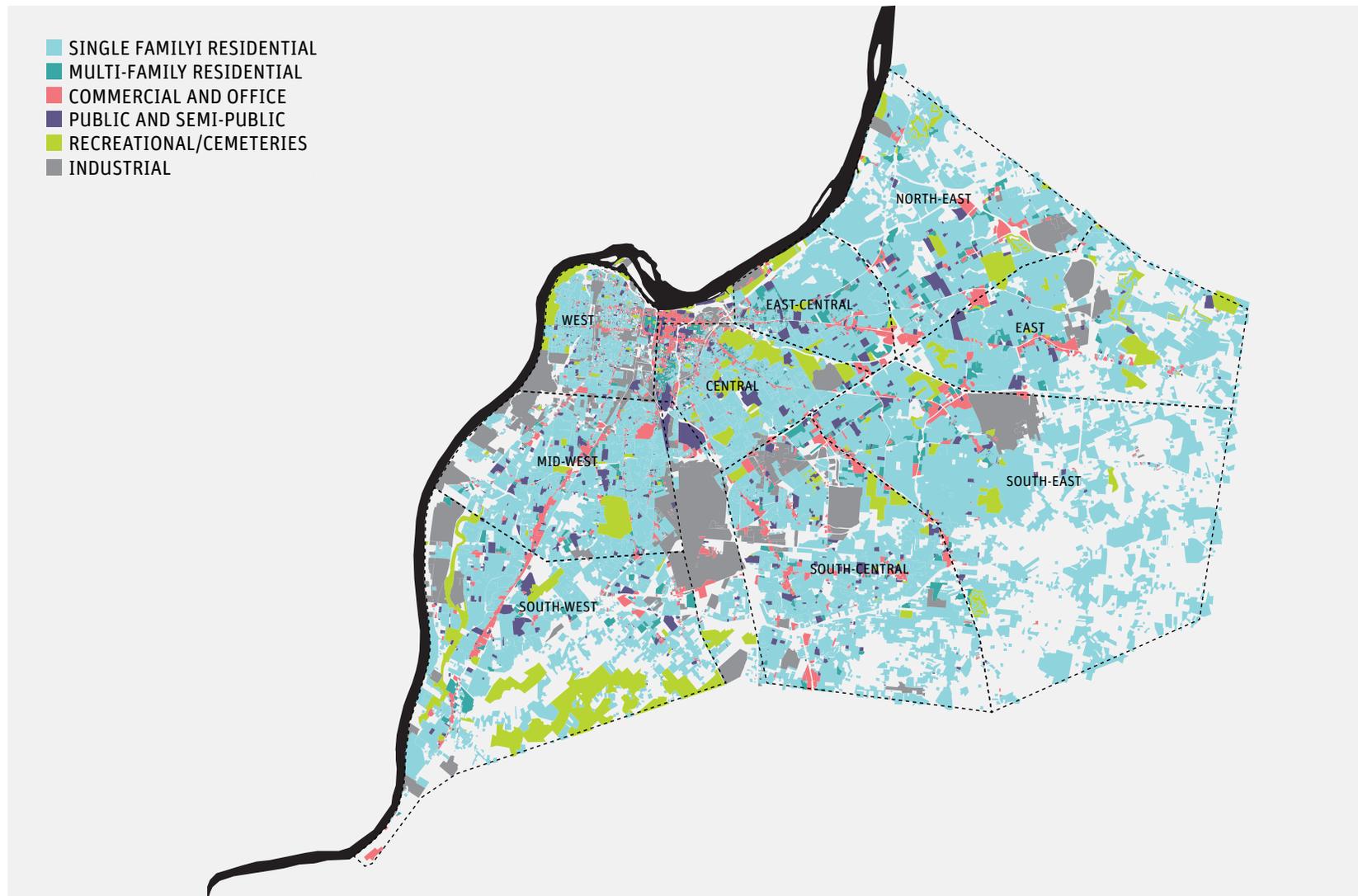
LOUISVILLE PATCHWORK

The patchwork is created by many typologies of land use and space.



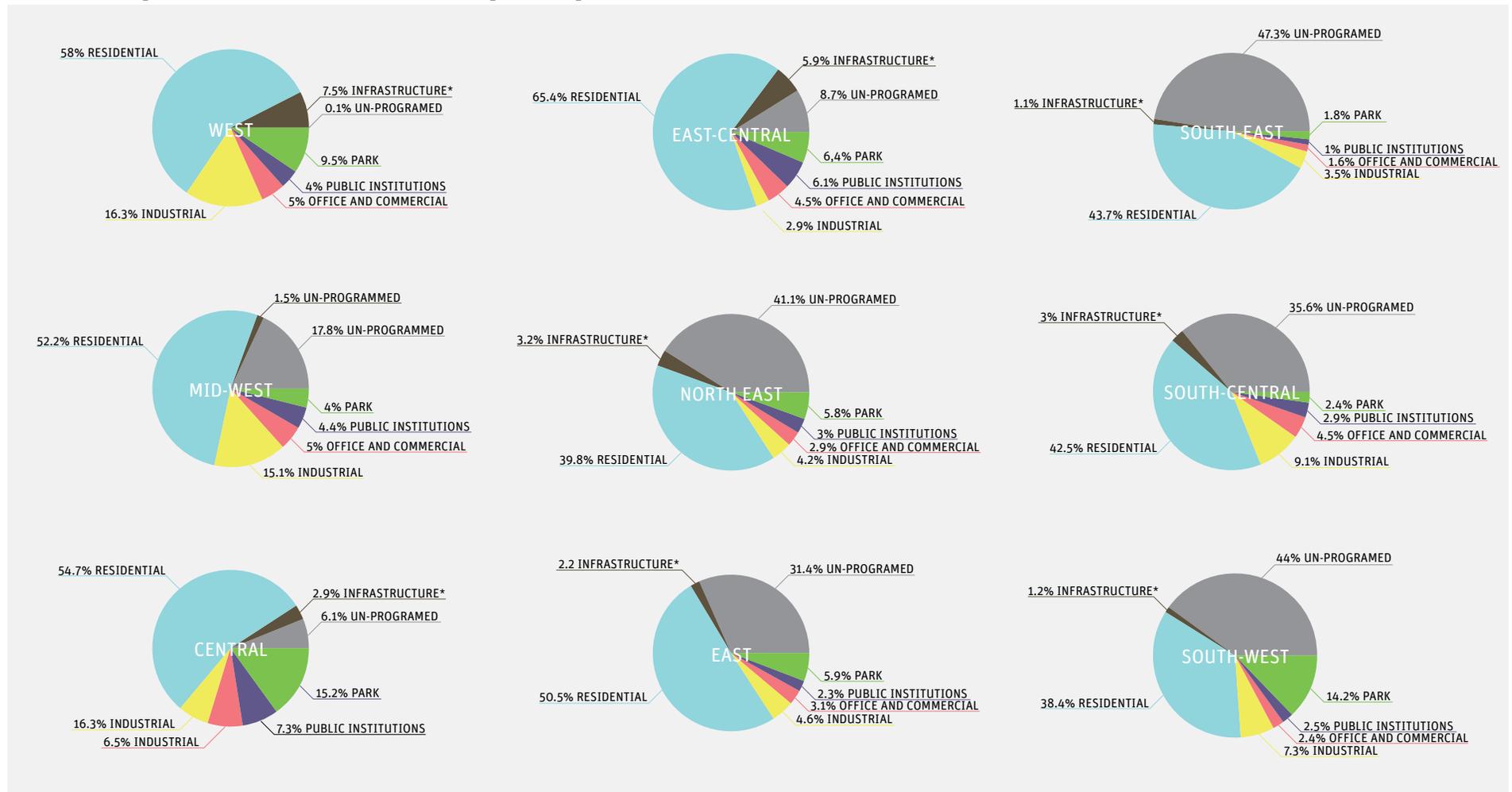
LOUISVILLE DISTRICTS LAND USE

Neighborhoods are not autonomous. The boundaries of these districts reflects perceived cross-neighborhood relationships.



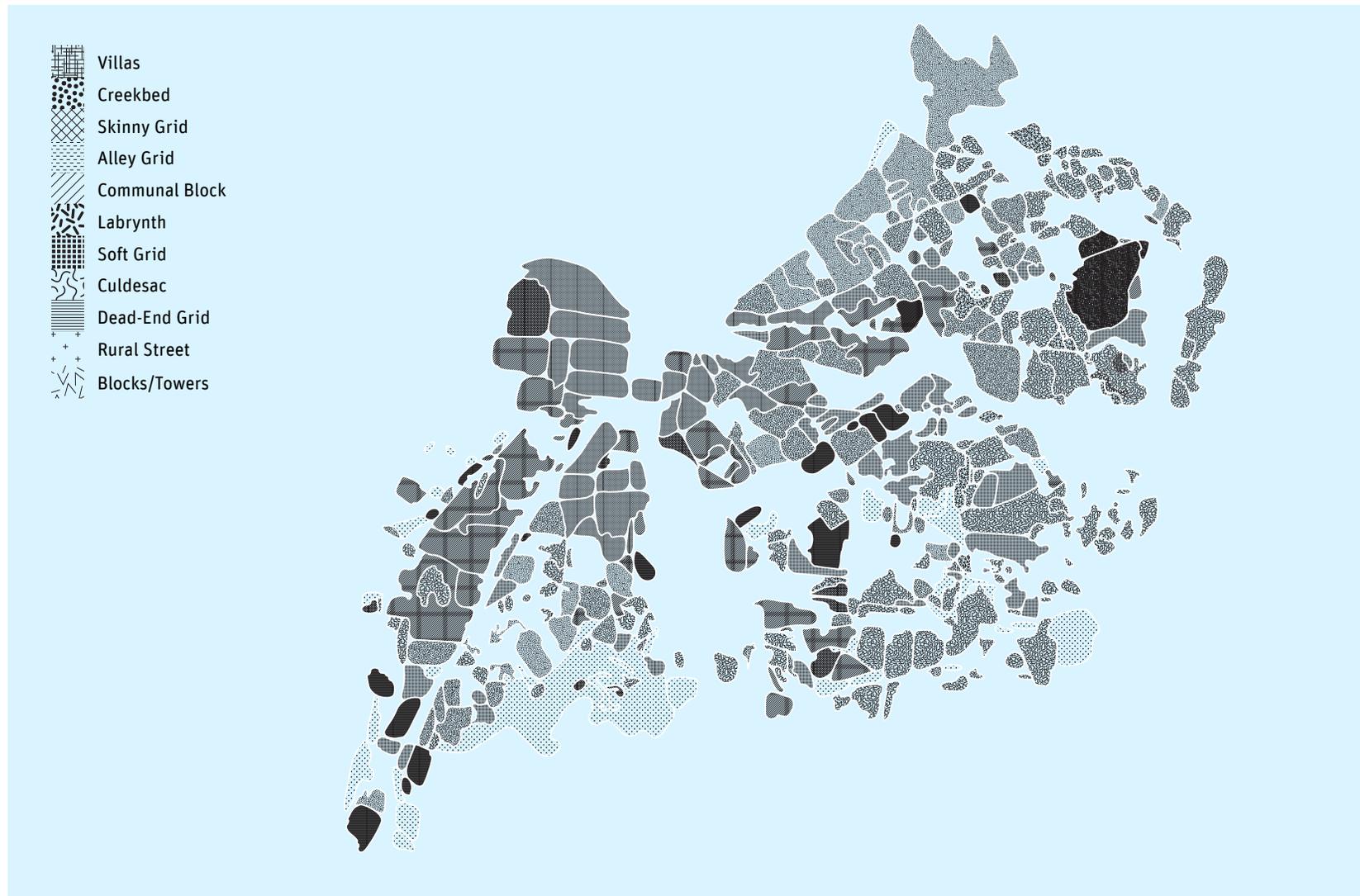
LOUISVILLE DISTRICTS LAND USE

The least prosperous districts have a higher proportion of industry and infrastructure, and significantly less unprogrammed space for development than more prosperous districts.



RESIDENTIAL PATCHWORK

Residential neighborhoods express themselves spatially in different ways.



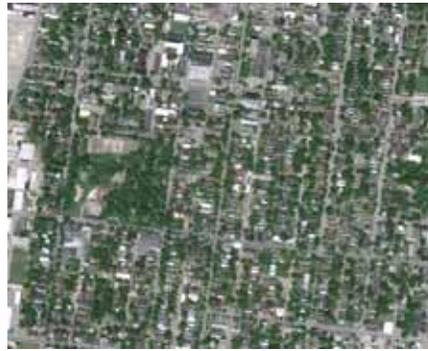
SUBURBAN DEVELOPMENT PATTERNS



01. Creekbed



02. Skinny Grid



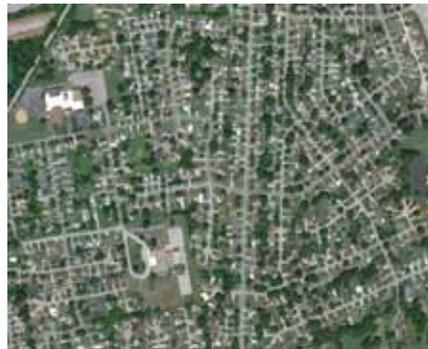
03. Alley Grid



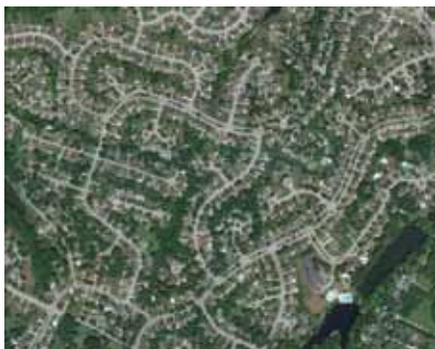
04. Communal Block



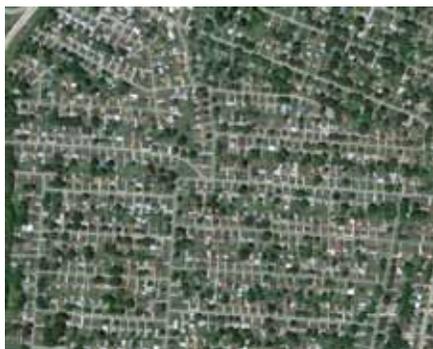
05. Labyrinth



06. Soft Grid



07. Cul-de-sac



08. Dead-End Grid



09. Villas

01 Creekbed neighborhoods are structured by rivers or creeks running through an area. They are generally found in more rural areas.

02 The Skinny Grid is found closer to urban centers. Neighborhood streets extend from a major city artery. The interior of the block is used as a communal backyard.

03 Alley Grids allow larger town homes to face toward prominent boulevards while a back alley is used for access, trash disposal and car parking.

04 The Communal Block is a more spacious grid. Homeowners access a communal or semi-private backyard, protected from the street by the block of houses.

05 Labyrinth neighborhoods are usually slow growing, plan-as-you-go settlements. As demand for new housing increases, land becomes increasingly more subdivided.

06 The Soft Grid is usually found where neighborhoods are located between two town centers. Streets connect and negotiate disparate grids, creating a soft connective tissue.

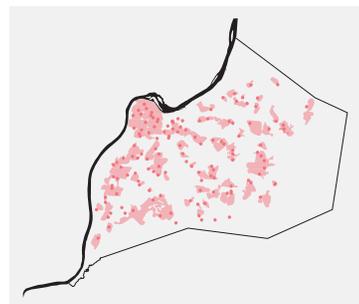
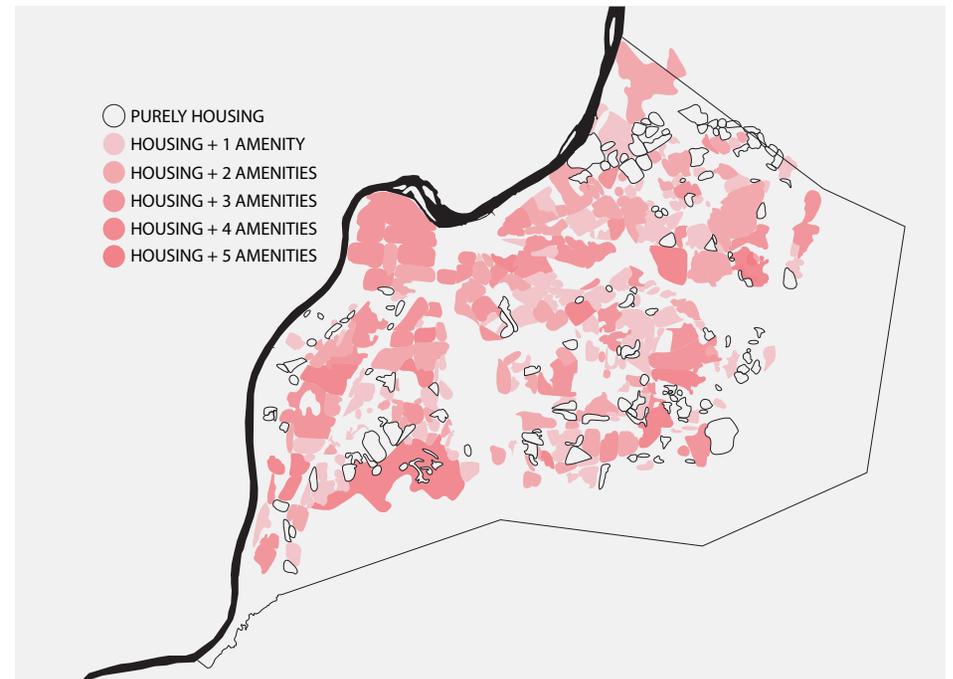
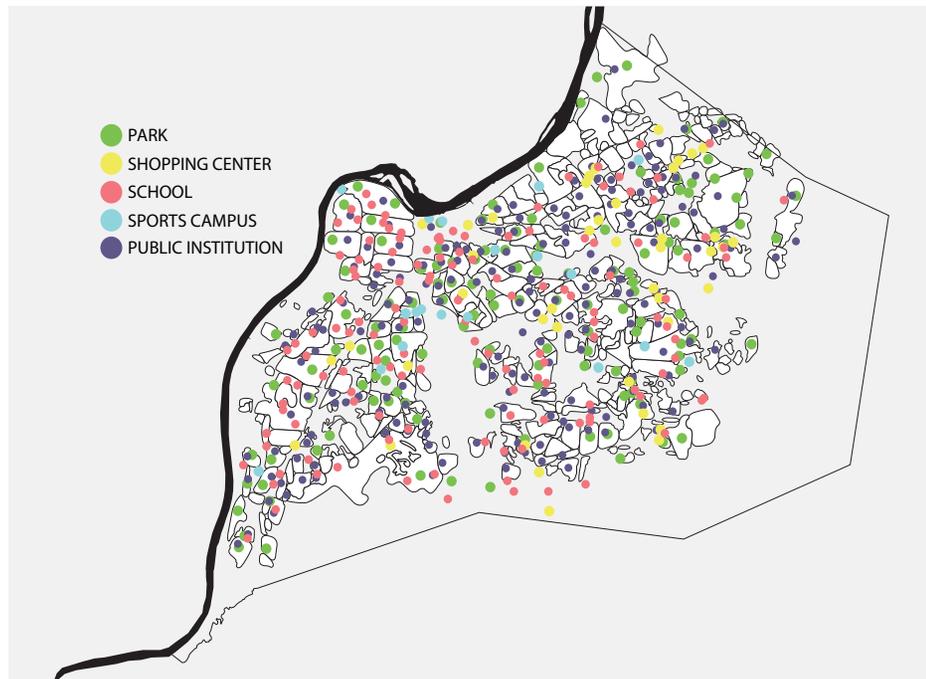
07 Cul-de-sac neighborhoods are masterplanned developments which allow for a great amount of perceived variation while delivering high economic yields on land.

08 The Dead-End Grid is an efficient planning principle. Dead-end streets reduce car speeds in neighborhoods, while long axes provide the maximum number built units on any given land parcel.

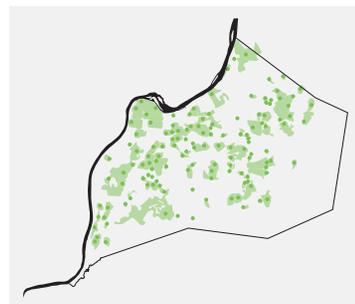
09 Villa neighborhoods are generally wealthy neighborhoods which were developed after the sale of plantation farms. Large parcels of land are divided amongst owners, and trees/ other greenery are used to provide privacy between plots.

NEIGHBORHOOD AMENITIES

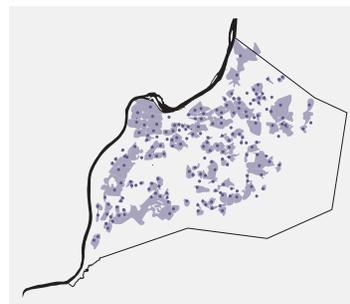
Amenities from shopping, schools, parks, sporting campuses and public institutions geographically define neighborhoods.



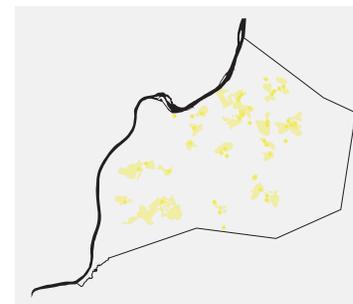
School



Parks



Public Institution



Shopping Center



Sports Campus



What are the effects of uneven distribution of resources and amenities across neighborhoods ?

If the current growth projection holds, Louisville will need to build 60,000 new housing units in 25 years. To ensure quality growth, Louisville can best make use of its already extended resources by looking to new typologies of housing and reuse.

HOUSING

12,000 acres of housing will be needed if Louisville continues with the same residential development.

Based on the KSDC projections, household growth is projected at an additional 60,000 households, with a slightly drop in household density from 2.35 to 2.28 - indicating increasing trend to smaller households. If the dominant development pattern remains as current patterns; the added 60,000 households will demand in the range of 12,000 acres of new development, or roughly 18 square miles. This would be significantly less if future development occurs in existing urban areas.

If the population growth tends towards the higher bounds, land demand could be as high as 30 square miles for the county.



HOUSING

Just as mass-production shaped the last generation of housing, energy, technology, transport, and adaptive re-use will influence today's housing trends.

"Houseboat to Energy Efficient Housing (HBEER), a joint College of Design-Center for Applied Energy Research project led by Michael Speaks in the College of Design and Rodney Andrews in CAER, and significantly involving large numbers of architecture graduate students, will address two important concerns;

low-cost housing and energy efficiency. The project will retool and redirect Kentucky's houseboat manufacturing industry, which has been decimated by the recent economic downturn. Most houseboat manufacturing facilities in the four-county-area around Somerset, Kentucky, have

ceased operation or drastically reduced output, producing dramatic, long-term job loss. The project will design energy-efficient, low-income housing units to be manufactured in Somerset, Kentucky and carry a "Kentucky Proud" label. This initiative will create a manufacturing value chain using Kentucky components

where possible. Manufacturing will occur in redesigned, refitted houseboat factories using local retrained workers. Ultimately, the project will produce energy-efficient housing benefitting Kentuckians manufacturing these units as well as those living in them."
– UK College of Design Website



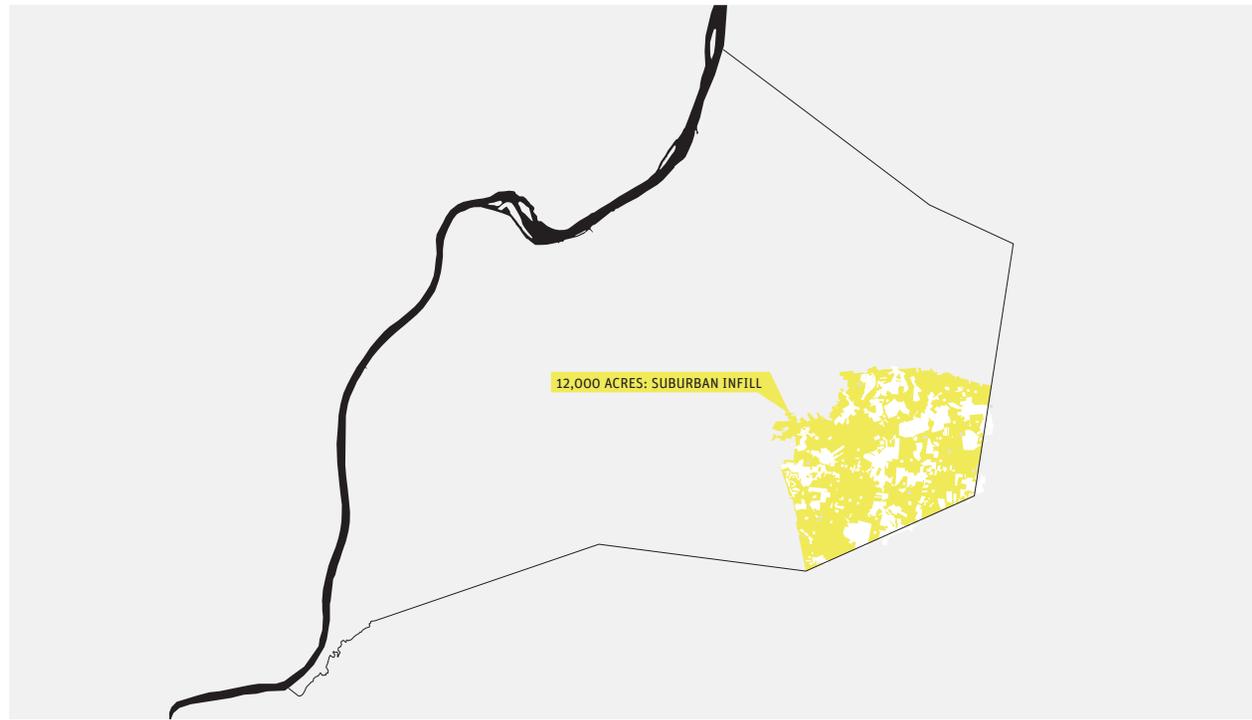


What are strategies for growth in the future: densification or sprawl?

SCENARIOS FOR GROWTH

Current Strategy

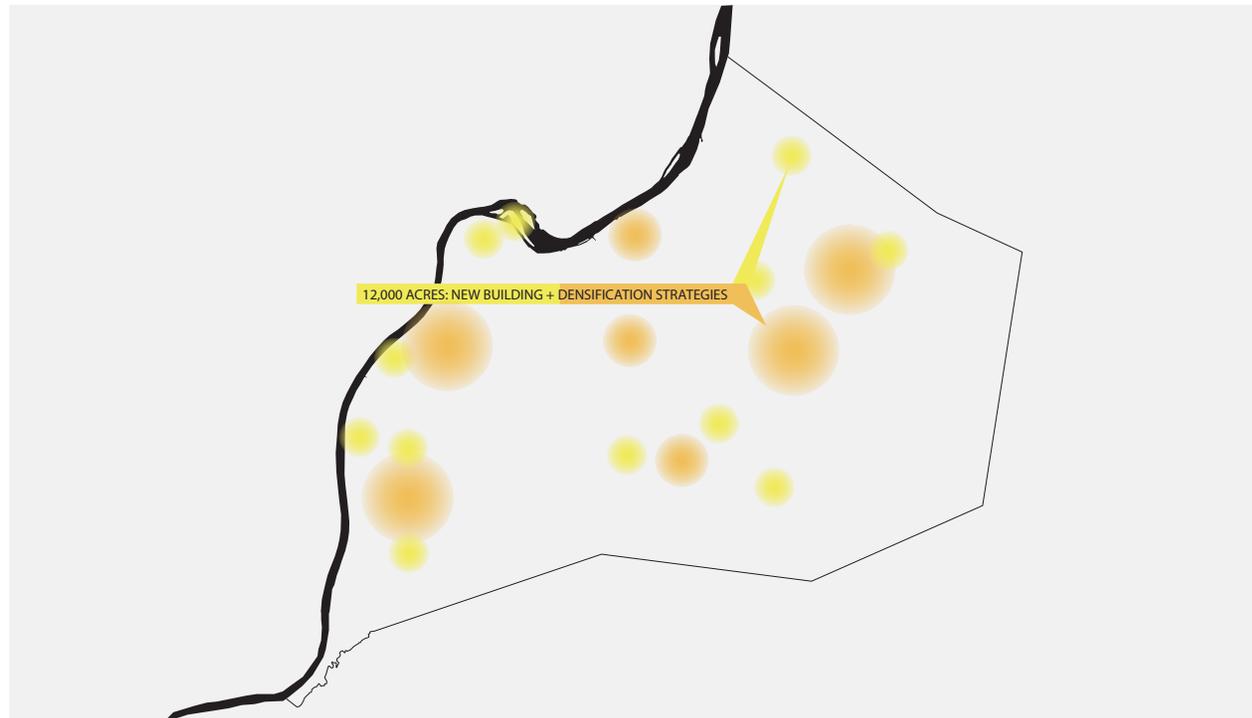
Autonomous housing units with relatively low density planning methods.



SCENARIOS FOR GROWTH

Densification Of Existing Semi-Urban Centers

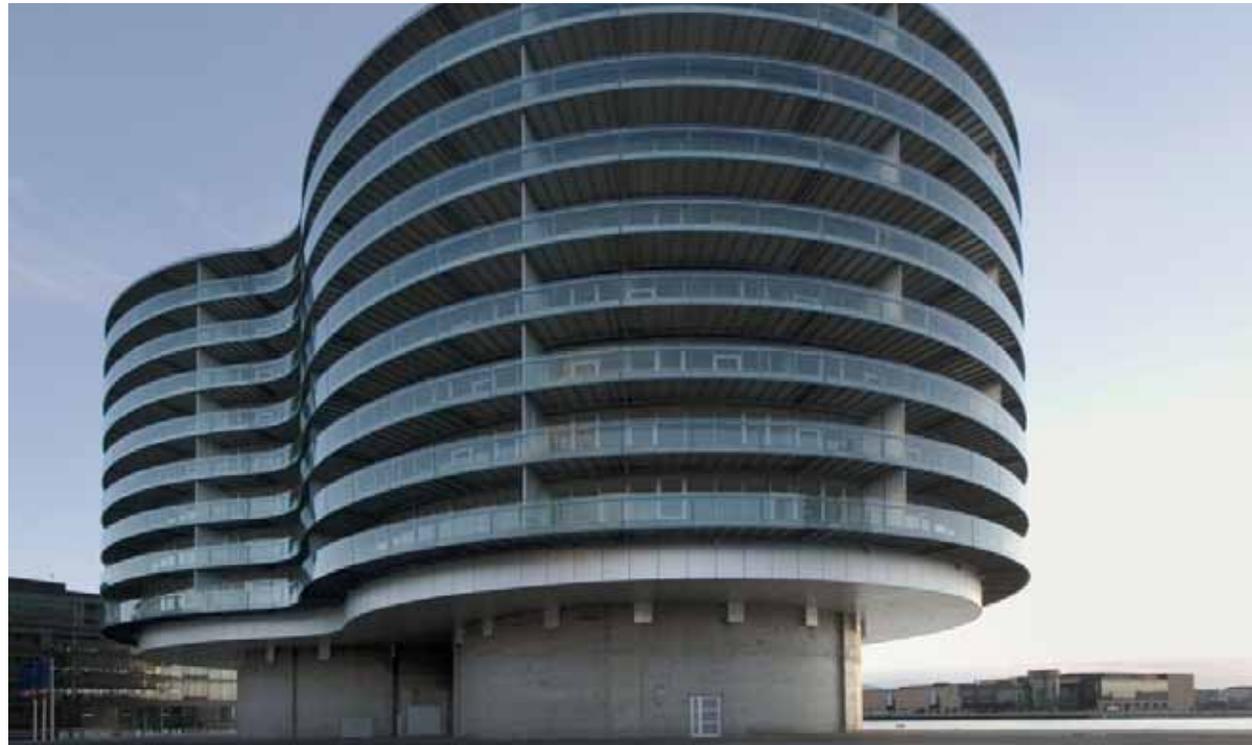
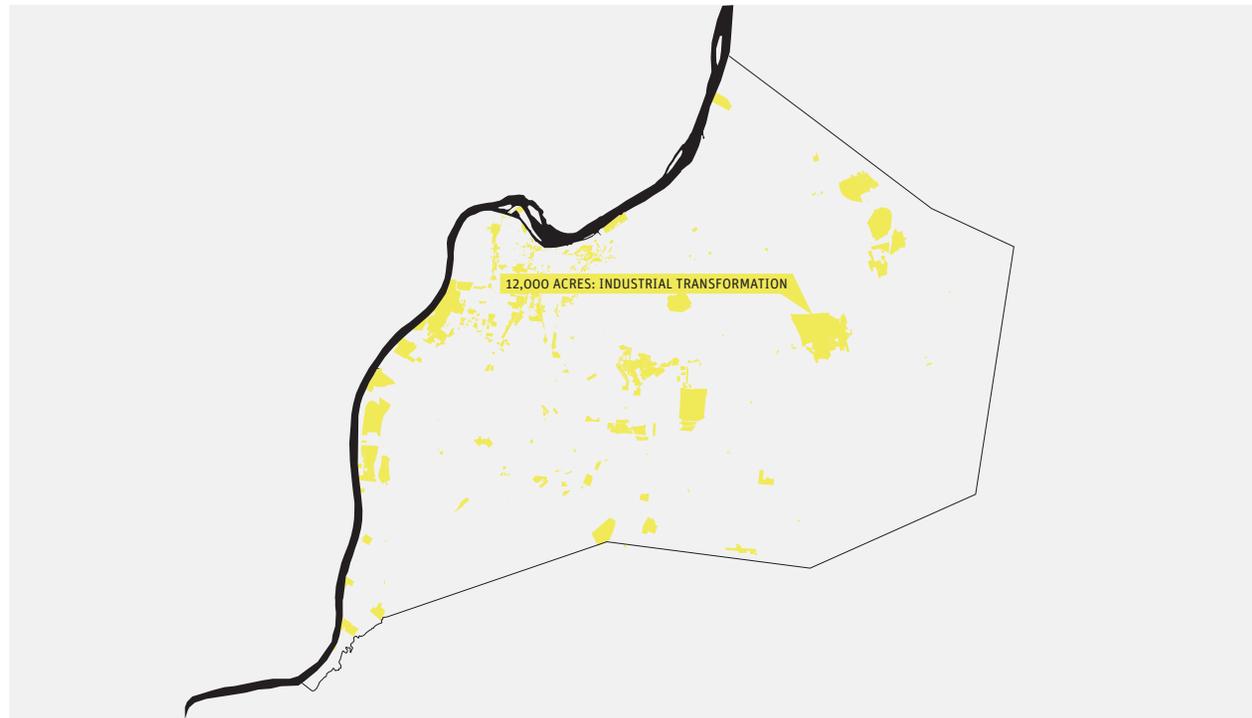
Identify open lots and suburban retrofitting options within the urban service boundary to reduce suburban construction costs and consequences.



SCENARIOS FOR GROWTH

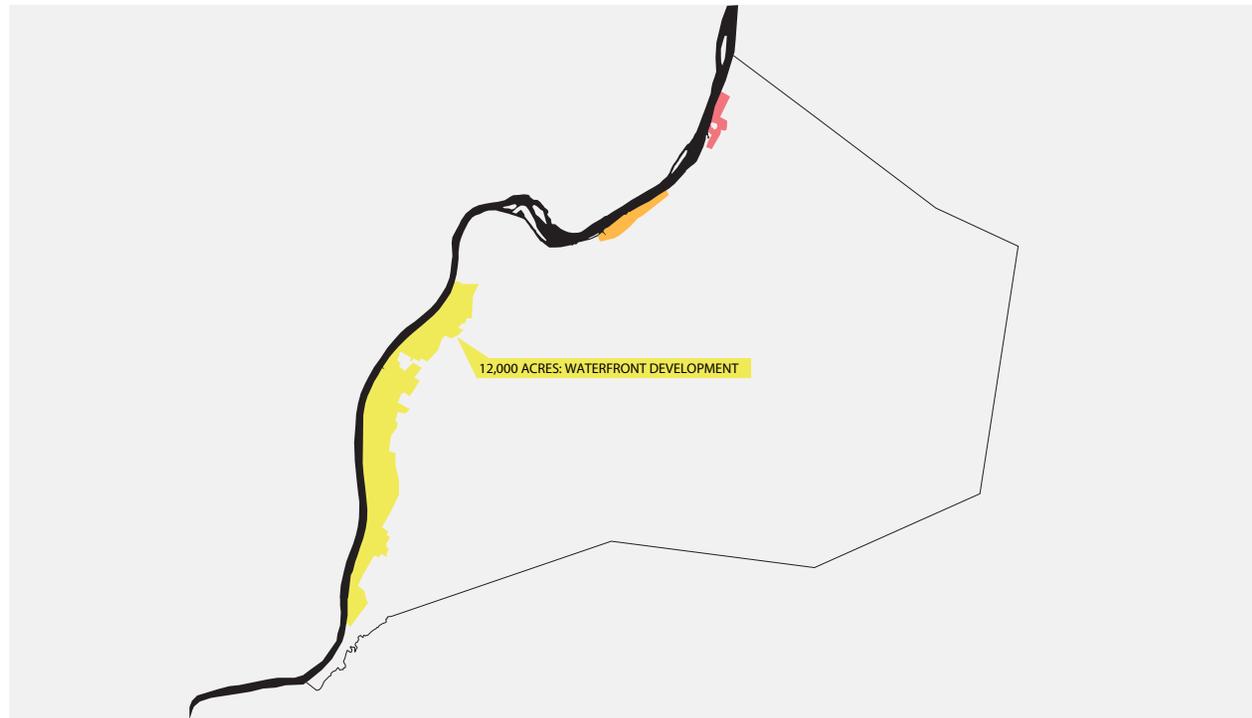
Transformation of Industrial Remnants to Residential units

Identify strategic buildings formerly used for industry which are now standing empty.



SCENARIOS FOR GROWTH Waterfront Development

Develop new residential neighborhoods which have a stronger relationship to the Ohio River and accommodate alternative relationships between living, working, production, resources and access.



SUMMARY

- Louisville is characterized by a patchwork urban fabric, a city of citizens with diverse socio-economic and cultural identities. Overlaps in identity, program, resources and connectivity maximize synergy and potential of this rich fabric.
- Growth corridors are in need of consistent and continuous development to secure their identities and maximize their potential now and in the future.
- Infrastructure, resources and amenities are unevenly distributed across neighborhoods. Re-balancing this is key to unlocking the inherent potential and diversity. .
- Scenario planning for further development for infrastructure and programming should be considered.
- Just as mass-production shaped the last generation of suburban housing, new forms of manufacturing should influence today's housing trends.

04 Focus Areas

- 4.1 Regionalism
- 4.2 Living
- 4.3 **Connectivity**
- 4.4 Creativity
- 4.5 Health
- 4.6 Energy
- 4.7 Identity

CONNECTIVITY

The future city will be powered by people.

The exodus to suburbia has greatly impacted the American city. Contiguous, walkable streets have made way for a car-based fabric. Dispersed business has reduced the CBD, diminishing its position as a solitaire. Commercial offerings shift to accommodate the influx of an increasing tourist based economy.

In re-imagining the city, we have to look beyond traditional notions of urban, suburban, and exurban. Metropolitan Louisville is a patchwork of unique urban conditions, which collectively constitute the identity of the city. Connectivity is not in its conception a physical construct, rather a means to bring people together, physically – people sharing ideas, creativity, and intelligence.. Though to achieve such exchange, the level of disparity in the communities needs to be addressed,

psychological and physical divides will need to be leveled.

As business operates on an ever-expanding network of intelligence, sharing, building, and disseminating intelligence, the city will be built on similar premises. Strategies need to be flexible, tiered, and scalable.

The future city will be powered by people. A step change is needed that starts with the agenda to put people first; pedestrians, cycling and mass transit, in favor of cars. A vision of change starts small and grows into a new paradigm for the city. With a progressive and scalable strategy, change is almost imperceptible, until it becomes the norm.

Mass transportation needs to be reliable, multi-faceted and pervasive to support the necessary

scale and expanse of the city. The future of the polycentric city is fast, connected, adaptive, and heterogeneous.

Moreover, public open space in the city represents the physical manifestation of flow and friction. More often than not though, these spaces are representations of 'green', whether ordered nature or nature copied, passive relationships for the status quo. Louisville has quite possibly the most inspiring park system in the United States. The new 21st Century Parks adds the next iteration of public space for the city. Often we only see the value of these spaces in hindsight; however, in the future we will have to actively pursue and plan them.

Louisville has the most inspiring park system in the United States, with 21st Century Parks as the next generation of the Olmsted legacy. Parks are a basic amenity that should be available everywhere, serving as a network of connected spaces and programs throughout the city.

WALKABILITY

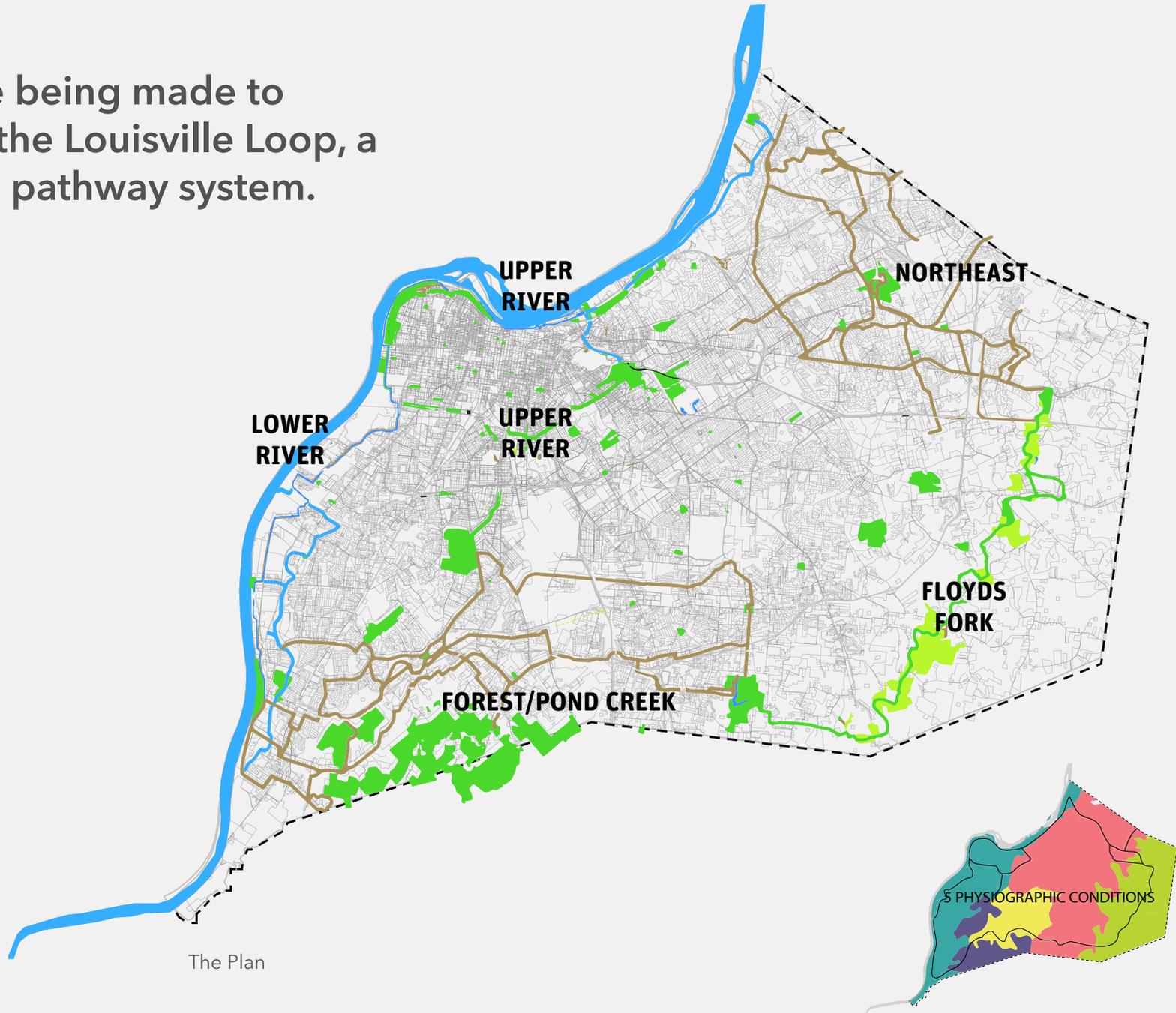
Louisville's physical infrastructure is lacking in connectivity. The city ranks low in walkability when compared to the 50 largest metropolitan areas in the United States.

