

THE CONTRIBUTIONS AND IMPACTS OF THE OLMSTED PARKS

PREPARED FOR
OLMSTED PARK CONSERVANCY
LOUISVILLE, KENTUCKY
2018

Prepared by  PlaceEconomics



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EXECUTIVE SUMMARY

With the 30th anniversary of the Olmsted Parks Conservancy (OPC) approaching, this is the time to better understand and more fully appreciate the values of the Olmsted Parks System and the importance of the work that the OPC has undertaken. The pages that follow identify the social, economic, and environmental contributions of the Olmsted Parks System to the City of Louisville.

Olmsted Parks are for everyone.

- Louisville is a diverse city, and the neighborhoods surrounding Olmsted Parks have an especially diverse makeup. The population surrounding Olmsted Parks is 37.8% Black, compared to 22.7% surrounding other parks and 15.9% in the rest of the city.
- In Louisville, Olmsted Parks are a major amenity to low-income families. A quarter of all Louisville households make less than \$25,000 annually. This is true of 38.5% of households within a half mile of Olmsted Parks.

Olmsted Parks add value.

- Properties within a half mile of Olmsted Parks represent \$7 billion to the local tax base.
- Being near an Olmsted Park provides a property value premium, and that enhanced value extends at least a half mile beyond the park boundaries for larger parks.
- While parks in general have a positive impact on property values, homes fronting an Olmsted Park have a per-square-foot value of 5.5% more than properties fronting on non-Olmsted Parks.
- Houses fronting Olmsted Parks are collectively worth \$94,721,000 more than non-fronting houses, resulting in \$891,000 more in property taxes each year to the local government.

Olmsted Parks serve Louisville's environmental goals.

- Olmsted Parks have a diverse tree canopy composition and 1.5x more trees per acre than the rest of the city.
- The 2,315 acres of Olmsted parkland reduce carbon emissions by 21,020,638 pounds. This equals the energy use of 1,030 homes for one year or 319,103 incandescent lamps switched to LEDs.
- 93,483,740 gallons of stormwater runoff are mitigated. This is the equivalent of 3,116,125 loads of laundry, 13,354,820 toilet flushes, or 5,425,101 showers.

Olmsted Parks connect nature and neighborhood.

- Nationally, the lack of greenspace associated with higher health risks and lower life expectancy disproportionately affects low-income communities. In Louisville, the Olmsted Parks serve these communities and work to close the “nature gap.”

Olmsted Parks attract new residents and creative jobs.

- While 28.4% of all jobs in Louisville are within a half mile of an Olmsted park, 53.7% of the “creative class jobs” (arts, entertainment, recreation) are within that distance from an Olmsted park.
- While 16.2% of the total population lives within a half mile of an Olmsted park, 33.3% of creative class workers live within that area.
- People want to live near Olmsted Parks. 44.2% of residents near Olmsted Parks have moved there since 2010. That percentage is significantly higher than the 28.3% of relatively recent move-ins in the rest of the city.

Olmsted Parks are sites of social cohesion.

- Despite the fact that Olmsted Parks make up only 19% of the land area of Louisville Parks and Recreation parks, they are the chosen site for:
 - 99% of concerts
 - 99% of outdoor theater
 - 93% of walks/runs
 - 61% of church meetings
 - 41% of school field days
 - 40% of picnics
 - 38% of festivals
 - 31% of family gatherings





INTRODUCTION

Louisville, Kentucky is a city that celebrates place. Founded on the Ohio River in 1778, Louisville has grown to be the 29th largest city in the United States. Although it is known for being home to many notable institutions—the Kentucky Derby, the Louisville Sluggers, Kentucky Fried Chicken, the University of Louisville, Muhammad Ali (Cassius Clay), and Kentucky bourbon, to name a few—it also has the notable distinction of being one of the four cities in the world to have a completed Frederick Law Olmsted-designed park system.¹

Why is this significant? Frederick Law Olmsted is known as the father of American landscape architecture, as well as the principal designer, with Calvert Vaux, of New York’s Central Park. Olmsted’s work, and that of his sons, is world-renowned and includes projects on campuses, estates, residential communities, public and institutional grounds, and of course, parks. He set a standard for design that was emulated across the nation from the late-nineteenth century through the twentieth century. The fact that Louisville is home not to just an Olmsted-designed park, but to a park *system*, and one that is extant, is truly notable.

Olmsted’s park system design for Louisville was prescient. As with so much of Olmsted’s work, he designed for a distant future—one few could imagine. By identifying several principal parks (Cherokee, Shawnee, Iroquois), linking them with parkways, and complementing the whole with smaller parks, Olmsted and his sons ultimately created a network of 18 parks and 6 parkways that still define the city today. Olmsted’s work was committed to creating “visually compelling and accessible greenspace that restores and nurtures the body and spirit of all people, regardless of their economic circumstances, and this is a commitment that has stood the test of time. The Olmsteds believed in the restorative value of landscape, and that parks can bring social improvement by promoting a greater sense of community and providing recreational opportunities, especially in urban environments.”² Olmsted designed with an understanding of change over time, selecting scenery and plant materials that would last, conserving the natural features of the site, and sustaining the ecological health of the area.

Parks are important civic investments—as public space, they serve as common areas for daily interactions that strengthen social networks and build healthy communities. As an increasing number of people move from rural to urban places in the 21st century, public urban parks are becoming the primary way that a large portion of the population experiences nature. According to a recent study by the National Recreation and Park Association, 7 out of 10 Americans visit their local parks on a regular basis.³ A growing number of people are coming to understand and appreciate the many environmental, economic, health, and social benefits that parks bring to our lives. Environmentally, parks can help filter air pollutants, capture stormwater, reduce downstream impact, host wildlife, and add other ecosystem benefits. Economically, parks can attract residents, tourists, and businesses, and in most instances, proximity to parks raises property values and grow a community’s tax base. Socially, parks are important to mental and physical health and they encourage community engagement, whether through school use or neighborhood activity.

The 122 Louisville Metro Parks are collectively a significant benefit to the citizens of Jefferson County, and even more so, the 18 Olmsted Parks and 6 parkways that are part of this collection. Since 1989, the OPC has partnered with Louisville Parks and Recreation (now Metro Parks) to raise millions of dollars to support, protect, and improve the Olmsted-designed parks and parkways. Their efforts have made a difference.

This report will show that these parks have made a difference because:

- Olmsted Parks are for everyone
- Olmsted Parks add value to private property and public coffers
- Olmsted Parks serve Louisville’s environmental goals
- Olmsted Parks connect nature and neighborhood
- Olmsted Parks attract new residents and creative jobs
- Olmsted Parks are sites of social cohesion

¹ Other cities include Rochester, NY; Buffalo, NY; Milwaukee, WI; and Boston, MA.

² “About the Olmsted Legacy,” National Association for Olmsted Parks, <http://www.olmsted.org/the-olmsted-legacy/about-the-olmsted-legacy>

³ Economic Impact of Local Parks: An Examination of the Economic Impacts of Operations and Capital Spending by Local Park and Recreation Agencies in the United States Economy, Executive Summary. 2018. <https://www.nrpa.org/siteassets/research/economic-impact-study-summary-2018.pdf>

