

SARATOGA ASSOCIATES

Landscape Architects, Architects, Engineers, and Planners, P.C.

CITY PARKS ECONOMIC IMPACT REPORT

March 2025

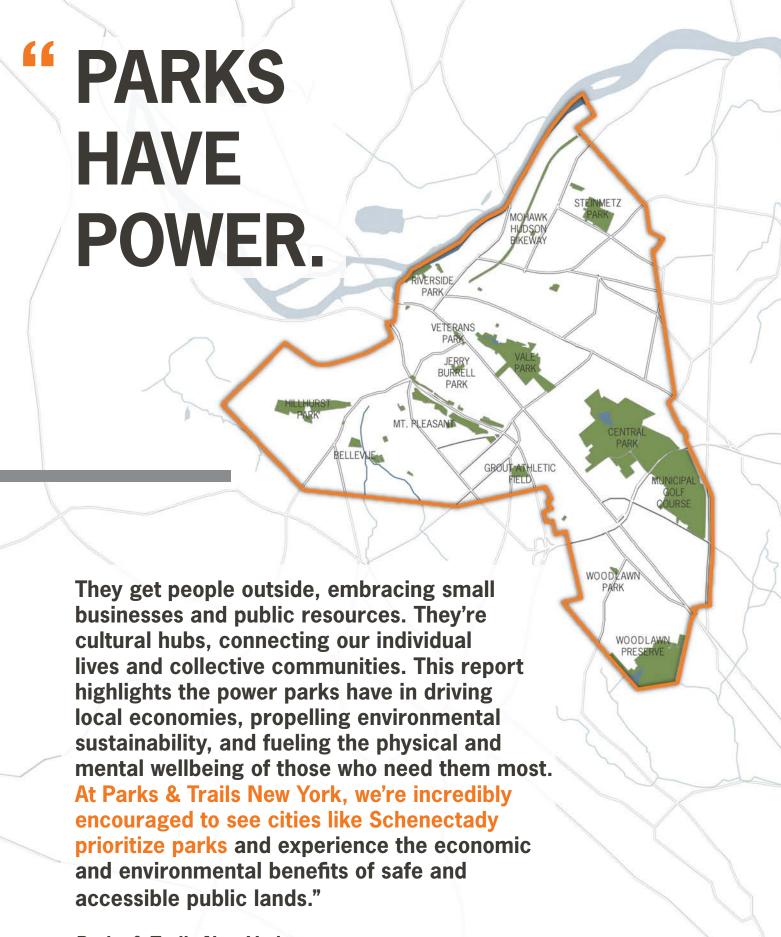
PREPARED FOR:

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Parks & Trails New York, Executive Director Paul Steely White

This report was produced by Saratoga Associates in partnership with the City of Schenectady.

Saratoga Associates Landscape Architects, Architects, Engineers, and Planners, P.C. is a multidisciplinary design firm specializing in landscape architecture, planning, and engineering with a focus on creating vibrant, sustainable, and resilient communities. With over five2 decades of experience, our team partners with municipalities, developers, and community organizations to deliver innovative solutions tailored to each project's unique needs. From parks and recreation planning to urban revitalization and infrastructure enhancement, Saratoga Associates blends creativity with technical expertise to foster economic growth and improve quality of life. Notable Schenectady projects include improvements to the Municipal Golf Course as well as the transformation of Central Park Pool, where we applied our collaborative approach to deliver thriving community assets.

The City of Schenectady has a rich history as a hub of innovation and industry, now emerging as a model for urban revitalization and sustainable growth in New York State. Recent investments in infrastructure, parks, and cultural initiatives reflect the city's commitment to enhancing quality of life and fostering economic development. Central Park Pool's revitalization stands as a testament to Schenectady's dedication to creating community-focused amenities that attract residents and visitors alike. With a strategic focus on leveraging its historic charm, vibrant neighborhoods, and strong civic partnerships, Schenectady continues to position itself as a dynamic and forward-thinking city poised for long-term prosperity.

Thank you to the following for their helpful insights:

- Mayor Gary McCarthy
- Michelle Carr
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A special thank you to the City of Schenectady Department of Parks and Recreation for the hard work they do for the City of Schenectady.





S14.8 MILLION

in economic value a n n u a l l y

These highlights underscore the multifaceted value of Schenectady's parks, from **economic growth** to **environmental sustainability** and **community enrichment**. Schenectady's own municipal parkland has contributed more than **\$14.8 million** in economic value to the local economy. This represents more than a **8x multiplier** on the City's continued investments.



ENVIRONMENT

Central Park's tree canopy prevents more than **6 million gallons** of stormwater runoff annually and reduces urban heat islands by up to 10°F, with **infrastructure costs savings** of up to

\$680,000

EQUITY

Schenectady dedicates about **10%** of its land to parks, serving **70%** of residents within a 10-minute walk—above the national median of 55%. The City provides more equitable park access across **age, income,** and **racial** groups compared to peer cities.

ECONOMY

Parks attract over tens of thousands of visitors each month who contribute millions to the local economy: Central Park alone sees **50,000+** monthly summer visitors, generating an annual **consumer surplus** of over

\$3.5MILLION

REAL ESTATE

Parks **enhance property values** by \$50 million, generating \$650,000 in annual tax revenue.

Parks contribute to daily neighborhood routines, reflected in a "home-to-home" visitor pattern.

These economic impact figures are based on annual findings, including annual tax and sales revenue from parks premium, annual operations impact, annual tourism impact, and annual environmental impact. The 8x return is derived from the City's expenditures on operations—for every dollar the City spends on operations, approximately \$8.60 in increased economic value is generated when considering benefits across real estate, tourism, and environmental factors.



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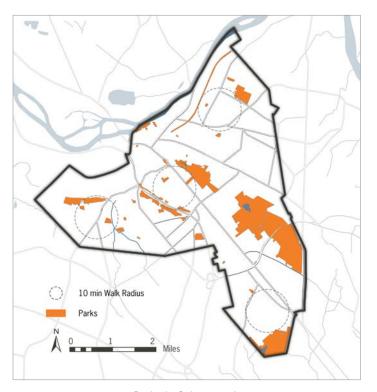
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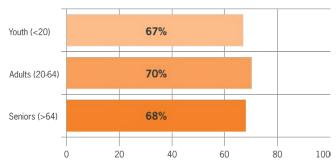
INTRODUCTION

The City of Schenectady's parks system is rooted in a vision forged more than a century ago: green spaces as cornerstones of urban life. This legacy can be traced to Charles Proteus Steinmetz (1865–1923), a renowned mathematician and electrical engineer affiliated with General Electric and Union College. In 1913, Steinmetz, serving as a member of the City of Schenectady's Common Council, was instrumental in the purchase of land and the establishment of the Schenectady Parks Commission. His efforts not only shaped the city's urban fabric but also laid the groundwork for a park system that remains a critical asset today.