1	New York-N. New Jersey-Long Island, NY-NJ-PA	85.3	26	San Jose-Sunnyvale-Santa Clara, CA	54.5
2	San Francisco-Oakland-Fremont, CA	84.9	27	Atlanta-Sandy Springs-Marietta, GA	52.9
3	Boston-Cambridge-Quincy, MA-NH	79.2	28	Richmond, VA	51.1
4	Chicago-Naperville-Joliet, IL-IN-WI	74.3	29	Tampa-St. Petersburg-Clearwater, FL	51.1
5	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	74.1	30	Detroit-Warren-Livonia, MI	49.9
6	Seattle-Tacoma-Bellevue, WA	73.7	31	Houston-Sugar Land-Baytown, TX	49.8
7	Washington-Arlington-Alexandria, DC-VA-MD-WV	73.0	32	Sacramento-Arden-Arcade-Roseville, CA	49.3
8	Hartford-West Hartford-East Hartford, CT	72.7	33	Las Vegas-Paradise, NV	49.2
9	Providence-New Bedford-Fall River, RI-MA	72.7	34	Columbus, OH	47.4
10	Miami-Fort Lauderdale-Pompano Beach, FL	72.5	35	Orlando-Kissimmee, FL	47.1
11	Minneapolis-St. Paul-Bloomington, MN-WI	69.3	36	Dallas-Fort Worth-Arlington, TX	46.9
12	Portland-Vancouver-Beaverton, OR-WA	66.3	37	Austin-Round Rock, TX	46.7
13	Los Angeles-Long Beach-Santa Ana, CA	65.9	38	Riverside-San Bernardino-Ontario, CA	46.7
14	Pittsburgh, PA	64.1	39	Phoenix-Mesa-Scottsdale, AZ	45.4
15	Baltimore-Towson, MD	63.9	40	Raleigh-Cary, NC	41.4
16	Rochester, NY	63.1	41	San Antonio, TX	40.8
17	St. Louis, MO-IL	61.4	42	Virginia Beach-Norfolk-Newport News, VA-NC	40.8
18	Milwaukee-Waukesha-West Allis, WI	60.6	43	Birmingham-Hoover, AL	40.0
19	Denver-Aurora-Broomfield, CO	60.4	44	Louisville-Jefferson County, KY-IN	39.7
20	Buffalo-Niagara Falls, NY	60.1	45	Memphis, TN-MS-AR	39.4
21	Cincinnati-Middletown, OH-KY-IN	58.9	46	Kansas City, MO-KS	38.1
22	Cleveland-Elyria-Mentor, OH	58.3	47	Indianapolis-Carmel, IN	37.4
23	Salt Lake City, UT	57.6	48	Nashville-Davidson-Murfreesboro-Franklin, TN	36.4
24	San Diego-Carlsbad-San Marcos, CA	55.7	49	Oklahoma City, OK	35.6
25	New Orleans-Metairie-Kenner, LA	55.6	50	Charlotte-Gastonia-Concord, NC-SC	34.3
			51	Jacksonville, FL	32.6

City Vitals 2.0 by CEO's for Cities Report: www.ceosforcities.org
 Copyrite 2012

LOUISVILLE LOOP

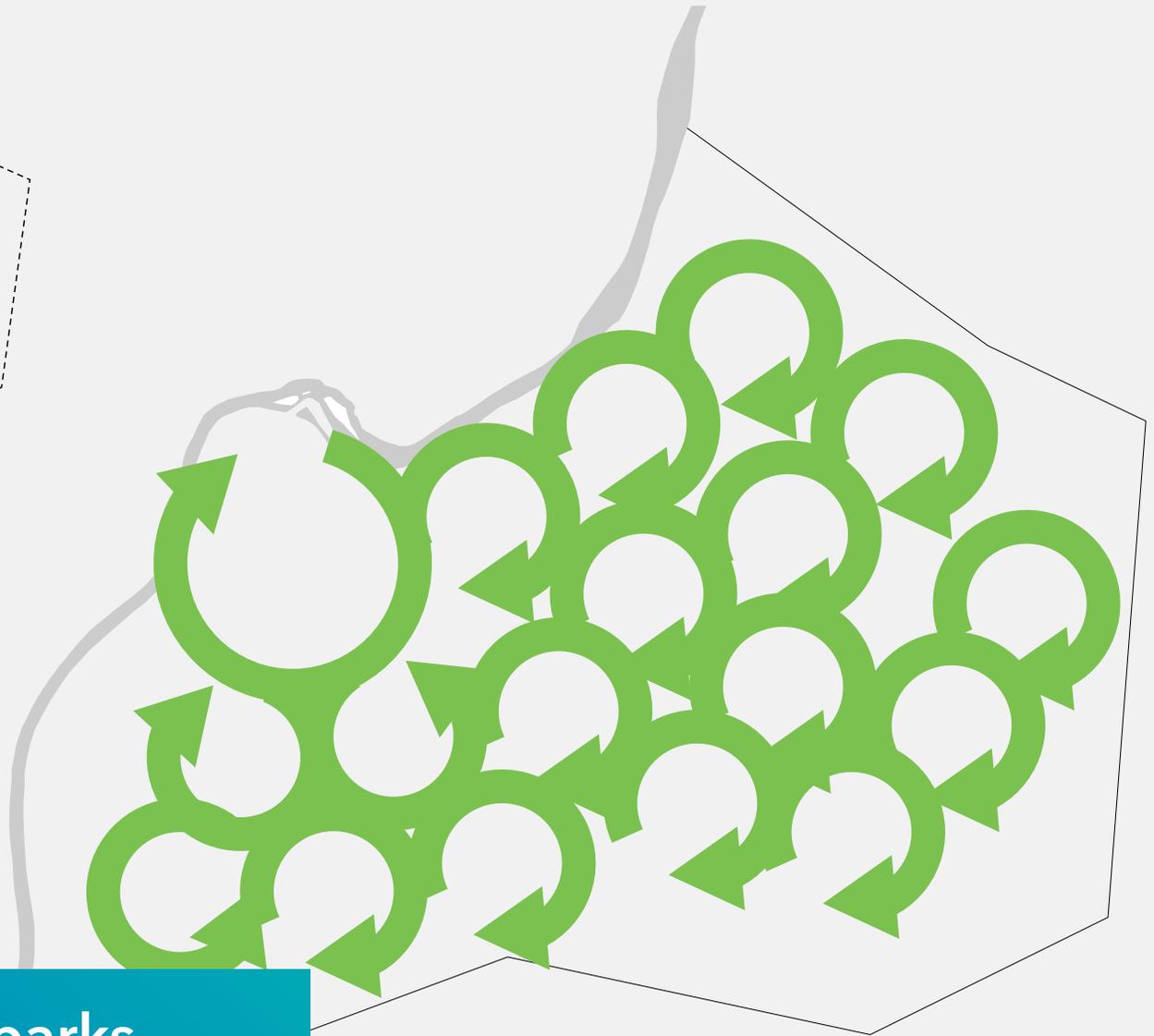
Plans are being made to connect the Louisville Loop, a 130 mile pathway system.



The Plan



The outer Loop is about 70 miles

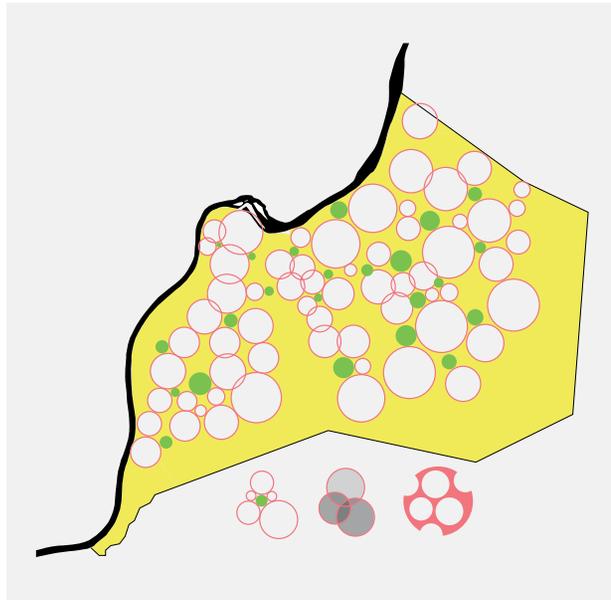


Could a network of parks and pathways more fully serve Louisville's neighborhoods?

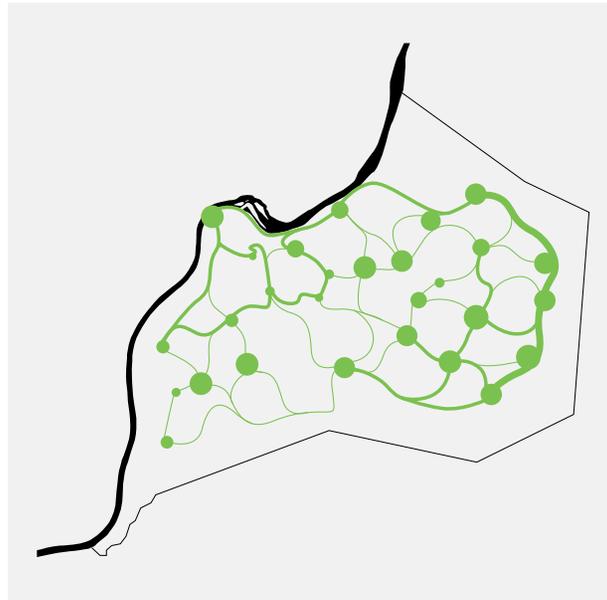
An expanded network of parkways would make recreation more accessible for neighbourhoods.

NETWORK PARKS

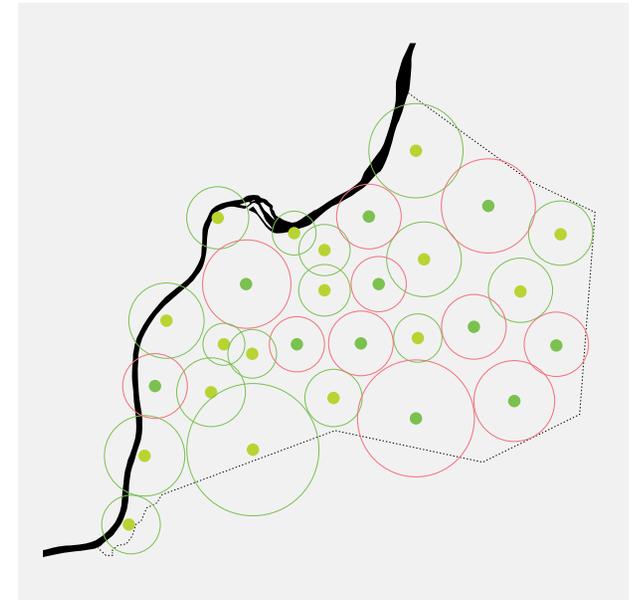
Other organizational structures can be considered to increase circulation and access.



Are parks the connective tissue between neighborhoods?



Are parks connected by parkways?



Are neighborhoods park-centric?

The Ohio River defines the history of Louisville industrially and culturally. Waterfront Park is the first step in reclaiming this vital space. Its potential can irrigate the length of the river and make its resources available to all Louisvillians.

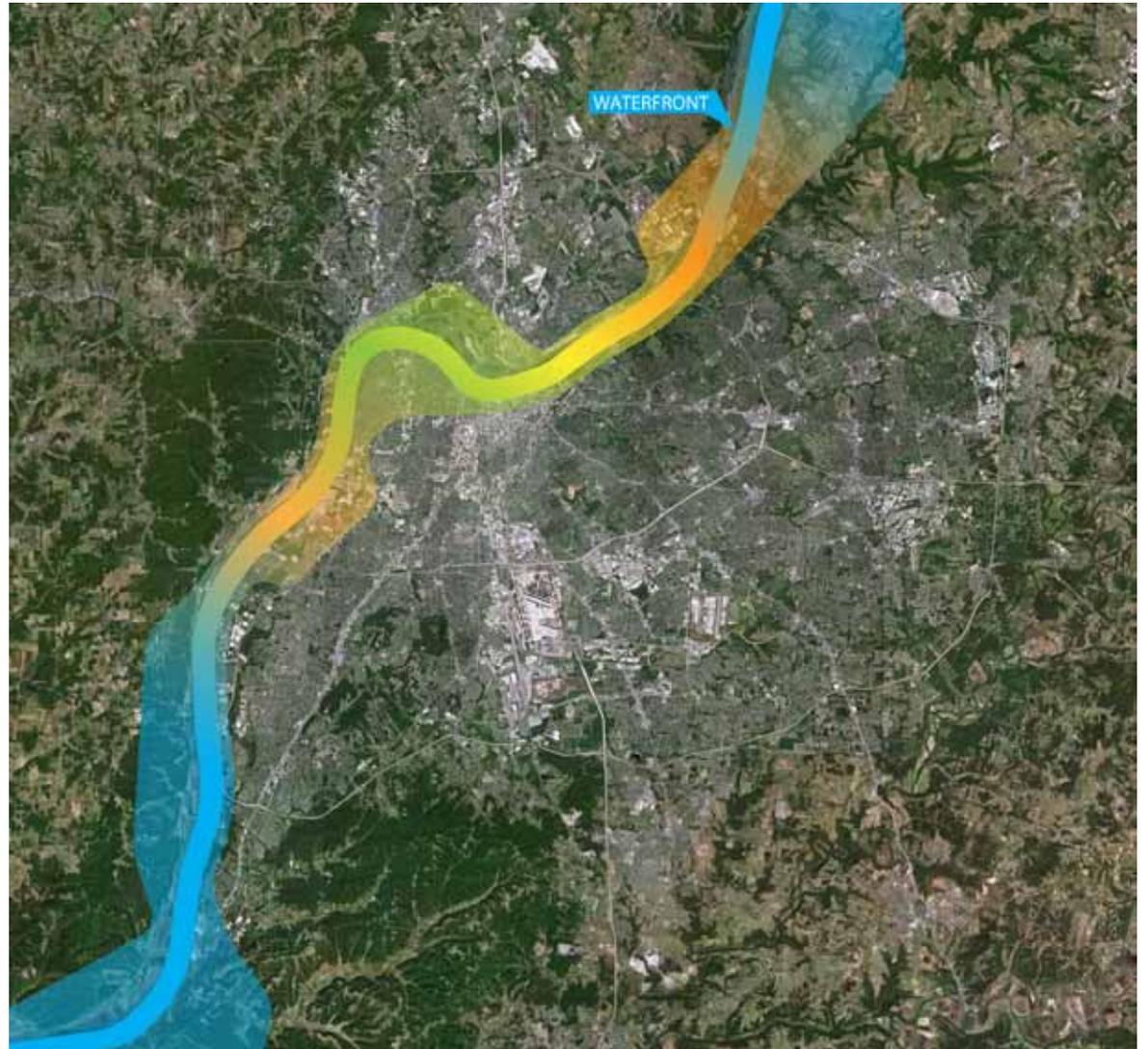
WATERFRONT POTENTIAL

Louisville has the potential to exploit its waterfront more fully.

Louisville currently has two working ports, one in Rubbertown, the other on the North-East. Efforts have been made recently to reconnect the city center to the waterfront for recreational purposes.

Waterfront industrial sites are by necessity isolated from the urban fabric they serve, operating on a different scale and flow, yet often directly adjacent to the very core of the city. Yet these sites are incredibly unique as they are hyper-connected to all types of infrastructure, and to a greater, remote context. Within these challenges also lies unique opportunity. How do we rethink the infrastructure to optimize integration; reconnecting the waterfront deep into the urban fabric and public life of the city?

This isolation and hyperconnectivity offers a new freedom in its relationship to the city. The unique scale, raw beauty, invisibility (out of sight, out of mind) and relationships to an artificial landscape is a dynamic stage for future growth, complementary to the city. By exploiting its freedoms, a new, strong, fresh identity for Louisville can be discovered.



OSLO WATERFRONT

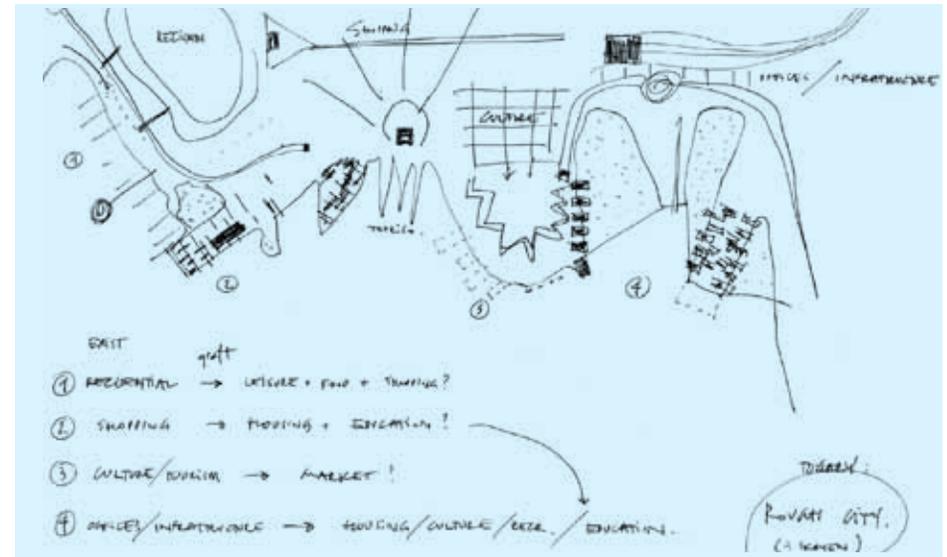
Oslo began to look holistically at its waterfront in 2000.

In 2000, Space Group was commissioned to look at the entire waterfront of Oslo and project potential scenarios. The city had developed a complicated relationship to the water's edge in its recent history. This initiative opened discussions between the city, the harbor managers, the tourism departments, the transportation department and housing developers which has resulted in 11 waterfront projects currently under development.

The first catalytic project was the Opera, completed in 2007. The Deichmanske Library and National Museum are currently under construction. Aker Brygge, the 80's wharf conversion, is currently undergoing a major transformation from shopping center to city neighborhood.



Space Group Vision for Oslo's Waterfront, 2000



Space Group's sketch for programming the waterfront

OSLO WATERFRONT

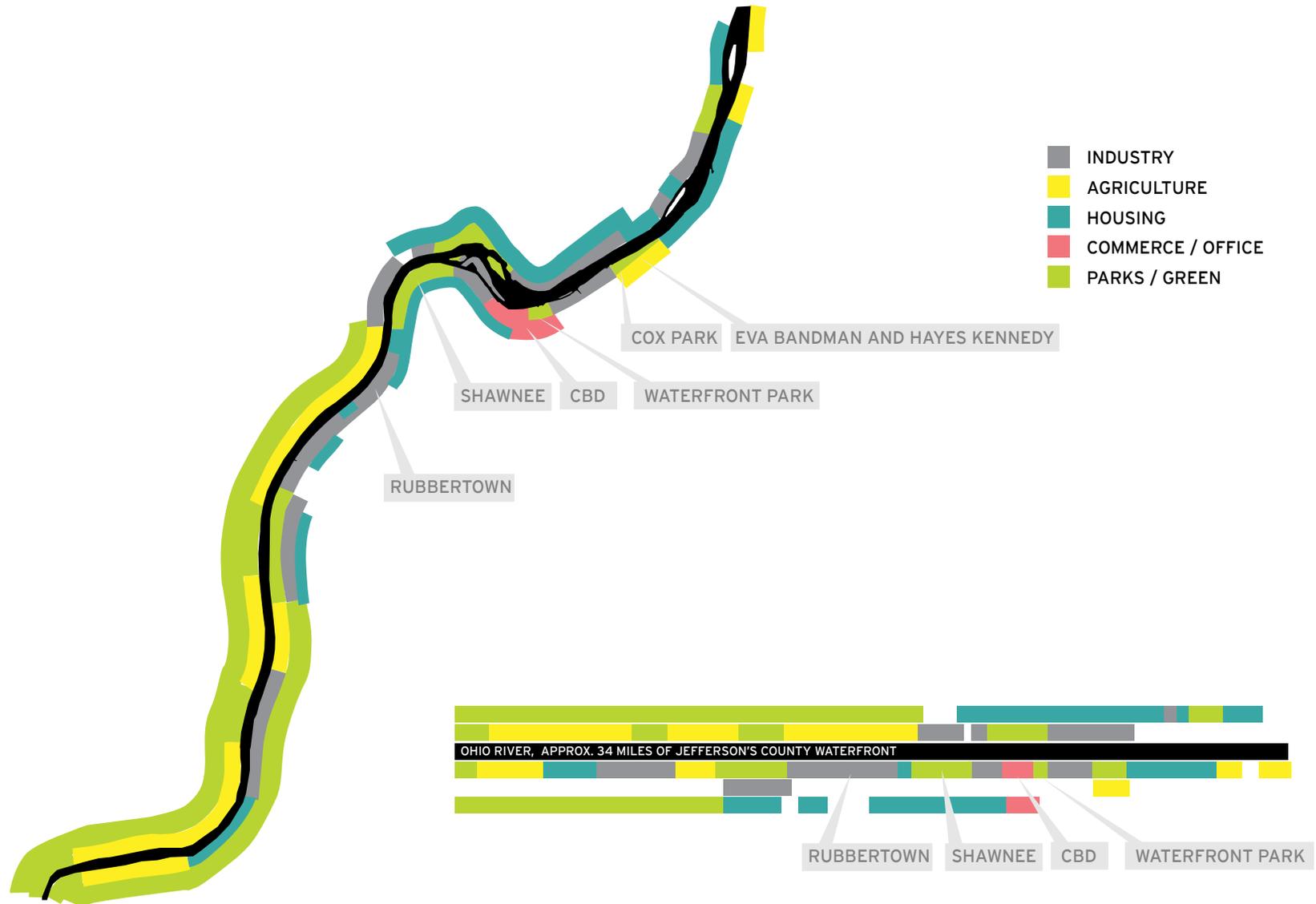




How can we build on the success of Waterfront Park and exploit the potential of the Ohio River?

PROPOSAL: WATERFRONT STRATEGY

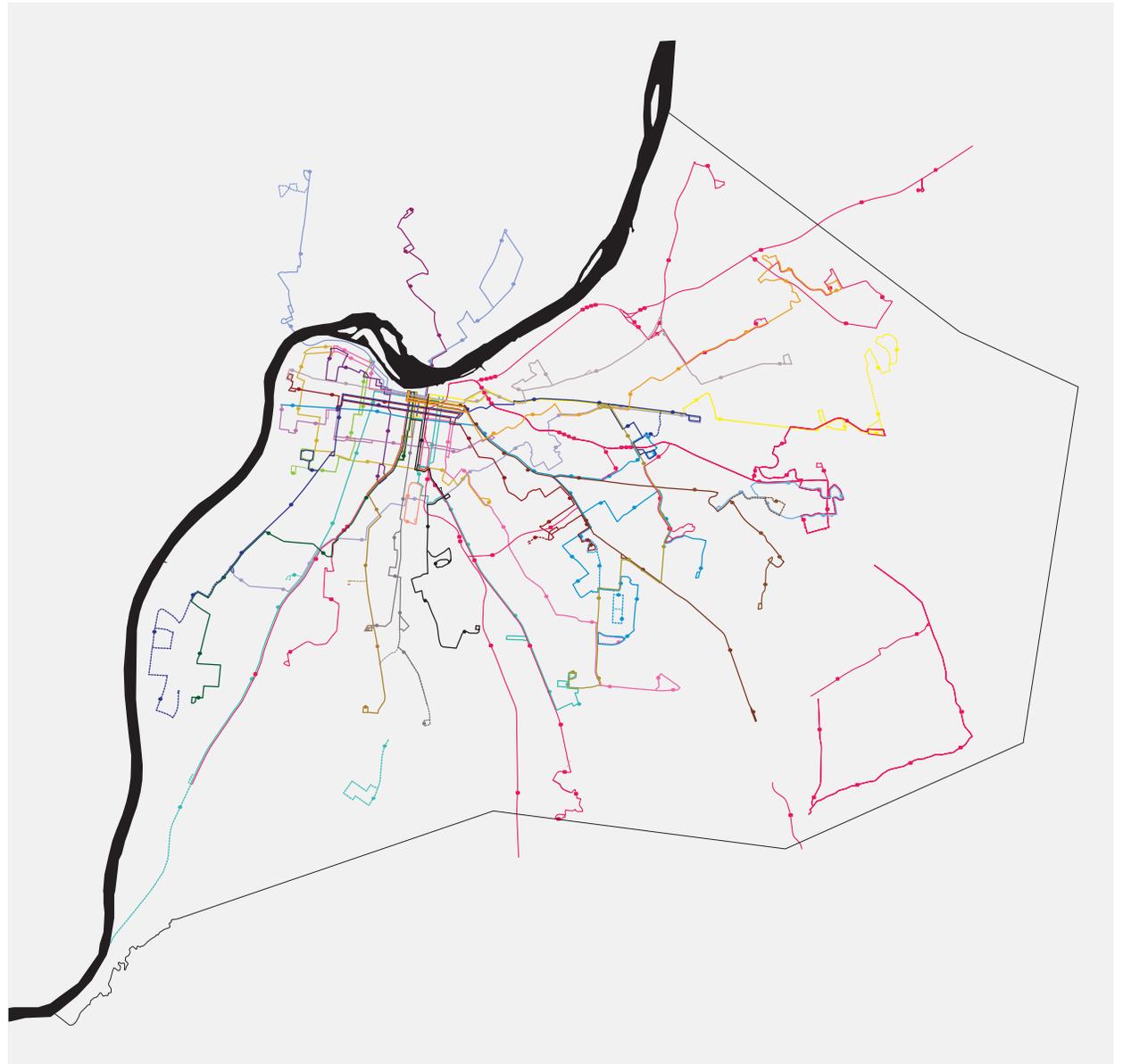
Louisville should re-connect to the waterfront through many different programmatic functions.



Mass transportation needs to be reliable, multi-faceted and pervasive to support the necessary scale and expanse of the city. The agenda: Put people first; pedestrians, cycling and mass transit before cars. This vision and change can start small and grow into a new paradigm for the city. With a progressive and scalable strategy, change is almost imperceptible, until it becomes the norm.

PUBLIC TRANSPORTATION TODAY

Louisville's public transportation lacks options and does not service large portions of the city.



PUBLIC TRANSPORTATION

The most innovative public transportation systems are flexible and allow for a variety of solutions.

BRT: Average capital cost per mile = 13.5 million dollars

Light Rail: Average capital cost per mile = 34.8 million dollars

Public transportation has been proven to improve health, alleviate transportation in cities

and reduce pollution. Multiple options exist for implementation.

High capacity transportation system (BRT Bus Rapid Transit), is built with minimal infrastructure in a short period of time. The system consists of dedicated corridors for articulated buses; the stations are connected to a new bicycle network.

BRT has been implemented in cities such as Boston, L.A., Mexico, and Buenos Aires

Battery powered folding cars developed by M.I.T for Bilbao operate under a car-sharing model, managed by the city government. The cars have a 75 mile range, and are purely electric.

Bordeaux, France



Light Rail System

Bogota, Colombia

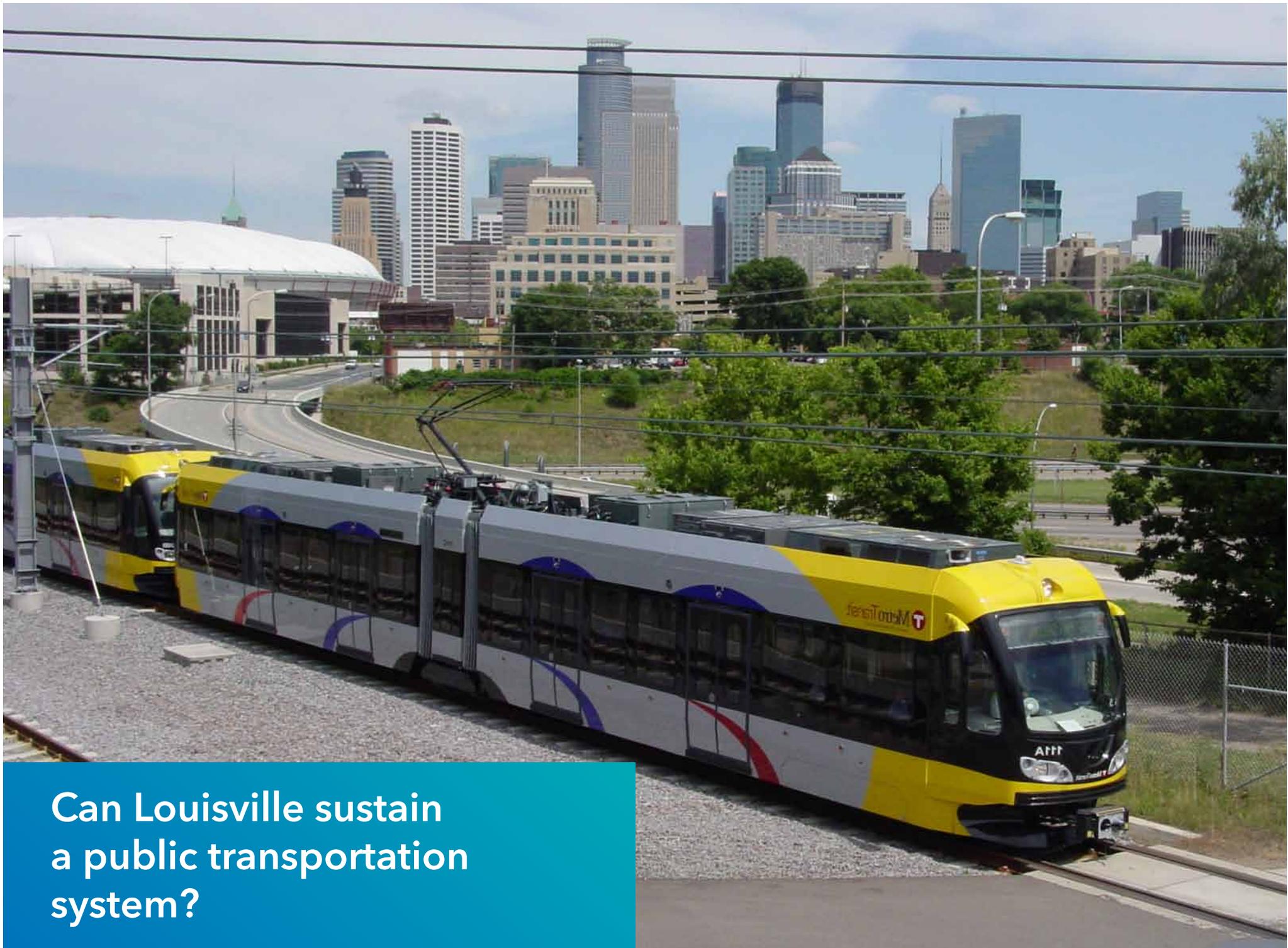


Transmilenio Dedicated Lane Bus System,

Bilbao, Spain



Hiriko, M.I.T.'s Electric Car System,



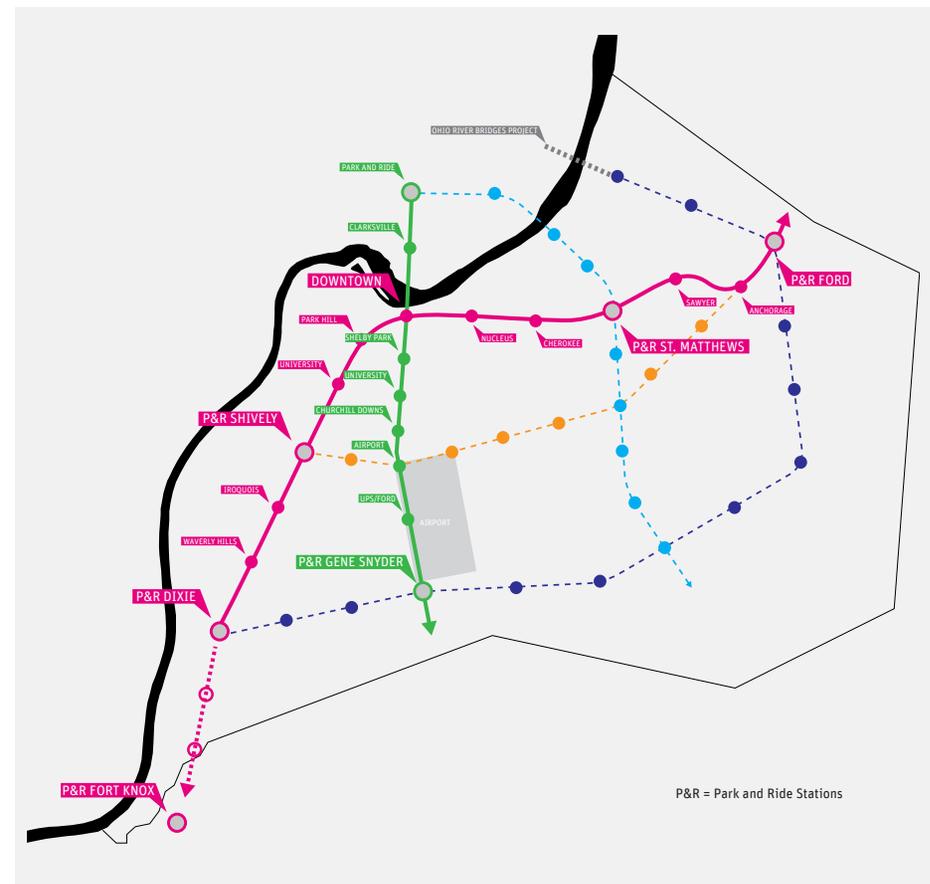
Can Louisville sustain a public transportation system?

PROPOSAL: PUBLIC TRANSPORTATION

Louisville will need to implement a mass transportation network as its population swells.

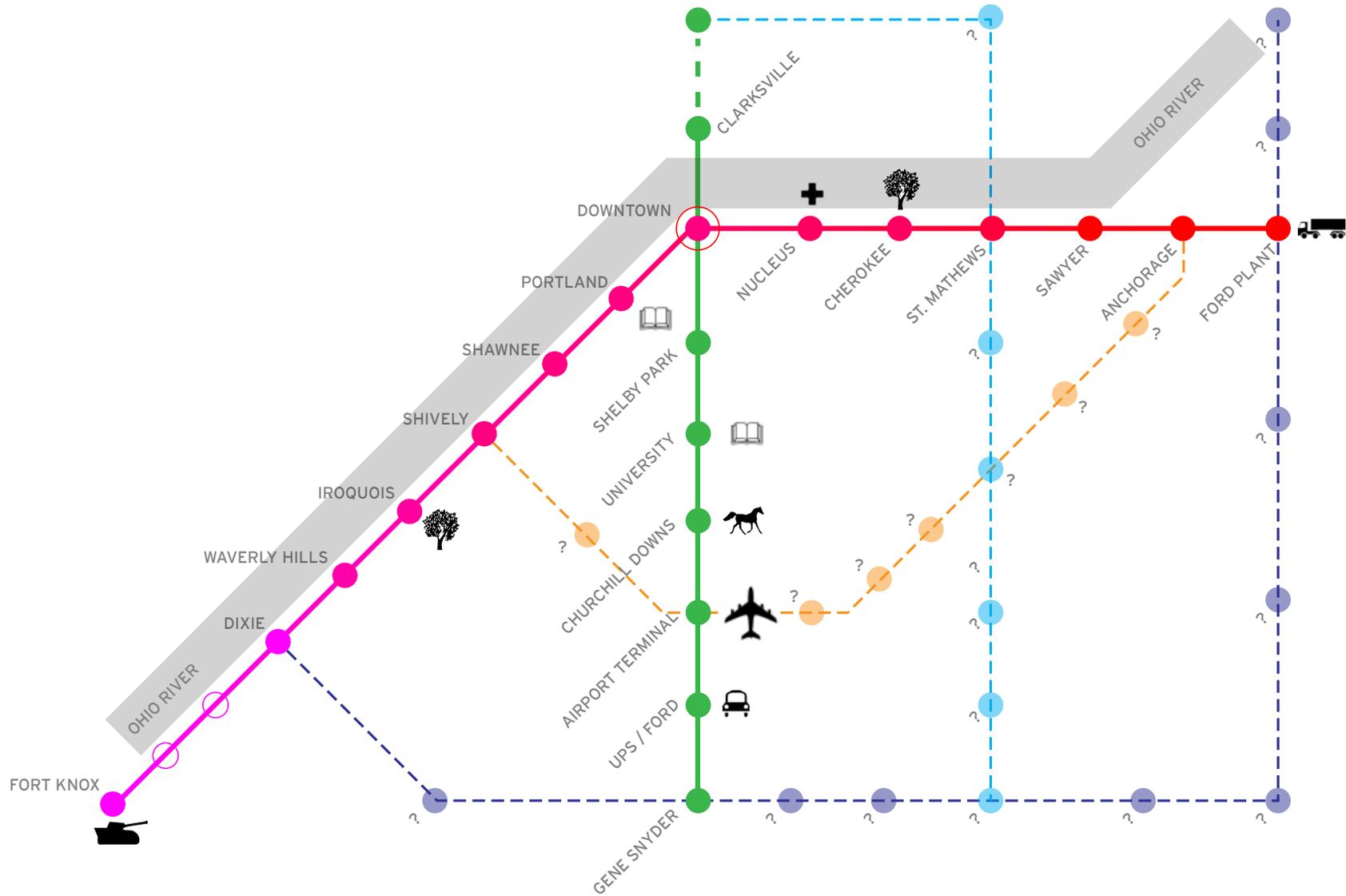


A north south axis of public transport has already been proposed by the The South Central Corridor Light Rail Project (2004).



The lightrail network could be expanded covering major nodes in town.

PROPOSAL: PUBLIC TRANSPORTATION



BICYCLE CONNECTIONS

If bikable connections were made clearer, it would be easier to promote bicycling as an alternative means of transportation.



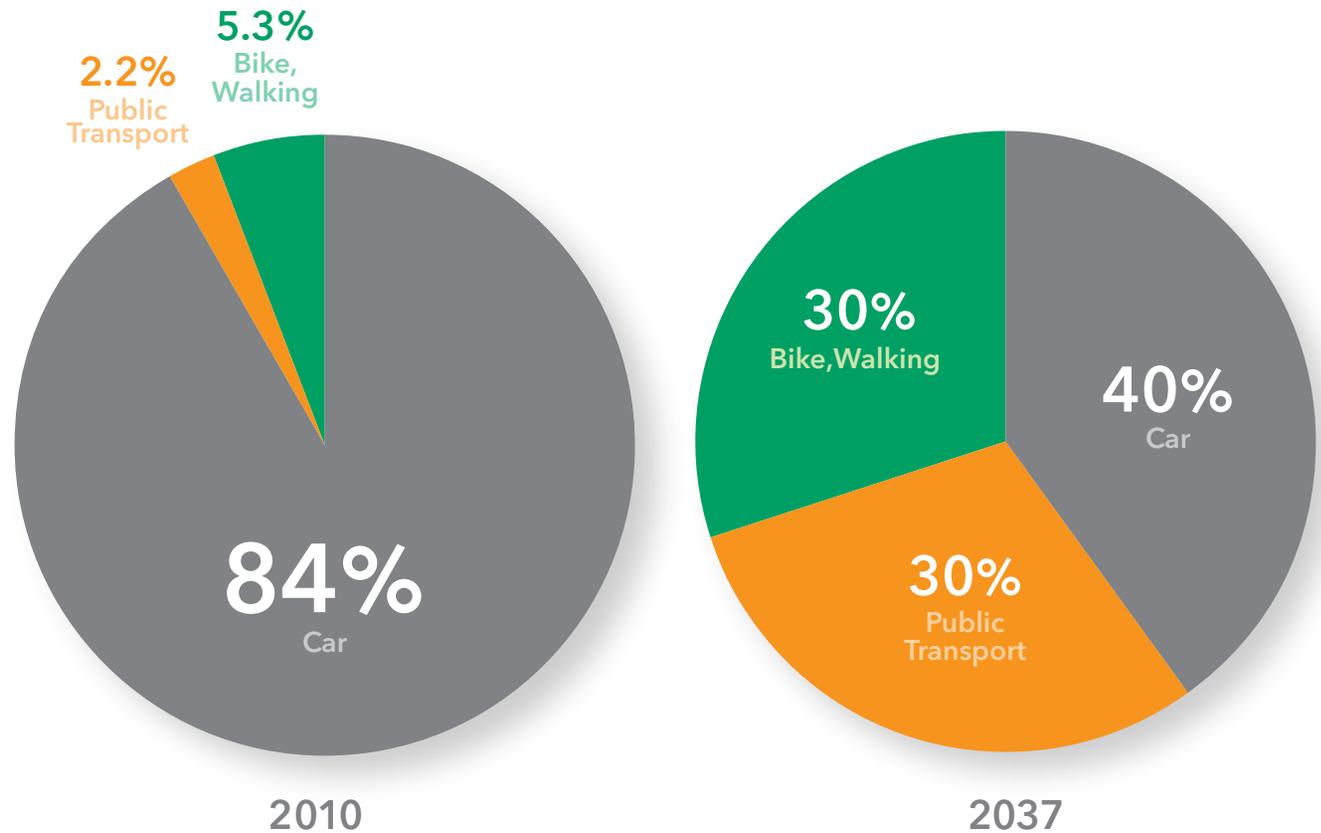


Can Louisville become a bike-centric city?

PROPOSAL: TRANSPORTATION GOALS

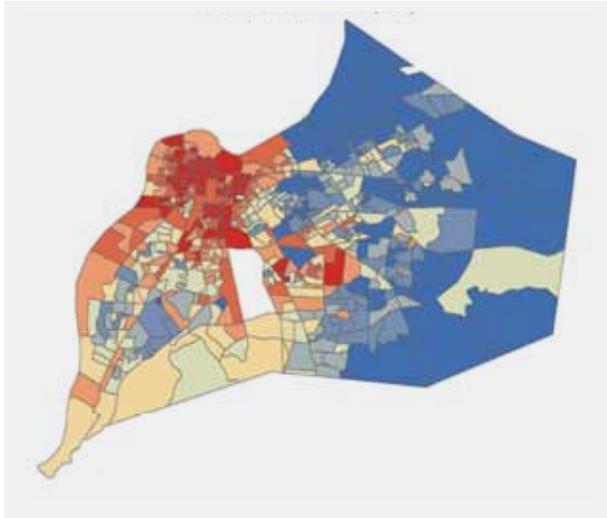
Strategies:

- Extensive network of pedestrian routes
- Extensive and attractive network of bike routes, separated from busiest streets
- Bike rentals/city-bikes/freewheelers
- Development of public transport network with broader site coverage
- Simple route charts with high frequency and stringent departures
- Improved conditions for inter-modal changes
- Establishment of park and ride at city borders

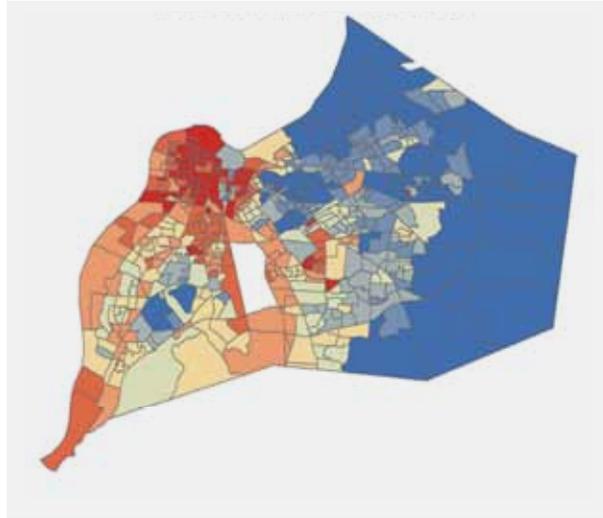


To imagine the city as a network, it is necessary to break down infrastructural and psychological divides. To fully tackle the complexities of the west side, it is necessary to find in roads that involve the communities, integrate diverse cultural values and level disparities to have a more unified approach to face challenges.

