

Parks Master Plan CITY OF BUFFALO

THE TRUST FOR PUBLIC LAND



The Trust for Public Land creates parks and protects land for people, ensuring healthy, livable communities for generations to come.

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FRONT COVER, TOP: Seated on the banks of Lake Erie, the 87-acre Ralph C. Wilson, Jr. Centennial Park is set to undergo major upgrades, as determined by community members through the Imagine LaSalle project. © RALPH C. WILSON, JR FOUNDATION; BOTTOM: The splashpad at MLK Jr. Park. © BUFFALO OLMSTED PARKS CONSERVANCY; BACK COVER: Visitors enjoy the boardwalk at Tifft Nature Preserve. © TIFFT NATURE PRESERVE

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Parks Master Plan CITY OF BUFFALO



Message from The City of Buffalo

Over the last 16 years, the City of Buffalo has focused on improving the quality of life for its residents and investing in our diverse neighborhoods. High-quality parks are a critical component in Buffalo's holistic revitalization strategy. Since my administration took back full management of Buffalo's parks in 2010, we have actively engaged with our tremendous public-private partners, non-profits, and community-based stakeholders in addition to building upon our collaborative efforts with agencies at the federal, state, county, and local level. Buffalo has steadily improved its parks through targeted capital investments, sustainable maintenance plans and accountable management agreements. The development of the City of Buffalo Parks Master Plan will act as a guide to continue these efforts and build on the progress we have made.

- THE HONORABLE BYRON W. BROWN, MAYOR, CITY OF BUFFALO

Message from the Ralph C. Wilson, Jr. Foundation

One of the Ralph C. Wilson, Jr. Foundation's core focus areas is Active Lifestyles, more specifically, Parks, Trails, & Green Design. Our goal is to improve recreational and economic development opportunities, connect communities, improve health and improve the quality of life for the people of Western New York by providing access to safe and equitable green space. In October 2018, the Foundation committed \$100 million for this purpose; to build and connect regional trails across Western New York and to transform the future Ralph C. Wilson, Jr. Centennial Park in the City of Buffalo. We are proud to work alongside dedicated government, civic and community partners to continue to strengthen the Buffalo Parks system for all residents and support the City of Buffalo Parks Master Plan.

- J.J. TIGHE, DIRECTOR, PARKS & TRAILS INITIATIVE, RALPH C. WILSON, JR. FOUNDATION

Message from The Trust for Public Land

The Trust for Public Land is honored to have worked with the City of Buffalo and many others to create this comprehensive plan for the park system, the first such plan in almost 40 years. Parks are uniquely powerful in their ability to revitalize communities by improving public health, cooling the air, cleaning the water, and providing a common space for neighbors to connect and support each other. These benefits make a city stronger—if parks are equitably accessible to all. Our goal is to improve the park system with up-to-date analysis and approaches to identify why, how, and where public, private, and nonprofit resources can best be concentrated to yield the greatest impact on climate, health, and equity. The collective and coordinated efforts of diverse partners around park improvements in recent years has helped demonstrate the importance of strategic, targeted investments. We are deeply grateful to the Ralph C. Wilson, Jr. Foundation for its leadership support that made this work possible. Together we can realize the enormous potential that parks can serve in Buffalo's future.

- CARTER STRICKLAND, VP, MID-ATLANTIC REGION AND NEW YORK STATE DIRECTOR, THE TRUST FOR PUBLIC LAND

Preface

Acknowledgments

Over 1,000 people helped to create the Buffalo Parks Master Plan, from community members who participated in the online survey and focus groups to local public sector and nonprofit employees who guided our mapping and community engagement as Steering Committee members to the children who completed the Buffalo Unlimited Activity Book. This was a collaborative effort from start to finish, and it would not have been possible without the outpouring of community support. In addition to the residents of the city, the Buffalo Parks Master Plan was made possible through the generous support of the Ralph C. Wilson, Jr. Foundation.

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THE TRUST FOR PUBLIC LAND is a national nonprofit organization dedicated to creating parks and protecting land for people, ensuring healthy, livable communities for generations to come. Since 1972, The Trust for Public Land has helped communities create over 5,000 special places.

THE CITY OF BUFFALO DIVISION OF PARKS AND RECREATION is entrusted with the care and oversight of more than 180 parks and recreational facilities, including the historic Frederick Law Olmsted designed park and parkway system, six recreation centers, eleven public pools and four public ice rinks as well as management of the street and park trees of our urban forest.

THE MAYOR'S OFFICE OF STRATEGIC PLANNING, a division within the City's Executive Department, coordinates economic development activities throughout the City of Buffalo. The Mayor's Office of Strategic Planning is subdivided into four divisions. Development, Real Estate, Planning & Zoning, and Environmental Affairs. The Division of Development works directly with the business community and real estate developers. The Division of Real Estate handles real estate transactions related to City-owned property, including the sale of real property owned by the City of Buffalo, including vacant lots, residential structures, and capital assets such as decommissioned schools and fire houses. The Division of Planning & Zoning oversees the administration of the City's development regulatory boards (Planning Board, Zoning Board of Appeals, and Historic Preservation Board) and engages the community in planning initiatives. The Division of Environmental Affairs handles matters related to state and federal environmental review, implementation of state and federal environmental land use laws, and oversees the Environmental Management Commission.

RALPH C. WILSON, JR. FOUNDATION. Ralph *C.* Wilson, Jr. believed to make effective change, efforts should make an impact from the start, yet carry long into the future. To do both, he earmarked a portion of his estate and the eventual sale of his beloved Buffalo Bills to fund his namesake foundation. The Ralph *C.* Wilson, Jr. Foundation began operations in 2015 to continue his legacy—one of generosity and innovation, healthy risk-taking and collaboration, and an unshakable community focus. Today, his hand-picked Life Trustees have determined to focus the efforts of the foundation on Mr. Wilson's home and adopted home regions of Southeast Michigan and Western New York. With a structure that dictates spend-down of our funds by 2035, we strive to match the urgency that people in need feel every day with community investments that consider both immediate and long-term benefit. Our time is short. But we have a steadfast commitment to working with community changemakers to make a long-term impact.

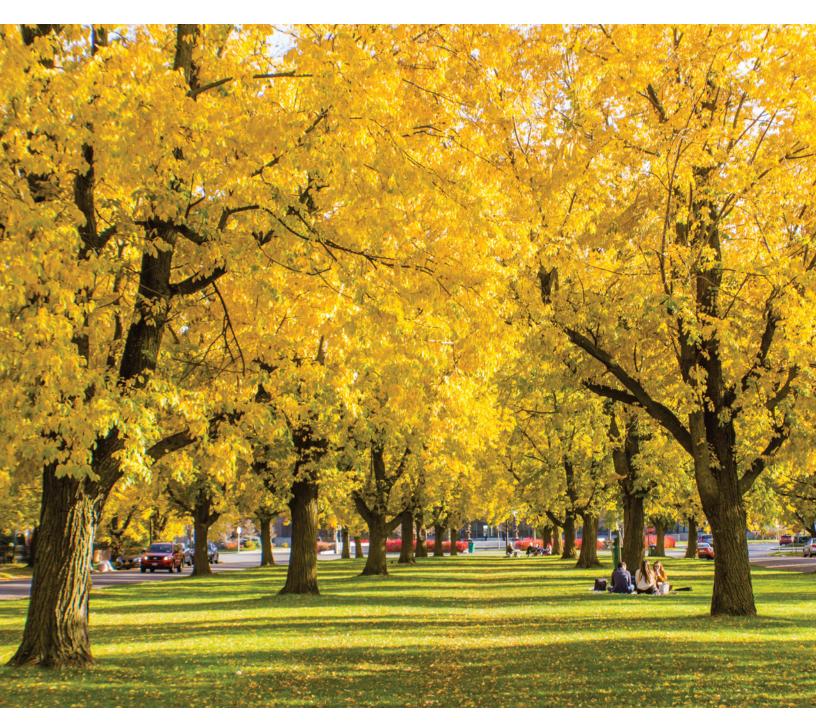
ART X LOVE was founded by the husband-and-wife team of Mac and Allyse Love in 2015, and is a for-profit creative agency based in Akron, Ohio. We believe in the health of art and the power of creative courage. Art x Love positions clients for success with creative initiatives that change the way people think, feel, and operate in select environments. We have worked with some of the most iconic brands in the world, and leverage our multinational experience to help local communities thrive.

NEW CITY PARKS is an initiative to address the lack of thriving urban parks in underserved neighborhoods. Parks within an easy walk from home provide opportunities for residents to move and connect with nature and provide a foundation for good health. However, low-income neighborhoods are often short on safe, usable parks. New City Parks (NCP) is an initiative launched in mid-2019 to build non-traditional and revitalized parks in underserved neighborhoods. NCP coordinates community outreach, GIS analysis, and landscape design, and engages with local communities to design and steward new parks.

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 $Chap in \ Parkway \ on \ an \ autumn \ day. \\ @\ ZHI \ TING \ PHUA/BUFFALO \ OLMSTED \ PARKS \ CONSERVANCY$

PARKS MASTER PLAN: CITY OF BUFFALO

Executive summary

Background

- Buffalo holds 2,360 acres of parkland, spread across 217 parks. The City of Buffalo owns 209 of these parks, representing 1,869 acres, with the balance owned and managed by the State and County.
- Park management in Buffalo is a collaborative effort. The city's Division of Parks and Recreation holds several management agreements with local organizations who partner with the city by assuming some of the management responsibilities. The largest of these partnerships are with the Buffalo Olmsted Conservancy, for the city's historic Olmsted park system, the Buffalo Museum of Science, for Tifft Nature Preserve, and the newly formed Ralph Wilson Park Conservancy, for Ralph C. Wilson, Jr. Centennial Park, formerly known as LaSalle.
- Roughly 89 percent of Buffalo residents live within a 10-minute walk of a park. This is an impressive number, as the national average for the country's hundred largest cities is only 55 percent. There are no major variations in the level of 10-minute walk access provided to residents based on race or income.
- While Buffalo scored excellent with regards to access, the overall system acreage was low, with only 8 percent of land used for parks (the national median is 15 percent). Residents in neighborhoods of color have access to 8 percent less park space per person than the city median and 53 percent less than those in white neighborhoods.
- Many of Buffalo's larger parks, such as Delaware Park, the Outer Harbor, and Ralph C. Wilson Jr. Centennial Park, serve diverse communities, drawing visitors from across the county.
- Buffalo's park system has seen continued improvements in recent years. Buffalo ranks #38 in The Trust for Public Land's 2021 ParkScore, a ranking of park systems in the country's largest

- 100 cities. Buffalo's ranking rose from #43 in 2020, #47 in 2019 and #51 in 2018.
- The coordination between the city, philanthropists, and private groups, including donations and volunteer hours, has meant that Buffalo spending on parks continues to climb from \$54 per resident in 2017 to \$66 in 2018, \$86 in 2019, and \$98 per resident in 2021, slightly above the national median of \$98.
- Buffalo's city park system provides an enormous asset to the community with regards to its ability to host local events. In 2019, Buffalo's city parks hosted over 1,800 sporting events and roughly 1,300 other permitted events, from large gatherings and parades to small birthday parties and picnics.

Benchmarking results

One method of assessing Buffalo's success in providing park services involves comparing it to similar municipalities. These comparisons can help a city determine where they are leading other cities and where they are following in order to identify opportunities for improvement. The Buffalo park system was compared to those of six cities selected by the project team: Newark (NJ), Cleveland (OH), Cincinnati (OH), St. Louis (MO), Rochester (NY), and Syracuse (NY). Peer cities were selected based on metrics such as population size, density, employment statistics, poverty, and growth rate.

ACREAGE AND ACCESS

One of the most important measures of the quality of a park system is how accessible the parks are to residents.

Buffalo is well-served with regards to park access.
 Roughly 89 percent of Buffalo residents live within

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- a 10-minute walk of a park. Buffalo is outdone only by St. Louis and Newark.
- Buffalo ranks lower in terms of parkland. The city sits at fourth among peer cities with regards to per capita park acreage, with 9 acres per 1,000 residents, below the peer city average of 12.
- Roughly 9 percent of Buffalo city land is devoted to parks, placing Buffalo in the middle of the peer cities, and only slightly behind the peer city average of 10 percent.
- The majority of Buffalo's parkland, 76 percent, is "designed," an area that has undergone some development. 24 percent is "natural" park space. This is roughly the same acreage breakdown as the peer city averages.

AMENITIES

A robust park system has a variety of park amenities that meet the diverse needs of residents.



Buffalo provides better access to basketball hoops, recreation and senior centers, and park restrooms than its peer city averages. © DAVID PEEVERS

- Buffalo provides better access to basketball hoops, recreation and senior centers, and park restrooms compared to the averages among peers.
- Buffalo had fewer playgrounds, tennis courts, splashpads, swimming pools, and skate parks compared to the averages among peers.

FUNDING AND REVENUE

Successful park systems require adequate and consistent funding.

- Overall spending on Buffalo city parks (public and private) totaled \$22,022,653, or \$85 per resident, slightly below the peer city average of \$88.
- Buffalo has had a great deal of success in attracting philanthropic investments to parks and developing public/private partnerships. Private spending on parks contributes roughly \$35 per resident, the highest of any peer city. 41 percent of park spending in Buffalo comes from private sources.
- Overall city spending on parks in 2019 was \$13,001,331. At \$50 per resident, Buffalo sits at the midpoint of peer cities but below the peer city average of \$76.
- City spending on operations sits at \$9,160,509 total and \$35 per resident, substantially behind the peer city average of \$63 per resident. This affects both components of operating spending; Buffalo's per resident maintenance and administrative spending is \$23 while the peer city average is \$43, and its per resident programming expenses sit at \$12, compared to the peer city average of \$20.
- At \$3,840,822 total and \$15 per resident, city spending on capital projects sits at the midpoint of peer cities and close to the peer city average of \$17.
- Almost all revenue created to support park spending by the City of Buffalo is generated through bonds or the city's general fund. Most cities, and in particular cities such as Cleveland and Cincinnati that generate larger sums of public dollars for parks, have more diverse public finance streams. Data from peer cities suggests that earned revenue could be a potential source of funding. This includes fees from items like classes, parking, and special events. Some peer cities are also raising large sums for parks via voter approved bonds and taxes, although the success of these strategies depends on voters' willingness to support these measures.

Economic benefits

Since the late 1800s when Olmsted was first brought to Buffalo, the public park and recreation system has expanded and evolved into a critical component of the city's economy. The park system provides substantial economic benefits in the form of attracting tourism, enhancing property values, managing stormwater, removing air pollution, and supporting economic development.

Cities across America are finding that investment in parks not only improves the quality of life for residents and visitors, but contributes directly to creating a modern, 21st-century economy. In addition to providing residents with essential recreational access and opportunities to improve their health, the parks in Buffalo provide numerous quantifiable economic benefits.

- The Buffalo park system contributes to the local tourism economy because it provides numerous parks and programming that attract visitors. These amenities generate \$23.6 million annually in direct visitor spending.
- Parks, like those in the City of Buffalo, increase the value of nearby homes because people enjoy living close to these resources and are willing to pay for that proximity. In fact, The Trust for Public Land estimates that the park system raises the value of nearby homes by \$102 million and increases city property tax revenues by \$455,000 a year.
- Trees and shrubs in the City of Buffalo's parks remove air pollutants that endanger human health and damage structures. These spaces provide significant health benefits and reduce pollution control costs by \$406,000 annually.
- Parkland contains pervious surfaces that can absorb precipitation and help improve water quality by filtering pollutants and slowing runoff.
 The City of Buffalo's parks provide value by absorbing 309 million gallons of stormwater and filtering 301 million pounds of pollutants, resulting in \$234,000 in stormwater management value each year.
- Parks, such as those provided by the City of Buffalo as well as other organizations, contribute to the region's quality of life, which plays an important

- role in attracting businesses and employees to the city and enhancing the community's recreation economy. Residents of Buffalo spend \$14.2 million annually on sports, recreation, and exercise equipment. Resident and tourist spending in Buffalo supports 13 recreation-related stores that generate \$14.5 million in sales and provide 75 jobs.
- Residents also enjoy the parks and facilities. Each year, residents of Buffalo benefit from the recreational use of these spaces. Future work may consider the value of this recreational use; however, it has not been explored at this time. Independent research shows that park use translates into increased physical activity, resulting in measurable health care cost savings. The average adult saves \$1,250 each year, and the savings are doubled for adults 65 years and older.

Geographic priorities

Mapping key resources, hazards, and demographic factors was a fundamental part of the Buffalo Master Plan process. To determine the highest-priority areas for park system improvements, the planning team employed Geographic Information Systems (GIS) to map the most critical datasets for determining park investment need.

The project's GIS analysis was organized into the following mapping topics:

- Social indicators (e.g., poverty, density, parkland, people of color)
- Health indicators (e.g., obesity, diabetes, asthma, activity levels)
- Natural and built environment indicators (e.g., tree cover, impervious areas, bus stops)

Each of these topics was mapped independently, resulting in a topic-specific map, and were combined to create one Overall Indicators Map. The highest-need neighborhoods for future investments included the Lower West Side and Upper West Side and the East Side neighborhoods of Schiller Park, Genesee-Moselle, Delavan Grider, Masten Park, Broadway Fillmore, Seneca Babcock, and Ellicott.









Community priorities

PARK USE

- According to the project's online survey results,
 park use in Buffalo is high. The most common
 park visitation rate is 1–4 times per month,
 representing roughly a third of survey respondents.
- Over half of survey respondents visit parks more frequently, with a strong core of "super users" representing 31 percent of respondents who visit parks over 10 times per month.
- Buffalo's large parks were identified as a strength of the system throughout the process. Smaller neighborhood parks were frequently mentioned as underutilized places. Survey results support this conclusion. When asked what park they visit most frequently, 41 percent of respondents listed Martin Luther King, Jr. Park and 37 percent listed Delaware Park.
- Driving is the most common method of getting to the park; 47 percent drive to parks, while 38 percent walk.
- The most common reasons for visiting Buffalo parks were exercise and fitness, recreation and fun, experiencing nature and wildlife, and socializing with friends or family.
- Of the participants who meet the CDC's weekly exercise recommendations (76 percent), over half (56 percent) are getting this exercise in a park. The health benefits of parks are particularly important for Black communities, where 74 percent of those hitting exercise targets are doing so in a park.

COMMUNITY PRIORITIES FOR PARKS

AMENITIES

- More amenities and facilities were the highestrated request for park improvements; 51 percent of survey respondents say that this upgrade would encourage them to use parks more frequently.
- The most highly requested amenities for active recreation were gardens, fitness zones/exercise equipment, splash pads/water features, dog parks, rock climbing walls/parkour facilities, playgrounds/play structures, swimming pools, and ice-skating rinks.
- Walking paths and trails were both the most commonly-used and the most heavily- requested

- open space amenity, followed by bike paths, recreational boating/canoeing, shelters for birding, campfire pits, and places for fishing.
- Park restrooms were by far the most highly requested passive park amenity.

AESTHETICS

- Improving park aesthetics was the second-highest priority from the online survey, behind only the need for more amenities. Forty-nine percent of survey participants said they would use parks more frequently if they were more beautiful.
- Many stakeholders and community members recommended improving park aesthetics through greater use of art. Ideas included rotating sculpture displays, murals celebrating local culture and history, and low-cost community-led interventions like asphalt painting.

MAINTENANCE

- Thirty-eight percent of survey respondents said that better maintenance would encourage them to use parks more frequently, the survey's thirdhighest priority. Many felt that more attention should be given to basic services like trash pickup, cleanup, and graffiti removal, as well as making sure furnishings are working and lawns are cut or reseeded.
- There is a general consensus that operations and maintenance are underfunded relative to the size of the park system and its use.
- Suggestions for improving maintenance included providing more garbage totes and emptying them more frequently, providing staff with training that has a greater focus on specialization, and creating an organized, city-wide park volunteer program.

PROGRAMMING AND EVENTS

- Park programming was also a high priority for Buffalo residents, with 35 percent of survey respondents saying that more programs and events would encourage them to use parks more frequently.
- The most highly requested program types included special events (concerts in the park, festivals, movies, etc.), outdoor/environmental education programs, fitness classes (aerobics, yoga, etc.), art classes (drama, painting, etc.), and before- and after-school programs.

- The partnerships that exist between program providers and the city are a huge asset to the park system. Buffalo is very well-served with regards to partners providing park programming.
- While there is a wealth of programming providers, participants noted the need for greater outreach in reaching community members who may not already be connected to a certain programming type, conducting outreach to existing groups that have strong community ties, such as block clubs or religious institutions.
- The challenges most commonly listed by programming providers largely related to the physical condition of parks, and included maintenance and accessibility issues, as well as the lack of open space or specific athletic amenities.
- Some programming providers also mentioned that getting community members to programs can be a major challenge; this applies to both youth after-school programming as well as larger events. Participants suggested a more organized mass transit approach to larger events. Some also noted that for large events, such as Shakespeare in Delaware Park, lack of wheelchair accessibility, sidewalk repair, and other maintenance issues made navigating the park challenging for disabled parkgoers.
- Some stakeholders also felt that providing recreational staff on a daily basis to run programs could be a major boon to neighborhood parks, activating the space and diminishing security concerns.

WINTER ACTIVATION

- Winter activation of parks was identified as a major opportunity. When asked to give their top priority for increasing park use in winter, survey participants listed planned winter activities, events, or festivals as the leading response, followed by year-round bathrooms that are heated and shoveling on park pathways or nearby sidewalks.
- The Division of Citizen Service's Wintermission had similar findings. Parks can be activated with improved snow clearance, structures, or other mechanisms to provide respites from the wind and cold, and increased winter programming.

SOCIAL SPACES

- Thirty-two percent of survey respondents listed places to be social with friends and family (e.g., picnic areas, BBQ pits) as a priority that would encourage them to more frequently use parks.
- Community members noted the need for more seating near playgrounds to allow parents and grandparents to watch their children, and that more benches would make parks better for socializing and more accessible to seniors.
- Many interviewees also noted the importance of unprogrammed, informal spaces for their ability to promote socializing.

ROUTE TO THE PARK

• Twenty-five percent of survey respondents said that a safer or nicer route to the park would encourage them to use parks more often. Engagement participants noted several challenges to accessing parks. Some noted that at times the sidewalks adjacent to the parks are in bad shape, making accessibility difficult, or that the paths leading into parks are not cleared of snow in the winter. Many also identified the need for traffic calming measures around parks, saying that speeding near parks can be a barrier to pedestrian access.

CRIME AND SAFETY

- Safety is seen as a major challenge and a barrier to park use. Twenty percent of survey respondents listed "If I felt safer in the park from crime" as a change that would encourage them to use parks more frequently. Participants noted that parks that get less use feel less safe. Many noted that a greater official presence in the parks, both during the daytime and after dark, would be beneficial. This could be a police officer, a security guard, or a park staff member through the creation of a Park Ranger Program. Other suggestions included more lighting, cameras, and emergency call boxes.
- Some participants felt a full Crime Prevention
 Through Environmental Design (CPTED) audit of
 the entire Buffalo park system was warranted to
 better understand where safety standards in the
 city parks could be improved.



Winter Blast 2018 at the MLK Jr. Park Basin. © ZHITING PHUA/BUFFALO OLMSTED PARKS CONSERVANCY

Other opportunities for improvements to the park system

VOLUNTEERING

- Stakeholders felt that leveraging volunteer support and realizing untapped potential for local stewardship would help to build community buyin for parks and improve park quality.
- Two-thirds of survey respondents indicated that they are either willing to volunteer in a park or are already volunteering. Roughly one-third answered that they would be willing to volunteer 1–2 hours per month, and another 22 percent said that they would be willing to volunteer 3–5 hours per month.
- Much of the current volunteer work occurring in Buffalo parks is being conducted by a few organized "friends of" groups, is happening in Olmsted parks, or is initiated by individuals or neighborhood groups.
- Many stakeholders felt that to increase the impact of volunteering in Buffalo's parks, the city needs to develop an organized approach to "invite" community members to volunteer, such as "Adopta-Park" or park stewardship programs with training and tools provided. This would have the impact of increasing volunteerism as well as increasing coordination between the city and volunteers to direct their efforts. A more organized approach may also allow the city to deploy more volunteers to parks with the greatest need, to track and support their efforts over time, and to increase residents' engagement with parks.

GREEN INFRASTRUCTURE

- Ninety-two percent of online survey participants support the use of some parkland to build stormwater absorbing raingardens.
- The Division of Parks and Recreation has already started incorporating green infrastructure into some of its new designs, in particular working in partnership with the Buffalo Sewer Authority.
 However, many stakeholders felt that there is an opportunity to make greater use of parks for green infrastructure.
- The long-term maintenance implications of green stormwater management can pose a major challenge.

• Some stakeholders suggested that rather than install more intensive green infrastructure interventions (e.g., ponds or raingardens), the city should focus on devoting more parkland to natural, unmanicured spaces that could serve as habitat, provide stormwater benefits, hold trees, and enhance park aesthetics. However, some felt that there may be pushback on leaving spaces in a less manicured state, noting that these spaces will require special signage and may require tutorials for volunteers and city staff to ensure proper upkeep.

PARK INFORMATION

- Stakeholders agreed that the city should make park information easier to find.
- Many community members and stakeholders felt that parks all over the city need more signage in the surrounding areas, showing the direction of the parks and what amenities they hold. This would help share what is available and help invite people into parks. Some interviewees felt there is a need for greater neighborhood wayfinding telling community members how to get to certain parks. Educational environmental signage would be interesting and could also help prevent littering.
- A more thorough website would alleviate some of the confusion, including an interactive map showing park locations, names, hours, and amenities.

MULTIGENERATIONAL PARKS

- To increase park use by seniors, stakeholders suggested certain amenities, including park restrooms, seating, and pickleball.
- Some stakeholders thought the city should consider replicating the County's Park Rangers program (trained, certified support personnel that are not official staff) that focuses on programming for senior citizens. In addition to children, this type of Park Ranger programming in neighborhood parks (described above) could benefit seniors.
- Community members also recommended more spaces of interest for older children and teens, including more hiking trails, BMX tracks, skate parks, and playground equipment designed for older children.

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CONCESSIONS AND RENTALS

 Greater access to concessions and rentals arose throughout community engagement. Community members requested increased access to rental equipment (e.g., kayaks or winter play equipment), as well as places to buy food and drinks.

Implementation strategies

This section outlines implementation strategies to address barriers to equitable park use discussed in previous sections of this plan. These recommendations were developed after reviewing the results of the project's geospatial data and demographic analysis, benchmarking against peer cities, and feedback and discussions with community members, park stakeholders, and the steering committee.

The **high-level objectives** below reflect the broad goals identified by community members and stakeholders, which are:

- 1. Activate and Connect Parks to People
- 2. Improve the Physical Condition of Buffalo's Existing Park System
- 3. Strengthen Park System Resources

To advance each objective, we have connected detailed strategies and actions that can be taken to meet those goals. While the majority of these action items reflect the findings of the Buffalo Parks Master Plan, results were also incorporated from Wintermission, a city-wide effort to identify ways to activate Buffalo residents in the winter.

OBJECTIVE: ACTIVATE AND CONNECT PARKS TO RESIDENTS

STRATEGIES

- Increase the Availability of Park Information
- Winter Activation
- Increase Programming in Underutilized Parks
- Improve Park Safety
- Simplify the Permitting Process and Institute a Tiered Fee System for Special Events
- Safe Routes to Parks
- Increase Public Transportation to Parks
- Add Wi-Fi to Parks

OBJECTIVE: IMPROVE THE PHYSICAL CONDITION OF BUFFALO'S EXISTING PARKS SYSTEM

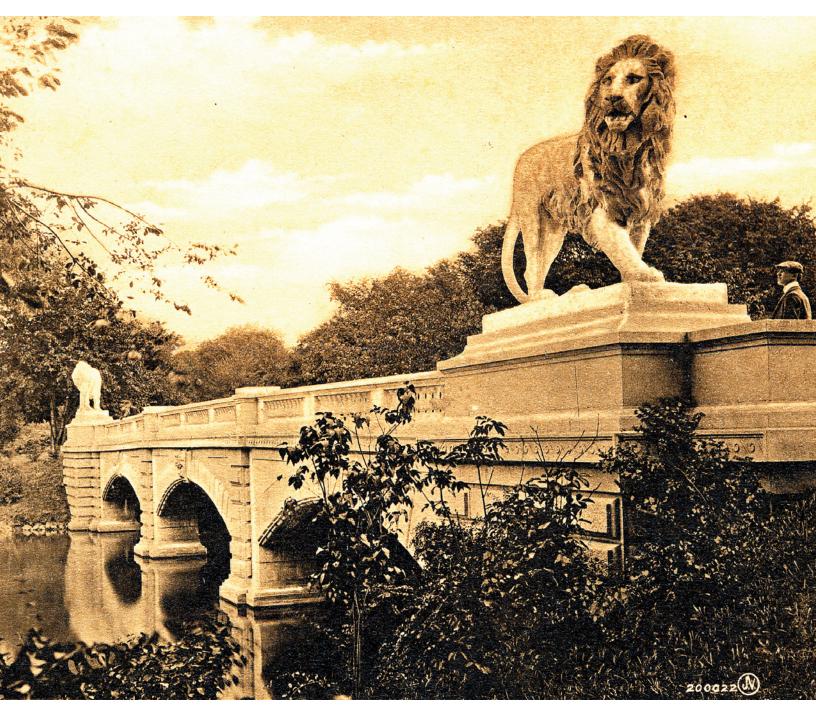
STRATEGIES

- Prioritize Park Investments in High-Need Areas
- Prioritize Park Improvements in Parks That Have Received No Recent Capital Investments
- Create "Community Schoolyards" Through Joint Use Agreements
- Create a Rating System for Existing Parks
- Increase the Quantity and Diversity of Park Amenities
- Incorporate Public Art Into Parks
- Continue to Incorporate Green Infrastructure and Natural Areas Into Parks
- Study Parks to Close to Traffic
- Create a Committee to Review City-Owned Vacant Lots and Open Space Parcels for Potential Opportunities to Create New Parkland and Natural Areas

OBJECTIVE: STRENGTHEN PARK SYSTEM RESOURCES

STRATEGIES

- Inform Stakeholders of the Multiple Benefits of Parks to Improving Buffalo Communities, Public Health, Equity, Climate, and Economy.
- Explore New Potential Funding Sources
- Optimize Parks Staffing and Services Agreements
- Establish a Citywide Volunteer Program for Buffalo Parks
- Work with partners to strengthen a network of "friends of" groups or build a neighborhood parks conservancy



A historic photo of the bridge at Delaware Park. ${\tt @BUFFALO}$ OLMSTED PARKS CONSERVANCY

12 PARKS MASTER PLAN: CITY OF BUFFALO

SECTION 1.

Background on the City of Buffalo

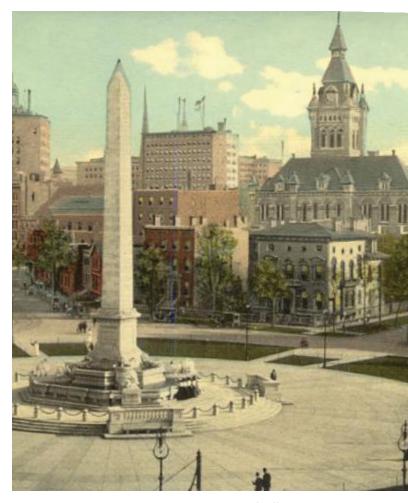
Introduction

Perhaps more than any other city in the nation, Buffalo has been shaped by its parks. The urban park system designed by Frederick Law Olmsted in 1868, which aimed to make Buffalo a "city within a park," has provided a structure to the city that in many ways endures to this day. Meanwhile, great natural attractions like Lake Erie and Niagara Falls have made the outdoors key to the region's identity. Although de-industrialization has reduced the city's population from the height of the steel-making days, the city is undergoing a renaissance. Thanks to the dedication and energy that local partners, city staff, and regional and local philanthropists are devoting to parks, recreation, and conservation, ambitious outdoor projects factor heavily into that resurgence.

Local Context

EARLY HISTORY

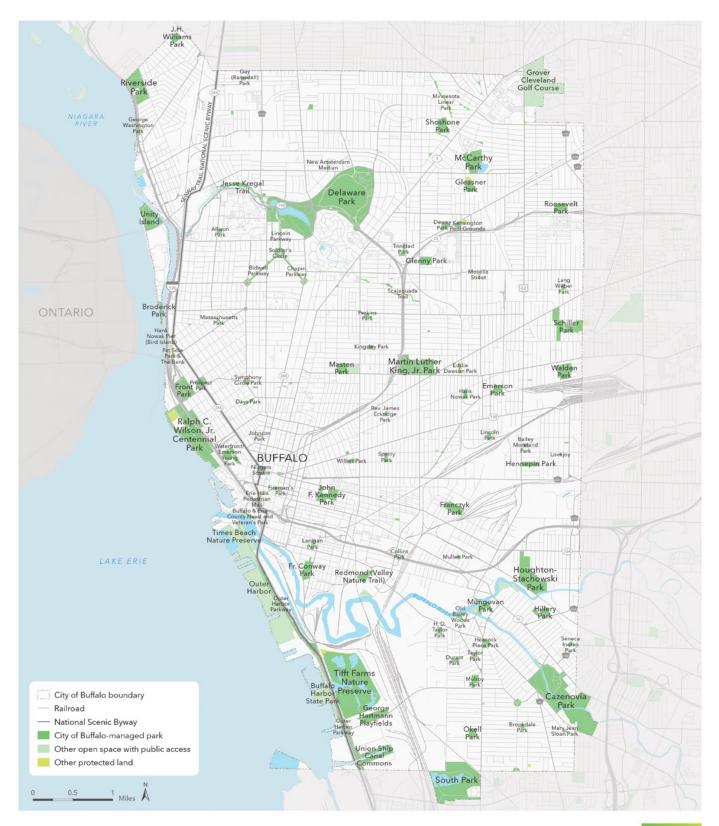
Sitting on the banks of the Niagara River and Lake Erie, home to the Buffalo River and Scajaquada Creek, Buffalo was founded as a small trading village in 1789. The construction of the Erie Canal in 1825 began an era of meteoric growth, and made the city a hub of wealth and progress. In 1881, Buffalo became the first city in the nation to incorporate electric street lights, giving it the nickname City of Light. It was in this era (1867 through 1903) that Buffalo constructed its historic park and parkway system, the nation's first city-wide park system. Designed by the country's first landscape architect, Frederick Law Olmsted, the system remains to this day, and includes six of the city's most beloved parks (see Park Management section). This growth continued through the early



Niagara Square was designed in 1804 to be the nexus of Buffalo's original street pattern.

20th century as Buffalo became a railroad hub, and later a manufacturing powerhouse during the WWII era. By 1950, Buffalo was the 15th largest city in the country, with a population of 580,000. Like many manufacturing cities, however, it began to decline as the nation began an era of de-industrialization.

PARKS MASTER PLAN: CITY OF BUFFALO 13



Study area

BUFFALO PARKS AND RECREATION MASTER PLAN

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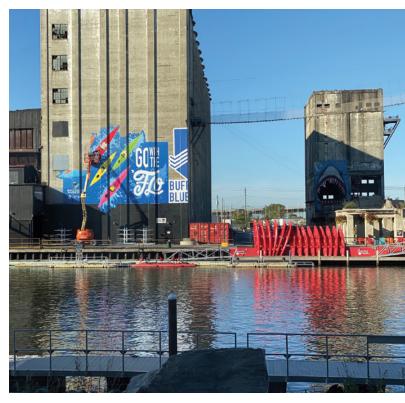


Population

Today, Buffalo's population sits at 257,518, roughly the city's population in 1890. The city's decreasing population in the last half of the 20th century has created a surge in vacant housing, with roughly 16.1 percent of the city's 131,868 housing units remaining vacant. Despite the shrinking population, the area has seen a recent uptick in its ability to attract young people. Since 2006, the millennial population of the Buffalo-Niagara area has grown by over 10 percent, the highest millennial growth rate among New York counties. Efforts like 43 North, which provides investment, tax breaks, and incubator space, are attracting young entrepreneurs by making Buffalo an attractive city for startups.² Recently traction has also gained around the idea that Buffalo could see a surge of future population growth as a climate change refuge (see Climate Change section). The state has also shown support for reviving Western New York's economy, committing \$1 billion to the region with the aim of growing the economy, creating jobs, and spurring private investment. The strategy for the Buffalo Billion initiative, developed by the Western New York Regional Economic Development Council, identifies tourism as one key growth area, and as such, some of this funding has already gone to supporting outdoor recreation, such as the \$10 million devoted to Buffalo Blueway (see Relevant Plans and Recent Projects section).3

DEMOGRAPHICS

Buffalo's white and black populations comprise the majority of residents, at 43 percent and 36 percent respectively, with a smaller Hispanic population of 12 percent (see Table 1). The city's majority black neighborhoods are located on the city's east side, while its white population is largely concentrated in the center of the city. Smaller, predominantly Hispanic communities exist on the west side, northwest of downtown.⁴ Roughly 10 percent of Buffalo's population was born outside of the U.S.



This large mural at Buffalo RiverWorks was funded by the state's Buffalo Billion initiative as part of its commitment to the Buffalo Blueway. © WESTERN NEW YORK REGIONAL ECONOMIC DEVELOPMENT COUNCIL

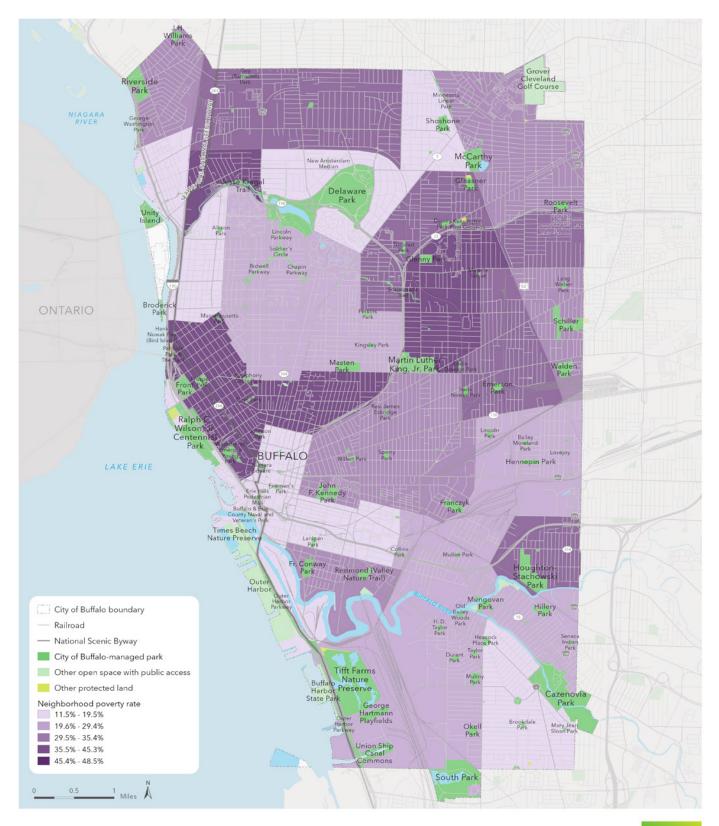
TABLE 1: BUFFALO POPULATION BY RACE ⁵				
Hispanic or Latino (of any race)	12%			
Not Hispanic or Latino	88%			
White alone	43%			
Black or African American alone	36%			
Asian alone	6%			
Two or more races	3%			

Today 30.3 percent of Buffalo's population lives below poverty (75,385), compared to 14.1 percent nationally. Poverty in Buffalo is largely concentrated on the west side north of downtown, and on the east side (see Figure 2).

