

SPB

SOUTH BUFFALO

BOA

BROWNFIELD OPPORTUNITY AREA

Step 3: Implementation Strategy

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I. PROJECT DESCRIPTION

1.1 Project Sponsors

The City of Buffalo, in cooperation with the Buffalo Urban Development Corporation (BUDC), was awarded a grant through the New York State Department of State (NYS DOS) and New York State Department of Environmental Conservation (NYS DEC) to advance the South Buffalo Brownfield Opportunity Area (BOA) into the Step 3 Implementation Strategy phase. The Brownfield Opportunity Area program provides communities with the planning and decision-making tools necessary to develop revitalization strategies for areas impacted by the presence of brownfields. This Implementation Strategy represents the final step of a three step process to develop a community-driven plan to return areas impacted by the presence of brownfields back to productive use. Each phase of the BOA program is described briefly below:

1.2 Location of Study Area

The South Buffalo BOA study area is approximately 1,968 acres, making it the largest BOA to receive funding in New York State. The BOA is located just outside the central business district in the southwest portion of the City of Buffalo, Erie County and the western region of New York. The project area represents a portion of the city with the largest concentration of former heavy industrial properties. As described in Section 1.5, the BOA is formed by NYS Route 5 to the west, Hopkins Street and South Park Avenue to the east, the Buffalo River to the north and the City of Buffalo-City of Lackawanna municipal boundary to the south. Lake Erie is located to the immediate west of the BOA, directly across NYS Route 5, and this waterfront area is included as part of the separate Buffalo Harbor BOA project area.

Neighborhoods surrounding the BOA generally include the Old First Ward to the north, the City of Lackawanna including the New Village Industrial Park and CSX Intermodal rail yard to the south, the NYS Route 5 corridor and Buffalo's Outer Harbor to the west, and the South Buffalo residential neighborhoods adjacent to the east.

Key Findings: At over 1,900 acres, the South Buffalo BOA represents one of the city's largest opportunities for revitalization of the South Buffalo community and the City of Buffalo. Located along two waterfronts and at the intersection of several international transportation corridors, the BOA is a valuable resource that is transforming into a regional economic and recreational center.

1.3 Steps to BOA Adoption

Step 1: Pre-Nomination Study is a pre-planning phase that allows a community to gain a better understanding of the opportunities and constraints which exist within a potential

study area. The key objectives in completing a Pre-Nomination Study are to identify a manageable and a justifiable study area boundary; conduct a preliminary analysis of existing conditions within the study area; to identify preliminary opportunities and constraints; and to begin to engage the community and stakeholders in a visioning and planning process. The South Buffalo BOA entered the program as a Step 2 Nomination Study as a result of the significant amount of planning previously completed for the study area.

Step 2: Nomination Study includes a comprehensive and thorough analysis of the 1,968 acres of the South Buffalo study area. Existing conditions that may have some implication on redevelopment, revitalization, and achieving the identified vision were inventoried and assessed. This includes additional research and curbside assessments of potential brownfield sites. In addition, an analysis of economic and market trends was completed to assist in strategy development. Sites are identified as having potential to serve as catalysts for further reinvestment based on a variety of environmental, community, and economic factors. This phase of the project identifies specific recommendations for revitalization and proposed targeted implementation strategies. The South Buffalo BOA Nomination Study was completed in 2009 and represented the culmination of a two-year (2007-2009) analysis and consultation process to establish a framework for the transformation of the BOA.

Step 3: Implementation Strategy identifies a range of potential projects to advance the recommendations developed as part of the Nomination Study into tangible projects by focusing redevelopment on strategic sites, encouraging public investment, and improving environmental quality throughout the study area. Projects and implementation tasks are identified for the specific needs of each BOA. Individual Phase II Environmental Site Assessments of suspected brownfield properties can be undertaken by individual property owners for targeted sites to better identify environmental conditions and reuse opportunities. The development of detailed redevelopment strategies for strategic sites, marketing and branding efforts are also typical in this phase of the program. BUDC is currently managing the South Buffalo BOA process on behalf of the City of Buffalo.