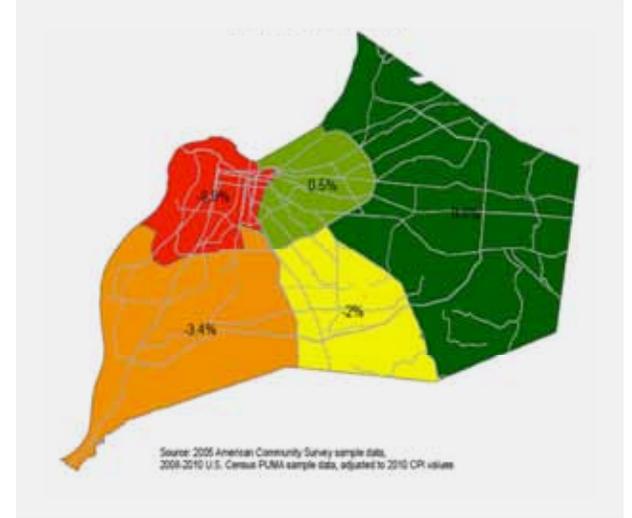
WEST LOUISVILLE CHALLENGE



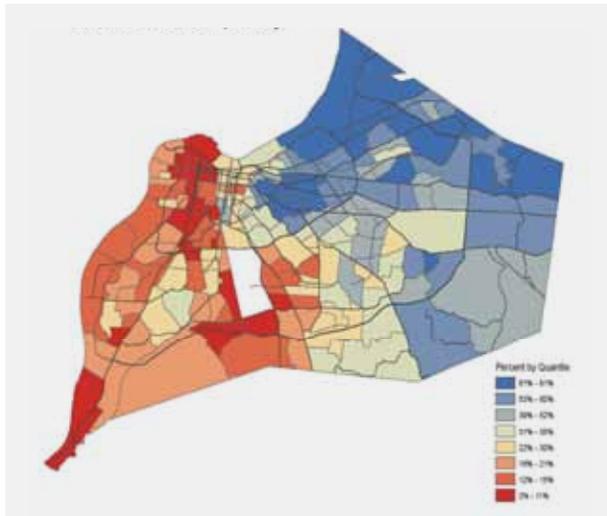
Household Income



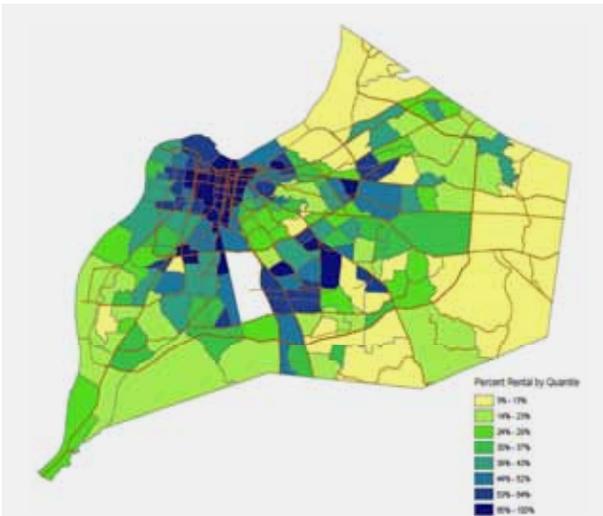
Home Value



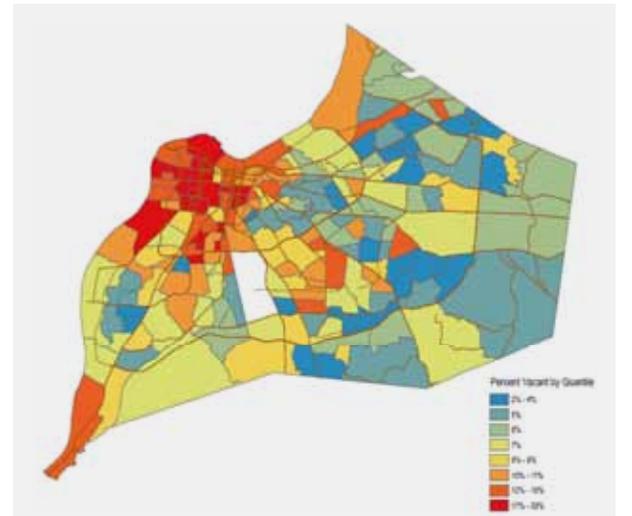
Change In Value



Education



Rental Occupancy



Vacant Housing

Research from John I. Trawick, AICP, Center For Neighborhoods

FOOD HUB

Food Hubs can provide better access to food, employment, education and connections to transportation networks.



Urban farming and school farms: In Oslo, schools and kindergartens use urban farms as part of their daily activities. Kids learn about producing food, ecology loops and healthy eating. The food produced in the urban farms that is not consumed is usually sold or shared by the community.



Food + Culture: from a distribution center to a Food Hub. Art installations, community programs, festivals and concerts linked to the local food culture. A Food Hub is more than an economic activity; it is also a public health and social project.





What is the potential of expanding the food hub in Portland?

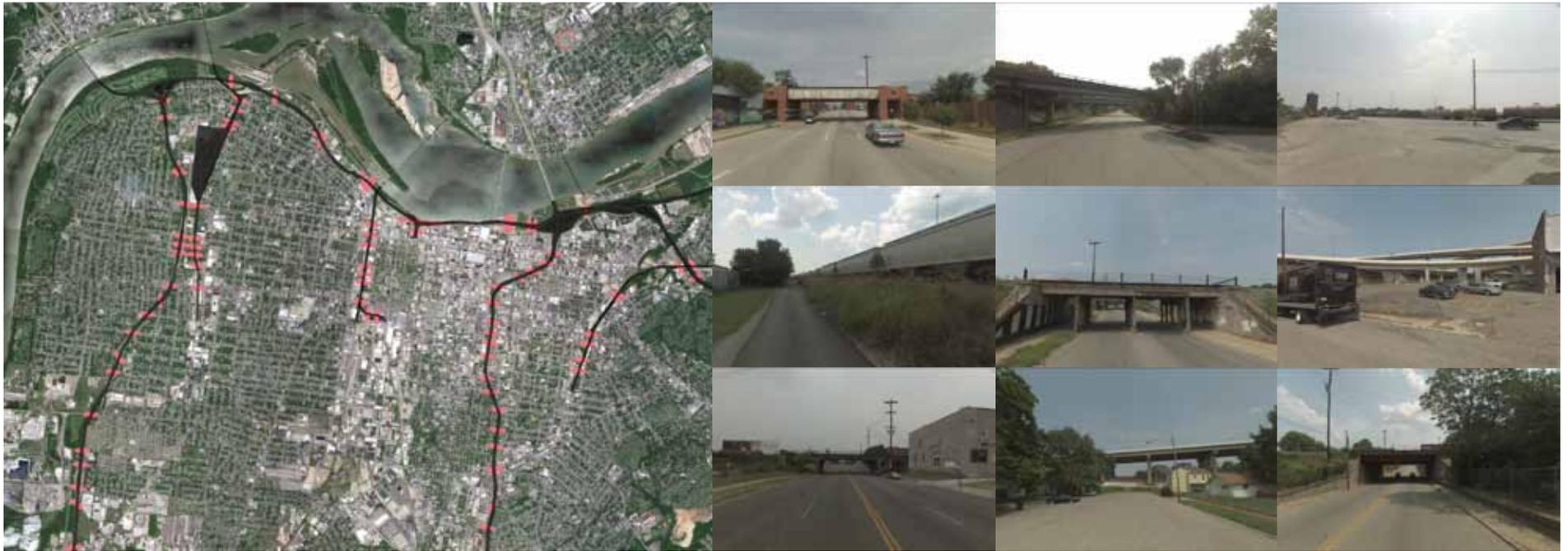
PROPOSAL: EXPANDED LOU FOOD HUB

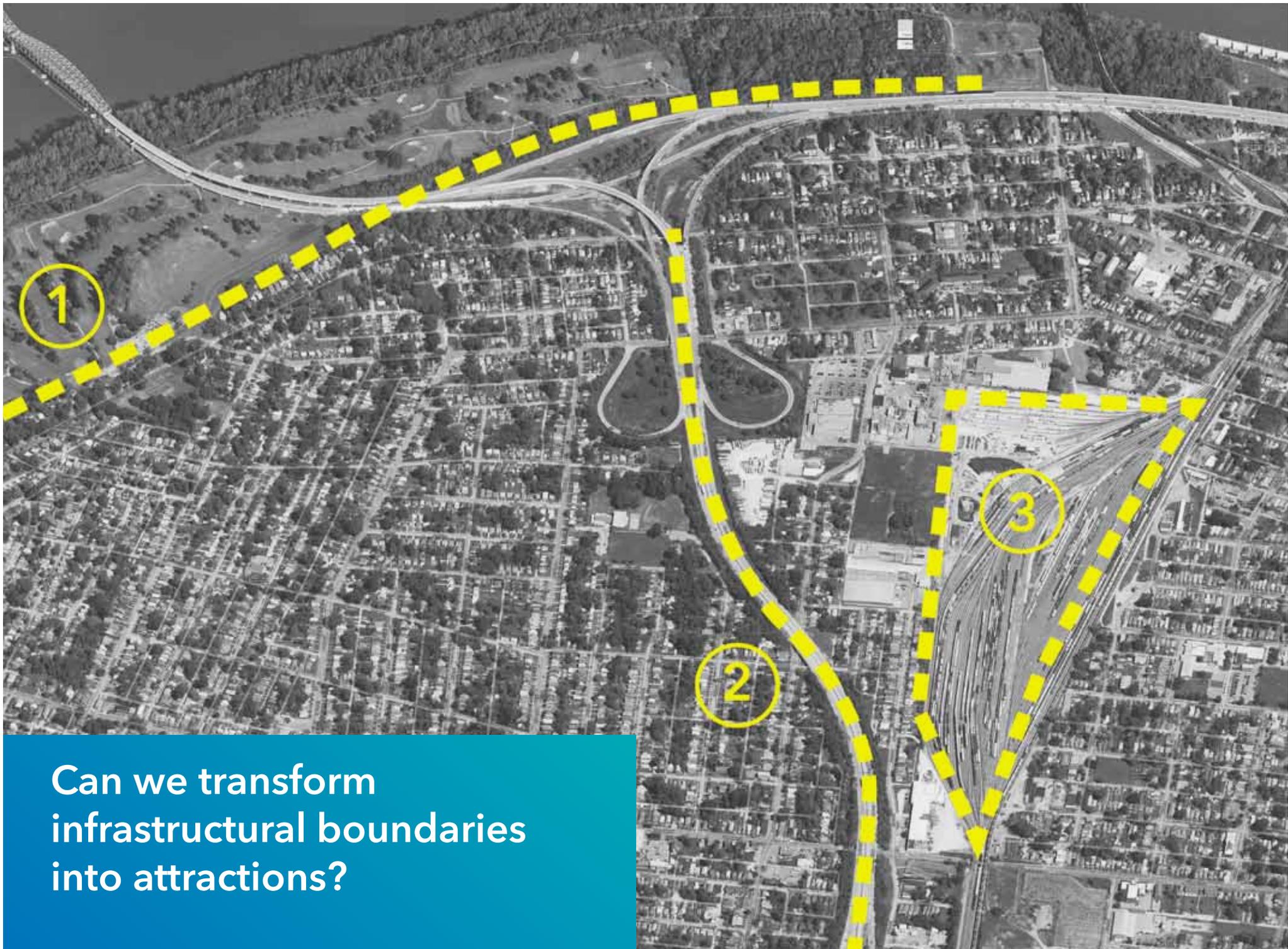


The physical remnants of infrastructure create hard edges and boundaries, resulting in isolated, under served, and bifurcated neighborhoods. How can we unify and increase the potential for interaction and fluidity across the city as a whole?

INFRASTRUCTURAL BARRIERS

Infrastructure in Louisville creates boundaries.





Can we transform
infrastructural boundaries
into attractions?

INFRASTRUCTURAL TRANSFORMATION

Soften and program edge conditions.



Large portions of the Dutch landscape are made out of heavy hydro infrastructure (flood walls, dikes). They are integrated into the recreational life as places to skate in the winter, water recreation activities in the summer, picnics and beaches, hiking and biking.



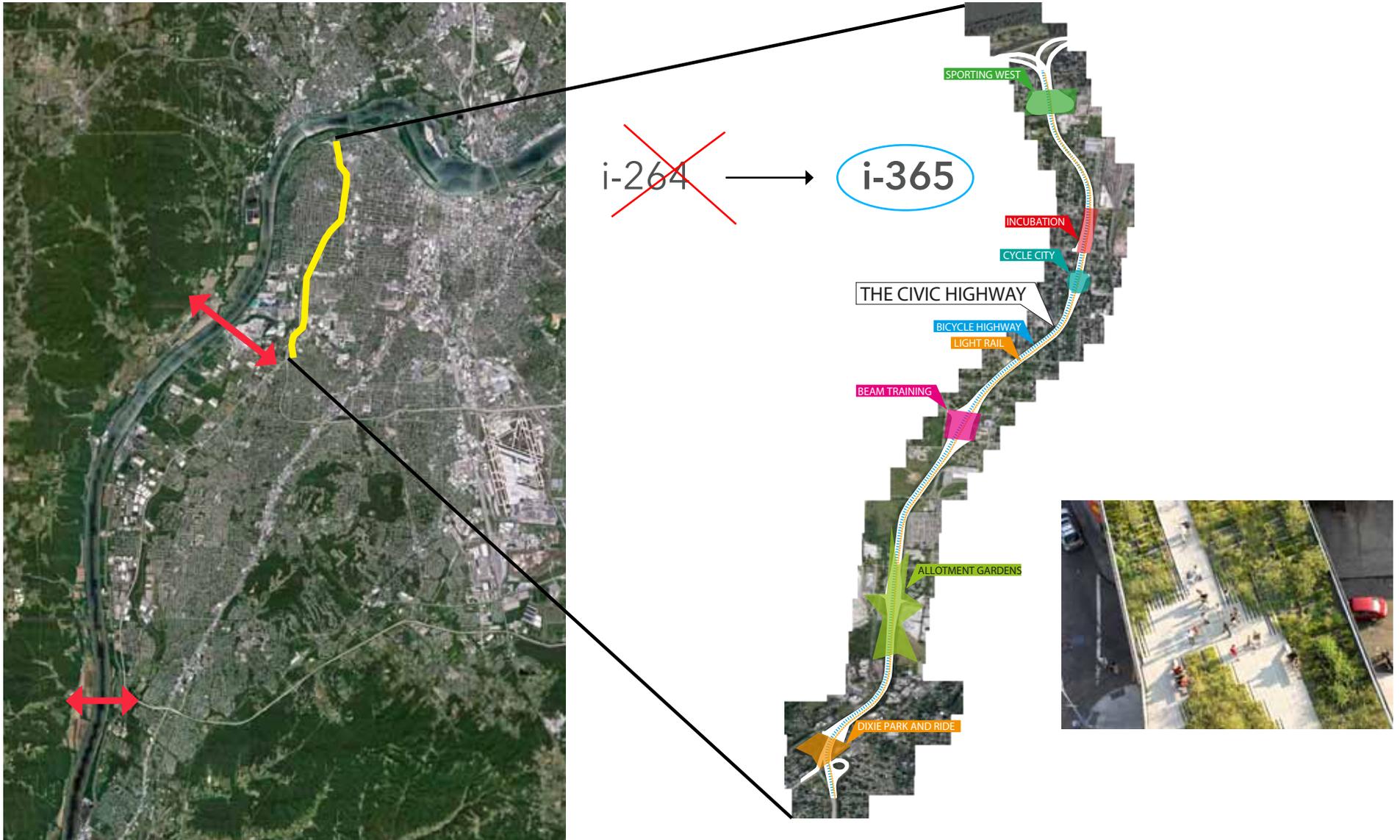
As the High Line in NYC became obsolete, the infrastructure was transformed as public space and recreation space. These types of transformation projects are often used as urban catalyst projects (as seen in Paris, NYC, Zürich, Barcelona).



Larger spaces like rail yards can be relocated to the outer loop and turned into urban parks (as seen in La Villette in Paris), turning a barrier into a meeting point between districts.

PROPOSAL: INFRASTRUCTURAL TRANSFORMATION

Create transportation fluidity and reprogram existing infrastructures with new forms of public transportation.



21st century jobs will be increasingly focused on information technology. To prepare for the future deployment of the knowledge economy and to attract talent and resources, Louisville needs to plan for a digital city by investing in education, innovation, and open government.

ACCESS AND INFRASTRUCTURE

Free WiFi in public zones connects people.



01. Free WiFi Hotspots



02. Parks

01. Free WiFi Hotspots

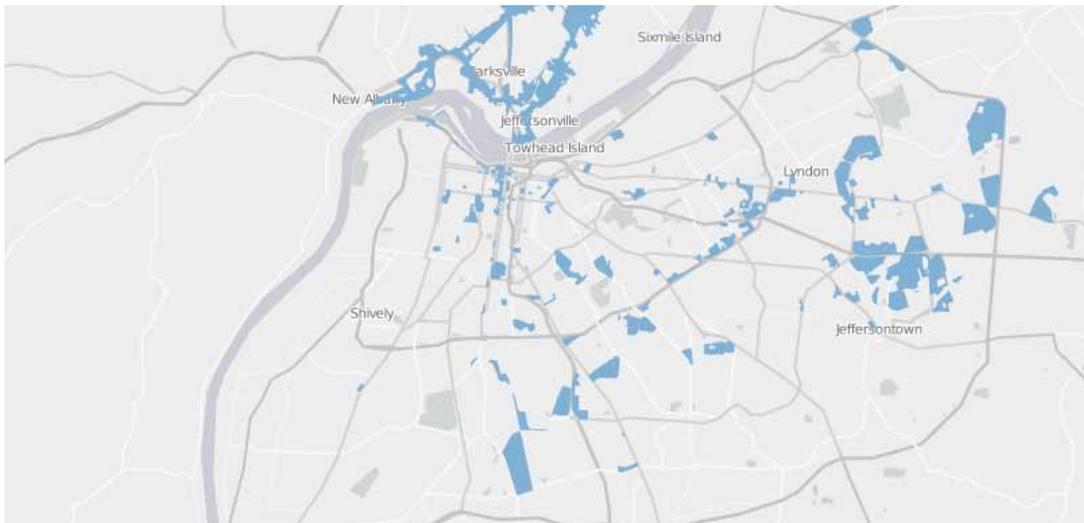
As of April 2011, there were more than 200 public WiFi hotspots in Louisville. However, McDonalds was providing more free WiFi than Louisville libraries.

02. Parks

An extensive parks system provides an opportunity to make access available in public space.

03. Fiber

Fiber optic connections exist in Louisville, however, availability to end users is limited. (Blue areas indicate fiber availability to end users.)



03. Fiber

ACCESS AND INFRASTRUCTURE MODELS

Establish partnerships to upgrade infrastructure and allow for easy access.



Municipal Network: Chattanooga Gig

This was the nation's first city-wide broadband network. Chattanooga's municipally-owned network has established the city as a tech hub in the South, and enabled services that go far beyond basic Internet connectivity, including a smart electrical grid, advanced traffic control, public safety innovations, and more.



Chicago Broadband

Chicago's plan to overhaul the city's broadband infrastructure emphasizes public/private partnerships. The effort includes a plan to extend low-cost, high-speed connections to underserved neighborhoods, and provide free WiFi in the city's public spaces.

Photograph of Millennium Park by David Ohmer <http://www.flickr.com/photos/the-o/1006813499/>



Bridging the Digital Divide: "We Are Now Connected" San Diego

In partnership with the global nonprofit One Economy and AT&T, San Diego offers 24 months of free broadband access to all residents of public housing in the city – amounting to around 600 households. The project was funded as part of a larger \$28.5 million grant from the US Department of Commerce.

Photo by Ana Tintocalis, KPBS

OPEN GOVERNMENT

Sharing information with the public creates trust within communities.

Commercial	FIRE SYSTEM SPECIALISTS LLC	2000 NATIONAL TP&E	40214	13	12/17/2003	4144	FIRE SUPP SINGLE SYST REPAIR	FIRE SU
Residential	CUSTOM POOL CONTRACTORS INC	11300 NUTWOOD RD	40223	17	12/25/2003	5015	NEW CONSTRUCTION	BUILDIN
Residential	& B ENTERPRISES CONTRA B	13414 REAMERS RD	40245	17	01/11/2004	6364	NEW CONSTRUCTION	BUILDIN
Commercial	SIMPLEXGRINNELL LP	2915 HURSTBOURNE PKY	40220	11	01/19/2004	5834	FIRE SUPP SINGLE SYST NEW CONS	FIRE SU
Commercial	B & B FIRE PROTECTION INC	17201 ANSELMO LN	40299	20	01/20/2004	7171	FIRE SUPP SINGLE SYST NEW CONS	FIRE SU
Commercial	KENTUCKIANA SPRINKLER CO INC	3141 2ND ST	40208	15	01/21/2004	7421	FIRE SUPP SINGLE SYST REPAIR	FIRE SU
Residential	OHIO VALLEY MOVERS INC	2208 FRANKLIN AVE	40216	12	01/26/2004	8120	MOVING WITHIN METRO AREA	MOVIN
Commercial	MIDWEST SPRINKLER CORP	7601 TRADE PORT DR	40258	12	02/04/2004	9219	FIRE SUPP SINGLE SYST NEW CONS	FIRE SU
Residential	OHIO VALLEY MOVERS INC	2619 FRANKLIN AVE	40216	1	02/11/2004	10001	MOVING WITHIN METRO AREA	MOVIN
Residential	J & J DESIGN & CONSTRUCTION	4310 BROOKHAVEN AVE	40220	18	02/16/2004	10491	ADDITION	BUILDIN
Residential	CARLOS M & WANDA LEE MEREDITH	5106 RAILROAD AVE	40258	12	02/18/2004	10845	RENOVATION/ALTERATION	BUILDIN
Other	VBD & ASSOCIATES INC	7305 RIVERS END CIR	40258	12	02/19/2004	10770	FOUNDATION ONLY	BUILDIN
Residential	JERRY HILL	2504 CEDAR ST	40212	5	02/19/2004	11003	ADDITION	BUILDIN
Residential	GORDON F & EARLENE R HAYWORTH	4812 MANSLICK RD	40219	24	02/26/2004	11827	ADDITION	BUILDIN
Commercial	B & B FIRE PROTECTION INC	7301 GLOBAL DR	40258	12	02/29/2004	11964	FIRE SUPP SINGLE SYST REPAIR	FIRE SU
Commercial	OF LOU THE CITY	800 MARKET ST	40202	4	03/02/2004	11122	RENOVATION/ALTERATION	BUILDIN
Residential	ALLSTATE GARAGE BUILDERS	1302 32ND ST	40211	1	03/02/2004	12408	NEW CONSTRUCTION	BUILDIN
Residential	STEVEN B CLINE GARAGES	13700 BUTTERMILK RIDGE RD	40299	20	03/17/2004	14297	NEW CONSTRUCTION	BUILDIN
Residential	STEVEN B CLINE GARAGES	6512 MOORHAVEN DR	40228	23	03/17/2004	14305	NEW CONSTRUCTION	BUILDIN
Residential	RATEAU CONSTRUCTION INC	2 GLEN ARDEN RD	40025	16	03/24/2004	15178	ADDITION	BUILDIN
Residential	BUYERS EDGE CONSTRUCTION CO IN	2219 LOWER HUNTERS TRCE	40216	12	03/29/2004	15210	NEW CONSTRUCTION	BUILDIN
Residential	AMIR & SAMIRA SALIHOVIC	414 KILMORY AVE	40214	21	04/01/2004	16145	ADDITION	BUILDIN

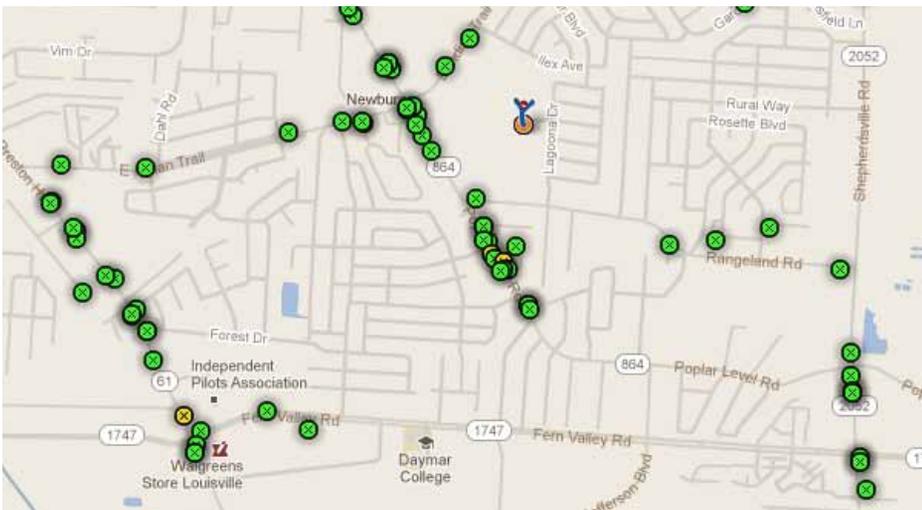
01. data.louisvillky.gov

A promising effort is active at data.louisvilleky.gov, but only a small number of data sets are currently available.

02. Metromapper

The online news organization metromapper has used the open data to create maps mashups, showing things like restaurant ratings or crime patterns.

01. data.louisvillky.gov



02. Metromapper

OPEN GOVERNMENT MODELS

-  **Map of Water Fountains**
GIS Map of Water Fountains in New York City Department properties.
-  **Restaurant Inspection Results**
NYC restaurant inspection results
-  **Mapped In NY Companies**
Raw data which powers the Mapped In NY site at [http://www.mappedinny.com](#)
-  **Demographic Statistics By Zip Code**
Demographic statistics broken down by zip code
-  **Quality Of Life Indicators**
Statistics on NYC quality of life
-  **Projects in Construction Map**
New school projects (Capacity) and Capital Improvement Construction



New York, NY: NYC Open Data

NYC Open Data supplies sets of public data produced by City agencies and other City organizations as part of an initiative to improve accessibility, transparency and accountability of City government. Data is available in a variety of machine readable formats.

<http://www.nyc.gov/html/data/about.html>

Richmond, VA: See Click Fix

See Click Fix is an online interactive site where residents can participate in city improvement. The site highlights 'watch areas' and offers a forum for conversation between residents.

<http://seeclickfix.com/richmond>

NYC and other cities worldwide

EDUCATION

Education institutions are taking advantage of digital tools.



01. The Greater Louisville Project



02. 55,000 Degrees



03. University of Louisville



04. Jefferson County Public Schools

01. The Greater Louisville Project

One of a number of ambitious programs that work on education in Louisville, the Greater Louisville Project provides research, data, and analytic tools to support an agenda that emphasizes education.

02. 55,000 Degrees

55,000 Degrees works to support educational attainment in Louisville, with a goal of an additional 55,000 bachelors or associate degrees. This program, like the Greater Louisville Project, is attempting to achieve broad education-related goals, rather than specifically targeting increases in science, technology, engineering, and math education.

03. University of Louisville

U.S. News ranks the University of Louisville at #160 in the nation, with an engineering program ranked at #121.

04. Jefferson County Public Schools

U.S. News ranks duPont Manual High School, part of the Jefferson County Public School system, as the #1 high school in Kentucky. Their over all national ranking is #153, and at #203 they are the only school in Kentucky that ranks in the top 250 for STEM education in the nation.

EDUCATION MODELS



Education as Social Event: Code Year

In January of 2012, the learn-to-code startup CodeAcademy started Code Year, transforming learning to program from a classroom chore into a social event. More than 400,000 people have signed up for the free program that emails a new coding lesson each week for a year – including civic leaders like New York’s mayor Bloomberg, who made learning to code his New Year’s resolution.



Partnering with Industry: TEALS

TEALS – Technology Education And Literacy in Schools – is a partnership between the Seattle public schools and local tech industry. Run by Microsoft, the program brings engineers into the classroom to teach Computer Science to high school students. What began as the grassroots effort of a single Microsoft engineer has matured to involve more than a hundred engineers from companies around Seattle.



Investing in Research: Applied Science NYC

To further establish itself as a high-tech hub, New York City offered access to city land and up to \$100 million of city capital to establish a world-class science and engineering campus in the city. After receiving proposals from 18 national and international academic institutions, the city chose to partner with Cornell and Technion-Israel; additional funding was also provided to Columbia and NYU.

“With 1.5 million computing jobs to fill by 2020, the growth of our economy relies on the ability of employers to obtain qualified employees with computing skills and our ability to ensure that graduates are educated for the needs of 21st century jobs.”

–Association for Computing Machinery

INNOVATION AND INDUSTRY

Institutions in Louisville are already teaming up with communities and businesses in order to create more fluidity and innovation.



01. Community

01. Community

The first Louisville Startup Weekend – held in September of 2012 – brought together the city’s small but active startup community.

02. Startup Infrastructure

Organizations like Forge are devoted to building the startup community through news and events. Incubators like MetaCyte act as incubators for research-based startups.

03. UPS Worldport

Thanks to UPS Worldport, Louisville has been able to attract tech startups, including CafePress, Zappos, and Gilt Groupe.



02. Startup Infrastructure



03. UPS Worldport



INNOVATION AND INDUSTRY MODELS



GENERAL ASSEMBLY

Co-working and education: General Assembly

Funded in part by a \$200,000 grant from the New York City Economic Development Corporation, General Assembly is a global network of campuses devoted to providing education and support to tech entrepreneurs. The facilities offers co-working space with desks, WiFi, an auditorium, and a rotating schedule of classes in everything from HTML to startup law.



Incubating Minority-run Startups: NewME Accelerator

This three-month-long program is designed to support minority entrepreneurs. Produced by a partnership of a news site, a venture capital firm, and an entrepreneur, the program connects startups with training, mentorship and advice from executives and investors representing a number of large, successful technology companies. Unlike many incubators, NewME does not take equity in supported startups.



Creating a regional startup Community: Silicon Prairie News

What started as a news website devoted to writing about tech entrepreneurship in Omaha has grown to encompass a seven state area in the upper Midwest. Their efforts to build community, talk about good work happening around the community, and organize a major regional event called Big Omaha have helped establish the region as an anchor of startup innovation.

"It is entrepreneurs in clean energy, medicine, advanced manufacturing, information technology, and other fields who will build the new industries of the 21st century, and solve some of our toughest global challenges."
—Startup America

DIGITAL CITY

Technology can create a connected community.



New York City's Digital Roadmap

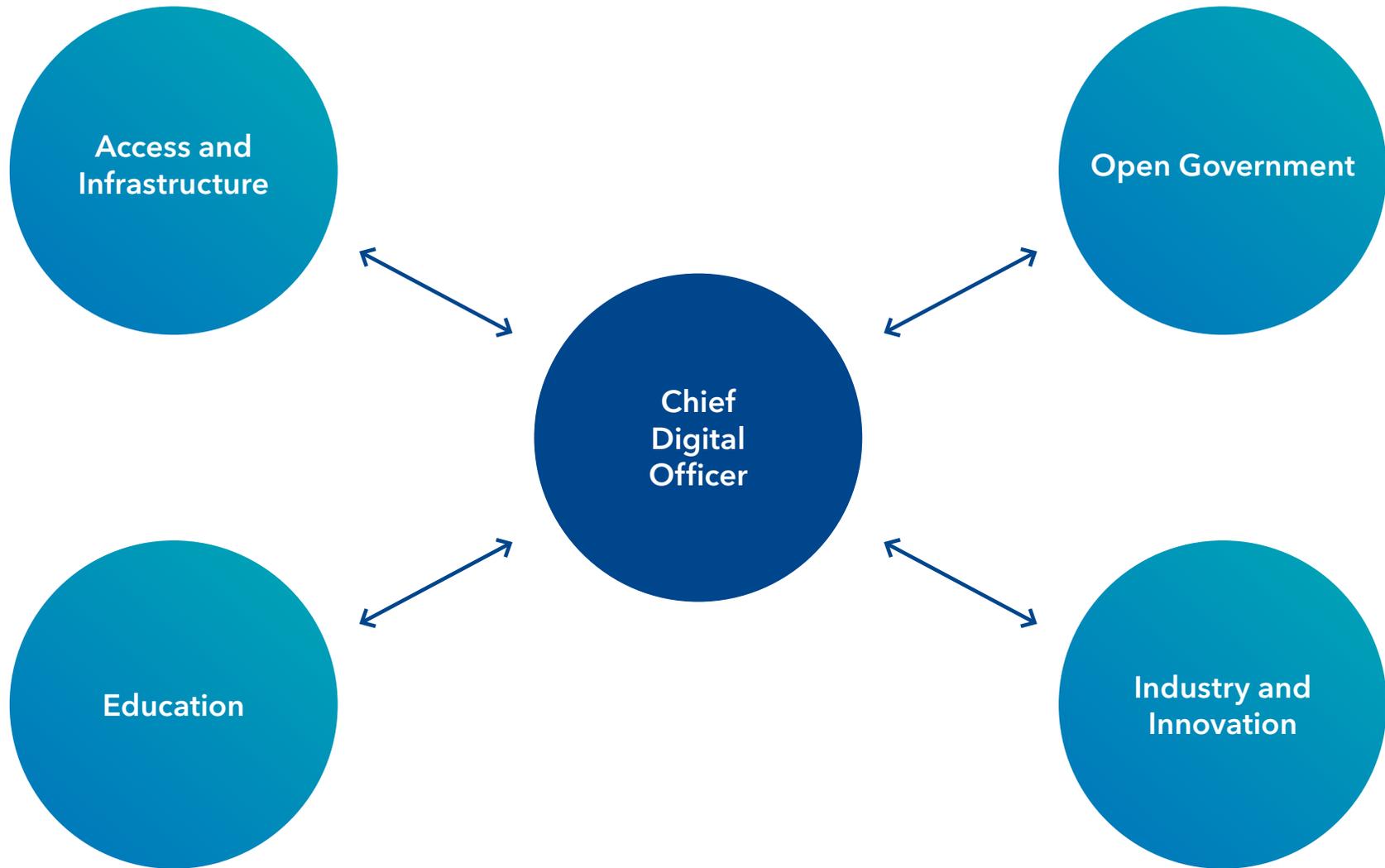
Created under the management of the newly-created Chief Digital Officer of New York City, the Roadmap for the Digital City is a framework to enhance City government's engagement with New Yorkers, increase New Yorkers' access to new technologies, continue making government information and services more transparent, and promote the tech industry.



Chief Technology Officer of the United States

The Chief Technology Officer of the United States is a position created within the Office of Science and Technology Policy by President Obama. The CTO will use technology to help create jobs, reduce the costs of health care and help keep the nation secure. He is also tasked with increasing Americans' access to broadband.

PROPOSAL: CREATE AN OFFICE TO RESEARCH, PLAN AND COORDINATE THE CITY'S DIGITAL FUTURE



SUMMARY

- **Creating a more multi-modal, accessible and healthy connectivity is vital to Louisville’s future.**
- **Mass transportation is a vital necessity for all livable 21st century cities.**
- **The great strides made in connecting Louisvillians to the Ohio River waterfront should continue to maximize the assets of this important natural resource and catalyze potential in West Louisville.**
- **Creating physical and psychological connections between east and west Louisville will expand the potential of the city as a whole.**
- **Setting the stage for a more connected digital city will foment all aspects of community and education for building a 21st century knowledge economy city.**

04 Focus Areas

- 4.1 Regionalism
- 4.2 Living
- 4.3 Connectivity
- 4.4 Creativity
- 4.5 Health
- 4.6 Energy
- 4.7 Identity

CREATIVITY

Louisville has an entrepreneurial history.

Louisville has a proud history of entrepreneurs. Devol, Hubble, Sanders, and Schnatter, to Ford, and Cherry, are founders that have acted as generators of major development throughout the city's history. Integral as a present and future generator, the Universities have a significant opportunity to play a major role in the continued growth of Louisville.

For Louisville to realize its future on the scale commensurate with its visions, a "step-change" is required. To sustain the growth that the vision can potentially unlock, we have identified five specific generators present in the market to build on: connectivity, living, creativity, energy, and entrepreneurship. In this context we refer to the actions applied to these generators as, "Accelerators":

Accelerators of growth; Accelerators of Knowledge; Accelerators of Competence; Accelerators of Networks; Accelerators of Culture; Accelerators of Interaction; Accelerators of Sustainability; Accelerators of Place; Accelerators of Vision.

There is a dualism present within the growth of Louisville's Multinational Corporations. While the ability to attract businesses has been one of city's major strengths, retaining them is equally imperative. Together with the various components of the universities, and close proximity to the city center, a continually revolving hub of intellectual mass and innovation is achievable. Incubation's basic premise of idea realization congeals in highly structured

environments in which start-up companies are provided with explicit access to space (dependent upon the size and significance of the venture), networks, finance, education, and infrastructure.

Most people think of density as critical to the culture of incubators but how is creative space a unique asset to the culture of incubation?

Imagine a business that doesn't utilize all its available assets to the fullest. How can it expect to be competitive in the increasingly diversified, globalized market? Louisville needs to unify its people across physical and social divides - USE EVERYONE - through infrastructural transformation, educational and job opportunities, and the cultivation of ideas.

By connecting people in dynamic ways, stimulating imagination and ideas, the stage is set to ignite what is unique to Louisville. Building on traditions, and building new ones.

Arguably the residual self-image of cities propagates an exclusive dimension to art, with limited access and dissemination. A burgeoning art scene in Louisville foments creative capital, expanding the space of culture and people. By building a broader platform for art, in schools, in the public realm, in commercial settings, as well as traditional ones, culture grows, and the space for understanding expands.

Creativity is inclusive. Creativity connects people.

Louisville must focus on attracting and retaining talent. For Louisville to revitalize its future on the scale commensurate with its vision, a 'step change' is required.

EDUCATION RANKING

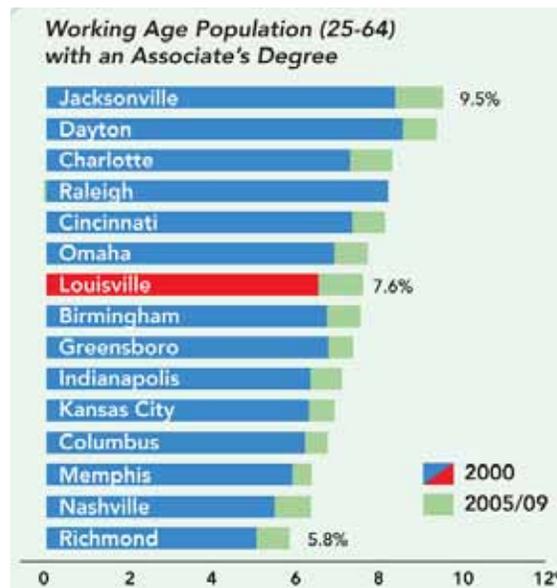
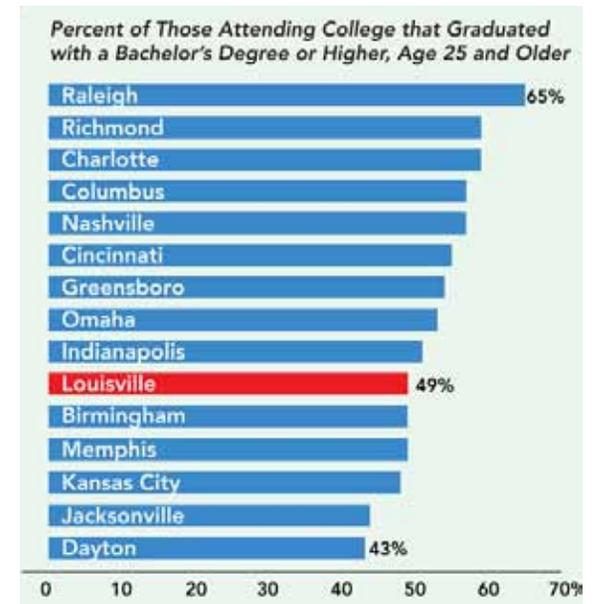
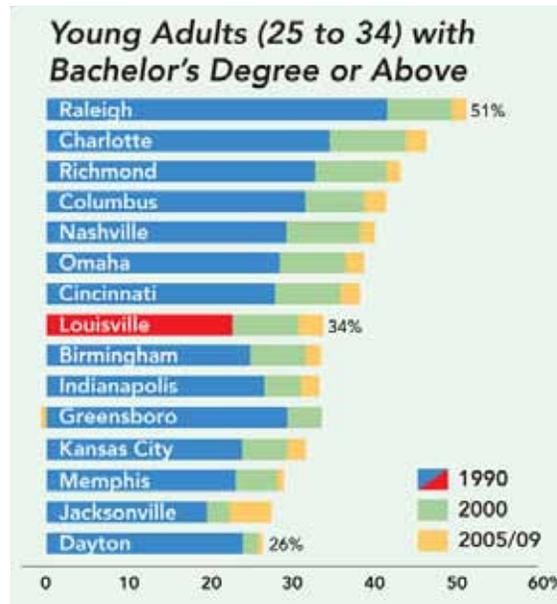
To be competitive in the global economy, Louisville needs to cultivate and grow its own talent base.

US most literate cities*:

Cincinnati	9
Lexington	15
Louisville	40

Cultivating the local intelligence and generating Brain Gain is as important as combating Brain Drain.

*Ranking based on college degrees, education attainment, booksellers per person, libraries per person and more.



EDUCATION RANKING

According to City Vitals 2.0, Louisville ranks low in education, international talent and innovation.

Population over 25 who have completed a four year college degree, born outside of the United States.

26	Portland-Vancouver-Beaverton, OR-WA	12.8%
27	Jacksonville, FL	12.3%
28	San Antonio, TX	11.5%
29	Charlotte-Gastonia-Concord, NC-SC	11.5%
30	Salt Lake City, UT	10.6%
31	Columbus, OH	10.0%
32	Providence-New Bedford-Fall River, RI-MA	10.0%
33	Cleveland-Elyria-Mentor, OH	9.7%
34	Virginia Beach-Norfolk-Newport News, VA-NC	9.7%
35	Minneapolis-St. Paul-Bloomington, MN-WI	9.7%
36	Denver-Aurora-Broomfield, CO	9.7%
37	Rochester, NY	8.9%
38	Richmond, VA	8.8%
39	Buffalo-Niagara Falls, NY	8.6%
40	Milwaukee-Waukesha-West Allis, WI	8.2%
41	New Orleans-Metairie-Kenner, LA	8.1%
42	Oklahoma City, OK	8.1%
43	Memphis, TN-MS-AR	7.7%
44	St. Louis, MO-IL	7.5%
45	Cincinnati-Middletown, OH-KY-IN	7.5%
46	Nashville-Davidson-Murfreesboro-Franklin, TN	7.5%
47	Indianapolis-Carmel, IN	7.3%
48	Pittsburgh, PA	6.8%
49	Kansas City, MO-KS	6.5%
50	Louisville-Jefferson County, KY-IN	6.5%
51	Birmingham-Hoover, AL	5.6%

Number of utility patents issued per 10,000 employees, 2009.