PARKS MASTER PLAN: CITY OF BUFFALO 15

TABLE 2: BUFFALO, NEW YORK DEMOGRAPHICS VS U.S.A. (2019) ⁶				
Indicators		Buffalo, NY	United States	
Demographics	Population Growth (percent change, 2010*-2019*)	-4%	7%	
	Median Age (2019*)	33	38	
Income	Median Household Income (2019*)	\$37,354	\$62,843	
	Per Capita Income (2019*)	\$24,400	\$34,103	
	Percent Individuals Below Poverty (2019*)	30%	13%	
	Percent Families Below Poverty (2019*)	25%	10%	
	Percent of Households with Retirement and Social Security Income (2019*)	44%	51%	
	Percent of Households with Public Assistance Income (2019*)	51%	19%	
Structure	Percent Population 25 Years or Older without High School Degree (2019*)	15%	12%	
	Percent Population 25 Years or Older with Bachelor's Degree or Higher (2019*)	28%	32%	
	Percent of Houses That Are Seasonal Homes (2019*)	0.2%	4.0%	
	Owner-Occupied Homes Where > 30 percent of Household Income Spent on Mortgage (2019*)	22%	28%	
	Renter-Occupied Homes Where > 30 percent of Household Income Spent on Rent (2019*)	49%	46%	

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Community indicator

BUFFALO PARKS AND RECREATION MASTER PLAN

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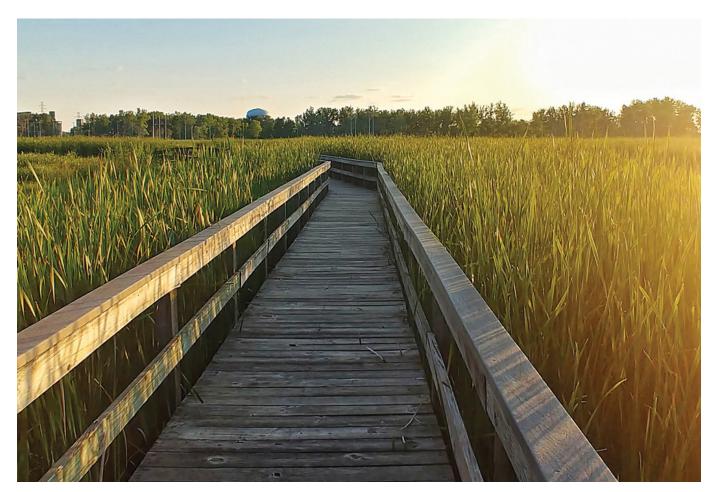
Health

Buffalo faces a high number of premature deaths (35.4 percent compared to 22.0 percent in Erie County as a whole and 24.0 percent in New York State) and age-adjusted hospitalizations (7.1 percent in Buffalo compared to 4.4 percent in Erie County and 3.1 percent in New York). The city also experiences 269.8 asthmarelated hospitalizations per 10,000 residents for ages 0-4, compared to only 139.8 in Erie County as a whole and 198.3 across the state.7 One study noted that "the risk of persons with asthma and chronic respiratory illnesses is significantly (p \leq 0.05) high among children and young adults living in Buffalo's west side, newer housing units, and of Latino ethnicity".8 The 2017-2019 Erie County New York Community Health Assessment noted that the area also struggled with high rates of obesity and diabetes, the latter of which disproportionately impacts Black and Hispanic residents, due to "a lack of access to and utilization of comprehensive primary preventive care that could have potentially

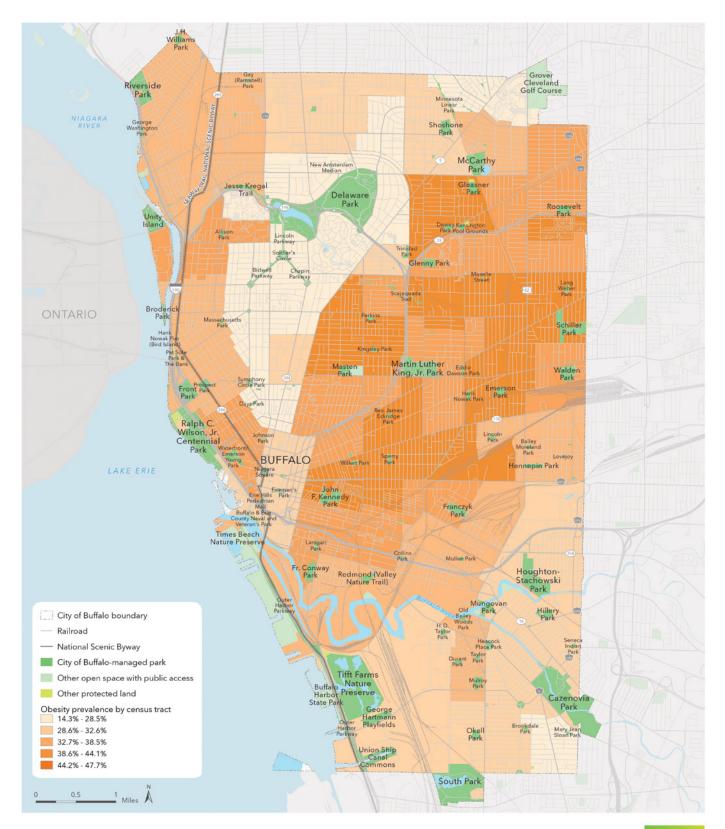
prevented the need for hospitalization." Obesity in Buffalo is largely concentrated on the city's east side (see Figure 3). In the Buffalo school district, 33.7 percent of children are considered obese.

Crime

Although Buffalo's crime rate has fallen since the 1990s (when much of the country experienced a peak), it still remains far above the national average and frequently ranks as one of the country's highest crime cities. With an overall crime rate of 50.59 per 1,000 residents (10.62 violent crimes per 1,000 and 39.97 property crimes per 1,000), it sits at the 96th percentile for crime in cities nationally. The fear of crime may be a barrier that reduces the frequency of park use and affects park design. In the recent park plan for Erie County, for example, many of the needed upgrades include security cameras (see Relevant Plans and Recent Projects section).



Founded in 1972, Tifft Nature Preserve is a 264-acre refuge that hosts hiking trails, environmental education, and wildlife viewing. © TIFFT NATURE PRESERVE



Community health indicator

BUFFALO PARKS AND RECREATION MASTER PLAN

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Environment

HABITAT

The topography of Western New York was formed largely by expanding and retreating glaciers during the last ice age. The path of these glaciers created a gently rolling topography, flat lake plains, and carved out an extensive network of waterways.¹² These streams, rivers, lakes, and marshes, and the deciduous and coniferous forests that thrive around them, support a wide array of wildlife throughout the region.¹³ Although Buffalo is thought of as an industrial city, the city has managed to maintain and create valuable pockets of nature within this urban setting.

Founded in 1972, Tifft Nature Preserve is a 264-acre nature refuge built on the site of a former city dump. Remediation involved capping solid waste in clay and covering the clay with soil from other sections of the preserve. Ponds on the site were enlarged and the site was replanted. Today, Tifft's cattail marsh, ponds, and woodlands provide rare habitat within the city. The preserve also hosts five miles of trails and boardwalks and an education center and features opportunities for fishing, snowshoeing, and cross-country skiing. Tifft Nature Preserve is operated by the Buffalo Museum of Science.¹⁴

Erie County Parks, Recreation, and Forestry is also an important manager of natural habitat within the City of Buffalo. In particular, the county's series of Buffalo River Natural Habitat Parks play an integral role in protecting and restoring habitat along the Buffalo River. The county has partnered with the City of Buffalo, New York State, and, in some instances, federal institutions (e.g., the Army Corps of Engineers) to "remediate, restore, and revitalize" sites along the Buffalo River, including Times Beach Nature Preserve, Seneca Bluffs Natural Habitat Park, and Red Jacket Natural Habitat Park (see Relevant Plans and Recent Projects section).¹⁵

CLIMATE CHANGE

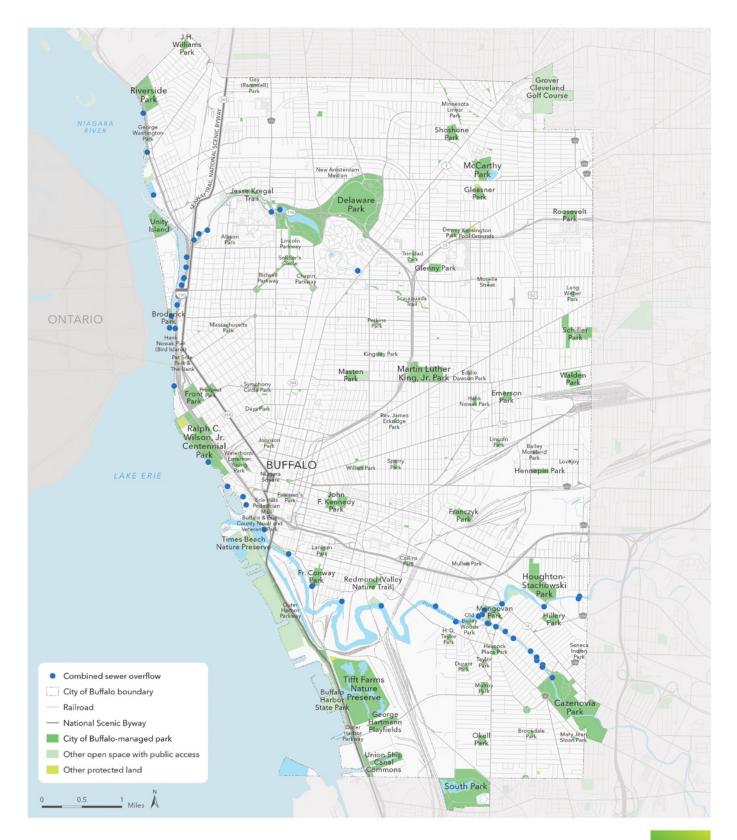
In recent years, Buffalo has garnered attention as a self-described "climate change haven." Some research indicates that given the city's cool climate, large freshwater supply (the Great Lakes hold 20 percent of the planet's surface freshwater), and availability

of housing and land, people will flock to Buffalo in the 21st century, occupying vacant housing and reviving the economy. The city appears to be at least somewhat insulated from many of the climate disasters (flooding, fire, drought, etc.) that are already starting to plague other cities throughout the country. A recent review by a researcher at SUNY found no evidence of shifts in the severity of rainfall in Buffalo. Since the breeze off of Lake Erie cools the city, there was only one 90-degree day in 2019.16 It also appears unlikely that the Great Lakes coastlines will experience substantial rise, or that the region will have to deal with high intensity storms.¹⁷ Mayor Brown referred to Buffalo as a "Climate Refuge City" in his 2019 State of the City Address.¹⁸ The Mayor has also taken steps to climate-proof the city, such as installing LED street lights, planting trees, upgrading the sewer system, and placing solar panels on city buildings. As such, Buffalo has become a Bronze Certified Climate Smart Community.19

COMBINED SEWER OVERFLOWS

Like many older cities, Buffalo has a combined sewer system that conveys both wastewater and stormwater in a shared pipe and transfers both to the same treatment plant.²⁰ When the volume of water in these pipes exceeds their maximum capacity during storms, they overflow into local streams, rivers, and Lake Erie, introducing bacterial and chemical pollutants.²¹ These Combined Sewer Overflows (CSOs) in Buffalo occur predominantly along the Buffalo River, Niagara River, and the shore of Lake Erie, with the highest concentrations appearing to occur along Black Rock Canal and Cazenovia Creek (see Figure 4).

Buffalo is taking several measures to reduce CSOs in the area. In 2014, the Buffalo Sewer Authority created its Long Term Control Plan, identifying strategies to reduce CSOs such as green infrastructure, optimizing system storage through real time control, and upgrading aging parts of the wastewater treatment system.²² The department has recently updated those plans in the Raincheck 2.0 report, which emphasized green infrastructure, and is also currently in the process of installing 16 smart sewer complexes across Buffalo. These updated systems use predictive analytics to determine when flows are safe to transfer



Natural & built environment indicator

BUFFALO PARKS AND RECREATION MASTER PLAN

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into local waterways.²³ Among nonprofits, Buffalo Niagara Waterkeeper has been an important educator and advocate, promoting green stormwater infrastructure such as permeable pavers, rain barrels, downspout disconnections, and rail gardens.²⁴

Although Buffalo's vacant lots are largely considered a bane to the surrounding community, they benefit stormwater management. These thousands of vacant residential lots throughout the city allow for infiltration, reducing the amount of stormwater entering sewers during storms that cause overflow events. The Buffalo Sewer Authority is currently measuring the impact of these vacant lots in reducing CSOs in partnership with the EPA.²⁵

Parks in Buffalo

OVERVIEW

Since Olmsted's original design for a Buffalo park system in 1868, parks have played a crucial role in city life. Today, thanks in part to this original system as well as a series of county parks, smaller neighborhood level parks, and ambitious larger park projects, roughly 89 percent of Buffalo residents live within a 10-minute walk of a park. This is an impressive number, as the national average for the country's hundred largest cities is only 55 percent. With regards to park

equity, there does not appear to be any major variation in the level of service based on race or income.26 Overall, Buffalo ranks #38 in The Trust for Public Land's 2021 ParkScore, a ranking of park systems in the country's largest 100 cities. Buffalo's ranking rose from #51 in 2018 and #47 in 2019 to #43 in 2020. This is partly a reflection of a change in TPL's methodology to include private spending as part of our scoring, which also happened to coincide with increased spending by philanthropists such as the Ralph C. Wilson Foundation and private groups such as the Buffalo Olmsted Parks Conservancy. Their spending adds considerably to the overall Buffalo spending number, providing roughly 41 percent of the total spending on parks in Buffalo. The ParkScore methodology also weights equity, and Buffalo does well even as challenges remain.

While Buffalo scored highly with regards to access, the overall system acreage is low, with only 8 percent of land used for parks (the national median is 15 percent). The 2021 ParkScore results, which had a particular focus on racial equity, revealed that this lack of park acreage is felt most acutely by communities of color. Residents in neighborhoods of color have access to 8 percent less park space per person than the city median and 53 percent less than those in white neighborhoods (see Figure 6).

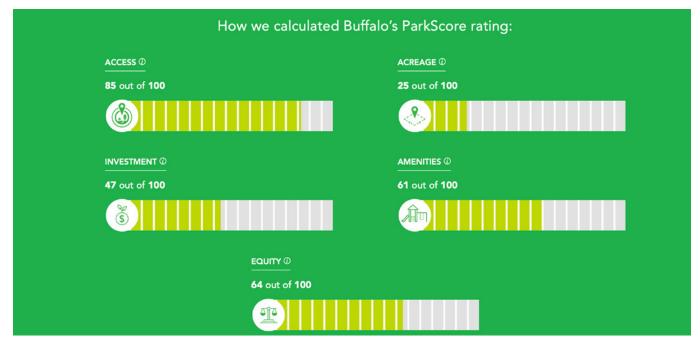
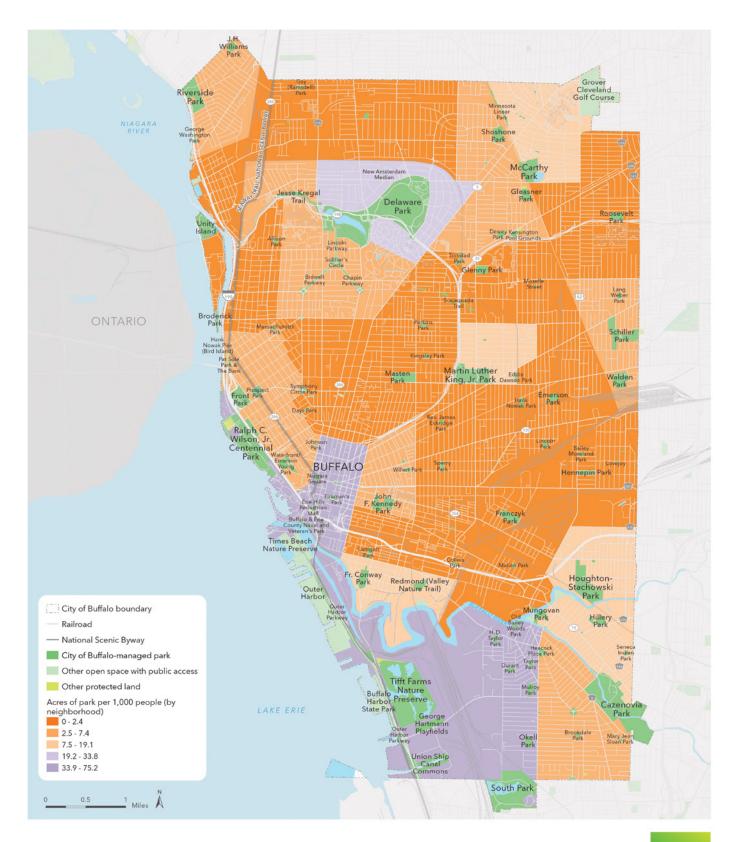


FIGURE 5. A breakdown of Buffalo's ParkScore ranking



Acres of park per 1,000 people

BUFFALO PARKS AND RECREATION MASTER PLAN

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The efforts of philanthropists and private groups, including donations, has meant that Buffalo spending on parks continues to climb from \$54 per resident in 2017 to \$66 in 2018, \$85 in 2019, and to \$98 per resident in 2021, slightly above the national average of \$96. (See Section 4, Comparison to Peer Cities, for a more in-depth breakdown of park spending in Buffalo). Buffalo scored relatively strongly with regards to amenities (see Figure 5). While access was high to basketball courts (85th percentile), bathrooms (69th percentile), and splashpads (86th percentile), the numbers of dog parks and playgrounds centers were below the 50th percentile.²⁷

An analysis of park spending on capital improvements from 2006 through 2020 revealed that over \$110 million has been spent by the city and its partners during this period (see <u>Figure 7</u>). For a full breakdown of capital spending by park, see Appendix 2.

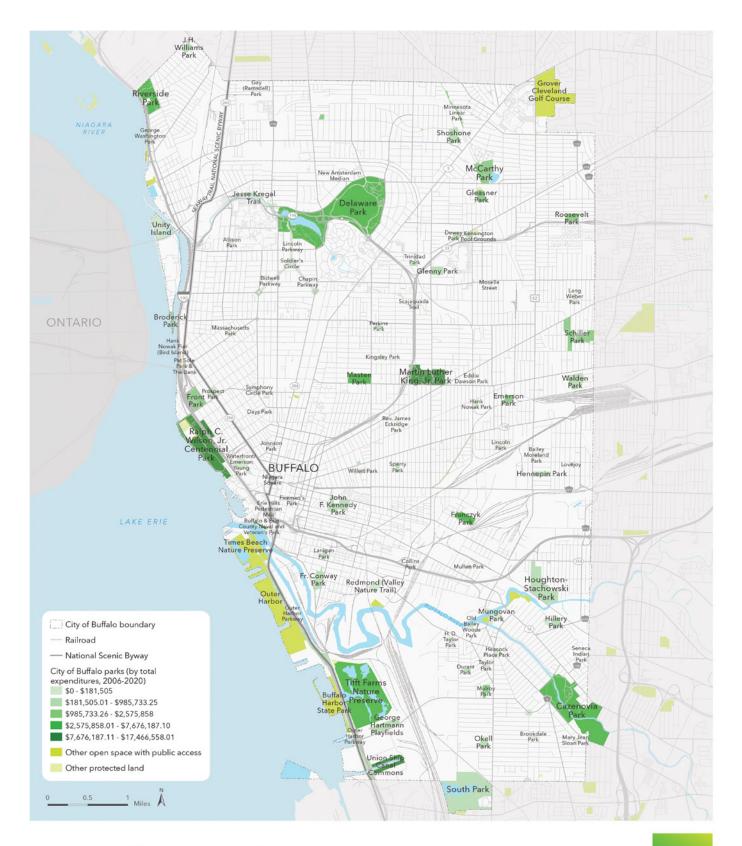
PARK MANAGEMENT

The primary park managers in Buffalo are the city's Division of Parks and Recreation within the Department of Public Works; Erie County Parks, Recreation and Forestry; and New York State Parks (which manages Buffalo Harbor State Park). Although Erie County Parks, Recreation and Forestry took over management of the city park system in 2004, the decision was later reversed and since 2010 Buffalo's city parks have been managed by the city, in partnership with multiple non-profit organizations as listed below, with the county managing the six county parks within the City of Buffalo.

TABLE 3: PARKS IN BUFFALO BY MANAGER			
Agency Name	Total Acres Parkland	Total Agency Units	
Buffalo Division of Parks and Recreation	1,869	209	
Buffalo Olmsted Parks Conservancy	851	22	
Buffalo Museum of Science	264	1	
Ralph Wilson Park Conservancy (Ralph C. Wilson, Jr. Centennial Park)	87	1	
Buffalo Urban Development Corporation (Ship Canal Commons)	22	1	
Buffalo Place	4	9	
Saving Grace Ministries (Perkins Park)	1	2	
Buffalo and Fort Erie Public Bridge Authority (Pat Sole Park)	1	1	
Buffalo Naval Park Committee Inc.	3	1	
Erie County Department of Parks, Recreation and Forestry (within Buffalo)	93	6	
New York State Parks, Recreation and Historic Preservation	190	1	
Erie Canal Harbor Development Corporation (Outer Harbor)	208	1	

The Buffalo Olmsted Parks Conservancy's agreement with the City of Buffalo covers roughly 850 acres of parkland throughout the city. Originally formed in 1978 as The Buffalo Friends of Olmsted Parks, an agreement was signed in 2004 coordinating maintenance and management of the historic Olmsted system. Designed by Frederick Law Olmsted, his son

John, and Calvert Vaux, the historic park and parkway system was built between 1867 and 1903. The system was the nation's first attempt at creating a city-wide park system. Today, it contains six of the city's largest parks (Delaware, Riverside, The Front, Martin Luther King Jr., Cazenovia, and South) and is connected by a network of broad parkways. In addition to being the



Capital encumbrances 2006 - 2020

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setting for outdoor recreation, the parks also host the Museum of Science in Martin Luther King Jr. Park, the Buffalo and Erie County Botanical Gardens in South Park, and the Buffalo History Museum and the Albright-Knox Art Gallery in Delaware Park.

PARK PROGRAMMING AND EVENTS

Buffalo's city parks provide an enormous asset to the community with regards to their ability to host local events. In 2019, Buffalo's city parks hosted over 1,800 sporting events and roughly 1,300 other permitted events, from large gatherings and parades to small birthday parties and picnics. The Division of Parks and Recreation manages some programming directly (for example, the City's aquatics program) while also reviewing applications and issuing permits for all sports, rentals, and special events in parks, unless otherwise specified through a partnership agreement. The Department of Community Services and Recreational Programming is also a major provider of recreational programs in parks. The department funds local organizations and program providers, contracting with not-for-profit agencies throughout the City of Buffalo to provide services to the city's residents, largely focusing on youth and seniors.

Relevant Plans and Recent Projects

In the past decade, Buffalo has seen great progress with regards to park master planning efforts. This section will review some of the most relevant plans, with more recent plans presented first. For a full review of relevant park planning efforts in Buffalo, please see Appendix 1.

RALPH C. WILSON, JR. CENTENNIAL PARK (ONGOING)

Currently underway, the <u>Imagine LaSalle</u> project is part of an ambitious effort to reimagine Buffalo's waterfront LaSalle Park, transforming it into the Ralph C. Wilson, Jr. Centennial Park. The project is a collaboration between the City of Buffalo, the University of Buffalo's Regional Institute, and several major design firms, and was funded through a \$80 million donation by the Ralph C Wilson, Jr. Foundation. Since its initiation in the summer of 2018, the project has involved community members throughout, reaching over one thousand residents in its initial discovery phase.

Currently, the project team is working through detailed designs of specific park features (e.g., the playground, pedestrian bridge) and soliciting community feedback. Project construction is scheduled to kick off in 2021 with the park's pedestrian bridge.

REVISIONING FOR ROUTE 33 AND ROUTE 198 (ONGOING)

Routes 33 and 198 have long been criticized in Buffalo for the impacts they have had on neighboring communities, as well as their disruption to Olmsted's original vision for the city. Recently, many advocates have called for major modifications of these routes, including downsizing to a boulevard or covering with decking and building a parkway. At the time of writing, the futures of these freeways are still being debated at the city and state levels.

NEIGHBORHOOD PARK IMPROVEMENT FEASIBILITY STUDY: SEARS, ROOSEVELT, AND LANG WEBER PARKS (2021)

Carried out between 2020 and 2021, this study was conducted by the Regional Plan Association in collaboration with New City Parks. Funded by the Ralph C. Wilson, Jr. Foundation, the study aimed to create preliminary designs and budget estimates for three City of Buffalo parks, with the goal that these design packets could be used to seek out funding to implement these improvements. The decision to focus on Sears, Roosevelt, and Lang Weber Parks was based on the results of this plan's Neighborhood Park Investment Need map results (see Section 6), along with input from the Division of Parks and Recreation, after conducting site visits aimed at identifying sites with a high need for upgrades. Following a successful grant application, the city and New City Parks plan to do focused outreach in each neighborhood to better understand specific community needs.

THE RIVERLINE (2021)

Located on NFTA property and led by the Western New York Land Conservancy, the proposed 1.5-mile linear park, named the <u>Riverline</u>, would aim to connect people to the Buffalo River and create access to nature in an industrialized area near downtown Buffalo. While not located on City of Buffalo parkland, the proposed Riverline would make it easier to

access the parks and kayak launches along the Buffalo River, as well as the Empire State Trail, Canalside, the Outer Harbor, and Larkinville. A concept design was finalized in July 2021 to turn the abandoned Delaware, Lackawanna and Western (DL&W) railroad into an urban nature trail with woodlands, meadows, wetlands, and bridges that will create overlooks.

EMPIRE STATE TRAIL (SHORELINE TRAIL) (2021)

In 2020, the state opened a 750-mile multi-use trail spanning from Buffalo to Albany and from New York City to Canada. Of the 550-mile section from Buffalo to New York City, 85 percent of the trail is off-road. The section of the Empire State Trail passing through Buffalo is known as the Shoreline Trail, as it follows the banks of Lake Erie and the Niagara River. The route has undergone several improvements, including improved wayfinding, ADA accessibility, trail widening, and safety improvements.

BUFFALO OUTER HARBOR CIVIC AND LAND USE IMPROVEMENT PROJECT GENERAL PROJECT PLAN (2020)

The Erie Canal Harbor Development Corporation ("ECHDC"), a subsidiary of the New York State Urban Development Corporation, took over the 208-acre Outer Harbor site in 2013. The approved 2020 plan for the site will preserve the outer harbor site as public open space, while adding pathways, new parking, boat launches, and other improvements to be built out over the next 20 years.

THE BUFFALO OLMSTED PARK SYSTEM FIVE YEAR PLAN (2019)

The Buffalo Olmsted Park Conservancy's Five Year Plan (2020–2024) is intended to identify implementable steps from the organization's 2005 plan that can be accomplished in this five-year time frame. Recommendations were broken down by the system's five park districts.

RAINCHECK 2.0 (2019)

The Buffalo Sewer Authority's 2019 Raincheck 2.0 examines the potential for using green infrastructure to address the city's CSO issues. The study examines equity, environmental systems, and the urban context of the City to identify six priority CSO Basins, identifies



A rendering from the Outer Harbor's updated master plan. © EMPIRE STATE DEVELOPMENT CORPORATION

appropriate green infrastructure approaches to address the city's CSO challenges, and provides implementation guidelines and strategies to support planning and decision making to engage stakeholders and property owners in planning and funding of green infrastructure projects across Buffalo.

CITY OF BUFFALO PARKS & BUFFALO PUBLIC SCHOOL FACILITIES SURVEY & DESIGN DEVELOPMENT (2019)

In April 2019, the design and engineering firm SWBR submitted design drawings and cost estimates for improvements to several Buffalo parks and schools, including Glenny Park, Masten Park, All High Stadium, Grabiarz School, JFK Park, McCarthy Park, Mungovan Park, F.L. Olmsted PS # 156, Riverside High School, Seneca (MST) High School PS # 197, and Waterfront Park. Currently, the Division of Parks and Recreation and Buffalo Public Schools (BPS) are conducting due diligence on the items, reviewing the cost estimates and site usage, and no decision has been made regarding these improvements. If the schoolyard improvements are made, the sites would become available to the public during non-school hours, effectively adding to the local park acreage.

ERIE COUNTY PARKS MASTER PLAN UPDATE (2018)

The Erie County parks system includes nearly 10,000 acres of recreational land throughout the county.

The department's 2018 master plan update assessed the condition of each of the parks, heard from local residents, and prioritized future park improvements.

COMMUNITY ENGAGEMENT FINDINGS

Engagement findings included:

- Use of existing facilities is low, excluding Chestnut Ridge and Riverwalk.
- Trails and pathways are the most used amenities, followed by picnic shelters and playgrounds.
- Participants felt that preserving natural areas (49 percent) and protecting the environment (46 percent) should be the department's top priorities.
- The top future priorities for improvement include lake quality (87 percent rated as important), trail and pathway connectivity (82 percent), and restrooms (80 percent).
- Improvements to existing park conditions and maintenance ranked as a top priority.
- While community members support an increase in funding, they were generally opposed to any funding strategy that will increase their tax rates.
- Improved communication and awareness of county parks was a major priority.

BUFFALO NAVAL PARK MASTER PLAN (2018)

The Buffalo Naval Park was created in 1976, when the U.S. Navy agreed to grant the decommissioned destroyer *USS The Sullivans* and the Guided Missile Cruiser *USS Little Rock* for the park's use. The park continued to grow over the years, incorporating new exhibits like the WWII submarine *USS Croaker* (SSK-246) in 1988, and moved to their current location in 2008.

In response to recent developments along the water-front (e.g., the Queen City Bike Ferry, the HarborCenter, the Canalside area with the commercial slip, board-walk, and the historic replica canals), BNP released an updated master plan in July 2018 with the aim of setting a course for the future that would allow the park to accommodate the ever-increasing visitation rates. The 2018 master plan identified the potential for a property expansion onto adjacent City of Buffalo-

owned land, improvements in interpretive signage and wayfinding, a plan for arranging new monuments, new lighting, increased building and patio space, and a bicycle corral, as well as creating a stronger sense of entry through more pronounced gateways.

BUFFALO BLUEWAY (2017)

A product of Buffalo Niagara Waterkeeper, the Buffalo Blueway plan aims to create a network of safe and equitable water access points on waterways throughout Erie County. In addition to access, the plan calls for the creation of wayfinding and artwork along the trail, hoping to entice locals and attract visitors.28 The state has already invested \$10 million to implement the plan through its Buffalo Billion II, and the Ralph C. Wilson, Jr. Foundation has awarded \$3 million for the implementation of the plan.²⁹ Work is already underway on the Blueway, and 2019 projects included a mural at Buffalo RiverWorks and markers and interpretive and safety signage at the RiverWorks, Wilkeson Pointe, and Mutual Riverfront Park. The Buffalo Blueway website helps potential users plan their trip, finding access points and creating an itinerary.

STATE OF PLAY: WESTERN NEW YORK (2017)

The Aspen Institute's State of Play reports assess access to sports opportunities in cities across the country. The 2017 review of Western New York gave the region a C+.

Specific takeaways for Buffalo include:

- There is a need for an indoor sports complex.
- The report noted recent improvements in maintenance and safety, but concluded that per capita spending lags, and suggested a stronger relationship between city parks and private donors, including the possibility of naming rights, and cited several success stories.
- The report noted maintenance needs in older parks and the fact that community-led efforts, such as in the case of Massachusetts Avenue Park, have had some success in this area.
- The community schools initiative has created new venues for sports. Lafayette International Community School functions as a community center on Saturdays, where West Side International Soccer utilizes the school's basketball courts for indoor futsal.

28

BUFFALO GREEN CODE UNIFIED DEVELOPMENT ORDINANCE (2016)

The Buffalo <u>Green Code</u> is Buffalo's 2016 update to the city's zoning code, and is intended to help implement the city's 2006 comprehensive plan. The plan was Buffalo's first comprehensive zoning update since 1953 and largely adheres to the concept of form-based planning, supporting Buffalo's tradition of mixed-use development. The plan zoned existing parks as Open Space and identified other areas where development should not be encouraged in order to preserve future opportunities for green space.

NIAGARA RIVER HABITAT CONSERVATION STRATEGY (2014)

The Buffalo Niagara Waterkeeper's 2014 Niagara River Habitat Conservation Strategy creates a plan for pursuing opportunities to conserve biodiversity and ecology and improve the environmental health trajectory in the Niagara watershed. The plan details the last six miles of lower Buffalo River and the entire Niagara River connecting channel as two of 42 Great Lakes Areas of Concern (toxic hotspots).

BRODERICK PARK MASTER PLAN (2012)

Broderick Park is one of Buffalo's most historic parks. It is considered to have been a terminus of the Underground Railroad, as this was a common point of crossing into Canada across the Niagara River. A plaque at the site commemorates those who crossed, and the park is listed as a designated Network to Freedom site by the U.S. National Parks Service. The park got an updated master plan in 2012 and recently underwent an \$11 million improvement. Shoreline Trail passes through the park, making access easy and increasing visitation. Currently, the City of Buffalo Arts Commission, the Division of Parks and Recreation, Buffalo Quarters Historical Society, the Friends of Broderick Park, and Buffalo Niagara Waterkeeper are partnering on an engagement effort to understand opportunities to incorporate art into the park.

BUFFALO URBAN FOREST MASTER PLAN AND INVENTORY (2003 & 2015)

Buffalo's 2003 <u>Urban Forest Master Plan</u> took stock of Buffalo's existing tree inventory, as well as the city's tree planting policies and resources, and created a plan



Broderick Park, a terminus of the Underground Railroad and designated Network to Freedom site by the National Parks Service. © STEPHEN M. BUCCILLI

for reforestation. In 2015, the city completed a <u>street</u> <u>tree inventory</u> complete with an interactive map and an analysis of tree benefits. The City of Buffalo's street and park tree inventory was completed in April 2015. The tree inventory is an important planning tool that should help the City of Buffalo establish a systematic program for tree care and determine budget, staff, and equipment needs. Implementation of the maintenance recommendations will improve public safety and help guide future management decisions.

Conclusion

Parks have been a central part of Buffalo life for a century and a half. During that time, the city has known explosive growth and slow decline, great wealth and economic stagnation. Today, the city is on the cusp of an exciting new renaissance. There are many signs of the city's new direction, including the uptick in young people moving to the city, state investment through the Buffalo Billion, ambitious park and recreation planning efforts like the Buffalo Blueway and Imagine LaSalle, and the generous philanthropy of the Ralph C. Wilson, Jr. Foundation's \$80 million commitment for parks and trails. By setting a new direction for Buffalo's city parks, this plan will be a major contributor to the city's future.

Indicator	Potential Dataset and Source	Notes
Labor force Participation		
Under 5 + 65+		2
Total Population Coccess		Z Z Z Z
lotal Households		
Median HH Income		
(rine	L: ty Note Portal	4
Povert		¥ 5
Poverty Bus Rider Stip	NFTA	\ _
cox: n:t, to bus stops		35
Cultural Diversity Olo Foreign Born		
Mobility Inpaired	Census	
Vercent Non white		34
Kent - Durdened		
Cost Durdened		
Social Isulation Indicators		
Proximity to Neighborhood	Commercial (adding	
Love Your Block (nut: unti	
Vacant Parcels	Vacant	

Local experts serving on a Steering Committee worked to determine key indicators of park need, which were later refined and mapped using Geographic Information Systems. © MATT MOFFA/THE TRUST FOR PUBLIC LAND

SECTION 2.

The Buffalo Parks Master Plan Process

The Buffalo Parks Master Plan is an effort to create a shared vision for building stronger, happier, more resilient communities through parks. The plan incorporates scientific data, technical analysis, and community engagement results to answer key questions about the people, parks, and environment in the City of Buffalo.

Community and Stakeholder Engagement

Community engagement was a key component of the Buffalo Parks Master Plan process. By hearing directly from community members, representatives, and stakeholders with organizations that have deep knowledge of Buffalo's parks, the planning team could understand barriers to park use and priorities for improving the park system. The project's timeline (February 2020–July 2021) overlapped almost entirely with the COVID-19 pandemic. For this reason, many of the in-person engagement activities that had been planned were removed in favor of activities that could be carried out remotely, such as virtual focus groups, phone interviews, an online survey, and an activity book. In order to hear from as many residents as possible in that context, the project team employed a variety of engagement strategies.

ONLINE SURVEY

The online survey allowed residents to share thoughts about current parks in the area and where to focus future improvements. The survey was available in English, Spanish, and Arabic from December 2020 through the end of April 2021. It received 1,015 responses. Outreach occurred over social media and through the planning team's distribution of hard-copy surveys via block club organizers and at the Belle Center and

Community Centers. Overall survey responses were robust and represented a wide diversity of Buffalo ethnic groups, ages, and income and education levels, however, responses were not spread proportionately among these demographics. Survey respondents were skewed toward females (57 percent), white respondents (74 percent), and the affluent (30 percent of households earned over \$100,000 annually). To avoid biasing the survey's results toward these demographics, results to certain questions were analyzed independently based on race/ethnicity and income. This was done wherever statistical analysis of survey results indicated significant differences in answers between these groups. For detailed online survey results, see Appendix 4.

FOCUS GROUPS

Focus groups were conducted with the aim of exploring specific topics with local stakeholders and residents. Three focus groups were conducted: Programming in Buffalo Parks, Volunteer Support in Buffalo Parks, and Addressing Access and Equity Challenges in Buffalo Parks. Sixty-two people participated in these focus groups.

STEERING COMMITTEE

Over 20 local experts participated in the project's Steering Committee. This group was tasked with providing guidance on the project's approach and recommendations. Steering Committee meetings were held bi-monthly from February 2020 to July 2021. Specific Steering Committee responsibilities included framing the project's overall approach, assisting with community input, helping to build public support, and guiding the project's mapping. Steering Committee participants represented the public, private, nonprofit, community-based, institutional, and philanthropic sectors.

INTERVIEWS

Twenty-two community leaders and key stakeholders participated in 19 interviews for the Buffalo Parks Master Plan. Interviews were conducted between April 2020 and September 2020. Input from interviews helped inform other community engagement efforts and provided important context throughout the planning process. The interviews covered a range of topics relating to parks, health, equity, funding, programming, volunteerism, the arts, and other community issues.

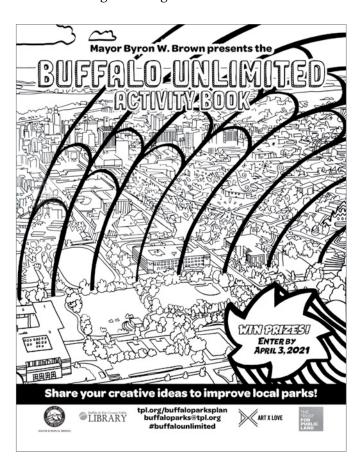
BUFFALO UNLIMITED ACTIVITY BOOK

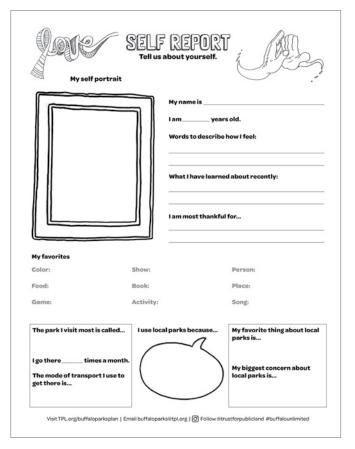
The Buffalo Unlimited Activity Book was an engaging and visual way for residents to share their vision for the Buffalo Parks Master Plan. Activities included programming a park for winter activities, designing a dream park, creating a park art installation, and reporting on the experience of walking to a park. Four thousand activity books were distributed in English, Spanish, and Arabic. Activity books were primarily distributed at grab- and-go lunch locations at Buffalo

Public Schools, with participants asked to drop off completed books at any library in the city. Project steering committee members also distributed books at their respective facilities, such as city community centers and the Buffalo Museum of Science. The activity book distribution began on December 4, 2020 and participants who completed at least half the book and returned it by April were automatically entered into a sweepstakes to win one of 20 prizes. Two virtual sessions were also conducted via Zoom, inviting community members to join and fill out the books together. Fifty community members completed 515 activities, with an average respondent age of 13. For a full summary of activity book findings, see Appendix 4.