This Implementation Strategy was prepared in accordance with the guidelines established by NYSDOS and NYSDEC for the Implementation Strategy (Step 3) phase of the BOA Program. The Steering Committee was comprised of community representatives and public sector-based organizations that contributed significantly to the development of the Implementation Strategy. The Steering Committee and other public outreach efforts are further discussed in Section ii: Public Participation Plan & Techniques to Enlist Partners.

1.4 Step 2 Project Overview and Description

The City of Buffalo is the second largest city in the State of New York and is the



Map 1: Regional Context

transportation hub of the Buffalo-Niagara Region. The City is located on the shores of the Niagara River, at the eastern end of Lake Erie. It is the fifth busiest trade city in the United States and at the center of North America’s fifth largest market, with access to more than 9 million consumers living within a 125-mile radius (Map 1: Regional Context) and regional population growth of over 110,000 people per year as published in the City of Buffalo’s *Queen City in the 21st Century Comprehensive Plan*. A former industrial giant, the City is transitioning from a manufacturing economy to a knowledge-based economy and is the center of the Buffalo-Niagara region. This new economy is made up of: law and administration; technology and communications; media and creative services; health care and medical research; research and development; culture and heritage; sports and entertainment; retail.

Due to economic restructuring over the past several decades, Buffalo’s older factories and industrial buildings not easily adapted to the requirements of the new economy, have become vacant and underutilized, leaving behind large tracts of vacant land. The slow and permanent decline of large scale heavy manufacturing industries combined with an increasing substitution of technology for labor has also resulted in a fewer number of high paying, career path jobs. As a result, the city and immediate region have been losing

industrial sector jobs and population for decades. Lower environmental standards during the first half of the 20th century have resulted in environmental contamination and the need for remediation before many of these sites can be reused.

Many of these sites are located in prime locations – on waterfronts and next to rail, highway and utility corridors – and represent significant redevelopment opportunities for the City of Buffalo. Cleaning up and reinvesting in these areas relieves pressures from developing on greenfields elsewhere throughout the region and improves and protects the environment.

Since completion of the Step 2 Nomination Study in 2009, the City of Buffalo has experienced a resurgence in the investment in the City of Buffalo and Western New York region. As described in the October 18, 2013 Business First edition, since 2010 and going forward there is more than \$3.78 B of investment in the development pipeline for the City of Buffalo and \$8.1 B in the overall Western New York area. In addition to these investments Governor Andrew Cuomo recently announced that two new companies (Sorra and Silveo) will be located in the South Buffalo BOA on RiverBend which is a 260-acre waterfront site planned as a mixed use urban community with a focus on research and development. These projects will lead to \$1.5 Billion in investment and 1,000 new jobs to start with more than 2,000 proposed. These projects will transform the former Republic Steel site into a new clean energy manufacturing campus called the High Tech Manufacturing Innovation Hub at RiverBend.

Included in State of New York's investments since the completion of the Step 2 are improvements to the infrastructure along the shoreline on Buffalo's waterfront which has resulted in improved public access and amenities including Ship Canal Commons, Tiff Street Pier, Gallagher Beach, Wilkeson Point, Fuhrmann Boulevard, Central Wharf, River Fest Park and Mutual Riverfront Park. Combined with the Buffalo River remediation, associated shoreline improvements and the recent announcements regarding RiverBend on the north and the new Ship Canal Commons in Buffalo Lakeside Commerce Park on the south, these public investments now frame the South Buffalo BOA, planting the seeds for further investment and revitalization.

Through the BUDC's efforts during this phase of the process, the BOA grant provides Buffalo with the resources to identify tangible implementation projects to advance the vision for redevelopment of the South Buffalo BOA and return strategic sites back to productive uses. An overview of previous and ongoing planning efforts within the study area is provided below.