OVERVIEW

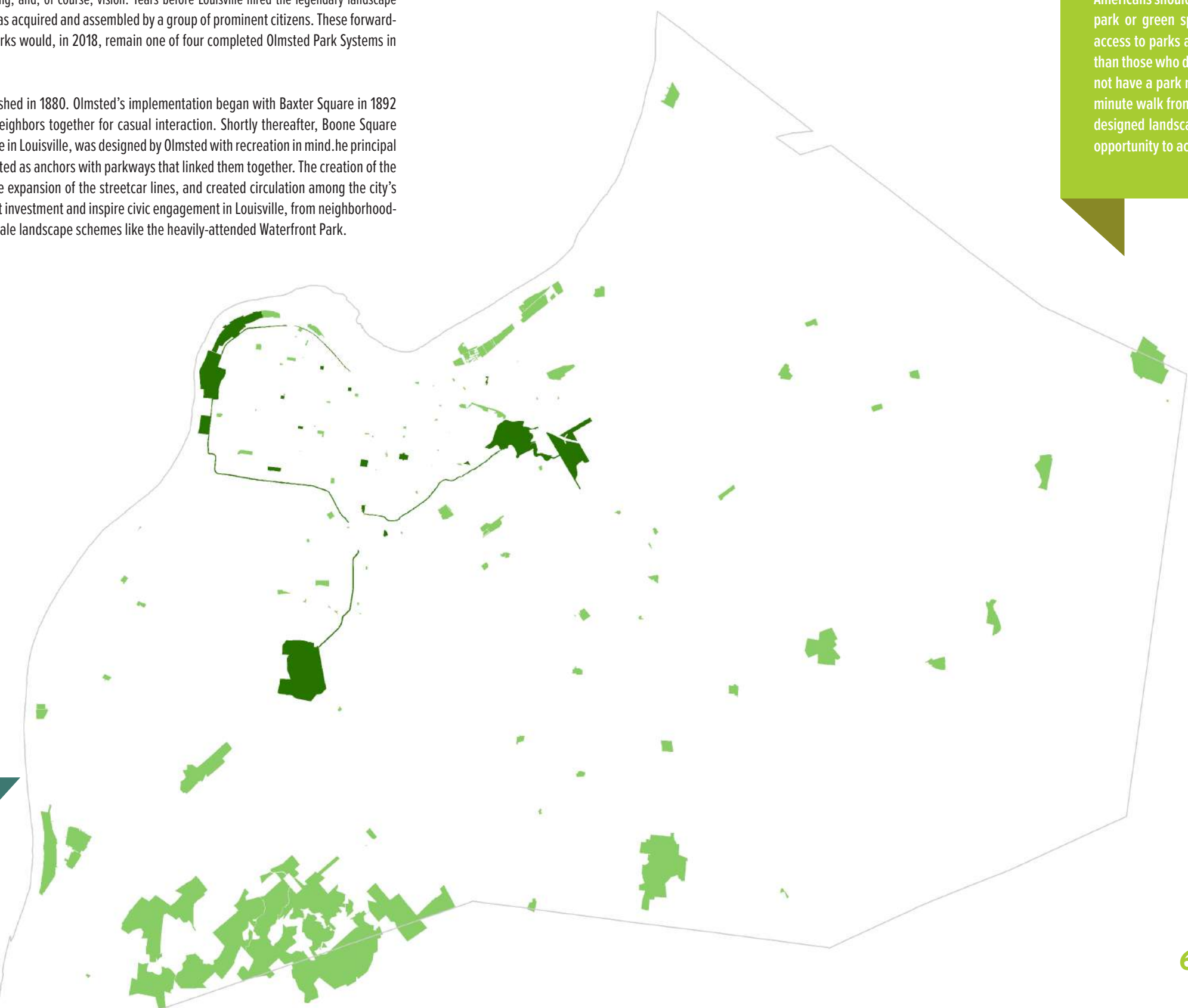
Park building takes coordinated efforts, political will, funding, and, of course, vision. Years before Louisville hired the legendary landscape designer Frederick Law Olmsted, the land for the parks was acquired and assembled by a group of prominent citizens. These forward-thinking benefactors likely did not realize that these parks would, in 2018, remain one of four completed Olmsted Park Systems in the world.

Baxter Square was Louisville's first public park, established in 1880. Olmsted's implementation began with Baxter Square in 1892 where he envisioned a greenspace that would bring neighbors together for casual interaction. Shortly thereafter, Boone Square Park, on the location of the first organized baseball game in Louisville, was designed by Olmsted with recreation in mind. The principal parks—Cherokee, Shawnee, and Iroquois—were created as anchors with parkways that linked them together. The creation of the parks spurred residential development, encouraged the expansion of the streetcar lines, and created circulation among the city's greenspace. Today, Olmsted's vision continues to attract investment and inspire civic engagement in Louisville, from neighborhood-level community development projects to new, large-scale landscape schemes like the heavily-attended Waterfront Park.

In 2017, the Trust for Public Land published an advocacy statement that all Americans should live within a 10 minute walk (or a half mile) of a high-quality park or green space. Research demonstrates that people who have easy access to parks are 47% more likely to walk at the daily-recommended level than those who do not have easy access. Currently, one in three Americans do not have a park nearby. In Louisville, 38% of the population lives within a 10 minute walk from a park and 16% live within a 10 minute walk of an Olmsted designed landscape. This proximity gives the citizens of Louisville a greater opportunity to access the many public health benefits that parks provide.



In the current geography of Louisville, parkland equals 7.3 % of the total land area and Olmsted-designed parks represent 19% of all parkland.



■ Olmsted Parks and Parkway
■ Louisville Parks and Recreation



Over 123,000 people live near Olmsted Parks



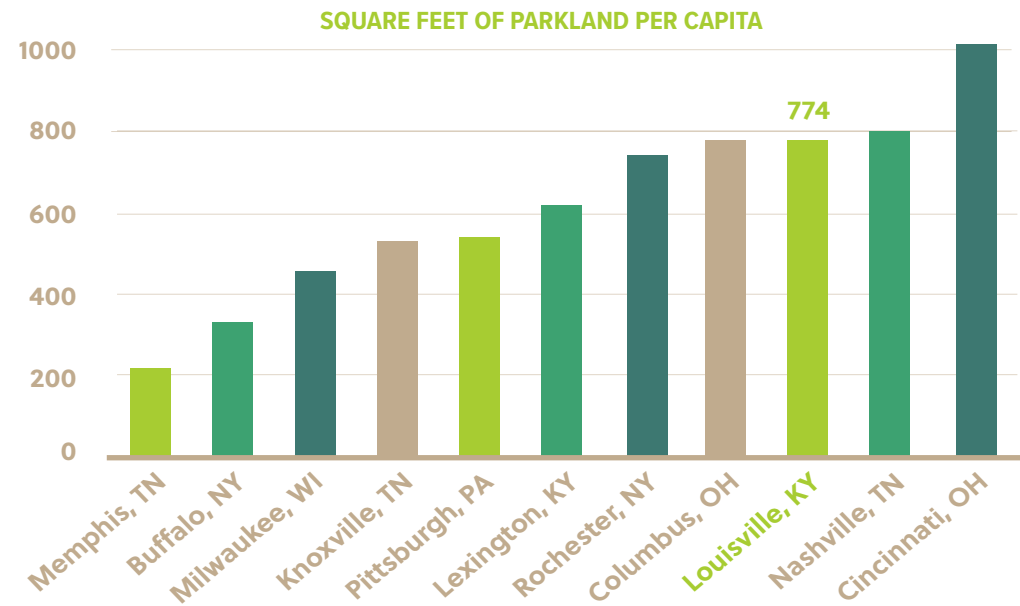
16% of Louisville's population live near an Olmsted Park, 22% live near another park, and 61% do not live near parks

PEER CITIES

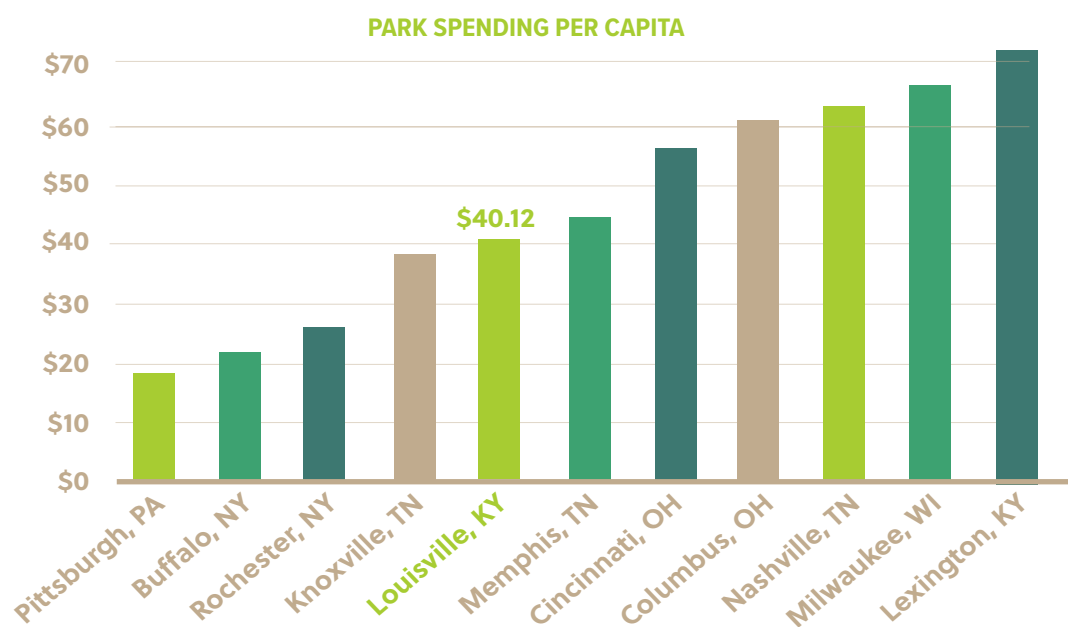
Despite this, Louisville parklands fall behind peer cities. In the 2018 Trust for Public Land's "Parkscore" rankings, Louisville ranks 84th out of the 100 largest cities in the United States.⁴ The low score is a result of subject areas such as lack of public spending on parks, access to parks, and parkland percent of city area. However, the average park size in Louisville is 7.7 acres, even higher than the #1 city for Parkscore—Minneapolis, Minnesota—at 6.6 acres.