Economic Benefits Study

An economic benefits study was conducted to quantify the benefits of parks, trails, and conserved lands in Buffalo. The Trust for Public Land's economists quantified the value of the city's parks, including enhanced property values, reduced air pollution, stormwater





 $The \ Buffalo \ Unlimited \ Activity \ Book \ provided \ a \ fun \ way for \ residents \ to \ share \ their \ vision \ for \ the \ Buffalo's \ parks.$

management, tourism, and economic development. By quantifying the value of Buffalo's parks in dollars and cents, this information will help the City of Buffalo and its partners make the case for further investment in parks, trails, and open space.

Mapping and GIS

CO-BENEFITS ANALYSIS

Geographic Information Systems (GIS) serve an integral role in the Buffalo Parks Master Plan. GIS analysis was crucial to identifying the areas within the study area with the greatest need for park and green infrastructure investment. The plan's GIS analysis was organized into the following mapping topics, each of which is discussed in more detail in Section 6:

- Social Indicators
- Health Indicators
- Natural and Built Environment Indicators

Many datasets were collected for each mapping topic. These datasets were weighted based on their importance and then "stacked" to create a topic-specific map. These topic area maps were "stacked" to create overall recommendations about the areas with the greatest need in an Overall Results Map shown in <u>Section 6</u>. For a detailed list of the GIS data used and analysis methods, see Appendix 3.

Through webinars and in-person meetings, the steering committee guided the analysis by helping to compile a list of relevant criteria to map, weight the data through an online survey, and review results to ensure that they accurately reflect on-the-ground realities.

LEVEL OF SERVICE ANALYSIS

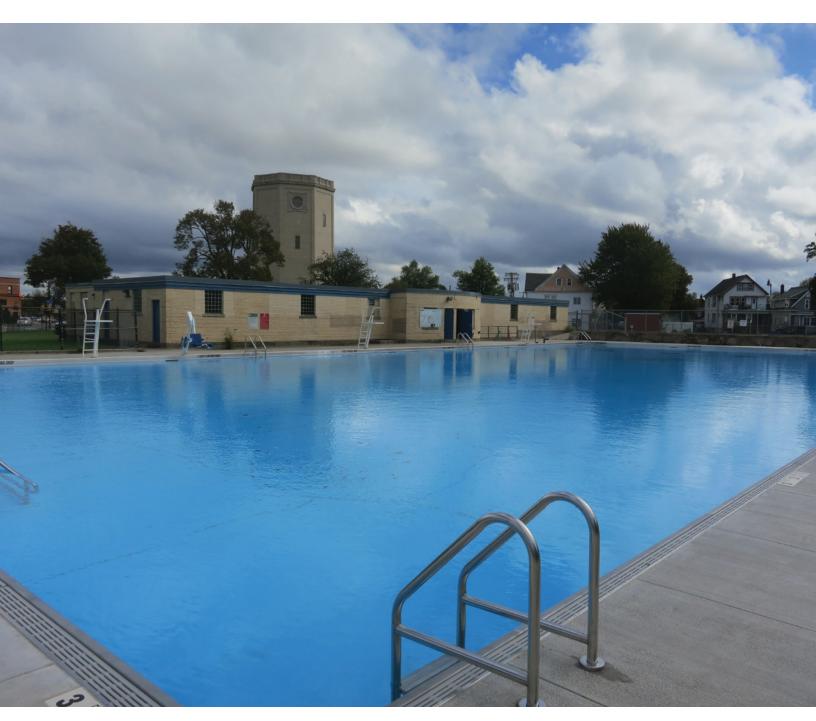
The purpose of an existing Level of Service (LOS) analysis is to understand how well the park and recreation needs of Buffalo residents are being met with existing park amenities and where additional investment is needed. Section 3: Current Park Access and Amenities contains nine maps, including one map measuring overall park access and eight maps assessing access to specific park amenities, including community gardens (both those inside and outside of parks), playgrounds, walking paths or trails, bike



Zoom focus groups allowed the project team to discuss key topics with stakeholders during the COVID-19 pandemic.

paths, pools, splash pads, park restrooms, and picnic shelters. These amenities were primarily selected based on the results of the online survey (see Section 7), with the caveat that for amenities that were highly requested on the survey but were particularly uncommon in Buffalo parks (e.g., park fitness equipment), a level of service map would not be useful since almost the entire city is without access.

The mapping process began by creating a GIS inventory of parks and the amenities they hold. From there, dynamic service areas were created, identifying the areas that are or are not within a 10-minute walk to each amenity. Service areas are based on Buffalo's existing road network and incorporate major barriers to pedestrian access, such as freeways and waterways. Using census data, the analysis was then able to provide statistics on the number of people with and without walkable access to that amenity. To better understand which populations are being served by each amenity and to identify equity issues that may exist, the analysis also breaks down these access statistics based on race, income, and age group.



 $Kensington\ Pool\ in\ the\ Fillmore-Leroy\ neighborhood.\ @\ STEPHEN\ M.\ BUCCILLI$

SECTION 3.

Current Park Access and Amenities

Introduction

The purpose of an existing Level of Service (LOS) analysis is to understand how well the park and recreation needs of Buffalo residents are being met with existing park amenities and where additional investment is needed. This section contains nine maps, including one map measuring overall park access and eight maps assessing access to specific park amenities, including community gardens (both those inside and outside of parks), playgrounds, walking paths or trails, bike paths, pools, splash pads, park restrooms, and picnic shelters. These amenities were primarily selected based on the results of the online survey (see Section 7), with the caveat that for amenities that were highly requested on the survey but were particularly uncommon in Buffalo parks (e.g., park fitness

equipment), a level of service map would not be useful since almost the entire city is without access.

The mapping process began by creating a GIS inventory of parks and the amenities they hold. From there, dynamic service areas were created, identifying the areas that are within a 10-minute walk to each amenity and areas that are not. Service areas are based on Buffalo's existing road network and incorporate major barriers to pedestrian access, such as freeways and waterways. Using census data, the analysis was then able to provide statistics on the number of people with and without walkable access to that amenity. To better understand which populations are being served by each amenity and to identify equity issues that may exist, the analysis also breaks down these access statistics based on race, income, and age group.

Park Access Statistics

Residents within a 10-minute walk from a park*

INDIVIDUALS within a 10-minute walk (total)



Total population 231,103

INDIVIDUALS within a 10-minute walk (by age)



Kids age 19 and younger 58,607



20-64 years old 139,507



Over 64 years old 32,993

HOUSEHOLDS within a 10-minute walk (by income)



Low-income (under 75% median household income) 48,535



Middle-income (under 75% median household income) 29,489



HIgh-income (over 125% median household income)

21,809

INDIVIDUALS within a 10-minute walk (by race)

White

91,874 (87%)

Black

87,090 (89%)

American Indian/Alaska Native

1,360 (89%)

Asian

10,807 (94%)

Pacific Islander

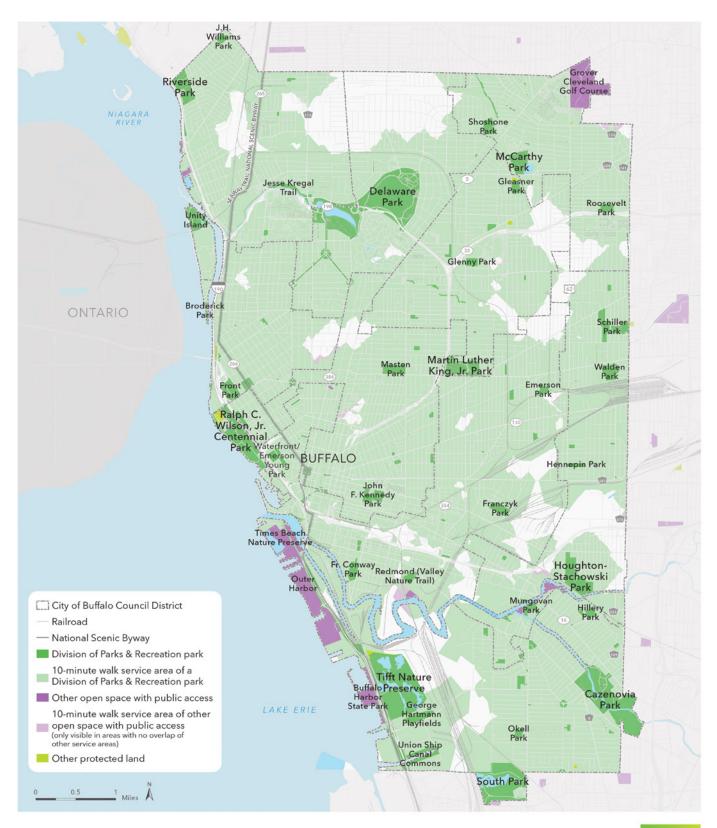
86 (86%)

Two or more races

6,655 (88%)

Hispanic

32,866 (92%)



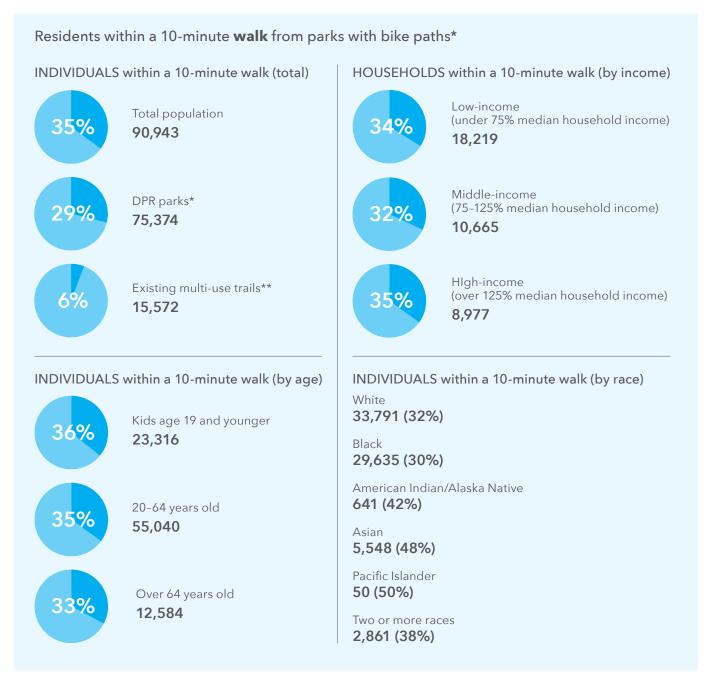
Park access

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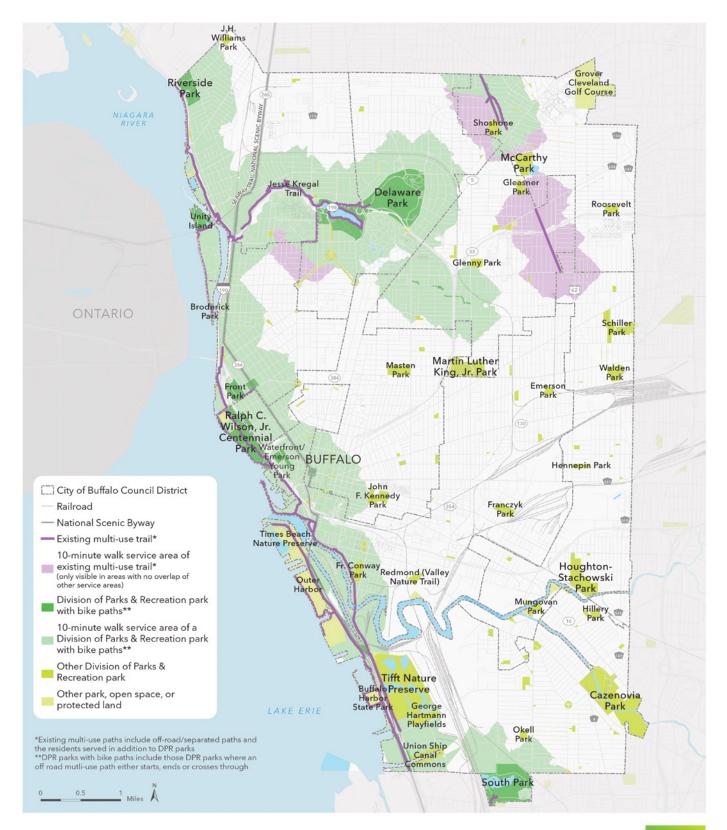


Bike Path Access Statistics



^{*} DPR parks with bike paths include those DPR parks where an off road multi-use path either starts, ends or crosses through.

^{**}Existing multi-use paths include off-road/separated paths and the residents served in addition to the DPR parks.



Bike path access

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Community Garden Access Statistics

Residents within a 10-minute walk from community gardens*

INDIVIDUALS within a 10-minute walk (total)



Total population **146,036**

INDIVIDUALS within a 10-minute walk (by age)



Kids age 19 and younger **37,342**



20-64 years old

87,801



Over 64 years old

20,886

HOUSEHOLDS within a 10-minute walk (by income)



Low-income (under 75% median household income)

33,888



Middle-income (75-125% median household income)

18,593



HIgh-income (over 125% median household income)

11,901

INDIVIDUALS within a 10-minute walk (by race)

White

42,923 (40%)

Black

66,826 (69%)

American Indian/Alaska Native

873 (57%)

Asian

8,049 (70%)

Pacific Islander

50 (50%)

Two or more races

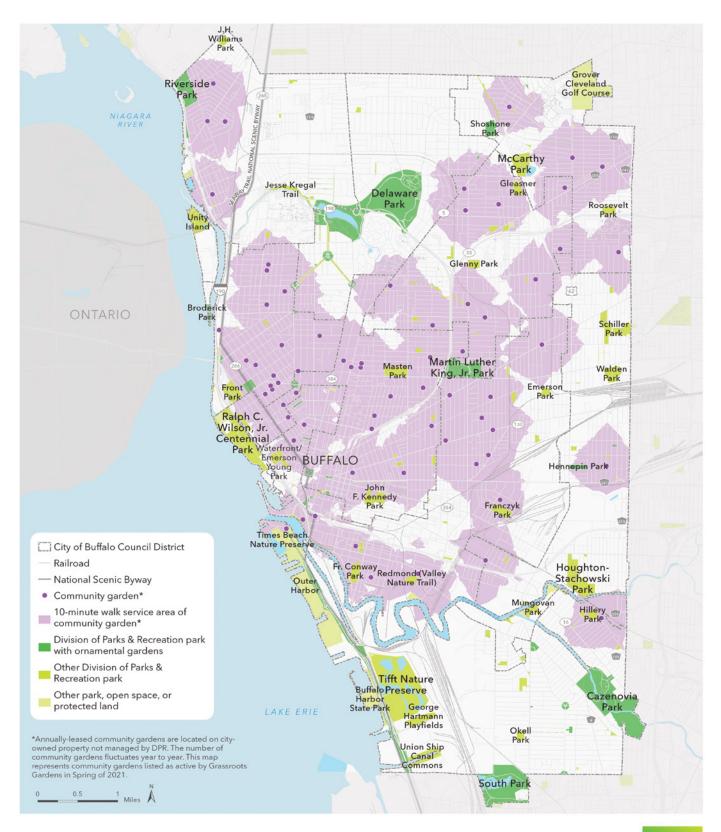
4,181 (55%)

Hispanic

22,841 (64%)

40

^{*} Annually leased community gardens are located on city owned property not managed by DPR. The number of community gardens fluctuates year to year. This map represents community gardens listed as active Grassroots Gardens in Spring of 2021.



Community garden access

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Picnic Shelter Access Statistics

Residents within a 10-minute walk from DPR parks with picnic shelters

INDIVIDUALS within a 10-minute walk (total)



Total population **95,288**

INDIVIDUALS within a 10-minute walk (by age)



Kids age 19 and younger **25,199**



20-64 years old **56,709**



Over 64 years old **13,377**

HOUSEHOLDS within a 10-minute walk (by income)



Low-income (under 75% median household income) **21,153**



Middle-income (75-125% median household income) **11,214**



HIgh-income (over 125% median household income) **7,920**

INDIVIDUALS within a 10-minute walk (by race)

White

31,945 (30%)

Black

38,938 (40%)

American Indian/Alaska Native

549 (36%)

Asian

5,001 (43%)

Pacific Islander

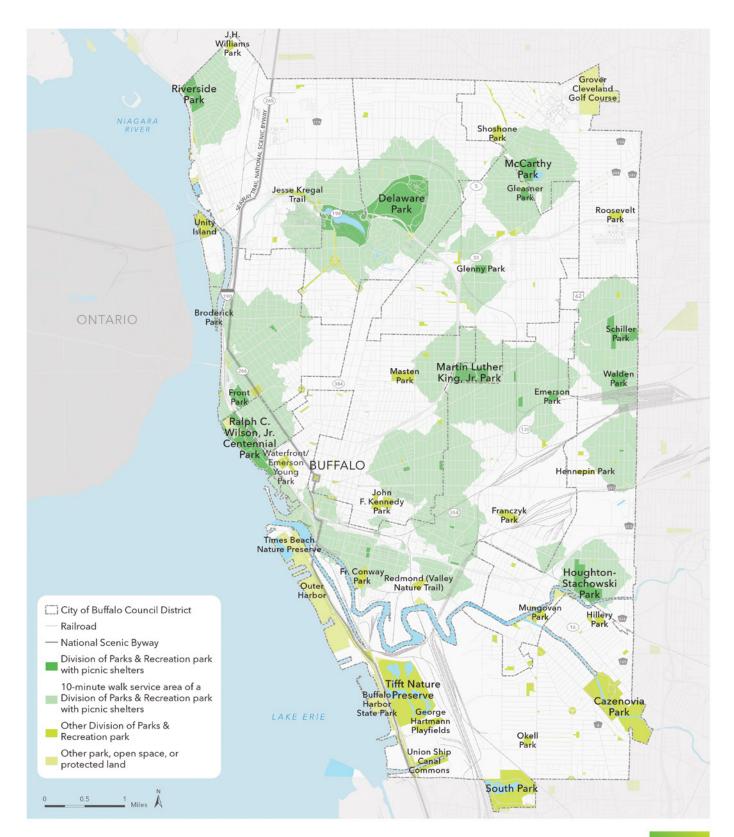
43 (43%)

Two or more races

2,737 (36%)

Hispanic

15,944 (45%)



Picnic shelter access

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Playground Access Statistics

Residents within a 10-minute walk from playgrounds

INDIVIDUALS within a 10-minute walk (total)



Total population **179,337**

INDIVIDUALS within a 10-minute walk (by age)



Kids age 19 and younger **47,199**



20-64 years old **106,290**



Over 64 years old **25,843**

HOUSEHOLDS within a 10-minute walk (by income)



Low-income (under 75% median household income) **38,814**



Middle-income (75-125% median household income)





HIgh-income (over 125% median household income)

15,375

INDIVIDUALS within a 10-minute walk (by race)

White

67,146 (63%)

Black

72,603 (75%)

American Indian/Alaska Native

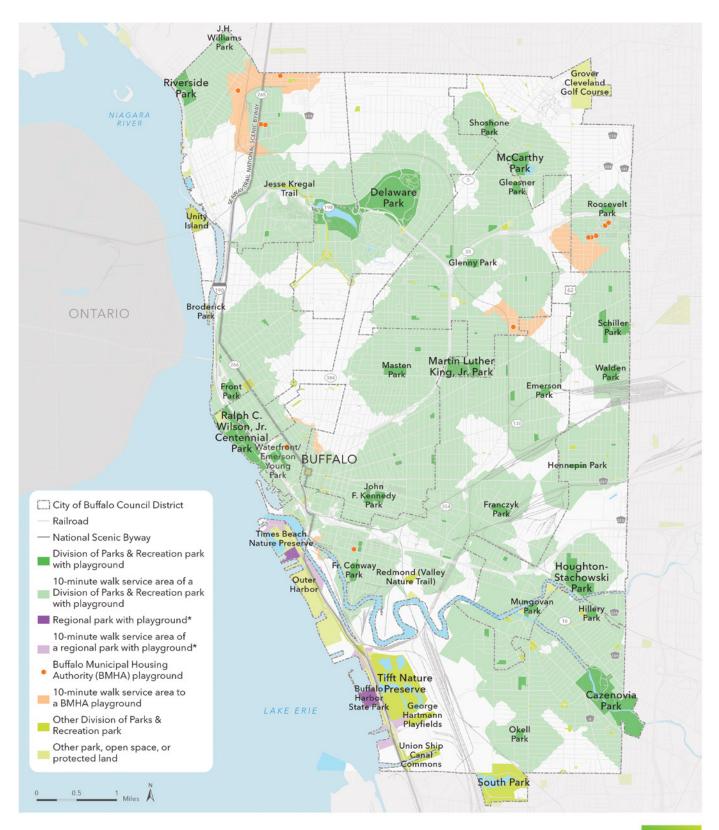
1,049 (69%)

Asian

6,690 (58%)

Pacific Islander

78 (78%)



Playground access

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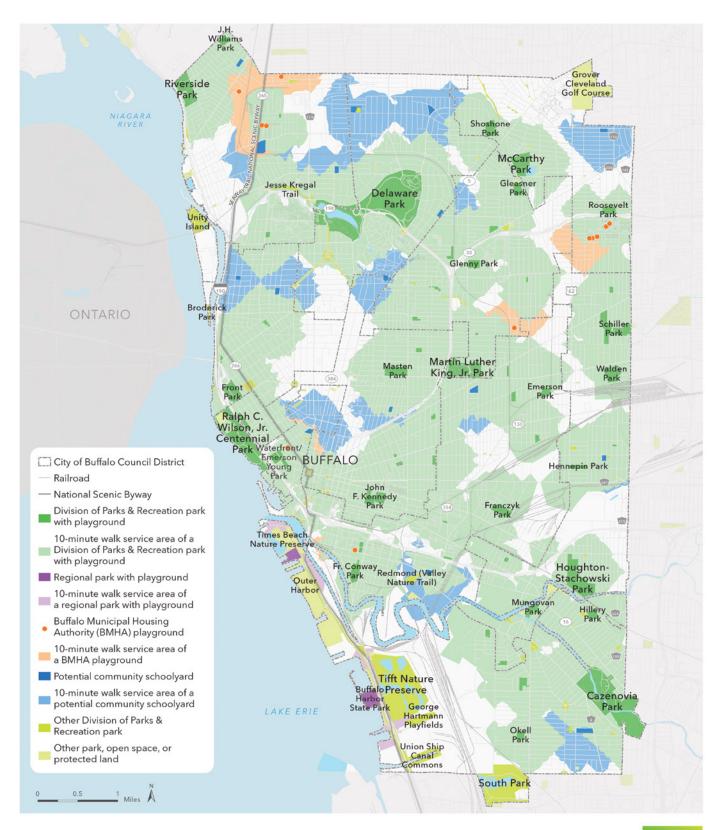


Playground Access Statistics (With Potential Community Schoolyards)

One method of increasing public access to green space involves providing community access to schoolyards during non-school hours. This map shows how access to playgrounds would increase if the city were to implement a community schoolyards program. The schoolyards included in this map were identified as

potential pilot sites based on existing playground access gaps, as well as through discussions between the Division of Parks and Recreation and Buffalo Public Schools based on current conditions. A decision about these sites is expected in the spring of 2022. For more on this topic, see Section 8.





Playground access

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Pool or Splashpad Access Statistics

Residents within a 10-minute walk from DPR parks with pools or splashpads

INDIVIDUALS within a 10-minute walk (total)



Total population **78,148**

INDIVIDUALS within a 10-minute walk (by age)



Kids age 19 and younger **21,462**



20-64 years old **45,278**



Over 64 years old

11,407

HOUSEHOLDS within a 10-minute walk (by income)



Low-income (under 75% median household income) **18,217**



Middle-income (75-125% median household income) **9,119**



HIgh-income (over 125% median household income) **5,602**

INDIVIDUALS within a 10-minute walk (by race)

White

26,320 (25%)

Black

35,739 (37%)

American Indian/Alaska Native

444 (29%)

Asian

2,190 (19%)

Pacific Islander

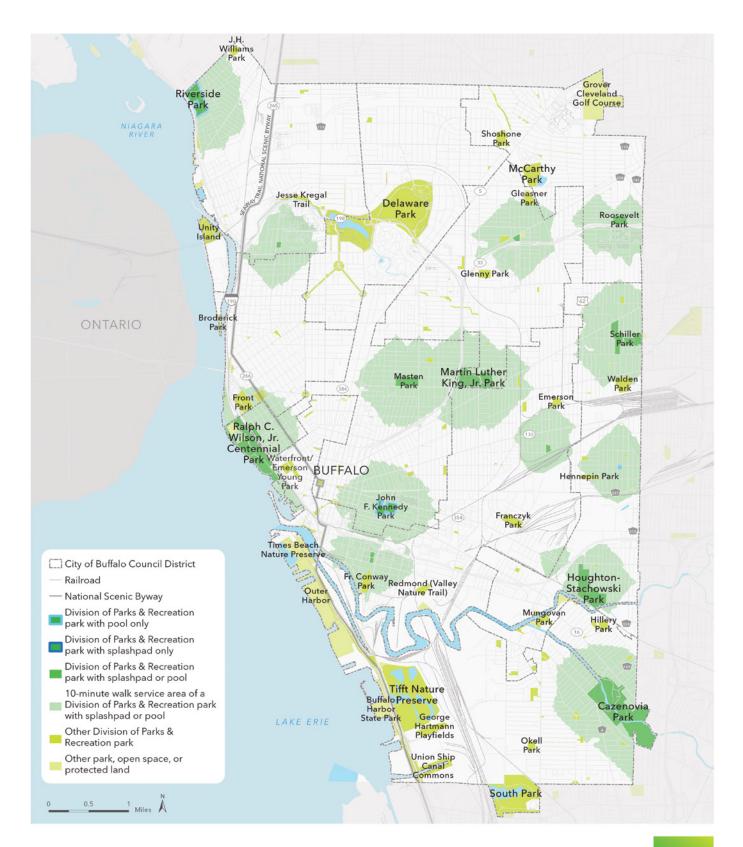
39 (39%)

Two or more races

2,029 (27%)

Hispanic

11,303 (32%)



Pool or splashpad access

BUFFALO PARKS AND RECREATION MASTER PLAN

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Park Restroom Statistics

Residents within a 10-minute walk from DPR parks with restrooms

INDIVIDUALS within a 10-minute walk (total)



Total population **137,958**

INDIVIDUALS within a 10-minute walk (by age)



Kids age 19 and younger **35,634**



20-64 years old **82,162**



Over 64 years old

20,156

HOUSEHOLDS within a 10-minute walk (by income)



Low-income (under 75% median household income) **28,953**



Middle-income (75-125% median household income)

16,888



HIgh-income (over 125% median household income)

13,028

INDIVIDUALS within a 10-minute walk (by race)

White

54,464 (51%)

Black

55,359 (57%)

American Indian/Alaska Native

794 (52%)

Asian

4,746 (41%)

Pacific Islander

68 (68%)

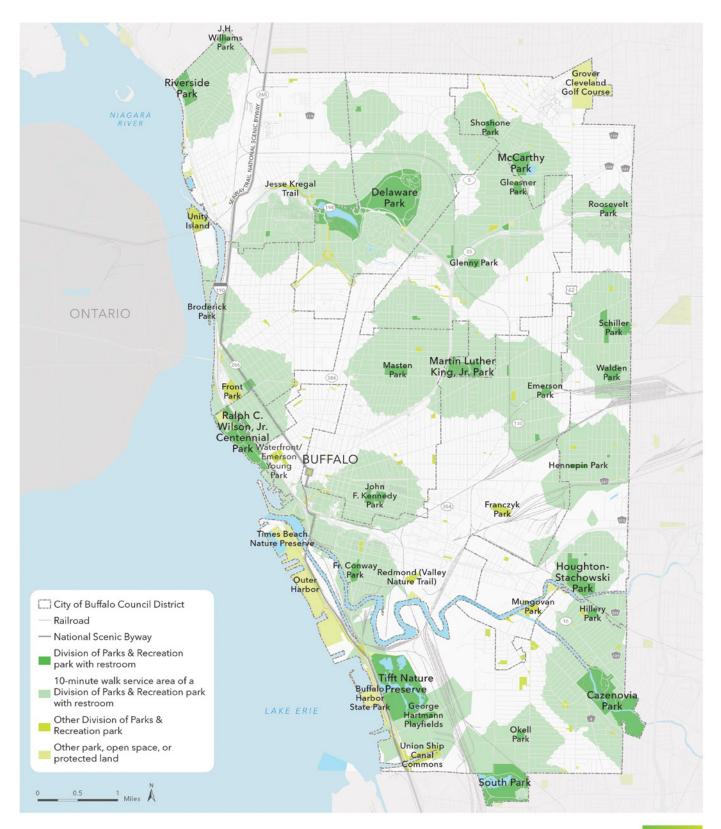
Two or more races

3,855 (51%)

Hispanic

18,493 (52%)

50



Restroom access

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Sports Field Access Statistics

Residents within a 10-minute walk from sports fields

INDIVIDUALS within a 10-minute walk (total)



Total population **133,785**

INDIVIDUALS within a 10-minute walk (by age)



Kids age 19 and younger **34,817**



20-64 years old **80,005**



Over 64 years old **18,960**

HOUSEHOLDS within a 10-minute walk (by income)



Low-income (under 75% median household income) **27,815**



Middle-income (75-125% median household income) **16,495**



HIgh-income (over 125% median household income) **12,610**

INDIVIDUALS within a 10-minute walk (by race)

White

56,836 (54%)

Black

45,673 (47%)

American Indian/Alaska Native

827 (54%)

Asian

5,312 (46%)

Pacific Islander

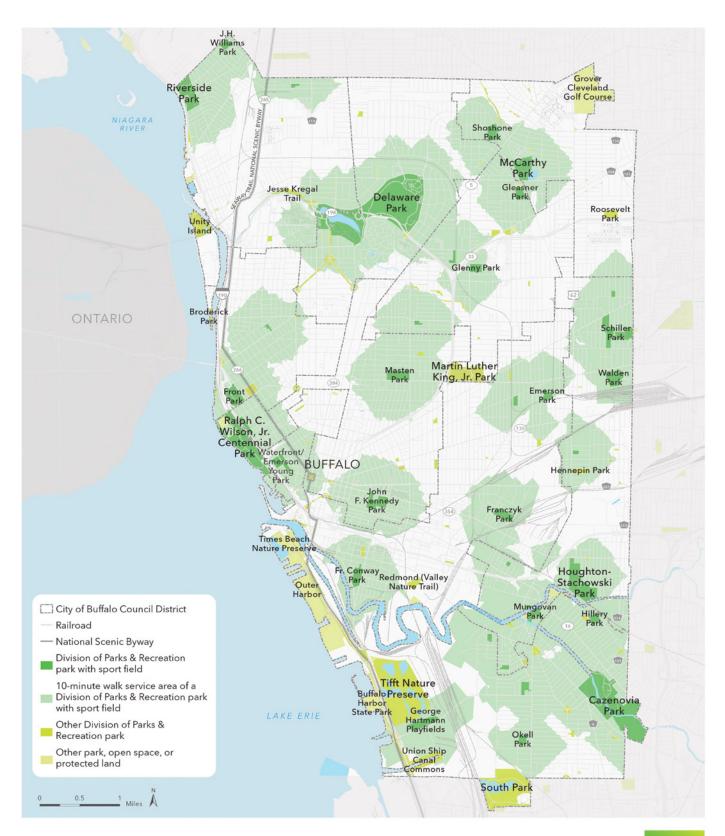
55 (55%)

Two or more races

3,735 (50%)

Hispanic

21,139 (59%)



Sport field access

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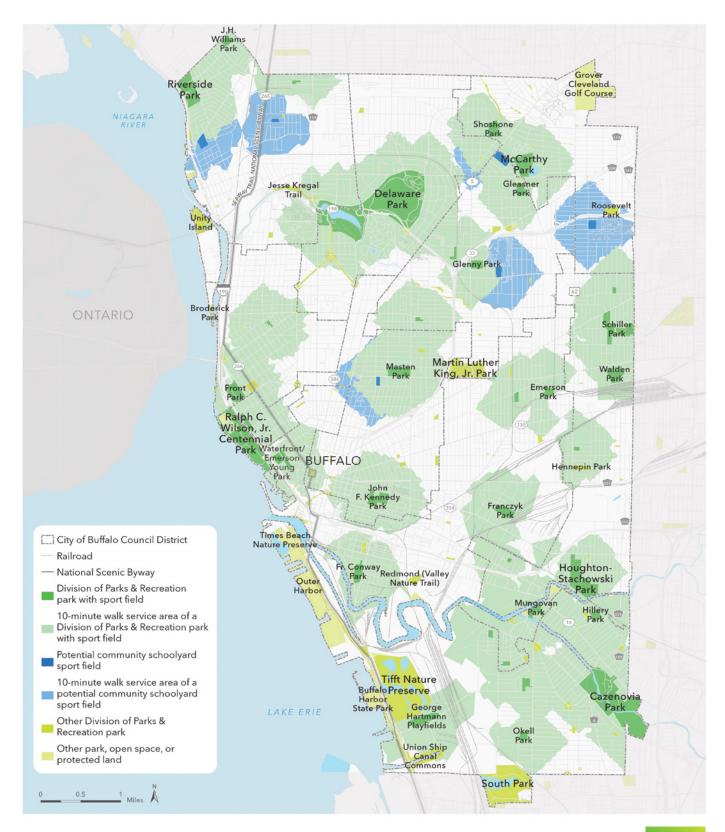


Sports Field Access Statistics (With Potential Schoolyard Sites)

One method of increasing public access to green space involves providing community access to schoolyards during non-school hours. This map shows how access to sports fields would increase if the city were to implement such a program. The schoolyards included in this map were identified as potential pilot sites

based on existing sports field access gaps, as well as through discussions between the Division of Parks and Recreation and Buffalo Public Schools based on current conditions and planned improvements. A decision about these sites is expected in the spring of 2022. For more on this topic, see Section 8.





Sport field access

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Walking Path Access Statistics

Residents within a 10-minute walk from walking paths*

INDIVIDUALS within a 10-minute walk (total)



Total population 132,841

INDIVIDUALS within a 10-minute walk (by age)



Kids age 19 and younger **33,586**



20-64 years old **80,151**



Over 64 years old **19,106**

HOUSEHOLDS within a 10-minute walk (by income)



Low-income (under 75% median household income)

27,666



Middle-income (75-125% median household income)

16,571



HIgh-income (over 125% median household income)

12,711

INDIVIDUALS within a 10-minute walk (by race)

White

53,969 (51%)

Black

46,585 (48%)

American Indian/Alaska Native

837 (55%)

Asian

6,646 (58%)

Pacific Islander

44 (44%)

Two or more races

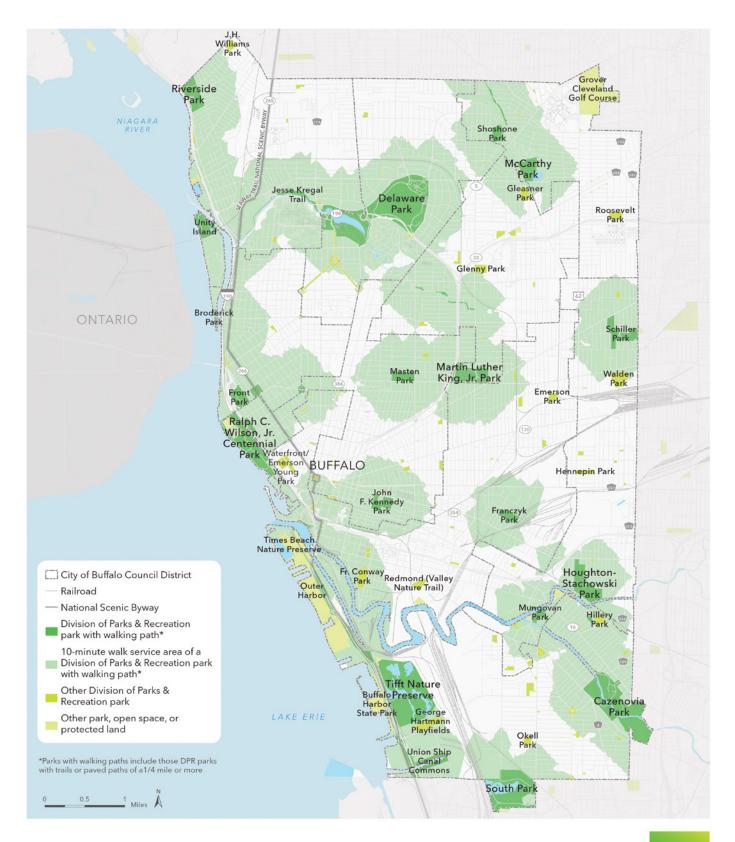
3,802 (50%)

Hispanic

20,777 (58%)

56

^{*} Parks with walking paths include those DPR parks with trails or paved paths of a 1/4 mile or more.



Walking path access

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The Japanese Garden in Buffalo's Delaware Park. @ CAROL M. HIGHSMITH

SECTION 4.

Comparison to Peer Cities

Introduction

One method of assessing Buffalo's success in providing park services involves comparing it to similar municipalities. These comparisons can help a city determine where they are leading other cities and where they are following, in order to identify opportunities for improvement. It is also a useful cross-check against our geospatial analysis within Buffalo's borders. While national averages are sometimes used to draw comparisons (for example, through The Trust for Public Land's ParkScore program), it can be more instructive to make comparisons to peer cities that have been specifically selected based on similarities with Buffalo. For this exercise, six cities were selected in consultation with the City of Buffalo and the steering committee:

- Cincinnati, OH
- Cleveland, OH
- Newark, NI
- Rochester, NY
- St. Louis, MO
- Syracuse, NY

In selecting these cities, many metrics were examined, such as population size, density, employment statistics, poverty, and growth rate. Geography was also an important factor, with most peer cities being located in a neighboring state. Cities with climates relatively similar to Buffalo were deliberately chosen, since climatic factors can affect the amenities a city chooses to provide, as well as maintenance costs. While none of these peer cities are a perfect match for Buffalo on every metric, all cities are similar to Buffalo on many points of comparison.

In addition, the list was also designed to include some peer cities that can serve as "aspirational" cities for Buffalo: Cincinnati and St. Louis. While these cities are still peers in that they share many similarities with



Piatt Park, the oldest park in Cincinnati, Ohio, one of Buffalo's six peer cities for the benchmarking study. © WHOLTONE

Buffalo, they are also known for their excellent park systems. In The Trust for Public Land's ParkScore database, a ranking of park systems in the country's 100 largest cities, Cincinnati ranked 8th and St. Louis ranked 16th in 2021. Of the peers, only Newark, ranked 42nd in 2021, does not sit in the top quartile of the rankings. Buffalo is ranked 38th in 2021, up from 58th just five years ago. Stakeholders within the City of Buffalo also expressed a desire to include cities within the State of New York. For this reason, Rochester and Syracuse were included as the cities in the state that are most similar to Buffalo. Since Rochester and Syracuse are not among the hundred largest cities in the country, they are not included in ParkScore and so are unranked.