Steinmetz understood that parks are more than amenities. They function as essential public infrastructure, improving public health, social cohesion, property values, and environmental quality. Across New York State, recognition of this importance has grown as efforts to have quantify these improvements have expanded – in the past decade, State Park visitation has increased by 40%, generating over \$5.5 billion in spending, rivaling the impact of the agricultural economy. Schenectady's own municipal parkland has contributed more than \$14.8 million in economic value to the local economy. This represents more than a 8x multiplier on the City's continued investments.



Parks in Schenectady



City Residents within a 10-minute of Park Walk by Age Group (%)

This report quantifies that ongoing economic impact and examines the influence of Schenectady's green spaces, with a focus on Central Park as a case study. It provides key insights for residents, business leaders, and policymakers, highlighting how parks deliver both direct benefits—such as tourism revenue and increased real estate values—and indirect gains, including improved public health and reduced infrastructure costs. By comparing the city's park assets with those in peer communities, this analysis underscores the strategic importance of maintaining and expanding Schenectady's Park system as a foundational element of long-term community development and economic growth.

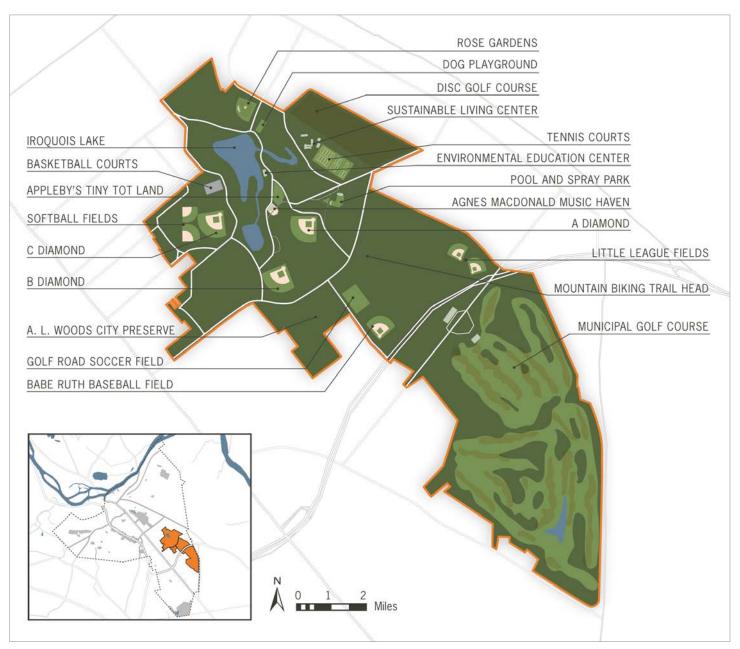
PARKS OVERVIEW

Schenectady takes pride in its network of 28 parks, which collectively serve more than 68,000 residents. While the City designates roughly 10% of its land for parks and recreation below both the City of Albany and the national median of 15%—it achieves a notably higher reach and accessibility than many peer communities. Indeed, 70% of Schenectady residents live within a 10-minute walk of a park, surpassing the national median of 55%, though just below Albany's 77% (Trust for Public Land, n.d.). Despite this, Schenectady offers more equitable access across age, income, and racial groups than peer cities like Albany. Understanding this context is essential to understand the importance of continued investment in parks and recreation to close gaps with regional benchmarks, and ensure that all residents benefit from accessible, high-quality public spaces. Ongoing improvements and maintenance from upgraded facilities to enhanced landscaping demonstrate a commitment to maximizing the impact of these valuable assets. As the City explores ways to further expand and enhance its park system, these efforts will continue to reinforce Schenectady's reputation as a community where green spaces are recognized as vital urban infrastructure.

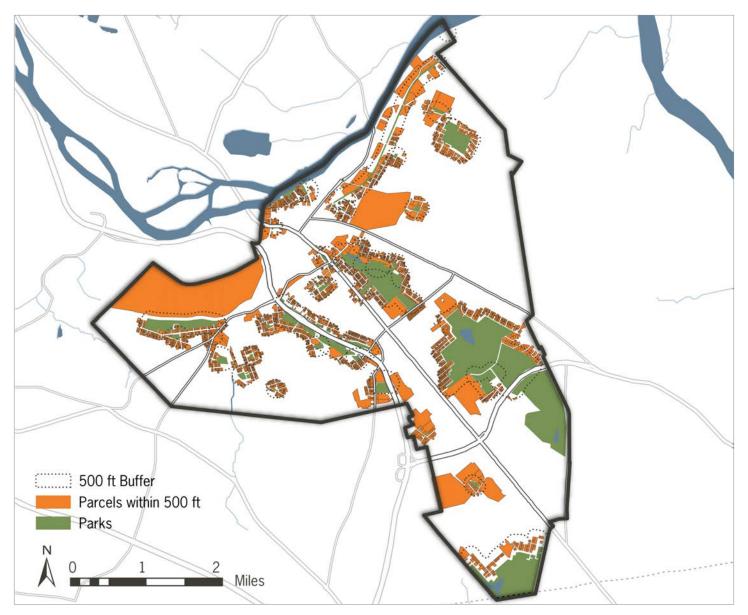
CASE STUDY: CENTRAL PARK

Named after New York City's iconic Central Park, Schenectady's Central Park serves as the crown jewel of the region's park system. Within almost 250 acres, the expansive park is home to the internationally acclaimed Music Haven venue, the Rose Garden, and access to freshwater fishing via Iroquois Lake. The park has multiple playgrounds, tennis courts, a pool and splash pad, disc golf course, and dog park, as well as a baseball field that is actively used by both Bryant & Stratton and Union College. According to Placer.ai, while the park remains open throughout the year, its most active period

is during the summer months (2024). Concerts at the Music Haven Stage draw crowds during warmer weather, while the public pool is open in July and August. These seasonal offerings complement the park's permanent features, ensuring that it remains a vibrant community space no matter the time of year. The park has received significant investments from local, state, federal, and philanthropic donors in recent years, with future investments planned for the Schenectady Environmental Education Center and Iroquois Lake area.