26	Cleveland-Elyria-Mentor, OH	5.3
27	Baltimore-Towson, MD	5.2
28	Indianapolis-Carmel, IN	5.2
29	Providence-New Bedford-Fall River, RI-MA	5.1
30	Denver-Aurora-Broomfield, CO	4.6
31	Washington-Arlington-Alexandria, DC-VA-MD-WV	4.6
32	Buffalo-Niagara Falls, NY	4.5
33	St. Louis, MO-IL	4.1
34	Miami-Fort Lauderdale-Pompano Beach, FL	3.7
35	Kansas City, MO-KS	3.6
36	Columbus, OH	3.4
37	Orlando-Kissimmee, FL	3.4
38	Tampa-St. Petersburg-Clearwater, FL	3.0
39	Memphis, TN-MS-AR	2.9
40	Richmond, VA	2.7
41	Charlotte-Gastonia-Concord, NC-SC	2.7
42	Riverside-San Bernardino-Ontario, CA	2.7
43	San Antonio, TX	2.4
44	Birmingham-Hoover, AL	2.2
45	Oklahoma City, OK	2.1
46	Nashville-Davidson-Murfreesboro-Franklin, TN	2.0
47	Las Vegas-Paradise, NV	1.8
48	Virginia Beach-Norfolk-Newport News, VA-NC	1.8
49	New Orleans-Metairie-Kenner, LA	1.8
50	Louisville-Jefferson County, KY-IN	1.7
51	Jacksonville, FL	1.5

INTERNATIONAL TALENT

Immigrants' productivity raises the U.S. Gross Domestic Product (GDP) by an estimated \$37 billion per year.

- More than a quarter of U.S. technology and engineering businesses launched between 1995 and 2005 had a foreign-born founder.
- In Silicon Valley, more than half of new tech start-up companies were founded by foreign born owners
- In 2005, companies founded by immigrants produced \$52 billion in sales and employed 450,000 workers
- Nearly a quarter of the international patents filed from the United States in 2006 were based on the work of foreign-born individuals (more than half of whom received their highest degree from an American university)
- Economists calculate that, as a result of immigration, 90 percent of native-born Americans with at least a high-school diploma have seen wage gains.

Historically, immigrants have made outsize contributions to American science and technology, with Albert Einstein perhaps the leading example. One-third of all U.S. winners of Nobel prizes in medicine and physiology were born in other countries. Far from "crowding out" native-born workers and depressing their wages, well-educated, entrepreneurial immigrants do much to create and support employment for Americans.

Meanwhile, the United States is falling behind in the pace of innovation and international competitiveness. Evidence for the decline in innovation is the decreasing U.S. share of international patents. In 2009, for the first time in recent years, non-U.S. innovators earned more patents (around 96,000) than did Americans (93,000). Only a decade earlier, U.S. innovators were awarded almost 57 percent of all patents.

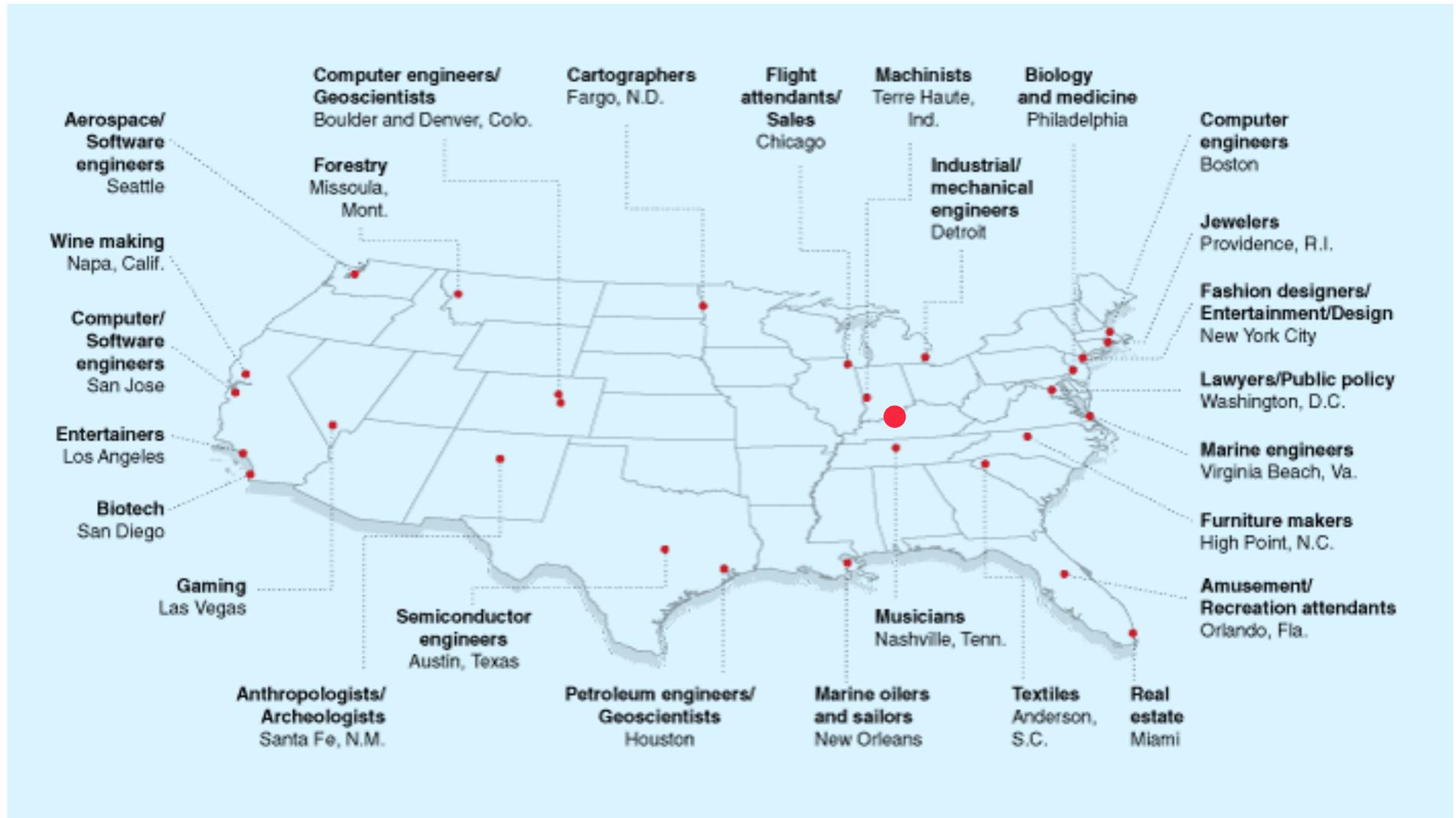
New York City mayor Michael Bloomberg, in a December 2009 Meet the Press interview, said about immigration: "We're committing what I call national suicide. Somehow or other, after 9/11 we went from reaching out and trying to get the best and the brightest to come here, to trying to keep them out. In fact, we do the stupidest thing, we give them educations and then don't give them green cards."



Can Louisville become a leader in a 21st century industry?

COMPETITIVE LOUISVILLE

Louisville is currently a leader in Logistics, Healthcare, Eldercare, and Advanced Manufacturing.



By 2018, 63% of all American job openings will require some sort of post-secondary education. As the University of Louisville expands, idea hubs emerge, places of entrepreneurship converge.

New partnerships between city government, private enterprise, the universities and 'people power' can form underlying networks to redefine the city.

LOUISVILLE UNIVERSITIES

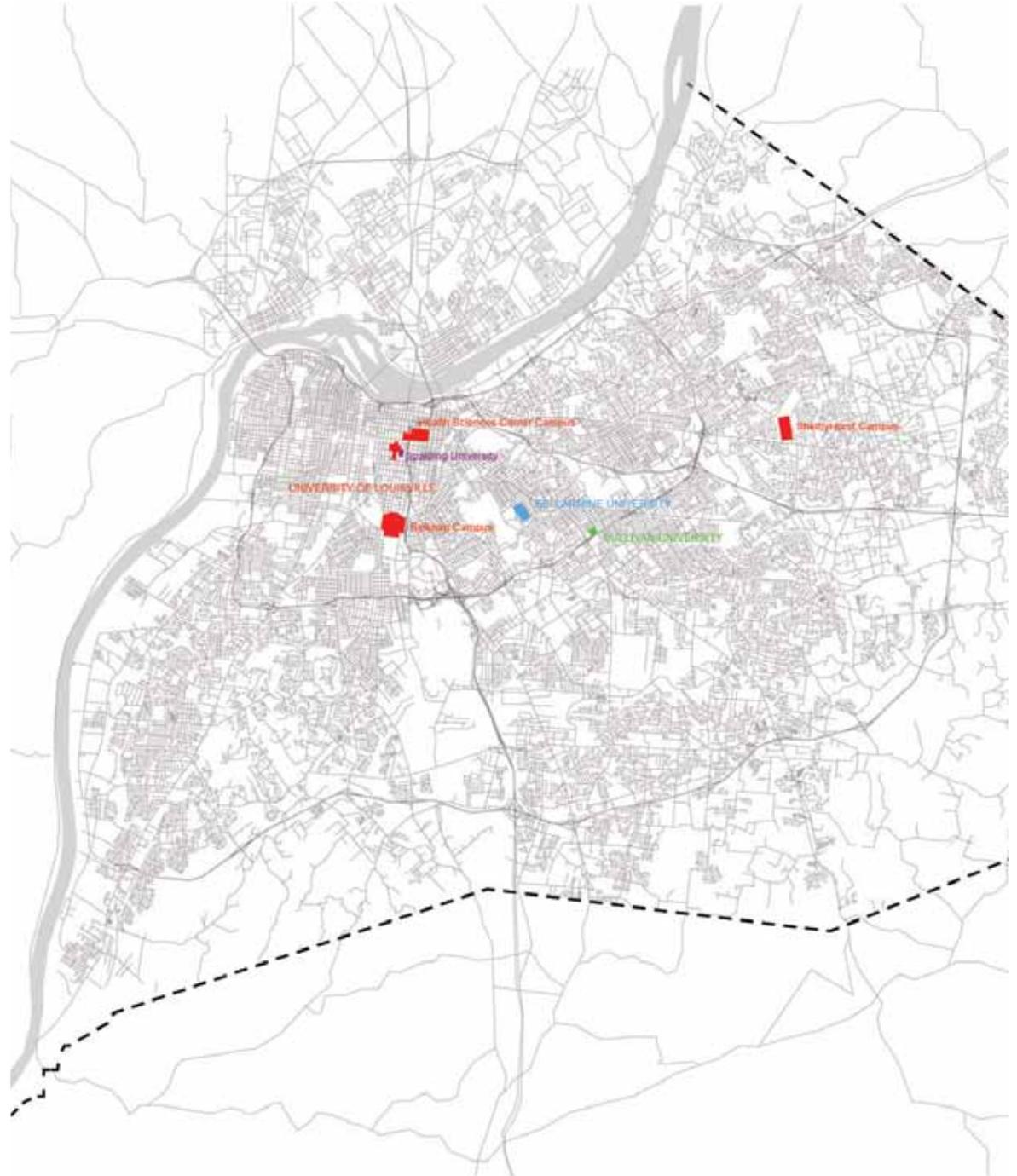
With four universities, Louisville has a foothold in post-secondary education.

The University of Louisville is the largest university in Jefferson County with 3 main campuses. UofL offers over 170 degrees, and is a leader in medical degree programs. The university has many ongoing masterplans to expand the University's physical presence in the city.

Bellarmino University is a Catholic liberal arts school located in the Highlands. It offers degrees in arts and sciences, business, education and nursing.

Sullivan University is Kentucky's largest private school or university. The school has campuses in Lexington, Louisville and Fort Knox. Sullivan specializes in career oriented degree options.

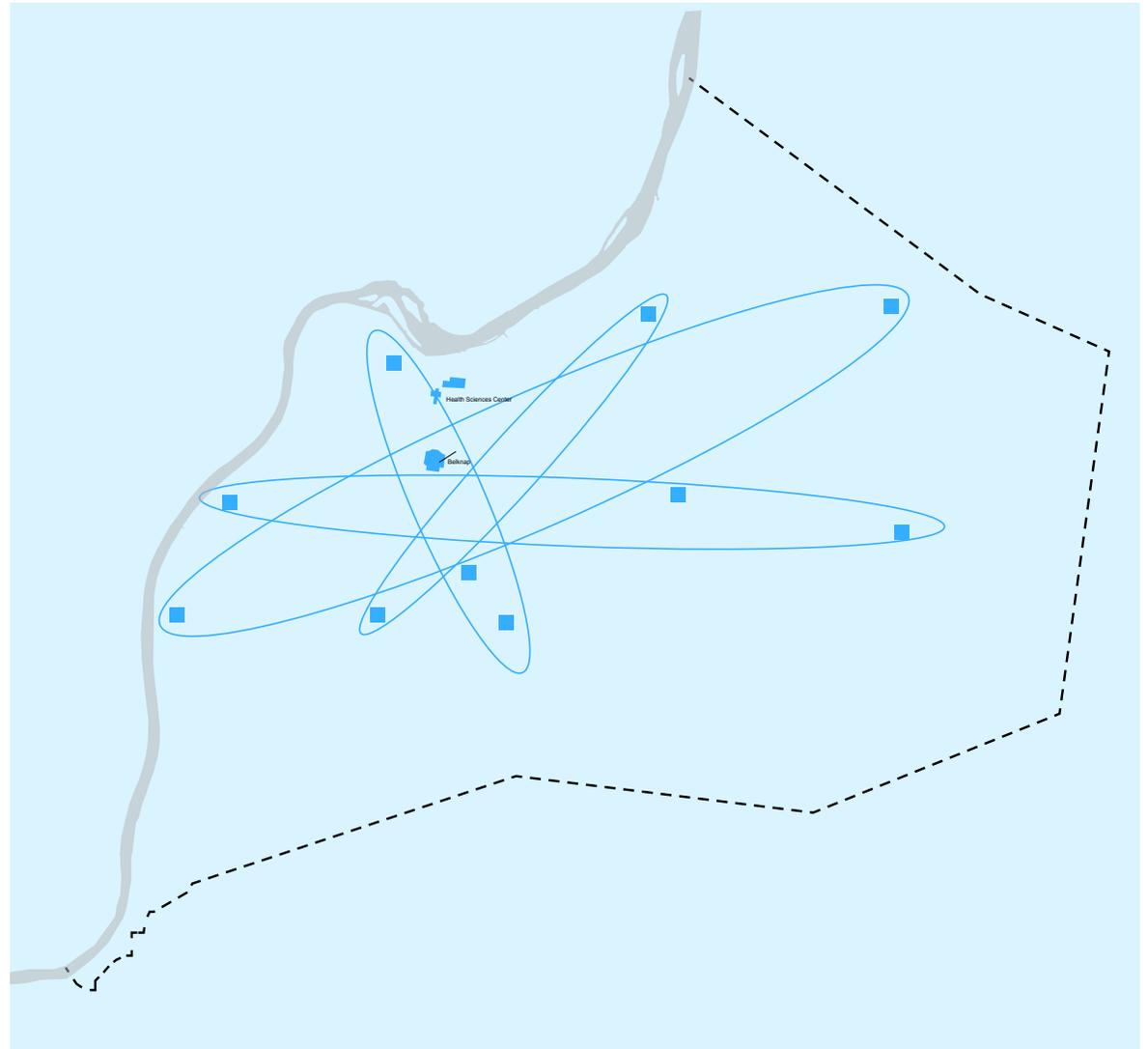
Spalding University offers over 24 degree programs at all levels of education providing learning in liberal and professional studies for both traditional and non-traditional students.



KNOWLEDGE ECONOMY

The future of education is tied to the intangible connections a university can make.

Research universities are a natural incubator for talent and new thinking and the greatest thing that universities can offer cities is partnerships for industry and a gifted talent base.



NUCLEUS INNOVATION PARK

Based at U of L, Nucleus Innovation Park is a best-in-class center for cutting edge collaboration and incubation.

“Nucleus is the center that brings together all of the elements essential to innovation and research commercialization success.

“As a business center, Nucleus orchestrates recruitment, incentives, shared community and infrastructure

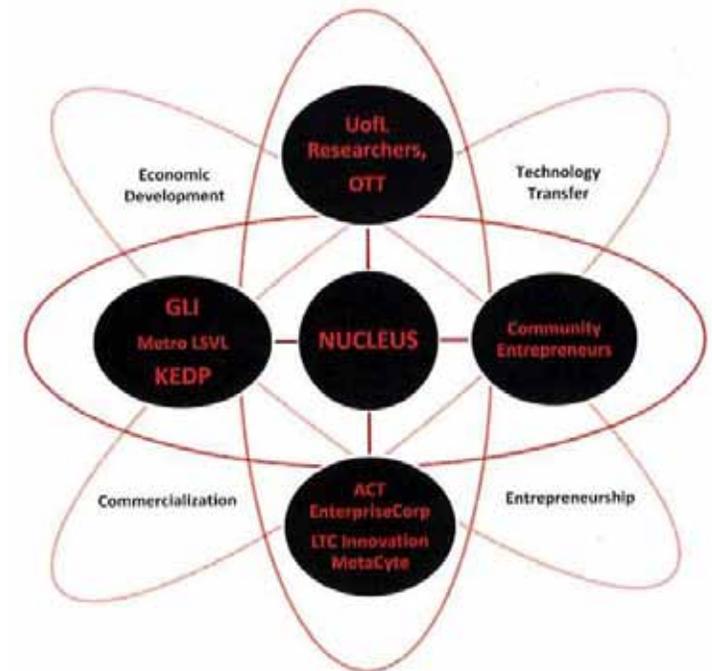
services. And, true to its name, Nucleus is positioned to become the center of leading national innovation and research parks.

“As an entity, Nucleus’ work is integral to the development of the research park currently underway

at UofL’s Haymarket 30-block property in downtown Louisville. In this role, Nucleus is creating a vibrant technology business district at Haymarket along the city’s Healthcare / University / Riverfront corridor. Medicine and physiology were born in other countries. Far

from “crowding out” native-born workers and depressing their wages, well-educated, entrepreneurial immigrants do much to create and support employment for Americans.”

(from <http://nucleusky.com/>)



CREATIVE CITY

Louisville's knowledge economy, if enabled by UPS, could have worldwide reach.

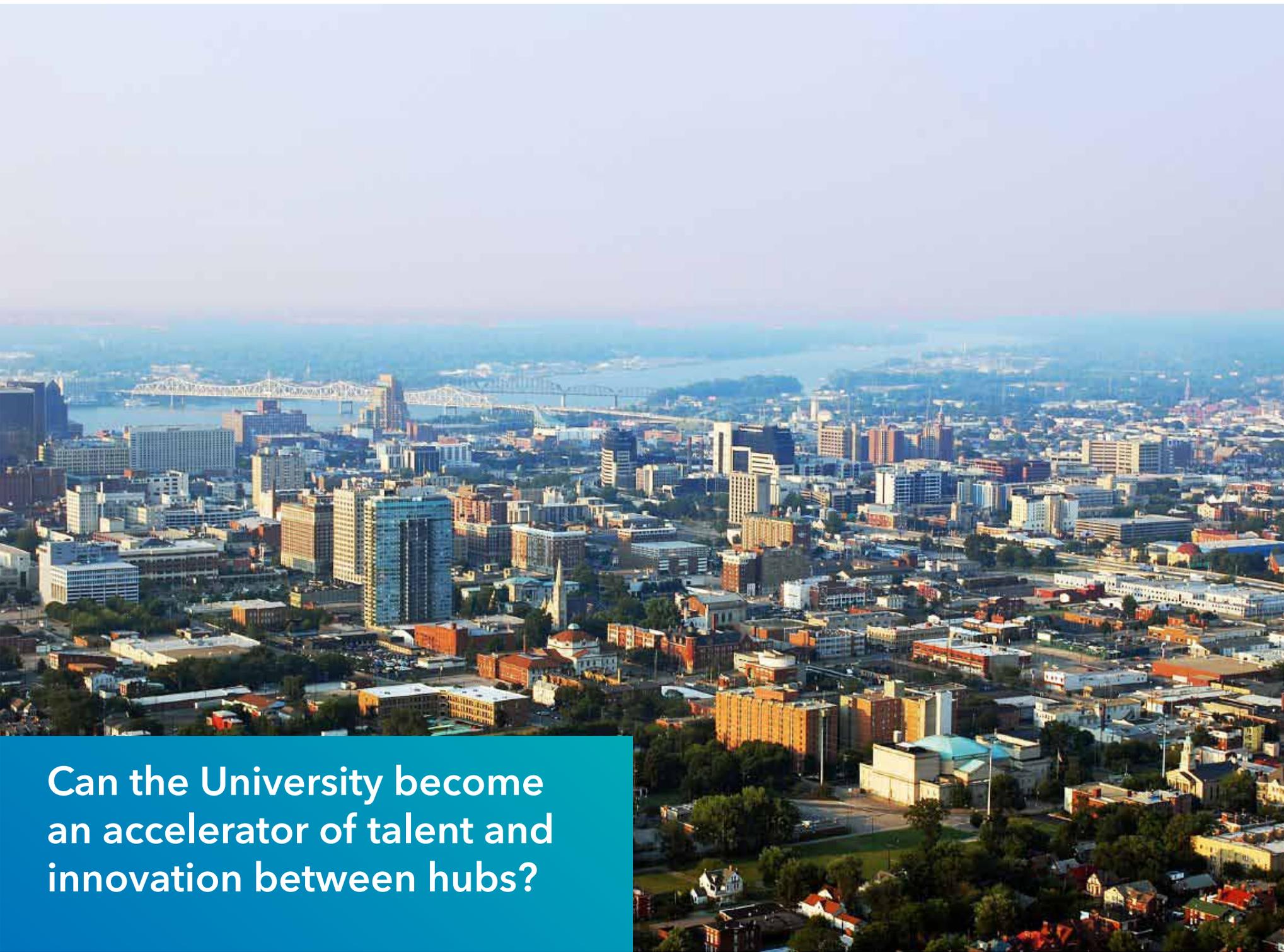


University Hub

+



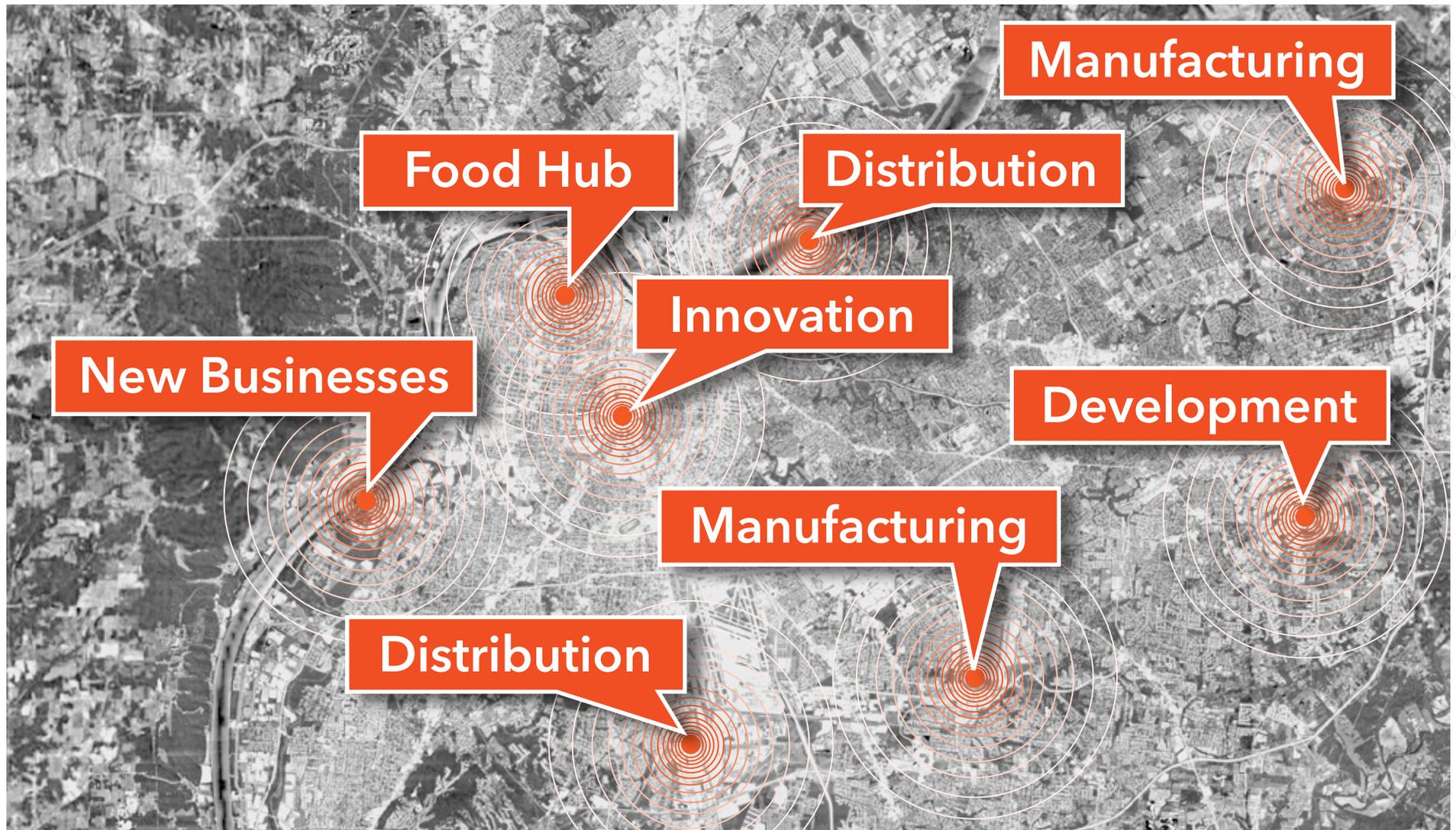
UPS Hub



Can the University become an accelerator of talent and innovation between hubs?

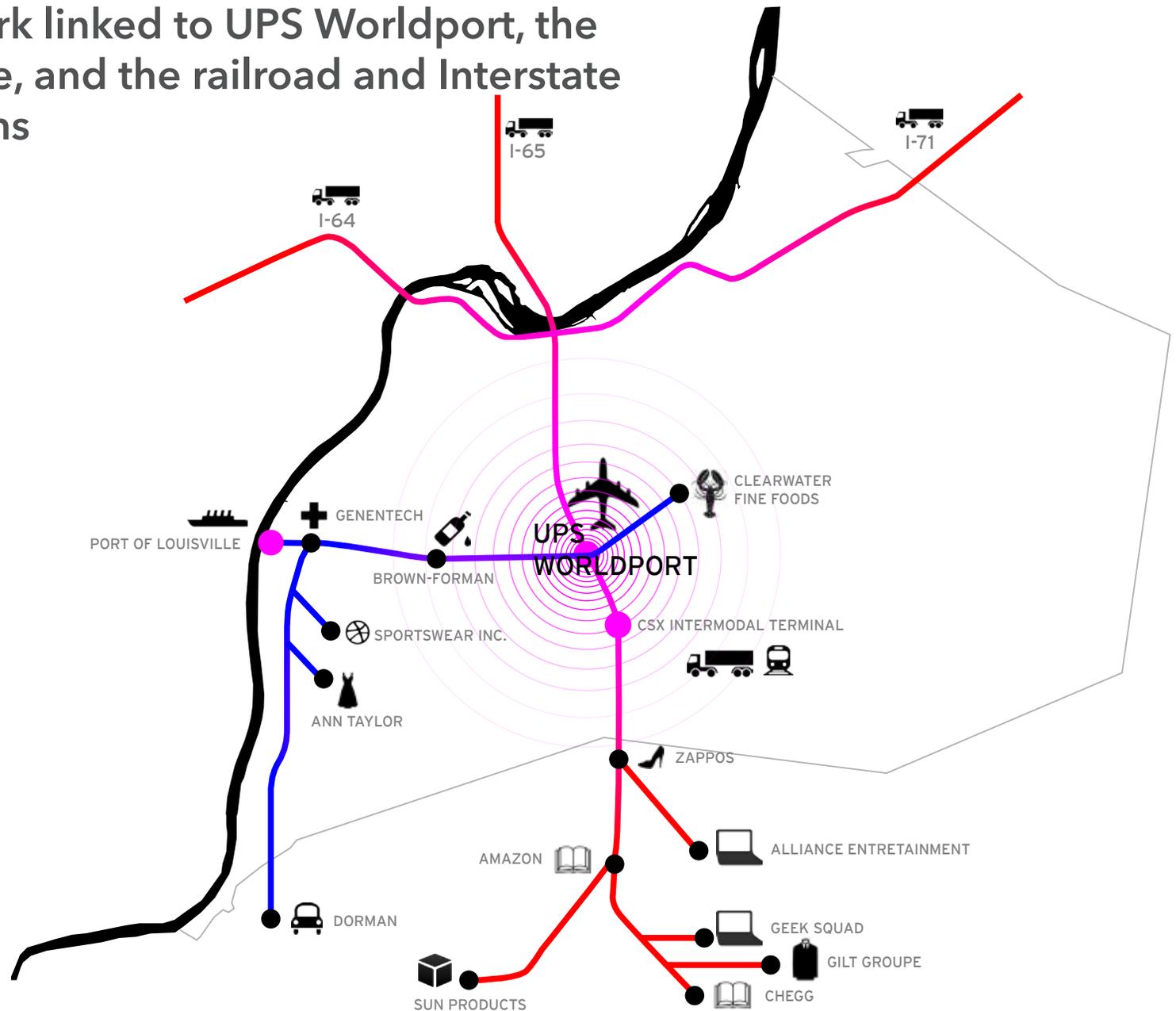
PROPOSAL: CREATIVE LOU-HUB

The university can offer partnerships to local and regional hubs to accelerate innovation.



CREATIVE LOU-HUB

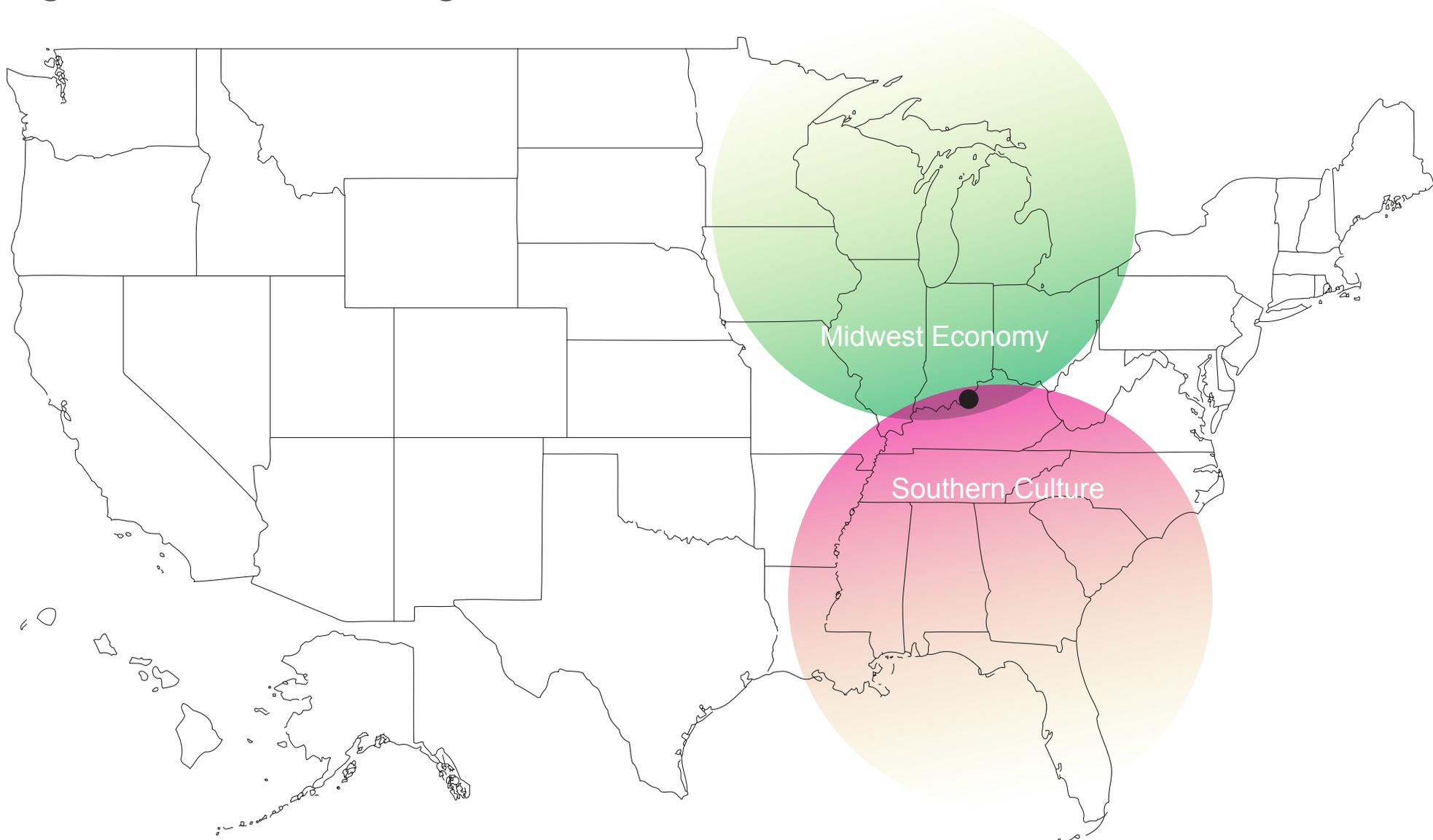
Logistics network linked to UPS Worldport, the Port of Louisville, and the railroad and Interstate Highway systems



Culture is the result of overlapping synergies. With such a diverse stock of people and interests, Louisville can develop a more complete experience based in its heritage and culture, both from the ground up and the top down.

LOUISVILLE CULTURE

Though Louisville competes in the Midwest economic region, its cultural heritage is linked to Southern tradition.



CULTURE

Culture in Louisville takes many forms and is shared through various events and activities.



PROPOSAL: INCREASED PROGRAMMING

The year calendar should be fully programmed with events that stimulate and project creativity, innovation, and economic stimulus.

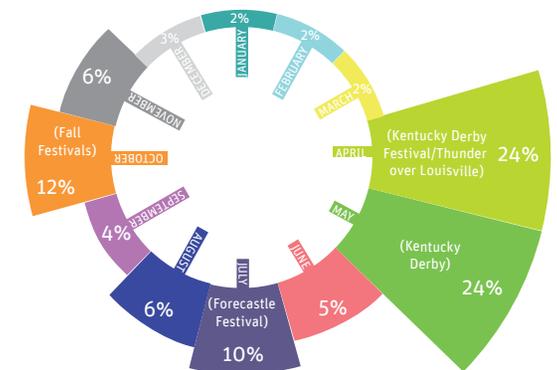


NUMBER OF PUBLIC EVENTS PER MONTH



Number of events per month in a calendar year

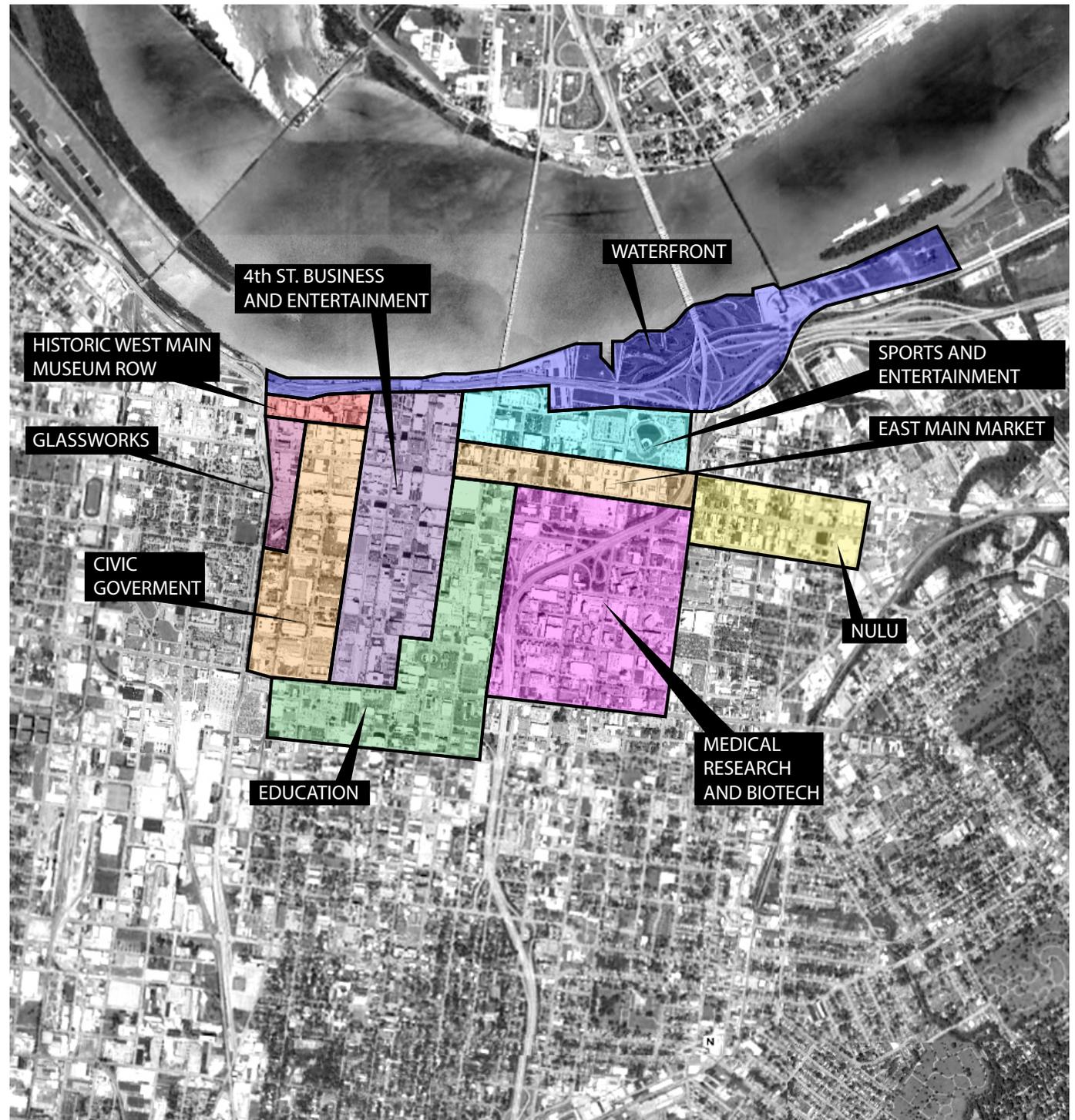
PERCENTAGE OF TOURISM ATTRACTED PER MONTH



Percentage of tourism attracted in a calendar year

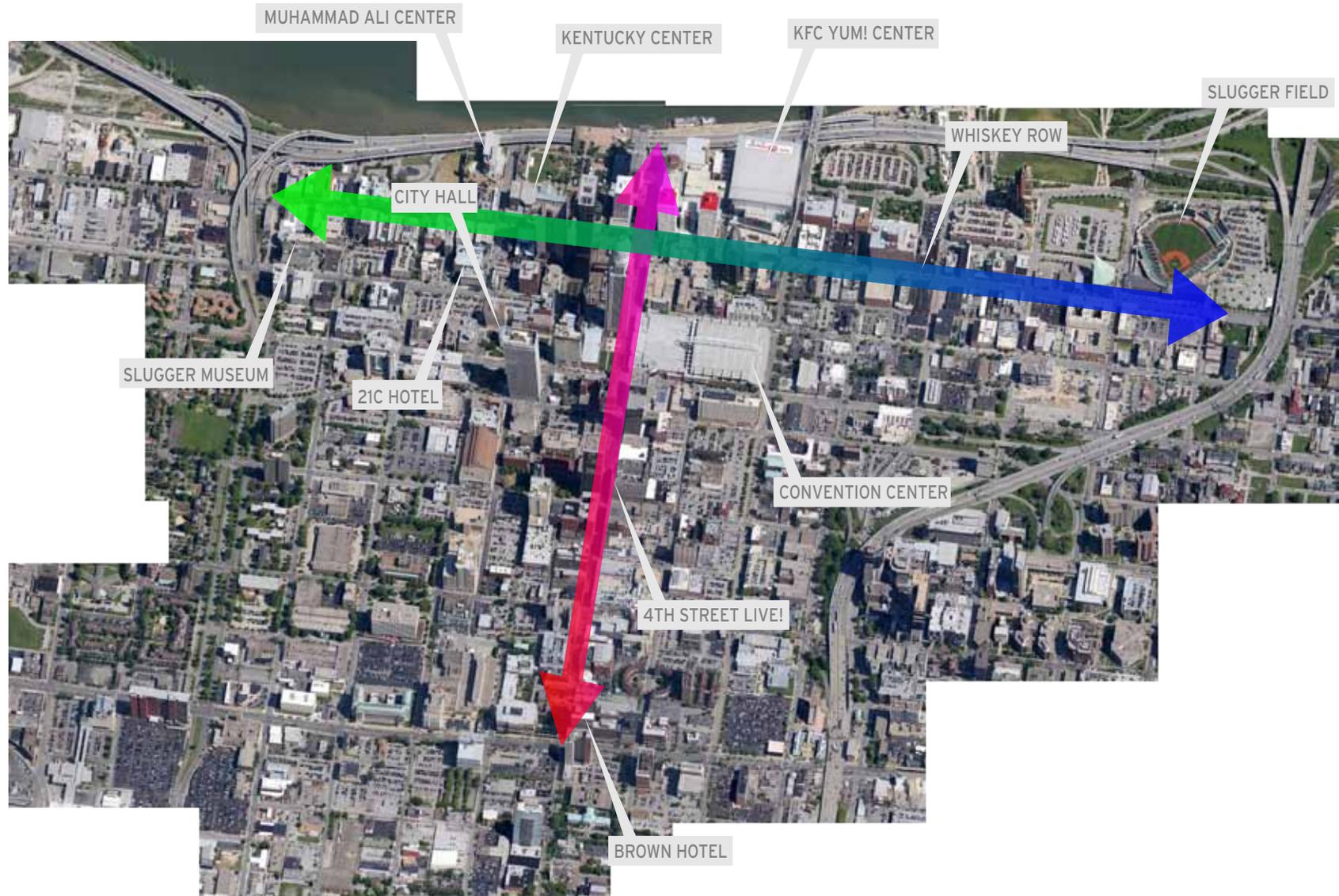
DOWNTOWN

Downtown has the most diverse programmatic mix which creates synergies between programs and people to offer a complete and diverse experience.



PROPOSAL: DOWNTOWN

By clarifying the districts and cultural axes, the downtown identity will emerge.