TABLE 4: PEER CITY BACKGROUND INFORMATION (2015-2019 ESTIMATES)30 Percent Change in Median 2021 Population, Total **Population Poverty** Household **ParkScore** City **Population** Density Rate 2000-2017 Income Ranking Buffalo, New York 259,574 -11% 38 6,362 25% \$34,268 Cincinnati, Ohio 298,957 22% -10% \$36,429 8 3,834 Cleveland, Ohio 388,812 4,965 31% -19% \$27,854 24 Newark, New Jersey 280,463 11,648 25% 3% \$35,181 42 Rochester, New York 209,463 5,838 30% -5% \$32,347 N.A. St. Louis, Missouri 314,867 5,030 20% -10% \$38,664 16

25%

5.726

In the following pages, specific metrics on park system characteristics such as overall park system acreage, park access, amenity inventories, and spending are compared across these cities. This analysis aims to provide a direct comparison of peer municipalities in order to understand more about the strengths as well as the needs of the Buffalo park system. The findings in this study are not in and of themselves recommendations, but rather will be used to inform recommendations of the Buffalo Parks Master Plan, together with the project's other tasks, including mapping results, community engagement, and stakeholder interviews.

144,405

Syracuse, New York

Any benchmarking analysis is only as good as the available data. Every effort was made to obtain the most accurate and current information, but due to differences in how each system collects, maintains, and reports data, variances may exist. These variations have an impact on the per capita and percentage allocations examined; hence, the overall comparison should be viewed with this in mind. For this reason, all figures are rounded to the nearest whole number. Data was primarily drawn from The Trust for Public Land's 2020 ParkScore database, which includes self-reported data from fiscal year 2019. ParkScore invites public sector and nonprofit park managers from the country's hundred largest cities to self-report data related to park acreage, amenities, revenue, and spending. As Rochester and Syracuse are not large enough to be

included in ParkScore, these cities were sent separate requests to provide this data. We thank them for their time and effort in supporting this study.

\$34,716

N.A.

-2%

To determine a city's ParkScore rating, The Trust for Public Land assigns points for 14 measures across five categories: acreage, investment, amenities, access, and equity. For each of the 14 measures, points are awarded on a relative basis, based on how a city compares to the 100 largest U.S. cities. Points are assigned by breaking the data range established by our national sample into brackets, with the lowest bracket receiving the least points and the highest bracket receiving the most points. Each city's total points—out of a maximum of 500—are normalized to a ParkScore rating of up to 100. For a full explanation of ParkScore's methodology, visit the website at https://www.tpl.org/parkscore/about.

Park Access & System Acreage

A park system's size and distribution throughout the city are key factors in determining the level of service being provided to the residents. This section compares Buffalo to its peer cities based on park access, each city's park acreage per resident, the overall percentage of city land that is devoted to parks, and the type of park space available to residents. This analysis will include all parkland within each city, regardless of whether the park manager is a city, county, state, or private organization.

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ACCESS TO PARKS

One of the most important measures of the quality of a park system is how accessible the parks are to residents. Table 5 shows the percentage of residents in each city that have walkable access to parks within a 10-minute walk. This is measured through GIS analysis based on the public road network, and takes into account barriers to foot traffic such as rivers or highways without crossing points.

Buffalo is comparatively well served with regards to park access. Roughly 89 percent of Buffalo residents live within a 10-minute walk of a park. Only St. Louis and Newark have better park access.

TABLE 5: PARK ACCESS		
City	Percentage of Population within a 10-Minute Walk of a Park	
St. Louis, MO	98%	
Newark, NJ	94%	
Buffalo, NY	89%	
Cleveland, OH	83%	
Rochester, NY	83%	
Cincinnati, OH	82%	
Syracuse, NY	76%	
Peer City Average	86%	

Parkland per Resident

Buffalo ranks fourth among peer cities with regards to per capita park acreage, with 9 acres per 1,000 residents, and below the peer city average of 12. <u>Table 6</u> shows the total acreage for each system and how that translates into service per 1,000 residents.

TABLE 6: PARKLAND PER RESIDENT		
City	Total Park Acres	Parkland per 1,000 Residents
Cincinnati, OH	6,904	22
Rochester, NY	3,500	17
St. Louis, MO	3,749	12
Buffalo, NY	2,360	9
Cleveland, OH	3,170	8
Syracuse, NY	972	7
Newark, NJ	844	3
Peer City Average		12

Parkland as a Percentage of City Land

Roughly 9 percent of Buffalo city land is devoted to parks, placing Buffalo in the middle of the peer cities, but slightly behind the peer city average of 10 percent.

TABLE 7: PARKS AS A PERCENT OF CITY LAND		
City	Parks as a Percent of City Land	
Rochester, NY	15%	
Cincinnati, OH	14%	
St. Louis, MO	10%	
Buffalo, NY	9%	
Cleveland, OH	7%	
Syracuse, NY	6%	
Newark, NJ	6%	
Peer City Average	10%	

Park Acres by Type

By providing a diverse range of parkland types, cities can help to meet the varied needs of their residents.

Table 8 breaks out how much of the park agency's land is designed for heavier active use such as organized sports compared to more natural or passive acreage.

Designed parkland includes parks that are more landscaped or designed for active use, such as play areas and athletic fields, and manicured green spaces. Natural parkland, by comparison, includes acreage that is less managed and may be left in a primarily natural state, such as preserves. Designed acreage generally costs much more to maintain due to high levels of use and more elements requiring care.

As with all data in this section, the figures below include all publicly accessible park space in each city. For Buffalo, this table includes city parks (including

Tifft Nature Preserve and the Olmsted Park System), county parks, and state parks, as well as the Outer Harbor space maintained by Erie Canal Harbor Development Corporation. Data was not able to be obtained for Syracuse or Rochester. Please note that these acreage totals add up to less than the "total park acres" in Table 3 since open water like lakes has been excluded from these figures.

The majority of Buffalo's parkland, 76 percent, is designed, while 24 percent is natural, a breakdown that is roughly the same as the peer city average.

TABLE 8: PARK ACRES BY TYPE						
City	Natural Acres	Percent Natural Acres	Designed Acres	Percent Designed Acres	Undeveloped Acres	Percent Undeveloped Acres
Cincinnati, OH	3,585	52%	3,306	48%	13	0%
St. Louis, MO	109	3%	3,597	96%	43	1%
Cleveland, OH	1,236	39%	1,792	57%	142	4%
Buffalo, NY	524	24%	1,676	76%	0	0%
Newark, NJ	0	0%	844	100%	0	0%
Peer City Average	-	23%	-	75%	2%	-

Park Amenities

The tables below compare key facility types available in each park system. The amenities included here are consistent with The Trust for Public Land's ParkScore survey. These amenities are not exhaustive and were chosen for a variety of reasons. All amenities included can be counted fairly consistently across cities. They are distinct (e.g., basketball hoops) and easily quantifiable. They do not vary dramatically by geography and they represent activities that target different age

groups and activity levels. While playgrounds meet the needs of children and families, tennis and pickleball courts address the needs of adults and seniors. Dog parks are growing in popularity and are for socialization among people of all types, and restrooms address all individuals regardless of age or activity level.

PLAYGROUNDS

With a total of 61 park playgrounds or 2 park playgrounds per 10,000 residents, Buffalo sits just behind the peer city average of 3 per 10,000 residents.

TABLE 9: PLAYGROUNDS			
City	Park Playgrounds	Playgrounds per 10,000 Residents	
Cincinnati, OH	153	5	
Cleveland, OH	139	4	
Syracuse, NY	50	3	
St. Louis, MO	88	3	
Buffalo, NY	61	2	
Rochester, NY	45	2	
Newark, NJ	28	1	
Peer City Average		3	

BASKETBALL HOOPS

Buffalo is fairly well-served in terms of basketball hoops in comparison to the peer cities. With a total of 165 hoops overall, or 6 hoops per 10,000 residents, Buffalo is second among peer cities, behind only Cincinnati.

TABLE 10: BASKETBALL HOOPS			
City	Basketball Hoops	Basketball Hoops per 10,000 Residents	
Cincinnati, OH	269	9	
Buffalo, NY	165	6	
Cleveland, OH	230	6	
Syracuse, NY	68	5	
Rochester, NY	94	4	
St. Louis, MO	86	3	
Newark, NJ	74	3	
Peer City Average		5	

OFF-LEASH DOG PARKS

Based on research undertaken by The Trust for Public Land through its annual ParkScore survey, dog parks, also known as "off-leash dog areas," are among the fastest growing park amenities in the combined parks systems of the 100 largest US cities. There are currently 818 dedicated dog parks in the 100 largest cities, an increase of 44 from 2018. Buffalo currently has 2 dog parks, or about 1 per 100,000 residents, tied with Cleveland and behind St. Louis and Cincinnati.

TABLE 11: DOG PARKS			
City	Dog Parks	Dog Parks per 100,000 residents	
St. Louis, MO	6	2	
Cincinnati, OH	5	2	
Buffalo, NY	2	1	
Cleveland, OH	3	1	
Rochester, NY	1	1	
Newark, NJ	1	0	
Syracuse, NY	0	0	
Peer City Average		1	

TENNIS COURTS

With a total of 48 tennis courts, or about 2 per 10,000 residents, Buffalo is near the bottom of the peer cities, with only Newark below it.

TABLE 12: TENNIS COURTS			
City	Tennis Courts	Tennis Courts per 10,000 Residents	
Syracuse, NY	51	4	
St. Louis, MO	110	4	
Cincinnati, OH	100	3	
Cleveland, OH	86	2	
Rochester, NY	43	2	
Buffalo, NY	48	2	
Newark, NJ	43	2	
Peer City Average		3	

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RECREATION AND SENIOR CENTERS

Buffalo leads all peer cities with regards to per capita access to recreation and senior centers. Buffalo has 28 recreation and senior centers, or 11 per 100,000 residents, more than any of the peer cities.

TABLE 13: RECREATION AND SENIOR CENTERS			
City	Recreation and Senior Centers	Recreation and Senior Centers per 100,000 Residents	
Buffalo, NY	28	11	
Cincinnati, OH	23	7	
Cleveland, OH	22	6	
Rochester, NY	13	6	
Syracuse, NY	8	5	
Newark, NJ	12	4	
St. Louis, MO	10	3	
Peer City Average		5	

SPLASHPADS

With 11 splashpads total, or 4 splashpads per 100,000 residents, Buffalo is roughly tied with Rochester and Cincinnati, and just behind the peer city average of 6.

TABLE 14: SPLASHPADS			
City	Splashpads	Splashpads per 100,000 Residents	
Cleveland, OH	40	11	
Syracuse, NY	13	9	
Cincinnati, OH	14	5	
Rochester, NY	9	4	
Buffalo, NY	11	4	
Newark, NJ	10	4	
St. Louis, MO	8	3	
Peer City Average		6	

COMMUNITY GARDENS

Buffalo leads all peer cities in community garden plots, hosting 178 garden plots total or 7 per 10,000 residents. Community garden numbers were not able to be obtained for Syracuse.

TABLE 15: COMMUNITY GARDENS			
City	Community Garden Plots	Community Garden Plots per 10,000 Residents	
Buffalo, NY	178	7	
Newark, NJ	101	4	
Rochester, NY	70	3	
Cincinnati, OH	60	2	
Cleveland, OH	7	0	
St. Louis, MO	0	0	
Syracuse, NY	N.A.	N.A.	
Peer City Average		2	

SWIMMING POOLS

There are a total of 11 pools within Buffalo's parks, or 4 pools for every 100,000 residents. This places Buffalo at the median when looking at per capita metrics but below the peer city average of 5.

TABLE 16: SWIMMING POOLS		
City	Swimming Pools per 100,000 Residents	Swimming Pools per 100,000 Residents
Cleveland, OH	41	11
Cincinnati, OH	23	7
Syracuse, NY	10	7
Buffalo, NY	11	4
Rochester, NY	6	3
St. Louis, MO	8	3
Newark, NJ	6	2
Peer City Average		5

SKATE PARKS

There is 1 skate park in Buffalo, although this is not uncommon, as none of the peer cities have more than 3. This places Buffalo at the median when looking at per capita metrics. With 4 skate parks per million residents, Buffalo is comparable to Newark, and ahead of Cincinnati and St. Louis.

TABLE 17: SKATE PARKS				
City	Skate Parks	Skate Parks per 1,000,000 Residents		
Syracuse, NY	2	14		
Cleveland, OH	3	8		
Rochester, NY	1	5		
Buffalo, NY	1	4		
Newark, NJ	1	4		
Cincinnati, OH	1	3		
St. Louis, MO	0	0		
Peer City Average	6			

PARK RESTROOMS

Buffalo residents are comparatively well-served with regards to restrooms in parks. With 55 restrooms total, or 21 per 100,000 residents, Buffalo sits behind Cincinnati but closely resembles St. Louis. Data was not available for Rochester.

TABLE 18: PARK RESTROOMS					
City	Park Restrooms	Restrooms per 100,000 Residents			
Cincinnati, OH	98	32			
St. Louis, MO	74	24			
Buffalo, NY	55	21			
Newark, NJ	31	11			
Cleveland, OH	38	10			
Syracuse, NY	7	5			
Rochester, NY	N. A.	N. A.			
Peer City Average	16				

Spending and Revenue

Successful park systems require adequate and consistent funding. This section details park- and recreation-related expenditures by the main city park agencies in each city. It reflects actual expenditures, not budgeted amounts, for the fiscal year 2019. It also reflects only parks and recreation related spending and does not reflect spending on attractions such as zoos or stadiums for which many parks departments are also responsible.

TOTAL CITY SPENDING

Table 19 shows total spending (both operating and capital dollars) spent by each city in fiscal year 2019. It also lists the amount spent per resident, which is a useful way to look at expenditures as it reflects the potential number of users (in number of residents) that a park system could have. Buffalo spent \$50 per resident in FY 2019, placing it in the middle of the comparison cities, but below the average of \$80.

TABLE 19: TOTAL CITY SPENDING				
City	Total Spending (City)	Total Spending per Resident (City)		
Cincinnati, OH	\$54,720,984	\$177		
Cleveland, OH	\$46,872,000	\$124		
Syracuse, NY	\$9,299,233	\$64		
Buffalo, NY	\$13,001,331	\$50		
St. Louis, MO	\$14,500,000	\$47		
Newark, NJ	\$11,805,496	\$42		
Rochester, NY	\$6,149,581	\$29		
Peer City Average	\$80			

CITY CAPITAL SPENDING

Table 20 lists capital spending for the 2019 fiscal year. These dollars include both land acquisition and capital improvement projects. Buffalo sits as the group's median with regards to city capital spending on parks, spending \$3,840,822 total or \$14.73 per resident. In Buffalo, this spending went entirely to capital improvements rather than land acquisition. As Table

20 shows, this is common, as the land for city parks only needs to be purchased once and many parks are created on land already owned by or donated to the city. Park amenities, by comparison, need to be maintained and upgraded continuously.

TABLE 20: CITY	CAPITAL SPENDING			
City	Capital Improvements (\$)	Land Acquisition (\$)	Total Capital Spending (\$)	Total Capital Spending (\$) per Resident
Newark, NJ	\$7,849,142	\$0	\$7,849,142	\$28
Cleveland, OH	\$7,524,000	\$220,848	\$7,744,848	\$20
Cincinnati, OH	\$5,724,578	\$0	\$5,724,578	\$19
Rochester, NY	\$3,247,000	\$0	\$3,247,000	\$15
Buffalo, NY	\$3,840,822	\$0	\$3,840,822	\$15
Syracuse, NY	\$1,527,000	\$0	\$1,527,000	\$10
St. Louis, MO	\$3,000,000	\$0	\$3,000,000	\$10
Peer City Average				\$17

CITY OPERATING SPENDING

Table 21 shows only operational spending by the city park agency for the 2019 fiscal year, per resident. Operational spending includes all spending for operations and maintenance of parkland, including administrative spending like salaries, as well as programming-related expenditures. This includes recreation spending as well as any operational dollars spent on events and other programming. Operational spending can be a good indicator of the general maintenance standards of a park system, as it encapsulates routine care such as mowing, trash removal, and landscaping.

At \$35 per resident, Buffalo lags behind most peer cities with regards to operating spending, although it is well ahead of Newark and Rochester. Buffalo was also far below the averages for each of the two operating spending categories, with maintenance and administrative spending at \$23 per resident compared to a peer city average of \$43, and a programming per resident of \$12, compared to a national average of \$20. Please note that this figure does include \$1.4 million of city funds granted to Buffalo Olmsted Parks Conservancy for the care of the Olmsted park system.

TABLE 21: CITY OPERATING SPENDING						
City	Maintenance and Admin (\$)	Maintenance and Admin (\$) per Resident	Programming (\$)	Programming (\$) per Resident	Total Operating Spending (\$)	Total Operating Spending (\$) per Resident
Cincinnati, OH	\$24,847,834	\$80	\$24,148,572	\$78	\$48,996,406	\$158
Cleveland, OH	\$36,611,000	\$97	\$2,517,000	\$7	\$39,128,000	\$104
Syracuse, NY	\$4,256,579	\$29	\$3,515,654	\$24	\$7,772,233	\$53
St. Louis, MO	\$10,000,000	\$32	\$1,500,000	\$5	\$11,500,000	\$37
Buffalo, NY	\$6,063,120	\$23	\$3,097,389	\$12	\$9,160,509	\$35
Newark, NJ	\$2,786,122	\$10	\$1,170,232	\$4	\$3,956,354	\$14
Rochester, NY	\$ 2,485,000	\$12	\$417,581.48	\$2	\$ 2,902,581	\$14
Peer City Average		\$43		\$20		\$63

PARK SPENDING: CITY & PRIVATE

Table 22 shows the percentage of parks- and recreation-related spending withoin each city that is provided by private organizations. Note that in this table, total park spending includes agencies other than the city park agency, though the rest of this study examines only the city park agency's finances. Private park spending data was not able to be obtained for Syracuse.

Notably, the highest spending cities, Cincinnati and Cleveland, both have a relatively low percentage of private dollars supporting their park systems. It is the mid-level cities, like Buffalo and St. Louis, where private dollars constitute a major percentage of the financial support for city parks.

Buffalo's nonprofits and private donors contributed over \$9 million to local parks in 2019, about \$35 per resident, higher than any peer city. Buffalo's private contributions to parks account for 41 percent of total park spending. For almost all other peer cities (excluding St. Louis), private spending accounts for less than 10 percent of overall park spending. When examining city and private park spending together, the total sum rises to \$85 per resident, close to the \$88 average.

A flourishing park system is typically well-supported by both public dollars and nonprofit groups, but public funding generally provides the majority of the investment for all spending categories, including acquisition, capital improvements, operations, maintenance, and programming. Non-profit park organizations and philanthropic partners are critically important. They foster a sense of ownership and pride in the park system and thereby create strong advocates for increasing public funding. However, they are not a substitute for continued and robust public realm support. While Buffalo's generous philanthropic scene provides a large portion of the 41 percent of private funding, entering the top tier will likely require more robust public support.

TABLE 22: PARK SPENDING: CITY & PRIVATE							
Place Name	Total Spending (City)	Total Spending per Resident (City)	Total Spending (Private)	Total Spending per Resident (Private)	Total Spending (City & Private)	Percent Private	Total Spending per Capita
Cincinnati, OH	\$54,720,984	\$177	\$3,668,809	\$12	\$58,389,793	6%	\$189
Cleveland, OH	\$46,872,000	\$124	\$53,000	\$0	\$46,925,000	0%	\$124
Buffalo, NY	\$13,001,331	\$50	\$9,021,322	\$35	\$22,022,653	41%	\$85
St. Louis, MO ³¹	\$14,500,000	\$47	\$10,585,005	\$34	\$25,085,005	42%	\$81
Syracuse, NY	\$9,299,233	\$64	N.A.	N.A.	\$9,299,233	0%	\$64
Newark, NJ	\$11,805,496	\$42	\$29,486	\$0	\$11,834,982	0%	\$42
Rochester, NY	\$6,149,581	\$29	\$161,906	\$1	\$6,311,487	3%	\$30
Peer City Average		\$80		\$8		9%	\$88

PARK REVENUE SOURCES

Table 23 examines how each of the cities included in the study generates revenue to support its parks. Almost all revenue raised for capital spending by the City of Buffalo is generated through a city councilapproved bond, with smaller capital grants being received through Community Development Block Grants (CDBG), New York Power Authority (NYPA), and the State and Municipal (SAM) Facilities Grant. Operations and maintenance spending is derived entirely from the general fund. General fund dollars come from a combination of property taxes, sales taxes, and any other non-specific destination revenue collected by a city. The general fund is the biggest pot of funds for a local government and is distributed through the annual budget process. Most general fund dollars go to public safety (Police, Fire, EMS) and education, the latter if the municipality has direct ownership of the school district. General fund dollars can be used for capital, O&M, and programming. They are the single largest source of funds for nearly all public park agencies with the exception of parks districts that are primarily funded through property tax assessments, bonds, and fees via separate stategranted authorities

When compared to its peer cities, Buffalo stands out for its lack of diversity in funding strategies. Most cities, and in particular cities such as Cleveland and Cincinnati that generate higher sums of public dollars for parks, have more diverse public finance streams. Some of Buffalo's peer cities are raising large sums for parks via voter-approved bonds and taxes, although of course this depends on voters' willingness to support these measures. Data from peer cities also suggests that earned revenue could be a promising source of funding for city parks. This category includes concessions like food, drink, classes, sports, equipment rentals, and ticketed events. Trending examples in city park systems include food truck vending, ticketed events, and craft fairs. The growth and acceptance of food trucks and other mobile concessions in parks and other public spaces in the past decade has greatly changed how contracts and agreements are created, how fees are collected, and the duration that a vendor can occupy a specific location. This is in stark comparison to traditional approaches for concessions in public parks, which are often multi-year and with limited seasons in a given year. Fees are usually a percentage of total sales and government agencies have the right to audit the concession vendors books to ensure the correct percentage is being paid.

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TABLE 23: CITY PARK REVENUE SOURCES							
Plac	ce name	Cincinnati, OH	Cleveland, OH	Buffalo, NY	St. Louis, MO	Newark, NJ	Rochester, NY
Capital Funding	Capital Appropriations	\$5,517,000	\$0	\$0	\$0	\$0	\$3,247,000
	City Council Approved Bonds and Taxes	\$0	\$0	\$3,472,835	\$0	\$0	\$0
	Voter Approved Bonds and Taxes	\$0	\$0	\$0	\$2,300,000	\$1,789,839	\$0
	Capital Grants	\$0	\$64,412	\$367,987	\$0	\$0	\$0
	Private Capital Grants or Donations to the Agency	\$350,000	\$1,985,524	\$0	\$0	\$0	\$0
Operating Funding	General Appropriation/ General Fund	\$25,784,850	\$36,641,313	\$9,260,509	\$930,000	\$3,606,509	\$2,827,881
	City Council Approved Taxes	\$6,318,355	\$0	\$0	\$0	\$0	\$0
	Voter Approved Taxes	\$0	\$0	\$0	\$3,000,000	\$349,846	\$0
	Earned Revenue/Fees Kept by the Agency	\$15,936,926	\$1,952,791	\$0	\$610,000	\$0	\$0
	Operating Grants	\$884,842	\$181,096	\$0	\$0	\$0	\$74,700
	Private Operating Grants or Donations to the Agency	\$764,320	\$12,800	\$0	\$0	\$0	\$0
Total		\$55,556,293	\$40,837,936	\$13,101,331	\$ 6,840,000	\$9,906,297	\$6,149,581



Events held in Buffalo's parks provide a major boost to the local economy, with park-related tourism contributing roughly 24 million dollars in 2019. © ZHI TING PHUA/BUFFALO OLMSTED PARKS CONSERVANCY

SECTION 5.

The Value of Buffalo's Parks

Buffalo, New York is well known for having a park and parkway system that was originally designed by Frederick Law Olmsted. Since the late 1800s when Olmsted was first brought to Buffalo, the public park and recreation system has expanded and evolved into a critical component of the city's economy. The park system provides substantial economic benefits in the form of attracting tourism, enhancing property values, managing stormwater, removing air pollution, and supporting economic development.

Cities across America are finding that investment in parks not only improves the quality of life for residents and visitors, but also contributes directly to creating a modern, 21st-century economy. In addition to providing residents with essential recreational access and opportunities to improve their health, the parks in Buffalo provide numerous quantifiable economic benefits (see Table 24).

TABLE 24. SUMMARY OF ESTIMATED ECONOMIC BENEFITS PROVIDED BY BUFFALO'S PARKS				
Benefit category	Value (2020\$)			
Annual stormwater infiltration	\$234,000			
Annual air pollution removal	\$406,000			
Enhanced property value				
Total additional property value	\$102,000,000			
Additional annual property tax	\$455,000			
Outdoor tourism Average annual direct spending due to the outdoors based on 2019 visitation to the City of Buffalo	\$23,600,000			
Economic development*				
Annual spending on sports, recreation, and exercise equipment by residents	\$14,200,000			
Annual sales generated by sporting-goods stores	\$14,500,000			

^{*} The economic development values presented here illustrate the importance of the recreation economy in Buffalo, New York. Not all spending and sales in these categories are exclusively generated by parks.

This report concludes that:

- The park system contributes to the local tourism economy because it provides numerous parks and programming that attract visitors. These amenities generate \$23.6 million annually in direct visitor spending.
- Parks, like those in the City of Buffalo, increase the value of nearby homes because people enjoy living close to these resources and are willing to pay for that proximity. In fact, The Trust for Public Land estimates that the park system raises the value of nearby homes by \$102 million and increases city property tax revenues by \$455,000 a year.

- Trees and shrubs in the City of Buffalo's parks remove air pollutants that endanger human health and damage structures. These spaces provide significant health benefits and reduce pollution control costs by \$406,000 annually (<u>Table 29</u>).
- Parkland contains pervious surfaces that can absorb precipitation and help improve water quality by filtering pollutants and slowing runoff. The City of Buffalo's parks provide value by absorbing 309 million gallons of stormwater and filtering 301 million pounds of pollutants, resulting in \$234,000 in stormwater management value each year (Table 27).³²
- Parks contribute to the region's quality of life, which plays an important role in attracting businesses and employees to the city and enhancing the community's recreation economy. Residents of Buffalo spend \$14.2 million annually on sports, recreation, and exercise equipment. Resident and tourist spending in Buffalo supports 13 recreationrelated stores that generate \$14.5 million in sales and provide 75 jobs.
- Residents also enjoy the parks and facilities. Each year, residents of Buffalo benefit from the recreational use of these spaces. Future work may consider the value of this recreational use; however, it has not been explored at this time. Independent research shows that park use translates into increased physical activity, resulting in measurable health care cost savings. The average adult saves \$1,250 each year, and the savings are doubled for adults 65 years and older.

These benefits are distributed across many sectors of the economy in Buffalo. Each estimate above represents a different type of value, with different time frames, accruing to different beneficiaries such as local businesses, government, and residents. In order to provide a robust and reliable report, this analysis relied on the most conservative methods supported by existing methodology and literature. For example, in any instance where multiple valuation methods were available, The Trust for Public Land utilized the method that produced conservative, lower bound estimate. This study illustrates that City of Buffalo parks contribute substantial economic benefits annually to the community as a whole.

Improving water quality and lowering stormwater management costs

Water quality and stormwater management are important issues in Buffalo, which gets its tap water from Lake Erie.³³ This section considers two major challenges to water quality management: costs to treat stormwater and associated nutrient loading (including nitrogen, phosphorus, and suspended solids). It then explores the role that parks play in improving water quality and lowering management costs across the city.

Although some amount of nitrogen and phosphorus in water bodies is essential, excess nutrients can cause aquatic plants to grow too fast. This can lead to excessive amounts of algae and lower water quality. As algae die off, they reduce the levels of dissolved oxygen, which can suffocate fish and other aquatic life. Some algae also produce harmful toxins and bacterial growth that can make people sick if they come into contact with polluted water, consume tainted fish or shellfish, or drink contaminated water. Although algae are naturally occurring, human activities frequently increase the levels of nutrients in water bodies beyond healthy levels.34 Sources include stormwater, animal feed lots, fertilizers, industrial waste waters, sanitary landfills, septic system leaching, and garbage dumps. Nutrient pollution can lead to economic losses (e.g., reductions in fisheries, recreation, and tourism) and increased costs (e.g., treating municipal or private drinking water or complying with regulatory actions triggered by impaired water quality, such as the Safe Drinking Water Act).35 For example, harmful algal blooms on the western end of Lake Erie in and around Toledo, Ohio have required significant treatment costs to protect drinking water and have also caused significant economic harm.36

Another threat to water quality is suspended solids, or mineral and organic particles that are carried along with water as it runs off the land and into waterbodies. Frequent sources include road and building construction sites. Suspended sediment can be detrimental for fish.³⁷

Rainwater that flows off roads, sidewalks, and other impervious surfaces can cause flooding, erosion, and declines in water quality by carrying pollutants with it. Parks can reduce stormwater and filter pollutants,

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lowering the levels of phosphorus, nitrogen, and total suspended solids that end up in waterbodies and lowering management costs. Parks support water quality because their pervious surfaces capture and absorb precipitation, slow runoff, infiltrate and recharge groundwater, and filter out pollutants. Meanwhile, vegetation on parks provides a considerable surface area that intercepts and stores rainwater, allowing some to evaporate before it ever reaches the ground. In effect, these green spaces function like storage reservoirs, reducing peak flows of runoff during rain events, and are an important form of green infrastructure, which naturally filters and infiltrates stormwater.

This section uses economic analysis to determine the value of stormwater infiltration by the City of Buffalo's parks, specifically considering the management costs that are avoided because these areas are parkland, rather than developed. The City of Buffalo's MyTreeKeeper Database inventoried all of the city's street trees to estimate the water-related benefits, finding that these urban trees reduced \$429,000 in runoff and pollutant loading and saved 53.6 million gallons of water each year.³⁸

MEASURING THE STORMWATER MANAGEMENT VALUE OF THE CITY OF BUFFALO'S PARKS

Building off the City of Buffalo's MyTreeKeeper analysis, The Trust for Public Land estimated the value of water quality enhancement provided specifically by parks in Buffalo using *i-Tree Hydro* to calculate the incremental amount of stormwater runoff and pollutant loading that parks prevent from entering water bodies.³⁹ The i-Tree Hydro application is designed to quantify the impact that changes in tree canopy cover and impervious cover are expected to have on stream flow and water quality in an area. The model relies on several inputs, including a map of baseline and alternative scenarios, hourly weather data, land cover types, and elevation. First, maps of the baseline and alternative scenarios were used to understand the land cover of lands in the region. The baseline scenario represents existing conditions of parks. The hypothetical alternative scenario models conditions in which parks are not protected and are therefore developed similar to the surrounding city. To determine a robust estimate of existing land cover, The Trust for Public Land used the *i-Tree Canopy* tool to photo-interpret Google Earth imagery to classify 300 points that were randomly located within each scenario (Table 25).

TABLE 25. PERCENT LAND COVER ESTIMATES FOR THE CITY OF BUFFALO, 2020				
Land cover	Baseline conditions: existing condition of City of Buffalo parks	Alternative scenario: hypothetical conditions where City of Buffalo parks are developed similar to the surrounding city		
Tree/shrub	33.0%	18.0%		
Grass/herbaceous*	46.3%	21.0%		
Bare soil	1.7%	3.0%		
Water	6.7%	3.0%		
Impervious	12.3%	55.0%		

^{*} Grass/herbaceous includes a combination of maintained and wild grass, as well as herbaceous cover including woody plants less than 12 inches in height or nonwoody plants of any height.

The land cover inputs were then used to simulate stream flow and water quality for the city under the two scenarios, that is, the existing condition of City of Buffalo parks and the hypothetical conditions where City of Buffalo parks are developed similarly to the surrounding city. Thus, the model isolates the volume of stormwater that is absorbed, above and beyond what parks would have absorbed had they been developed.

The volume of stormwater runoff or surface runoff is then combined with information about the concentration of pollutants to estimate the reduced pollutant loading due to parks. The model estimates that parks reduce stormwater by 309 million gallons and reduce total pollutants by 301 million pounds annually (Table 26).

$\textbf{TABLE 26.} \ \textbf{STORMWATER RUNOFF AND POLLUTANT LOADING AVOIDED BECAUSE OF THE CITY OF BUFFALO'S PARKS, 2020$

Stormwater runoff volume (gallons) Alternative scenario: hypothetical conditions Baseline conditions: where City of Buffalo parks Volume capture: difference existing condition of are developed similar between baseline conditions City of Buffalo parks to the surrounding city and alternative scenario Type Stormwater runoff volume 942,000,000 1,250,000,000 309,000,000 Pollutant loading (pounds) Baseline conditions: Alternative scenario: Pollutant capture: difference lands within the City of lands in the City of Buffalo between baseline conditions and alternative scenario Type Buffalo's parks that are outside City parks Total suspended solids 421,000,000 566,000,000 145,000,000 Biochemical oxygen 88,800,000 119,000,000 30,500,000 demand Chemical oxygen demand 345,000,000 464,000,000 119,000,000 Total phosphorus 2,000,000 2,690,000 688,000 Soluble phosphorus 796,000 1,070,000 273,000 Total Kjeldhal nitrogen 11,400,000 15,300,000 3,900,000 Nitrite and nitrate 4,120,000 1,420,000 5,530,000 Copper 85,700 115,000 29,500 Lead 392,000 526,000 135,000 Zinc 996,000 1,340,000 343,000 **Total** 875,000,000 1,180,000,000 301,000,000

The Trust for Public Land then determined the economic value of stormwater retention by parks by estimating the cost of managing wastewater. On average, 46.4 billion gallons of wastewater are treated annually in Buffalo. On average, between 2010 and 2019, wastewater treatment operating expenses in

Buffalo were \$35.1 million annually.⁴⁰ Therefore, the average operating cost to treat 1 million gallons of wastewater is \$757. The Trust for Public Land estimates the value of stormwater capture by parks is \$234,000 annually (Table 27).

TABLE 27. THE ECONOMIC VALUE OF THE STORMWATER BENEFITS PROVIDED BY THE CITY OF BUFFALO'S PARKS (2020\$)

Category	Stormwater capture by parks	Value per million gallons	Total value
Stormwater runoff volume (gallons)	309,000,000	\$757	\$234,000

The Trust for Public Land's estimate of the water quality benefit provided by parks in Buffalo is conservative for at least three reasons. First, as mentioned above. the value of stormwater management is based on lower bound estimates of the value. That is, The Trust for Public Land chose to use operating expenses only and did not consider avoided capital expenditures for treatment facilities. These can be significant, as illustrated by the treatment capital plan for 2019-2020 at \$27.5 million.41 Second, this benefit does not include the value provided by constructed green infrastructure investments in parks, such as the Buffalo Sewer Authority's update of the parking facilities at Broderick Park to include green infrastructure elements.42 The City of Buffalo is committed to using green infrastructure as a strategy for managing runoff. In fact, the city's Rain Check 2.0 Grant Program funds green infrastructure projects on private and public property, including rain gardens, green roofs, and bio-swales.⁴³ Research conducted for the city found that a hypothetical \$1 million green infrastructure project could provide \$1.5 million in economic impact and directly support 8.7 employees in the year the project is built.44 Third, the benefit does not directly include the value of removing suspended solids, phosphorous, and nitrogen from entering nearby waterways. This analysis demonstrates that these parks make a significant contribution to the community. Without these parks, the city would have to invest more heavily in systems and programs designed to limit pollution and capture and potentially treat stormwater. Thus, these parks are providing value to the city by providing this natural service.

Reducing air pollution

Air pollution is a significant and expensive problem associated with growth that injures human health and damages structures. Human cardiovascular and respiratory systems are affected, with broad consequences for health care costs and productivity.⁴⁵ In addition, acid rain, smog, and ozone increase the need to clean and repair buildings and other infrastructure.⁴⁶ The vegetation in parks plays a role in improving air quality, helping nearby areas avoid the costs associated with pollution.⁴⁷ Trees and shrubs have the ability to remove pollutants from the air. Leaves absorb gases such as nitrogen dioxide, sulfur dioxide, carbon monoxide, and ozone. By adhering to plant surfaces, particulate matter (PM), which includes small particles of dust, metals, chemicals, and acids, can also be removed.⁴⁸ This section uses economic analysis to determine the cost savings these spaces provide by reducing the concentration of pollutants in the air.

Air pollution is a significant issue across the country and in Erie County as well. Breathing air pollutants, including fine particles and ozone, can lead to premature death, nonfatal heart attacks, aggravated asthma, and lost days of work and school.49 State of the Air is an annual report by the American Lung Association that looks at air quality across the United States in terms of both ozone and particle pollution. Erie County received a D grade for ozone, having an average of three high ozone days in 2016-2018. The county had nine days of particle pollution that were unhealthy for sensitive populations.50 The Buffalo-Cheektowaga-Olean New York metropolitan region also received a D grade for ozone and had several groups at risk, including 15,100 children and 98,100 adults with asthma, 57,600 with COPD, 697 with lung cancer, and 80,500 with cardiovascular disease.51 The positive, pollution-reducing benefits of parks are thus magnified in the region.

For 31 years, the City of Buffalo has been committed to greening up the city by managing and expanding public trees through the Arbor Day Foundation's Tree City USA program.⁵² The City of Buffalo's MyTreeKeeper

Database inventoried all of the city's street trees to estimate the air quality benefits provided by the trees in the city, finding that these urban trees removed 35,200 pounds of pollutants from the air and provided an air pollution removal benefit of \$224,000.⁵³

MEASURING THE AIR POLLUTION VALUE OF THE CITY OF BUFFALO'S PARKS

Building off of the City of Buffalo's MyTreekeeper analysis, The Trust for Public Land estimated the value of air pollution removed specifically by trees in parks using *i-Tree Canopy*. The *i-Tree Canopy* application estimates tree cover and tree benefits for a given area using a random sampling process that classifies ground cover types with Google Earth aerial photography. The Trust for Public Land used the 300 points mapped as part of the *i-Tree Hydro* land cover mapping process within parks as one of five categories for the analysis (Table 28). Parks are mostly grass and herbaceous cover at 46.3 percent of the land cover.

TABLE 28. LAND COVER CLASSES OF CITY PARKS IN BUFFALO, 2020					
Cover class	Percent cover	Acres			
Grass/ herbaceous	46.3%	859			
Tree/shrub	33.0%	612			
Impervious	12.3%	229			
Water	6.67%	124			
Bare soil	1.67%	30.9			

The *i-Tree Canopy* model derives change in pollutants due to the vegetation, including carbon monoxide, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter. The model estimated the value of these changes for each pollutant based on values established by i-Tree researchers. These values are determined primarily from savings in health care costs related to reduced exposure to harmful pollutants, based on the EPA's Environmental Benefits Mapping and Analysis (BenMAP) Program. BenMAP measures the economic value of changes in air quality based on medical

expenses that individuals would pay for air pollution-related hospital visits, medical care, and lost work, as well as their willingness to pay to avoid the pain and suffering, loss of satisfaction, and leisure time.⁵⁵ The values for carbon monoxide and particulate matter greater than 2.5 microns and less than 10 microns were based on national externality values.⁵⁶ These values were then adjusted to 2020 values using the producer price index.⁵⁷

The Trust for Public Land estimates that the City of Buffalo's parks provide \$406,000 in air pollution removal value annually (Table 29). This analysis demonstrates the significant value parks provide by reducing air pollution. If the vegetation in these spaces did not exist, the community would have higher health care costs related to air quality.