Central Park Amenities



Parcels within 500 ft of Parks

REAL ESTATE

Research demonstrates that proximity to parks boosts property values, increases municipal tax revenues, and enhances the quality of life for residents (Crompton & Nicholls, Impact on property values of distance to parks and open spaces: An update of U.S. studies in the new millennium, 2019). Frederick Law Olmsted, regarded as the father of landscape architecture, observed a significant rise in property values around Central Park in New York City as the park developed. His insight led to the formulation of the proximate principle, which posits that parks elevate the value of adjacent properties. This increase not only benefits property owners but also generates higher municipal tax revenues, positioning parks as self-financing public assets

(Crompton, The impact of parks on property values: empirical evidence from the past two decades in the United States, 2005). In Schenectady, parcels within five hundred feet of parks exhibit assessed values nearly \$50,000 higher than the citywide average, demonstrating the application of the proximate principle locally. However, accurately measuring this impact presents challenges. Property values are influenced by a variety of other factors beyond park proximity—such as the presence of schools, retail amenities, and public transportation options. In addition, outliers, and the clustering of similar property values within certain neighborhoods can complicate efforts to isolate and measure parks' contributions.

To address these complexities, Saratoga Associates employed a real estate park premium methodology that attributes a portion of assessed real estate value directly to park proximity. This approach corroborates local and spatial regression analyses—which account for broader spatial patterns—and aligns with the Trust for Public Land's established best practices. By applying this refined methodology, we present a more accurate estimate of how parks influence property value growth in Schenectady.



Concert at Music Haven (Discover Schenectady)

National research suggests that the proximate park premium extends up to 2,000 feet from a park, with property values increasing by as much as 20% due to proximity (Crompton, The impact of parks on property values: empirical evidence from the past two decades in the United States, 2005). This analysis focused on parcels within five hundred feet of parks, a conservative estimate (Crompton, Perceptions of How the Presence of Greenway Trails Affects the Value of Proximate Properties, 2001). Our findings indicate that the cumulative value of properties enhanced by park proximity in Schenectady totals \$50 million. At the current tax levy rate of \$12.97 per \$1,000 of assessed value, these properties generate approximately \$650,000 in additional annual tax revenue that helps offset the cost of park maintenance and operations. To understand the long-term financial benefit of this revenue stream, the present value of future tax revenue increases was calculated (sometimes referred to as the "terminal value"). Using conservative estimates—a compound annual growth rate of 2% for property values, and an 8% discount rate to account for the time value of money— Saratoga determined that the present value of the increased tax revenue attributable to park proximity exceeds \$10 million. To further assess the fiscal impact, Saratoga Associates analyzed five years of real estate transactions to determine the additional revenue from property sales attributable to the

Park Premium (based on their location within the influence zone). An analysis of these results found that an average of **\$15,934** in additional annual revenue is generated through park-influenced transactions. These estimates serve as a conservative baseline.

Proximity to parks in Schenectady enhances property values by \$50 million, generating \$650,000 in annual tax revenue and demonstrating parks' role as self-financing public assets.

These real estate findings are further supported by Placer. Al data, a machine learning and data science tool which generates foot traffic analytics from cell phone data, which provides critical insights into how residents interact with parks. The data reveals that the most common journey for park visitors is home-to-home, meaning that most trips begin and end at a resident's home, without additional stops. This behavior further supports the value that residents place on local accessibility to green spaces.



Foot Traffic Pattern per Park Trip

The home-to-home pattern reflects that parks are deeply integrated into residents' daily routines and that neighborhood access to green spaces is not just a luxury but a practical amenity. By maintaining and improving access to parks, Schenectady can continue to enhance property values and foster community well-being, supporting a cycle of real estate growth and municipal economic development.

VISITORS AND TOURISM

Tourism is a key driver of economic activity in the Schenectady, contributing to both local business revenues and the quality of life for residents. Parks and recreation facilities serve not only as attractions for visitors but also as critical amenities for residents, creating a confluence of economic and social value. In 2022, travelers to Schenectady County spent more than \$20 million on recreation-related activities, according to regional economic data from Oxford Tourism Economics. To estimate the share of this spending within the City of Schenectady, we applied a proportional allocation model, which assumes spending is distributed in line with population. This model offers a conservative estimate compared to more complex methodologies like location-quotient models, which account for areas with higher tourism concentrations—such as Schenectady.



Central Park Pool Visitors (Saratoga Associates, June 2024)

Based on these figures, Saratoga Associates estimates that more than **31,000 visitors contributed almost half (\$8.6 million) of the County's recreation spending** within the city. More specific event details will be discussed in the Community Cohesion section of this document.

Local residents who use the City's parks also place significant value on these amenities. Using data from Placer.Al, Saratoga Associates estimated that Central Park receives more than 50,000 visitors during the summer months. The average visitor spent more than an hour at the park, with many visits occurring on Saturday and Sunday between 2:00PM to 6:00PM. While many of these visitors may be from out of town, attending a college baseball game, visiting the Rose Garden, a concert at Music Haven, or participating in a tennis tournament, Central Park is primarily designed to serve residents of the city. To contextualize Central Park's performance, Saratoga Associates compared it with other notable parks in the region, including Thacher State Park, Washington Park in Albany, and Shepard Park in Lake George during the month of August.

Performance	Central Park	Washington Park	Thacher State Park	Shepard Park
Metric	Schenectady	Albany	Voorheesville	Lake George
Visits	99.9K	33K	41.1K	53.9K
Visitors	54.9K	23.7K	34.8K	46.6K
Frequency	1.82	1.39	1.18	1.16

Capital Region Parks Visitor Frequency, August 2024

Saratoga Associates conducted an analysis to estimate the recreational value of the park using the unit day value method (U.S. Army Corps of Engineers, 2024). This method assigns a monetary value to each visitor's day of recreation, reflecting the 'consumer surplus' - the enjoyment and benefits they receive from using the park, beyond what they pay to access them. Since many park services are free or low-cost, the consumer surplus captures the additional satisfaction or enjoyment people gain, which is not reflected in any direct payment. This analysis indicated a lower bound of \$3 million in consumer surplus. To validate this result, the Oregon State University Recreation Use Values Database was consulted, which provides more detailed use value estimates for common activities in Central Park like bicycling, freshwater fishing, swimming, picnicking, and swimming based on economic valuation studies that estimated the use value of recreation activities in the U.S. and Canada from 1958 to 2015 (Rosenberger, 2016). Given the lack of park-specific user data, each visit was recorded as the lowest applicable recreational use value, from which an estimated consumer surplus can be estimated of more than \$3.5 million annually. This too should be considered a lower bound.