South Buffalo Redevelopment Plan (1997): The planning process for the South Buffalo Brownfield Study Area commenced in the 1990s with funding through the New York State Clean Water/ Clean Air Bond Act Federal Brownfields Redevelopment Program. The City

of Buffalo, in partnership with the City of Lackawanna, Erie County, Erie County Industrial Development Agency (ECIDA) and other project stakeholders undertook master planning for 1,200 acres of brownfield properties, vacated following industrial decline. This planning initiative established the framework for later completion of the Step 2 Nomination Study, which updated the community vision, goals and objectives for planning throughout the BOA. This Plan also satisfied the Step 1 Pre-Nomination Study requirements under the BOA program.

South Buffalo Brownfield Opportunity Area Step 2 Nomination Study (2009): The City of Buffalo, with funds from the NYSDOS and NYSDEC, entered South Buffalo study area into the BOA program in 2007 in the Step 2 Nomination Study phase. The Step 2 Nomination Study was approved to bypass the Step 1 Pre-Nomination Study phase as a result of prior planning completed as part of the South Buffalo Redevelopment Plan. Findings and recommendations stemming from the Nomination Study process are summarized and updated, as necessary, throughout this Step 3 Implementation Strategy.

RiverBend Master Plan (2011): The RiverBend Master Plan represents the first implementation project completed for the South Buffalo BOA and concurrently being advanced as part of the Step 3 Implementation Strategy. Funded by the New York State Department of State and National Grid, the BUDC undertook the planning initiative for redevelopment of a 260-acre waterfront site to spur private sector investment and job creation. The future for RiverBend is envisioned to be characterized by a green, modern and vital urban neighborhood that capitalizes on the site's vast size, accessible rail infrastructure, location adjacent to Downtown Buffalo, and extensive frontage on the Buffalo River. The RiverBend Master plan focused on the themes Connect (establish a strong connection between the South Buffalo BOA and adjacent neighborhoods and destinations), Restore (implement a comprehensive green infrastructure plan to restore the damaged ecosystem), Transform (develop over 3 million square feet of new development on vacant land), Engage (work with the local community and city partners to reposition Buffalo for the future), all of which are echoed throughout this Step 3 Implementation Strategy.

South Buffalo Golf Course Feasibility Study (2013): The South Buffalo Golf Course Feasibility Study is an implementation project identified in the Step 2 phase and conducted concurrently with the Step 3 Implementation Strategy. The study stems from recommendations developed as part of the South Buffalo Redevelopment Plan, and reinforced during the Step 2 Nomination Study for development of a golf course on the existing All-Tiff and Marilla Street landfills. The study aims to achieve two objectives: locate a recreational facility in the South Buffalo area and restore South Park to the original Olmsted design (requiring removal and relocation of the existing 9-hole golf course that currently exists within the park).

South Buffalo Brownfield Opportunity Area Step 3 Implementation Strategy (current): This document represents the product of the Step 3 Implementation Strategy, completed over the course of 2013, and builds on prior and concurrent planning efforts, as described above. Completion of the South Buffalo BOA Implementation Strategy marks a critical milestone in a long process that began with preparation of the South Buffalo Redevelopment Plan in the late 1990s. As the largest BOA in the State of New York, the South Buffalo BOA is poised to serve as a precedent for successful brownfield redevelopment strategies by initiating catalyst projects that spur reinvestment in vacant and underutilized properties.

To develop implementation strategies the planning work that was completed during previous studies was analyzed and updated, and strategies were developed that match current city trends and the community vision. Updated land use plans were reviewed with stakeholders and incorporated into the new City of Buffalo Unified Development Ordinance (UDO). Priority sites within the study area were identified and outreach to landowners took place to garner interest in investing in their property and understanding the environmental conditions that exist. Throughout the study small, medium and large implementation projects were identified and discussed with the community and potential project champions. A phased approach for implementation of these projects was identified along with potential champions and funding sources. The final Implementation Strategy will provide the South Buffalo BOA stakeholders with a roadmap of opportunities that can lead to a transformative change in both the short-term as well as longer-term.