TABLE 29. VALUE OF ANNUAL AIR POLLUTION REMOVAL BY CITY PARKS IN BUFFALO (2020\$)

Pollutant	Tons	Value (2020\$)
Carbon monoxide	663	\$480
Nitrogen dioxide	4,080	\$1,460
Ozone	30,900	\$96,600
Particulate matter greater than 2.5 microns and less than 10 microns	4,440	\$15,100
Particulate matter less than 2.5 microns	2,320	\$292,000
Sulfur dioxide	2,330	\$230
Total	44,700	\$406,000

Increasing property value

Parks have a positive impact on nearby residential property values.⁵⁸ All other things being equal, people are willing to pay more for a home close to these amenities. Since property tax is based on a home's value, the increased value of homes near these spaces leads to additional property taxes being generated annually. This section explores the extent to which the park and recreation system in Buffalo enhances the

value of nearby homes and the implications this has on increasing property tax revenues.

The property value added by parks is separate from the value that residents gain from the recreational use of these amenities. Property value goes up even if the resident never visits or uses a given park. Rather, property value is affected by two factors: quality of and distance from the park. Research has found that the quality of parks can affect nearby property values in several ways.⁵⁹ Beautiful natural areas with public access, scenic vistas, and bodies of water are markedly valuable.

Distance from parks is the second factor influencing property values. Nationwide research shows that the premium for proximity to these spaces can extend up to 2,000 feet and can also affect market values by as much as 20 percent. The results of a recent review of U.S. studies found that passive parks can boost home sales by 8 to 10 percent, with greater premiums for larger parks. The National Association of Realtors touts the value of parks and has found that the premium for homes near parks can extend three blocks and start at 20 percent, declining as the distance from the park increases.

Research in cities similar to Buffalo shows that property values are higher near parks. For example, a study of Three Rivers Park in Pittsburgh, Pennsylvania, found that since 2001, home values within the vicinity of riverfront park investment projects had risen 60 percent compared to the 32 percent rise citywide. Research in Cincinnati, Ohio, found that impacts on home prices are enhanced by proximity to parks. For the average property in the study (valued at \$123,000), every 100-meter increase in the distance from the closest park decreased the sale price up to 0.51 percent (\$627). 44

The Buffalo community recognizes the importance of investments in community assets like parks, schools, churches, landmarks, and transit routes. ⁶⁵ Literature from the region and similar cities supports the role that parks and walkability play in increasing property values. There is a growing demand for pedestrian and transit-oriented communities in Rust Belt cities like Buffalo, Pittsburgh, and Detroit. Walkability, which can be enhanced with parks, generates significant

premiums for single- and two-family home sales.⁶⁶ In addition, ongoing efforts to expand the first state park in the City of Buffalo identify the potential of the park to impact the city through property values and other economic benefits.⁶⁷

Using the most conservative method of analysis supported by these and other studies, The Trust for Public Land economists analyzed the enhanced property value and increased tax revenue from residences due to their proximity to the City of Buffalo.⁶⁸ First, the economists identified all homes in the city within 500 feet of these spaces using spatial analysis.⁶⁹ Then, they obtained property value and tax information for all homes in the city using parcel and tax data from the City of Buffalo. This information was then combined with the spatial analysis to estimate a 5 percent value premium for residences proximate to City of Buffalo parks, as well as the accompanying property tax contributions due to this premium. The application of a 5 percent premium is consistent with The Trust for Public Land's conservative approach to measuring property value in over a dozen other communities across the country.

Table 30 shows the results of this analysis for all City of Buffalo parks. In tax year 2020-2021, 21 percent, or 13,700, of the 66,000 homes in Buffalo were located within 500 feet of these amenities. These homes had a total market value of \$2.04 billion. An additional \$102 million in residential property value in the city resulted from proximity to Buffalo's parks. Each year, \$455,000 in additional property tax revenue is generated by Buffalo parks.

TABLE 30. ENHANCED PROPERTY VALUE DUE TO PROXIMITY TO CITY OF BUFFALO PARKS (2020\$)

н	Homes within 500' of parks		
Residential value	\$2,040,000,000		
Residential tax	\$9,110,000		
Enhanced residential value	\$102,000,000		
Enhanced residential tax	\$455,000		

This is a conservative estimate of the enhanced property value provided by parks in Buffalo for two major reasons. First, consistent with previous research, the analysis looked at the increased property value and property tax revenues that resulted from proximity to parks greater than a half-acre only, with a focus on parks that have a significant amount of greenspace to impact property values, rather than facilities such as recreation centers. Research shows that larger parks generally create higher premiums.70 There may be some small parks less than a half-acre in size that boost nearby property values. This would result in an underestimation of the true value of parks in the city. Second, this analysis looked at residential properties only.71 There are certainly commercial or other properties that receive a boost in property values for their proximity to parks; however, this is a lower-bound estimate of the enhanced property value since that value is not captured in this estimate.

Generating travel and tourism

Parks are a critical component of the tourism economy. This section summarizes the scale of the tourism economy in the region/city and estimates the tourism spending that is due to the parks, trails, and open space amenities that make the outdoors and recreational opportunities available to visitors.

Prior to the pandemic, the tourism economy across New York State had seen consistent growth, with traveler spending reaching 35 percent above the state's pre-recession peak set in 2008. New York State's tourism economy expanded in 2018 with 6.2 percent growth in traveler spending. Statewide, this growth translated into \$71.8 billion in visitor spending, which generated \$8.9 billion in state and local taxes.⁷²

Also prior to the pandemic, 6 percent of overnight leisure travelers in the U.S. made trips for the primary purpose of the outdoors and enjoying activities such as camping, hunting, fishing, hiking, and boating.⁷³ Travelers who visit these outdoor resources spend money on food, travel, and lodging during their stay, bringing new dollars and new tax receipts into the region. The Buffalo region boasts outdoor assets that draw residents. Outdoor attractions include the Great Lakes Seaway Trail and the Empire State Trail.⁷⁴ One of

the goals of the state's Empire State Trail initiative, which will connect Buffalo and Albany, is to support regional economic development strategies by promoting recreational and history-based tourism opportunities.⁷⁵ Another attraction is Niagara Falls State Park, one of the many parks in the New York State Park system. Although the specific contribution of Niagara Falls State Park is unknown, visitors to the State Park system generate about \$4 billion each year and support about 45,000 jobs.⁷⁶

More locally, there are many parks in Buffalo that support the tourism economy by attracting visitors. From the Cazenovia Park Casino to the Japanese and Rose Gardens in Delaware Park to Broderick Park, which was recognized as a Network to Freedom site by the National Park Service,77 there are many reasons for travelers to visit Buffalo's parks. Beyond the gems nestled within the city's historic Olmsted Park and Parkway System, Buffalo also boasts unique sites like Tifft Nature Preserve and the Outer Harbor Parkway. Visitors may come to Buffalo for the primary purpose of accessing the outdoors, such as those who travel to the region specifically to spend the day visiting the Buffalo Zoo or attending one of the many events held in parks. For example, Buffalo hosts one of the largest and longest running Juneteenth celebrations in the country at MLK Jr. Park as well as the Corporate Challenge, which attracts over 12,000 runners who participate in a 3.5-mile road race through Delaware Park.78

Park resources also enhance the visitor experience for people already traveling to the region. Outdoor recreation activities can often extend the length of a stay in the region for visitors who have a varied itinerary, such as those who might take a walk along the Lincoln Parkway after attending a special event, like Ride for Roswell, or visiting family. Either way, visitors can enjoy these resources and will have several expenditures related to their trip that contribute to the local economy. Even if they do not have to pay to use the park resources, they may eat at local restaurants, buy gas for their vehicle during the trip, or make a contribution to support a guided walk.

One way to estimate the contribution of parks to the tourism economy involves understanding the visits

made by travelers who come primarily to access the outdoors and the associated spending these travelers generate.⁷⁹ To calculate the tourism benefit provided by outdoor amenities as a whole, The Trust for Public Land's economists first isolated the proportion of visitors to the City of Buffalo whose primary purpose for travel was the outdoors and then applied this percentage to total direct tourism expenditures for the city. Based on visitor survey data, they determined that 2 percent of the 3.2 million domestic overnight visitors and 4 percent of the 4.4 million domestic day visitors to Buffalo cited the outdoors as the main reason for their trip.80 Applying these percentages to the total direct tourism spending by each visitor type generated in Buffalo, the economists estimated that \$23.6 million in spending each year is attributable to the parks that make the outdoors accessible to domestic tourists (Table 31).

TABLE 31. ESTIMATED DOMESTIC TOURISM
SPENDING ATTRIBUTABLE TO THE
OUTDOORS IN BUFFALO (2021\$)

Category	Value
Domestic day visitors, 2019	4,400,000
Total direct spending by domestic day visitors, 2019	278,000,000
Percent of domestic day visitors whose primary purpose is the outdoors	4%
Portion of direct domestic visitor spending attributable to parks	11,100,000
Domestic overnight visitors, 2019	3,200,000
Total direct spending by domestic overnight visitors, 2019	624,000,000
Percent of domestic overnight visitors whose primary purpose is the outdoors	2%
Portion of direct domestic visitor spending attributable to parks	12,500,000
Direct domestic visitor spending attributable to the parks	23,600,000

This spending includes parks that are owned and managed by the City of Buffalo, as well as private or other public outdoor amenities, such as state or county parks. For example, on average, 241,000 people visit the Buffalo Harbor State Park and Marina each year. Park Nearby Niagara Falls State Park, while not within city limits, also likely contributes to Buffalo's tourism economy, with 9.52 million people visiting the park each year. Data was not available to isolate resident versus tourist visits and the respective economic spending profiles; however, this \$23.6 million estimate of economic value is conservative because it does not include the spending of international visitors, such as those from Canada.

This visitor spending value also includes spending at outdoor amenities that are provided privately or by nonprofit organizations. For example, Buffalo and Erie County Botanical Gardens received nearly 147,000 visits in 2019 and 68,700 in 2020. 83 Although private amenities like these may also provide access to the outdoors for visitors, data is not available to break out the visitation between resident and nonresident users.

Bolstering economic development

Buffalo's parks contribute to economic development in the region. These amenities enhance quality of life as well as offer many leisure opportunities that are important generators of economic activity, attracting talent, employers, and investment to the region. This section explores how these amenities enhance quality of life, boost the recreation economy, and support local businesses.

QUALITY OF LIFE

Quality of life plays a critical role in the region's economic development. Employees in today's economy consider more than salary when choosing where to work. For example, focus groups conducted by Carnegie Mellon University have found that young creative workers, particularly those in high-technology fields, consider lifestyle factors, such as environmental and recreational quality, more heavily than the job itself when choosing where to live. Additional research on local economic development has focused on quality of life and concerns about the natural, social, and cultural environment as well as on lifestyle

affordability. This research has looked at a broader range of quality-of-life considerations, from transportation and housing to health care, labor, and the environment. Parks contribute to local economic development by making communities more attractive to new residents and also providing low-cost opportunities for recreation and health that increase the quality of life for residents.85 The importance of the region's quality of life for economic development is acknowledged by the state's community and economic development organizations. For example, the Better Buffalo Fund Program includes strategies to create vibrant neighborhoods and provide access to employment opportunities.86 The American Planning Association has recognized Delaware Park, which is often defined as the "heart" of the community, as one of the Great Places in America.87

OUTDOOR RECREATION

With 52 percent of New York residents participating in outdoor recreation each year, and many visitors coming from outside the state to access the outdoor amenities, the outdoor recreation industry is a solid driver of the state's economy. New York residents are more likely to participate in snowmobiling and downhill skiing than the average American. Consumer spending on snow sports and wildlife watching (\$6.7 billion) generates more than the entire economic impact of the state's film industry (\$6.5 billion). As a result of the outdoor amenities the state boasts, outdoor recreation generates \$41.8 billion in consumer spending annually, which supports 313,000 direct jobs with \$14.0 billion in wages and salaries as well as \$3.6 billion in state and local tax revenue.88 Outdoor recreation also accounts for 1.7 percent of the state's gross domestic product (GDP), which means the outdoor recreation industry, which adds \$29.2 billion to the state's economy. This supports 2.3 percent (nearly 291,000) outdoor recreation jobs.89

Buffalo's parks enable recreation activities that generate economic benefits by supporting businesses, including those that sell recreation equipment. In order to understand the recreation-related economic activity in Buffalo, The Trust for Public Land used information from Esri Business Analyst to capture data on the local economy, consumer behavior, participation in leisure

activities, and business activity.90 Using this tool, one can begin to understand how an area compares to U.S. averages, as well as to other places across the country such as the six comparison cities considered in this Park Master Plan study: Cleveland, Ohio; Cincinnati, Ohio; Newark, New Jersey; Rochester, New York; St. Louis, Missouri; and Syracuse, New York. The Trust for Public Land used data obtained with Esri Business Analyst and from the Bureau of Economic Analysis to understand how the Buffalo economy compares with these other cities (see Table 32). In terms of population and incomes, Buffalo consistently lands in the middle compared to the other six cities. Among the group, population ranges from 144,000 to 376,000 and Buffalo ranks 5th. Median household income in the comparison group ranges from \$29,400 to \$44,500, with Buffalo falling in the middle with \$36,900.

TABLE 32. DEMOGRAPHIC CONTEXT FOR COMPARISON CITIES (2020\$)							
City	Population, 2020	Median age, 2020	Households, 2020	Median household income, 2020	Average household budget, 2020	Market potential index, 2020	Gross domestic product of county containing city, 2019
Buffalo	260,000	35.3	114,000	\$37,000	\$48,000	62	\$53,900,000
Cincinnati	310,000	34.4	140,000	\$41,500	\$57,700	75	\$70,300,000
Cleveland	376,000	37.4	162,000	\$29,400	\$40,300	52	\$87,900,000
Comparison average	273,000	34.3	114,000	\$36,800	\$49,300	64	\$59,200,000
Newark	284,000	34.0	97,400	\$37,500	\$47,900	62	\$52,100,000
Rochester	208,000	32.7	87,500	\$32,500	\$43,800	57	\$43,100,000
St. Louis	314,000	36.1	142,000	\$44,500	\$58,800	76	\$72,200,000
Syracuse	144,000	31.2	57,500	\$35,500	\$47,000	61	\$29,300,000
Buffalo compared to average	95.4%	103.0%	99.3%	100.0%	97.4%	97.1 %	91.2%

Esri Business Analyst compiles estimates of household budget expenditures and calculates a spending potential index (SPI) that represents the amount spent for products and services relative to the national average. In 2020, Buffalo households spent an average of \$48,000 on household budget expenditures, including items like food, housing, transportation, health care, and education. This is 62 percent of the national average for household budget expenditures. In fact, the budgets across all cities are well below national averages, ranging from 62 to 76 percent of budgets across the country. The size of Buffalo's economy, based on gross domestic product in its surrounding county, falls directly in the middle of the other comparisons. These findings will provide important context for interpreting the statistics related to recreation spending later in this section.

PARTICIPATION IN RECREATION

Esri Business Analyst allows for the examination of outdoor recreation activities across the entire population (e.g., municipal parks and private facilities). According to this tool, participation in recreation activities is prevalent among residents of Buffalo.⁹¹ The top activity was walking for exercise-18.2 percent of households did so in the last 12 months (Table 33). Other popular activities included swimming (11.1 percent), jogging or running (10.3 percent), fishing (8.8 percent), and hiking (8.4 percent) – all recreation activities available through Buffalo's Division of Parks and Recreation. Esri Business Analyst also calculates a market potential index (MPI) that measures the relative likelihood of individuals and households in an area participating in certain activities compared to the U.S. average.⁹² Based on the market potential index, The Trust for Public Land knows estimates households in Buffalo are less likely than households nationwide to participate in certain outdoor activities, such as hiking. However, Buffalo households are more likely than households across the country to play softball, football, Frisbee, basketball, tennis, and soccer or go horseback riding. Baseball and volleyball are also consistent with rates of participation nationally.

TABLE 33. ESTIMATED PARTICIPATION IN RECREATION, SPENDING, AND MARKET POTENTIAL IN BUFFALO (2020)

POTENTIAL IN BU	Percent of households	Market
Activity	that participate annually	potential index (MPI)
Walking	18.2%	77
Swimming	11.1%	73
Jogging/running	10.3%	84
Freshwater fishing	8.8%	81
Hiking	8.4%	69
Basketball	8.4%	107
Road bicycling	7.3%	79
Yoga	6.7%	81
Golf	6.0%	76
Canoeing/kayaking	5.3%	83
Football	5.1%	109
Soccer	4.4%	105
Frisbee	4.0%	109
Baseball	4.0%	100
Tennis	3.8%	107
Mountain biking	3.5%	85
Volleyball	3.4%	100
Softball	3.1%	110
Boating	2.8%	67
Ice skating	2.6%	93
Horseback riding	2.3 %	102

RECREATION EXPENDITURES AND SPENDING POTENTIAL

Individuals who participate in recreation activities purchase products to enhance their experiences, such as exercise clothing, footwear, bicycles, and fishing tackle. In addition to participation, the Esri Business Analyst tool compiles estimates of recreation expenditures and calculates a spending potential index (SPI) that represents the amount spent on products and services relative to the national average.⁹³ As with the MPI, the SPI can be useful for comparing Buffalo to other cities and the national averages.

The SPI predicts that residents of Buffalo spend \$14.2 million annually on sports, recreation, and exercise equipment, with households spending an average of \$125 (Table 34). This spending—among other recreation equipment expenditures—includes an average of \$41.80 on exercise equipment, \$40.10 on hunting and fishing equipment, \$17.70 on bicycles, and \$14.10 on camping equipment. From a run in Delaware Park after work to playing a round of golf at Cazenovia Park, the park system enables a wide array of recreation activities and thus supports these recreation expenditures.

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TABLE 34. ANNUAL HOUSEHOLD SPENDING ON SPORTS, RECREATION, AND EXERCISE EQUIPMENT IN BUFFALO, 2020

Spending category	Average amount spent per household	Total spending	Spending potential index
Sports, recreation, and exercise equipment	\$125.00	\$14,200,000	62
Exercise equipment and gear, game tables	\$41.80	\$4,740,000	64
Bicycles	\$17.70	\$2,010,000	57
Camping equipment	\$14.10	\$1,600,000	64
Hunting and fishing equipment	\$40.10	\$4,550,000	64
Winter sports equipment	\$2.41	\$273,000	48
Water sports equipment	\$3.26	\$370,000	50
Other sports equipment	\$3.98	\$452,000	56
Rental and repair of sports, recreation, and exercise equipment	\$1.49	\$169,000	53

Average household spending in the comparison cities ranges from \$104 to \$154 per year. This ranges from between 51 and 75 percent of the national average. Spending on this category in Buffalo is lower than national levels and in two of the six comparison cities; however, it still results in \$14.2 million in spending, which contributes to local business revenues when purchases are made locally. Although spending on recreation equipment is lower in Buffalo and all the

comparison cities than spending levels nationally in this category, it is important to note that incomes are also lower. Given this lower level of income that is available to spend on discretionary purchases like recreation activities and equipment, the free and low-cost amenities and activities available through the city parks system provide additional value in meeting this recreation demand, especially for lower income residents.

TABLE 35. ANNUAL HOUSEHOLD SPENDING ON SPORTS, RECREATION, AND EXERCISE EQUIPMENT FOR BUFFALO AND COMPARISON CITIES (2020)

City	Average amount spent per household	Total spending	Spending potential index	Median household income
Buffalo	\$125	\$14,200,000	62	\$37,000
Cincinnati	\$151	\$21,200,000	75	\$41,500
Cleveland	\$104	\$16,900,000	51	\$29,400
Newark	\$113	\$11,000,000	56	\$37,500
Rochester	\$114	\$9,960,000	56	\$32,500
St. Louis	\$154	\$21,800,000	76	\$44,500
Syracuse	\$123	\$7,070,000	61	\$35,500

Providing recreational value

In addition to bolstering the tourism economy, the parks owned by the City of Buffalo provide substantial economic benefits through their wide use by local residents. These amenities offer value to residents by providing access to recreational opportunities such as walking, visiting with family, relaxing, playing in playgrounds, picnicking, enjoying nature, and participating in team sports such as basketball, soccer, and tennis.

Economists know that park amenities provide value because people are willing to pay for recreational access to parks, and even private facilities. This value exists even if individuals do not have to pay to access these amenities (e.g., pay an entry fee). Most recreational uses in the parks are available at low or no cost. Thus, the benefit accrues to the user in one of two ways: by providing cost savings to individuals who were willing to pay to recreate but did not have to and by providing travel cost savings to individuals who do not have to travel to access a substitute site. The Trust for Public Land's most recent economic benefits analyses in cities across the country indicate that on average, each park visit provides a \$3 value for residents.

While it is known that City of Buffalo's parks receive high levels of use each year, data is not available to estimate visitation. Future survey work could focus on the estimation of the recreational use value provided by the parks in Buffalo by understanding the frequency of park use and the types of activities residents engage in.

The City of Buffalo is committed to ensuring that the parks serve the needs of residents. For example, it is working with the University of Buffalo's Regional Institute School of Architecture and Planning to transform LaSalle Park into the Ralph C. Wilson, Jr. Centennial Park. The process, which started in 2018, has involved a high level of community engagement and ongoing public collaboration.

Providing health care cost savings

Access to parks, like those provided by the City of Buffalo, can help communities meet health goals and reduce medical costs for residents. The relationship between health, nature, and parks is well documented in the health care literature and recognized locally through partnerships between the city and health organizations such as Blue Cross Blue Shield and Independent Health. This section discusses the important role that parks, including those owned and maintained by the City of Buffalo, play in improving the health of residents.

Green spaces have been proposed as a health determinant because of the various mechanisms through which they have been found to improve health and well-being. Recent research has shown that there is an inverse relationship between greenness and mortality, indicating that increasing greenspace should be considered as a public health intervention.95 Parks provide numerous health benefits, from enhancing mental health to improving physical health. One field of study indicates that people who have increased exposure to the outdoors show long-term mental health improvements. Several studies have demonstrated that access to public outdoor spaces can decrease stress, aid in mental fatigue recovery, and reduce levels of depression and anxiety.96 Recent research has found that visiting parks can improve mental health, which results in global health care cost savings of \$6 trillion per year.⁹⁷ Exposure to natural environments or more green areas provides further benefits. Researchers have found that leisurely walks in natural environments lead to a 12 percent decrease in the stress hormone cortisol and are linked to lower depression and perceived stress.98 In addition, women living with a higher amount of greenness around their homes had a 12 percent lower rate of death from non-accidental causes compared to women living with the least amount of greenness.99 The City of Buffalo has many passive-use parks that improve the mental health of the city's residents.

In addition to mental health benefits, studies have found that physical inactivity and poor diet together are the second-leading cause of death in the United States. 100 Physical exercise can reduce the likelihood of illnesses such as obesity, cardiovascular disease, diabetes, and arthritis, and, consequently, it can also reduce the associated medical costs. 101 There are many ways by which nature has been empirically tied to specific physical and mental health outcomes. 102 Studies of health care economics and policy have

established that increased access to public outdoor spaces and more biking and walking infrastructure encourages people to exercise, reducing overall health care expenditures. Investment in public open space encourages behavioral changes that not only reduce chronic diseases and health care costs, but also improve quality of life. The City of Buffalo works with local partners to increase the health of residents. For example, BlueCross BlueShield of Western New York has hosted a Fitness at Canalside series for six years. In addition, Soccer for Success is a free after-school program for young participants from kindergarten to 8th grade, offered by Independent Health Foundation, in collaboration with the Buffalo Soccer Club, the United Way of Buffalo, and Erie County.

The Robert Wood Johnson Foundation recently ranked the health of New York counties, taking into consideration length of life, quality of life, health behavior (including physical inactivity and access to exercise opportunities), clinical care, social and economic factors, and the physical environment. The results show that Erie County residents are less physically inactive than the average resident of New York. That is, according to the Robert Wood Johnson Foundation, 26 percent of Erie County's population was physically inactive in 2020, compared to 25 percent of the state's residents. Having access to exercise opportunities, including but not limited to parks, is critical to a community's level of physical activity. County-level data show that the majority of residents have access to these opportunities. That is, 96 percent of Erie County residents have access to exercise opportunities. 107 The Trust for Public Land's ParkServe® database indicates that 89 percent of the residents in the City of Buffalo have access to parks within a 10-minute walk. 108 Because access does not guarantee use, the city is working to ensure that the parks are meeting the needs of the local communities. The process to transform LaSalle Park into the Ralph C. Wilson, Jr. Centennial Park is a great example of that commitment.109 In addition, the city's ongoing master park plan, of which this is a part, has the goal of improving the park system to facilitate park use for Buffalo residents.

Physical inactivity and obesity are challenging health problems that have significant impacts on the resident population. In 2020, 30 percent of county resident

adults were obese.110 Total obesity-related costs in New York State are more than \$11.8 billion annually, with \$4.3 billion of those costs funded by Medicaid.111 The Centers for Disease Control and Prevention (CDC) recognizes that physical activity helps improve overall health and reduces the risk for chronic diseases. As such, the CDC promotes physical activity guidelines, defining sufficient activity as at least 150 minutes of moderate-intensity activity per week or at least 75 minutes of vigorous-intensity activity per week, along with muscle-strengthening activities at least two days per week.112 Having access to places to walk, such as paths and trails in Buffalo parks, can help individuals meet these recommendations for regular physical activity.¹¹³ Parks are some of the most commonly reported convenient places for improved physical and mental health, especially if the space is well maintained, safe, and accessible.114 From a public health perspective, parks provide low-cost, high-yield wellness opportunities.115

Residents who use the park and recreation system to exercise at a frequency, duration, and intensity that meets these guidelines have lower health care costs. Based on previous work in health care economics, the Trust for Public Land estimates physically active adults save an average of \$1,250 on annual medical costs compared to adults who are not physically active. In addition, persons over the age of 65 typically incur two or more times the medical care costs of younger adults. 116 Some research indicates that the average health care expenses for adults over 65 can be over three times those of working-age people.¹¹⁷ The cost savings are based on the National Medical Expenditures Survey, which has been widely cited in similar studies. 118 Future survey work could be undertaken to understand the extent to which resident park visitors use the parks to an extent that results in health care cost savings.

Economic benefits in the context of the COVID-19 pandemic

Research for this study was completed during the COVID-19 pandemic. At the time, the pandemic had already proved that parks play an important role in enhancing physical and mental health while providing critical spaces for people to more safely connect with

nature and each other. It also highlighted the challenges associated with operating parks under such complicated circumstances, especially given the stay-at-home orders and other recommendations that limited movement and upended funding models.

At the time of this analysis, high levels of uncertainty existed around the extent to which the COVID-19 pandemic would affect the economy or the economic benefits provided by parks. In the United States, economic activity plummeted and unemployment soared in the wake of the coronavirus. Despite not knowing the scale of these impacts, the data available about the economy prior to the pandemic allowed The Trust for Public Land to provide a baseline understanding of the ways in which the park system in Buffalo provides economic benefits and how these amenities may be a part of the community's strategy to recover economically.

For example, the importance of outdoor tourism is growing in the context of the pandemic. A travel sentiment survey conducted during the pandemic in September 2020, indicated that 69 percent of respondents had plans to travel in the next six months, with future travel plans focused on individual outdoor activities in addition to road trips and visiting friends and family. This focus reflected the relative perceived safety of those types of getaway¹¹⁹ and the importance of parks in providing access to outdoor activities. A subsequent report, released in February 2021, demonstrated that more people were planning to travel again. In fact, 81 percent visitors of respondents planned to travel in the next six months, with 45 percent planning to visit friends and family, 35 percent planning to go to a beach or waterfront, 26 percent planning to visit a national park, state park, or monument, and 18 percent planning to go on a hike or bicycle ride. 120

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 $During \ the \ COVID-19 \ pandemic, Buffalo's \ parks \ provided \ residents \ with \ safe, outdoor \ spaces \ to \ gather. \\ @ZHITING \ PHUA/BUFFALO \ OLMSTED \ PARKS \ CONSERVANCY$



The fountain at Burke's Green Park. © STEPHEN M. BUCCILLI

SECTION 6.

Neighborhood Park Investment Need

Introduction

Mapping key resources, hazards, and demographic factors was a fundamental part of the Buffalo Master Plan process. To determine the highest-priority areas for park investment, the planning team employed Geographic Information Systems (GIS) to map the most critical datasets for determining park investment need. For more on this approach, see Section 2.

The project's GIS analysis was organized into the following mapping topics:

- Social indicators
- Health indicators
- Natural and built environment indicators

In this section, each of these mapping topics is explained, along with the resulting topic-specific map. Although these specific mapping topic results were combined to create one Overall Priorities Map (presented at the end of this section), the results of each topic are also useful independently.

This process was guided by a group of local experts serving on the project steering committee. Through webinars and in-person project kickoff, the steering committee guided the analysis by helping to (1) compile a list of relevant criteria to map, (2) weight the data through an online survey, and (3) review results to ensure they accurately reflect on-the-ground realities. This mapping process was iterative, with regular review from the advisory team, followed by revisions based on their input. A list of criteria was generated at the steering committee kickoff meeting, with additional criteria being added or removed based on data availability and the continued input of the steering committee. The analysis drew on national datasets (e.g., census, FEMA, CDC 500 Cities, EPA's Environmental Justice Screening and Mapping Tool, and HUD's racially concentrated areas of poverty data) as well as local studies, such as Raincheck 2.0, The Buffalo Bicycle Master Plan, crime data, and NFTA public transportation data. Detailed GIS metadata is available in Appendix 3.

Social Indicators

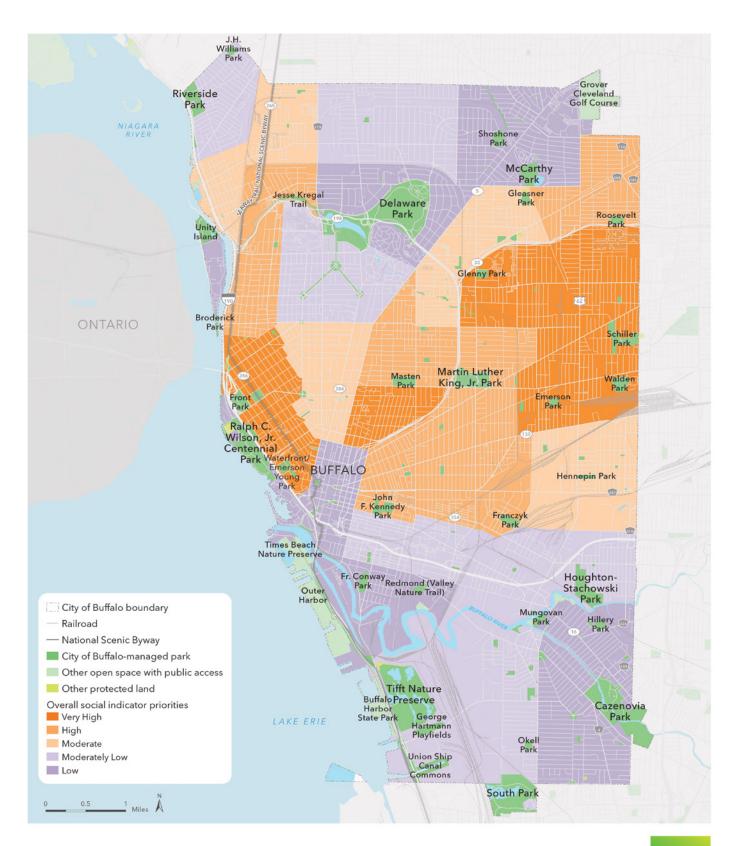
This map displays the community indicator priorities for the Buffalo Parks and Recreation Master Plan. Community factors have major implications for a neighborhood's park need. Under-resourced communities may have the greatest need for the services provided by parks and the most limited ability to travel long distances to access such services elsewhere or to pay to use private recreational facilities. Eight indicators were combined and weighted based on the input of the project Steering Committee to create this map. The indicators are:

- Poverty (19 percent)
- Racially concentrated areas of poverty (19 percent)
- Acres of park per 1,000 people (15 percent)
- Children (15 percent)
- Population density (11 percent)
- Seniors (7 percent)
- People of color (4 percent)
- Disabled population (4 percent)

Based on these metrics, the highest priority areas are primarily located in the West Side and Lower West Side neighborhoods, as well as East Side neighborhoods such as Genesee-Moselle, Delavan Grider, Kenfield, and Martin Luther King, Jr. Park (see Figure 19).



Lang Weber Park in the Schiller Park Neighborhood, one of the highest priority areas based on social indicators. © RPA



Overall social priorities

BUFFALO PARKS AND RECREATION MASTER PLAN

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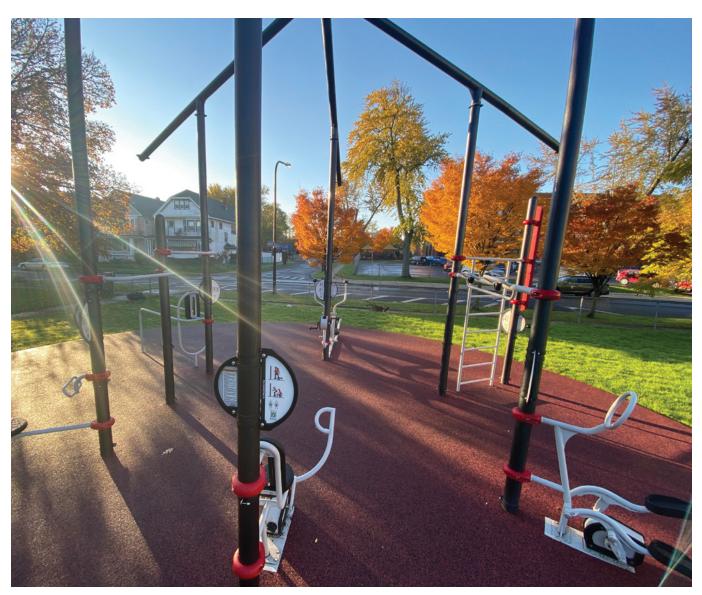
Health Indicators

Parks can play a critical role in supporting community health, providing residents with a free, close-to-home opportunity for physical activity. Parks also help relieve stress and combat social isolation. This map shows where the individual health indicators stack up, offering multiple health benefits to the Buffalo community if park improvements occurred in that neighborhood. Below are the individual weights applied to each health indicator to create the combined overall result:

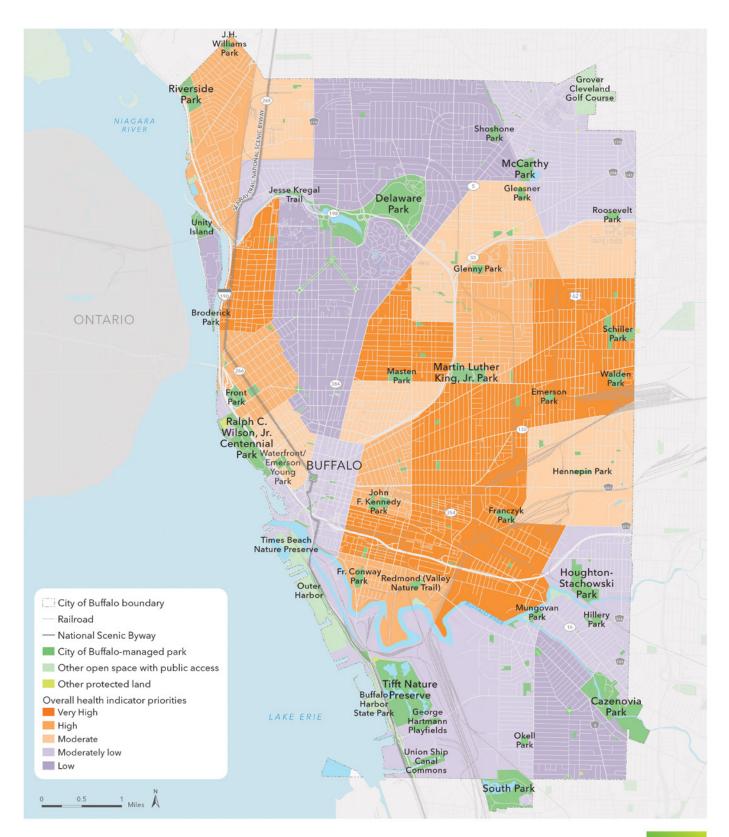
- Physical inactivity (17 percent)
- Poor mental health (17 percent)

- Poor physical health (14 percent)
- Poor air quality (14 percent)
- Heart disease (10 percent)
- Population without health insurance (10 percent)
- Asthma hospitalizations (7 percent)
- Diabetes (7 percent)
- Obesity (3 percent)

Based on these health metrics, the highest need neighborhoods include the Upper West Side and the East Side neighborhoods of Schiller Park, Broadway Fillmore, Masten Park, Genesee-Moselle, Seneca Babcock, and Ellicott (see Figure 20).



Horace "Billy" Johnson Park is Buffalo's first fitness park, and was developed through collaboration between the City and AARP. The project is just one example of how Buffalo's part support community health. © STEPHEN M. BUCCILLI



Overall health priorities

BUFFALO PARKS AND RECREATION MASTER PLAN

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Natural and Built Environment Indicators

Parks can make major improvements to the local environment, helping to absorb rainfall before it makes its way downstream, deteriorating water quality and contributing to flooding. Parks can also cool surrounding neighborhoods by providing shade and creating a gap in hot surfaces like pavement. Trees and urban canopy also filter air pollutants, which can cause respiratory diseases such as asthma. This map indicates where parks, trees, and green infrastructure can help solve a range of problems in the natural and built environment. The indicators mapped and weights applied included:

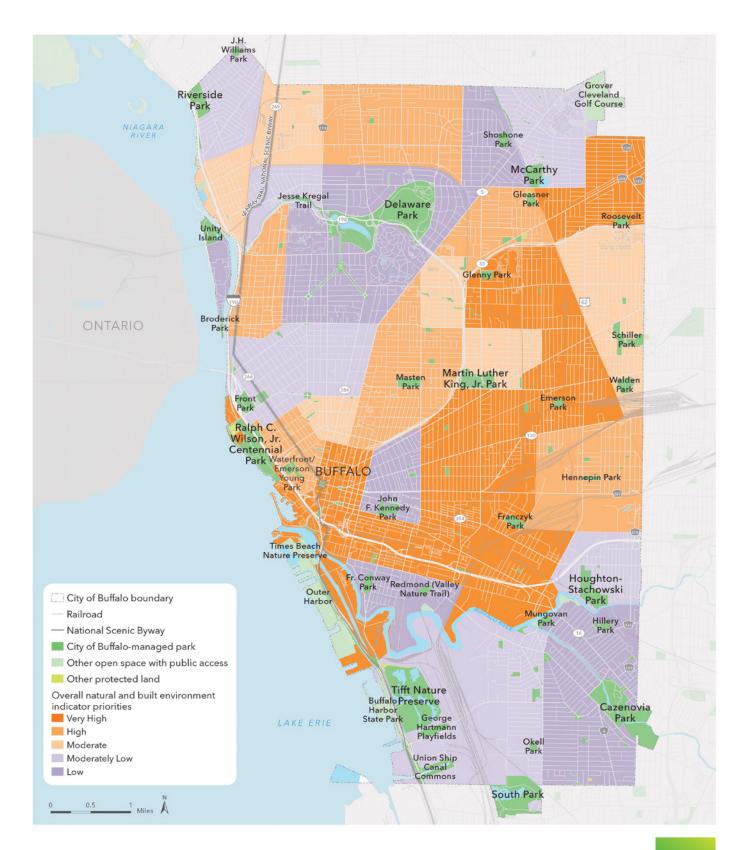
- Tree canopy (14 percent)
- Impervious cover (14 percent)
- Crimes per 1,000 residents (14 percent)

- Percent of neighborhood in priority combined sewer overflows (CSO) basins (11 percent)
- Percent of neighborhood in urban heat island (11 percent)
- Houses in distress (8 percent)
- High traffic stress roads (8 percent)
- Pedestrian and bike accidents (6 percent)
- Bus stops (6 percent)
- Percent of neighborhood in a flood zone (3 percent)
- Existing bike facilities (3 percent)
- Proposed bike facilities (3 percent)

The highest-ranking neighborhoods included the Central neighborhood, Seneca Babcock, Ellicott, Broadway Fillmore, Genesee-Moselle, Delavan Grider, and Kensington-Bailey (see Figure 21).