The economic impact of Schenectady's parks is amplified by the convergence of tourism-driven revenues and resident-driven recreational value. Parks like Central Park attract visitors from outside the city, generating millions in tourism-related spending, while also serving as essential amenities for residents, contributing to community cohesion and quality of life.



Winners, Eastern Adult League Sectional Championships (USTA)

United States Tennis Association

A significant driver of tourism and local economic activity is the annual **USTA Eastern Adult League Sectional Championships**, which for almost a decade has been hosted at Central Park. Organized by the Eastern Section of the United States Tennis Association (USTA Eastern) in collaboration with Discover Schenectady, this event is recognized as the largest organized adult team tennis competition in the state. Over the course of five weekends, spanning June, August, and September approximately 2,000 players converge on Central Park. Matches are free for spectators, enhancing community accessibility and participation.

"For nearly a decade,
Schenectady has welcomed the New York
and northern New Jersey tennis community
with open arms. We are beyond thankful for
the hospitality and incredibly thrilled to bring
our biggest adult championship back
to the Electric City."

-Jenny Schnitzer, Executive Director and CEO USTA Eastern

This tournament not only attracts players and spectators but also drives significant economic activity in the region. According to Discover Schenectady, the event contributes nearly \$2 million to the local economy through increased patronage of hotels, restaurants, and retail establishments. Additionally, the city has secured a USTA Growth Catalyst Grant, which will be allocated to upgrade and restore the Central Park courts and expand programming opportunities for residents, thereby maximizing the value of local investments.

Youth Baseball

Each summer, Schenectady's parks host a series of highprofile youth baseball tournaments that draw teams from across the Northeast. The flagship Firecracker Tournament alone brings approximately 100 teams to New York's Capital District, with roughly 30 teams competing on Schenectady fields. In addition, Perfect Game – a major national youth baseball organizer – holds seven tournaments in the area, typically with ~30 teams each. This influx of teams and their families generates significant economic activity, from filled hotels and busy restaurants to increased demand for local services. With each visiting team averaging 15 players and staying two nights (Friday and Saturday) for tournament play, the combined events generate thousands of overnight stays in the area.

"Bringing sports tournaments to our city parks is a game-changer for our local economy...
Investing in our parks isn't just about recreation—it's about economic growth and community prosperity."

-Mayor Gary McCarthy, City of Schenectady

Firecracker Sports and Perfect Game, tournament organizers, both ensure that a large share of teams' travel budgets is spent at hotels in the local area through mandatory team booking, directly benefiting Schenectady's hospitality sector. Strategically, the sustained hosting of the Firecracker and Perfect Game tournaments has elevated Schenectady's profile as a regional sports tourism destination. Each year, hundreds of teams and thousands of athletes come to know Schenectady as a place with quality fields and well-run events. This reputation-building is invaluable: it helps ensure that tournament organizers continue to include Schenectady's parks in their circuits, and it attracts new events looking for proven host cities. Local officials recognize this momentum. As Gary McCarthy, Mayor of the City of Schenectady noted, "Bringing sports tournaments to our city parks is a gamechanger for our local economy. These events fill our hotels, boost local businesses, and create jobs, all while showcasing our city as a premier destination for athletes and families. Investing in our parks isn't just about recreation—it's about economic growth and community prosperity."

ENVIRONMENTAL AND PUBLIC HEALTH

Urban parks are essential components of city infrastructure, providing ecological services that support environmental sustainability and public health. Central Park's approximately 240 acres offers substantial benefits by reducing heat-related mortality, improving walkability, lowering air pollution, and enhancing water quality. Quantifying these impacts is essential to fully appreciate the value of the park system.

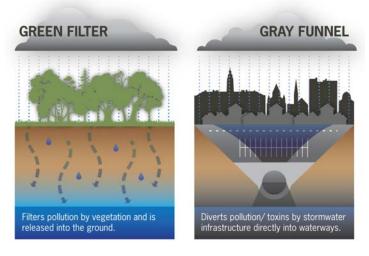
Air pollution, hydrological, and carbon benefit estimates are modeled in iTree using factors specific to the region: regional precipitation rates, common tree species, and average environmental impacts such as stormwater interception rates (Nowak, Walton, & Greenfield, n.d.). While a tree survey for the City of Schenectady has been conducted, it does not inventory the entire project area. Instead, remote land cover classification was used to determine whether an area is covered by tree canopy, impervious surfaces, or other types of ground cover. This classification was then used to calculate stormwater interception. The monetary value assigned represents the cost savings or environmental services provided by trees, compared to a scenario where trees and other park infrastructure are absent.



Tree Canopy in May (Saratoga Associates)

Central Park's tree canopy covers 64% of its area, approximately 151.85 acres, preventing an estimated 6.19 million gallons of runoff into municipal sewers annually, saving the City between \$55,000 to \$680,000 in infrastructure capital costs.

The tree canopy in Central Park significantly enhances air quality by filtering pollutants from the atmosphere. Each year, the trees sequester approximately 162 tons of carbon, with an annual economic value of \$27,000 and a lifetime sequestration value exceeding \$880,000ⁱⁱⁱ. Beyond carbon sequestration, the park's trees annually remove over 13,000 pounds of harmful pollutants, including carbon monoxide (CO),