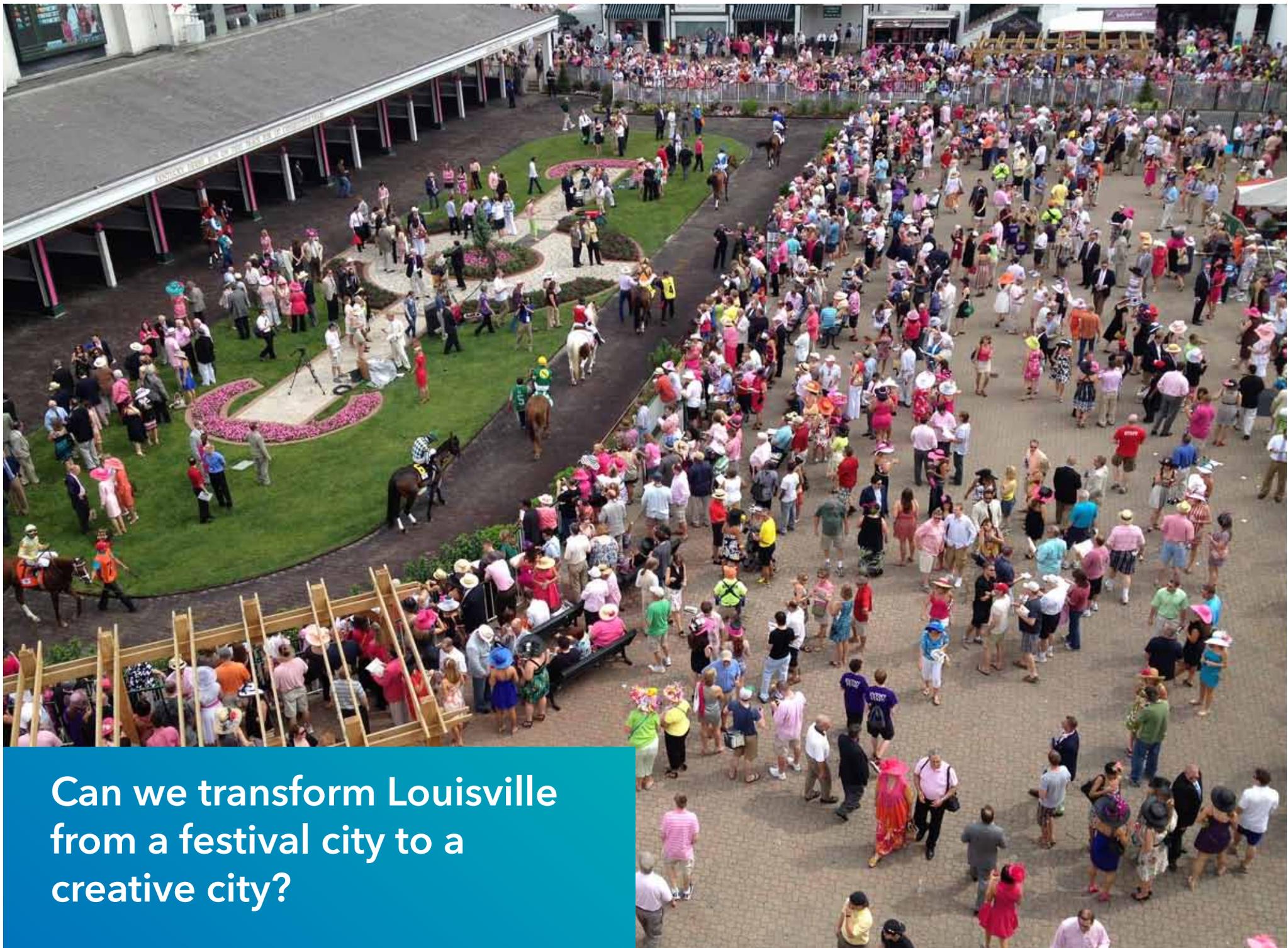
CULTURE

Adaptive re-use possibilities can offer exciting transformation projects for the city and provide a home for future cultural programs.



Tate Modern

	VENUE	EMPTY LOT	STOREFRONT	EXISTING BUILDING FLOOR	EXISTING BUILDING, TOTAL	EXISTING WAREHOUSE	EXISTING INFRASTRUCTURE	RIVER	PARK	NEW BUILDING (PURPOSE BUILT)
HIGH CULTURE										
PERFORMING ARTS		*		*	*	*	*		*	*
VISUAL ARTS			*	*	*	*				
MUSIC				*	*	*				*
DANCE			*	*	*	*	*		*	
LOCAL CULTURE										
PICNIC AREAS		*						*	*	
INTERNET CAFÉ			*	*			*		*	
LIBRARY										
AGRICULTURE		*				*	*	*	*	
BOAT								*	*	
SPORTS CULTURE										
FOOTBALL		*							*	*
SOCCER		*							*	*
BASEBALL		*							*	*
BASKETBALL		*				*	*		*	*
GOLF								*	*	
TRACK AND FIELD		*							*	*
FIELD HOCKEY		*							*	*
VOLLEY BALL		*				*			*	*
COLLECTIVE CULTURE										
RELIGION					*	*		*	*	
SPORTING EVENTS		*				*			*	*
MARKET		*		*	*	*	*	*	*	
INDIVIDUAL CULTURE										
INTERNET HOT SPOT			*				*			
GAMING				*	*	*	*			*
ATTRACTIVE CULTURE										
ANNUAL EVENTS		*				*	*	*	*	
BOURBON CENTER			*	*	*	*	*			
HORSE RIDING		*					*	*	*	
CONVENTION										*



Can we transform Louisville from a festival city to a creative city?

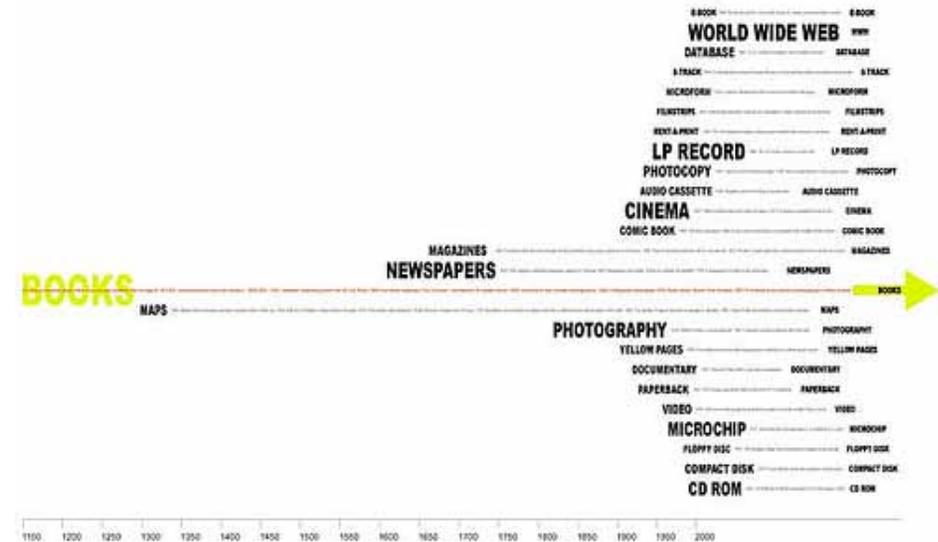
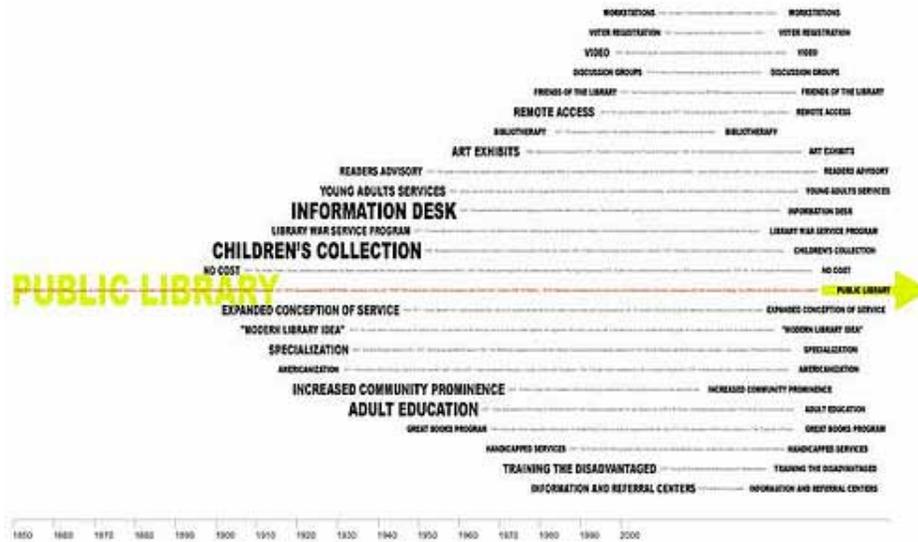
CITY LIBRARIES

Libraries are a public amenity that could be distributed more evenly throughout the city.



CITY LIBRARY AS LAB

The public library has evolved from an archive to a community center. Libraries are becoming the new urban living rooms.



Diagrams from OMA on the Seattle Public Library



Can a new center of knowledge and creativity become a symbol for cultural and intellectual exchange between citizens – an **URBAN LIVING ROOM?**

PROPOSAL: CITY LIBRARY AS LAB

An architectural icon can be the new symbolic center of knowledge and creativity for Louisville.



SUMMARY

- Louisville has the fundamental assets of a forward thinking culture of innovation in many sectors which can be coalesced and catalyzed.
- Strides have been made to increase the potential of downtown. Continued effort should be made to define and develop Louisville's downtown range of program to foment focus and identity.
- The shift of Louisville from City of Festivals to a Creative city needs a civic symbol to catalyze energy and identity.
- Creativity should be defined in broad terms and should connect diverse cultural expressions, learning, independent free thought, innovation, inquiry and public participation and service.

04 Focus Areas

- 4.1 Regionalism
- 4.2 Living
- 4.3 Connectivity
- 4.4 Creativity
- 4.5 Health
- 4.6 Energy
- 4.7 Identity

HEALTH

Louisville needs to support its citizens in both physical and social health matters.

A healthy city can be defined by certain qualities: active living, healthy eating and clean environment. Louisville has low density housing and ambitious park projects. Assets like the Olmsted parks, the recent Waterfront Park, the connection of Louisville Loop, and the city's proximity to five national forests give Louisville an amazing recreational potential. But this alone does not constitute a healthy city.

Louisville needs to support its citizens beyond basic health needs. The city should understand the social and economic links tied to increased life expectancy. According to the American Fitness Index, Louisville's health rate ranks among the lowest in the country. Furthermore, the life

expectancy rates within Louisville are clearly lower on the west side of the city where employment and education are lower than the county average. Local food distribution centers like the Grasshoppers Food Distribution center in Portland is a first step in rehabilitating neighborhood health though business and engagement. Louisville has a great local food heritage which should be exploited in select Louisville neighborhoods.

On a larger scale, Kentucky suffers from negative effects of the coal mining industry. The overall air quality ranks among the more polluted in the country and the reliance on coal has many negative health impacts for its population. Transforming Louisville's energy resources to more environmentally friendly methods and building

more energy efficient housing can be ways of combating the negative effects and leading the state transformation into an energy leader in the country.

As a potential, Louisville has the largest concentration of aging-care businesses in the world. In the next 25 years, more than 50% of the population in Louisville will be retirement-age. As a world leader in aging care, Louisville is uniquely poised at the center of a global demographic shift over the next twenty years.

By facing the challenges of the state and county, Louisville has the opportunity to become a city with healthy living alternatives: the healthy escape.

As a world leader in aging care, Louisville is uniquely poised at the center of a global demographic shift over the next twenty years. At home, however, it needs to support its own citizens in ways that go beyond health to the social and economic links tied to improved life expectancy.

AGING CARE

Louisville has the largest concentration of aging-care businesses in the world.

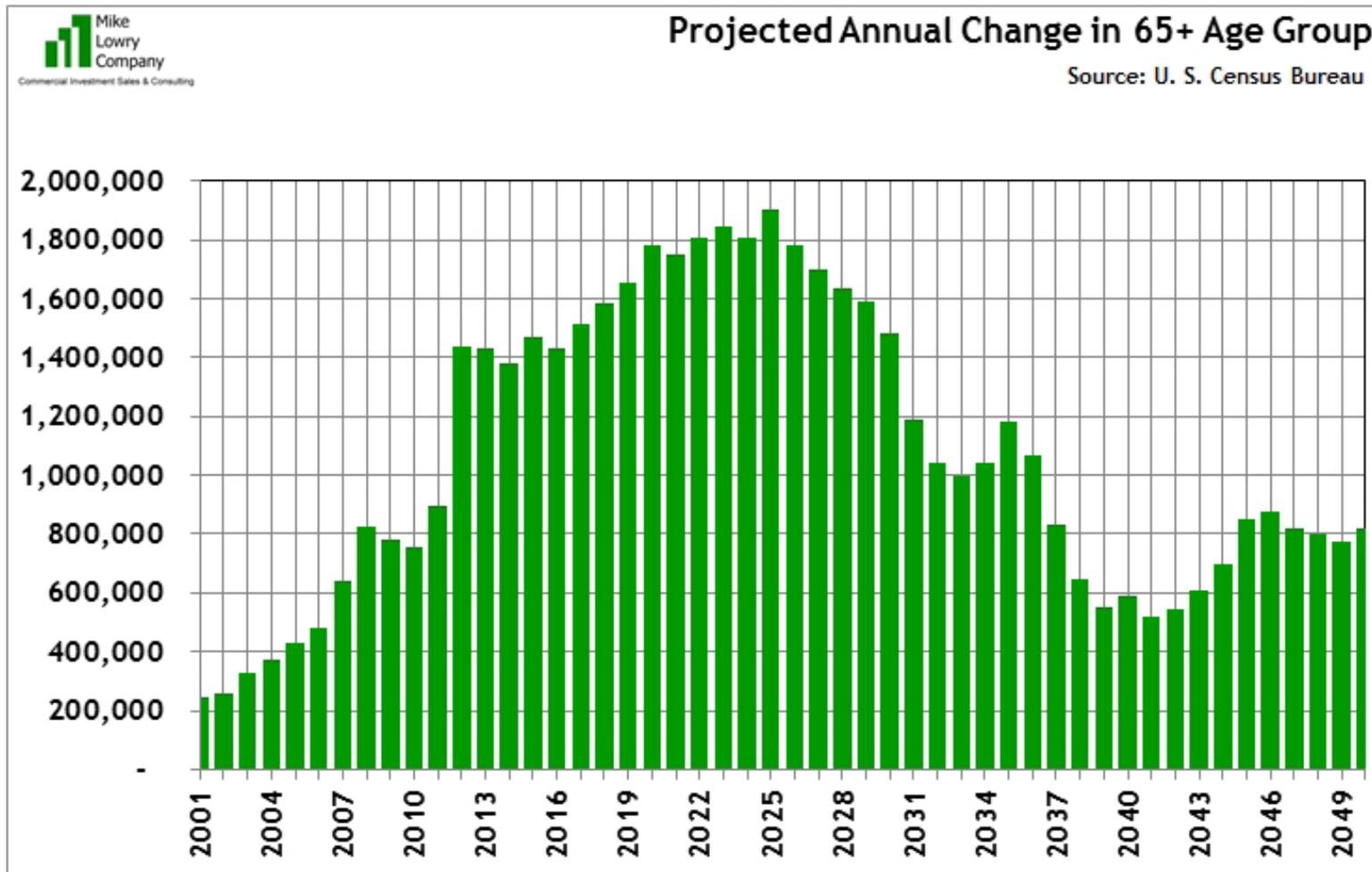
Louisville is the world-leader in Lifelong Wellness & Aging Care. With over 18,000 professionals producing over \$48 billion in revenue, wellness and aging care companies headquartered in Louisville constitute the largest concentration of aging-care businesses in the world.

- Almost Family Inc.
- Atria Senior Living Group Inc.
- Elmcraft Senior Living
- Humana
- Kindred Healthcare Inc.
- Pharmerica Corp.
- Res-Care Inc.
- SHPS
- Signature Healthcare
- Trilogy Health Services LLC



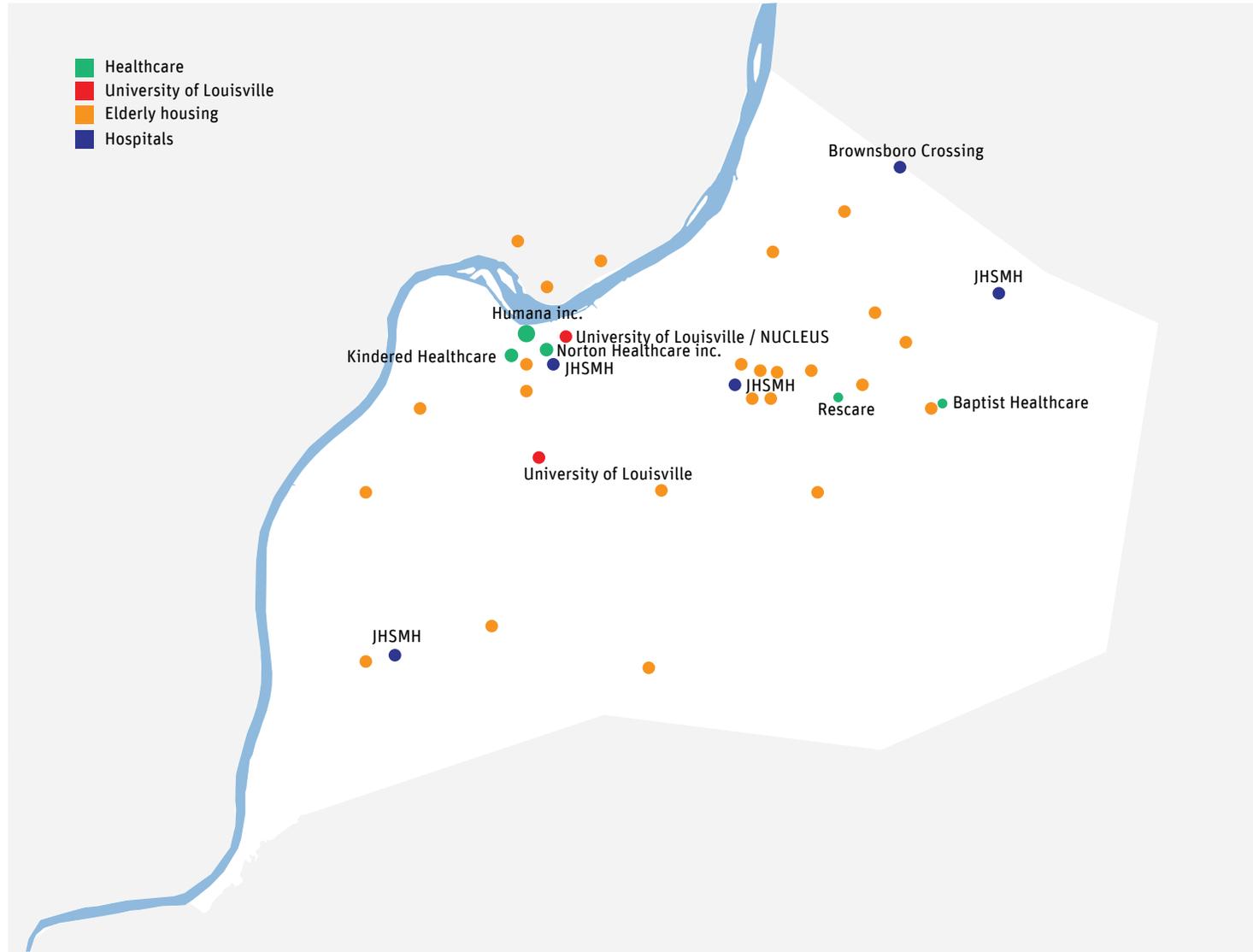
AGING POPULATION

Over the next twenty years, the shift to an aging population will increase demand for aging healthcare.



HEALTH INDUSTRY

Louisville health care leaders can form strong partnerships through the University and elderly living communities.

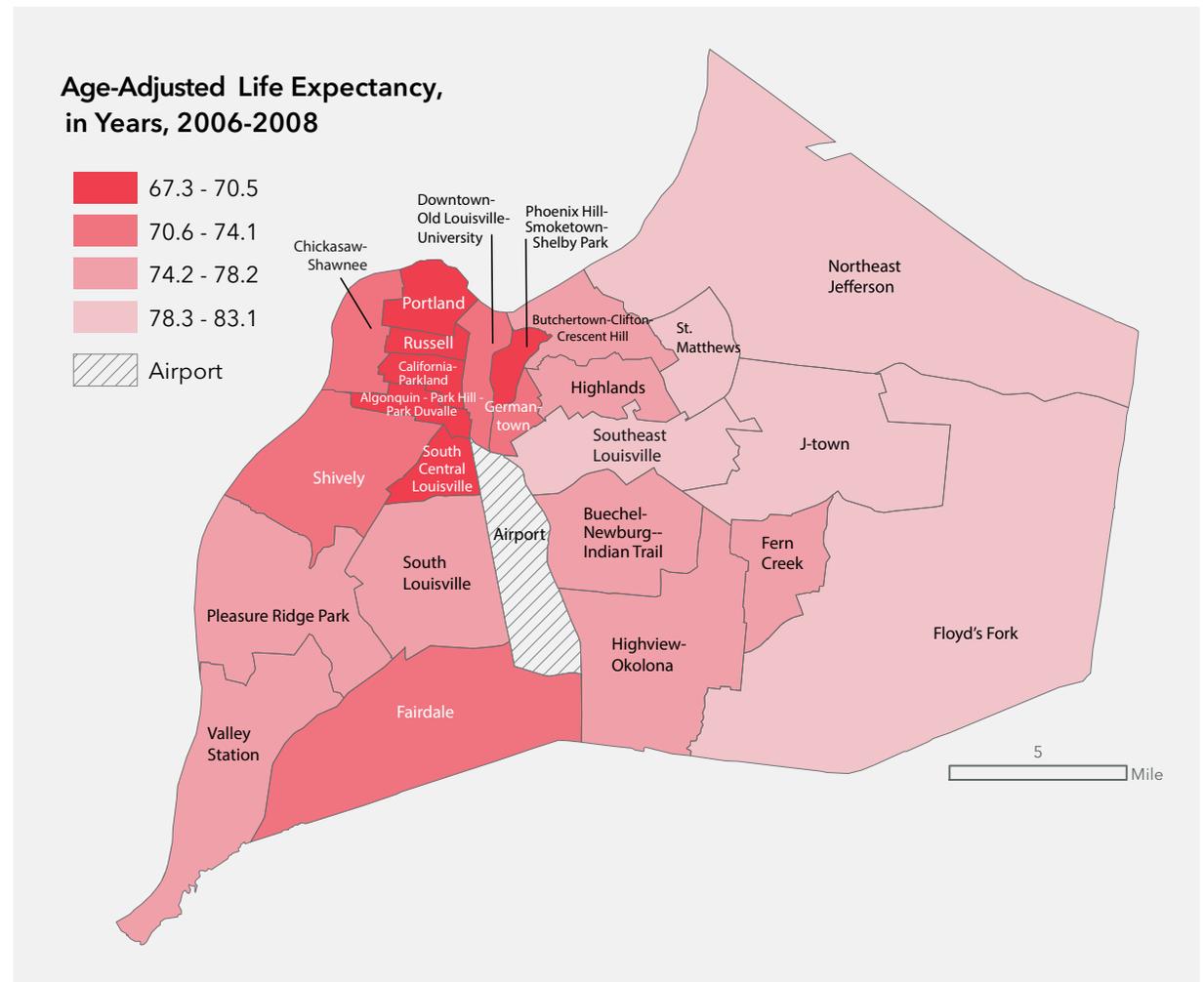


HEALTH DIVIDE

On the west side, lower incomes and lower educations are sharply correlated to lower life expectancy rates.

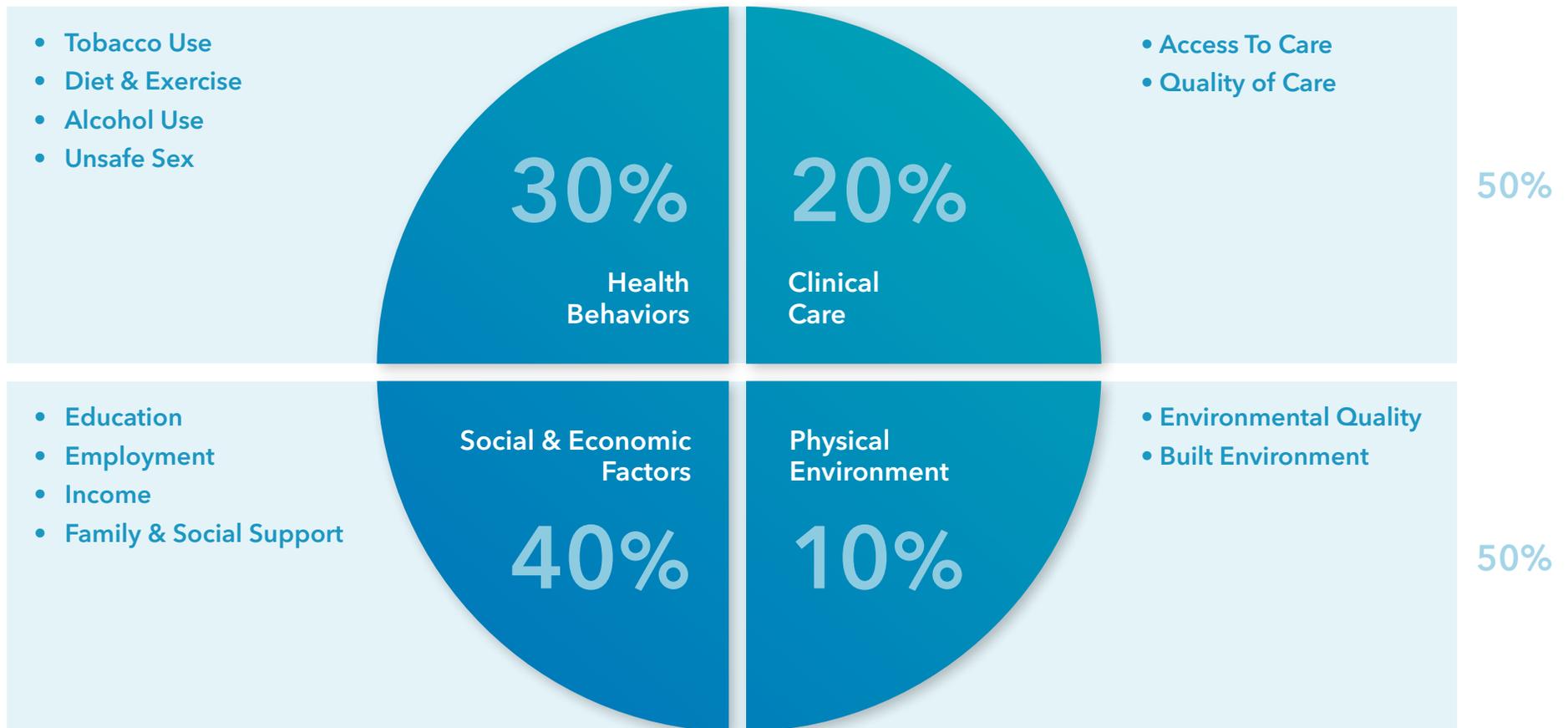
In a 2003 study involving blacks, Mexican-Americans, and whites in the United States, mortality rates for all gender and racial/ethnic groups were two to four times higher for those with the lowest incomes who lived in the lowest SES neighborhoods compared with those with the highest incomes who lived in the highest SES neighborhoods. Deaths would hypothetically be reduced by about 20% for each subgroup if everyone had the same death rates as those living in the highest SES neighborhoods.

(Louisville Metro Health Equity Report)



SOCIAL DETERMINANTS FOR HEALTH

Health equity is linked to social, economic, and behavioral determinants.



Source: Louisville Metro Public Health Address,
LaQuandra S. Nesbitt, MD, MPH Director, LMPHW, March 6, 2012



How might the major institutions and private enterprise in Louisville support healthy living from the ground up?

Kentuckians suffer from both internal and external adverse health affects. An attribute of the future city will be healthier living alternatives.

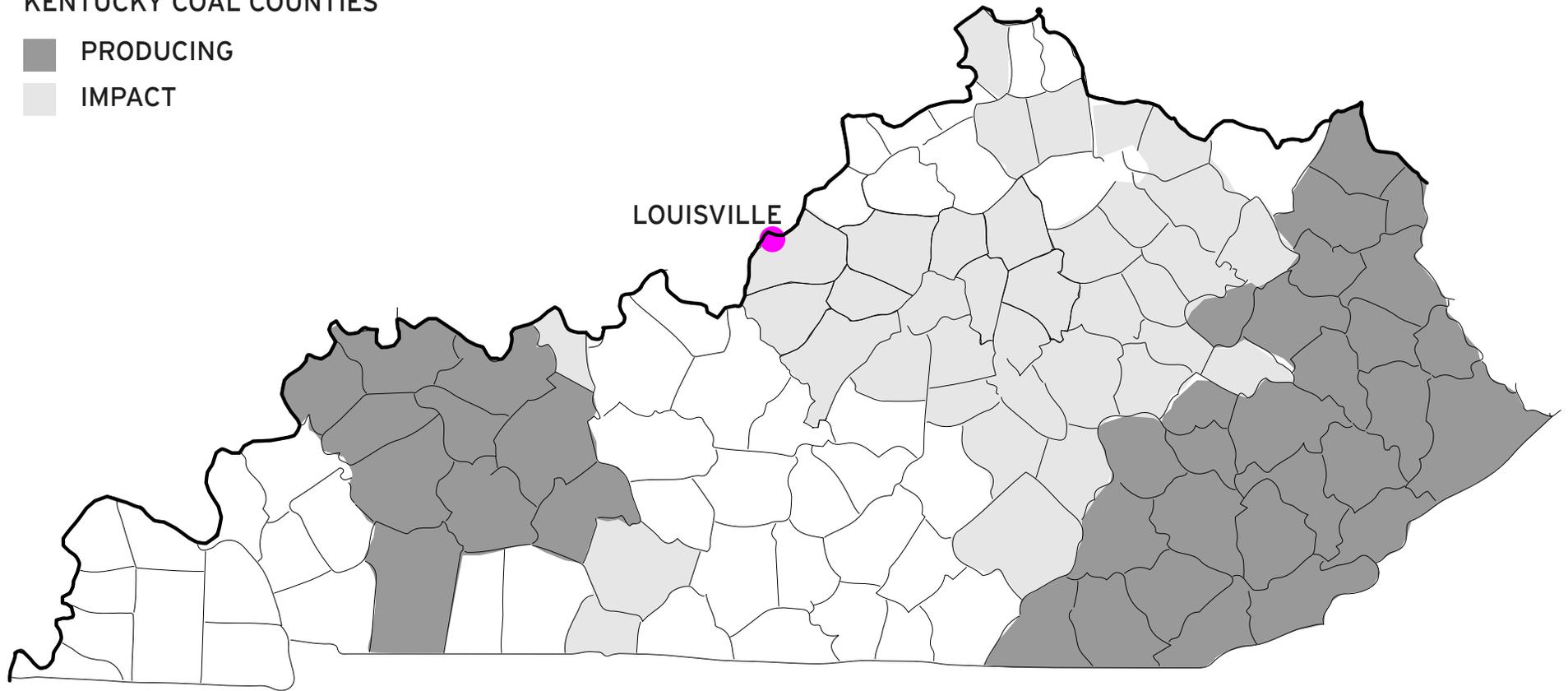
Louisville should lead the state in the transformation of healthy urban and suburban development.

KENTUCKY POLLUTION

The majority of Kentucky is impacted by the coal mining industry.

KENTUCKY COAL COUNTIES

- PRODUCING
- IMPACT

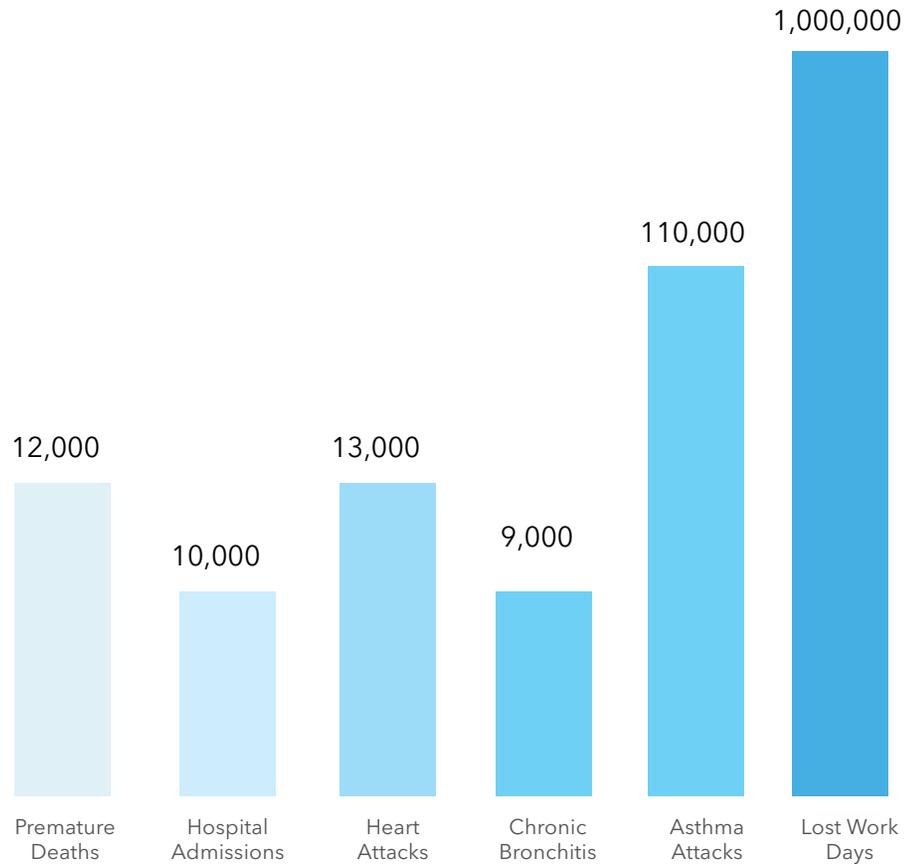


HEALTH AND ENERGY GENERATION

Kentucky's reliance on coal has many negative health impacts for its population.



Estimated health effects from U.S. coal-fired power plant emissions, 2010



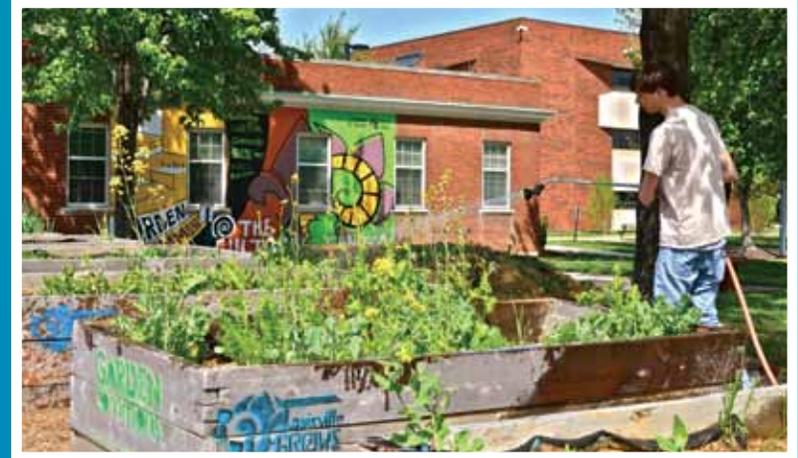


Can Louisville become the healthy escape?

- Clean environment
- Healthy eating
- Active living

HEALTHY ALTERNATIVES

Cities provide healthier options for living.



SUMMARY

- Given its density of high-quality, eldercare organizations, Louisville should lead the country in innovative, new forms of housing and community development and programming for elder communities.
- Louisville, in collaboration with Louisville based health care organizations, should lead the country in creating healthy city initiatives to become the healthiest city in the region, America's heartland.
- Natural resources and the participation of health-based organizations provide excellent resources to pioneer ground-breaking education for healthy living in the Louisville K-12 school system and University of Louisville.

04 Focus Areas

- 4.1 Regionalism
- 4.2 Living
- 4.3 Connectivity
- 4.4 Creativity
- 4.5 Health
- 4.6 Energy
- 4.7 Identity

ENERGY

Energy is the currency of the New Golden Age.

Within 25 years it is imaginable that we would produce all the energy we need from renewable sources. This is energy produced in a sustainable way, available and affordable for all. To do this, governments will have to lead the charge.

The Venezuelan scholar on technology and economic development, Carlota Perez, describes the current financial event not as a unique occurrence but one of 5 major technological revolutions in the history of the modern world. The 5th revolution, Information Technology and Telecommunication, grew rapidly as a result of private investment, slowly separating itself from the 'real' economy and developing a bubble economy. This artificial or bubble economy was not sustainable, and, similar to the revolution at the turn of the century (age of oil, automobile and mass production), the bubble burst.

The economy always adjusts itself, and that adjustment historically has been through the collaboration between government and the private sector. Carlota Perez hypothesizes that the new revolution that ensues will foment the deployment of the previous technology and incite a new Golden Age—the energy revolution. To meet this challenge we will need an implementable plan that promotes research in the development in energy and efficiency and renewable energy. We have to start on the scale of the city, and imagine entire new structures and grids for the distribution of clean energy. Greater access to alternative sustainable energy forms will be imperative. The way we move (public transport), what we consume, the materials that we use, re-use, recycle, as well as the food we eat (the waste, sustainable sources) are critical, achievable factors of this step change.

The 21st Century industry will rely on renewable energy resources.

It is imperative that Kentucky redefine its relationship to its natural resources in order to discover and cultivate innovative, renewable energy alternatives.

COAL VS. RENEWABLES

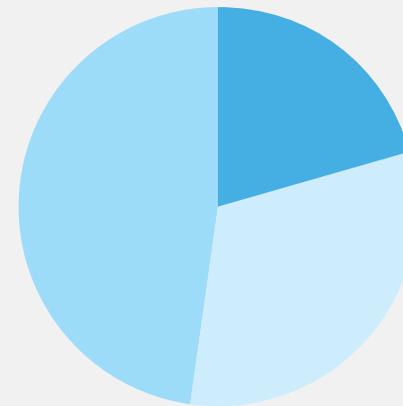
As the third largest producer of coal in the nation, Kentucky is reliant on conventional fuel sources to generate electricity.

As the third largest producer of coal and with some of the lowest electricity prices in the nation, Kentucky remains largely dependent on conventional fuel sources to generate electricity. The state has identified bioenergy, wind, solar, hydro, and geothermal energy as potential new energy sources in its energy plan, and is pushing policy and incentives that would help move the renewable energy industry forward. For the time being, however, utility-scale growth is limited to just a few planned biomass power and fuels facilities, with no announced plans to develop the state's other untapped, available renewable energy resources.

(Source: American Council On Renewable Energy)

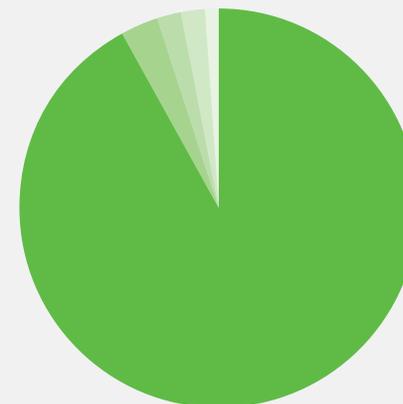
- 92% of the electricity produced is from coal.
- The future of coal powered plants is linked to the building of large and expensive carbon capture plants.
- Even though the US is one of the world's largest coal producer, imports have been rising since the 1980's (36.246 tons in 2006).
- Renewable energies are almost non-existent in KY today.
- The biggest potential for renewable energy resources are biomass and solar photovoltaic.

Kentucky electricity consumption by sector, 2010



commercial	21%
residential	31%
industrial	48%

Kentucky electricity generation, 2010



coal	92%
hydro	3%
petroleum	2%
natural gas	2%
biomass	>1%

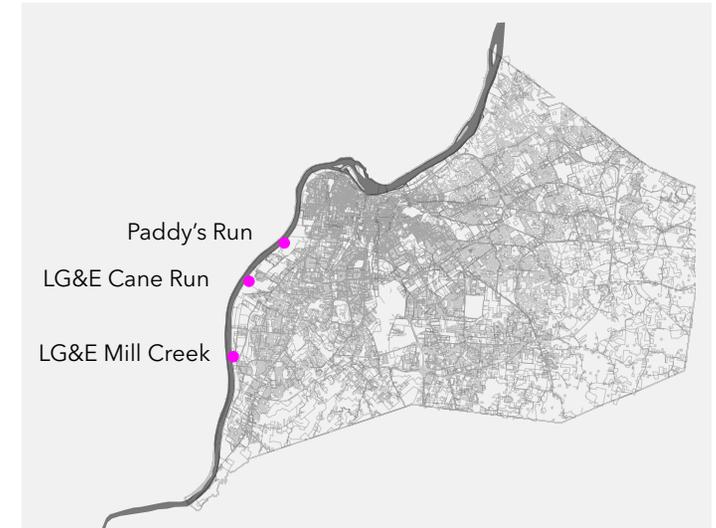
*Kentucky Energy Database, 2011

JEFFERSON COUNTY'S COAL DEPENDENCY

Jefferson County's coal powered energy plants account for 20% of all industrial air emissions in Kentucky.

"Rubbertown is composed of 11 large chemical plants and energy generation plants, accounting for approx. 20% of the State's air toxic and 42% of all industrial air emissions in Jefferson County."

(Source: West Jefferson County Community Task Force)



LG&E Paddy's Run



LG&E Cane Run



LG&E Mill Creek

ONGOING INITIATIVES

Ongoing initiatives are starting to experiment with alternative energy sources for remediation and job creation.

25 x 25 Alliance, Roadmap for Kentucky:

- Lead by the Kentucky rural energy consortium, its goal is to produce 25% of the state's energy from clean sources by 2025.
- 25 x 25 sees the implementation of clean energy as a job creator that will strengthen the national economy, mainly in rural America (emphasis on bio-mass, bio ethanol and bio diesel from crops).

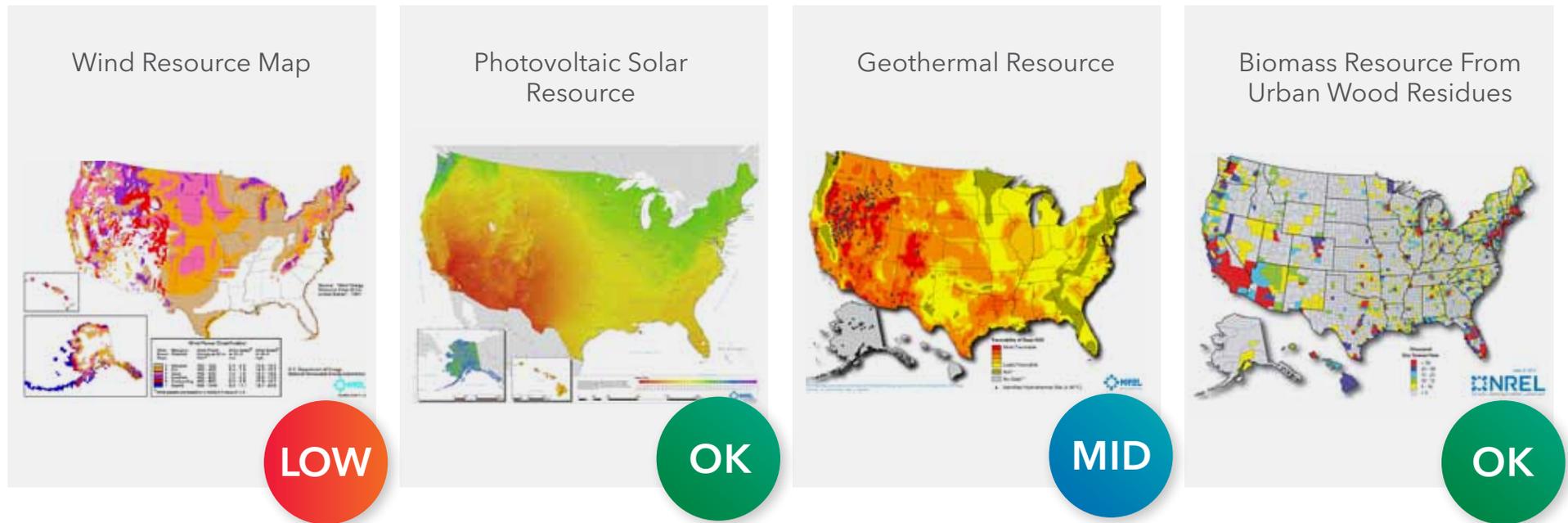
Kentucky Brownfield Redevelopment Program:

The Kentucky Brownfield Program seeks to help redevelop and revitalize properties that are abandoned or underutilized due to real or perceived contamination. There are an estimated 8,000 brownfield development sites across the state. They include sites such as old gas stations, mine-scarred lands, abandoned factories, old schools and hospitals and meth labs.



RENEWABLE ENERGY POTENTIAL

Solar and biomass energy resources have the most potential for Louisville.



* Source: NREL National Renewable Energy Laboratory

REHABILITATION: ZOLLVEREIN MASTERPLAN, GERMANY



Masterplan by OMA



School by SANAA



Museum and visitor's center by OMA

In 1988, the coal-refinery at Zollverein closed, 5 years after the mines were shut down. The city bought the site and declared it German Industrial Heritage, later declared UNSECO World Heritage.