Parks can enhance a city's environmental quality. This bioswale at Ralph C. Wilson, Jr. Centennial Park improves water quality by absorbing rainfall and reducing runoff. © STEPHEN M. BUCCILLI



Overall natural and built environment priorities

BUFFALO PARKS AND RECREATION MASTER PLAN

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Overall priority indicator neighborhoods

This map shows where the social, health, and natural and built environment indicators stack up, offering multiple benefits to the community if park improvements occurred in a neighborhood. Equal weights were applied to each of the three map topics. By incorporating data from such varied topics into a single analysis, the map accounts for the broad

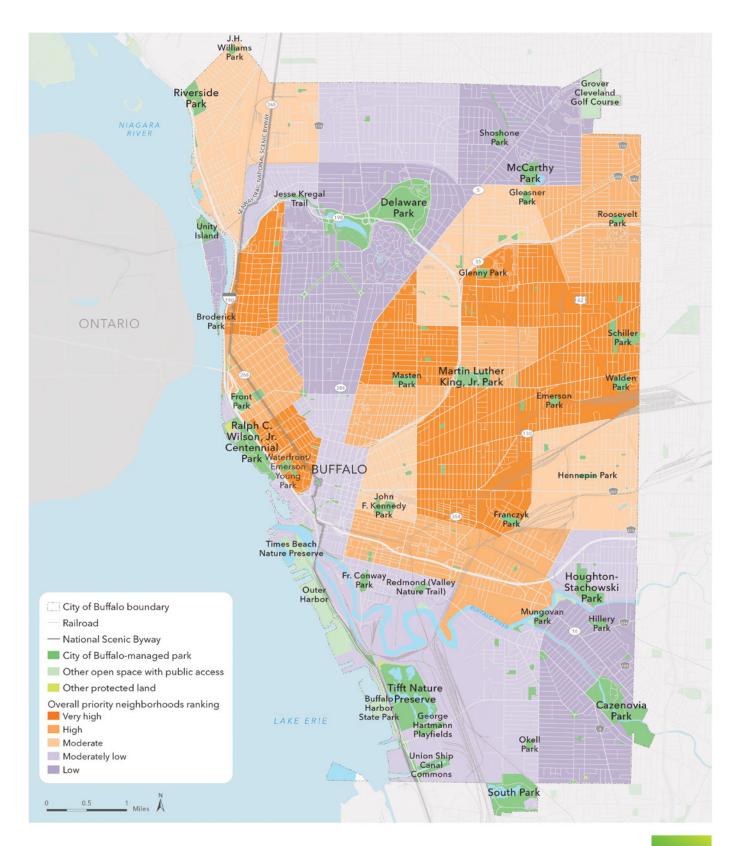
spectrum of benefits parks provide, offering the most holistic view of park need in Buffalo.

In the west, the highest priority neighborhoods included the Lower West Side and Upper West Side. On the East Side, the neighborhoods included Schiller Park, Genesee-Moselle, Delavan Grider, Masten Park, Broadway Fillmore, Seneca Babcock, and Ellicott (see Figure 22).



Sears Paderewski Park in Broadway Fillmore, one of the highest ranking overall priority neighborhoods. © RPA

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Overall priority neighborhoods

BUFFALO PARKS AND RECREATION MASTER PLAN

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Buffalo Unlimited Activity Book entries. @ ARTXLOVE

SECTION 7.

Community Priorities

"I love [parks]. They are the heart of the city."

"One of the reasons I love living in Buffalo are the parks. They are beautiful."

"For me, a city apartment dweller, they are my backyard! They are everything to me."

"First, as a place for everyone to feel equal. Even if someone does not have a backyard or a pool at home or a garden, they can feel like they have ownership over these places. It makes it so that even the poorest people can have a nice space to use as needed and free events that they can access in their community."

"Parks epitomize the resurgence of the city and a growing awareness of the value of nature and our unique scenery."

 SURVEY PARTICIPANTS RESPONDING TO THE QUESTION, 'WHAT DO BUFFALO PARKS MEAN TO YOU?'

Introduction

Community engagement was a key component of the Buffalo Parks Master Plan process. By hearing directly from community members, representatives, and a diverse group or representatives from organizations that have deep knowledge of Buffalo's parks, the planning team could understand barriers to park use and priorities for improving the park system. The project's timeline (February of 2020 – July 2021) overlapped almost entirely with the COVID-19 pandemic. For this reason, many of the in-person engagement activities that had been planned were removed in favor of activities that could be carried out remotely, such as virtual focus groups, phone interviews, an online survey, and an activity book. In order to hear from as

many residents as possible in that context, the project team employed a variety of engagement strategies.

Overall survey responses were robust and represented a wide diversity of Buffalo ethnic groups, ages, and income and education levels; responses were not spread proportionately among these demographics. Survey respondents were skewed toward females (57 percent), white respondents (74 percent), and the affluent (30 percent of households earned over \$100,000 annually). To avoid biasing the survey's results toward these demographics, results to certain questions were analyzed independently based on race/ethnicity and income. This was done wherever statistical analysis of survey results indicated significant differences in answers between these groups (see Appendix 4 for the full online survey results).

This section will focus on summarizing engagement results as a whole, including our in-depth conversations about park experiences with park stakeholders, our steering committee, and focus groups, and their reactions to relevant data and analysis we presented. The results discussed in this section also draw on the community engagement results from the Division of Citizen Services' Wintermission project, which engaged Buffalo residents in an online survey as well as in-person events in 2020 to better understand winter activation opportunities. Launched in 2018 by the group 880 Cities, Wintermission set out to combat social isolation and increase levels of physical activity in winter for all residents, no matter their age, ability, socio-economic, or ethnocultural backgrounds. Buffalo was selected as one of three pilot cities.

For a full listing of community engagement methods with descriptions, see <u>Section 2</u>. Separate summaries from each of the project's engagement activities can also be reviewed in Appendix 4.

Park Use

According to the project's online survey results, park use in Buffalo is high. The most common park visitation rate is 1–4 times per month, representing roughly

a third of survey respondents. Over half of survey respondents visit parks more frequently than this, with 31 percent visiting parks over 10 times per month.

How often do you visit parks on a monthly basis?

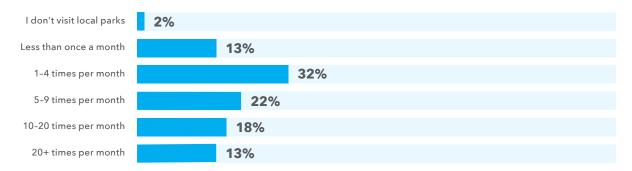


FIGURE 23. Park visitation rates in Buffalo

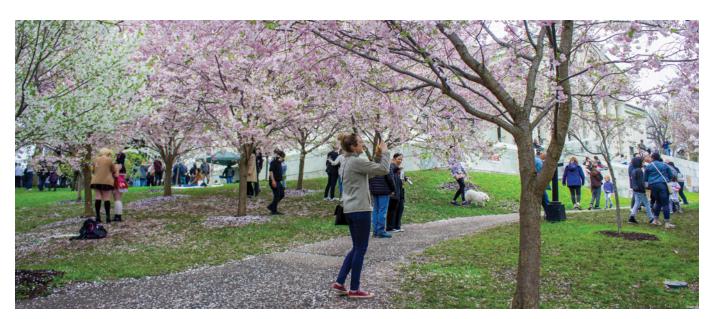
WHICH PARKS ARE PEOPLE VISITING THE MOST?

"The perception is we have a couple of larger parks that are heavily used by the public, while some of the remaining (smaller, less prominent) parks remain underutilized."

- INTERVIEW PARTICIPANT

Parks use and perceptions around park quality vary greatly based on park size. Buffalo's large parks were

identified as a strength of the system throughout the process. This is true for both the Olmsted parks (and specifically Delaware) as well as other large parks, such as Ralph C. Wilson, Jr. Centennial Park. Smaller neighborhood parks were frequently mentioned as underutilized places. Survey results support this conclusion, with 47 percent listing Delaware Park as the parks they visit most frequently (see Figure 24). Among Black survey respondents, 41 percent of respondents listed Martin Luther King, Jr. Park.



Delaware is Buffalo's most visited park. © BUFFALO OLMSTED PARKS CONSERVANCY

What is the name of the park you visit most frequently?



FIGURE 24. What is the name of the park you visit most frequently? Words were scaled based on the frequency with which each word was used, with more frequently used words appearing larger.

Many stakeholders felt that specific outreach promoting smaller, less frequently used parks could also help to activate these spaces. Participants felt that the system's smaller parks need better exposure and more signage, noting that only the people who live nearby know that those parks exist. Some also suggested a campaign to

visit parks in other parts of the city, such as a parks tour (similar to a mural tour) or a push to promote jogging in different parks around the city. Engagement participants also felt that these smaller neighborhood parks could have more programming and a wider variety of programming.

What is the most frequent mode of transportation you use to visit that park?

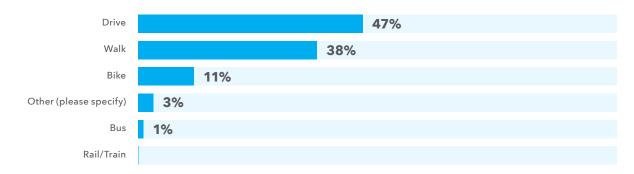


FIGURE 25. What is the most frequent mode of transportation you use to visit that park?

GETTING TO THE PARK

Driving is the most common method of getting to the park, with 47 percent saying they use this method. However, walking is also fairly common at 38 percent. These numbers vary substantially by race, with 66 percent of Black respondents driving compared to 44 percent of white participants. Rates of driving were also higher for participants making less than \$35,000 per year at 53 percent. This may reflect differences in

accessible walking routes by neighborhood, or the distances travelled to arrive at a park. If, for example, the majority of east side residents are traveling to Martin Luther King Jr. Park to participate in a specific planned activity, due to an affinity for this park, or because of problems (e.g., safety, maintenance, aesthetics) in their neighborhood parks, this could explain these responses.

WHY PEOPLE VISIT BUFFALO PARKS

Public parks provide major support for public health in Buffalo, with 74 percent of survey respondents saying they visit parks for the purpose of exercise and fitness. Recreation/fun, experiencing nature and wildlife, and socializing with friends or family were also very common responses.

Why do you use local parks? Check all that apply.

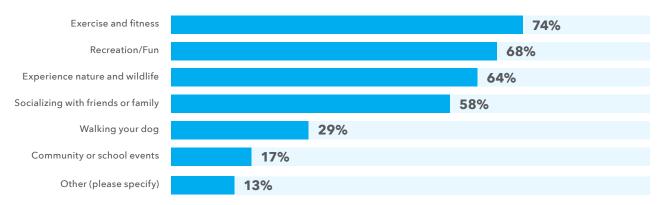


FIGURE 26. Why do you use local parks? Check all that apply.

The crucial role that parks play in providing opportunities for physical activity is also visible in other survey questions. While 70 percent of survey respondents reported getting the CDC-recommended amount of exercise each week, 56 percent of these respondents (or 39 percent of total respondents) reported getting this exercise in a park. That means that for the participants who meet weekly exercise requirements, over half are getting that exercise in a park. The health benefits of parks are particularly important for Black

communities. While the percentage of Black respondents who report getting the recommended amount of exercise each week was comparatively low (58 percent for Black respondents vs 70 percent for overall respondents), the percentage who get that exercise in a park was actually relatively high (43 percent for Black respondents vs 39 percent overall). This means that of Buffalo's Black residents who report meeting weekly exercise targets, 74 percent are hitting these targets in a park.

In an average week, do you do at least 150 minutes of moderate-intensity exercise, such as walking, or 75 minutes of vigorous-intensity exercise, such as running?



FIGURE 27. Survey respondents achieving the CDC recommendation for exercise each week

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In an average week, do you do at least 150 minutes of moderate-intensity exercise (such as walking) or 75 minutes of vigorous-intensity exercise (such as running) in a park?

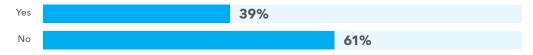


FIGURE 28. Survey respondents achieving the CDC recommendation for exercise each week in a park

Community Priorities for Parks

When asked what would encourage community members to use parks more frequently, "More amenities/ facilities (e.g., sports fields, bathrooms, fitness equipment)" and "If they were more beautiful (e.g., more plants and trees, artwork, water fountains)" were the two top responses, with 51 percent and 49 percent respectively. Other highly selected options included "Better maintenance/upkeep", "More events and programs" and "Places to be social with friends and family (e.g., picnic areas, BBQ pits)". These top five

amenities were relatively consistent across races and income levels, although slight changes occurred in the order of these amenities. For Black survey respondents, the order of these (from most requested to least requested) was more amenities, more events and programs, if they were more beautiful, places to be social, and better maintenance. The need for more amenities far outweighed any of the other options at 68 percent, while the other four top options were closely spaced with 47 percent–55 percent.

Would any of the following encourage or help you to use any parks in Buffalo more frequently? Check all that apply.

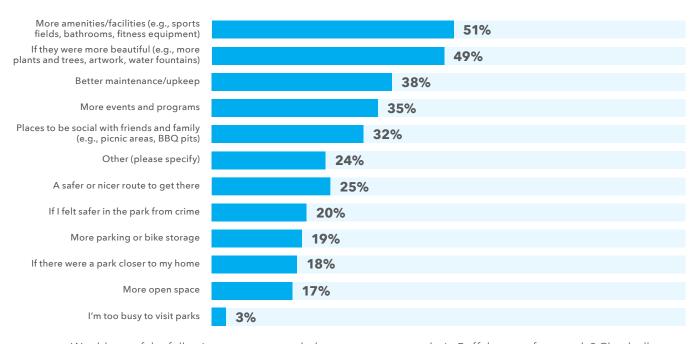


FIGURE 29. Would any of the following encourage or help you to use any parks in Buffalo more frequently? Check all that apply.

AMENITIES

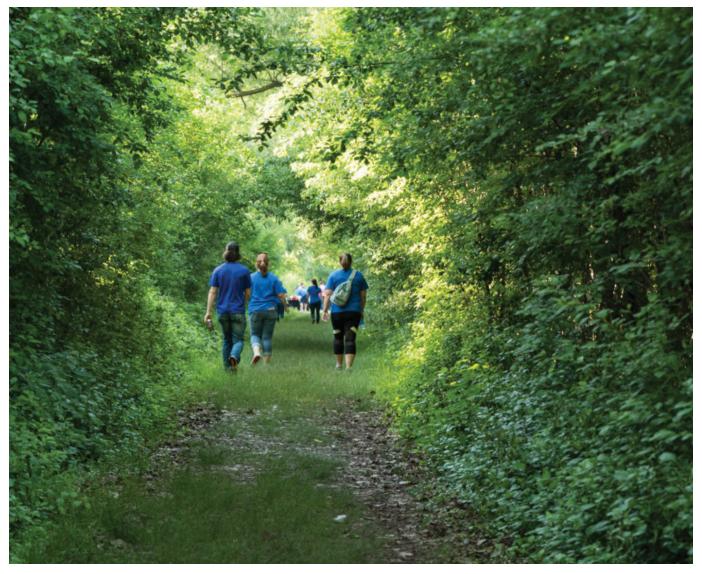
"A lot of parks lack features and amenities (fountains, bathrooms, trails, playgrounds, etc.), just a grass area

with a few trees. Probably a legacy of trimming back to the bare minimum that could be maintained.

"There was a consistent view throughout the engagement process that Buffalo's parks need more amenities. "More amenities/facilities (e.g., sports fields, bathrooms, fitness equipment)" was the highest rated response with 51 percent of survey respondents saying that this upgrade would encourage them to use parks more frequently. For the sake of keeping survey questions manageable, amenities were grouped by type.

ACTIVE AMENITIES

The most highly requested active amenities included Community Gardens, Fitness Zones/Exercise Equipment, Splash Pads/Water Features, Dog Parks, Rock Climbing Walls/Parkour Facilities, Playgrounds/Play Structures, Swimming Pools, and Ice Skating Rinks. These top amenities were consistent across income and race with minor exceptions. While dog parks were much more highly rated among white survey takers, playgrounds scored much higher among Black respondents. Many of these amenities were also raised in other engagement activities. For example, off-leash dog parks were noted as largely missing from Buffalo parks in focus groups, and as a result, people let their dogs run off-leash in areas that are not designated as dog parks. Focus group and interview participants also noted that more ice-skating rinks would help to activate parks in the winter. Many community members also provided write-in responses to this question, requesting more accessible playgrounds, pickleball, futsal, handball courts, a cricket pitch, and a rugby field.



Walking paths are Buffalo's most popular open space amenities. © TIFFT NATURE PRESERVE

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For each of the following active park amenities, please let us know: (1) Have you used it in the past 12 months? (2) Does Buffalo need more of these?

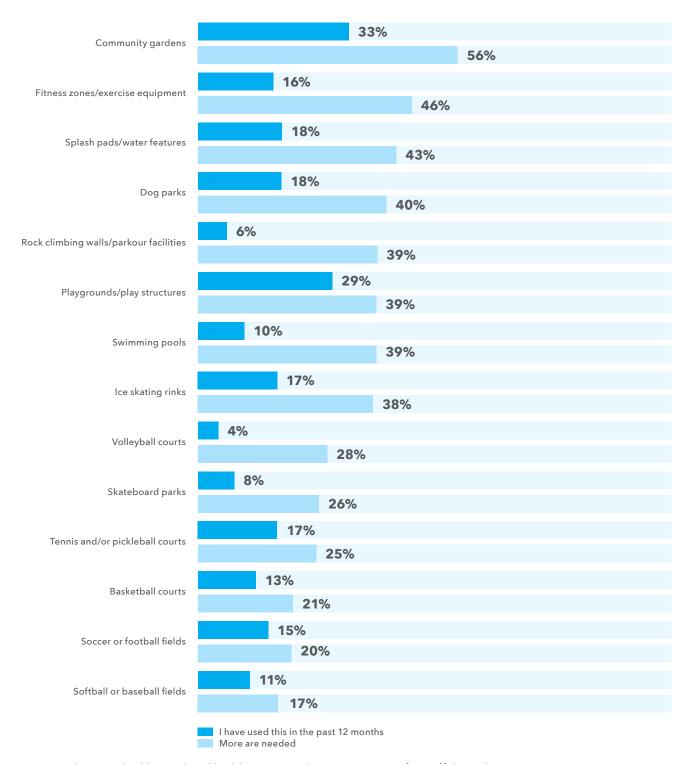


FIGURE 30. The most highly used and highly requested active amenities for Buffalo parks.

OPEN SPACE AMENITIES

When examining open space amenities, walking paths or trails were both the most commonly-used and the most heavily-requested amenity, followed by bike paths. Focus group participants agreed that removing vehicular traffic from Delaware and South Park has been a great improvement, effectively creating miles of new trails for jogging, walking, and biking, and recommended expanding this to close all streets within parks to vehicular traffic.

Recreational boating/canoeing, shelters for birding, campfire pits, and places for fishing were also commonly requested. These were the most requested amenities regardless of race or income, although with differing orders. For Black respondents, campfires jumped to second place on the list behind walking paths, while boating fell to number six. For lower income respondents, shelters for birding jumped to number 2. Walking paths were consistently in first place across demographics. Write in suggestions included "elderly friendly scooter paths" and walking paths with more frequently-spaced benches.

For each of the following open space amenities, please let us know: (1) Have you used it in the past 12 months? (2) Does Buffalo need more of these?

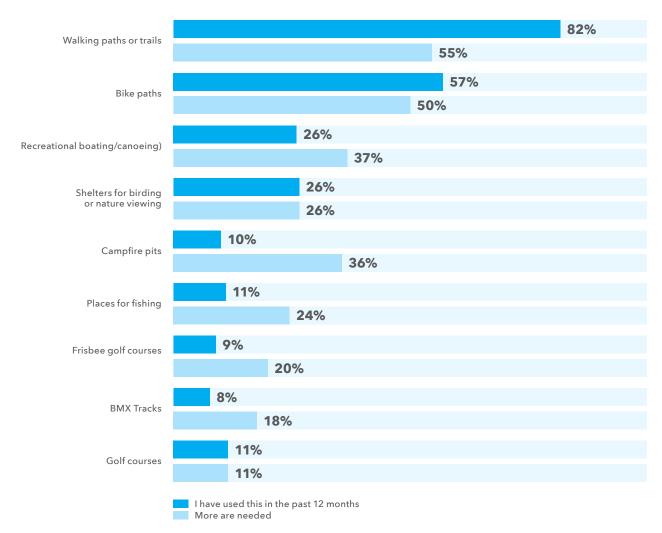


FIGURE 31. The most highly used and highly requested open space amenities for Buffalo parks.

PASSIVE PARK AMENITIES

Park restrooms were by far the most highly requested passive park amenity, although amongst Black respondents requests for community and senior centers tied for first place. Focus group participants noted a particular need for bathrooms, remarking that a lack of bathrooms can make it more difficult to enjoy parks. Program providers also noted that the lack of restrooms is a challenge to holding events in neighborhood parks, noting that many smaller parks lack

restrooms, and that the cost to bring in portable restrooms can be prohibitive. Additional bathrooms in smaller parks would make it easier to carry out programs. Bathrooms were noted as a particularly high need for programming, as children have less ability to spend long periods of time in parks without bathroom relief. Benches were a common write-in response to this question, with a particular recommendation to use more regularly spaced benches to make walking paths more accessible for seniors, and ADA accessible picnic areas.

For each of the following passive park amenities, please let us know: (1) Have you used it in the past 12 months? (2) Does Buffalo need more of these?

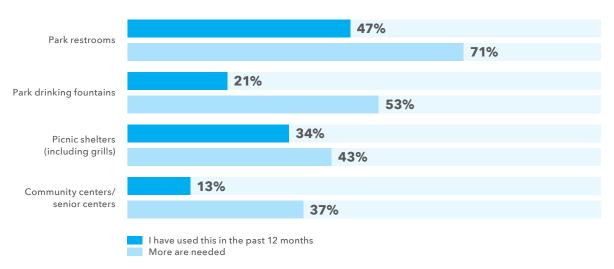


FIGURE 32. The most highly used and highly requested active amenities for Buffalo parks.

THE IMPORTANCE OF PROVIDING A DIVERSITY OF AMENITIES

The survey results above can help the city and its partners to identify the most highly used and requested amenities in Buffalo parks. However, even amenities that did not emerge at the top of these lists are still important. Programming providers spoke to the need for more amenities and a greater diversity of amenities in parks, particularly in communities of color. Examples included tracks, baseball diamonds, tennis courts, ice rinks, benches, and restrooms. Programming providers noted that while they were educating youth on new sports that they may not have been exposed to, sometimes the children did not have the necessary facilities (e.g., a volleyball court) close by. While the providers could bring a net for the program, the children were not able to continue playing after the program had ended.

PARK AESTHETICS

"Art is the perfect icing to place on parks."

- INTERVIEW PARTICIPANT

"I love the idea of painting surfaces in parks. Just sprucing up something so it is not a drab concrete color everywhere. We can frequently get donations from a local hardware shop or get council members to contribute. There is a lot more opportunity for stuff like that for sure."

- INTERVIEW PARTICIPANT

"I want my art to make people understand how precious nature is."

- ACTIVITY BOOK RESPONSE

"Art can be anywhere to remind us and others that creativity is all around us and to enjoy bits of beauty."

- ACTIVITY BOOK RESPONSE

"I want public art to inspire and impact my neighborhood by getting people more involved and coming together and getting people to show their more creative side."

- ACTIVITY BOOK RESPONSE

Improving park aesthetics was the second highest priority from the online survey, behind only the need for more amenities. 49 percent of survey participants said they would use parks more frequently "If they were more beautiful (e.g., more plants and trees, artwork, water fountains)." Please note that although many issues contribute to the aesthetics of a park, some of these (e.g., maintenance, providing additional natural areas) will be addressed specifically in other sections of this chapter.

Many stakeholders and community members recommended improving park aesthetics through greater use of art. Some noted that while the city has been proactive about increasing public art elsewhere, new public art pieces have been largely absent in parks. Participants mentioned the work currently underway to incorporate art at Broderick Park to commemorate the Underground Railroad as a step in the right direction.

Neighborhood parks in Buffalo are thought to lack identity. Some participants felt that the city could use art and design to make each park feel unique, noting that this could be one key to activation. One interviewee commented that "they shouldn't all be the same. I would do a plant-themed one, and a space-themed one ... make it a neighborhood amenity and destination." Another suggested greater community involvement in design: "For playgrounds that are suited to communities, you need to involve communities in design.

Playgrounds could be better designed and dispersed, but also customized for each community."

Some engagement participants felt that cultural representation is lacking in Buffalo parks, and suggested using parks to celebrate the history of Buffalo. One participant noted that for the majority of the youth her organization serves (primarily children from higher poverty neighborhoods on the East Side), they do not see themselves represented or invited to participate in parks in a way that respects their culture, music, or art. Participants agreed there needs to be more invitations to participate. Participants noted the portrait of Mary Talbert on the Freedom Wall as a positive example and mentioned that this piece seemed to invite spontaneous performances, with performers doing a socially-distanced performance on Juneteenth.

Others also suggested the benefits of quick, low-cost efforts like asphalt art. In addition to improving park aesthetics, these would have the benefit of inviting community members and youth to participate. Others, noting the success of the Shark Girl sculpture, suggested rotating sculptures in parks. This suggestion echoes the findings of Wintermission, which recommended attracting "people to parts of the city that don't see much activity in the winter by installing large, interactive, temporary sculptures. Run a design competition and make the results into a tourist attraction during the coldest months of the year."

Maintenance

"Sometimes the play areas go weeks and weeks if not longer if something is broken. The slide in my park was broken for four months. I know it is just the budget."

- INTERVIEW PARTICIPANT

"If a park is in a distressed neighborhood, it already has a distressed feeling. Because some of our parks are in a distressed neighborhood, like MLK, you kind of get a sense that it is not the same as Delaware Park. It needs additional love and care."

- INTERVIEW PARTICIPANT

"The city is good at getting capital projects done, as well as emergency repairs and services. The city and the Division of Parks and Recreation do not undertake proper, consistent maintenance (this is true even at the Olmsted Parks). Maintenance is too often deferred, and maintenance funds are the first to be cut. The city needs a proper asset management system for buildings and grounds."

- INTERVIEW PARTICIPANT

"We don't have a lot of money and use city parks all over Buffalo for various activities when it's warmer out. But the MAINTENANCE is poor. There are drug paraphernalia most times at any playground; I carry gloves and a garbage bag every time I go to a playground to clean up before I allow the kids to play anywhere, from WestSide to MLK to Shoshone."

- ONLINE SURVEY RESPONSE

"Lack of maintenance at some parks makes them impossible to use."

- ONLINE SURVEY RESPONSE

"Half of the existing amenities in the city are unusable due to lack of maintenance, please maintain the existing facilities before creating new ones that won't be maintained."

- ONLINE SURVEY RESPONSE

"All neighborhoods need access to safe and usable outdoor spaces, not just the wealthy areas like Chapin Parkway and Bidwell Park. Better maintenance of bike paths and more of them. Garbage cans that are emptied regularly are needed to stop the constant litter and garbage problem."

- ONLINE SURVEY RESPONSE



Many community members requested more art in their local parks. This mural, painted on a wall of McKinley High School, enhances the Jesse Kregal Pathway. © ARTXLOVE

"Create jobs for youth working in the parks to boost community investment in their condition and participation. Hire from within the neighborhoods."

- ONLINE SURVEY RESPONSE

Thirty-eight percent of survey respondents said that better maintenance would encourage them to use parks more frequently, the survey's third highest priority. Issues surrounding maintenance arose throughout all community engagement processes. Focus group participants felt that maintenance challenges pose a major barrier to park use, with some community members sharing that they had stopped visiting particular parks because of cleanliness issues.

Many community members and stakeholders also felt that city parks are not maintained to uniform standards, with parks in affluent areas receiving better care than parks in lower-income neighborhoods, and larger signature parks receiving better care than smaller neighborhood parks. The upkeep challenges in smaller parks were also noted by programming providers as a barrier to hosting programs in neighborhood parks, citing safety concerns related to upkeep (e.g., needles, holes in the fields).

Many felt that more attention should be given to basic services like trash pickup, cleanup, graffiti removal, making sure furnishings are working, and cutting or reseeding lawns. Participants felt that more trash bins, and emptying these bins more frequently, would lead to major improvements in cleanliness. Several participants mentioned the illegal presence of ATVs in the parks, making the parks feel less safe for pedestrians and damaging the grounds. Some felt that creating an official ATV park could be a solution.

There is a general consensus that operations and maintenance are underfunded relative to the size of the park system and its use. Other recommendations for improvement included providing more competitive salaries for new hires and greater specialization and training among staff. Many stakeholders also felt that an organized, city-wide park volunteer program could be a successful way to improve park upkeep in Buffalo. See Volunteerism and Stewardship for more on this.

Programs and Events

What additional recreational programs do you feel Buffalo parks should offer or expand? Check all that apply.

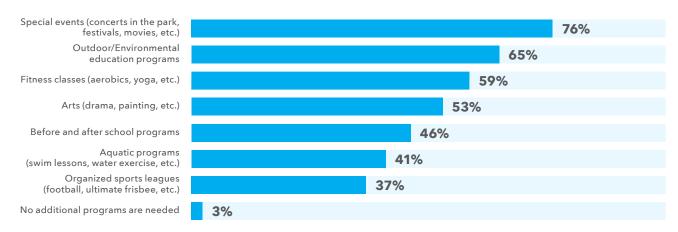


FIGURE 33. Community priorities for park programing.

Park programming was also a high priority for Buffalo residents, with 35 percent of survey respondents saying that more programs and events would encourage them to use parks more frequently. The most highly requested program types included "Special events (concerts in the park, festivals, movies, etc.)" with 76 percent, "Outdoor/Environmental education programs" at 65 percent, "Fitness classes (aerobics, yoga, etc.)" at 59 percent, and "Arts (drama, painting, etc.)" at 53 percent.

PROGRAMMING PARTNERSHIPS

The partnerships that exist between program providers and the city are a huge asset to the park system. Buffalo is very well-served with regards to partners providing sports and fitness programming. Participants noted that for any sports or fitness program type

that might be requested, there are partners who are willing to provide them.

In speaking with programming providers in Buffalo through focus groups, feedback varied based on the type of programming being provided. Providers of sports and fitness programs generally had positive experiences working with the city, noting that the process to reserve a site and obtain a permit was easy and straightforward. Participants also noted that the Division of Parks and Recreation regularly comes out to clean parks prior to their organizations' scheduled events. Arts programming providers generally felt that the permitting and approval process was cumbersome and expensive. Participants felt that many organizers do not know how to get special events scheduled, and that the process feels like jumping through a lot of hoops. This can make it particularly difficult

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if someone is planning an event that is to happen relatively soon (i.e., in the next few days). Participants also noted that providing insurance for these events can be expensive. One participant voiced her surprise at realizing that she would be required to insure the vacant lots in the vicinity of her events. Another participant suggested the parks institute a tiered fee structure, with reduced fees for smaller events. She noted that certain types of programs would be hard to carry out at the existing fee level.

PROGRAMMING OUTREACH

"Not everyone has email/internet, use multiple sources to publicize events."

- ONLINE SURVEY PARTICIPANT

While there is a wealth of programming providers, participants noted the need for greater outreach to community members who may not already be connected to that programming type, using existing groups with strong community ties such as block clubs or religious institutions. For example, if a program provider is going to do a skateboarding event in an area where skateboarding is not yet common, outreach needs to be a major focus. One focus group participant noted the achievements of Soccer for Success (a collaboration between Independent Health Foundation and Algonquin Sports) at attracting children from the east side, an area thought to have little interest in soccer. By conducting outreach through the block clubs, the league quickly expanded from 25 children to 150.

PHYSICAL CHALLENGES TO PROVIDING PROGRAMMING

Many Park programming providers felt that the physical condition of parks was the greatest barrier to organizing events, rather than any barriers with the event-planning process. Environmental education providers, for example, felt that providing more natural open space would be the biggest step toward increasing this programming type (see Green Infrastructure in this section). Likewise, sports and fitness programmers generally felt that the availability of amenities and maintenance issues were the biggest hindrance to sports and fitness programming. This was particularly true in Buffalo's smaller parks. Art programming

providers felt that having more small-scale performance spaces (like the smaller band shells in Central Park in New York City) would make it easier for music, theater, and dance performances to occur. Additional park restrooms would also help to support these events.

Accessibility within the park was also noted as a challenge by some. The organizer of Shakespeare in Delaware Park noted that many of the event's past attendees are "aging out" of the event. While he noted that the recent addition of lights on the park's paths was a major improvement, he still felt that at night, the paths are not safe for elderly attendees. The fact that the event primarily relies on street parking also meant that the walk to the event could be long and challenging.

TRANSPORTATION TO PARK PROGRAMS CAN BE A MAJOR CHALLENGE

The challenge of getting community members to programs applies to both youth after-school programming and larger events. With youth after-school programs, organizers noted that the bus schedule is not always conducive to getting students to programs on time. Even when there is a bus stop at the park, the student may have to take several buses to get to that stop, and if they miss a bus in the process, they could be stranded. This is particularly difficult in the winter. While some organizers have experimented with renting a bus in the past, the cost can be prohibitive. Many participants also mentioned that providing parking for large events can be a challenge. At Funk Fest, for example, many attendees could not find appropriate parking and received parking tickets.

Participants suggested a more organized mass transit approach to larger events. Another attendee noted that the city rents a stage for groups organizing events, and that renting a bus on an event-specific basis for programs in parks would be a major asset. Participants also suggested creating a shuttle with arts and cultural stops, or incorporating transportation to parks into the Arts Access Pass created by Arts Services Inc. (ASI) that includes free Uber or Lyft rides to arts programming. Some participants noted that Reddy Bike is piloting no-cost access to electric bikes, which could be a major improvement, although it was acknowledged that relying on bicycles for

transportation to events would still mean that weather would be a challenge during parts of the year.

Albright-Knox is piloting an Art Truck that will be used to make arts-based programs more mobile.

USING PROGRAMMING TO ACTIVATE NEIGHBORHOOD PARKS

"When I was a kid, you could just walk down to the local park and they had a couple youth there in the summer organizing events. We are kind of missing that from our parks that 'every Tuesday there is this event at the local park' and working on that community connection."

- INTERVIEW PARTICIPANT

"I used to play at a community center and parks always growing up ... seems like now a lot of kids don't have the activities to do and they become bored and in trouble."

- ONLINE SURVEY RESPONSE

Some stakeholders also felt that providing recreational staff on a daily basis to run programs could be a major boon to neighborhood parks. In addition to providing a space for children, this presence could also have positive impacts on safety. One interview participant noted that Soccer for Success, a collaboration of Algonquin Sports and Independent Health, has had success driving illicit uses out of underused parks. While the city has been actively recruiting programming providers to carry out programs in smaller parks, there has generally been a strong pushback from providers, who prefer to use the city's larger, signature parks.

Social Spaces

"A place where community members can come together to enjoy space with one another."

 ONLINE SURVEY PARTICIPANT RESPONDING TO THE QUESTION "WHAT DO BUFFALO PARKS MEAN TO YOU?" "Definitely more public seating; more areas to chill out without people running through tranquility."

 ONLINE SURVEY PARTICIPANT RESPONDING TO A QUESTION ABOUT THE NEED FOR ADDITIONAL PASSIVE AMENITIES.

Thirty-two percent of survey respondents listed "Places to be social with friends and family (e.g., picnic areas, BBQ pits)" as a priority that would encourage them to more frequently use parks. Some of these were also listed as improvements that would make parks more multigenerational. For example, community members noted the need for more seating near playgrounds to allow parents and grandparents to watch their children, and benches were listed by many as a major priority for making parks more accessible to seniors. Many interviewees also noted the importance of unprogrammed, informal spaces for their ability to promote socializing.

Route to the Park

"Access to parks is a notable weakness from the engineering perspective. Certain parks are easier to get to than others, but this should not be the case. We would like to see parks focus on improving access conditions to parks for all modes of travel (vehicle, pedestrian, and cyclist)."

- INTERVIEW PARTICIPANT

"Keep traffic out of the parks. Our children are learning to walk, run, bike, skate, etc. within inches of through traffic."

- ONLINE SURVEY PARTICIPANT

"I work for Buffalo Public Schools, and I feel awful for my students. Since COVID, they have few experiences to promote positive mental health. They have nothing to do. The parks would give them open space to play, but they can't afford bus fare to get to the parks!"

- ONLINE SURVEY RESPONSE

Twenty-five percent of survey respondents said that a safer or nicer route to the park would help them to use parks more often. Engagement participants noted several challenges to accessing parks. Participants noted that in some instances, the sidewalks adjacent to the parks are in bad shape, making accessibility difficult, or that the paths leading into parks are not cleared of snow in the winter. Many also identified the need for traffic calming measures around parks, saying that speeding near parks is a barrier to pedestrian access. Measures suggested included speed bumps near parks (mentioning the speed bumps near Cazenovia Park as a positive example), signage informing drivers that they were approaching a park and that there are children at play, and community-led interventions such as asphalt painting.

Residents and community members alike identified expressways as a barrier to pedestrian park access, noting that they cut through the most marginalized areas, isolating those communities and cutting them off from parks. As one online survey participant wrote, "Constant reminder of Robert Moses' racist planning legacy. Remove the 198 stretch through the park and any other remainders of his legacy." Another commented: "We love our local park Delaware Park. Our dream would be to have you remove the 198 and reconnect our park ... As you ride bicycles from the rose garden side to the Ring Road side there is a spot where you have to cross the exit ramp to the 198 onto Delaware Road. It is another spot that just puts a mom on high alert. Cars and parks just don't mix but it is the only way to get us from one side to the other. Just another reason to close the 198 from Parkside to Grant Street!!"

Vehicular traffic within the park was also identified as an issue. Many lauded the recent decision to make Delaware Park pedestrian only, with one survey participant writing "We have been so grateful that you closed Ring Road. It made the park so much safer and enjoyable for a mother with two kids under six riding bikes on the loop and not having to worry about cars!! Thank you so very much for this!!" Similarly, many community members noted the dangers of cars speeding around and through Martin Luther King, Jr. Park.

Some also felt that public transportation could be better organized to serve the needs of park visitors. This view was particularly common among program providers (see Programs and Events in this section).

Crime and Safety

"Security is probably our number one lacking issue in the city parks. There is no security. The police do what they can, but they are not as accessible as we need. They can't be everywhere. I would love to have park rangers or park security officers to be there daily on a 7-day a week schedule."

- INTERVIEW PARTICIPANT

"Safety is one of the number one things that comes up with block clubs—safety, security, and cleanliness. In a lot of the parks, the drugs and prostitution have waned. In some, no matter what we do, it doesn't improve. There are only so many times you are going to bring your kids to the park. If we had activities going on, those groups would help keep those parks clean."