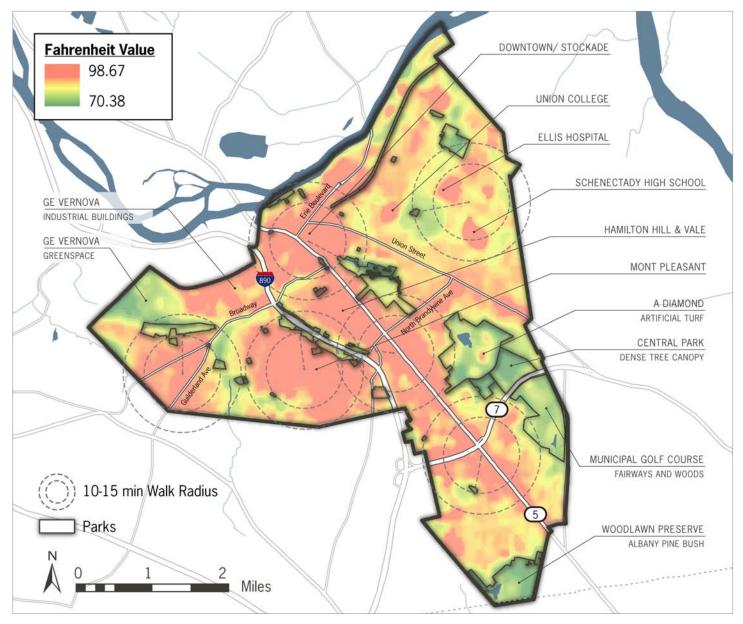


Green Filter vs Gray Funnel

nitrogen dioxide (NO2), ozone (O3), sulfur dioxide (SO2), and particulate matter (PM2.5 and PM10). These pollutants are known to contribute to respiratory and cardiovascular diseases, posing significant public health risks. More details on these figures can be found in Figure 3.

The removal of these pollutants yields annual health and economic benefits valued at nearly \$947,000. Although Saratoga Associates did not directly quantify the healthcare cost savings from increased physical activity in the city's parks, it is reasonable to infer that many visitors engage in such activities, leading to reduced healthcare expenditures since physically active individuals typically require fewer medical resources. A brief analysis using Esri Business Analyst reveals that the city's spending on sports, recreation, and exercise equipment is generally below the national average. This suggests residents may spend less on these products or services, potentially due to the availability of free or low-cost recreational opportunities provided by the city parks. Despite this lower spending, the market potential for park-based activities such as fishing, baseball, and basketball aligns with national averages. This indicates that residents continue to participate in these activities, possibly at reduced personal expense due to accessible recreational amenities within the city. This is further bolstered by data from CDC Places data, which uses Behavioral Risk Factor Surveillance System data, Census population data, and American Community Survey data to quantify the level of physical activity in an area.

Unsurprisingly, the data shows that areas in Schenectady with accessible and well-distributed parks tend to exhibit higher rates of physical activity among residents. Consequently, the city's investment in parks not only promotes public health but also contributes to economic savings for both residents and the community at large.



Urban Heat Island Temperature Map with Walking Radii in Relationship to City Parks

Saratoga Associates reviewed surface temperature samples from summer 2023 and 2024, which suggested that parks have a preventative effect on urban heat islands. Central Park, for instance, had a median surface temperature nearly **10 degrees lower** than the citywide average, with this cooling benefit extending to a 500-foot "park-premium" (Urban Climate Lab at the Georgia Institute of Technology, 2016).

This "Oasis Effect," whereby the park has a much cooler temperature than the surrounding city, and this effect exceeding the area of the park itself helps **reduce the strain on public health resources and enhances the quality of life** for residents (Yu & Hien, 2006). This is particularly crucial during periods of extreme heat, which are becoming more frequent due to climate change.

Schenectady Environmental Education Center

Central Park will soon be home to the Schenectady Environmental Education Center, a collaborative project developed in partnership with the City of Schenectady, the Schoharie River Center, the Upper Union Neighborhood Association, The Environmental Clearinghouse, and Community Fathers, Inc, with funding through NYSERDA. The Center will occupy the currently vacant Central Park Casino and will be an integral part of Central Park's programming. It will serve as a community resource where local youth can learn about critical environmental issues affecting their health, water quality, and renewable energy. Designed as a net-zero facility, the Center will feature:

- Air source heat pumps
- Highly efficient windows and doors
- LED lighting
- Upgraded insulation
- Advanced air sealing measures
- Solar PV arrays to generate all the energy the facility needs

When complete, the Environmental Education Center will provide meeting and exhibit space, a small kitchen area, a large patio overlooking the Mohawk River, ADA-compliant bathrooms, and program workspaces. Through hands-on learning projects—such as tree measurement, chemical testing of water quality, and an ecology field school—the Center will help residents understand how hazardous

PROPOSED BUILDING FLOOR PLAN

Patio
Proposed uses:
-Private Office
-Proposed uses:
-Onference Space
-Indoor Proposed uses:
-Conference Room
-Classroom
-Office/Workspace
-Office/Workspace
-Indoor Programming
-Meeting Space
-Proposed uses:
-Private Office

Project Proposal (Page from SEEC Brochure)

conditions develop and how environmental degradation can be prevented or reversed. The facility will offer educational resources and opportunities to low-income youth and families throughout Schenectady, filling a gap since no comparable center currently exists in the County. Its location is within walking distance of several schools and is easily accessible by bike, foot, and public transit, ensuring broad community access.

"[It's] places like this,
educational opportunities like
this, that really foster [childhood
environmental education]...and shed
light on what those ideas are, and
how, at some point, [these children
are] going to be the leaders of this
community leaders of this state,
and they're going to be able to
bring us with new innovation and
technology beyond what we're even
thinking of today (WAMC)."

-Angelo Santabarbara, New York State Assemblyman

With an anticipated project cost of \$1,394,200, RIMS Il estimates that the project will create more than 12 jobs while adding almost \$1.1mm to the gross regional product. However, this analysis does not consider the potential for increased visitation - whether that be school field trips, community events, or regional conferences, nor do these figures fully capture the additional economic activity generated by visitors. Even school field trips—though typically modest spenders—can have a cumulative impact on local businesses when students, teachers, and chaperones purchase food, supplies, or merchandise in the neighborhood. Community events and regional conferences hosted at the Center are likely to attract adult visitors who spend more on dining, shopping, and possibly accommodations, creating valuable ripple effects for restaurants, retail stores, and hotels. Over time, this increase in foot traffic and local recognition will stimulate further investment, reinforced by Schenectady's reputation for environmental stewardship.

COMMUNITY COHESION

Community cohesion plays a vital role in building resilient neighborhoods, fostering a sense of belonging, and improving the quality of life for residents. To quantify this impact, Saratoga Associates analyzed the impact of two nonprofits that are active in Central Park: Music Haven and the Rose Garden.