While the Trust for Public Land's Parkscore represents an objective, numbers-only comparison, this study measured Louisville against other cities by taking into account cities of similar age, development, population, and region. [Side bar: list of peer cities called out graphically]

In terms of square feet of parkland per capita, Louisville ranks high.

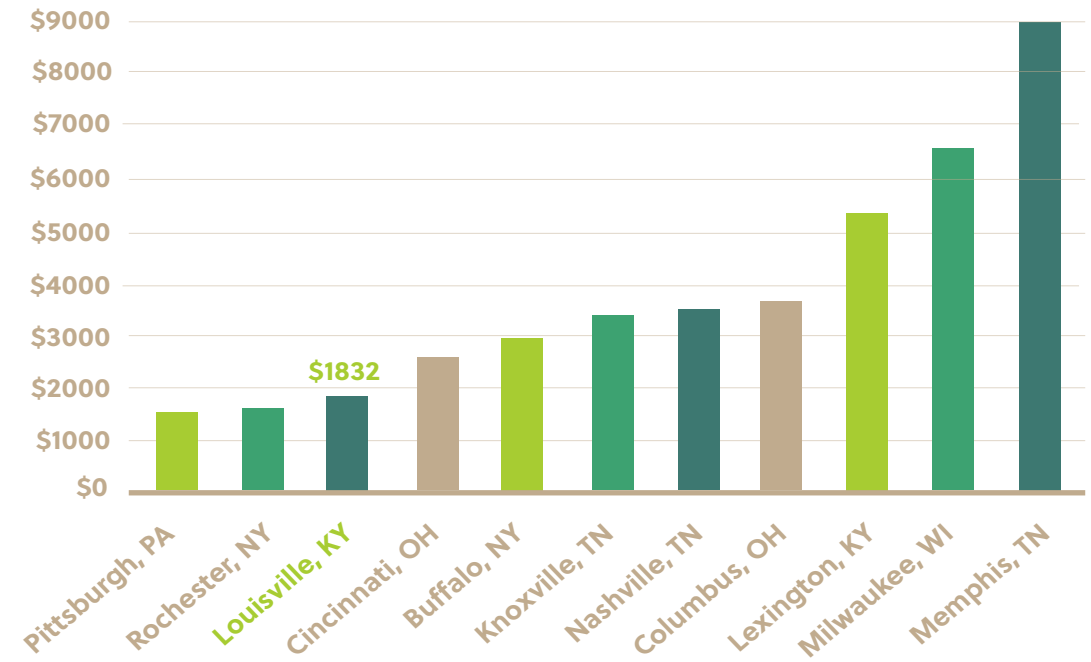


In terms of park spending per capita, Louisville is in the lower half.



⁴ Parkscore is a comprehensive park rating methodology created by the Trust for Public Land. Using the 100 largest cities in the US, the cities are ranked on categories of acreage of parks, access, and service and investment. The rankings are released yearly at <http://www.parkscore.tpl.org/>.

PARK SPENDING PER ACRE



In a spending-per-acre of parkland comparison, Louisville is on the low end of the comparison cities. Louisville only spends \$1,832 per acre, compared to Lexington's more than \$5,000 per acre.

The City of Louisville merged with Jefferson County in 2003, creating a leaner government. Today, the Metro government stretches every dollar to provide services to Kentucky's largest city, made up of nearly 400 square miles. The OPC helps fill this gap where the public sector's resources are stretched.



Olmsted designed four other park systems in Rochester, NY; Buffalo, NY; Milwaukee, WI; and Boston, MA. This photo shows Delaware Park in Louisville's peer city of Buffalo.

Photo Credit: <https://www.blparks.org/>

CONTRIBUTIONS OF THE OLMSTED PARKS CONSERVANCY

The OPC formed in 1989, "works closely with the city and its citizens to raise needed funds and guide revitalization of 18 Olmsted-designed parks and 6 parkways." Since their formation, "partnerships with local government, generous individual and corporate donors, proud volunteers and countless others have led the Conservancy to investing more than \$35 million in Louisville's vital, community assets."⁵

In their white paper, "Measuring the Economic Value of a City Park System," the Trust for Public Land writes about "Community Cohesion." Numerous studies have shown that the more webs of human relationships a neighborhood has, the stronger, safer, and more successful it is. Any institution that promotes this kind of community cohesion—whether a club, a school, a political campaign, a religious institution, a co-op—adds value to a neighborhood and, by extension, to the whole city.⁶

This human web, which famed urban writer and activist Jane Jacobs termed "social capital," is strengthened in some cities with parks. In cities with a great amount of social capital, park volunteers do everything from picking up trash and pulling weeds to planting flowers, raising playgrounds, teaching about the environment, educating public officials, and contributing dollars to the cause.

The OPC keeps detailed records of donations and gifts and tracks volunteer hours at Olmsted Parks. The OPC recorded 1,000-1,200 volunteers and 7,000 hours of volunteer time every year between 2014 and 2017. In 2017, under the leadership of 52 Park Stewards, there were 51 groups of volunteers consisting of 904 individuals from schools, neighborhood groups, nonprofits, local businesses and large corporate groups. This was supplemented by another 245 individual volunteers (non-park steward, non-affiliated). OPC collected \$615,000 in donations in 2017.

Independent Sector, a national membership organization focused on nonprofits, projects the dollar value of volunteer time nationally and by state. They note that the estimated value of each volunteer hour in Kentucky in 2017 was \$21.17. That represents a total value of \$148,190 in contributed services to the OPC and by extension, to Louisville's Metro Parks.⁷

The OPC works in tandem with Louisville Metro Parks to maintain the world-class park system, including the less glamorous aspects like restrooms. A recent renovation of the restrooms at Central Park in the Old Louisville neighborhood provided much needed improvements and increased accessibility. These efforts are recognized and appreciated by the Louisville community. In a 2015 article for Kentucky Educational Television, Patrick Reed wrote, "Due to the efforts of the conservancy and other committed citizens, Olmsted's living works of art will likely continue to engage and inspire Louisville's residents throughout the 21st century and beyond."

⁵ <http://www.olmstedparks.org/about/>

⁶ Trust for Public Land, "Measuring the Economic Value of a City Park System", <http://cloud.tpl.org/pubs/ccpe-econvalueparks-rpt.pdf>

⁷ https://independentsector.org/resource/vovt_details/





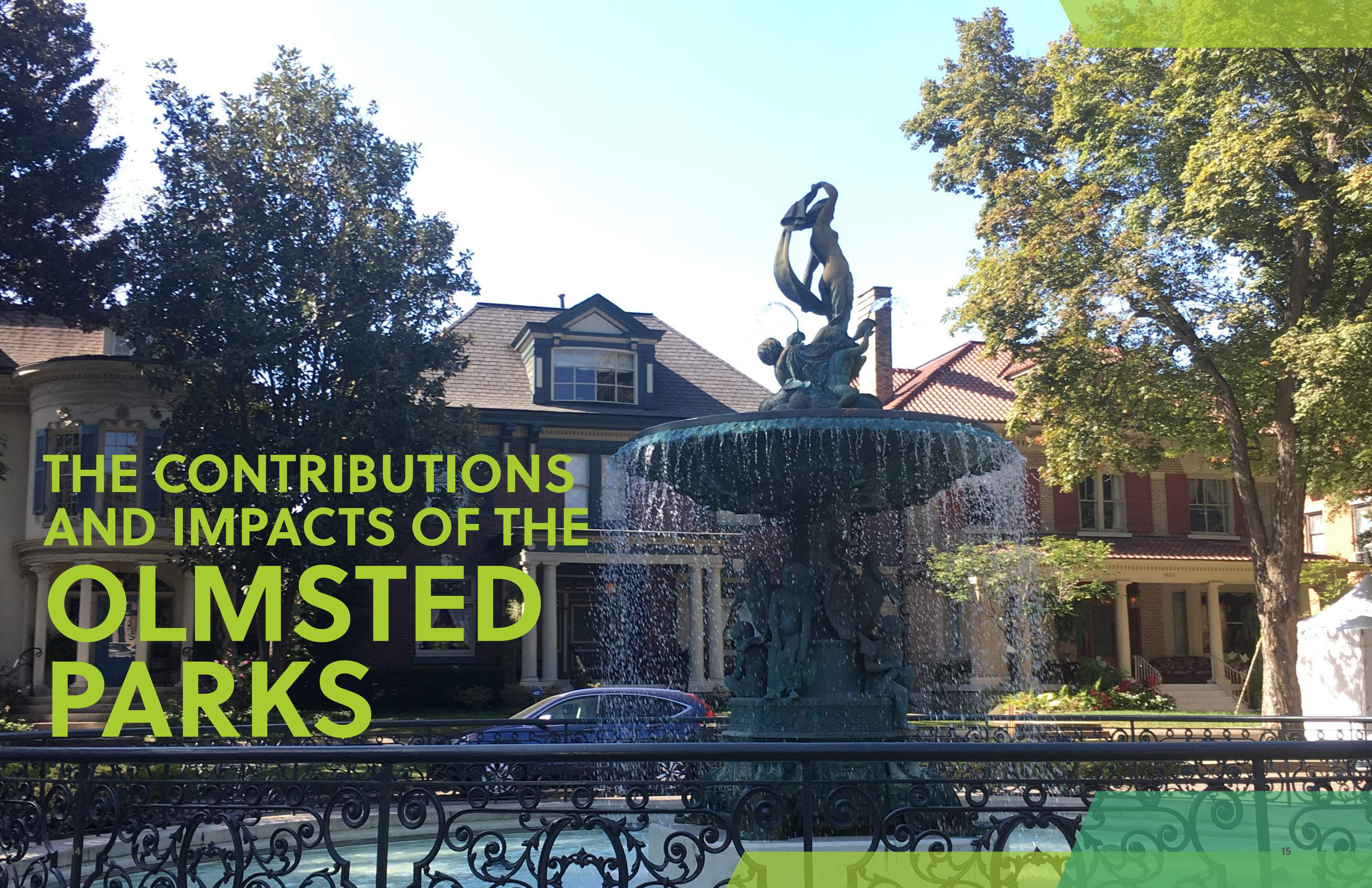
Dan Jones
Chief Executive Officer
21st Century Parks