- INTERVIEW PARTICIPANT

"Where we did soccer for success in neighborhood parks, some of those parks have really improved. Durant and Bailey Morgan playground, Roosevelt, a lot of the illegal activities that were going on, the activities stopped, because they were having positive activities going on. There is a process. It is partnerships and communication."

- INTERVIEW PARTICIPANT

"Something that should be addressed right away is increased lighting. MLK Park is pitch dark at night and it has led to crime at night. Lights and maybe security cameras. It would be helpful if the city would devote money to making Crime Prevention Through Environmental Design (CPTED) improvements."

- INTERVIEW PARTICIPANT

"Not at all-drug dealers."

 ACTIVITY BOOK RESPONSE TO THE QUESTION 'HOW COMFORTABLE IS THE TRIP TO THE PARK?' (PINE WOODS PARK)"

Safety is seen as a major challenge and a barrier to park use. 20 percent of survey respondents listed "If I felt safer in the park from crime" as a change that would help them to use parks more frequently. Several interview and focus group participants expressed concerns for safety in the park. Participants noted that parks that get less use feel less safe. Many said that a greater official presence in the parks, both during the daytime and after dark, would be beneficial. This could be a police officer, a security guard, a park staff member carrying out programs, or even a park maintenance crew member in uniform. Some showed a preference for police on bicycles, saying that it would make them more approachable. Other proposed solutions included cameras, improved lighting, and emergency call boxes. In addition to providing a safer environment, these lights could be decorative. One participant imagined lighting throughout all of the city parks following a certain theme (e.g., pink for breast cancer awareness), saying that this would create pride. The lack of respect for leash rules was also raised

as a safety issue. In addition to all-terrain vehicles (ATV's), some felt that parks (and in particular Martin Luther King, Jr. Park) needs greater barriers to vehicles, as cars regularly drive through the park.

Some participants felt a full Crime Prevention Through Environmental Design (CPTED) audit of the entire Buffalo Park System was warranted to better understand where safety standards in the city parks could be improved. This could be done by training block clubs to do the assessments, as demonstrated by the Division of Citizen Services' Love Your Block program.

Other Opportunities for Improvement VOLUNTEERING

"I think people would definitely come out to volunteer in their neighborhood parks they just need some guidance and support. It would give people a sense of pride."

- INTERVIEW PARTICIPANT

Many parks and gardens are maintained and improved by volunteer groups. Would you be willing to volunteer to help care for a park in Buffalo? If so, how many hours each month would you be willing to help out?

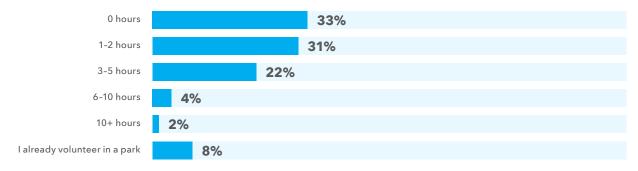


FIGURE 34. Willingness to volunteer in Buffalo's parks.

In Buffalo, passion for green space and civic pride are ingrained in the culture. Stakeholders felt that leveraging volunteer support and realizing untapped potential for local stewardship would help to build community buy-in for parks and improve park quality. Two-thirds of survey respondents indicated that they are either willing to volunteer in a park or are already volunteering. Roughly one third answered that they would be willing to volunteer 1–2 hours per month,

and another 22 percent said that they would be willing to volunteer 3–5 hours per month.

Much of the current volunteer work occurring in Buffalo parks is being conducted by a few organized "friends of" groups, is happening in Olmsted parks, or was initiated by proactive individuals or neighborhood groups. The Division of Parks and Recreation regularly supports these efforts through the use of tools, contributing ornamental plants, and ongoing maintenance support for volunteer projects. Some current park volunteers showed a strong appreciation for the city's support, clearing away trash bags following volunteer cleanup events. However, many felt that greater communication is needed in instructing people how to get involved with park volunteering. Some noted the need for additional clarity from the city on what volunteers are needed to do, and what they are not allowed to do. Union labor infringement can also be an issue, and greater transparency is needed in what volunteers should and can do.

Participants also felt that additional support from the city is necessary to improve and increase volunteer efforts. Suggestions included supplying bags, tools, gloves, and hoses, as well as providing other resources like access to water sources, compost, plants, greenhouse access, and a greater availability of garbage cans in the parks. This would provide practical support to volunteer efforts, as well as boost morale.

Some also felt that for a smaller organization like a block club, it can feel like there is a lot of red tape to carry out a volunteer event. They noted that getting a permit for an event could require visiting several offices within City Hall, and that if these offices coordinated more with each other, it would make scheduling events easier. Permits for larger events can also be expensive, and although the forms are available online, it is not always clear which form is required for which type of event. The cost of insurance can also be prohibitive for a block club.

THE NEED FOR A CITY-WIDE VOLUNTEER PROGRAM

Many stakeholders felt that to increase the impact of volunteering in Buffalo's parks, the city needs to develop an organized approach to "invite" community members to volunteer, such as an "Adopt-a-Park" or park stewardship program. This would have the impact of increasing volunteerism, as well as increasing coordination between the city and volunteers. A more organized approach may also allow the city to deploy more volunteers to parks with the greatest need. Many also noted that an organized volunteer program would create a group of "park ambassadors" throughout the city, and that this would strengthen communication between the city and residents. Some felt that this would be particularly advantageous in New American

communities, where communicating with the city can feel intimidating or may be difficult due to language barriers.

Several participants remarked on the success of the Division of Citizen Services' recent Love Your Block program and noted that creating a city-wide Love Your Park program could be successful, especially if there was one central place for residents to sign up. Participants also suggested organizing additional "friends of" groups through an adopt-a-park program. Different neighborhoods and communities in Buffalo can feel divided and segregated. Inviting all community members to help in parks can play a role in building social connections.

Many stakeholders involved in volunteer organizing mentioned the importance of a volunteer management system or database. Such a program could help prioritize maintenance needs, match volunteers with projects, and track progress on certain tasks as well as volunteer hours contributed. The ideal system would also be able to send mass texts to include people who do not have access to smartphones.

VOLUNTEER RECRUITMENT

Stakeholders and community members had a number of recommendations regarding how the city and its partners could recruit volunteers. Some businesses are active contributors, bringing out employees to help with cleanup efforts. Buffalo Olmsted Parks Conservancy in particular noticed a boost in volunteerism from employees receiving a certain number of hours to volunteer each month through their employers.

Participants noted the need for additional training for volunteers, and that this could also assist in recruitment. They suggested that volunteering should be promoted as a tangible learning opportunity that is more than just a chance to help. For example, for volunteers interested in lawn care and landscaping, volunteering is an opportunity to learn from an expert.

Some felt that there are equity issues with volunteering, as people from more privileged backgrounds likely have more availability to participate. There was disagreement on this point, however, as others pointed out the recent success of the Love Your Block

program, in which neighborhood improvements (including in parks) were carried out through volunteer efforts, frequently in under-resourced communities. Furthermore, survey results indicate that there was no difference by race in terms of willingness to volunteer, and that households earning less than \$35,000 annually were actually significantly more likely to say they are willing to volunteer. Regardless, providing a small stipend could help with this challenge in lower income communities. This could support one community liaison in each block club or park, who could help to identify maintenance needs.

Current volunteers and organizers also noted that small gestures like gifts, notes, or meals can do a lot to make volunteers feel appreciated. Creating a party-like environment with music and food can also be a great way to make a volunteer event feel fun. Providing access to a new park or trail can also lead to an uptick in volunteerism due to the excitement of the improvement.

Focus group participants recommended a major citywide push around the importance of volunteering. Signage in the park telling people what work is needed and how to sign up would be helpful. Many felt that there should be a more deliberate program to involve youth. Participants noted that the Mayor's Summer Youth Employment Program, high schools and colleges with volunteer requirements, and AmeriCorps VISTA could all serve as ways to engage youth in parks. Stakeholders agreed that these should be approached as interesting educational opportunities for youth, rather than focusing on menial tasks like litter removal. The program could also be an opportunity for environmental education, teaching youth about ecological restoration, which would help to make the work meaningful. Many felt that this would help

Buffalo create a culture that values parks and the environment in order to dissuade misuses, littering, and vandalism.

Green Infrastructure in Parks

"Increasing habitat value of parks, which can help aesthetics and improve health (air quality, cooler)"

 INTERVIEW PARTICIPANT, IN ANSWER TO A QUESTION ON TOP PARK PRIORITIES.

"Green grass fields could be meadows. It would be reverting to something more natural and would help with management. Simple green infrastructure would work well and be low maintenance. The waterfront could have restored riparian areas. Cazenovia has some riparian restoration areas, and we could have more. Waterways in parks could have living shoreline treatments, as BNW did in Tifft."

- INTERVIEW PARTICIPANT

According to the online survey, 92 percent of participants support the use of some parkland to build stormwater-absorbing raingardens. Currently, the City of Buffalo is moving ahead with green infrastructure in a variety of ways, guided in part by the Raincheck 2.0 Plan. The Division of Parks and Recreation has already started incorporating green infrastructure into some of its new designs. However, many stakeholders felt that there is an opportunity to make greater use of parks for green infrastructure, in particular working in partnership with the Buffalo Sewer Authority.

Would you support the use of some parkland to build rain gardens that would absorb stormwater from the park and nearby areas?



FIGURE 35. Public support for rain gardens in parks.

Currently, the long-term maintenance implications of green stormwater management pose a major challenge. The more advanced the green infrastructure practices, the more difficult and expensive these locations become to maintain in the future. These maintenance issues make collaborations between Buffalo Sewer Authority and the Division of Parks and Recreation challenging, particularly if there is not absolute clarity surrounding who is responsible for upkeep or if there is not sufficient budget for the ongoing maintenance. Also, appropriately staffing the relevant department with the relevant expertise needed to manage green infrastructure is an obstacle.

Some stakeholders suggested that rather than installing more intensive green infrastructure interventions (e.g., ponds or raingardens), the city should

focus on devoting more parkland to natural, unmanicured spaces and open space that could serve as habitat, provide stormwater benefits, hold trees, and enhance park aesthetics. Likewise, programming providers felt that there is a lack of explicit environmental education in Buffalo, and for that to change there needs to be a shift in park design. Participants noted that most parks in Buffalo have grass and a few trees, and that a change in the design of parks to a more natural aesthetic would help facilitate nature-based programming. More native meadows in parks would allow educators to discuss topics such as bees, pollinators, and native plants in the same way that the county parks at Red Jacket and Seneca Bluffs facilitate education on riparian environments.

Winter Activation

We want to help people use parks all year. Please complete the sentence: I would use parks more in the winter if there were more:

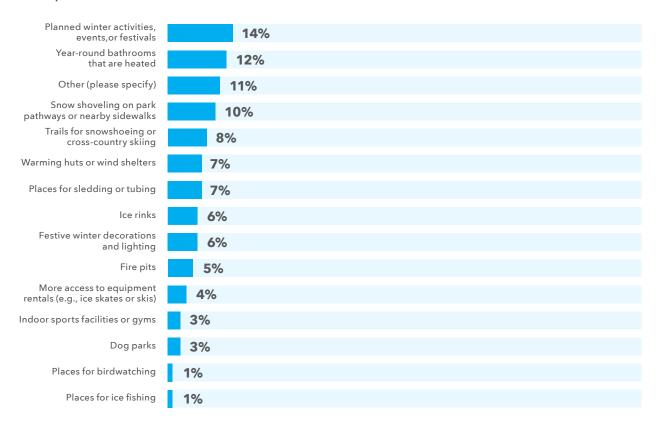


FIGURE 36. Winter Park Activation Priorities.

"We need to get creative with winter programming. What about lake or creek skating at Delaware, even Cazenovia, South Park? Create cross-country skiing, concessions and rentals, and include warming features."

- INTERVIEW PARTICIPANT

"Get some fire pits! That would be really cool. Especially if you could bring some beers and some sandwiches and hang out by a fire in the winter without the police being jerks about it because it's 9 pm and it's dark. Also, not everyone works 9-5 and we'd like to enjoy parks too!"

- ONLINE SURVEY RESPONSE

"Hot cocoa. Skating."

"Roasting marshmallows - going sledding and tubing and ice-skating and having some good ole hot cocoa!! :D"

"Sitting by the bonfire drinking some hot cocoa, skiing on ice, and chilling with my homies."

"Sledding – hot cocoa – fire pit."

"Sledding and snowballs."

"Sunrise snowshoe or sunset snowshoe with hot cocoa, sledding and nature hike with picnic, rest in warming hut, sign guest book – Bathroom in general. – Snow castles and forts."

 ACTIVITY BOOK RESPONSES TO THE PROMPT, 'DESCRIBE AN IDEAL WINTER DAY IN THE PARK WITH YOUR FAMILY OR FRIENDS'

Winter activation of parks was identified as a major opportunity. The lack of opportunity for winter park activities has implications for recreation as well as health via its connection to physical activity.

When asked to give their top priority for increasing park use in winter, "Planned winter activities, events,

or festivals" was the leading response, followed by "Year-round bathrooms that are heated" and "shoveling on park pathways or nearby sidewalks." These options were all consistently raised throughout focus groups and interviews.

Several interviewees had creative ideas for outdoor winter programming, including temporary ice rinks, winter festivals, winter lighting events, and ice sculpting. Many also noted that greater availability of indoor field houses would make activity easier in the winter months. Bringing in vendors to rent equipment was also identified as an opportunity, with stakeholders suggesting places to rent equipment like cross-country skis and snowshoes.

The Division of Citizen Service's Wintermission had similar findings, concluding that the top park-related priorities for winter activation included improved winter snow clearance, opportunities for winter warmth to provide respites from the wind and cold, and increased programming (in particular in parks).

Park Information

"There is not park information. Maybe 311 or the city website. The website is not particularly useful or friendly. It would be useful to have [a place with more park information]. You could tell people, "you can setup tents for volleyball, just do x, y, z on your way out."

- INTERVIEW PARTICIPANT

"Neighborhood parks would benefit from a site. Where is my neighborhood park? What are they for. What can you find there?"

- INTERVIEW PARTICIPANT

"I think the first step is being clear on what are the parks, where they are, what is in them; we don't do a good job of that. There needs to be somewhere to go for that information. We need someone to be able to easily find where the pools are. We are at the basics here."

- INTERVIEW PARTICIPANT

Many community members and stakeholders felt that parks all over the city need more signage in the surrounding areas, showing the direction of the park and what amenities it holds. This would inform people about what is available and invite them into the park. Some interviewees felt there is a need for greater neighborhood wayfinding, telling community members how to get to certain parks. Some community members felt that interpretive signage would be interesting and could serve practical purposes, such as discouraging littering.

Stakeholders agreed that the city should make park information easier to find. A more thorough website would alleviate some of the confusion. Some felt that a Facebook page for city parks would be an easy way for residents to provide feedback on park-related issues. Others suggested that the Division of Parks and Recreation should also continue to utilize the city's Clean Sweep initiative to spread information about parks in-person.

Making Parks More Multigenerational

Many community members and stakeholders felt that city parks could do more to appeal to users of all ages, noting that currently they feel very focused on serving young children. It was suggested that increasing the availability of certain amenities, including park restrooms, seating, and pickleball, would increase seniors' use of parks. Many participants also felt that there is a lack of planned activities for seniors. Recommendations included cooking classes, line dancing, and fitness programs. Some stakeholders also felt the city should consider replicating the County's Park Rangers program (trained, certified support personnel that are not official staff) that focuses on programming for senior citizens. In addition to children, this type of park ranger programming in neighborhood parks (described above) could benefit seniors.

Participants noted that park improvements for children are frequently aimed at younger children, and there should be more consideration of the 12–17 age group. One participant said that while she regularly took her children to city parks to play when they were young, they no longer find them challenging, and they more regularly go to county parks to hike.



Winter Blast at MLK Park, 2018. Planned winter activities, events, or festivals was the top community prioritiy for increasing winter park use.

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Community members also recommended more spaces of interest for older children and teens, including more hiking trails, BMX tracks, skate parks, and playground equipment designed for older children.

Another community member expressed the importance of providing seating close to playgrounds so that parents and grandparents can sit while they watch their children. Additional open space and trails were recommended improvements for making parks interesting to all age groups.

Concessions and rentals

"At MLK splashpad, in the summer, have an ice cream truck or slushie guy sell their wares in the middle at the fountain, as us wet parents can meet and watch the kids. MLK at sunset in the summer is magical." – Online survey response

The desire for greater access to concessions arose throughout community engagement. This topic came up most frequently in discussions of winter activation (e.g., the ability to rent cross-country skis or buy a hot chocolate). However, some suggestions did include warm-weather improvements such as more places to rent kayaks or to buy an ice cream or a cold drink on a hot day.



Over 300 volunteers helped to build the new playground at Martin Luther King, Jr. Park. Buffalo has a rich tradition of volunteerism, and a city-wide program to organize and encourage volunteers will help to expand these efforts. © SARAH LARKIN/BUFFALO OLMSTED PARKS CONSERVANCY

SECTION 8.

Implementation Strategies

Introduction

This section outlines strategies to address barriers to equitable park access, use, and conditions discussed in previous sections of this plan. These recommendations are based on the project's geospatial data and demographic analysis, benchmarking against peer cities, and feedback and discussions with community members, park stakeholders, and the steering committee.

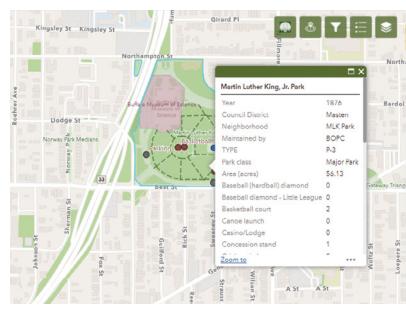
The high-level objectives below reflect the broad goals identified by community members and stakeholders, which are:

- 1. Activate and Connect Parks to People
- 2. Improve the Physical Condition and Capacity of Buffalo's Park System
- 3. Strengthen Park System Resources

To advance each objective, we have connected detailed strategies and actions that can be taken to meet those goals. While the majority of these action items reflect the findings of the Buffalo Parks Master Plan, results were also incorporated from earlier plans, in particular Wintermission, a citywide effort to identify ways to activate Buffalo residents in the winter.

Objective: Activate and Connect Parks to Residents

Many of Buffalo's parks are frequently used and adored by residents. However, several challenges exist with regards to increasing use of existing parks, or "activation". First, neighborhood parks are generally much less used than the city's larger signature parks. Second, most parks receive infrequent use in the winter. Third, many stakeholders also felt that greater availability of park information is necessary to activate parks. This section will primarily focus on how to close these gaps in park use. One advantage to making



In response to feedback that community members need greater access to park information, the city created an interactive parks map with park locations, hours, and amenities.

improvements in park activation are the benefits it can provide to other aspects of the park system. Activated parks feel safer, are less likely to be vandalized, and are more likely to attract volunteers.

STRATEGY: INCREASE THE AVAILABILITY OF PARK INFORMATION

A lack of information was identified as a barrier to park use, with many stakeholders noting that residents do not know what parks and park amenities are available outside of their own neighborhood. Greater availability of park information would also make it easier for individuals and groups to visit parks outside of their own neighborhoods, something that community engagement results showed to be relatively uncommon but beneficial. To address this, the city will take a multi-pronged approach to increasing the availability of park information, using existing and new approaches.

SIGNAGE

Stakeholders and residents lamented the lack of signage for Buffalo parks. Many felt that greater signage could let community members know where parks are and what amenities are present. The city of Buffalo and the Buffalo Olmsted Parks Conservancy recently updated park signage design standards, as well as recommendations for signage locations for the Olmsted parks. Using this plan as a starting point, the city will expand this effort to identify signage needs for the rest of the city park system and implement a plan to meet those needs. Updated signage should contain information about how to register problems in the park with the city (calling 311) and the URL to the city's forthcoming online parks map.

TIMELINE	Years 1-3
KEY METRICS	Number of new park signs added

ONLINE PARK MAP

Greater availability of park information would also help people plan their trips to parks. Currently, residents frequently do not understand the park system outside of their own neighborhood with the exceptions of the large signature parks. This can be a challenge when looking for a specific park amenity, planning outings with friends and family, or trying to find other park information. To help solve this issue, the city will create an interactive park map. The map would include not only the city's park names and boundaries, but also the amenities available within each park, relevant park information (e.g., hours of operation) and links to potential resources (e.g., applications for reservations and permits).

TIMELINE	Years 1-3
KEY METRICS	The creation of the map, traffic to the map

STRATEGY: WINTER ACTIVATION

The need for greater winter activation was discussed by many community members and stakeholders. Providing opportunities to use parks in the winter would provide physical and mental health benefits and bring community members together. The recommendations below are based on both the results of the Buffalo Parks Master Plan engagement process, as well as Wintermission Buffalo, a project led by the Division of Citizen Services with the aim of understanding how to activate Buffalonians in the winter.

WINTER EVENTS

Planned winter events were a top community priority in both the Parks Master Plan engagement process and Wintermission. The city will look for opportunities to bring winter programming to different local parks each week on a rotating basis. Some ideas include live music performances and outdoor movies (with free hand warmers provided), winter markets for local goods, and social nights with a DJ.

BUILD OPPORTUNITIES FOR WARMTH AT LOCAL PARKS

This city will look for opportunities to construct shelters to offer respite during long bouts of outdoor play. These would double as shade protection in the summer, and could be created through a design competition for university students. In parks with the greatest opportunities for winter activities, the city will also look for opportunities to open and heat restrooms.

ALLOW FIRE PITS IN LOCAL PARKS

There is currently a city policy against open flames. Buffalo will consider revising it to allow firepits in certain local parks. Additional policies could reduce fire risk and promote social connections between neighbors, following in the model of Toronto's Dufferin Grove Park. In addition to being a top priority of Wintermission, fire pits were also highly requested via the parks master plan's online survey.

LIGHT UP THE DARK

Add more lighting in public spaces to create a sense of warmth when the sun sets early. This would also help to meet safety-related objectives. Currently, per common council resolution, only six city parks are open at night. Therefore, opportunities to implement this recommendation are largely limited to those parks, although special event permits for nighttime events in winter would also allow for greater nighttime activation.

WINTER GEAR SHARE OR RENTAL PROGRAM

Share or rent out a neighborhood collection of winter skis, skates, and other gear and equipment to help increase access to expensive winter activities. This could be carried out through working with a neighborhood organization or group that assumes responsibility for loan or rental management (as suggested by Wintermission) or by attracting rental-oriented businesses to parks.

WINTER ART INSTALLATION

Attract people to parts of the city that don't see much activity in the winter by installing large, interactive, temporary sculptures. The city could run a design competition and make the results into a tourist attraction during the coldest months of the year.

INDOOR FIELD HOUSES

The need for more free, publicly-accessible field houses in Buffalo has been discussed for years. Working with partners, the city will make these plans a reality.

TIMELINE	Continuously over the next 10 years
KEY METRICS	Number of participants in winter activities

STRATEGY: INCREASE PROGRAMMING IN UNDERUTILIZED PARKS

Stakeholders and community members alike spoke of the need for a more consistent staff presence in Buffalo's parks. The Division of Parks and Recreation will work with its partners in the Division of Citizen Services, Department of Community Services and Recreational Programming, Buffalo Police Department, and local nonprofits to work in, patrol, or activate these spaces. This would have the benefit of attracting community members to parks outside of their vicinity, something that stakeholders felt would make parks feel less segregated. In addition to activating under-utilized parks, this need was raised as a way to make parks feel safer. The Police Athletic League's PlayStreets program has already had success with this strategy, activating underused parks through their weekly youth sports clinics. The Division of Parks and Recreation will work with its partners to build on this success, increasing programming in underused neighborhoods parks.

TIMELINE	Years 1-5
KEY METRICS	 Number of staff employed in park activation Number of community members participating in programs

STRATEGY: IMPROVE PARK SAFETY

Buffalo will design, build, and maintain parks with safety in mind. When new parks are developed or existing parks are updated, their planning should include an assessment of security needs. Locations will have good street exposure and visibility. Park design and programming will be guided by Crime Prevention Through Environmental Design (CPTED) principles, which uses design to maximize public safety. Likewise, in neighborhoods where residents have raised the issue of safety in parks, CPTED assessments should be conducted of existing parks, checking for issues such as lighting, clear lines of sight, safe pedestrian routes, etc. The Division of Citizen Services, through their Love Your Block initiative, has developed a procedure for training community members to conduct CPTED assessments, and this could be replicated in other parks, with identified improvements being made by the city. The Division of Parks and Recreation will also look for opportunities to add security cameras to parks where community members have raised safety concerns.

TIMELINE	Continuously over the next 10 years
KEY METRICS	 Number of CPTED assessments conducted Number of safety improvements (e.g., lighting, call boxes) added to parks

STRATEGY: SIMPLIFY THE PERMITTING PROCESS AND INSTITUTE A TIERED FEE SYSTEM FOR SPECIAL EVENTS

The City of Buffalo is fortunate to have a number of partners who provide events and programs in the city's parks, hosting roughly 1,300 other permitted events in 2019. For programming providers who carry out these events frequently (e.g., the Police Athletic League) the process feels relatively simple and easy to navigate. However, stakeholders who schedule events less regularly, such as block clubs, reported that the process is difficult to navigate and prohibitively

expensive, particularly when accounting for insurance costs. The city will look for opportunities to simplify the permitting process, revisit insurance requirements, and look for ways to reduce the fees for neighborhood organizations and other small events. The current fee structure has two cost tiers with a fee hike at 50 people. Instituting a structure with additional tiers will allow the system to recuperate greater fees from very large events while reducing fees for smaller block club events or family gatherings. Youth sports programming should, of course, remain free.

TIMELINE	Years 7-10
KEY METRICS	 Time to fill out and receive permit for smaller groups Affordability of fee structure for smaller groups

STRATEGY: SAFE ROUTES TO PARKS

Many community members felt that vehicle traffic in the city was a barrier to greater park use. Buffalo is already taking action to address the issue through such efforts as the city's Slow Streets program. Efforts at traffic calming should be continued with a particular emphasis on routes from communities to parks. The city should also invite community groups to participate in this process. In neighborhoods with strong community concerns about traffic, the city should work with block clubs or volunteers to conduct walkability adults, identifying specific issues. Many successful traffic calming measures involve artistic interventions like pavement painting. In addition to slowing traffic, these measures can improve park aesthetics and create a sense of ownership from civic groups. The city will also embrace opportunities to incorporate micromobility options (e.g., shared bikes) into parks, thus helping to connect parks to surrounding neighborhoods and destinations. The city should, of course, continue to implement the Bicycle Master Plan and look for opportunities to expand its existing parkway system.

TIMELINE	Years 5-10
KEY METRICS	Number of traffic calming measures employed adjacent to parks

STRATEGY: INCREASE PUBLIC TRANSPORTATION TO PARKS

Stakeholders expressed concern that the lack of regular or convenient public transportation was a barrier to greater access to parks. This concern was also expressed by park program providers around park events. The Division of Parks and Recreation will work with Niagara Frontier Transportation Authority to look for opportunities to provide greater public transportation access to parks and park events, additional stops near parks, such as increasing services for large park events, and greater connectivity between schools and parks to help students reach after-school events.

TIMELINE	Years 5-10
KEY METRICS	Number of special NFTA trips for park events

STRATEGY: ADD WIRELESS INTERNET TO PARKS

Adding Wi-Fi capabilities to city parks is a growing national trend. Buffalo will look for opportunities to add Wi-Fi capacity to parks, particularly as it expands other broadband efforts with opportunities to provide access to nearby parks.

TIMELINE	Continuously over the next 10 years
KEY METRICS	Number of parks with Wi-Fi

Objective: Improve the Physical Condition and Capacity of Buffalo's Parks System

The majority of feedback received during the project's community engagement focused on physical improvements to existing parks. This section will focus on strategies that the City of Buffalo and its partners can employ to address the needs of the park system based on findings from the park plan's community engagement, feedback from stakeholders, and results from the benchmarking and mapping analysis.

STRATEGY: PRIORITIZE PARK INVESTMENTS IN HIGH-NEED AREAS

Buffalo will plan future park investments in areas where these benefits are needed the most, in both existing or new parks. By using the maps presented in <u>Section 6</u> to drive future park investments, the city can prioritize park investments in the neighborhoods that have the greatest need for the services provided by parks. This approach will help the city to prioritize equity in future park development, as well as community health and the environment.

TIMELINE	Continuously over the next 10 years
KEY METRICS	Dollars spent on park investments in high and very-high need neighborhoods

STRATEGY: INCORPORATE HISTORIC FUNDING IN CAPITAL INVESTMENT REVIEW

A review of park capital expenditures since 2006 showed that while there was significant investment made in city parks, there were still some parks that had not received capital funding. While focusing on high-need areas (as described above), the city should also focus on these under-invested parks within these areas when making decisions about park spending and while developing its 4-year capital plan.

TIMELINE	Continuously over the next 10 years
KEY METRICS	Dollars spent on park investments in parks with no capital investment since 2006

STRATEGY: CREATE "COMMUNITY SCHOOLYARDS" THROUGH JOINT USE AGREEMENTS

Buffalo has excellent park access, with 90 percent of community members living within a 10-minute walk of a park. While this number is admirable, the city is committed to reaching a goal of 100 percent. In addition, Buffalo has less park space per capita than many of its peer cities (see Section 4). More critically, there is an unequal distribution of park space throughout Buffalo; neighborhoods where most residents identify as people of color have access to 47 percent less park space than those residents in predominantly white neighborhoods. This matches park inequities found in the rest of the country. Again, additional park space can address this issue.

Joint use agreements provide a significant opportunity for cities to use existing publicly-owned land at schools to quickly and effectively improve access to outdoor recreation and nature. This can be done at little cost in many cases. Opening existing schoolyards and athletic fields to the public after school hours, on weekends, and during the summer allows communities to benefit from the increased access to parks and recreational facilities, while options like pollinator gardens, additional trees, and absorbent turf fields provide environmental benefits like stormwater capture and cooling shade. Newly created community schoolyards are multi-functional outdoor areas designed for and by the school community that offer places for students, teachers, parents, and community members to play, learn, explore, and grow. They can be used as an outdoor classroom or a setting for community gatherings, and can include play areas, athletic courts, and features for neighbors of every age, such as shaded picnic tables and exercise tracks.

Making this program a reality in Buffalo will require cooperation between Buffalo Public Schools (BPS) and the City of Buffalo Division of Parks and Recreation (Parks). This agreement will mean that BPS continues to maintain these spaces while Parks contributes technical assistance and coordination on public access protocols. We are proposing a three-tiered rollout of a community schoolyard program (see Appendix 6 for details).

TIMELINE	Continuously over the next 10 years
KEY METRICS	Number of schoolyards improved and given public access

STRATEGY: CREATE A RATING SYSTEM FOR EXISTING PARKS

While access to parks is critical, so is the quality of parks. Throughout the engagement process, many community members and stakeholders shared their feeling that the quality and upkeep of Buffalo's city parks can vary substantially from park to park. To combat this, the city will implement a rating system to evaluate park quality and needs on a regular basis. Such a system will help parks managers to invest in the parks with the greatest need for upgrades. Evaluations will be conducted periodically to ensure they are up to date and to evaluate trends compared to a baseline year. Similar rating systems have been implemented in cities across the country. See Appendix 6 for examples.

TIMELINE	Years 1-3
KEY METRICS	The existence and implementation of a parks rating system

STRATEGY: INCREASE THE QUANTITY AND DIVERSITY OF PARK AMENITIES

The importance of adding park amenities to Buffalo's parks was prominent in community engagement. According to the online survey, the most highly requested amenities were:

TABLE 36: PRIORITY AMENITIES FROM THE ONLINE SURVEY		
Active Park Amenities	Open Space Amenities	Passive Amenities
Gardens Fitness Zones/ Exercise Equipment Splash Pads & Water Features Dog Parks Rock Climbing Walls/Parkour Facilities Playgrounds Swimming Pools Ice Skating Rinks	Walking Paths & Trails Bike Paths Recreational Boating/ Canoeing Shelters for Birding Campfire Pits Places for Fishing	Park Restrooms Drinking Fountains

This list provides a starting point for the types of amenities the City of Buffalo and its partners should add to city parks. However, focusing solely on these amenities would also be too limiting, as many stakeholders, particularly athletic programming providers, noted the importance of providing a diversity of amenities. Choosing new amenities in existing and new parks needs to be done in close collaboration with the surrounding communities.

Adding amenities to local parks not only provides activities to community members, but will also help solve other park issues through activation. For example, gardens were one of the most highly requested

amenities in the online survey. Currently, many of the community gardens in the city are managed by the nonprofit Grassroot Gardens on vacant lots outside of parks. Incorporating more native plant, ornamental, or community gardens into city parks would not only increase the recreational potential of parks, it would also help to reduce safety concerns by activating these spaces while also improving the aesthetics of the park.

TIMELINE	Continuously over the next 10 years
KEY METRICS	Number of new amenities added

STRATEGY: PRIORITIZE PARK AMENITIES IN AREAS OUTSIDE OF SERVICE AREAS

Planning for additional park amenities in Buffalo will be done in a comprehensive way, looking at the existing availability of amenities and needs throughout the city. Section 3: Current Parks Access and Amenities, should be used by the Division of Parks and Recreation and its partners to identify high-priority areas for certain amenities, based on which neighborhoods are currently outside of a 10-minute walk to those amenities. Using these maps to plan out future amenity additions will not only reduce the number of Buffalo residents who are not within walking distance of their favorite park activity, it will also help to make each Buffalo park feel special by ensuring that it is fulfilling a unique role.

TIMELINE	Continuously over the next 10 years
KEY METRICS	Number of new residents served by park amenities

STRATEGY: CONTINUE TO INCORPORATE GREEN INFRASTRUCTURE AND NATURAL AREAS INTO PARKS

The Buffalo Sewer Authority's Raincheck 2.0 plan provides a framework for how the city can move forward using green infrastructure to address stormwater issues. The Division of Parks and Recreation and Buffalo Sewer Authority have been successfully collaborating on projects such as the green infrastructure improvements in the pool parking lot at Ralph C. Wilson, Jr. Centennial Park. The city should continue this collaboration while also working to clarify the

lingering specifics of this work, such as future maintenance responsibilities.

That should be paired with adding more natural areas to parks where appropriate. Roughly 524 acres of the parkland in Buffalo (including sites belonging to the state or country) are maintained as natural open space, or roughly 24 percent of total park acreage. This is similar to peer cities, which have 23 percent of their park space as natural open space. However, Buffalo's natural open space is not evenly distributed throughout the city, but is largely focused near Lake Erie, such as Tifft Nature Preserve, or along the Buffalo River, such as the county parks. Creating more natural open space in other Buffalo parks, or in new parks, would allow the city to meet the growing demand of nature-based recreation and for walking paths and riding trails, a top-requested amenity. This step would also help the city to increase its green infrastructure and associated stormwater benefits without taking on highly engineered projects, and could be done in connection with BSA, as well as nonprofit partners, such as Buffalo Niagara Waterkeeper, and the Buffalo Olmsted Conservancy, which is already exploring these opportunities in the city's historic park system through their Olmsted Naturally committee. The Division of Parks and Recreation will also continue to collaborate with the Buffalo Bureau of Forestry to implement the city's urban forestry master plan.

TIMELINE Continuously over the next 10 years

KEY
METRICS

• Green infrastructure projects in parks
• Impervious area conversion in parks
• BSA spending in parks, number and acreage of open spaces in parks

STRATEGY: STUDY PARKS TO CLOSE TO TRAFFIC

When discussing open space amenities, community members requested walking paths or trails most often, followed by bike paths. Focus group participants agreed that the temporary removal of vehicular traffic from Delaware and South Park has been a great improvement, effectively creating miles of new trails for jogging, walking, and biking, and recommended expanding this to close all streets within parks to vehicular traffic. The Division of Parks and Recreation will build on this success by studying where it would

be reasonable and appropriate to close additional internal (or perimeter) roads to traffic.

TIMELINE	Years 1-2 (implementation in Years 3-5)
KEY METRICS	 Miles of roadway closed to traffic Number of parks with traffic-free walking and biking paths

STRATEGY: INCORPORATE PUBLIC ART INTO PARKS

Improved park aesthetics was one of the top community priorities for increasing park use. Specifically, community members desire parks that use art and design to distinguish one park from another. To achieve this, the Division of Parks and Recreation should collaborate directly with the Buffalo Art Commission, community members and artists, and other city services (e.g., Community Services & Recreational Programming, Citizen Services) to o btain more grants and diversify funding mechanisms to support public art programs for parks. Strategic collaborative efforts should focus on grants for the arts, humanities, economy, infrastructure, and tourism in support of public art for the parks. There are many ways to incorporate public art, but improving the number of grants obtain, opportunities won, and resources available for creative initiatives is a critical starting point.

The City of Buffalo should consider low-, medium-, and high-cost public art projects for parks with a purposeful approach to enhancing and differentiating park identity through aesthetic, physical, and programmatic experiences. While selecting artists to carry out these projects, the city will maintain a strong focus on diversity and inclusion. In addition, we recommend giving specific consideration towards preservation and ongoing maintenance of public art, which disproportionately impacts public art resources in the city. With an efficient approach to art for parks, the City of Buffalo can achieve a wider impact, with higher-quality improvements that successfully inspire park use immediately and for a long time to come.

PARK ART AUDIT

The city will undertake a simple audit of art in the park system. Cataloguing public art in Buffalo's parks and its condition will support tourism and enhance

park experience with a smart and efficient approach to art appreciation.

ART PROGRAMS

The City of Buffalo could also develop dedicated programs and partnerships to support public art in the parks, including:

- Art in the Park: The City of Buffalo could schedule an annual day in the parks for art, nature, and community appreciation. An Art in the Park Day could feature exhibitions of local artists' work, craft shows, musical and theatrical performances, and more. These events are excellent cultural catalysts and tourism revenue generators for local communities. The city could dedicate one park for this purpose and event each year and/or a secondary location to encourage exploration of new neighborhoods and areas.
- Chalk It Up: A community chalk art day similar to Chalkfest, but with a focus on neighborhood parks
- Mural Brigade: The City of Buffalo could partner
 with local universities, high schools, and community
 organizations on grant applications for a city-wide
 mural program. The goal of the "Mural Brigade" is
 to provide experiential learning for aspiring artists,
 who will work in collaboration with professional
 muralists/artists on projects across the city.
- Cooperative Agreements: Improved application
 processes for local artists interested in developing
 artwork and creative programs for Buffalo's parks.
 This should include professional development
 support to help aspiring artists and creative
 professionals apply for grants and obtain permits
 to work on public property. More specifically, the
 process whereby public art projects can be proposed
 and evaluated should be clearly marketed across
 the entire city, with resources and applications
 available to local artists and organizations online
 and in print.
- Collaborations with developers, neighborhood groups, and business leaders on creative initiatives for their local parks with support from the city
- Special Events Coordination: Expanding public art to include seasonal and cultural programs that engage other creative mediums including music, dance, theatre, spoken word, digital/e-sports, culinary arts, and more

PARK ART OPPORTUNITIES

Opportunities for greater art inclusion in Buffalo parks include:

Low Cost

- Community-Led Efforts: (neighborhood organizations, block watch groups, cultural organizations, small businesses, local artists and organizations) funded by independent grant application efforts with support from the City of Buffalo and Buffalo Art Commission
- Asphalt Art: Concrete stain paintings to improve wayfinding and beautify park spaces
- Modular Murals: Murals that are made for seasonal outdoor display with anti-graffiti coating and a range of applications including installation on masonry, fencing, and in-ground support
- DIY Placemaking Solutions. Benches, tables, gardens, stages, parkour facilities, and recreational amenities designed for seasonal use
- Enhanced Amenities: Painted backboards, decorated fencing, or picnic tables
- Dedicated Public Art Walls: These are walls
 where community members and arts organizations can refresh public art on a rotating basis.
 These walls could feature chalk murals, graffiti
 art, or more traditional murals. The primary
 benefit of this amenity is the potential for
 change and diversity of ongoing communication
 and narrative in the community.