Agnes Macdonald Music Haven

Music Haven, now entering its 35th year, **delivers over \$1.7 million in economic impact annually to Schenectady.** Operating as a pro bono-led organization and offering premium-quality performances – comparable market-rate events are priced more than \$50 per ticket – Music Haven provides free access to high-caliber cultural experiences. This approach generates a substantial consumer surplus, which can be understood as the difference between what attendees would be willing to pay and the zero-price point offered. A single performance draws upwards of 2,000 attendees, with a consumer surplus of almost \$125,000 per event. Over the course of a typical season, this translates into more than \$1,390,000 in direct consumer surplus.

This significant consumer surplus not only enriches the cultural fabric but also enhances Schenectady's brand as a vibrant, accessible arts hub, positioning the city competitively within the Capital Region. Music Haven's programming symphonies, film series, and genre-diverse concerts - draws a demographically varied audience, historically aged 40-65, but increasingly inclusive of younger segments (20–30 years old). By appealing to multiple age groups, Music Haven catalyzes greater foot traffic in the park and surrounding neighborhoods. Research across similar community arts initiatives in comparable mid-sized U.S. cities suggests that each cultural attendee generates additional local economic activity through spending on dining, retail shopping, and transportation. Based on estimates from executive leadership for visitors that could be classified as 'out-of-region,' these tourists generate an additional \$287,175 in annual revenue.

Music Haven's fundraising strategies enable it to operate sustainably without impact on public budgets. These funds are effectively substituting for municipal or private capital that would otherwise be required to host similar caliber events. Volunteerism reinforces this. Beyond a staff of seven paid professionals, over 50 volunteers and the executive leadership team contribute more than 1,500 hours of community service. Applying the 2022 New York OPRHP benchmark for valuing volunteer time, these efforts represent a highly conservative value of approximately \$53,565 in annual labor costs.



Partnerships with local food and beverage providers offer additional economic spillovers, although the resulting tax revenue, employment, and broader economic impacts were not analyzed for the purposes of this report. Stage side concessions provided by Yanni's Restaurants, Nicole's Catering, Ben & Jerry's, Wolf Hollow, Frog Alley Brewing, and Nine Pin integrate local entrepreneurship into the event's value chain, create seasonal employment opportunities, and enhance the attractiveness of Schenectady as a destination for both residents and visiting patrons.

Cultural Celebration

Schenectady's parks serve as vibrant venues for cultural celebrations that enhance the community's social fabric and generate significant tourism revenue. Held at Music Haven in Central Park, Caribbean Day is free to attend, reflecting the city's commitment to accessible, community-focused events. The annual Schenectady Caribbean Day festival is one of the premier cultural events in the Capital Region, attracting approximately 15,000 spectators. This festival celebrates Caribbean culture and heritage with a diverse array of activities that include an array of authentic dishes such as jerk chicken, curried goat, rice and peas, and plantains, live performances by renowned artists, including international reggae, soca, and chutney musicians, local artisans showcase unique, handmade crafts and souvenirs. The festival coincides with other regional events—such as Schenectady's Little Italy StreetFest, Stockade Villagers' Outdoor Art Show, and the St. George Greek Festival—collectively positioning Schenectady as a vibrant destination for cultural tourism.

Central Park Rose Garden

The Rose Garden, established in 1959, stands as one of the City's longest-standing community assets. Over the decades, it has grown into a premier attraction in Schenectady, drawing visitors from neighboring regions and Canada. Today, its popularity rivals that of prominent local landmarks such as Proctor's Theater, with an annual economic impact of nearly \$248,000.

A key factor behind the Rose Garden's enduring success is its steadfast commitment to long-term planning. Guided by a comprehensive master plan emphasizing the use of high-quality materials, the garden has strategically pursued higher-cost capital investments that significantly reduce ongoing maintenance and operational expenses.

Fiscal responsibility extends to the contributions of dedicated volunteers, who are integral to the garden's continued vitality. Each year, approximately twenty-five volunteers provide more than 2,975 hours of work—an in-kind value of roughly \$126,000—that offsets labor costs and enables the organization to maintain expenses at about \$121,000. Without this support, many of these costs would shift to the city. The Rose Garden's ability to remain financially self-sustaining is bolstered by donations, requests, and permit fees, including those for professional photography and weddings.

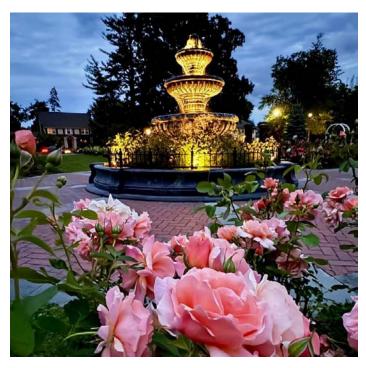


Wedding Party (Rose Garden Restoration Committee)

In recognition of the garden's importance, the city provides critical services such as water, electricity, and waste disposal, as well as integrating the garden's security into its network. It is understood that these costs are integrated into the broader parks budget and were therefore not included in this analysis of the Rose Garden.



Beyond its horticultural appeal, the Rose Garden has evolved into a cultural and social hub, hosting photographers, weddings, school visits, and other community gatherings. With approximately one hundred visitors daily during the season, the garden not only generates revenue through permits but also enhances the region's profile as a desirable destination for special events.



Fountain (Rose Garden Restoration Committee)

Schenectady Municipal Golf Course

The Schenectady Municipal Golf Course is a long-standing public facility, operating since 1935 as an 18-hole, par-72 venue. It offers a pro shop with an expansive retail selection, a clubhouse with an independently operated restaurant, and dedicated practice facilities. The Course is governed through a collaborative model involving the Mayor's Office, City Council, a Golf Course Advisory Committee, and the Golf Professional. Beyond daily play, it regularly hosts high school golf teams, junior golf camps, and charity events, reinforcing its role as a vital community asset.

In 2024, approximately 43,000 rounds were played, about 70% (an estimated 26,000 rounds) of which were played by non-resident golfers. The Course sets its fees to ensure that resident rates remain below market, thus providing affordable recreational access to local players. For example, residents pay \$31 for an 18-hole round on weekends, while non-residents pay \$39, an \$8 differential.