Dan currently serves as the Chairman and Chief Executive Officer of 21st Century Parks, where he oversees fundraising, planning, design, construction, and operations of the Parklands of Floyds Fork. The Parklands is a nearly 4,000-acre public parks system along the Floyds Fork watershed in eastern and southeastern Louisville that is essentially reimagining the Olmsted vision in the 21st century.

According to Dan Jones, “you can’t do anything with large scale parks without looking back at Olmsted.” A native of Louisville, he grew up around quality parks, but was concerned that the city was not installing parks with the same long-term vision and community focus that brought Frederick Law Olmsted to Louisville a century ago. And so when he founded 21st Century Parks in 2004, he set out to create a city asset that would have a 100-year impact, just as Olmsted did.

In general, Dan doesn’t take issue with growth and development at the edges of cities, and Louisville has indeed been growing at the edges. So, he founded a park system modeled on Olmsted’s principals—a park system that would allow for growth and benefit the community at large.

“I believe that what parks do outside their boundaries is just as important, if not more important, than what they do inside in terms of health, education, quality of life, property values, etc. I also think that the spirit of parks is not about the recreation that takes place in boundaries—parks are equally or more significant because of what they do for the communities around them.”



**THE CONTRIBUTIONS
AND IMPACTS OF THE
OLMSTED
PARKS**

Olmsted Parks are for everyone.

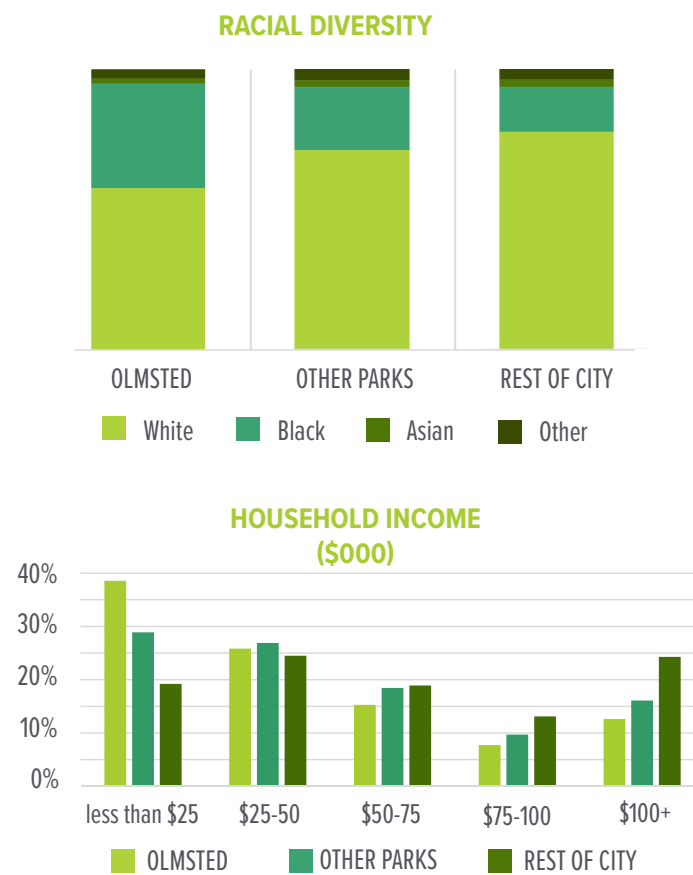
Every family deserves a park within a 10-minute walk from their home. Unfortunately, this is not always the case, especially for families in underserved neighborhoods. Nationally, park access is influenced by demographic, socioeconomic, and regional factors, as well as disparities in park distribution and accessibility to transportation. Yet public park access is especially critical for low-income communities that may have few other recreational facilities or public resources. For neighborhoods that have long suffered disinvestment, public parks are a matter of equity.

Diversity in public space matters, and Louisville is a historically diverse city. By 1900, the size of Louisville's African American population was exceeded by only six other cities. When other parks were closed to the black community during Jim Crow, Chickasaw was the only large park that remained open until all city parks were desegregated in 1954. Over the course of the 20th century, white flight and Louisville's decline as a regional trade hub meant that the city's center and west end declined. As the city's African American population settled in the west end during white flight, these communities largely inherited the Olmsted Parks. Today, the neighborhoods surrounding Olmsted Parks are still the most diverse in the city. The population surrounding Olmsted Parks is 37.8% African American, compared to 22.7% surrounding other parks and 15.9% in the rest of the city. As the city becomes more diverse, spaces like Olmsted Parks are going to be important platforms for different cultures and communities to interact.

Just as it is important that parks serve racially diverse communities, it is critical that communities with low-income residents have access to green space. Often it is low-income families that bear the environmental burden of urban living. That may mean living near highways with no sound walls or tree buffers to capture pollutants, lacking access to clean drinking or ambient water, or being exposed to hazardous waste and land contaminants. These same communities are less likely to have access to quality healthcare. Thus, the communities that are the most exposed to environmental hazards or pollutants are the least likely to receive treatment. A growing body of literature shows that greenspace is just as essential to a livable and sustainable city as other critical systems that work to keep their residents moving and working. In other words, parks create opportunities for all members of a community to thrive.

In Louisville, Olmsted Parks are a major amenity to these low income communities. While 24.6% of all households in Louisville make less than \$25,000, this is true of 38.5% of households within a half mile of Olmsted Parks. Olmsted Parks are providing public resources to the communities most in need.

"Every urban kid in Louisville deserves the opportunity to have a park change his or her life. These parks are city shaping, but they are also life shaping." - Chris Chandler, Green Heart Project



8 "Race Relations and Public Policy in Louisville: Historical Development of an Urban Underclass," Scott Cummings and Michael Price, *Journal of Black Studies*, Vol. 27, No. 5 (May, 1997), pp. 615-649.
 9 "A Restoring Prosperity Case Study," Edward Bennett and Carolyn Gatz, The Brookings Institute, 2008.
 10 "Environmental Burdens of Low Income and Minority Populations and Health Disparities: Implications for Environmental Public Health Tracking," Devon Payne-Sturges and Gilbert Gee. *Epidemiology*: July 2004. Vol 15 Issue 4. p S133.
 11 United States Department of Agriculture, "Urban Nature for Human Health and Well-Being: A research summary for communicating the health benefits of urban trees and green space."



Algonquin Park



Jeana Dunlap
Director of Redevelopment Strategies
Develop Louisville

The Office of Redevelopment Strategies coordinates cross-functional targeted neighborhood revitalization with a high level of accountability for tangible, data-driven actions that produce visible improvements in the built environment while supporting households, entrepreneurs, institutions, and other stakeholders. The Office of Redevelopment Strategies’s recent initiative, *Vision Russel*, seeks to transform the Russel neighborhood in West Louisville, flyin under the slogan of “Capturing the Past, Cultivating the Future.” *Vision Russel* will leverage \$600,000 in a neighborhood with two Olmsted Parks, building on the assets of existing green space, housing stock, and community members to advance Russel as an attractive, accessible, and culturally vibrant place to live and work.