1.5 Brownfield Opportunity Area Boundary Description and Justification

The South Buffalo BOA boundary was established in the 1990s as part of the South Buffalo Redevelopment Plan and reaffirmed during the Step 2 Nomination Study. The study area is bordered by NYS Route 5 on the West, the Buffalo River on the north, Hopkins Street and South Park Avenue on the east and the City of Buffalo-City of Lackawanna municipal boundary on the south. Lake Erie is located to the immediate west of the South Buffalo BOA, directly across Route 5. This boundary was identified for several reasons. The northern edge is adjacent to the Buffalo River, which creates a natural border and serves as one of the focal points of the BOA study. To the north of the river is the Buffalo River Corridor BOA, whose Nomination Study is currently underway (Map 2: City of Buffalo and Brownfield Opportunity Areas). The western edge, adjacent to Route 5, is appropriate as the lakefront on the other side of Route 5 is incorporated into the boundary of the Buffalo Harbor BOA, currently in the Step 2 Nomination Study phase. The eastern boundary is generally defined by the edge of the South Buffalo residential community and was aligned with major streets. Finally, the southern edge is defined by the City of Buffalo's boundary with the City of Lackawanna.



Map 2: City of Buffalo and Brownfield Opportunity Areas

LEGEND

- BORDER OF THE CITY OF BUFFALO
- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

The South Buffalo BOA represents the portion of the City having the largest geographic concentration of former heavy industries (Map 3: South Buffalo BOA Context). Today, apart from the Buffalo Lakeside Commerce Park, the New Village Industrial Park, located south in Lackawanna, and CSX Intermodal rail yard to the south, the immediate development context is primarily low rise residential, including the Old First Ward to the north and the neighborhoods of South Buffalo to the east. Other commercial and industrial operations are scattered throughout the South Buffalo BOA, primarily along Hopkins and Tift Streets. Ownership in the BOA is roughly equal between the public and private sectors, approximately 987 acres and 860 acres respectively not including public right-of-ways which make up the additional 121 acres of the BOA. (Map 9: Private and Public Ownership). The total noncontiguous City-owned land within the study area consists of approximately 530 acres, which includes City of Buffalo, the Buffalo Urban Renewal Agency and the Buffalo Economic Renaissance Corporation. The third largest ownership category includes the railroad properties, which account for approximately 258 acres. Several key properties with considerable redevelopment potential and/or representing a significant public interest include:

- Buffalo Lakeside Commerce Park;
- RiverBend Commerce Park (former LTV/Republic Steel);
- Tift Nature Preserve;
- Existing and former railroad corridors;
- Former Village Farms site;
- Alltft Landfill;
- Marilla Street Landfill;
- South Park; and,
- Surrounding mixed-use residential / commercial / industrial neighborhoods.

1.6 Community Vision, Goals and Objectives

Public engagement has been pivotal to the development of the Implementation Strategy and Nomination Study. As detailed in Section II, and throughout the Implementation Strategy and Nomination Study the knowledge and insights gained informed the approaches, recommendations and planning techniques used to develop the project plans, goals and visions. Through community meetings, stakeholder gatherings and individual sessions information was learned about the history of the district and the community's vision for its future. As stated in the Nomination Study the master plan principles strongly reflect the goals that were offered by the community. The Nomination Study provided a strategy for the South Buffalo BOA as an engine of growth within the region. Development of the BOA will also contribute to the community through a mixture of land uses, improving mobility, fostering attractive neighborhoods with a strong sense of place and enhancing the natural environment.



Map 3: South Buffalo BOA Context

LEGEND

..... SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

During the initial outreach for the Implementation Study community members, private business owners and local officials were presented the Step 2 master plan, Riverbend master plan, the Buffalo Lakeside Commerce urban renewal plan, South Park Plan for the 21st Century and Tift Nature Preserve Vision. When asked what was the most critical implementation project the overwhelming response was connectivity. The major connectors in the South Buffalo BOA consist of: Tift Street to the Outer Harbor; South Park Avenue to downtown (Central Business District, Canalside, Erie Basin); Hopkins Street to South Park Avenue and South Park. The community vision includes an improved infrastructure and path system that connects South Buffalo to the areas described above and provides access to the Buffalo River while maintaining green and open space connections between major green areas.