Irrigation and Course Design (Saratoga Associates)

The 2024 Adopted Budget for the Golf Fund is \$1,554,834. This budget supports ongoing capital improvements, such as cart path construction, and continued operation of the course, including the pro shop's retail segment, which includes services like New York State Golf Association registrations. The 2024 budget also includes a transfer of \$174,114 to the General Fund, \$17,000 to the Water Fund, \$800 to the Sewer Fund, and \$153,000 to the Capital Fund, for a total transfer of \$344,914. Thus, this pricing structure means that visitors effectively subsidize both the Golf Course operations and the broader municipal budget. By bringing outside spending into the region, non-resident golfers support the Course's ongoing capital improvements and contribute to transfers to the City's infrastructure. At peak season, the Course employs approximately thirty individuals. The maintenance of the course and the operation of the clubhouse restaurant are structured through lease agreements with a local operator, contributing to the local supply chain.



Economic impact extends well beyond the Course itself: every dollar of final demand generated by the Course delivers an additional \$0.48 in regional economic output, for an estimated impact of \$2,301,465.29. This figure encompasses not only direct spending at the Course but also the induced and indirect effects benefiting area hotels, restaurants, retailers, and transportation services patronized by visiting golfers. Direct earnings reflect wages paid to employees on the Course and related staff. Beyond the thirty positions employed directly on the Course during peak season, the induced spending supports an estimated seventeen jobs within the community.

While the economic benefits are significant, the Course also delivers important social value. Through junior golf programs, it fosters youth development and community engagement, and by hosting school teams, it enhances local educational and athletic opportunities. The Schenectady Municipal Golf Course functions as both a valued community resource and a strategic economic lever, sustaining its legacy of service to residents while drawing external capital into Schenectady's broader municipal ecosystem.

OPERATIONAL IMPACT

Parks serve as a vital asset to the City of Schenectady, not only for its recreational and environmental contributions but also for its significant economic impact on the local economy. Saratoga Associates analysis has found that for every dollar spent on Schenectady's Park operations and maintenance, \$1.47 of total economic activity is generated.

This report evaluates the economic impact of Schenectady's parks through Input-Output (I-O) modeling, highlighting how operational and maintenance expenditures drive local economic activity, support employment, and contribute to the county's gross regional product (GRP). While the I-O model aggregates impact at the county level, the localized nature of spending suggests that the most pronounced economic benefits are concentrated within the city, where the parks are situated.

The I-O model is an economic tool that maps the interdependencies among different sectors within an economy. It analyzes how the output from one industry serves as an input to another, creating a chain of economic activity:

- Direct economic activity generated by the parks' expenditures.
- Indirect economic activity resulting from the parks' suppliers purchasing goods and services.
- Induced economic activity from employees spending their earnings within the local economy.

By applying sector-specific multipliers, this analysis measures the total influence of park-related expenditures on output, employment, earnings, and value-add. This analysis is based on the City's approved 2024 budget, 2017 U.S. Benchmark I-O data, and 2022 regional data for Schenectady.

City parks had a direct fiscal impact of \$1,730,067 in 2024, accounting for approximately 1.5% of the city's annual revenue. This direct spending on parks contributes approximately \$2.65 million in total economic output to the regional economy. They support eighteen full-time equivalent jobs directly and indirectly within the local area. Most jobs supported by the parks are concentrated in the arts, entertainment, and recreation industries, as well as in the real estate, rental, and leasing sectors. These parks add approximately \$1.56 million to the county's GRP: every dollar spent on the parks' operations creates an additional \$0.47 in economic activity.



Caribbean Day at Music Haven (Discover Schenectady)

This analysis does not include past capital expenditures. However, with millions invested through ARPA-supported projects, the total economic impact is likely much greater. For example, the Central Park Pool construction alone is estimated to have created 25 jobs and generated over \$12 million in economic activity—far exceeding the City's construction costs.

Economic Impact Conclusion

Schenectady's municipal parks are far more than community spaces for recreation and environmental stewardship—they are dynamic economic engines that strengthen the City's fiscal health and overall quality of life. This report highlights their substantial impact: generating more than \$14.8 million in economic value, yielding a 8x return on municipal investments, and contributing \$1.56 million to the county's gross regional product.

The localized benefits of park spending—direct, indirect, and induced—reverberate throughout Schenectady's economy. These findings illustrate that parks are both fiscally strategic and pivotal to community well-being, supporting employment, stimulating regional output, and enhancing the City's capacity for sustainable growth.

As Schenectady continues to prioritize its parks, it is investing not just in green space, but in a resilient economic future. Ongoing and expanded support for municipal parks is, therefore, more than an expenditure: it is a catalyst for prosperity and a cornerstone for a thriving, equitable, and sustainable city. Parks, in essence, lie at the intersection of Schenectady's economy, environment, and community—an enduring legacy well worth preserving.



GLOSSARY

Consumer Surplus - The difference between what individuals is willing to pay for a good or service and what they pay, representing the benefit gained.

Input-Output (I-O) Model - An economic model that describes the flow of goods and services between industries and sectors within a region, is used to estimate economic impacts.

RIMS II Multipliers - Regional Input-Output Modeling System multipliers, used to estimate the total economic impact of specific activities on a regional economy.

Multiplier Effect - The proportional increase in economic activity resulting from an initial expenditure, reflecting direct, indirect, and induced impacts.

Direct Economic Impact - The immediate economic contribution of spending associated with a specific activity, such as park operations or visitor expenditures.

Indirect Economic Impact - The secondary economic activity generated through the supply chain, as businesses purchase goods and services.

Induced Economic Impact - The economic activity resulting from spending by employees who earn income from direct and indirect economic activities.

Proximate Principle - The concept that properties near parks or open spaces have higher values due to their location, benefiting from aesthetic, recreational, or environmental amenities.

Unit Day Value Method - A technique used to estimate the recreational value of a park or open space by assigning monetary value to each visitor's experience. The UDV method was developed by the U.S. Army Corps of Engineers as part of their economic valuation framework for water resource projects.

Recreation Use Value - The economic value derived from recreational activities, often calculated using methods such as contingent valuation or unit day value. Stems from environmental economics, particularly the valuation of non-market goods. Formalized in the mid-20th century to measure the economic contributions of outdoor recreation to public welfare.

Stormwater Interception - The process by which vegetation, particularly tree canopies, capture and reduce the amount of stormwater runoff, mitigating flooding and saving infrastructure costs.

Urban Heat Island Effect - The phenomenon where urban areas experience higher temperatures than surrounding rural areas due to human activities and reduced vegetation.

Oasis Effect - A cooling effect observed in and around parks or green spaces, where temperatures are lower than surrounding urban areas.

Volunteer Time Valuation - The economic value attributed to unpaid volunteer labor, based on State OPRHP benchmarks.