Even though Jeana Dunlap wasn’t aware of the vast achievements of Olmsted while she was growing up in Louisville, she did know that his parks and parkways were beautiful and stood apart from the other parts of town. “As a Shawnee [Park] kid, those parks and parkways were my playground, and so many of our family stories revolve around Shawnee and Chickasaw Parks. It’s where people of every generation will drive through on a leisurely Sunday.” Today, Jeana is the Director of Redevelopment Strategies for Louisville Forward, a city initiative focused on economic and community development.

Jeana’s family would visit from Bardstown, Kentucky for family reunions, and her elders would tell the stories of those trips. “It was a really big deal for people to come to Louisville for the reunions at Chickasaw Park. That legacy continues to this day—either Chickasaw or Shawnee, that’s where people choose to gather when they have those connections.” The fact that the Olmsted Parks weave throughout the city is also key to Jeana. She explains, “In terms of public spaces and gathering spaces...for communities that have been somewhat starved for commercial amenities, the parks are the biggest asset to these communities. If there isn’t some other amenity to make an area a destination spot, here, everyone has access to a park. It creates some equity to have those assets in all of the neighborhoods.”

Chickasaw Park is also home to an African American tennis club—the West Louisville Tennis Club—with a long tradition among locals. Remarkably, the club has been active since the 1920s and has seen significant investment over the years. Shawnee Park is also important to the community as it is the home of Dirt Bowl and the Juice Bowl—huge community-centered athletic events covered by stations like ESPN, and boasting ties to legends like Darrell Griffith, Derek Anderson, and Rajon Rondo. Though hosted at Shawnee Park, almost every neighborhood is represented at these events. An award-winning book was published recently called “I Said Bang!: The History of the Dirt Bowl,” and a video promotion explains that the Dirt Bowl is more than just basketball, “it’s tradition, it’s culture, it’s heritage.”

Houses fronting Olmsted Parks are collectively worth \$94,721,000 MORE because of that location, resulting in \$891,000 MORE in property taxes each year to local governments.



The total value of single family residential property within a half mile of Olmsted Parks is **\$431,135,729**



\$891,320 in additional property tax revenue is equivalent to the **SALARY OF 17 TEACHERS**



8.5% of all residential properties are within a half mile of an Olmsted Park but represent

12.5% OF THE TOTAL VALUE of residential properties

The average parcel size of a property within a half mile of an Olmsted Park is **2.5 TIMES SMALLER** at **6,605 square feet** compared to **17,020 square feet**.

Properties within 1/2 mile of Olmsted Parks represent **\$7 billion** to the local tax base.

Being near an Olmsted Park provides a property value premium. In the case of the larger parks, that enhanced value extends **at least 1/2 mile beyond the park boundaries.**



While parks in general have a positive impact on property values, Olmsted Park-fronting houses have **a per square foot value of 5.5% more** than properties fronting on non-Olmsted Parks.

NEARLY 20% OF HOME SALES between 2012 and 2015 were near Olmsted Parks.

Olmsted Parks add value.

In economic jargon, public parks are a good that would be infeasible to charge to provide, and so the private market is insufficiently motivated to do so. However, the characteristics that define public goods, such as public schools or transit, are the same qualities that make them essential to equitable urban life. Unlike private goods, the benefits of public goods are not confined to those who pay for them—non-payers or “free-riders” can consume the good at no financial cost. Similarly, the consumption of the good by one user does not restrict the consumption by others, and the cost to supply to additional users is marginal.

Non-exclusivity and accessibility make public goods important civic and social infrastructure. They cannot be supplied for a profit, but they contribute undeniable social benefits. Thus, it is often the job of governments or nonprofits to provide them.

We understand, then, that parks have non-market value, that they provide necessary benefits for the public, and that it falls on the public and nonprofit sectors to provide them. But can we measure some return on these public assets?

This study evaluated the proximate effect of parks on property values in Louisville, with a particular focus on the impacts of Olmsted Parks as compared to other parks. Overall, parks in Louisville, including the linear greenspaces like the tree-lined parkways, have a positive impact on property values. Similar studies in other cities have shown that larger passive parks—such as Cherokee, Shawnee, and Iroquois— have the largest influence, and this held true in Louisville. After accounting for differences in condition, age, and size, properties fronting on Olmsted Parks have an aggregate value premium of \$94,720,520. Because these parks enhanced the value of nearby properties, an additional \$891,320 in property tax revenue was collected in 2017. While parks in general have a positive impact on property values, properties fronting an Olmsted park have a per-square-foot value of 5.5% more than properties fronting on non-Olmsted Parks, after adjusting for differences in condition, age, and size.

Olmsted Parks serve Louisville's environmental goals.

Leadership in Louisville has committed to numerous declarations to address environmental issues and climate resilience over the last ten years. This list includes the U.S. Mayors Climate Protection Agreement (2005), the Global Covenant of Mayors for Climate and Energy (2016), the Rockefeller Foundation 100 Resilient Cities (2016), and the Paris Agreement (2017). These initiatives, along with the City's Sustainability Plan, cite goals of protecting the environment and reducing Louisville's carbon footprint, ensuring the health, wellness and prosperity of all citizens, and preparing for the impacts of climate change. In addition, a 2016 study on the alarming impacts of urban heat island effect in Louisville keeps these issues at the forefront of policymakers' minds. The 2,315 acres of Olmsted Parks help Louisville meet these goals.

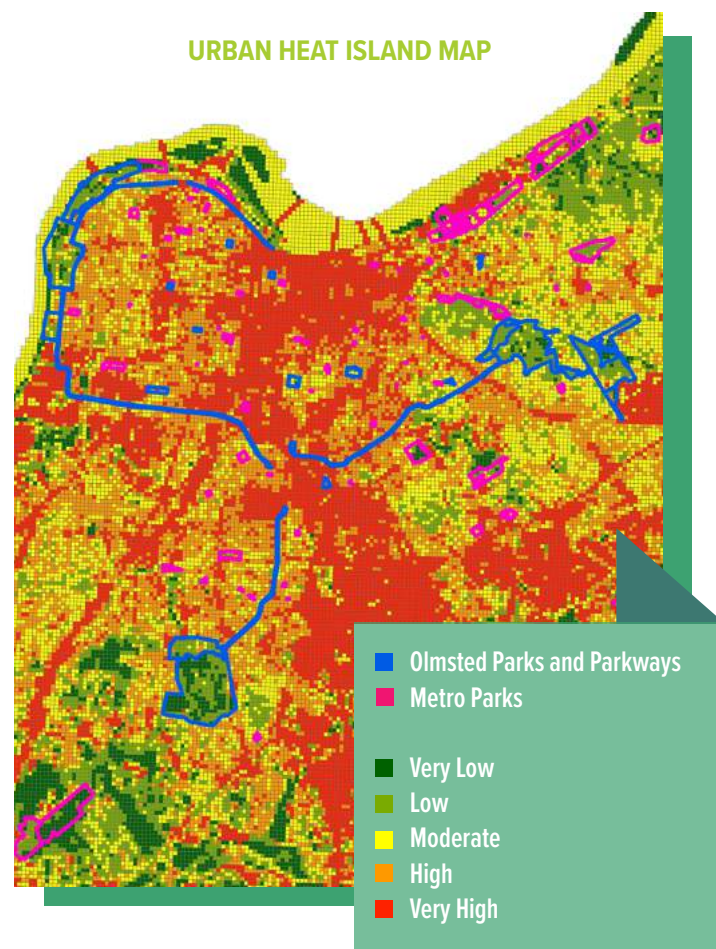
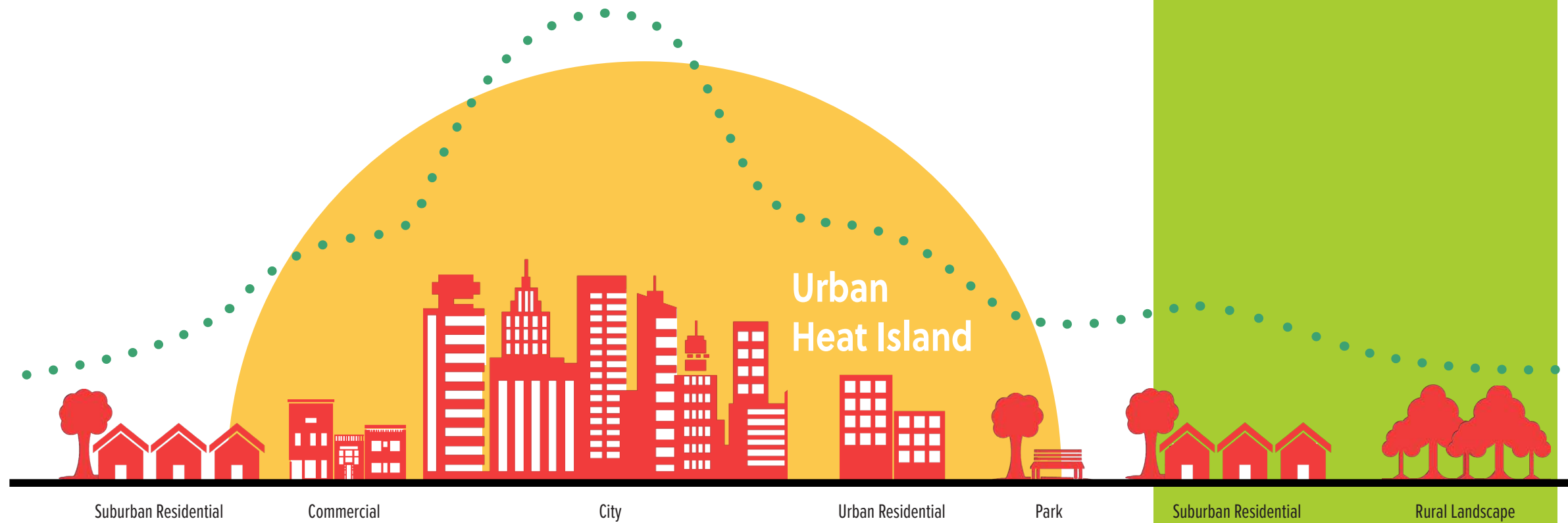
As Louisville rapidly urbanized in the late-19th and early-20th centuries, the Olmsted Parks were strategically located at what was then the edge of suburban development. Today, the city boundary has grown well past the Olmsted Parks and the Olmsted Parks serve as important environmental microclimates in Louisville. These microclimates are not only helping meet environmental goals, but saving the city and residents money.