The masterplan for the site consists of a band around the former historic site, which contains the new necessary program and functions.



Museum and visitor's center by OMA



Masterplan by OMA

The program includes: visitor's center, a museum, temporary exhibition areas, meeting rooms, new educational buildings and offices.

REHABILITATION: FARMINGTON, MINNESOTA



Landscape by Balmori Associates. A drainage system for a new development serves to create green public space. It also resolves environmentally the issue of frequent flooding in a flat plain – with a high water table and peak storm volumes – emptying in the Red River.



The Farmington, Minnesota, Prairie Waterway has a dual purpose, providing drainage for the development of nearly 500 homes while creating and functioning as a public space. Balmori Associates proposed an open water drainage system to replace the usual underground pipeline. Dubbed 'Park Place' by local residents, the 91-acre park has now become an integral part of the community, not only as a part of infrastructure, but also as a public amenity.

BROWNFIELD AND INDUSTRIAL REMEDIATION: FORD TRUCK ASSEMBLY PLANT



William McDonough + Partners were commissioned by Ford to upgrade their Truck Assembly Plant in Dearborn, MI (one of the largest and oldest factories in the world) into a sustainable 21st century manufacturing plant and to remediate the polluted soil and waters around the site.

Main Features:

- 10 acre Green roofs on existing and new buildings. The roofs reduced stormwater runoff by holding up to 1 inch of rainfall. Living plants absorb carbon dioxide and emit oxygen.

- Introduction of daylight to deep industrial buildings, reducing energy consumption and adding comfort.
- Ponds of phytoremediation, which uses natural plants to rid soil of contaminants.
- Solar cells on rooftops, geexchange and windpower demonstration projects.
- Planting more than 1,500 trees, wet meadows, porous paving, hedgerows and bioswales that attenuate, clean, and convey storm water across the site.

WASTE AND ENERGY GENERATION: OSLO & MADRID



Oslo: Klemetsrud waste-to-energy plant was opened in 1986. It has been upgraded with advanced cleaning systems, and is today a modern facility for waste handling. The plant produces energy in the form of steam that is utilized for district heating and production of electricity.

Electricity is also produced from landfill gas led through pipes from the Grønmo landfill nearby. An environment report published in 2005 shows that the plant has no environmental impact or consequence.

Energy recovery of solid waste is an economic and environmental way to treat waste. Waste energy and district heating provides electricity for homes in Oslo.



Madrid: The Masterplan for an garbage infill outside Madrid includes a recycling plant that brings together a heterodox rubbish selecting and processing complex, storage, workshops and offices, and a museum area with a display intended to encourage people's environmental awareness. The green roof, the polycarbonate, the lightweight bolted structure and the set of interior facings manifest this spirit, forming a constructional system that shows the greater environmental commitment that can be currently obtained using techniques available on the market.

The plant works as a learning center for schools around Madrid.

Project by Abalos & Herreros arquitectos, Madrid, Spain.

BROWNFIELDS AND SOLAR ENERGY



Solar landfill. Brightfields Development LLC

“According to the U.S. Conference of Mayors, more than 100 cities nationwide have estimated that they each would receive additional tax revenues in the range of \$205 million to \$500 million by returning brownfields to productive economic use.

Solar Technologies

“There are a variety of ways to capture or convert sunlight into useful energy. Solar technologies use the sun’s energy to provide heat, light, hot water, electricity and cooling for homes, businesses and industry. Solar technologies are broadly characterized as either “passive” or “active” depending on how they capture, convert and distribute sunlight. Active solar activities and technologies use photovoltaic panels, pumps and fans to convert sunlight into useful outputs, such as electricity. Passive solar



Unused landfill, Scituate, MA.

techniques include selecting materials with favorable thermal properties, designing spaces that naturally circulate air, and aligning the position of a building to the sun.

“Photovoltaic (PV) devices, or “solar cells” convert sunlight into energy. PV systems are one of two primary active solar technologies, along with solar thermal plants. PV systems produce two main products that can be sold in the marketplace: electricity and the green attributes of this electricity. PV systems make use of highly purified silicon that functions to convert sunlight directly into electricity. Solar cells are a familiar and widely used technology - calculators, toys, yard lights, roadside warning signs all use solar cells to convert sunlight directly into electricity.”

* Source: EPA, Green Remediation and Utility-Scale Solar Development

IMPLICATION

“A Solar Power Purchase Agreement (SPPA) is a financial arrangement in which a third-party developer owns, operates and maintains the photovoltaic (PV) system, and a host customer agrees to site the system on its property and purchases the system’s electric output from the solar services provider for a predetermined period. This financial arrangement allows the host customer to receive stable, and typically lower-cost electricity, while the solar services provider or another party acquires valuable financial benefits such as tax credits and income generated from the sale of electricity to the host customer. SPPAs are common in both the public and private-sector PV marketplace. With this business model, the host customer buys the services produced by the PV system rather than the PV system itself.

“Benefits for host customer

- No upfront capital cost.
- Predictable energy pricing.
- No system performance or operating risk.

- Projects can be cash flow positive from day one.
- Visibly demonstrable environmental commitment.
- Potential to make claims about being solar-powered.
- Potential reduction in carbon footprint.
- Potential increase in property value.
- Support for local economy and job creation.

“Challenges for host customer

- More complex negotiations and potentially higher transaction costs than buying PV system outright.
- Administrative cost of paying two separate electricity bills if system does not meet 100 percent of site’s electric load.
- Potential increase in property taxes if site is reassessed.
- Site lease may limit ability to make changes to property that would affect PV system performance or access to the system.”

* Information provided by EPA’s Green Power Partnership

EXELON SOLAR CITY, CHICAGO



“The largest urban solar installation in the United States, Exelon City Solar produces 10 megawatts of electricity on a former brownfield in Chicago’s West Pullman neighborhood.

“The site is a 41-acre= former industrial area that has been vacant for more than 30 years. The project included the site’s remediation and restoration as a productive site.

“32,000 solar photovoltaic (PV) panels convert the sun’s rays into clean electricity with zero carbon emissions.

“The installation generates more than 14,000 megawatts-hours of electricity per year - enough to meet the annual energy requirements of up to 1,500 homes.

“It displaces approximately 31.2 million pounds of greenhouse gas emissions per year – equivalent to taking more than 2,500 cars off the road.

“Approximately 200 construction jobs were created.”

* Source: Exelon corp.



How can Louisville (and by extension, Kentucky) shift to more sustainable energy resources?

RETROFIT POTENTIAL

The Kentucky Exposition Center is the largest climatized building in the State and one of the largest of it's kind in the US. (1,3 Million Sq. Feet)

How can it be turned into the first Carbon Neutral fair ground in the Country?



Photovoltaic Cells

Living Roof

Ponds To Collect Stormwater

Permeable Pavement In Parking

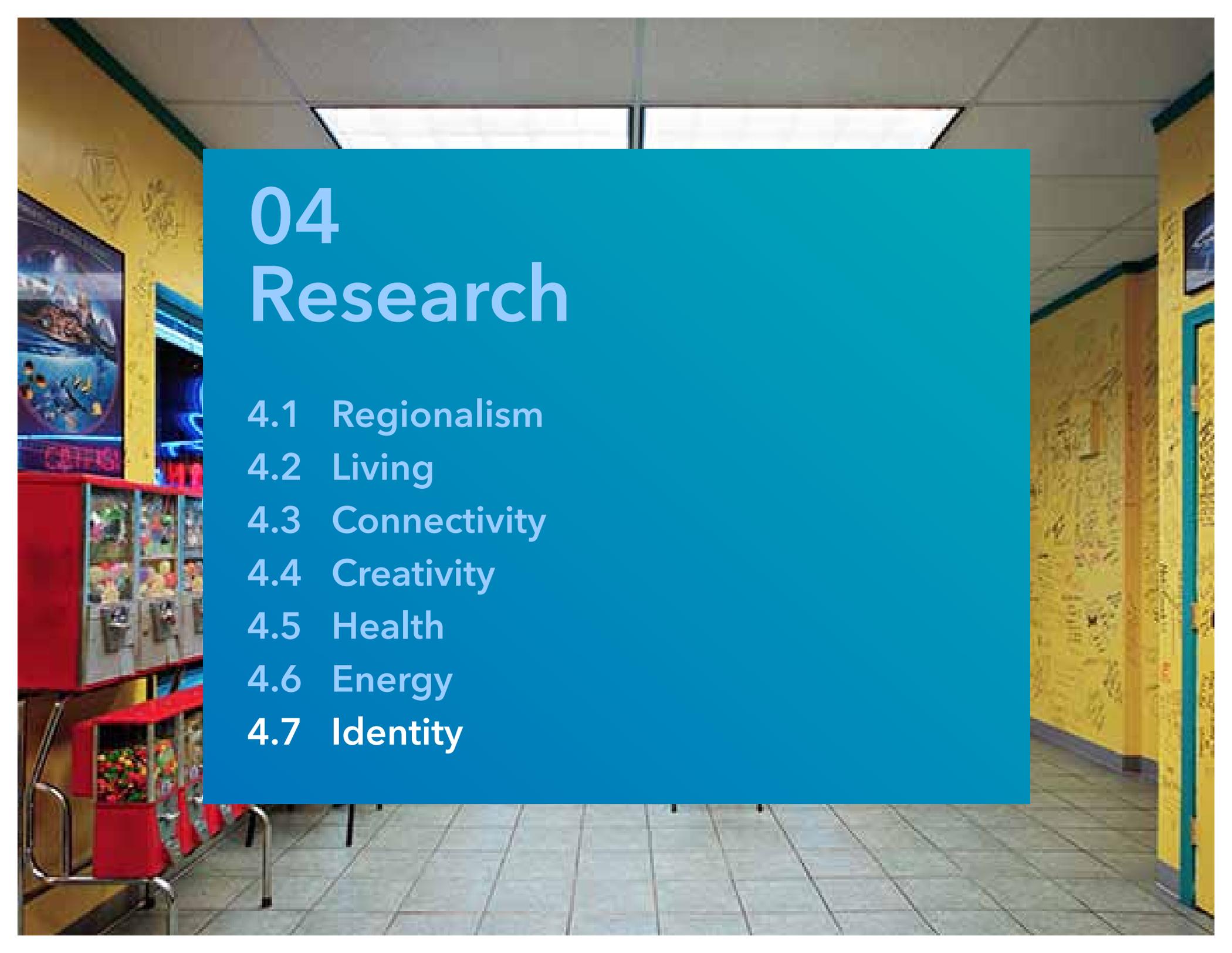
SOLAR ENERGY PLANTS?

Empty spaces, rooftops, and industrial sites have the potential to power thousands of homes.



SUMMARY

- Louisville should lead the state and nation in the shift from coal based energy to transformative new sustainable energies.
- Louisville's infrastructural and industrial remnants should be re-imagined as clean energy producing sites to begin the process of transformation and innovation.



04 Research

- 4.1 Regionalism
- 4.2 Living
- 4.3 Connectivity
- 4.4 Creativity
- 4.5 Health
- 4.6 Energy
- 4.7 Identity

ON URBAN BRAND IDENTITY

“Cities, like dreams, are made of desires and fears, even if the thread of their discourse is secret, their rules are absurd, their perspectives deceitful, and everything conceals something else.”

– Italo Calvino, “Invisible Cities”

In a globally networked world, where long-standing categories for everything from consumer products to nation-states have been radically upended, branding is the new catchphrase.

The competition for consumers, talent, opportunities, influence, investment and attention is not limited to corporations. Now all entities are drawn into the idea marketplace.

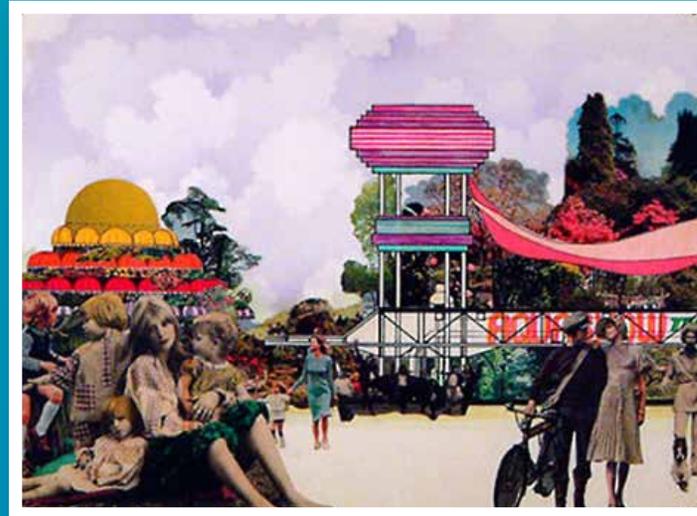
To compete it is essential to be clear. Branding is a way to focus the story of a place into actionable gestures and a form of planning that allows diverse players to communicate in a unified voice.

Cities are synergistic centers of production and cultural mythology. They are macro-scaled incubators that aggregate talent, knowledge, resources and ambition and breed invention.

Cities are by nature rich, complex and immersive. That’s why we are drawn to them. There is a reason so many virtual products use the city as a metaphor. But as complex as a virtual space may be, they can never rival the real thing. The vitality of the metropolis is an idea as old as human culture.

Cities have heritage, they don’t need to invent it. But to thrive, cities need to attract and retain the human and capital resources that fuel growth and change. That means cities have to tell a compelling story about who they are, what they’re doing, and where they’re headed.

In connecting to these practices, what is the image of Louisville and the stories or mythologies around it? As we uncover we can start to do the real work of telling a tale unique to Louisville and share its incredible history and wealth of assets.



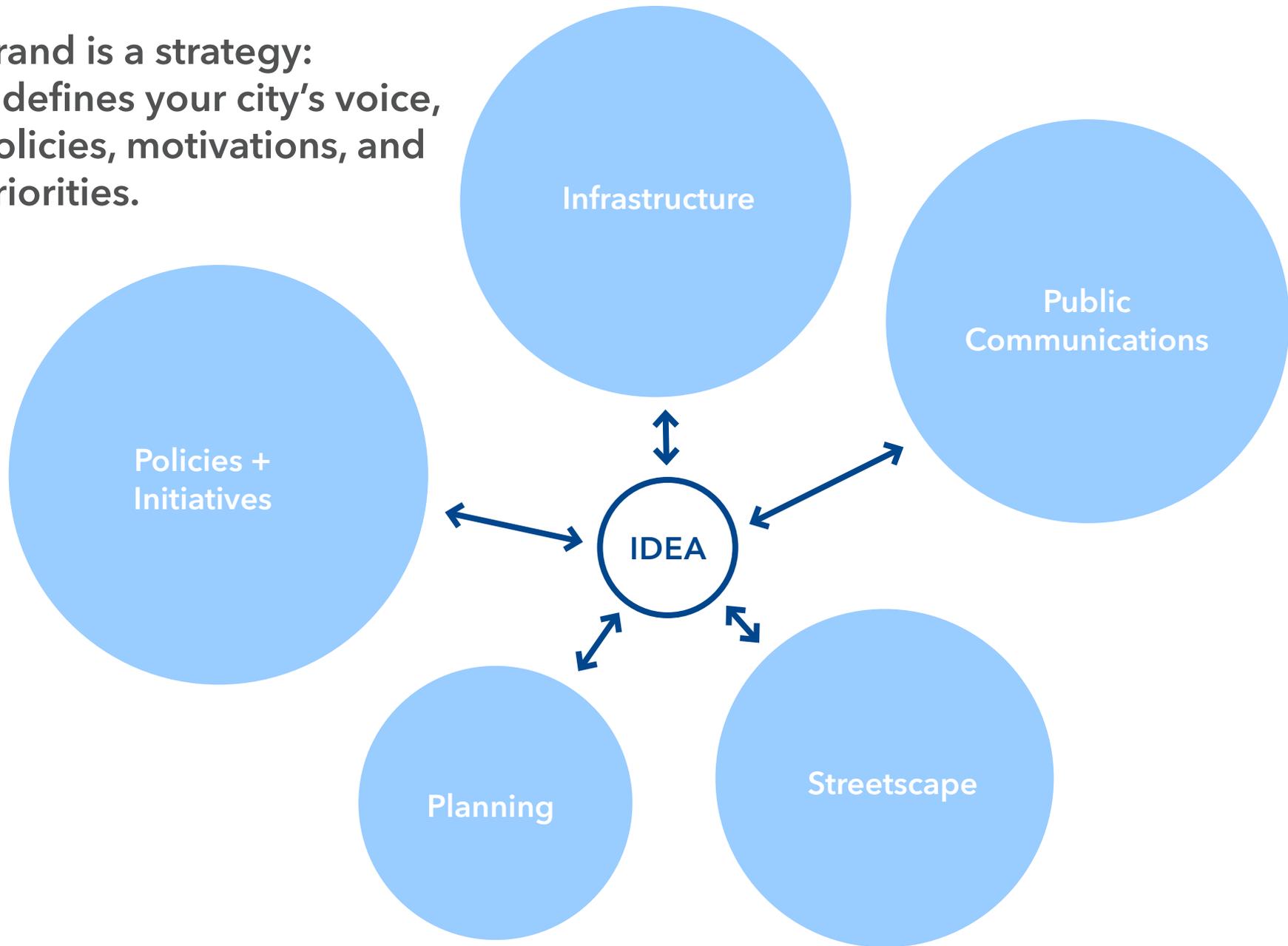
WHAT IS A BRAND IDENTITY?

A brand is **NOT** a logo or a slogan.
It is an **IDEA** that is at the heart of everything you do.



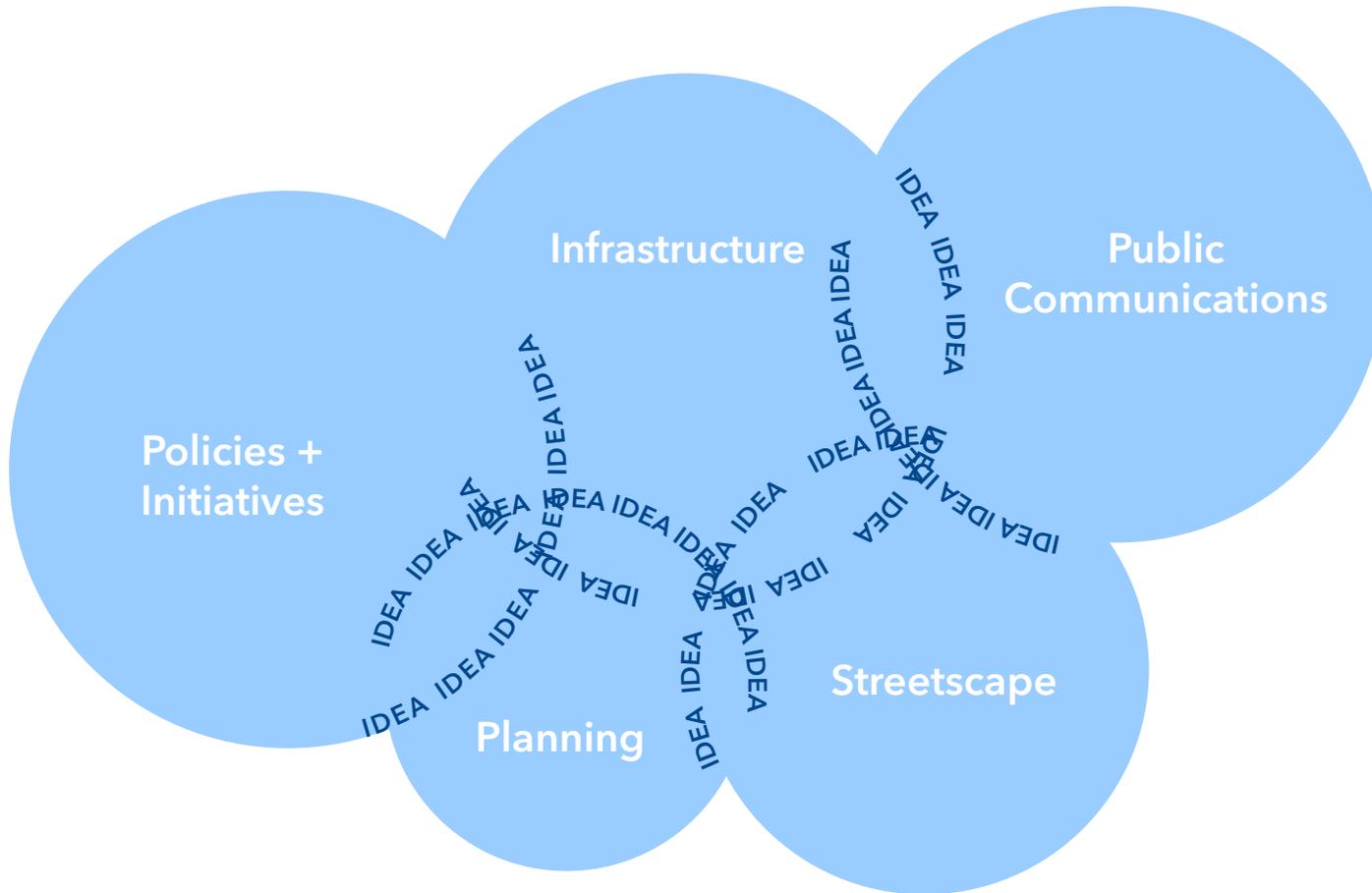
WHAT IS A BRAND IDENTITY?

Brand is a strategy:
It defines your city's voice,
policies, motivations, and
priorities.



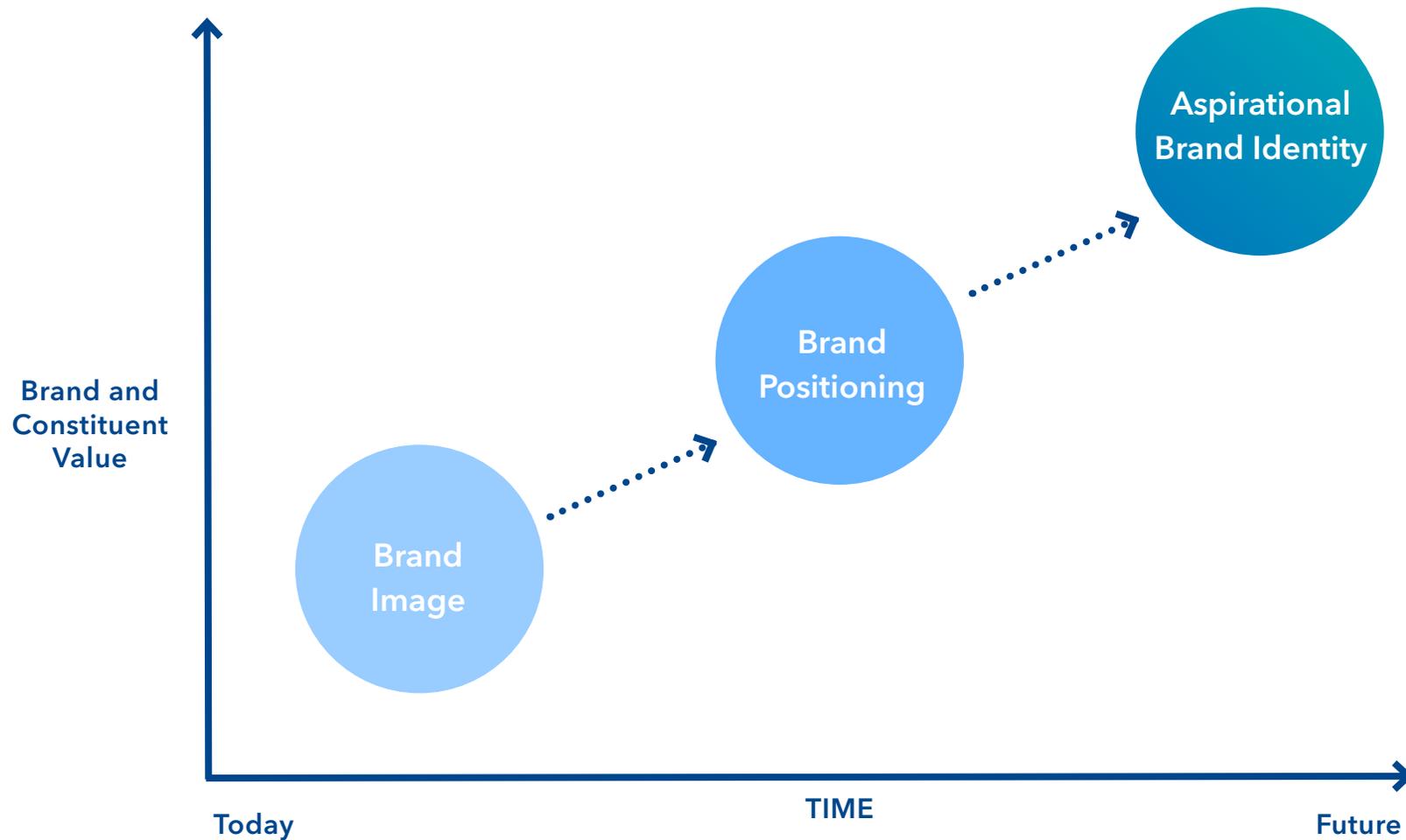
WHAT DOES IT DO?

When strategy is brought to life through tactics, together they create a brand image for a city.



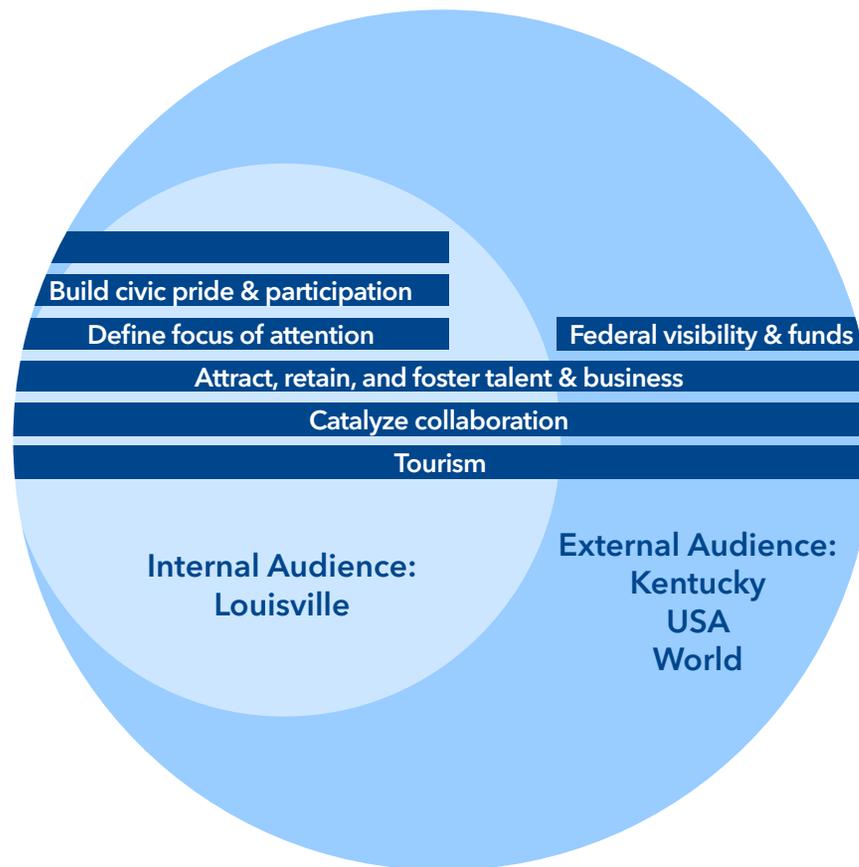
WHAT DOES IT DO?

Strategy guides brand image from what you are to what you want to be.



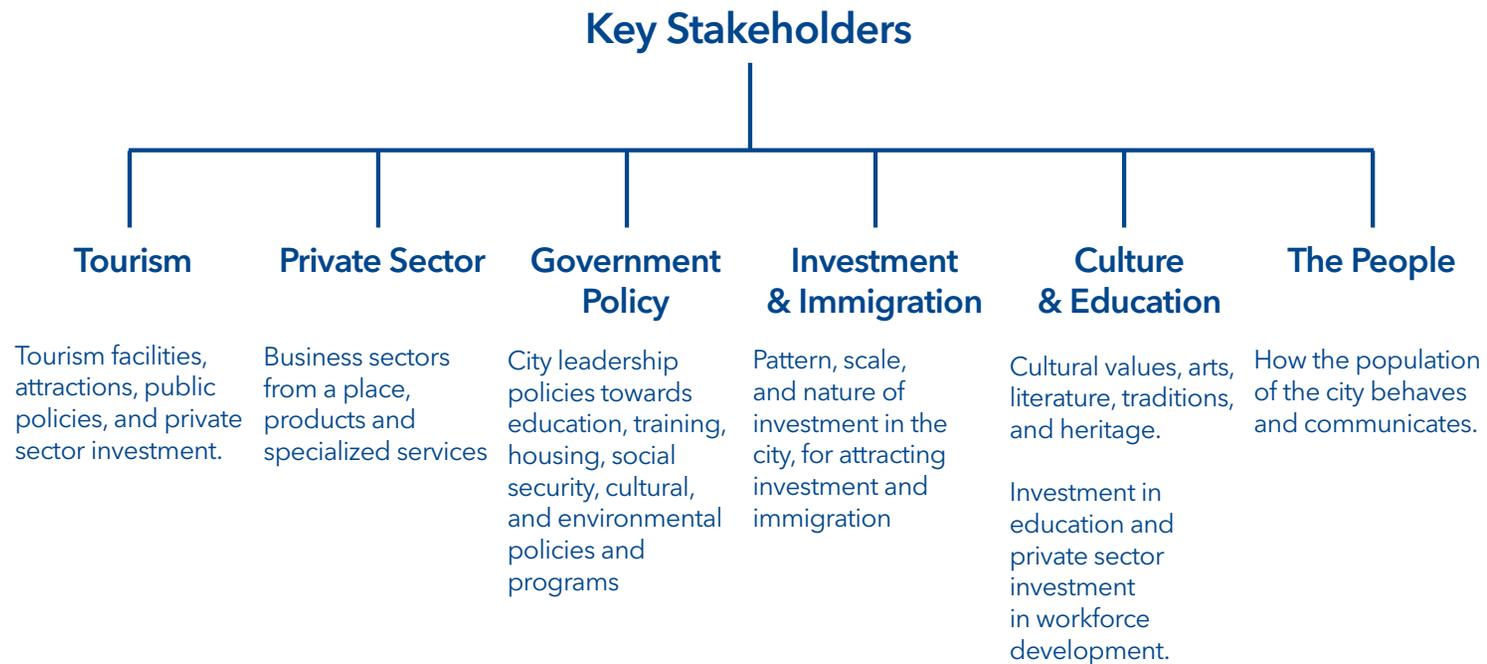
WHO IS IT FOR?

For internal and external audiences, brand identity organizes initiatives and establishes perception.



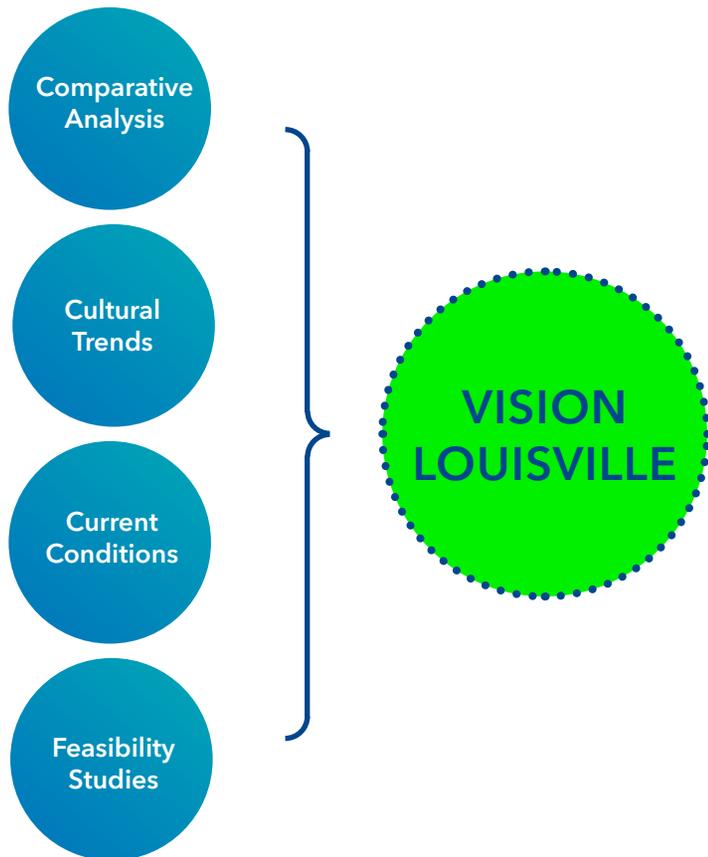
WHO IS IT FOR?

A key element of city branding is involving all stakeholders who can shape the nature of the place.



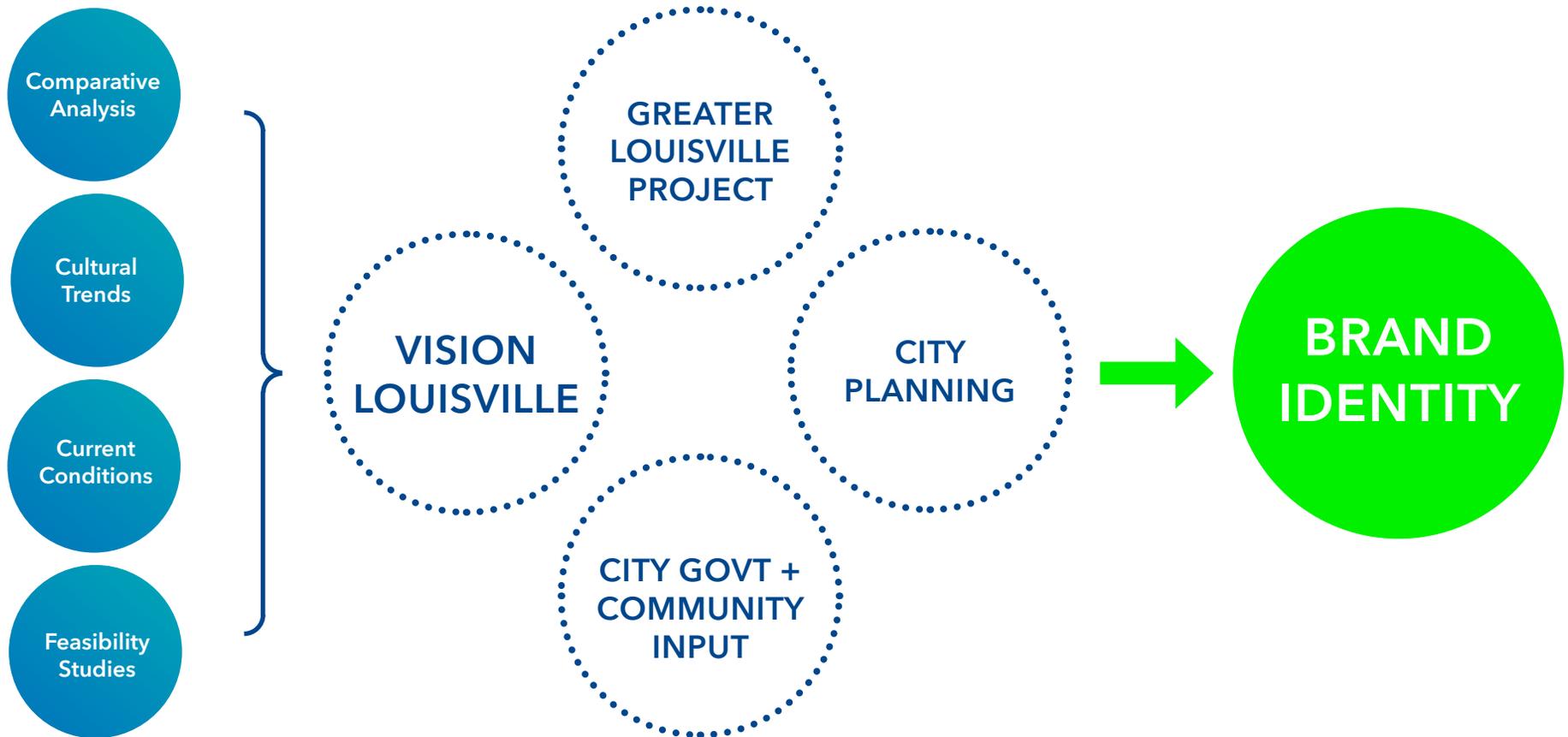
WHERE DO WE START?

Using a broad range of inputs, Vision Louisville is the first step in reimagining Louisville's identity.



WHERE DO WE START?

Using a broad range of inputs, Vision Louisville is the first step in reimagining Louisville's identity.



GOALS FOR VISION LOUISVILLE

The Vision Louisville Plan should set goals and aspirations for how to ...

Work towards a common goal

Organize government, investors, partners, citizens in common goals to prioritize and achieve results.

Create a mutual image of where we are going.

Communicate Louisville's unique assets

Preserve and extend Louisville's distinct heritage.

Distinguish Louisville locally and regionally.

Create synergies between public + public initiatives

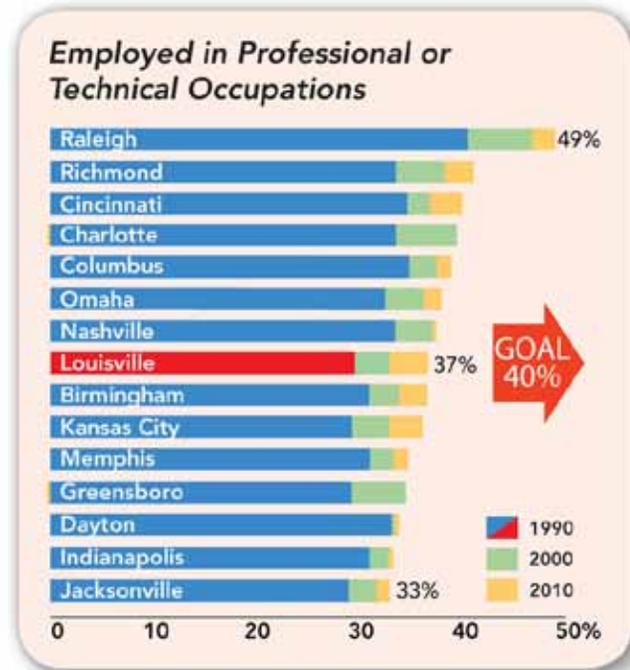
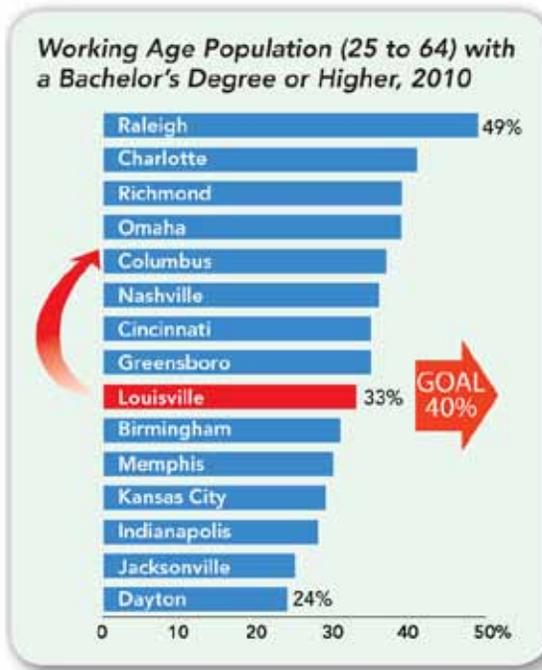
Create synergy on all levels:

- access
- transportation
- education
- cultural sectors
- jobs
- community dialogue

Provide a vehicle for and leverage existing initiatives such as the Greater Louisville Project.

WHAT MAKES A CITY COMPETITIVE?

Competitive cities differentiate themselves through quality of place, jobs, and education.



REGIONAL COMPARISON

Regional cities use a range of tactics and projects to stay competitive.



Columbus: Slow and Steady
Use assets (state capital, OSU, start-up culture, housing market) for brain gain and business incubation.



Indianapolis: Sports Capital USA
Use existing sports cred as platform for showcasing other parts of the city



Cincinnati: Plan Build Live
Rewrite building regulations to facilitate growth and participation to improve the city.



Raleigh: Research Triangle
Utilize regional universities to build a knowledge- and research- based economy and talented workforce.



Richmond: "RVA"
Transform from a historical place to a creative hub through entrepreneurship initiatives.



Kalamazoo: Kalamazoo Promise
Use private-public partnerships to fund every graduating child's college education.



Nashville: "Nashvegas"
Build on heritage as Music City to create an updated, glamorous new image and cityscape.



Omaha: Silicon Prairie
Home-grow a tech hub by gathering, broadcasting, and incubating a new regional industry.

Ambitious initiatives, infrastructural overhauls, and strong civic voice have helped to distinguish best-in-class cities.

INITIATIVE

Vancouver as become a model of sustainability by setting ambitious goals and implementing smart, realistic strategies to achieve them.

Major Assets

With the smallest per capita carbon footprint of any city in N. America., Vancouver is one of world's "most livable cities." It also has magnificent natural surroundings, strong environmental values, diverse cultural mix, innovative economy.

Urban Renaissance

The city's progressive approach to building a sustainable city includes initiatives for renewable energy, green building codes, new "green" jobs, zero waste, and access to nature.

Brand Strategy

The Greenest City 2020 Action Plan sets and communicates specific goals & strategies to "be the greenest city in the world by 2020"



INFRASTRUCTURE

Providence re-connected its downtown by excavating a river that has become a new waterfront.

Major Assets

Home to several revered higher education institutions (Brown, RISD, Johnson & Wales), Providence has immense cultural capital. Its smallness fosters quicker change.

Urban Renaissance

The waterfront development project revived the downtown and created a new center of cultural and economic activity.

Brand Strategy

Build on heritage and reputation for original thinking to become The Creative Capital. The strategy establishes Providence as a vibrant northeastern city where original thinking is expansive and every experience is personal.



VOICE

New York City transformed its image by developing a clear, friendly consistent voice that unifies its diverse make-up.

Major Assets

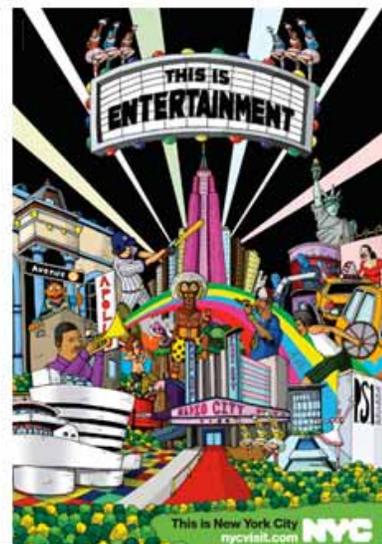
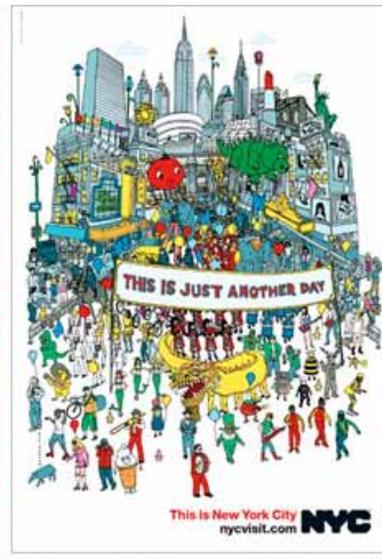
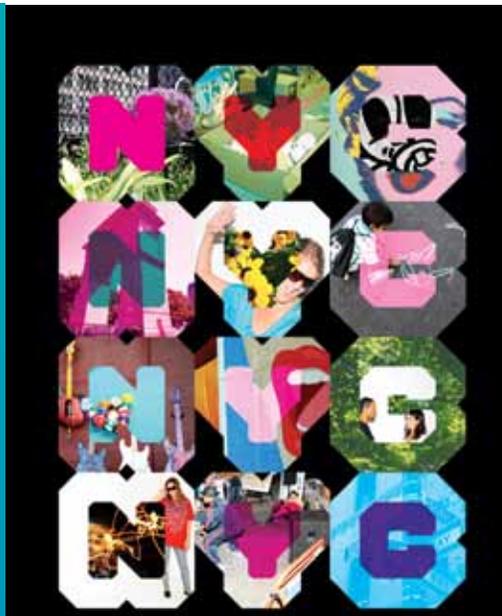
As "The Capital of the World", NYC has immense cultural, social, economic diversity and output. Its density and eclecticism at once defines and confuses its identity.