As part of the Implementation Study, the community along Hopkins Street was engaged to further refine the vision of the neighborhood. This community consists of a variety of land uses with historically industrial uses on the west side of Hopkins Street and residential neighborhoods on the east. These competing uses, building scales, vacancies, and underutilized properties generated many concerns from both sides. Through improving the quality of the infrastructure, landscape and building structures, a vision of a revitalized neighborhood that works for all users was generated from public comments. This vision provides opportunities for existing and new business to grow and residential infill to strengthen the fabric of this community. The vision of Hopkins Street promotes a diverse and successful sustainable street that is inviting to all users.



II. PUBLIC PARTICIPATION PLAN & TECHNIQUES TO ENLIST PARTNERS

2.1 Introduction

The South Buffalo BOA Step 3 public participation process is comprised of techniques and methods ranging from steering committee and public open house meetings to small stakeholder and one-on-one landowner site visit/planning meetings. At each step, communication tools, including advance web based outreach, were used to share current data, compelling graphics and implementable strategies with the community at large as well as with key groups or businesses who could champion projects. Properties that were determined as priority sites for the immediate and long term success of the South Buffalo BOA were engaged through information mailers, a stakeholder meeting, and in person meetings to discuss the available incentives and voluntary participation in Phase II Environmental Site Assessment (ESA) application.

2.2 Community Participation Plan (CPP) Step 2 Summary

Public and stakeholder participation was an invaluable component of the Step 2 nomination process. Each element of the comprehensive engagement process, which included stakeholder interviews, public open houses, and steering committee meetings, contributed directly to the South Buffalo BOA analysis and evolution of the Master Plan. The description of the public participation process was broken down into four parts. The first focuses on understanding the audiences who were engaged to ensure a successful and inclusive South Buffalo BOA planning process. The second presented the communication tools and strategies. Public outreach at each stage of the planning process was synthesized to create long term sustainability and underpinned the principles for several Smart Growth concepts seen below:

- Diversifying the employment base to support greater economic resiliency;
- Fostering distinctive communities to create a strong sense of place;
- Mixing land uses and increasing densities to discourage sprawl;
- Support existing or future higher order transit service and reduce car dependence;
- Preserve open space and critical environmental areas to add ecological and economic value

2.3 Community Participation Plan (CPP) Step 3 Summary

The Community Participation Plan (CPP) expands on the success of previous outreach efforts conducted as part of the South Buffalo BOA Step 2 Nomination Study. The plan outlines a strategy to engage the local community, project partners, and stakeholders in the overall planning process. The South Buffalo BOA is strategically located with the potential

to become a logistics hub, particularly with its rail assets and proximity to transportation resources in Southern Ontario. These assets along with strong incentive programs create an ideal condition to further strengthen the areas' opportunities for advanced manufacturing, life sciences and research & development.

With such competitive economic opportunities, it was important to engage stakeholders in both the City of Buffalo and the Buffalo-Niagara region. This CPP established the framework for community participation to ensure that City representatives and the consultant team had a clear understanding of the issues that are on the forefront of property/business owners and residents of the South Buffalo BOA study area. The Step 3 Implementation Strategy will set the stage for the revitalization of South Buffalo's natural, cultural, and economic assets.

2.4 Community & Stakeholders

Enlisting community and stakeholder partners is a common theme inherent to both the Nomination Study and Implementation Strategy. Collaboration with City Councilmembers, Community Leaders, Neighborhood Groups, Community Activist, Landowners and the project steering committee provided a wide range of perspectives and priorities. The varying outreach provided a network of communication that generated interest at all levels throughout the City of Buffalo and included the following audiences:

City and State Representatives: This audience has been championing the South Buffalo BOA since the beginning of the Nomination Study. Their involvement in the steering committee and community meetings provided invaluable local insight. Throughout the selection of implementation projects, representatives helped align project selection with local initiatives while playing an instrumental role as leaders for their development. The final Implementation Strategy will have small, medium and large scale projects and in many cases will require public funding. The role of City and State representatives in supporting this effort is critical and their ongoing involvement in the South Buffalo BOA will enhance the success of pursuing funding and maintaining community engagement.