Trees naturally cool the environment. The presence of trees and greenspace subsequently lower building energy use for property owners. Studies suggest that large large trees planted in the correct location can shade a home and reduce summer energy costs up to 35%.¹² In Louisville, Olmsted Parks have a diverse tree canopy composition and 1.5x more trees per acre than the rest of the city. This greater diversity and number of trees coupled with the presence of old-growth forests, like in Iroquois Park, provide a vital habitat for plants and animals. A variety of tree species is important as the threat of Emerald Ash Borer is high in Louisville and the city is funding tree plantings to meet environmental goals.¹³

A 2014 report called Summer in the City: Hot and Getting Hotter, identified Louisville as 5th among US Cities with the most intense summertime urban heat islands. But, it is the park system in general, and the Olmsted Parks in particular, that provide a respite from that impact. Between 2004-2012, the city saw a 7% tree canopy loss—over 6,500 acres. Olmsted Parks lost only 4% of their canopy or just 44 acres.

¹² How to Plant Trees to Conserve Energy for Summer Shade, Arbor Day Foundation, <https://www.arborday.org/trees/climatechange/summershade.cfm>

¹³ Olmsted Parks Conservancy, Species Composition Analysis.



These trees also mitigate urban air pollution through disposition. Trees also alter wind patterns which contributes to emissions. Older, larger, tree canopies are the most effective for environmental benefits, particularly with stormwater collection. The 2,315 acres of Olmsted Parks, with their density and diversity of plant cover, act as important sponges, capturing rain and filtering runoff. This minimizes the impacts of storms and lessens the burden on infrastructure. Trees and vegetation are a more cost-effective way to mitigate stormwater—the alternative is to construct new management systems to replace the functions of that green infrastructure. The presence of parkland, greenspace, and trees in Louisville's crucial watersheds helps with storage and interception of rainfall at the source, and can reduce diffuse pollution—pollution from a range of sources but with a cumulative effect—by enhancing sediment retention. The location of Shawnee and Chickasaw Parks along the banks of the Ohio River provides greenspace in the flood zone, adding protection to Louisville's neighborhoods.

The vegetation preserved in Olmsted Parks plays a significant role in improving air quality in the region, minimizing noise pollution, reducing stormwater impacts, and providing greenspaces for outdoor activities—all major quality of life factors.

Energy Saving Contributions of Olmsted Parks

Olmsted Parks have a direct impact on environmental savings. The 2,315 acres of Olmsted park land equate to:



21,020,638 pounds

of Carbon Emissions Reduced
This equals the energy use of 1,030 homes for one year or 319,103 incandescent lamps switched to LEDs.



93,483,740 gallons

of Storm Water Runoff Mitigated
This equals 3,116,125 loads of laundry, 13,354,820 toilet flushes, or 5,425,101 showers.

Boone Square



“Our parks are a good space to scream if you need to scream, a good place to be yourself. It’s very important in this society, keeps down depression. From a human standpoint, it’s where I’ve always felt safe. We need to come to 2017 with the Olmsted Parks, get the best benefits, keep the interest of the community. With the community being younger, a lot of people don’t understand the historical significance of Olmsted but we have to keep them relevant in 2020.” - Myra Friend-Ellis, Legislative Assistance, Metro Council District 5

Olmsted Parks connect nature and neighborhood.

Louisville’s Olmsted Parks are more than aesthetically pleasing. The parks connect neighborhoods with nature, provide environmental health, and strengthen the community’s well-being. The evidence linking nature in neighborhoods to physical health is rapidly strengthening and the science demonstrating the benefits of nature to mental health has long been established. Nationally, sedentary lifestyles, obesity, and numerous chronic diseases make up more than 20% of healthcare costs. The projections reveal the estimated costs of preventable chronic diseases will only continue to rise. Despite this evidence and successful campaigns such as Michelle Obama’s “Let’s Move Outside” and the National Park Service’s “Healthy Parks, Healthy People,” public parks continue to be an undervalued health solution. Acknowledging and utilizing public parks as a public health strategy is a low-cost, high-impact opportunity.

Olmsted designed the park system in Louisville with these factors in mind, believing the polluted city air could be “disinfected by sunlight and foliage.”¹⁴ More than 120 years later, these benefits of linking nature and neighborhood still hold true in Louisville.

Because nearly half of all Louisville residents within a ten minute walk to a park live near an Olmsted park, the Olmsted Parks unquestionably provide opportunities for health benefits. As Louisville moves to implement its Resiliency and Equity initiatives,¹⁵ it is important to note that increasing, maintaining, enhancing, and programming greenspace is listed as a priority.

Numerous local studies demonstrate the need for additional green space in Louisville. In the recently completed Air Louisville study, where over 1,100 participants collected 1.1 million data points, tree planting is listed as the number one recommendation to combat the high asthma rates in Louisville.¹⁶ Also underway is a new pilot study called the Greenheart Project—a controlled experiment working with 700 participants to test urban greening.¹⁷ Nationally, the lack of greenspace that is associated with higher health risks and lower life expectancy is especially prominent in low-income communities. In Louisville, the Olmsted Parks serve these communities and work to close the “nature gap.” Particularly for children, access to playing outside in parks and opportunities for leadership and stewardship are significant. In 2016, Louisville joined six other pilot cities in the National League of Cities Cities Connecting Children to Nature (CCCN) initiative to increase out-of-school time spent in nature, improve mental health and social cohesion, and nurture youth as stewards for the natural environment.¹⁸

While this study could not specifically quantify the ability of the Olmsted Parks to counter-balance other factors contributing to the health equity disparity in Louisville, the evidence certainly demonstrates that access to nature has the potential to disproportionately improve health outcomes for these populations.

¹⁴ Barrett, Miller, and Frumkin, “Parks and Health: Aligning Incentives to Creative Innovations in Chronic Disease Prevention,” 2014.

¹⁵ Louisville is one of the Rockefeller Foundations 100 Resilient Cities, which requires the city to develop a strategic resiliency plan. Louisville has also made commitments to health equity, releasing a Health Equity Report in 2017 and instituting a Health Equity Fund in 2018.