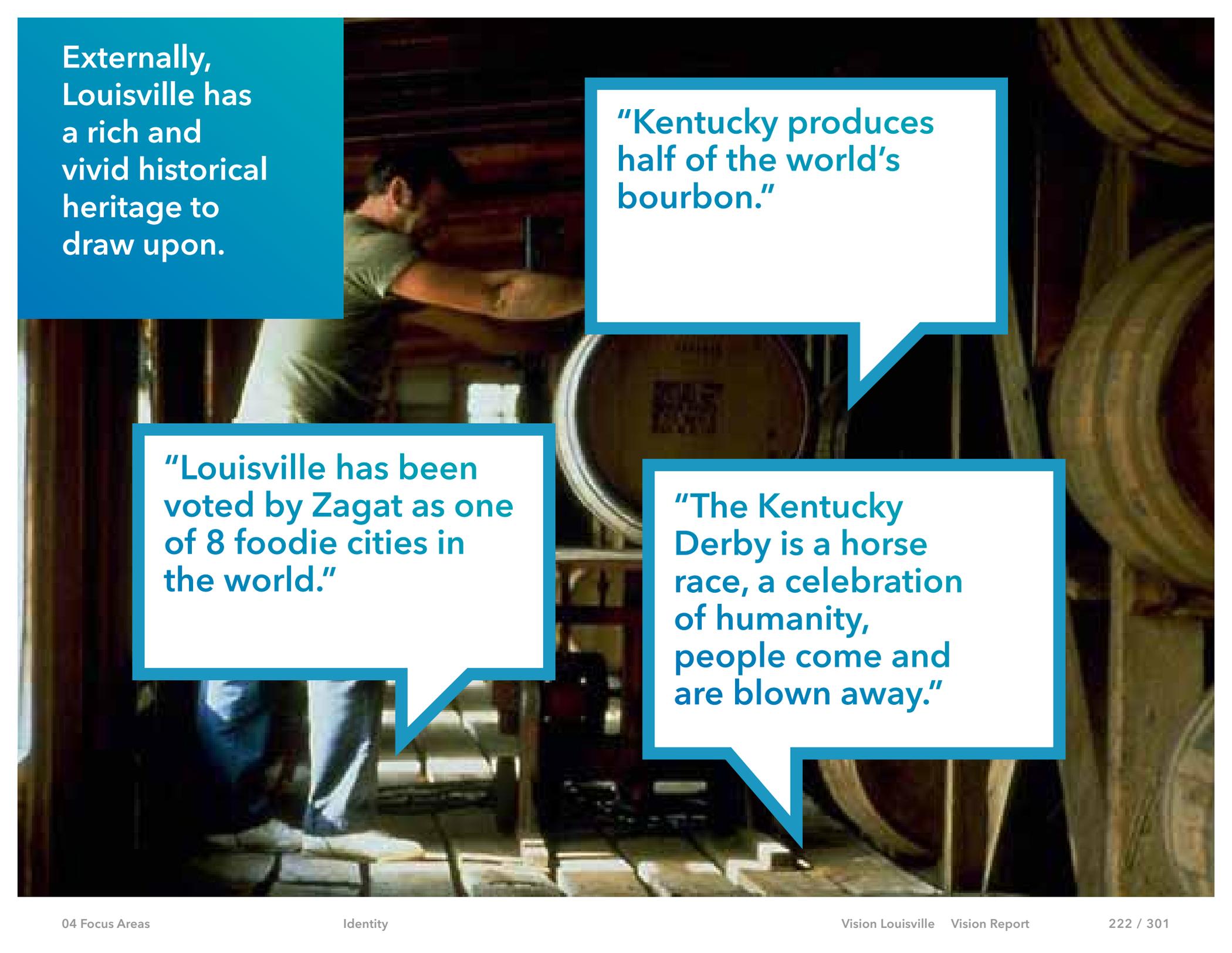
Urban Renaissance

Major initiatives have slowly changed the image of the city from a dangerous to a friendly place. Waterfront revitalization, new/improved infrastructure, private-public partnerships, and outdoor public space initiatives have helped transform the city.

Brand Strategy

Make NYC a more friendly and accessible place for residents, visitors, commerce by creating a unifying voice and graphic language that unifies its diverse constituents (PlaNYC).





Externally,
Louisville has
a rich and
vivid historical
heritage to
draw upon.

"Kentucky produces
half of the world's
bourbon."

"Louisville has been
voted by Zagat as one
of 8 foodie cities in
the world."

"The Kentucky
Derby is a horse
race, a celebration
of humanity,
people come and
are blown away."



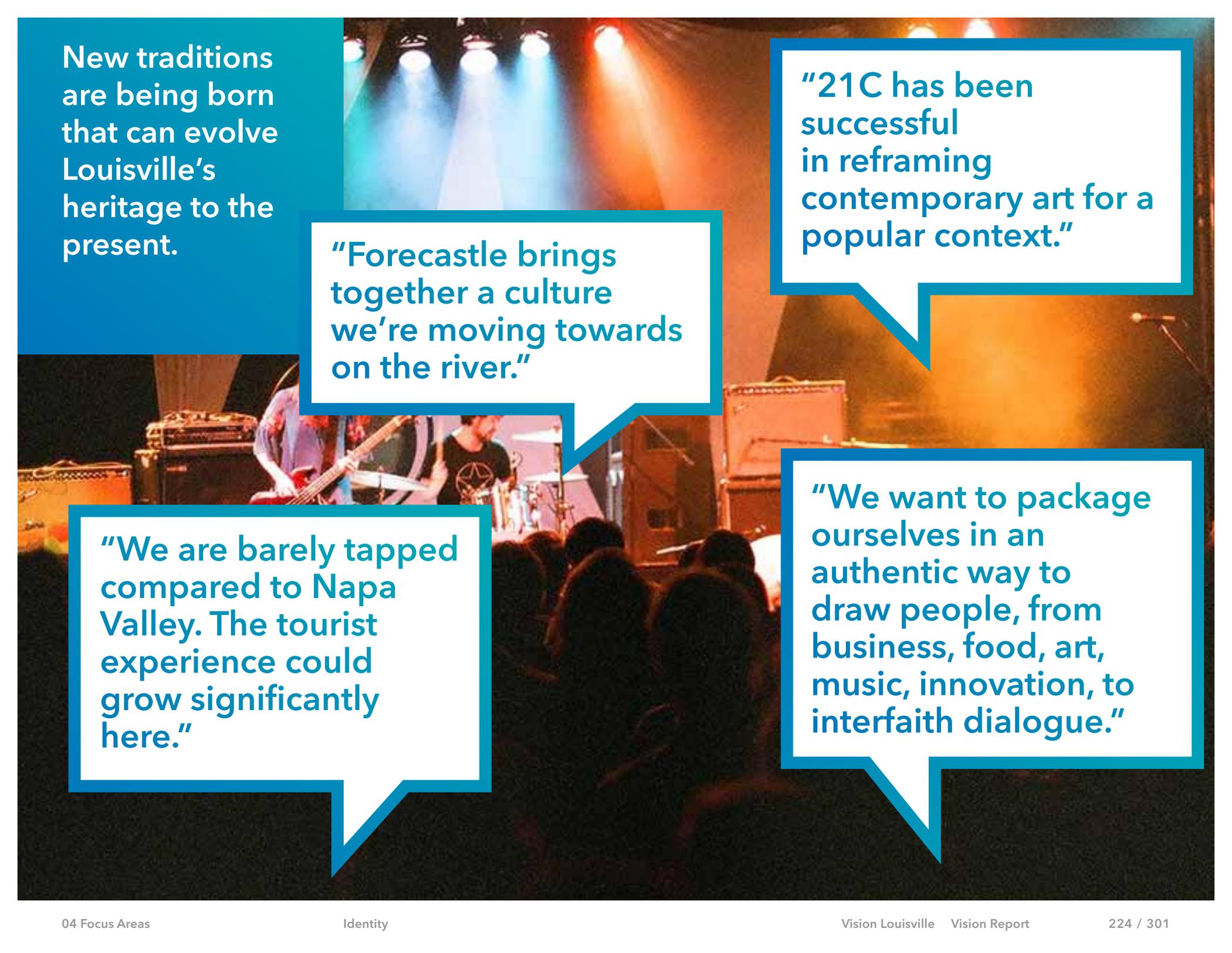
At a local level, neighborhoods and a pride of place bind residents together.

"We have a sense of Louisville pride not seen in sister cities, such as Cincinnati or Indianapolis."

"This is a city of joiners, give them something to do and they'll do it."

"People like living here because you can come and make a difference quickly."

"28,000 people give from their weekly paycheck, that speaks to our culture."



New traditions are being born that can evolve Louisville's heritage to the present.

"Forecastle brings together a culture we're moving towards on the river."

"21C has been successful in reframing contemporary art for a popular context."

"We are barely tapped compared to Napa Valley. The tourist experience could grow significantly here."

"We want to package ourselves in an authentic way to draw people, from business, food, art, music, innovation, to interfaith dialogue."

But ...

Without one focal point, Louisville has not been able to strongly assert its identity and provide a larger narrative.

"There's a story to be told, we're only in the first chapter."

"I wish Louisville would just choose one thing and work on it, make it happen."

"What is the brand of Louisville? Most people are pleased when visiting because they have no or low expectations."

"There are all these pieces that are not connected to one another in terms of a larger brand."

"Louisville lacks an organizing principle. We need an identity driving us forward, that we can measure."



**“Possibility City”
has not been
able to act as
the catalyst that
Louisville needs.**

**“A lot of people
feel Possibility
City is generic, it
reflects a level of
both ambition and
insecurity.”**

**“We tried “Possibility
City” but we can’t
be everything to
everyone.”**

**“Possibility City was
designed to introduce
the city to our core
audiences, to relocate
business and bring in
outsiders.”**

Possibility City plays into the trap of regional cities aspiring to be "big city" without telling a specific story.



Detroit



Atlanta



Minneapolis



Raleigh



Louisville



Indianapolis

VISION LOUISVILLE

- Louisville has a rich heritage and history to draw from, a culture of independence, a tradition of civic pride and motivated parties who are committed to fostering its growth. This diverse heritage means that Louisville stands for many things, but not one key idea, creating a blank slate for others' perceptions.
- Recent branding campaigns have exemplified the identity crisis of the American regional city: big city or town, knowledge or heritage economy. Without a clear identity and common goals, the perception and guiding principles of Louisville's present cannot be translated into the future.
- Vision Louisville can be a catalyst to imagine Louisville's future. Transforming the built environment can be the ladder to change in many sectors to help clarify Louisville's future.

ASSETS & CHALLENGES

ASSETS

- Louisville is undefined, a blank slate for perception
- Good existing assets: high quality of life, space, potential for growth
- Motivated parties (city, business, patrons)
- Culture of independence
- Potential to develop public and private partnerships
- Key growth industries have been fostered over time

CHALLENGES

- Moving beyond heritage
- Need for larger identity and narrative that communicates its assets
- Overmodesty about Louisville's assets
- Identity crisis: big city, town, or something in between?
- Competitive distinctiveness and visibility with similar American cities
- Ability to compete in the knowledge economy

What are contemporary cultural trends influencing the future of the city?

LANDSCAPE URBANISM

Landscape urbanism is increasingly relevant as a unifying lens through which to understand the complex systems of contemporary urban environments.

Beyond “green space”, landscape is a metaphor for seeing the city as an active, changing ecological system consisting of both man-made and natural systems.

With an emphasis on public spaces – infrastructure, natural environments, post-industrial sites – landscape urbanism is a set of tactics for reclaiming and growing more robust and “productive” cities.

The merging of infrastructure and ecology leads to multivalent and layered public space: how can they be used for leisure, services, economic generators, food and energy production, etc.? The blurring of traditional disciplinary boundaries encourages a planning and design approach that engages shared interests, overlapping networks, and partnerships. As a planning tactic, landscape urbanism prioritizes the design of a dynamic system that can grow, adapt, and change over time, with the understanding that unforeseeable shifts are inevitable.



LANDSCAPE URBANISM



Urban Farming

Growing Green

Founded by Will Allen in the belief that healthy communities cannot exist without a healthy food system, Growing Power is considered the go-to expert in urban farming and was awarded a MacArthur “Genius Grant” in 2008. Their aim is to create sustainable food production and the growth of communities through the creation of local gardens and community food systems. Operating the only functional farm within Milwaukee city limits, Growing Power also sells to food co-ops, other retail stores and about 30 restaurants in the Milwaukee and Chicago areas, and will expand to Detroit, Taos, and New Orleans in the coming years.



Park as Cultural Hub

Millennium Park in Chicago is an outdoor public space featuring public art, architecture, cultural programming, restaurants, and recreational facilities. It is also one of the world’s largest green roofs over a parking lot and rail yard. The park has been a focal point of urban life since opening in 2004.



Brownfield Remediation

Freshkills Park in Staten Island, NYC, is a long-term remediation project that will reclaim one of the world’s largest landfills and transform it into a “productive and beautiful cultural destination” for recreation, education, and cultural programming. It has become a symbol of how cities can restore balance to the landscape and reclaim land and water assets as equity for the city.

IMPLICATION

Create robust public spaces that can perform on multiple levels, from leisure and public programming to public services, energy and food production.

CITIZEN-LED URBANISM

Leading an emergent form of urban design, designers and activists are increasingly using the cities they live in as a canvas for self-initiated experimentation and improvement at the neighborhood or block level.

No single master plan can anticipate the evolving and varied needs of an increasingly diverse population or achieve the resiliency, responsiveness and flexibility that shorter-term, experimental endeavors can.

This strategy of temporality adapts to unpredictable demands, provides more for less, and encourages innovation, using short-term actions to effect long-term change while working with city government, non-profit organizations, and local constituents.



CITIZEN-LED URBANISM



Open-source Community Planning

Better Block Project

The Dallas group Build a Better Block is dedicated to helping cities around the US develop their own open-source Better Block projects. In 2010 a group of community organizers, neighbors, and property owners revitalized a single commercial block, converting it to a walkable, bikeable neighborhood destination. Better Block projects have since been developed throughout the US, with many of the temporary infrastructure improvements and businesses made permanent.



Tactical Urbanism

Tactical urbanism is a way of framing short-term, local interventions as a laboratory for experimentation. Grouping a larger number of existing ground-up activities, from occupying parking spaces to transforming unused public space into plazas, tactical urbanism is intended as an urban design tool kit to be distributed widely. Simple moves such as painting a bike lane green can help create a safer city for bicyclists.



Crowd-sourced Investment

Citizeninvestor is a new platform that offers the average person a chance to be a philanthropist in their community for five or ten dollars. Based off Kickstarter, Citizeninvestor works with cities across the US to find projects that cities or citizens want to see happen, but don't have the budget for. Either a municipality puts a project, like tree planting, on the Citizeninvestor website and accepts donations, or citizens start a petition for a project they'd like to see done, hoping the city will green-light it.

IMPLICATION

Motivate and engage citizens to improve their neighborhoods at the local level. Local, small-scale projects are an ideal testing ground for policy.

CITY AS INCUBATOR

Richard Florida's concept of "creative cities"—places that produce tangible value through their creative output and latent brainpower reframed how cities perceived the impact of creativity and the kinds of residents and activities they should be supporting.

Some cities now see this incubation process as imperative to their economic growth and have taken specific initiatives to support a culture of incubation, turning entrepreneurship into a vehicle for creativity. Recognizing that the physical density of cities—from overlapping programs to adaptive reuse—is conducive to innovation, companies and organizations are attempting to harness these conditions from combining deep research with applied problems or giving entrepreneurs access to eclectic and diverse networks.



CITY AS INCUBATOR



General Assembly

Part co-working space and part educational campus, **General Assembly** is a new model for tech start-up incubation that founding in 2011. Realizing that “a college-like setting and campus design offers the best opportunities for thinking and learning; where people have the benefit of serendipitous encounters,” General Assembly has expanded from a single location in New York City to a global network of campuses for individuals seeking opportunity and education in technology, business, and design.



BMW Guggenheim Lab

The **BMW Guggenheim Lab** is a mobile laboratory travelling to nine major cities world-wide over six years. Led by international teams of emerging talents in the areas of urbanism, architecture, art, design, science, technology, education, and sustainability, the Lab addresses issues of contemporary urban life through programs and public discourse. Its goal is the exploration of new ideas, experimentation, and ultimately the creation of forward-thinking solutions for city life.



Center for Urban Pedagogy

The **Center for Urban Pedagogy (CUP)** is a nonprofit organization that uses design and art to improve civic engagement. Projects are often undertaken as collaborations among art and design professionals, community-based advocates and policy makers, and the staff. The tools created are used by organizers and educators all over New York City and beyond to help their constituents better advocate for their own community needs.

IMPLICATION

Create a culture of incubation by providing resources for incubation—from attracting talent to opportunities for multi disciplinary collaboration.

AMERICAN HERITAGE

As offshore manufacturing in the luxury goods market has become pervasive, “Made in the USA” has become a signifier of old-school craftsmanship and authenticity.

Countless men’s style blogs, such as A Continuous Lean serve as an online clubhouse for devotees of American-made heritage labels like Red Wing Shoes and Filson.

As Americana chic goes mainstream, This newfound pride also extends to American cities and smaller communities, such as the “Made in Brooklyn” phenomenon.



AMERICAN HERITAGE



Made Agency

Founded by former advertising executive Michael Schiff, Made is a new flash-sale shopping site for the Americana set, selling items like shuttle-loom jeans and a 19th-century-style baseball made of leather sourced from a Chicago tannery. Beyond selling heritage goods, Made is also an advertising agency that in turn represents companies that manufacture only in America. The company grew out of Mr. Schiff's conviction that a manufacturing revival was crucial to a lasting economic recovery.



Shinola "Made in Detroit"

A 100 year old shoe-polish company called Shinola has recently been revived to make upscale watches, bicycles, backpacks and cola in GM's former headquarters of research and design in Detroit. Promoted as "Made in Detroit," Shinola works closely with other American manufacturers to source components domestically whenever possible. The brand will relaunch in Fall 2012 with plans to open a showroom and retail space in New York by 2013.



Kentucky Bourbon Trail

Bourbon requires a particular terroir that is difficult to replicate, making almost all bourbon produced exclusively in Kentucky. The explosion of interest in artisanal food and drink in the past decade was a natural fit for bourbon, in 2003 the Kentucky Bourbon Trail was created to market the region as a tourist destination. More than 2 million people have visited a Kentucky Bourbon Trail distillery in the last five years, with nearly a half million of those visiting in 2011, bringing visitors from all 50 states and 15 countries.

IMPLICATION

Recast Louisville's products and assets as an embodiment of artisanal craftsmanship and way of life, not just as history.

**In the era of industrialized economy,
places were represented by their products.**

If Italy = Fashion, Food, Furniture



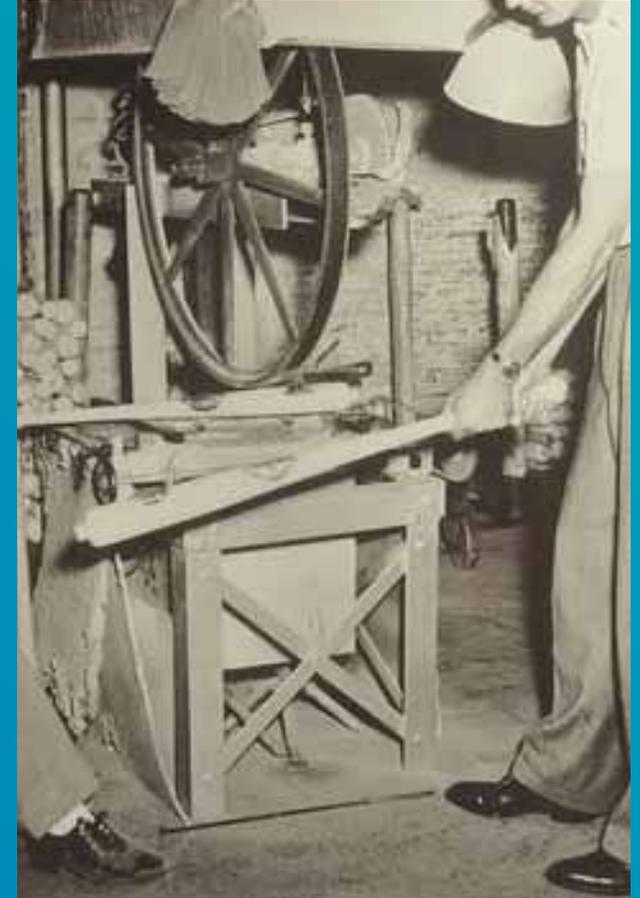
Then Louisville = Horses, Bourbon, Baseball Bats



1872



1785



1855

What is the image of Louisville in an idea economy?



How can Louisville move into the present by embodying experiences and ideas rather than objects?



Consider:
Louisville = City of New
Tradition

New Tradition

Louisville-built. Lewis meets Clark. Ali meets Martin. Louisville is where independents, entrepreneurs, visionaries past and present craft their future. Heritage forever looks back, but authenticity builds a foundation anew.

This sense of craft and intimacy, a connection to the land, makes Louisville authentic at its core, and is why its bourbon, horses, and baseball bats are known worldwide. Louisville now helps produce many things – from the world’s most sophisticated distribution network, a thriving local food scene, emerging cultural institutions, to innovative research.

We now have the opportunity to take this idea of craft and thoughtfulness and apply it to our own city, from fostering a vibrant culture of creativity, ideas, and entrepreneurship to its spaces, parks, ways of movement and connection. By sowing the soil for transformation to take, we can prepare our children to shape the future in powerful, new ways that reflect the best of Louisvillian values: independence, entrepreneurship, innovation and ideas.



**Consider:
Louisville = The City Green**

A town center, a place where everything happens from political debate to shopping and sharing, a symbol of the community and place, a node to meet. In New England, it was literally a place of agriculture, industry, consumer economy and leisure simultaneously.

This deep history of community engagement and open space has defined the city since inception cultivating not only the green of Kentucky Bluegrass but independent, open-minded, entrepreneurial and generous spirit of its people. The culture of Louisville has always been fueled by the synergy between its agrarian and industrial success, evidenced in its continued preservation of three Olmstead-designed parks to new open spaces like Forecastle, 21C and the Idea Festival.

Louisville is a patchwork quilt of greens, networked through the entire metro area, linking it to the open plains of Kentucky Bluegrass beyond its borders, perhaps the most powerful symbol of the region. Preserving and enhancing of our city greens, imagining new kinds of open, dynamic spaces for interaction and engagement, and linking and cultivating them as a flexible, dynamic contemporary network for enjoyment, innovation and engagement will set the stage for our transformation.



Consider:
Louisville = The Healthy City

Healthy City

Louisville is made up of many flows – people, transportation, infrastructure – that coexist and weave in and around the built environment. Altogether they make up Louisville as an ecosystem and create the lived experience of the city.

They make up the social, physical, and economic conditions that shape the places into which Louisvillians are born, and where they live, learn, work, play, and age.

As a network of neighborhoods stitched together by these connections, Louisville has the opportunity to create true equality of place, by linking social justice and opportunity to health. Viewed through the lens of an ecosystem, creating a healthier city lies not just in biometrics – but in expanding access to education, food, and infrastructure.

From Portland to the Highlands, small to large, if we can grow neighborhoods and the connections between them, we can truly connect health and place and lay the foundation for a Louisville that allows all of its citizens and industry to flourish.

DEFINING SUCCESS

“Put Louisville on the map.” **Visibility.**

“People leave with a much bigger perspective once they come here.” **Reputation.**

“We need an identity driving us forward.” **Purpose.**

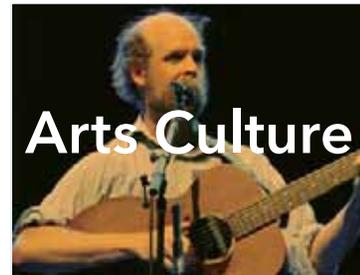
“We’re only in the first chapter of our story.”
Storytelling.

21ST CENTURY LOUISVILLE

Tradition

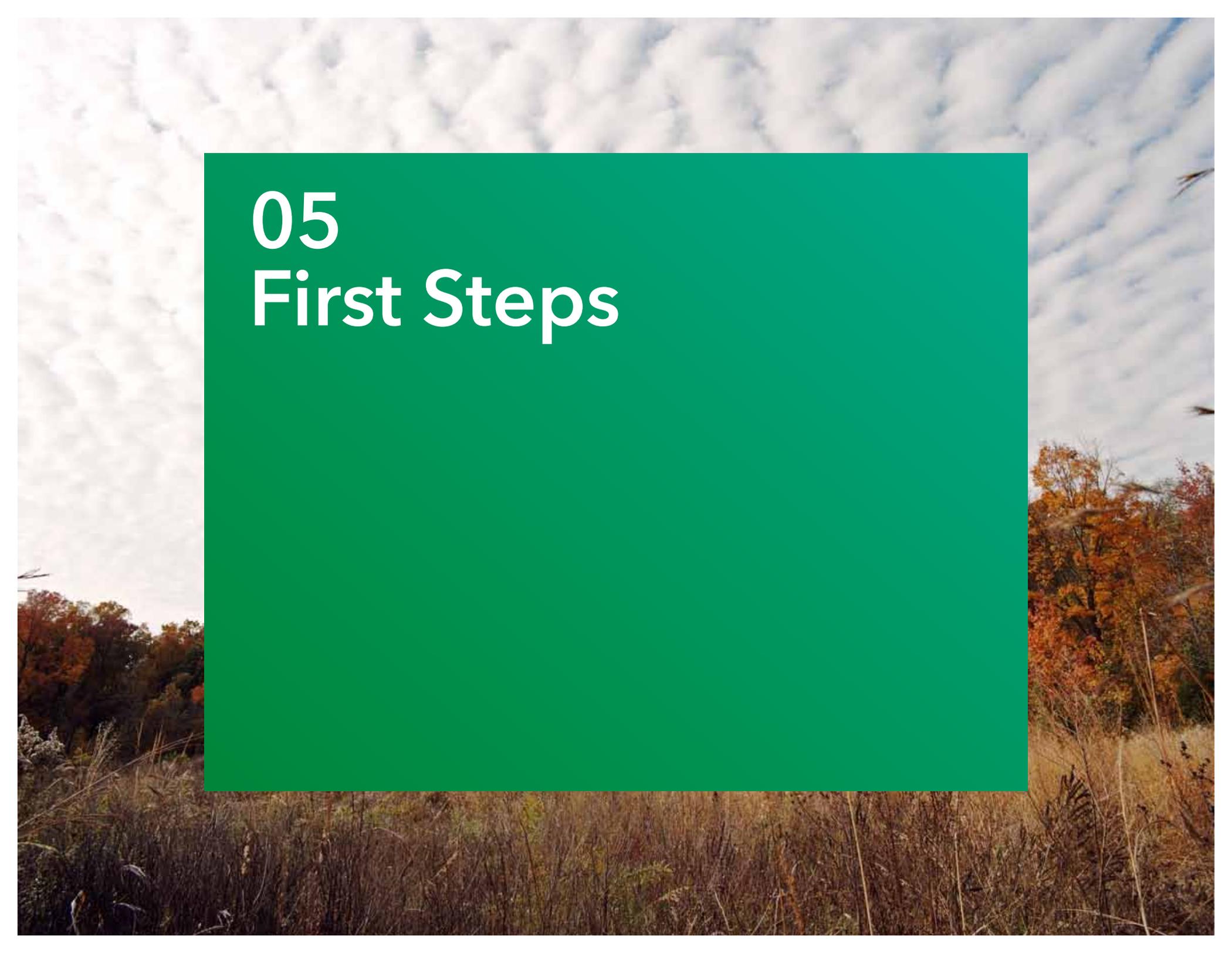
+

New Louisville



SUMMARY

- The key to city identity is aiming to be what you aspire to appear.
- Engaging the community in consideration of its own future is a generative way to create identity and direction from within.
- Louisville has a number of positive attributes to realize a more aspirational identity and the question is a matter of focus. This focus can be directed and catalyzed through the Vision Louisville process.
- Small scale efforts can accelerate the process and promote public participation and ownership.



05 First Steps

The process of shaping Louisville's future can be enacted incrementally. Process can be made visible and ideas scalable.

Starting with reasonably and quickly achievable efforts can accelerate the progress, promote public participation and ownership and kick off the next chapter in Louisville's story.

REGIONALISM

Brand BEAM

Put an image to the Beam initiative to forward the initiative in the hearts and minds of potential partners and the public and usher in a new era of American Competition and an American manufacturing renaissance.



LIVING

Hello from Louisville!

Promote Louisville as the host of UPS's Worldport. Send a little bit of Louisville around the world with every UPS package shipped and put Louisville on the map.



CONNECTIVITY

Louisville Walks the Waterfront!

Demonstrate connectivity and equality of access to Louisville's natural resources. Stage a Louisville "Walk the waterfront" march. Create public art projects, events and activities at disjunctures and obstacles to inspire contemplative possibilities for one of Louisville's greatest asset, the Ohio River.



CREATIVITY

Public Art

Create a public campaign that labels and celebrates Louisville's culture of innovation, ideas and creativity. Art, theatre, business, manufacturing, and food are all products of Louisville imagination and the engines to propel the city forward.



HEALTH

People Power

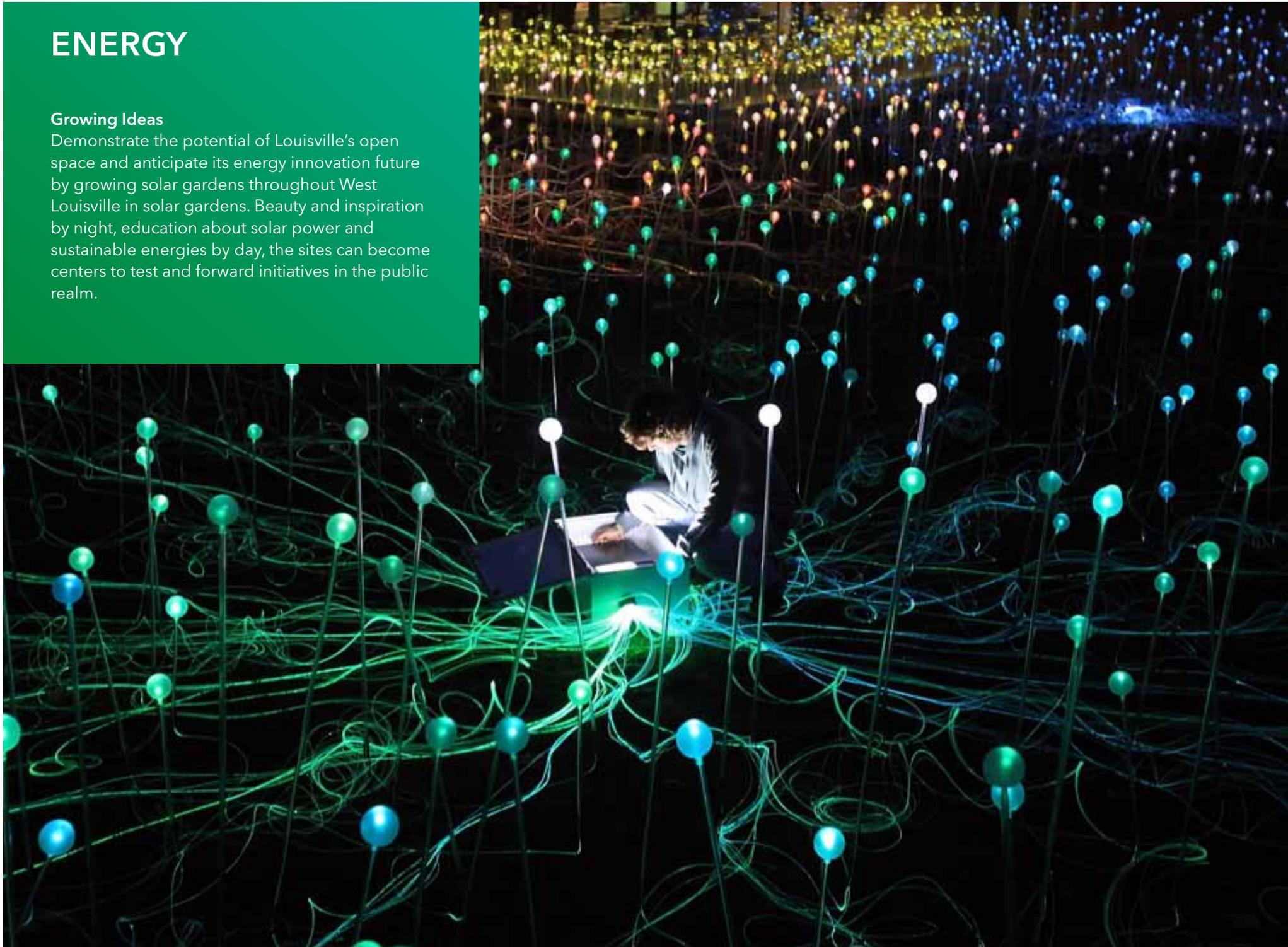
Extend Humana's bicycle share program to the city. Activate the Louisville Loop and beyond for leisure activity connected to city commuting to kick start the first step toward a people-powered city. Create a bike lane down the center of Bardstown road to showcase the effort and devote visible public space to changing the culture of transportation and health in the city.



ENERGY

Growing Ideas

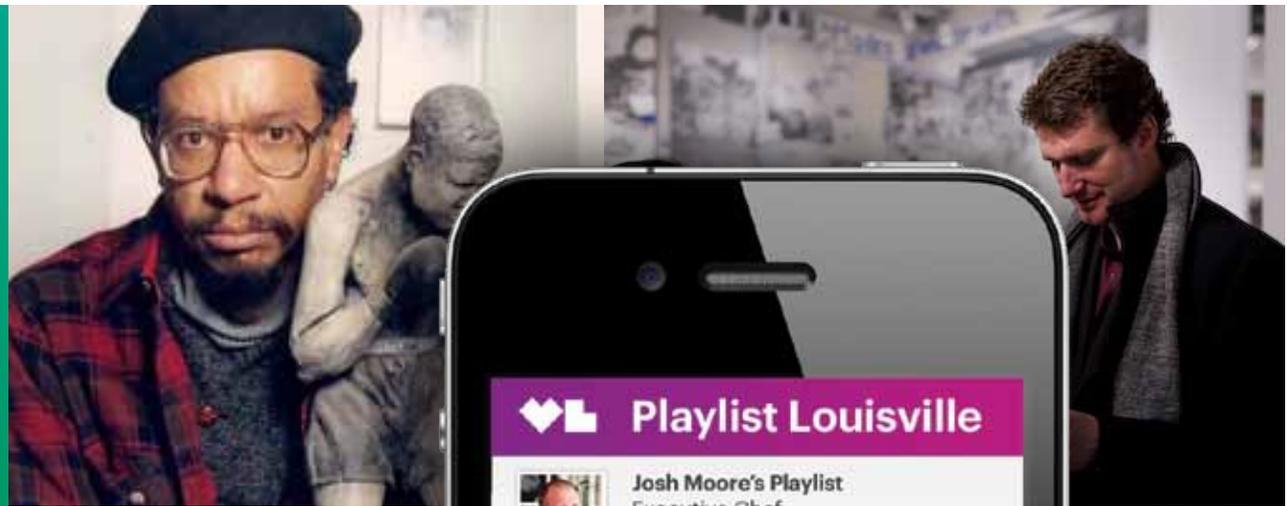
Demonstrate the potential of Louisville's open space and anticipate its energy innovation future by growing solar gardens throughout West Louisville in solar gardens. Beauty and inspiration by night, education about solar power and sustainable energies by day, the sites can become centers to test and forward initiatives in the public realm.



IDENTITY

Playlist Louisville

Create a series of playlists/tours online that present the best Louisville events, experiences and places by a wide range of ordinary and extraordinary Louisvillians – chef, curator, musician, basketball coach, actor, artist, mom, senior citizen, health nut, etc.



A photograph of a school hallway with a purple overlay. The hallway has yellow walls, a tiled floor, and a row of lockers on the right. On the left, there are vending machines and a display case. A large purple rectangle is overlaid on the center of the image, containing the text '06 Campaign' in white. The text '06' is on the top line and 'Campaign' is on the bottom line, both in a bold, sans-serif font.

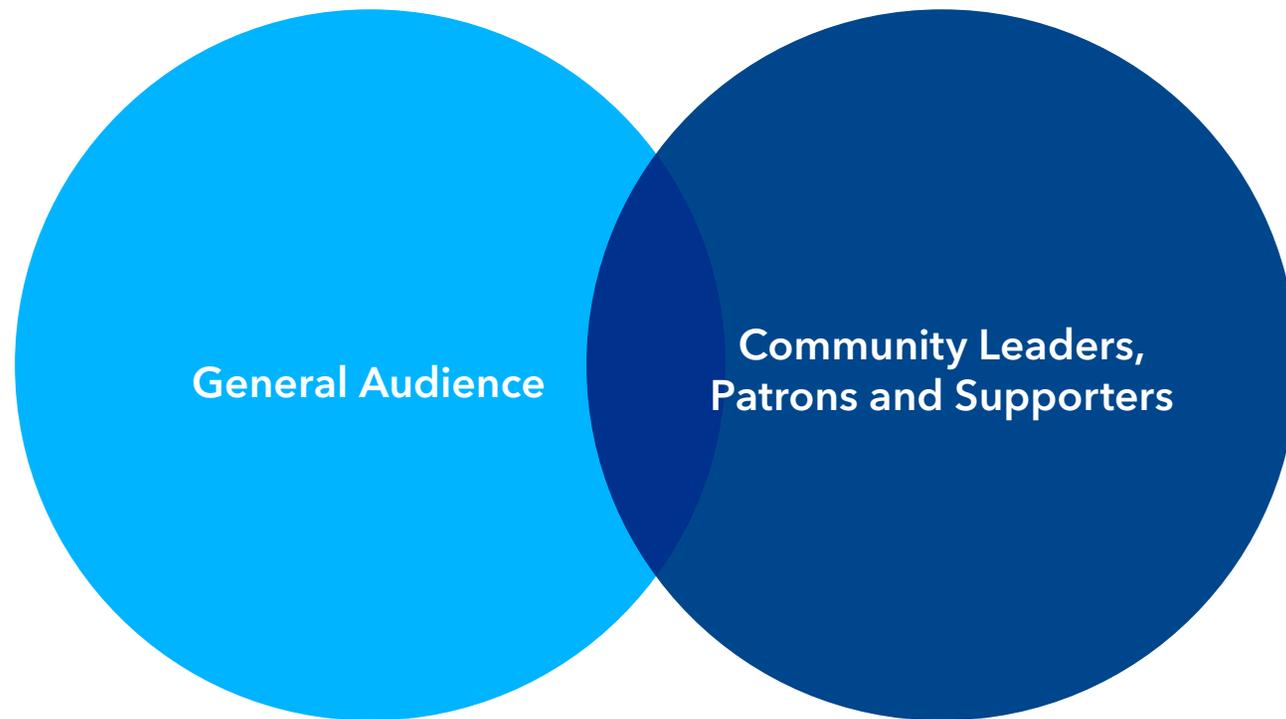
06 Campaign

COMMUNICATION GOALS

1. To convey the fundamentals of the initiative
2. To gather input on the direction and content of the plan
3. To garner support and partnership from key stakeholders
4. To inform and involve the public
5. To help all constituencies imagine the potentials and future of the city
6. To broaden the base of ambassadors of the plan and provide information, advocacy and fundraising tools

AUDIENCE

While broad, the communications plan should address two key constituencies and requires modified materials to accommodate these related audiences:



IMPLEMENTATION CONSIDERATIONS

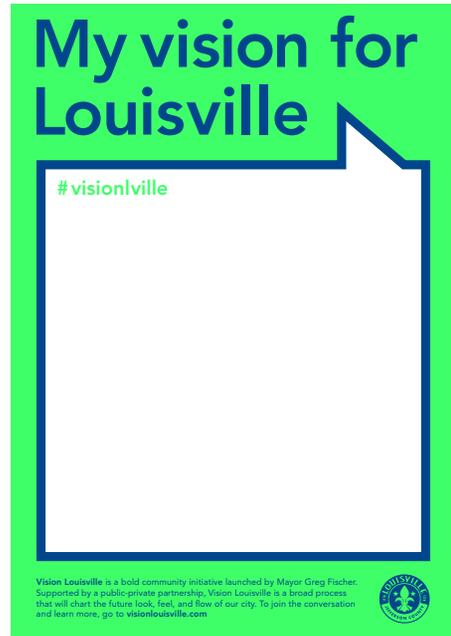
We need to ensure that our communications are consistent, timely and informative.

1. First and foremost, we need to keep the current website updated and oversee the dynamically generated content.
2. The design of the communications must accommodate not only our needs but our ability to support and maintain the quality of this content. This should be considered in the proposals following and discussed in advance of initiating any concrete vehicles or materials.

SUMMARY OF PHASE 1 COMMUNICATIONS TO DATE



Current status of site



Visual campaign for Idea Festival



Survey of community response



Update on progress (video)

The Vision Louisville initiative in its initial stages, will provide the necessary consensual building process to develop a meaningful Vision Plan and brand identity for Louisville Metro.