Community Leaders: The members of the South Buffalo BOA community that are vocal and have been engaged in this community prior to the Nomination Study provided significant local knowledge throughout the Implementation Strategy. This group of engaged leaders consists of community members, local business owners, residential association leaders and large institutions. Large group and individual visioning sessions took place to gain an understanding of their concerns, needs, interests and vision for the area. These sessions informed the project team of a range of important community and city issues. The insight that leaders gained during these sessions provided them with knowledge of the study that was valuable to share their constituents and furthered the project outreach. Members from this leadership group also sat on the Hopkins Street Steering Committee.



Image 1: Business cards distributed at public meeting

Non-for-Profit Organizations: The City of Buffalo has a committed group of non-for-profit organizations that are striving to improve the local community while providing critical services that affect people on a daily basis. Of utmost importance to the South Buffalo BOA is the need for small and implementable projects that can initiate physical and social change. Members of these organizations met in group and individual settings to generate a discussion about the community within the study area and potential projects. The passion and synergy which these organizations approached the South Buffalo BOA led to many proposed implementable projects.

General Public: The four public meetings/workshops were designed to be open forums to inform and listen to a broad public audience. Similar to the Nomination Study the meetings were structured as a two-way conversation to encourage input from participants. In order to generate lively discussions, digital presentations and interactive display boards were used. To continue the discussion after all of the meetings, presentations were posted to social media and the project website to stimulate further discussions. Project specific business cards were handed out at all public meetings with contact information and website addresses. (Image 1: Business cards distributed at public meeting)

Landowners: A critical audience that can create immediate and significant change in the study area are the landowners. Through analysis of the Nomination Study and dialogue with the project leaders, priority areas were selected to focus outreach and education. This outreach included group and individual meetings. Stakeholders were contacted, visited and mailed brochures describing the project and Phase 2 Site Assessment opportunities that are available for them along with the meeting date and location. The Landowner meeting provided a forum to discuss the project, its importance to the area, how stakeholders can be involved, available incentives and simple implementation projects that they can champion. Following the Landowner meeting, individual meetings were arranged to further discuss the Phase 2 site assessments and potential early implementation projects. The face to face meetings with landowners generated a high level of interest and valuable input regarding future development opportunities. (Image 2: Landowner Informational Brochure)