¹⁶ “Air Louisville Study Completed!,” <https://www.familyallergy.com/asthma/air-louisville-study-completed/>

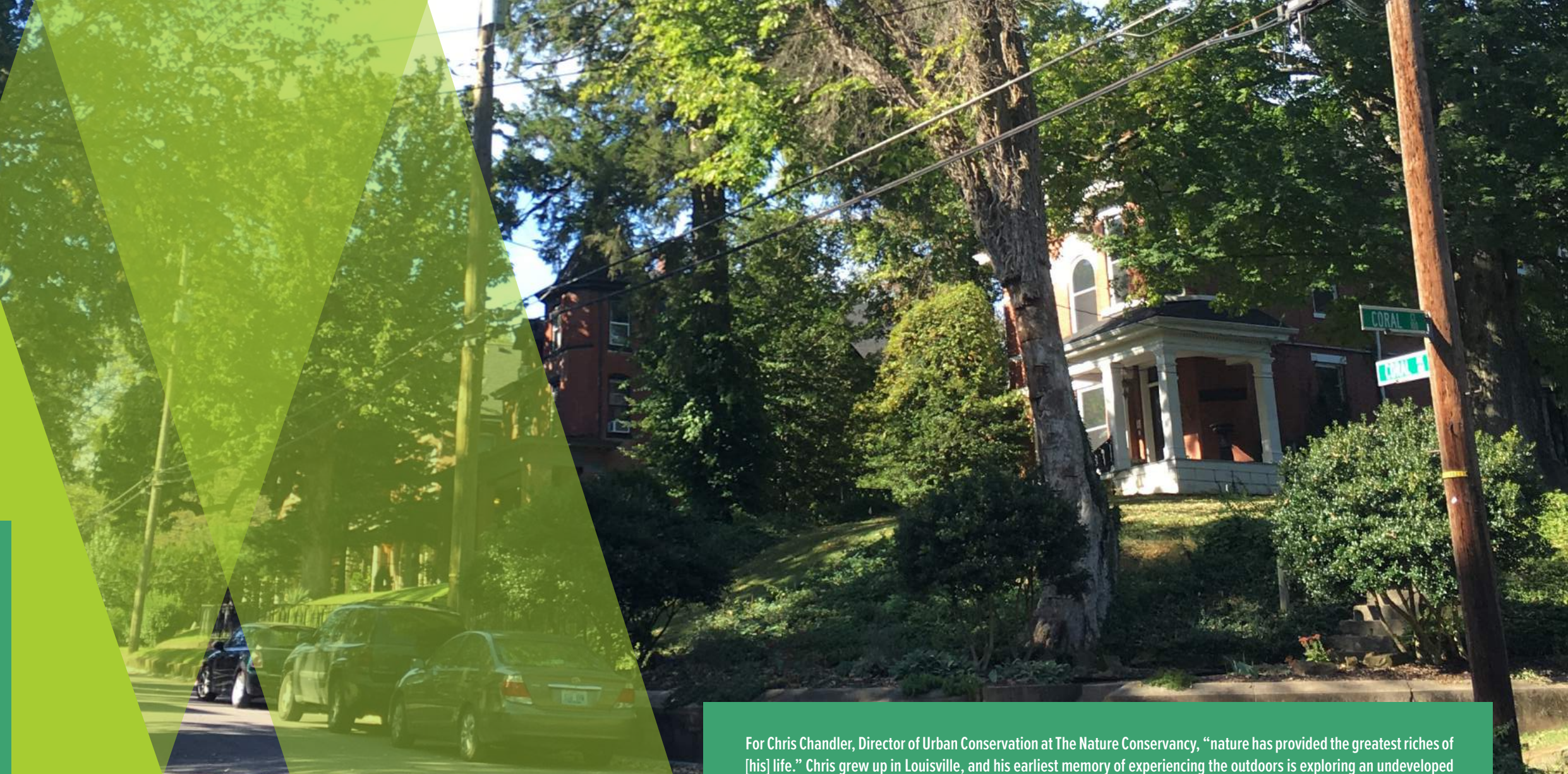
¹⁷ “Green Heart Project,” University of Louisville, <https://louisville.edu/greenheart>

¹⁸ “Connecting Children to Nature,” National League of Cities, <https://www.nlc.org/cities-connecting-children-to-nature>



Chris Chandler Director of Urban Conservation The Nature Conservancy

A Louisville native, Chris holds a B.A. in communications from the University of Louisville and has more than seven years of experience serving as a project manager and business developer for several Louisville-based ecological consultants. His professional background has given Chris a demonstrated ability to work with private landowners, governmental agencies, volunteer organizations and other partners on a variety of habitat restoration projects already underway in Louisville. A certified Arborist, Chris also serves in leadership positions with local non-profit and community-based environmental organizations. He is involved with Louisville's Green Heart Project, a collaborative research initiative led by the University of Louisville, The Nature Conservancy, Hyphae Design Laboratory, and the Institute for Healthy Air Water and Soil which will examine the link between neighborhood greenery and human health.



For Chris Chandler, Director of Urban Conservation at The Nature Conservancy, “nature has provided the greatest riches of [his] life.” Chris grew up in Louisville, and his earliest memory of experiencing the outdoors is exploring an undeveloped lot that backed up onto his neighborhood. As Chris put it, “It was my peace.” As he got older, he dreamed of getting to Cherokee Park, an Olmsted park that was several miles away. It was also where his parents first met. He knew that once he was allowed to ride his bike that far, he’d have countless miles of green to explore: “All of a sudden, that five-acre wood lot was this vast oasis surrounded by the built environment. I spent so much of my time in the Olmsted Parks in high school.”

Chris’ love of nature continued to grow, eventually taking him on hikes around the U.S. and Central and South America. While walking the Appalachian Trail, he met his wife. Now, having been given so much by the nature and the parks, Chris works to ensure that legacy for others. “Those parks are what keep me up late at night and get me out of bed in the morning. Every urban kid deserves to have their life affected as mine was by our parks system. It’s an amazingly special opportunity and Louisville is so fortunate to have the Olmsted Parks System in place. It has been city-shaping.”

Beyond enjoying the recreational benefits and beauty of the parks, Chris also focuses on the big picture health benefits. “In Louisville, your zip code is the #1 indicator of your life expectancy, with a 13-year swing in life expectancy based on where you live. Wealthier areas have highest percentage of tree canopies and green space. The only thing that bucks that trend is the parks system. If a neighborhood doesn’t have green space and trees, at least a nearby park does. We will soon have 80% of the world’s population in cities. At the end of the day, we welcome dense city centers, but nature can make cities more livable. The beauty of the Olmsted Parks is that they welcomed development coming in—they planned for its inevitability. When you come find us in Louisville, you’ll know what we look like and what we’ll continue to look like.”

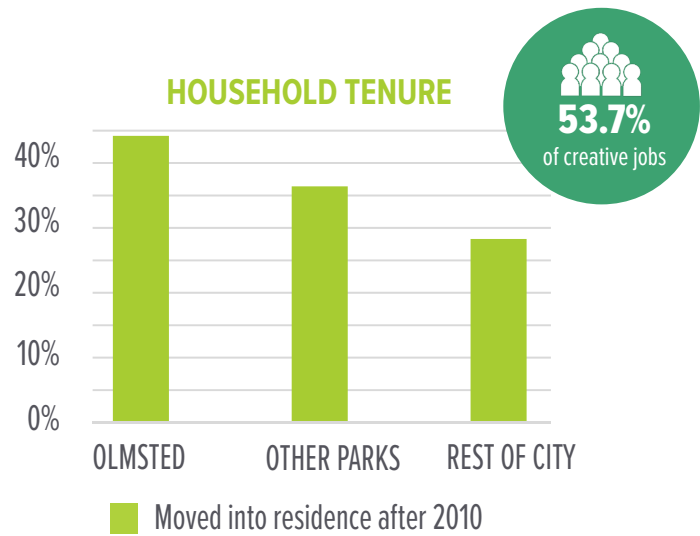
Olmsted Parks attract new residents and creative jobs.

In a time when people can live anywhere, to have something that is a key component for quality of life is a significant asset. And for Louisville, the Olmsted Parks are one of those key components. On a national level, people desire to live near parks—in fact, the National Recreation and Park Association reports that 85% of people seek parks when choosing a place to live and that is also evident with Louisville’s Olmsted Parks.

This analysis also found that that Olmsted Parks are a magnet for both residents and jobs. The U.S. Census tracks household tenure, asking residents to indicate when they moved into their current housing unit. Since 2010, more residents have chosen to locate nearby an Olmsted park than nearby another park or elsewhere in the city.

Not only are residents disproportionately choosing to live near an Olmsted park, employers are also taking this desire to be near the parks into account. In Louisville, over 54,000 jobs are located nearby Olmsted Parks, accounting for 28.4% of jobs citywide. While health care jobs represents the largest industry in Louisville, in recent years the economy has been diversifying. One area of growth is the creative industry, which saw a 34% growth rate in the number of jobs between 2012-2015. The creative industry is measurably attracted to Olmsted Parks, as 53.7% of creative class jobs are within a half mile of an Olmsted park. Not only are creative class jobs growing, but a third of creative class workers live near their job. In a 2013 report by the International Downtown Association, any area with over 30% live-work population is considered a “high live-work” area compared to other cities across the country. This has positive impacts not just for the worker, but to the environment, traffic congestion, businesses that serve both residents and workers, the municipal budget, and public safety issues. Density, walkability, bikeability, and live-work lifestyle are important in quality of life measurement and that is exactly what the Olmsted park neighborhoods provide.