VISION LOUISVILLE IDENTITY

Mark



Logo



Typography

**ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890**

Sans Serif: Graphik

**ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890**

Serif: Plantin

Color

Gradients: CMYK



One Color



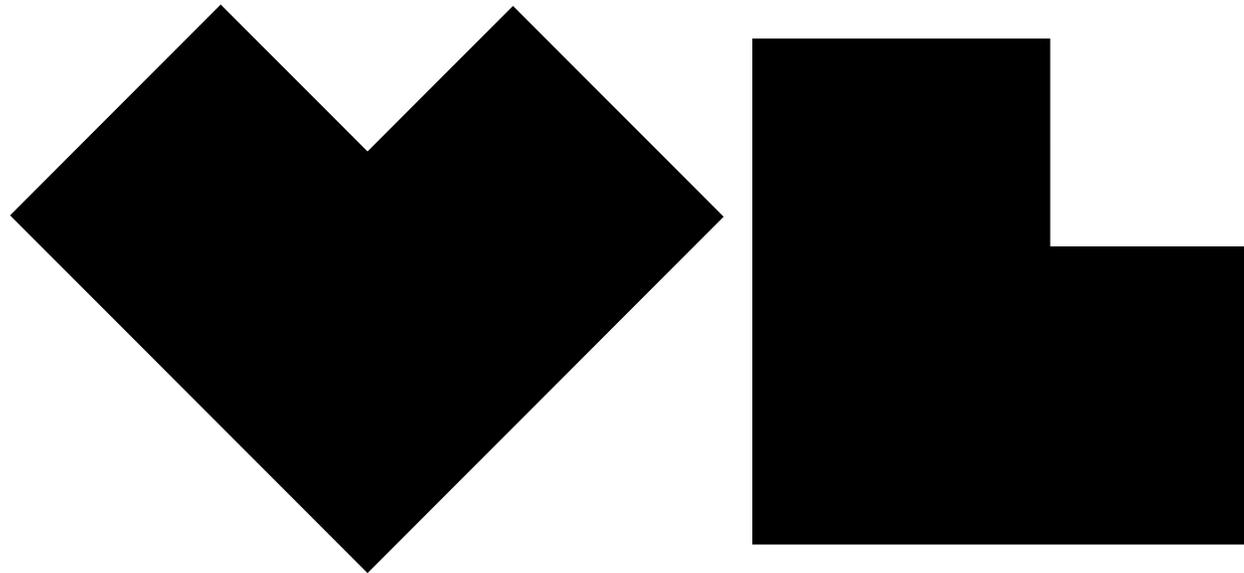
PMS 3415

PMS 2602

PMS 5483

PMS Red 032

MARK

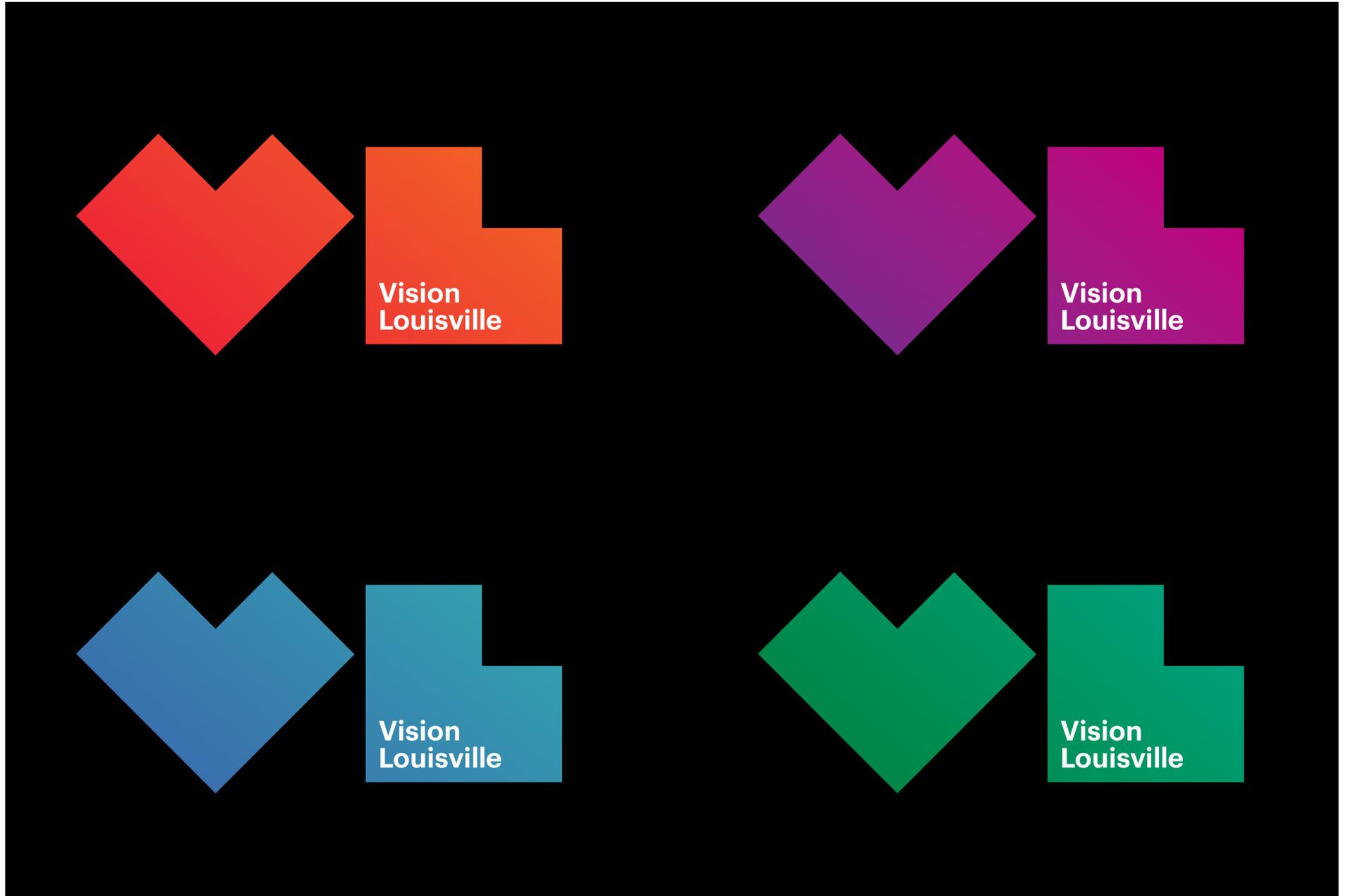


Vision Louisville

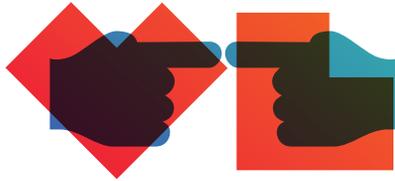
PALETTES



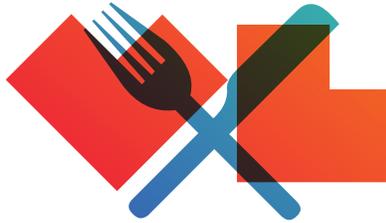
PALETTES



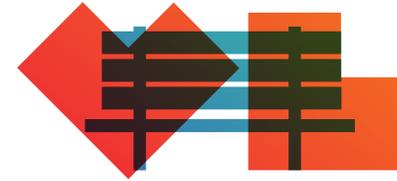
LOGO ADAPTATIONS



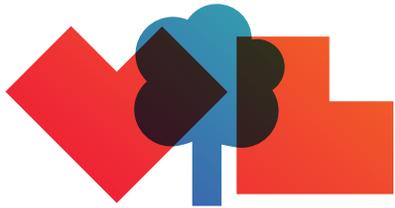
CONNECTVILLE



FOODVILLE



PARKVILLE



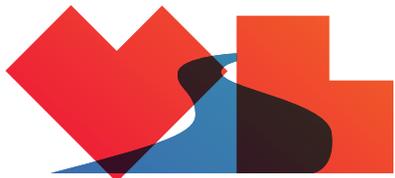
GREENVILLE



BIKEVILLE



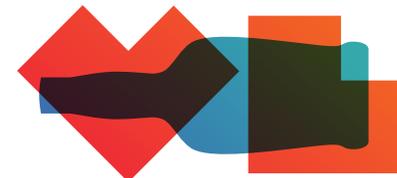
WALKVILLE



RIVERVILLE



CULTUREVILLE



BOURBONVILLE

FONTS

Graphik Regular

ABCDEFGHIJKLMN
OPQRSTUVWXYZ
abcdefghijklmnopqrs
tuvwxyz1234567890

Graphik Semibold

**ABCDEFGHIJKLMN
OPQRSTUVWXYZ
abcdefghijklmnopqrs
tuvwxyz1234567890**

Plantin Regular

ABCDEFGHIJKLMN
OPQRSTUVWXYZ
abcdefghijklmnopqrs
tuvwxyz1234567890

Plantin Semibold

**ABCDEFGHIJKLMN
OPQRSTUVWXYZ
abcdefghijklmnopqrs
tuvwxyz1234567890**

USES

Scale

The logotype must always be legible.



If the logo is smaller than 1 inch or 70px tall, the mark must appear without the logotype or with the logotype alongside.

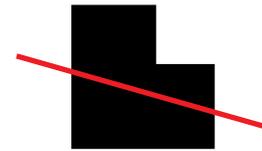


Or

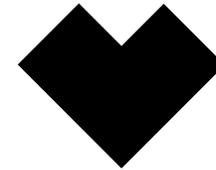


Minimal Mark

The "L" should not appear on it's own.

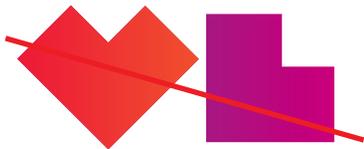


The "V" can appear on it's own.



Use of Color

Never use two different colors on the mark.



Only one gradient or color should be applied to the mark.



PHOTOGRAPHY

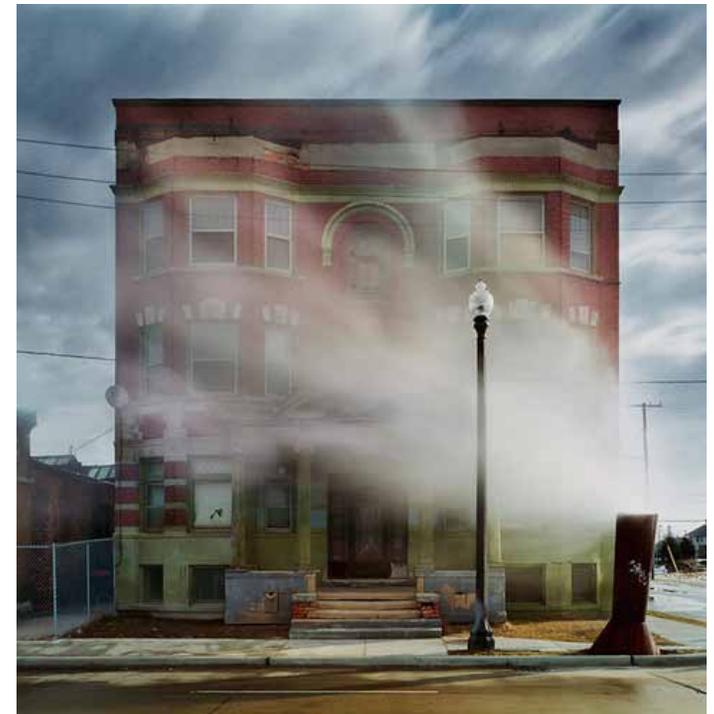
Capture the imagination and provide a vision for constituents to rally support and enthusiasm around. Joel Sternfeld's images of the Highline brought context and beauty to otherwise overlooked, unseen urban blight.



PHOTOGRAPHY – OPEN SPACES



PHOTOGRAPHY – URBAN CHARACTER



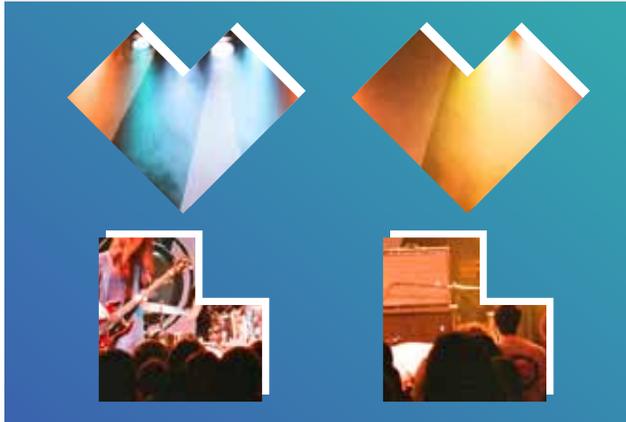
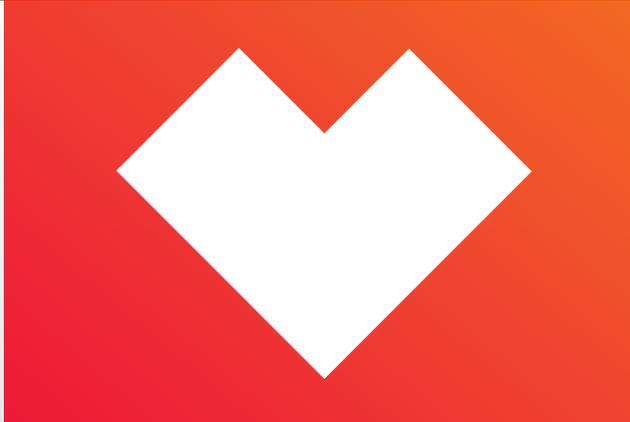
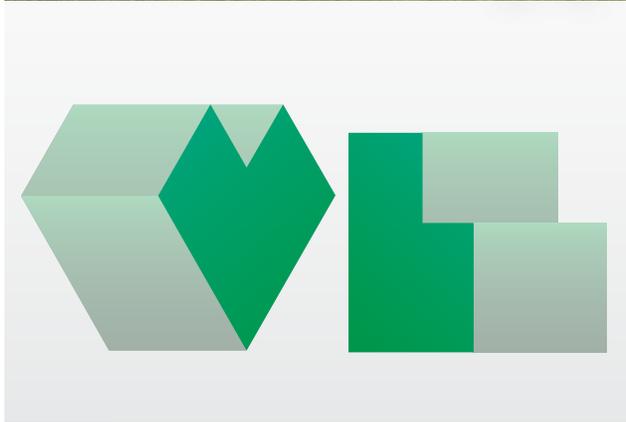
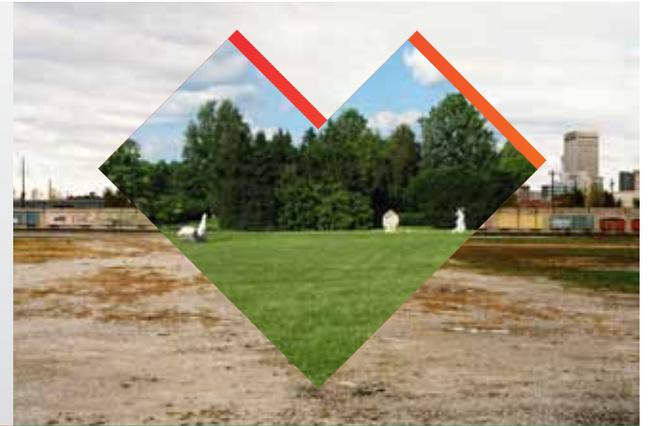
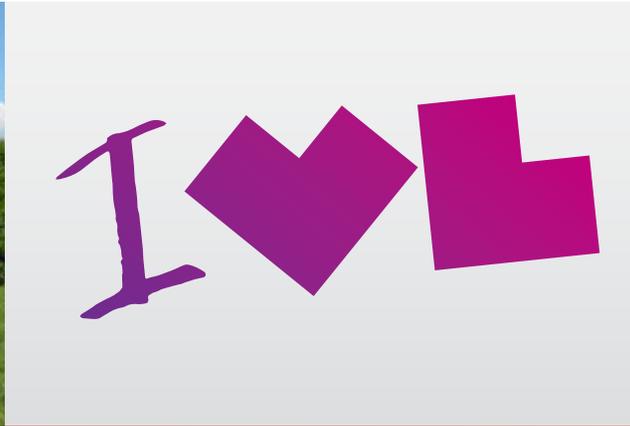
COMMUNICATION VEHICLES



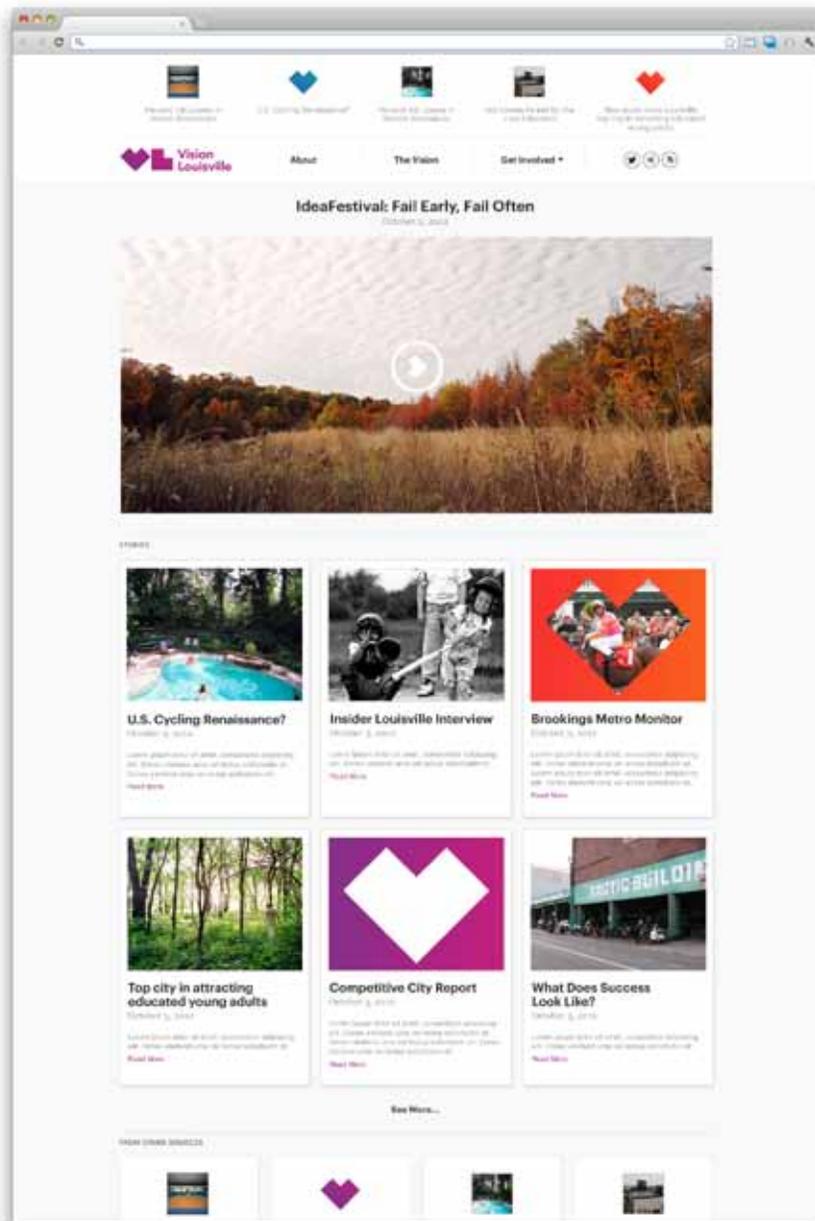
TONE AND GUIDELINES

- Be clear and direct.
- Be visual, engaging, and fun.
- Find imaginative ways to visualize the city and suggest new possibilities
- Embrace eclecticism and participation. Let the mark and font, tie things together.
- Orchestrate experiences that allow the community to meet, discuss, explore the thinking and possibilities together (like the Idea Festival)
- Say and seek input on street and online

FLEXIBILITY / VOICE OF THE MARK / IDENTITY



WEBSITE & SOCIAL MEDIA



Homepage



Twitter

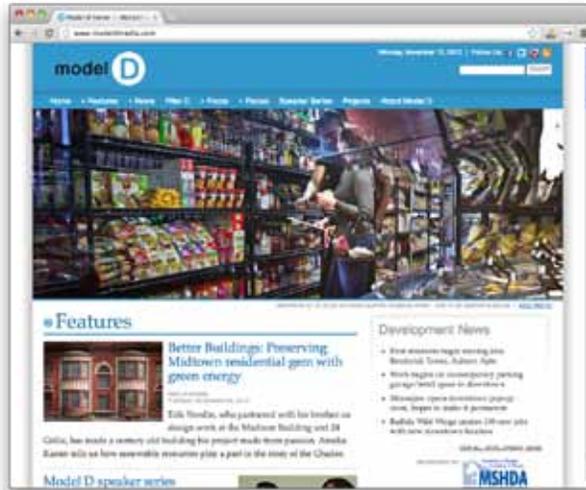


Facebook

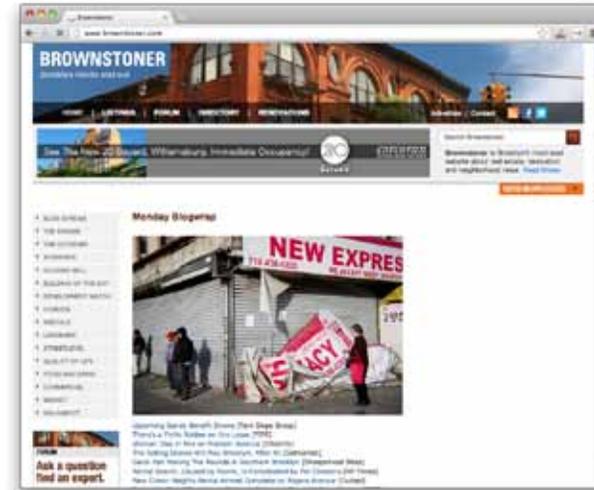
CONTENT STRATEGY

The Vision Louisville website is a vehicle to retell the Louisville story as well as to re-imagine the city. Reports from the field, urban experiments in Louisville and elsewhere, events, and happenings are collected for community conversation and dialogue. These narratives should be eclectic and inspirational – specific to the unique culture of Louisville but pulled from diverse sources that link the project to the reconsideration and reinvention happening in cities all over the country. The approach should be journalistic, open, objective and aspirational. The site will be a dynamic portal that tracks the process of the vision plan, publishes blog entries informed by original and curated editorial content, and provides a dynamic portal to many other Louisville planning projects and initiatives. An open platform, it should incorporate guest editors, multiple perspectives, and diverse sponsorship.

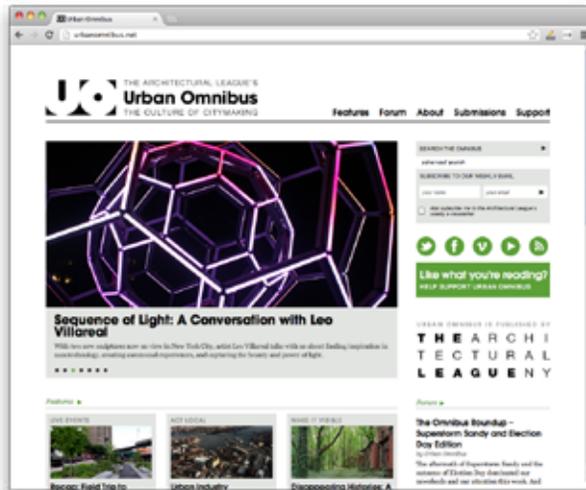
MODELS



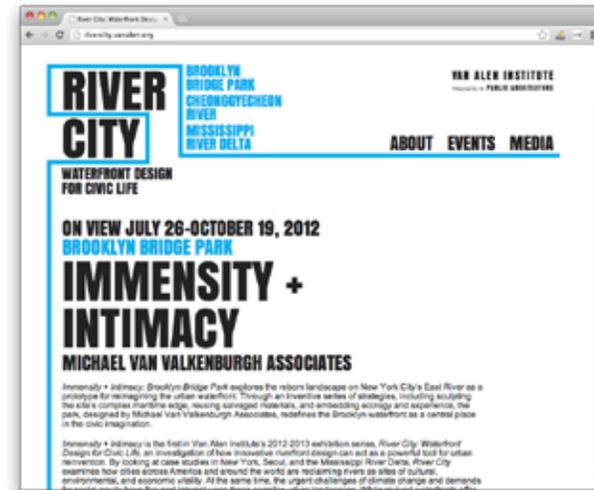
Model D
www.modeldmedia.com



Urban Omnibus
urbanomnibus.net



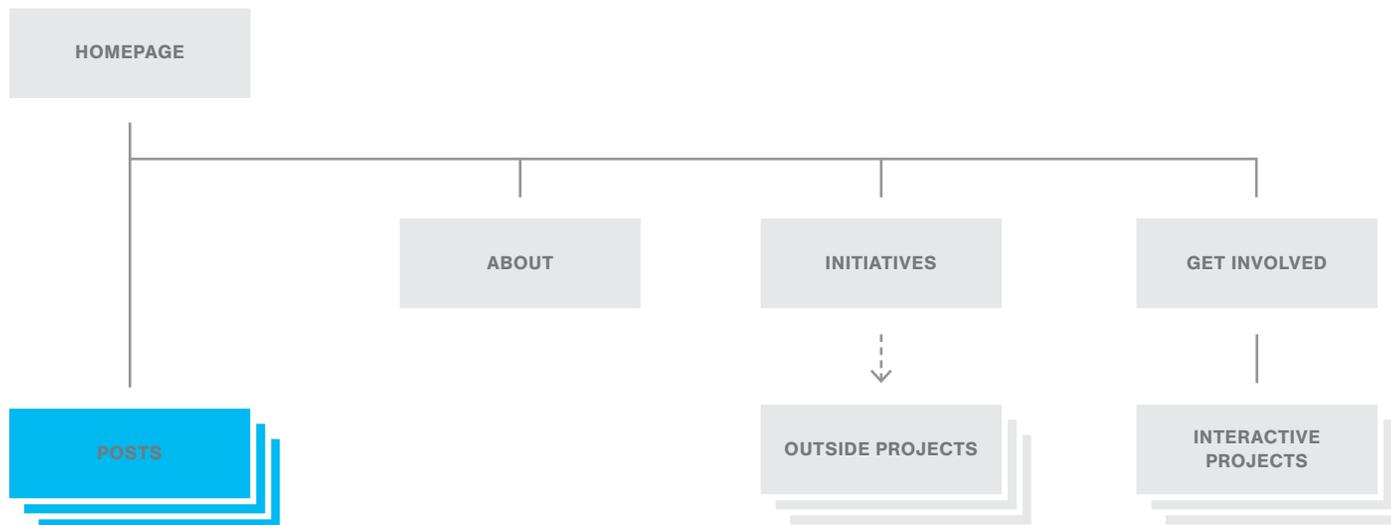
Brownstoner
www.brownstoner.com



River City
rivercity.vanalen.org

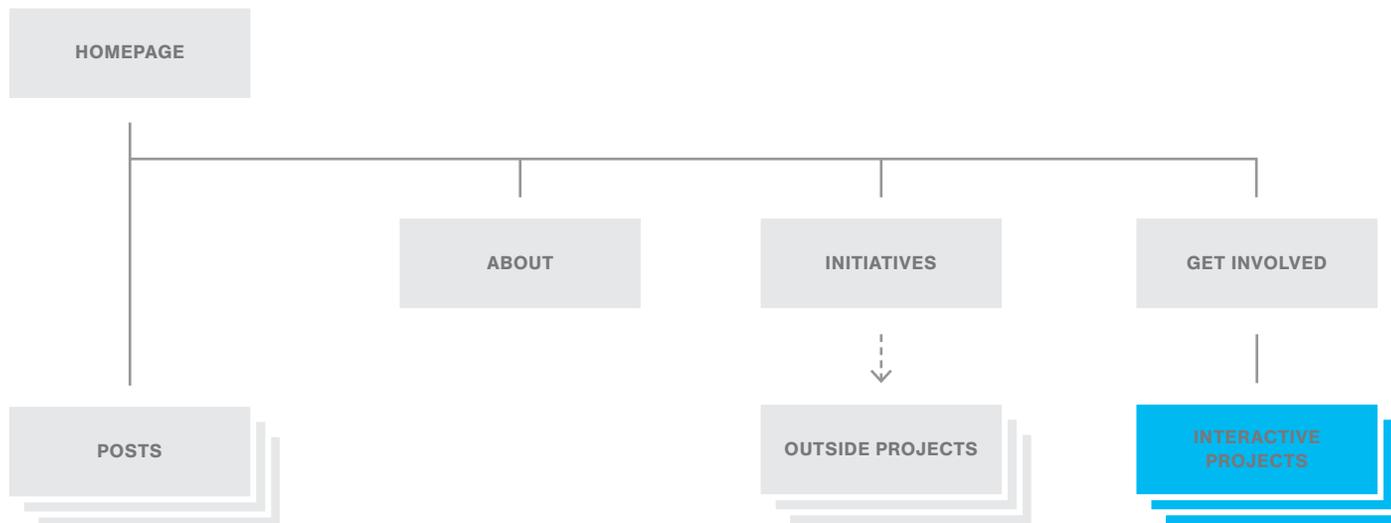
POST POSSIBILITIES

- **Articles and links** Best practices in sustainability, living, transportation.
- **Cultural reports** Art, theatre, music, innovation and technology, etc.
- **Day in the Life** Reports from various Louisville neighborhoods.
- **City “Playlists”** Curated by Louisvillians and visitors.
- **New History** Reinterpretations of Louisville traditions.
- **Resources** Lists of other urban development blogs.



GET INVOLVED POSSIBILITIES

- **Things to Do** Ways for the community to get involved in initiative areas.
- **Data Visualizations** Cloud showing community priorities in vision proposal.
- **Twitter** Official Vision Louisville Feed.
- **Map/Catalog** A guide to Louisville's potential.
- **Bulletin board/Events Calendar** Listing urban happenings.
- **Wiki** To articulate and build consensus around community values.



INFORMATION ARCHITECTURE & EDITORIAL STRUCTURE

Description

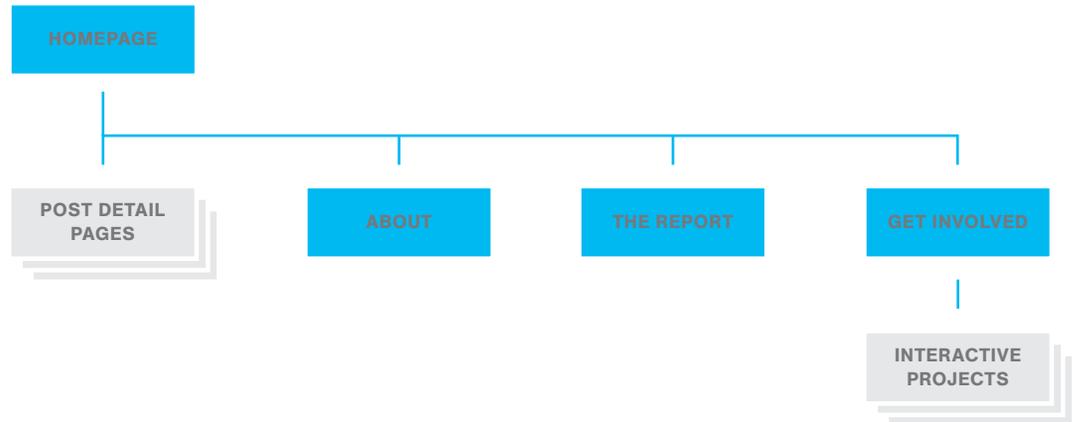
As the primary public face of Vision Louisville, the website and social media efforts exist to build community around the project.

- Explain the project and announce progress.
- Provide a forum for community voices.
- Make consensus concrete.
- Catalyze action around initiative areas.

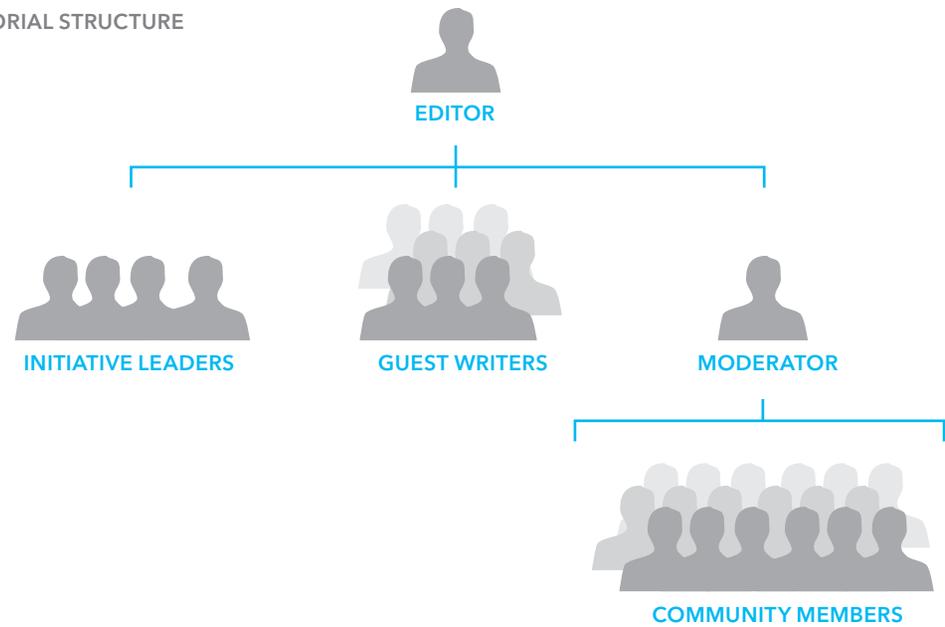
Implementation

In addition to initial technical implementation, the online media effort will require an editorial structure and resources for ongoing content production and community management.

INFORMATION ARCHITECTURE



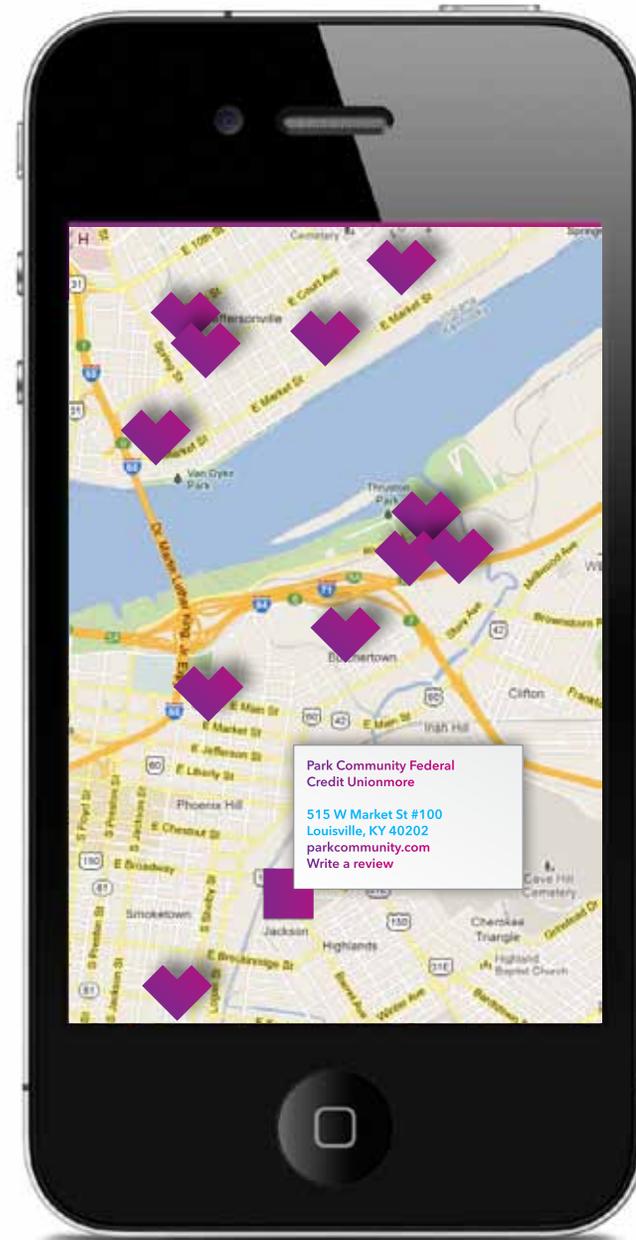
EDITORIAL STRUCTURE



MOBILE APPLICATION

Description

A mobile application would function as an extension of the website. The app would be a tool for people within the community to easily share their ideas and stay informed about what's happening in their city.



ROAD SHOW & POWERPOINT

Vision Louisville



Quality of life in Louisville
28 September 2012

Ingredients

- Louisville's historical legacy
- Best practices across a series of urban i
- Case studies in other urban transformation
- Current masterplanning in the city of Louisville and the region
- Economic Forecasting



7/15 Vision Louisville Masterplan Presentation 28 September 2012

“This sense of community makes us feel we really can be responsible for our own destiny; and that we really are able to take advantage of opportunites we create for ourselves.”

— Owsley Brown II



What is the vision process?

Visioning is a broad ranging, open, engaged and creative process to inspire big ideas authentic to Louisville's culture. The process will include informed dialogue around the future of the city, bringing community and governmental organizations, non-profits, and cultural institutions to the table. A vision initiative is a catalyst for urban transformation.

Where are we in the process now?

We are in Phase 1, Research and Discovery. This includes:

- Understanding the history of urban development in Louisville, current planning, and best practices internationally
- Investigating the unique culture of Louisville, its diverse neighborhoods, and needs and desires of community constituents
- Understanding the demographic, economic, geographic, and cultural change that is probable and possible in the next 25 years

Who is involved in the project?

A diverse team of international, national and local consultants experienced in urban planning, sustainability, communication and community outreach, working in partnership with the Louisville Metro Department of Economic Development and Innovation.

What is goal of Vision Louisville?

The initiative will generate guidelines to unify and direct the twenty-first century transformation of Louisville among many parties including the city, institutions and citizens acting in the interest of the city's future.

What areas of focus does the initiative explore?

- How do we preserve and cultivate our city's nature resources and unique culture?
- How do we build a more sustainable and healthy city?
- How do we foster better connections through transportation?
- How do we and innova
- How do we partnership
- How do we

How will

Later phases will plan on how to into immediat partners in the Development

Consulta

Architecture and Norway (Led by at University of Bates, Space C planning effort Downtown are Environmental Feasibility: Dav outreach: Urb

How do

Phase 1 will inc will continue t project identif
www.visionlou
www.twitter.co

FAQ
Vision
Louisville

“Our undertaking is big and bold and requires us to dig deep and to think innovatively what does our future look like and how do we encourage growth, authenticity, preservation, sustainability, authenticity, weirdness, quality of place all the things that make Louisville Louisville.” — Mayor Greg Fischer



Follow us on twitter #vi

Vision Louisville is a community process to guide the future of Louisville in the face of substantial change. As one of hundreds of changing American cities,

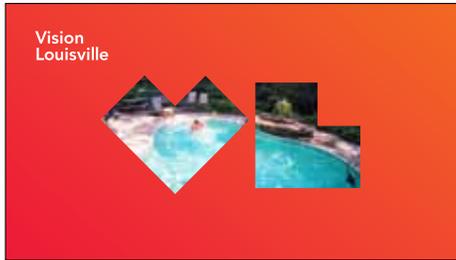
Louisville has an opportunity to learn from its past and present to shape its future. Led by the Office of the Mayor and Louisville Metro Department of Economic Growth

and Innovation and supported by a public-private partnership. **The goal of the initiative is to chart the potential look, feel, and flow of our city in 2035.**



Learn more www.visionlouisville.com

VIDEO



25 ideas for Louisville

"Improved transportation."



"A place that's vibrant and growing."



"A place that values quality of work."



Share your vision with us

www.visionlouisville.com

#visionville

TRAVELLING EXHIBITION FOR PUBLIC DISPLAY

Description

A travelling exhibition is a way to have a physical presence and generate interest within the community. Vision Louisville ambassadors would be on site to answer specific questions about the plan.

Implementation

A wall-mounted foam-core presentation.



Vision
Louisville

My Vision for Louisville



TRAVELLING EXHIBITION FOR PUBLIC DISPLAY

Installation

A temporary exhibition installed in a public space to promote Vision Louisville and provide information about the initiative.

Implementation

Custom plexiglass structure.



MOBILE EXTENSION OF THE EXHIBITION

Description

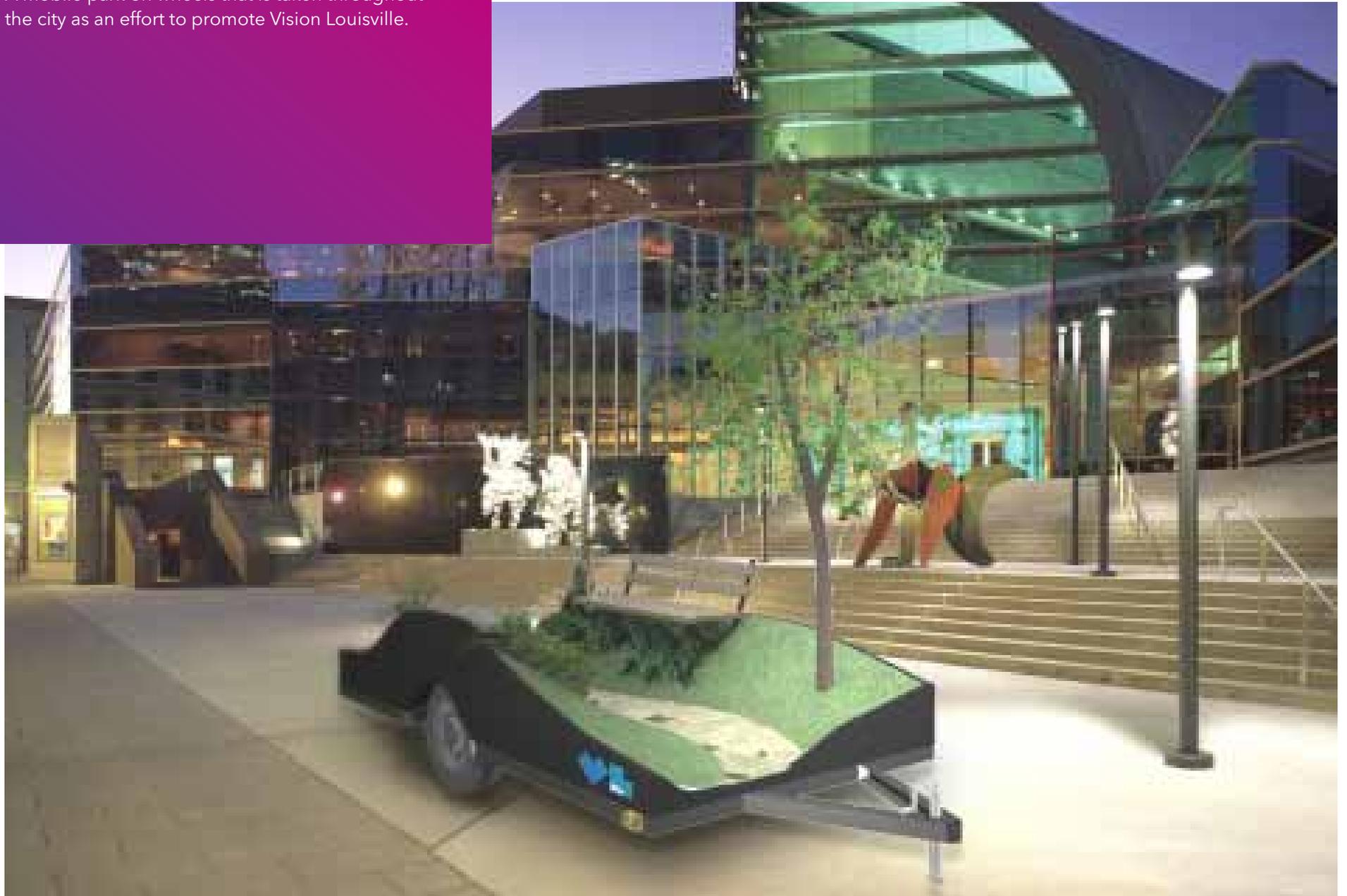
A bicycle-powered mobile exhibition that moves throughout the city and offers information about the initiative.



TRAILER PARK

Description

A mobile park on wheels that is taken throughout the city as an effort to promote Vision Louisville.



PERMANENT EXHIBITION AND EVENT SPACE

Implementation

Adhesive vinyl signs applied to windows and doorways.



BRAND AMBASSADORS

Implementation

T-shirts, stickers and pins.



EDUCATION TOOLS

01. Activities that encourage kids to think creatively about their city.

02. Posters that are displayed in schools and libraries.

Implementation

Off-set printed, 8.5" x 11" or 11" x 17" paper.



02. Posters

01. Activities

CONCLUSION

Incorporating feedback

A very important part of the Phase 1 process will be addressing the feedback loop. In response to the Phase 1 submission, the larger team of the city, Spacegroup and consultants will need to determine how to respond and incorporate various levels of input from potential partners and community.

Getting the message out

A critical component of communication is the development of a PR strategy that may be informed by: 1) A series of lectures affiliated with the campaign on urban transformation organized by Michael Speaks 2) Interviews with Space Group/Gary Bates and Michael Speaks, Mayor Fischer, Matthew Barzun, Ted Smith.

Priorities

Once the proposal for communications proposal included in the Phase 1 submission have been vetted, a plan will be put in place to dedicate roles and responsibilities and execute materials.

Local vehicles

- Newspaper, magazines
- Blogs/Print: Atlantic Cities, GOOD Magazine, Metropolis
- National press: Follow up to Michael Kimmelman's recent NYTimes article on planning in Louisville

First priorities for exhibition for Phase 2 include:

- Executive Summary
- Expanded website
- Road show power point presentation
- Traveling exhibition panels
- A plan for how to respond to input at all levels
- An actionable PR strategy

Thank you.

Phase 1 Staff:

**Louisville Metro Economic
Growth and Innovation**

Phase 1 Consultants:

Space Group (Oslo, Norway)

2x4 (New York, NY)

Davis Langdon (San Francisco, CA)

Dr. Michael Speaks (UK College of Design)

Urban Collage (Lexington, KY)



www.visionlouisville.com