Carbon Sequestration - The process by which trees and vegetation capture and store atmospheric carbon dioxide, contributing to climate change mitigation.

Real Estate Park Premium - The increased property value attributed to proximity to parks or green spaces. **Terminal Value -** The present value of future income.

Placer.Al - A data analytics tool that uses cell phone geolocation data to track foot traffic and visitor patterns in specific locations.

FIGURE LIST

Industry	Value
Real Estate	\$661,791.51
Operations	\$2,648,213.80
Visitor/Tourism	\$9,881,857.29
Enviromental	\$1,682,264.00
Total Impact	\$14,874,126.60
Multiplier	8.60

Figure 1 – Summary of Benefits

Real Estate	
Annual Tax Revenue from Park Premium	\$645,856.73
Annual Sales Revenue from Park Premium	\$15,934.78
Economic Impact	
Annual Operations	\$2,648,213.80
Visitors/Tourism	
Unit Day Value	\$3,030,960.00
Recreation Use Value	\$3,593,728.00
Music Haven & Rose Garden	\$1,986,664.00
Golf Course	\$2,301,465.29
Environmental	
Avoid Runoff	\$55,276.00
Avoided Green Costs	\$680,000.00
Air Pollution	\$946,988.00

Figure 2 – Detailed Benefits

Land Cover	
Cover Class	% Cover ± SE
Grass/Herbaceous	15.10 ± 1.83
Impervious Buildings	1.04 ± 0.52
Impervious Other	4.69 ± 1.08
Impervious Road	4.69 ± 1.08
Soil/Bare Ground	6.25 ± 1.24
Tree/Shrub	65.10 ± 2.43
Water	3.13 ± 0.89
	•
Air Pollution Estimates	
Description	Amount (lb)
Carbon Monoxide removed annually	217.88
Nitrogen Dioxide removed annually	2213.7
Ozone removed annually	6012.74
Sulfur Dioxide removed annually	1278.24
Particulate Matter less than 2.5 microns removed annually	431.08
Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	3422.58
Carbon Estimates	
Description	Carbon (T)
Sequestered annually in trees	162.57
Stored in trees (Note: this benefit is not an annual rate)	5205.59
Hydrological	
Benefit	Amount (Mgal)
Avoided Runoff	6.19
Evaporation	10.63
Interception	10.64
Transpiration	28.71
Potential Evaporation	116.52
Potential Evapotranspiration	89.54
Type II Table 1.5 For Golf	
Benefit	Number
Final-demand Output	\$2,301,465.29
Final-demand Earnings	\$580,108.57
Final-demand Employment	18
Final-demand Value-added	\$1,294,399.31
Direct-effect Earnings	\$1,935,457.36
Direct-effect Employment	2

Figure 3 – Environmental Benefits of Central Park

Table 1.5 Total Multipliers - detailed industries	Expenditure	Final-demand Output /1/ (dollars)	Final-demand Earnings /2/ (dollars)	Final-demand Employment /3/ (number of jobs)	Final-demand Value-added /4/ (dollars)	Direct-effect Earnings /5/ (dollars)	Direct-effect Employment /6/ (number of jobs)
Maintenance and repair construction	\$242,000.00	\$337,565.80	\$48,545.20	0.77	\$180,169.00	\$340,639.20	0.37
Other nonresidential structures	\$7,513,000.00	\$9,920,165.20	\$1,314,023.70	95'62	\$5,641,511.70	\$5,641,511.70 \$10,154,570.80	10.82
Power and communication structures	\$516,000.00	\$658,261.20	\$80,754.00	1.13	\$429,518.40	\$697,632.00	0.75
Architectural, engineering, and related services	00'000'069\$	\$914,319.00	\$138,759.00	1.74	\$571,665.00	\$943,713.00	1.14
Management consulting services	\$500,000.00	\$644,250.00	\$113,150.00	1.65	\$428,850.00	\$647,100.00	0.74

Note: This is a breakdown of the impact of the pool construction project's economic impact, computed from Regional Input-Output Modeling System (RIMS II)

Figure 4 – Pool Model



REFERENCES

REFERENCES

- (2024). Retrieved August 2024, from Placer.ai: https://www.placer.ai/
- Crompton, J. L. (2001). Perceptions of How the Presence of Greenway Trails Affects the Value of Proximate Properties. Journal of Parks and Recreation Administration, 114-132.
- Crompton, J. L. (2005). The impact of parks on property values: empirical evidence from the past two decades in the United States. Managing Leisure, 203-218.
- Crompton, J. L., & Nicholls, S. (2019). 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, 127-146.
- Nowak, D. J., Walton, J. T., & Greenfield, E. J. (n.d.). iTree. Retrieved from iTree: https://canopy.itreetools.org/references
- Rosenberger, R. (2016). Recreation Use Values Database. Retrieved from https://recvaluation.forestry.oregonstate.edu/
- Trust for Public Land. (n.d.). Retrieved from Trust for Public Land ParkScore: https://www.tpl.org/city/schenectady-new-york
- U.S. Army Corps of Engineers. (2024). Economic Guidance Memorandum, 24-02, Unit Day Values for Recreation for Fiscal Year 2024. U.S. Army Corps of Engineers.
- Urban Climate Lab at the Georgia Institute of Technology. (2016, June). The benefits of green infrastructure for heat mitigation and emissions reductions in cities. Retrieved from Trust for Public Land: https://www.tpl.org/wp-content/uploads/2023/05/Benefits-of-Green-Infrastructure.pdf
- (WAMC). Retrieved January 2025, from WAMC: https://www.wamc.org/news/2023-09-26/redevelopment-plans-announced-for-long-vacant-central-park-casino-in-schenectady
- Yu, C., & Hien, W. N. (2006). Thermal benefits of city parks. Energy and Buildings, 105-120.

ENDNOTES

- Applying a five percent premium aligns with TPL's standard methodology for assessing property value in numerous communities nationwide. All relevant properties were included in the analysis.
- At the time of writing, current 10-year U.S. Treasury yield is 4.551%. Discount rate of 8% (10Y + 345bps) is conservative estimate.
- "Carbon sequestration is based on 1.071 T of Carbon, or 3.926 T of CO_2 , per ac/yr and rounded, while the amount stored is based on 34.281 T of Carbon, or 125.697 T of CO_2 , per ac and rounded, the value of which is based on \$170.55/T of Carbon, or \$46.51/T of CO_2 and rounded.