“In terms of talent attraction, [the Olmsted Parks] are huge assets to our neighborhoods.” - Tom Stephens, Executive Director, Center for Neighborhoods



Access Ventures is an impact investment firm that builds more inclusive economies through mission-aligned investments that enable communities to flourish. They have invested three murals in the Shelby Park neighborhood.



Photo Credit: www.accessventures.org

Olmsted Parks are sites of social cohesion.

Social cohesion is difficult to quantify. That said, countless social scientists have affirmed that the ability to gather and spend time together in public space sustains the vital connections that facilitate healthy community-building.¹⁹ Public spaces expose people to difference, and research has shown that even indirect and passive social interactions contribute to a sense of belonging.²⁰

Beyond just recreational use, social cohesion is maintained when the community works together toward a common goal, whether it is to clean a park, to repaint a bridge, or to remove invasive vines from endangered trees.. “Collective efficacy” is a condition where social trust among community members is combined with a readiness to intervene for the common good.²¹ This willingness to participate in voluntary, community-building activities is a useful proxy to measure social capital.²² In each of the years from 2014-2017, the OPC recorded 1,000-1,200 volunteers and 7,000 hours of volunteer time. In 2017, under the leadership of 52 Park Stewards, the parks had 904 volunteers with 51 groups—schools, neighborhood groups, nonprofits, local businesses and large corporate groups. Olmsted Parks and the OPC provide valuable channels for the community to come together to care for place, and through these opportunities build social trust.

“People care about their parks, they give us opportunities to recreate, people come all year round. The activities vary: walking, playing basketball, family reunions, bounce houses for kids.They are very popular in terms of rentals. People feel a sense of ownership.” - Cheri Bryant Hamilton, Louisville Metro Council District 5



Olmsted Parks are sites of social cohesion. They are overwhelmingly the chosen location for community and family gatherings, school field trips, and recreational activities. While Olmsted Parks make up only 19% of the land area of Louisville Parks and Recreation parks, they are the chosen site for:

- 99% of Outdoor Concerts
- 99% of Outdoor Theater
- 93% of Walks/Runs
- 61% of Church Meetings
- 41% of School Field Days
- 40% of Picnics
- 38% of Festivals
- 31% of Family Gatherings

¹⁹ “Healthy, Equity, and Public Space,” Gehl Institute. <https://gehl.institute.org/news/health-equity-public-space/>

²⁰ “Public Life in NYC’s Plazas,” Gehl Institute. <https://gehl.institute.org/work/nyc-public-plazas-public-life-and-urban-justice-in-nycs-plazas/>

²¹ “Park Power - Land and People” The Trust for Public Lands, <https://www.tpl.org/magazine/park-power%E2%80%94landpeople>

²² “The Prosperous Community: Social Capital and Public Life,” The American Prospect, <http://prospect.org/article/prosperous-community-social-capital-and-public-life>



Photo Credit: Louisville Sustainability Council



CONCLUSION

Louisville is known as the compassionate city. The leadership has committed to equality, sustainability, and resilience, and since the 2003 merger, the municipal government has had a focus on data-based policy solutions. This study demonstrated with data that the Olmsted Parks provide shared space for all socio-economic brackets and are sites that bring the community together for family gatherings, recreation, concerts and more. The Olmsted Parks add value in the real estate market and the data shows that people are willing to pay more to live near them. In addition, the Olmsted Parks are helping the city meet environmental goals with marked environmental savings. The beneficial link between nature and neighborhood is scientifically-known and Olmsted Parks are providing greenspace for the vulnerable populations in Louisville who need it most. As Louisville works to increase its economic and environmental viability, the Olmsted Parks attract and retain residents and jobs.

This report measured a great range of impacts and contributions, but not everything is quantifiable with hard numbers. Throughout the interviewing process, there was an abundance of community pride surrounding the Olmsted Parks with the same themes stated over and over again. As one stakeholder put it, “Not a lot brings us together, but the parks do.”

ACKNOWLEDGEMENTS

We would like to thank all those who generously contributed their time, knowledge, expertise, and stories to this report:

SEVE GHOSE, Director, Louisville Parks & Recreation

ELIZABETH L. RIESSER, Data analyst, Louisville Parks & Recreation

BENNETT KNOX, Jefferson Memorial Forest
Brandy N. Kelly-Pryor, Director of the Center for Health Equity

AJA BARBER, Community Health Manager
JAY GULICK, Managing Broker and Owner, KY Select Properties

CLAIRE ALAGIA, WR Realtors

TAMIKA JACKSON, Real Estate Agent & member of Landmarks Commission

ELLEN BLAND, WR Realtors

TOM WAKEFIELD, WR Realtors

BRYAN BURNS, Shelby Park Neighborhood

MYRA FRIEND-ELLIS, Legislative Assistance, Metro Council, District 5

CHERI HAMILTON, Metro Council District 5

SARAH WOLFF, Shelby Park Neighborhood & Olmsted Staff

TOM STEVENS, Executive Director, Center for Neighborhoods

JACKIE FLOYD, Neighborhood Liaison, Center for Neighborhoods

TOM OWEN, Historian, Archivist at U of L, former Metro Council Person

DARNELL FARRIS, Retired, former City Architect with Landmarks Commission

KELLY KINAHAN, Assistant Professor of Urban and Public Affairs, University of Louisville

CAROLYN WATERS, Adjunct Instructor, School of Environmental Studies, Bellarmine University

ERIC FRIEDLANDER, Louisville Metro Chief Resilience Officer

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ANDREA WEBSTER, Sustainability Project Manager for Louisville Metro Government

DEVON HANKINS, Deputy Director of Strategic Planning at Louisville Metro Government

SUSAN HAMILTON, Attorney, Loeb Fellow, Environmentalist, Board Member for Bernheim Forest

TONY LINDAUER, Jeff Co Property Valuation

TIM BARRY, Housing Authority

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LEAH BELL, Resilience Office

RAY ANTHONY YEAGER, Inst. For Healthy Air Water & Soil

ERIC FRIEDLANDER, Chief Resilience Officer

WES SYDNOR, Metro Sewer District

MAJOR WALTMAN, Olmsted Conservancy

JOHN SWINTOWSKY, Parks and Recreation

JON HENNEY, PLA, AICP

AMIN OMIDY, PLA, ASLA

CYNTHIA JOHNSON, City Historic Preservation

CHARLES CASH, AIA

KEITH RUNYON, Vital Sites Hist Pres Advocacy

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EDITH BINGHAM, Historic Pres Advocate

LAUREN ANDERSON, Inst for Healthy Air Water & Soil

MICHELLE KING, Air Pollution Control

GILL HOLLAND

CHRIS CHANDLER, The Nature Conservancy

CINDI SULLIVAN

DAN JONES, 21st Century Parks

METHODOLOGY

To understand the impacts of the Olmsted Parks and Olmsted Park Conservancy it was necessary to gather quantitative data supplemented with qualitative information. Over the last six months data was gathered from the US Census, the Environmental Protection Agency, the Jefferson County Property Valuation Administration, Boxwood Means, The Longitudinal Employer- Household Dynamics (LEHD), and other sources. On the qualitative side, the team visited all 18 Olmsted Parks and interviewed dozens of stakeholders, public officials, residents, and other community members. All photos were taken by the PlaceEconomics team or provided by the Olmsted Parks Conservancy, unless otherwise credited.

This study excludes Waterfront Park and the Parklands of Floyds Fork.

THE PLACEECONOMICS TEAM

This report was prepared and written by Donovan Rypkema, Briana Grosicki, Rodney Swink, and Katlyn Cotton of PlaceEconomics. Editing was by Carla Bruni. Report design was by Katlyn Cotton. Rypkema is principal of PlaceEconomics, a Washington D.C.-based real estate and economic development consulting firm. He is author of *The Economics of Historic Preservation: A Community Leader's Guide* and an adjunct professor in the Historic Preservation Program at the University of Pennsylvania. Grosicki is Director of Research at PlaceEconomics and serves on the Board of Directors for the National Alliance of Preservation Commissions and Preservation Action. Swink is Senior Associate of Planning and Development, as well as a licensed landscape architect and Professor of the Practice at North Carolina State University's College of Design. Bruni is the Associate for Engagement at PlaceEconomics. She has extensive experience working on environmental initiatives with a variety of organizations in and around Chicago, and has worked with the U.S. EPA to create Environmental Justice reports and Community Involvement plans. Cotton is a Research Associate with PlaceEconomics and recent graduate in historic preservation from the University of Pennsylvania.



The Olmsted Parks Conservancy (OPC), formed in 1989, works closely with the city and citizens of Louisville to raise the necessary funds and guide the revitalization of 18 Olmsted-designed parks and 6 parkways. Since their formation, their efforts have invested more than \$35 million in Louisville.

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