Medium Cost

- Murals
- Creative Amenities: Benches, tables, lighting, bike racks, and equipment designed by local artists and skilled manufacturers
- Enhanced Amenities: Painted basketball courts, creative lighting installations, sensory installations, storybook trails, etc.

High Cost

- Sculptures
- Expansive Placemaking Initiatives: Land art (sculptures in the earth), outdoor and sheltered amphitheaters, free Wi-Fi zones, etc.
- High-Quality and Highly-Differentiated Amenities: Artistically designed splash pads, recreation equipment, outdoor fitness, etc.
- Kinetic Installations (flags, mobiles, water and wind sculpture installations, etc.)

 Thematic Park Design: Incorporating creative placemaking into the design of the park, with a theme (e.g., nature, elements, animals, outer space, cartoons, STEM, etc.) incorporated throughout the design.

MAINTAINING ART IN PARKS

The cost of maintaining existing art in the City of Buffalo currently occupies 75 percent or more of the Buffalo Art Commission's budget. Specific solutions for maintaining new and existing public art must be developed before medium-to-high-cost public art projects can be implemented. Solutions could include different funding mechanisms within the city budget (increasing from 1 percent to 2 percent of capital expenditures), grants, and business and community partnerships. In addition, the City of Buffalo should develop protocols to quickly and strategically address public art maintenance (e.g., schedules for refurbishment, stewardship partners, contracted maintenance with community artists). Future public art initiatives should consider:

- Anti-graffiti materials: Marine-grade polyurethane
- Vandalism response protocols: City and neighborhood beautification task forces, organized by the city in partnership with community organizations and block watch groups
- Repairs and replacement costs: To be considered in advance of implementation

These changes will improve park aesthetics and visitor experience, making neighborhood parks feel distinctly for and dedicated to the communities they serve. This will increase the sense of equity residents feel towards their parks and improve stewardship and support for a wide range of future community initiatives that can use the parks as a base for other outbound opportunities.

TIMELINE	Continuously over the next 10 years
KEY METRICS	 Number of grants applied for Number of artists and community groups engaged Condition of artwork, and Number of public art projects completed.

STRATEGY: CREATE AN INTER-AGENCY TASK FORCE TO REVIEW CITY-OWNED VACANT LOTS FOR OPPORTUNITIES TO CREATE NEW PARKLAND

In addition to Buffalo's many formalized parks, the city also owns many vacant lots. These spaces provide an obvious opportunity for expanding park access, and some may even be used currently as informal recreational space by community members. Since they are already city-owned, this transformation would at a minimum require adding signage identifying the space as a park and funding and responsibility for regular city maintenance, with plans to add amenities following future community engagement. To facilitate this process. Buffalo should create a task force of relevant agencies (e.g., the Division of Parks and Recreation, the Division of Planning, and the Division of Real Estate) to examine such sites and make determinations about their suitability as parks. The task force will focus primarily on sites that are outside of a 10-minute walk to an existing park (see Figure 8 in Section 3), sites that are in higher-need communities (see Figure 22 in Section 6), and park acres per person.

TIMELINE	Years 1-5
KEY METRICS	 Number of spaces formalized as parks Residents provided with park access Park acreage per resident metrics Inventory of unallocated city-owned open space

Objective: Strengthen Park System Resources

STRATEGY: INFORM STAKEHOLDERS OF THE MULTIPLE BENEFITS OF PARKS TO IMPROVE BUFFALO COMMUNITIES, PUBLIC HEALTH, EQUITY, CLIMATE AND ECONOMY.

Buffalo's parks fulfill a number of crucial roles. They provide a setting for physical activity, improve air and water quality, and create settings for recreation and social interaction. The more stakeholders that understand the breadth and depth of these benefits, the more support there will be for investing in parks with private and public funds or with volunteer time and other resources. The healthcare system, for example, could well view parks as outdoor wellness centers that would address many of the chronic health problems of Buffalo residents. The city will utilize the results

of the park benefits study in <u>Section 5</u> to educate policy makers, city staff, funders, and the public on the crucial role played by city parks to improve the lives of Buffalo residents and the city overall.

TIMELINE	Years 1-3, then continuously over the next 10 years
KEY METRICS	Understanding of the value of parks and number of citations to the park benefit study, number of industries and stakeholders who invest in and volunteer for parks.

STRATEGY: EXPLORE POTENTIAL NEW FUNDING SOURCES

In many ways, the City of Buffalo and its partners have performed an admirable job funding parks. Private spending on parks is substantial, and the city's capital expenditures generally keep up with its peers. However, Buffalo lags in its funding of operations and maintenance, and the impacts have been noted by community members and stakeholders alike. Currently, Buffalo spends \$6,063,120 annually on maintenance and administration, or about \$23 per resident, about half the peer city average of \$43 per resident. For Buffalo to reach the peer city average, the city would have to increase maintenance and administrative spending to \$11,161,682 per year. While philanthropists have done much to support Buffalo's parks, private funders are generally unlikely to support operations and maintenance costs, particularly in smaller neighborhood parks.

The City of Buffalo's financial support for park operations and maintenance comes entirely from the city's general fund (see Section 4: Comparison to Peer Cities). While this was the norm for most cities in the past, today cities that generate higher sums of public dollars for parks, such as Cleveland and Cincinnati, have more diverse public finance streams, including earned revenue and voter approved taxes and bonds devoted to parks. To ensure sufficient financial support in the future, the city should undertake a study to explore other options for increasing funding, such s diversifying public sources of revenue, pursuing grants, or earned income practices like permit revenue from concerts and other special events. The city should consider revising facility rental and special events

revenue practices; more park agencies are keeping these fees and re-investing those funds directly into parks versus contributing them to the city's general fund. While some sources such as concessions will provide only modest revenue, the greater use of concessions would provide a way to cover the costs of adding more amenities to parks that were requested by many community members throughout the engagement process. There is a strong record of this for Little Leagues that help activate baseball diamonds throughout the park system. Charging food trucks and other vendors a "rental fee per day" rate has generally been found to be more successful than a traditional "percentage of sales" model and is easier to manage. The City of Buffalo has done an impressive job of keeping park programs low- or no-cost for children, and another recommendation covers equitable tiered revenue. This is an excellent precedent in terms of supporting equity in park programming and should be maintained.

Greater collaboration with partner organizations will also make park grant applications appealing to a wider variety of potential funders. For example, partnering with the Buffalo Sewer Authority or Buffalo Public Schools on park and schoolyard improvements would allow the city to pursue federal and state grants related to stormwater, the environment, education, and other funds from more varied sources. In addition, partnering with cultural and community organizations on aesthetic improvements to parks would allow the city to pursue public art and humanities grants to celebrate local heritage, identity, and creative spirit. The city can also consider a grants coordinator who is focused on parks.

TIMELINE	Years 1-5 (goal of 5% growth per year), then continuously over the next 10 years
KEY METRICS	 Increase in public funding for operations and maintenance Number of additional park funding sources engaged Dollars spent on park investments in high and very-high need neighborhoods.

STRATEGY: OPTIMIZE PARKS STAFF AND SERVICE AGREEMENTS

Once operational and maintenance funding for Buffalo parks has increased, rightsizing staffing, ensuring the appropriate skill sets among those staff members and determining appropriate supplementary service agreements should be a top priority. Buffalo will complete an evaluation of options for improving staffing, including staff allocation and the consideration of park partners and volunteers at parks, who can provide a public presence that amplifies park safety and activation (see related recommendation). The city will also explore options for greater training and specialization among operations and maintenance staff. Providing official uniforms should also be a priority, as community members mentioned that it would help community members see the work that the city is doing in parks, which would strengthen their own sense of stewardship.

Increases in staffing and service agreements will not only benefit operations and maintenance, but they will also pay dividends in all aspects of the park system, yielding results much greater than the cost. For example, a larger staff will make it easier for the Division of Parks and Recreation to apply for grants and organize volunteer efforts.

TIMELINE	Continuous growth over the next 10 years
KEY METRICS	Number of full and part time staff added to the Division of Park and Recreations current staff

STRATEGY: ESTABLISH A CITYWIDE VOLUNTEER PROGRAM FOR BUFFALO PARKS

Volunteer hours are an important resource for parks departments across the country. With a more focused volunteer program, Buffalo's parks could benefit from the city's strong tradition of distributed community engagement. Block clubs, communities of faith, and small businesses are examples of civic organizations that have a locally focused interest in the urban fabric. The city has dedicated agencies to such efforts such as the Department of Citizen Services, which carries out local outreach programs such as Love Your Block, Wintermission, and Clean Sweeps. There is also a

vibrant and active network of schools and libraries tasked with fostering a healthy civil society.

The city will create a "Love Your Park" volunteer program that will build on the successful "Love Your Block" program to promote community stewardship of parks. Love Your Park envisages community building through the use of parklands to catalyze a progressive process of engagement, networking, education, social connectivity, and tangible, visible improvements in community beautification. Love Your Park will elevate the importance of local, sustainable community investment in Buffalo parks by empowering existing community groups/outreach programs to pursue individual program goals while promoting broader citizen engagement within parks. Volunteer groups could also take on the role of educating community members about park spaces, leading a series of "walkshops" to local parks. An additional benefit could be for Buffalo Parks to identify younger entry-level stewards, leveraging this exposure to deepen the pipeline and develop future staff talent. This program could be run by the Division of Parks and Recreation or by the Department of Citizen Services.

For a full summary of the proposed Love Your Park framework, see Appendix 7.

TIMELINE	Years 1-3, pending funding of \$150,000/year
KEY	 Number of volunteers engaged Number of volunteer hours
METRICS	contributed Number of parks adopted

STRATEGY: WORK WITH PARTNERS TO STRENGTHEN A NETWORK OF "FRIENDS OF" GROUPS

As a city, Buffalo benefits from a deep sense of civic pride and engagement. Parks are enormous beneficiaries of this, as can be seen through the prevalence of both volunteerism and philanthropy. As noted in Section 4, 41 percent of overall park spending in 2019 was from private sources. This has been a huge boon to Buffalo's parks. However, parks are better positioned to take advantage of these dollars when there is an associated conservancy or "friends of" group that can accept such funds and pair them with volunteer efforts. Obvious success stories in Buffalo include

Buffalo Olmsted Parks Conservancy, the relationship between the Museum of Science and Tifft Nature Preserve, and the forthcoming Ralph C. Wilson, Jr. Centennial Park Conservancy. However, neighborhood parks and park groups do not get the same level of philanthropic support, in part because such groups lack capacity to apply for or administer grants. Creating a city-wide network of parks "friends of" groups or, if there is available funding, conservancies focused on neighborhood parks would allow for the sharing of best practices and funding sources. Also, a network might seek a fiscal sponsor for local "friends of" groups, help some apply for non-profit status, incorporate as conservancies, take on the role of applying for grants for park improvement, and potentially even take on other staffing roles such as hiring a volunteer coordinator.

Buffalo has also experienced recent successes partnering on park management with business improvement districts (BIDs) and Property Owners Association (POAs), including Buffalo Place and Buffalo Urban Development Corporation. The city should embrace opportunities to create new partnerships with BIDs/POAs or expand existing agreements.

TIMELINE	Years 3-5
KEY METRICS	 Network of neighborhood parks conservancies is established Funding for member neighborhood park conservancies Number of parks covered by a conservancy or "friends of" groups

Endnotes

- 1. https://worldpopulationreview.com/us-cities/buffalo-population/
- 2. https://www.43north.org/who-we-are/
- 3. https://buffalobillion.ny.gov/buffalo-blueway
- 4. https://www.esri.com/en-us/maps-we-love/gallery/predominant-populations
- ACS 5-year estimates used. U.S. Department of Commerce. 2019. Census Bureau, American Community Survey Office, Washington. D.C.
- ACS 5-year estimates used. 2019 represents average characteristics from 2015-2019; 2010 represents 2006-2010. U.S. Department of Commerce. 2019. Census Bureau, American Community Survey Office, Washington, D.C.
- https://www.health.ny.gov/statistics/community/minority/docs/ mcd_reports/erie_county_city_of_buffalo.pdf
- 8. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1732596/
- 9. https://www.uwbec.org/content//UWBEC percent20Childhood percent20Obesity percent20Report percent20Card.pdf
- https://www.forbes.com/pictures/ mlj45jggj/10-buffalo/#542f3aeb3f39
- 11. https://www.forbes.com/pictures/mlj45jggj/10-buffalo/#542f3aeb3f39
- 12. http://ecologicalregions.info/data/ny/NY_front.pdf
- 13. https://www.growwny.org/nature-habitat/
- 14. https://www.tifft.org/about-us/
- 15. http://www2.erie.gov/environment/sites/www2.erie.gov. environment/files/uploads/pdfs/ERIE percent20COUNTY percent20PARKS percent20MASTER percent20PLAN percent20UPDATE_FINAL_VOLUME percent202-FLAT-compressed-REDUCED.pdf
- https://weather.buffalostate.edu/sites/weather.buffalostate.edu/ files/uploads/photos/PDF/Trend percent20Analysis_ December_2017.pdf
- 17. https://nca2018.globalchange.gov/chapter/front-matter-about/
- https://www.citylab.com/environment/2019/12/ climate-change-displacement-refuge-city-buffalo-new-york/602758/
- https://climatesmart.ny.gov/?type=1336777441&tx_sjcert_certification[certification][__identity]=30
- https://www.epa.gov/sciencematters/ evaluating-effectiveness-vacant-lots-green-infrastructure-buffalo-ny
- 21. https://www.epa.gov/sciencematters/
 evaluating-effectiveness-vacant-lots-green-infrastructure-buffalo-ny
- 22. https://buffalosewer.org/app/uploads/2017/08/LTCP-Exec-Summary.pdf
- 23. https://news.wbfo.org/post/smart-sewers-key-400m-city-plan-end-water-overflows

- https://bnwaterkeeper.org/wp-content/uploads/2015/12/BNR_ KnowYourSewershed_Handbook.pdf
- 25. https://www.epa.gov/sciencematters/evaluating-effectiveness-vacant-lots-green-infrastructure-buffalo-ny
- 26. https://www.tpl.org/city/buffalo-new-york
- 27. https://www.tpl.org/city/buffalo-new-york
- 28. https://www.buffalorising.com/2018/05/ waterkeepers-soft-opening-of-the-first-dock-and-launch-of-thebuffalo-blueway/
- 29. https://www.wnypapers.com/news/article/ current/2018/10/11/134434/ buffalo-niagara-waterkeeper-3-million-award-from-ralph-c.-wilsonjr.-foundation
- 30. All data in Table 4 provided by the 2015-2019 5-year American Community Survey, with the exception of The Trust for Public Land's ParkScore rankings, and the population density data which was derived from the U.S. Census Bureau, Population Division.
- 31. As these spending figures are focused on city parks, for the purpose of comparison, private spending on state or national parks (e.g., the Gateway Arch Park Foundation's spending on Gateway Arch National Park in St. Louis) have been removed.
- 32. All numbers in the text and tables are rounded to three significant digits unless otherwise noted. Because of rounding, some report figures and tables may not appear to sum.
- Buffalo Water, Annual Drinking Water Quality Report for Calendar Year 2018, accessed September 24, 2020, https://buffalowater.org/ wp-content/uploads/2019/07/2018-2019-Water-Quality-Report.pdf.
- 34. U.S. Environmental Protection Agency, "Nutrient Pollution," accessed June 8, 2020, https://www.epa.gov/nutrientpollution/issue.
- Environmental Protection Agency, A Compilation of Cost Data Associated with the Impacts and Control of Nutrient Pollution, EPA 820-E-15-096, 2015.
- 36. Alliance for the Great Lakes, Five Years Later: Lessons From the Toledo Water Crisis, accessed December 17, 2020, https://greatlakes.org/2019/08/five-years-later-lessons-from-the-toledo-water-crisis/; Great Lakes Now, Great Lakes Moment: Harmful Algal Blooms Negatively Impact the Lake Erie Economy, accessed December 17, 2020, https://www.greatlakesnow.org/2019/11/harmful-algal-blooms-cost-economic-impact/
- 37. Michael E. Kjelland, Christa M. Woodley, Todd M. Swannack, and David L. Smith, "A Review of the Potential Effects of Suspended Sediment On Fishes: Potential Dredging-Related Physiological, Behavioral, And Transgenerational Implications," *Environment Systems and Decisions* 35 (2015):334–350; Jeff Bash, Cara Berman, Susan Bolton, "Effects of Turbidity and Suspended Solids on Salmonids," Center for Streamside Studies, University of Washington, Washington State Transportation Center, 2001.
- MyTreeKeeper, Buffalo, NY, https://buffalony.treekeepersoftware.com/, accessed September 25, 2020.

- U.S. Forest Service, Davey Tree Expert Company, The Arbor Day Foundation, Society of Municipal Arborists, International Society of Arborculture, Casey Trees, and SUNY College of Environmental Science and Forestry, i-Tree Hydro, https://www.itreetools.org/tools/hydro.
- 40. Buffalo Sewer Authority, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2019. Based on wastewater treatment volume and costs between 2010 and 2019.
- 41. Buffalo Sewer Authority, 2019-2020 Budget, accessed December 17, 2020, https://buffalosewer.org/app/uploads/2019/04/BSA-Budget-19-20-Small.pdf
- 42. RainCheck, Clean Water Buffalo, "Broderick Park," accessed September 25, 2020, https://raincheckbuffalo.org/project/broderick-park/.
- 43. RainCheck, Clean Water Buffalo, "Rain Check Green Infrastructure Grant Program," accessed September 25, 2020, https://raincheckbuffalo.org/grants/.
- Buffalo Sewer Authority, Rain Check 2.0 Opportunity Report, Appendix D: Economic Impact Analysis, 2019, accessed September 25, 2020, https://raincheckbuffalo.org/opportunityreport/.
- Marilena Kampa and Elias Castanas, "Human Health Effects of Air Pollution, Environmental Pollution," Environmental Pollution 151 (2007): 362-367; Janet Currie, "Pollution and Infant Health," Child Development Perspectives 7 (2013): 237-242.
- 46. R. N. Butlin, "Effects of Air Pollutants on Buildings and Materials," Proceedings of the Royal Society of Edinburgh. Section B. Biological Sciences 97 (1990): 255-272; U.S. Environmental Protection Agency, The Plain English Guide to the Clean Air Act, EPA-456/K-07-001, Office of Air Quality Planning and Statistics, 2007; American Lung Association, "Health Effects of Ozone and Particle Pollution," accessed December 3, 2019, https://www.epa.gov/pm-pollution.
- David J. Nowak, Satoshi Hirabayashi, Allison Bodine, and Robert Hoehn, "Modeled PM2.5 Removal by Trees in Ten U.S. Cities and Associated Health Effects," *Environmental Pollution* 178 (2013): 395–402
- 48. Particulate matter includes fine and coarse particles. Fine particles consist of particulate matter less than 2.5 micrometers in diameter and are so small they can be detected only with an electron microscope. Sources of particulate matter include all types of combustion, including motor vehicles, power plants, and residential wood burning. Coarse dust particles consist of particulate matter between 2.5 and 10 micrometers in diameter and are generated by crushing and grinding operations as well as dust stirred up by cars traveling on roads. U.S. Environmental Protection Agency, "Particle Pollution (PM)," accessed December 3, 2019, https://www.epa.gov/benmap/how-benmap-ce-estimates-health-and-economic-effects-air-pollution.
- 49. U.S. Environmental Protection Agency, "Benefits Mapping and Analysis Program: How BenMAP-CE Estimates the Health and Economic Effects of Air Pollution," accessed September 2, 2020, https://www.epa.gov/benmap/how-benmap-ce-estimates-health-and-economic-effects-air-pollution.
- American Lung Association, "Report Card: New York," State of the Air 2020, accessed September 24, 2020, http://www.stateoftheair.org/city-rankings/states/new-york/.
- 51. American Lung Association, "Compare Your Air," State of the Air 2020, accessed September 24, 2020, https://www.stateoftheair.org/city-rankings/compare-your-air.html?msa1=Buffalo-Cheektowaga-Olean, percent20NY&msa2=Rochester-Batavia-Senecapercent20Falls, percent20NY
- 52. Arbor Day Foundation, "2019 Tree City USA Communities in New York," accessed September 25, 2020, https://www.arborday.org/programs/treecityusa/TreeCities.cfm?chosenState=New_York&orderBy=Years.

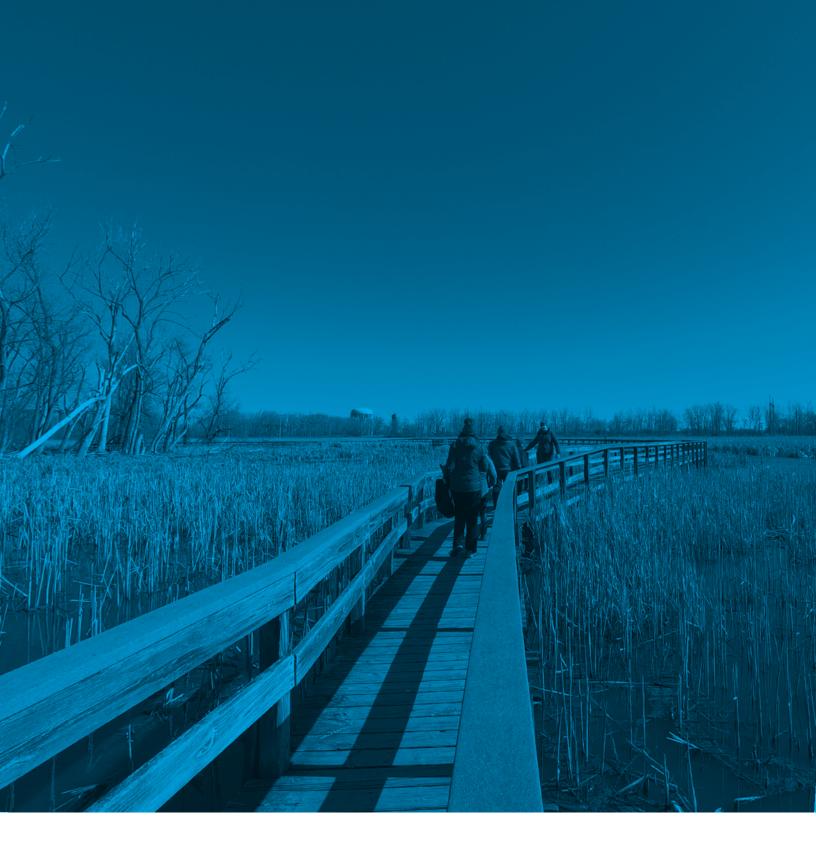
- MyTreeKeeper, Buffalo, NY, https://buffalony.mytreekeeper.com/, accessed September 25, 2020.
- 54. i-Tree Canopy was developed by the U.S. Forest Service, Davey, Arbor Day Foundation, Society of Municipal Arborists, International Society of Arborculture, Casey Trees, SUNY College of Environmental Science and Forestry, and Northeastern Area Association of State Foresters.
- 55. U.S. Environmental Protection Agency, "Benefits Mapping and Analysis Program: How BenMAP-CE Estimates the Health and Economic Effects of Air Pollution," accessed September 2, 2020, https://www.epa.gov/benmap/how-benmap-ce-estimates-health-and-economic-effects-air-pollution.
- Satoshi Hirabayashi, i-Tree Canopy Air Pollutant Removal and Monetary Value Model Descriptions, The Davey Institute, 2014, https://www.itreetools.org/documents/560/i-Tree_Canopy_Air_Pollutant_Removal_and_Monetary_Value_Model_Descriptions.pdf.
- 57. U.S. Department of Labor, Bureau of Labor Statistics, Producer Price Index, www.bls.gov/ppi/.
- 58. John L. Crompton and Sarah Nicholls, "Impact on Property Values of Distance to Parks and Open Spaces: An Update of U.S. Studies in the New Millennium," Journal of Leisure Research 51, no. 2 (2019): 127-146; Virginia McConnell and Margaret Walls, The Value of Open Space: Evidence from Studies of Nonmarket Benefits (Washington, DC: Resources for the Future, 2005); John L. Crompton, "The Impact of Parks on Property Values: Empirical Evidence from the Past Two Decades in the United States," Managing Leisure 10, no. 4 (2005): 203-218.
- 59. Ibid.
- 60. John L. Crompton, The Proximate Principle: The Impact of Parks, Open Space and Water Features on Residential Property Values and the Property Tax Base (Ashburn, VA: National Recreation and Park Association, 2004).
- John L. Crompton and Sarah Nicholls, "Impact on Property Values of Distance to Parks and Open Spaces: An Update of U.S. Studies in the New Millennium," *Journal of Leisure Research* 51, no. 2 (2019): 127-146.
- 62. National Association of Realtors, "Parks, Surf Breaks and Walmart: How Do They Affect Home Values," accessed May 26, 2020, https://www.nar.realtor/newsroom/real-estate-story-ideas/parks-surf-breaks-and-walmart-how-do-they-affect-home-values; Brad Broberg, "Everybody Loves a Park: Green Space Is a Premium When Building, Buying, or Selling," National Association of Realtors, On Common Ground (2009): 20-25.
- Pennsylvania Department of Conservation and Natural Resources, Economic Impact of Local Parks, Recreation and Open Space in Pennsylvania, 2014, accessed December 17, 2019, https://www.keystonefund.org/wp-content/uploads/sites/5/2014/03/dcnr_009692.pdf.
- 64. Rainer vom Hofe, Oana Mihaescu, and Mary Lynne Boorn, "Are Homeowners Willing to Pay More for Access to Parks? Evidence from a Spatial Hedonic Study of the Cincinnati, Ohio, USA Park System," *Journal of Regional Analysis and Policy* 48, no. 3 (2018):66-82.
- 65. Czb LLC., Buffalo Housing Opportunity Strategy, 2017, accessed September 25, 2020, https://www.thepartnership.org/wp-content/uploads/2017/12/Buffalo-Housing-Opportunity-Strategy.pdf.
- 66. Li Yin, Hao Zhang, Kelly Patterson, Robert Silverman, and Liang Wu, "Walkability, Safety, and Housing Values in Shrinking Cities: Spatial Hedonic Study in Buffalo, Pittsburgh, and Detroit," *Journal of Urban Planning and Development* 146, no. 3 (2020).
- Sam Magavern, "Buffalo's Outer Harbor: The Right Place for A World-Class Park," Partnership for the Public Good, 2018.

- 68. For the purposes of this analysis, The Trust for Public Land isolated homes within 500 feet of a park greater than a half-acre. The exception was Buffalo designated "small parks" that are at least a quarter acre and contain at least one amenity (e.g., a playground). Smaller parks and facilities only were removed from the analysis.
- 69. A home consists of a residential structure that is owned and taxed. This analysis includes single-family homes as well as multiple-unit dwellings (e.g., condominiums). Other property types, such as commercial properties, were not considered in this analysis because sufficient data were not available to quantify the benefit. Nonresidential property types are rarely studied in the literature as they are more difficult to statistically analyze—there are more variables that influence value and fewer real estate transactions to compare.
- National Park and Recreation Association, "How Much Impact do Parks Have on Property Values?" March 26, 2020, accessed April 5, 2021, https://www.nrpa.org/parks-recreation-magazine/2020/april/how-much-impact-do-parks-have-on-property-values/.
- 71. Other property types, such as commercial properties, were not considered in this analysis because sufficient data were not available to quantify the benefit. Nonresidential property types are rarely studied in the literature as they are more difficult to statistically analyze—there are more variables that influence value and fewer real estate transactions to compare.
- 72. Tourism Economics, Economic Impact of Tourism in New York, 2018
 Calendar Year, Hudson Valley Focus, accessed September 24, 2020,
 https://highlandscurrent.org/wp-content/uploads/2019/09/
 tourism-impact-2018-hudson-valley.pdf.
- 73. Longwoods International, *Colorado Travel Year* 2019, https://industry.colorado.com/sites/default/files/Colorado.percent202019
 percent2019
 <a h
- 74. Great Lakes Seaway Trail, "Buffalo/Niagara Falls," accessed September 25, 2020, http://www.seawaytrail.com/ buffalo-niagara-falls/.
- 75. New York State, "About the Empire State Trail," accessed September 25, 2020, https://www.ny.gov/empire-state-trail/ about-empire-state-trail.
- Political Economy Research Institute, Economic Benefits of the New York State Park System, 2017, accessed September 25, 2020, https://www.ptny.org/application/files/6515/0903/5031/Economic-benefits-of-NYS-parks.pdf.
- National Park Service, "National Underground Railroad Network to Freedom," accessed September 25, 2020, https://www.nps.gov/orgs/1205/index.htm.
- 78. Juneteenth Festival, Inc., "Event Information," accessed September 25, 2020, https://juneteenthofbuffalo.com/level3.php; Drew Brown, "What You Need to Know About Juneteenth of Buffalo," Visit Buffalo Niagara, June 3, 2020, accessed September 25, 2020, https://www.visitbuffaloniagara.com/3-things-you-need-to-know-about-juneteenth-of-buffalo/; American Planning Association, "Delaware Park: Buffalo, New York," accessed September 25, 2020, https://www.planning.org/greatplaces/spaces/2014/delawarepark.htm
- 79. This approach is conservative because it does not capture the spending by visitors who come for other purposes but extend their stay to enjoy parks in Buffalo.
- 80. Compass Longwoods International, *Travel USA Visitor Profile*, Visit Buffalo Niagara, 2018/2019.
- 81. County parks with unique amenities are sometimes a component of the tapestry of resources that make the outdoors accessible to tourists. Information was not available to understand usage of county parks, nor to isolate the proportion of local versus nonlocal visitors to these amenities. The Erie County park amenities located within the City of Buffalo were also not likely to attract non-local visitors to the city; however, this is consistent with The Trust for Public Land's work across the country and its understanding that federal, state, and regional parks are the most likely to draw significant tourist visits

- while local amenities are more often designed to meet the recreational needs of local residents.
- 82. Angela P. Berti, New York State Parks, e-mail message to author, February 26, 2021. Data were provided for 2016-2020, and the average was calculated for 2016-2019, prior to the COVID-19 pandemic.
- 83. Erin Grajek, vice president of Buffalo and Erie County Botanical Gardens, e-mail message to author, February 26, 2021.
- Richard Florida, Cities and the Creative Class (New York: Routledge, 2005).
- 85. Daphne T. Greenwood and Richard P. F. Holt, Local Economic Development in the 21st Century: Quality of Life and Sustainability (New York: Routledge, 2015).
- 86. New York State, Empire State Development, "Better Buffalo Fund Program," accessed September 24, 2020, https://esd.ny.gov/better-buffalo-fund-program.
- 87. American Planning Association, "Delaware Park: Buffalo, New York," accessed September 25, 2020, https://www.planning.org/greatplaces/spaces/2014/delawarepark.htm.
- 88. Outdoor Industry Association, New York, accessed September 24, 2020, https://outdoorindustry.org/state/new-york/.
- 89. U.S. Bureau of Economic Analysis, "Outdoor Recreation Satellite Account, U.S. and Prototype for States, 2017," accessed September 27, 2019, https://www.bea.gov/data/special-topics/ outdoor-recreation.
- Esri, "ESRI Business Analyst," accessed February 23, 2021, http://www.esri.com/software/businessanalyst.
- 21. The data analyzed here are from the Sports and Leisure Market Potential report and are based on national propensities to use various products and services, applied to local demographic composition. Usage data were collected by GfK MRI, a leading market research firm, in a nationally representative survey of U.S. households
- 92. The MPI is tabulated to represent a value of 100 as the overall demand for the United States. An MPI of more than 100 represents high demand; a value of less than 100 represents low demand. For example, an MPI of 120 implies that demand is likely to be 20 percent higher than the national average.
- 93. The SPI is tabulated to represent a value of 100 as the overall spending for the United States. When the SPI is equal to 100 for a specific type of merchandise, consumers are spending at a rate equal to the national average. The SPI is an indicator of what level of discretionary income consumers are willing to devote to a particular good or service.
- 94. This spending category includes exercise equipment and gear, as well as game tables.
- 95. David Rojas-Rueda, Mark J. Nieuwenhuijsen, Mireia Gascon, Daniela Perez-Leon, and Pierpaolo Mudu, "Green Spaces and Mortality: A Systemic Review and Meta-Analysis of Cohort Studies," *The Lancet* (2010)
- 96. P. Veugelers, F. Sithole, and S. Zhang, "Neighborhood Characteristics in Relation to Diet, Physical Activity and Overweight of Canadian Children," International Journal of Pediatric Obesity 3 (2008): 152-159; lan Alcock, Mathew P. White, Benedict W. Wheeler, Lora E. Fleming, and Michael H. Depledge, "Longitudinal Effects on Mental Health of Moving to Greener and Less Green Urban Areas," Environmental Science and Technology 48, no. 2 (2014): 1247-1255.
- Buckley, R., Brough, P., Hague, L., Chauvenet, A., Fleming, C., Roche, E., Sofija, E., and Harris, N. "Economic Value of Protected Areas Via Visitor Mental Health," *Nature Communications* (2019), https://doi. org/10.1038/s41467-019-12631-6; National parks a boost to mental health worth trillions: study (2019, November 12) retrieved 13 January 2020 from https://phys.org/news/2019-11-national-boost-mental-health-worth.html.

- M. R. Marselle, K. N. Irvine, and S. L. Warber, "Examining Group Walks in Nature and Multiple Aspects of Well-Being: A Large-Scale Study," Ecopsychology 6, no. 3 (2014): 134-147; Claude Bouchard, Steven N. Blair, andWilliam Haskell, Physical Activity and Health (Champaign, IL: Human Kinetics, 2012); Ronald Sturm and Deborah Cohen, "Proximity to Urban Parks and Mental Health," Journal of Mental Health Policy and Economics 17, no. 1 (2014): 19-24.
- 99. Peter James, Jaime E. Hart, Rachel F. Banay, and Francine Laden, "Exposure to Greenness and Mortality in a Nationwide Prospective Cohort Study of Women," *Environmental Health Perspectives* 124, no. 9 (2016): 1344–1352.
- 100. A. H. Mokdad et al., "Actual Causes of Death in the United States, 2000," Journal of the American Medical Association 291 (2004): 1238-1245; Centers for Disease Control and Prevention, The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives, 2002, National Center for Chronic Disease Prevention and Health Promotion, 2003.
- 101. A. T. Kaczynski and K. A. Henderson, "Parks and Recreation Settings and Active Living: A Review of Associations With Physical Activity Function and Intensity," *Journal of Physical Activity and Health* 5, no. 4 (2008): 619-632.
- 102. Ming Kuo, "How Might Contact with Nature Promote Human Health? Promising Mechanisms and a Possible Central Pathway," Frontiers in Psychology 6 (2015): 1-8.
- 103. A. T. Kaczynski and K. A. Henderson, "Parks and Recreation Settings and Active Living: A Review of Associations with Physical Activity Function and Intensity," Journal of Physical Activity and Health 5, no. 4 (2008): 619-632; Chenoweth and Associates, The Economic Costs of Overweight, Obesity, and Physical Inactivity Among California Adults-2006, California Center for Public Health Advocacy, 2009; Janette Sadik-Khan and Seth Solomonow, "Improving Public Health by Making Cities Friendly to Walking and Biking," Health Care Policy and Law 177, no. 5 (2017): 613-614.
- 104. P. Veugelers, F. Sithole, and S. Zhang, "Neighborhood Characteristics in Relation to Diet, Physical Activity and Overweight of Canadian Children," *International Journal of Pediatric Obesity* 3 (2008): 152-159.
- 105. BlueCross Blue Shield of Western New York, "BlueCross BlueShield Fitness at Canalside Series Goes Virtual," May 21, 2020, accessed September 25, 2020, https://www.bcbswny.com/content/wny/about/news/latest/bluecross-blueshield-fitness-at-canalside-series-goes-virtual.html.
- 106. Independent Health, "Soccer for Success Program in Buffalo to Be Showcased Today during a Visit by Representatives from the Corporation for National and Community Service (CNCS)," September 28, 2016, accessed September 25, 2020, https://www.independenthealth/Newsroom/PressReleases/SoccerforSuccessPrograminBuffalotobeShowcased.
- 107. Robert Wood Johnson Foundation, County Health Rankings and Roadmaps, New York 2020, accessed September 24, 2020, https://www.countyhealthrankings.org/app/new-york/2020/rankings/erie/county/outcomes/overall/snapshot. Access to exercise opportunities measure the percentage of individuals in a county who live reasonably close to a location for physical activity. They are considered to have access to exercise opportunities if they reside in a census block that is within a half mile of a park, reside in an urban census block that is within one mile of a recreational facility, or reside in a rural census block that is within three miles of a recreational facility.
- 108. The Trust for Public Land, 2020 ParkScore Index, accessed September 24, 2020, https://www.tpl.org/city/buffalo-new-york.
- University of Buffalo, Regional Institute, School of Architecture and Planning, "Imagine LaSalle," accessed September 25, 2020, https://regional-institute.buffalo.edu/project/imagine-lasalle/.

- 110. Robert Wood Johnson Foundation, County Health Rankings and Roadmaps, New York 2020, accessed September 24, 2020, https://www.countyhealthrankings.org/app/new-york/2020/rankings/erie/county/outcomes/overall/snapshot.
- 111. State of New York Comptroller, Soaring Health Care Costs Highlight Need to Address Childhood Obesity, 2012, accessed September 24, 2020, https://www.osc.state.ny.us/sites/default/files/reports/documents/pdf/2018-12/health-child-obesity-2012.pdf.
- 112. Centers for Disease Control and Prevention, "How Much Physical Activity Do Adults Need?" accessed December 3, 2019, http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html.
- B. Giles-Corti and R. J. Donovan, "The Relative Influence of Individual, Social, and Physical Environment Determinants of Physical Activity," Social Science and Medicine 54 (2002): 1793-1812.
- K. E. Powell, L. M. Martin, and P. P. Chowdhury, "Places to Walk: Convenience and Regular Physical Activity," *American Journal of Public Health* 93, no. 9 (2003): 1519-1521.
- 115. M. A. Barrett and Daphne Miller, "Parks and Health: Aligning Incentives to Create Innovations in Chronic Disease Prevention," *Preventing Chronic Disease* 11 (2014).
- Roland D. McDevitt and Sylvester J. Schieber, From Baby Boom to Elder Boom: Providing Health Care for an Aging Population (Washington, DC: Watson Wyatt Worldwide, 1996).
- 117. U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, "The High Concentration of U.S. Health Care Expenditures," accessed December 4, 2019, http://www.ahrq.gov/research/findings/factsheets/costs/expriach/index.html#HowAre.
- 118. M. Pratt, C. A. Macera, and G. Wang, "Higher Direct Medical Costs Associated with Physical Inactivity," Physician and Sports Medicine 28, no. 10 (2000): 63-70. Costs were updated to current year dollars using the unadjusted medical cost consumer price index to account for inflation. U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers, Not Seasonally Adjusted, U.S. City Average for Medical Care, www.data.bls.gov.
- 119. Longwoods International and Miles Partnership, Travel Sentiment Study Wave 20, September 2020.
- 120. Longwoods International and Miles Partnership, Travel Sentiment Study Wave 31, February 23, 2021.
- 121. While the majority of the Level of Services maps in this section focus on access to amenities that exist within parks, community gardens are unique in that the majority occur outside of Buffalo's parks. This map and the accompanying statistics show access to community gardens within parks as well as to those managed by Grassroots Gardens, a nonprofit dedicated to promoting community gardens in Western New York.





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