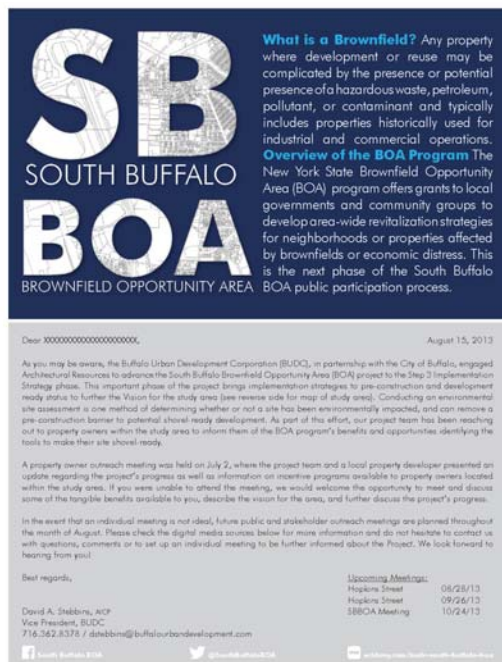


Image 2: Landowner Informational Brochure

Steering Committee: The Steering Committees played an integral role in the development of the South Buffalo BOA. Two separate steering committees were formed: one for the general South Buffalo BOA project and another for the Hopkins Street Neighborhood. This was done in an effort to maximize input and development strategies for the overall South Buffalo BOA project area as well as elicit detailed neighborhood information and concerns to inform the vision for the Hopkins Street Corridor. The Steering Committees worked with the planning team on the overall vision of the South Buffalo BOA Plan and Hopkins Street Vision, as well as represent a variety of community interests. The Steering Committee consisted of representatives from the City of Buffalo, DOS, the New York State Department of Environmental Conservation (NYSDEC), project partners and stakeholders. Meetings between the project team and the Steering Committee provided a venue for discussing project specifics, planning opportunities, concept designs, presentation materials, marketing strategies, and review of comments related to the submission of project related documents.

These outreach efforts informed the Implementation Strategy based on smart growth planning strategies, current economic conditions and incentives (e.g., BOA program incentives, the Billion for Buffalo, Consolidated Funding Application) while acknowledging recent successes (e.g. Buffalo Niagara Medical Campus, Canalside, and Larkinville). Most importantly, this outreach effort provides a blueprint for implementing short, medium and long-term projects.





Image 3: South Buffalo BOA Website & Social Media

2.5 Communication Strategies

Internet: Capitalizing on advances in technology, a web based interactive platform facilitated feedback and allowed for dissemination of information to a wider range of participants locally, regionally, and internationally. The project website, hosted by BUDC, fostered participation from the community as well as provided outreach to regional and international stakeholders. The interactive website is an efficient tool that is a source for project information (including access to project presentations and meeting information), and a forum for suggestions and strategies from the public. (Image 3: South Buffalo BOA Website & Social Media)

Social Media: With the advent of social media, communities of people can create, share, and exchange ideas with a global community in comparatively inexpensive ways. Facebook and Twitter accounts were created for the South Buffalo BOA and regularly updated to share information, photography, upcoming events, and pertinent news with the public. By using a variety of platforms like social media, information about the South Buffalo BOA can be accessed by a large and diverse population. Inversely, by contributing content, communities are enabled by submitting their thoughts with less formal methods. (Image 3: South Buffalo BOA Website & Social Media)

Print Media: Although the rise of the internet and 24-hour rolling news has seen print media steadily decrease, the uses of print media are still numerous and highly advantageous to individuals and businesses alike. Print media - newspapers, magazines and brochures - play an important role in attracting large audiences in addition to digital media. White Papers addressing environmental concerns, brochures physically posted in community establishments and newspaper advertisements were all deployed to reach the greatest audience possible.



Image 4: Public Meeting Flyers

2.6 Consultation Events with Community

A total of four public meetings were held beginning April 2013 through December 2013. Two meetings were held to discuss the overall South Buffalo BOA and two meetings were held to focus on the Hopkins Street Neighborhood. These public meetings and workshops were focused on the various stages and planning efforts of the South Buffalo BOA. The meetings and workshops were organized to inform local residents, business, and property owners of the project status and to solicit opinions on the proposed redevelopment plans of the South Buffalo BOA. The meetings promoted and encourage active participation from local community members and business owners. The general intent for each meeting, and proposed meeting schedules, is discussed in further detail below:

Meeting #1, April 30th, 2013 (South Buffalo BOA and Golf Course Study joint presentation)

An initial kick-off meeting was jointly presented by the consultant team for the South

Buffalo BOA and by the consultant team for the South Buffalo Golf Course Feasibility Study (located in the South Buffalo BOA). This session focused on an introduction of team members, overview of the Step 2 Nomination Document, review of the RiverBend Master Plan, Buffalo Lakeside Commerce urban renewal plan, South Park Plan for the 21st Century, Tiff Nature Preserve Vision, South Buffalo Golf Course Feasibility Study, and Step 3 Implementation objectives. In addition, facilitators engaged participants in an open house session to encourage public input on proposed/future land uses for the Step 3, and the South Buffalo proposed Golf Course.

Meeting #2, June 5th, 2013 (Hopkins Street)

At the first Hopkins Street Neighborhood meeting/workshop the discussion was focused on:

- The Neighborhood and the importance of their participation in this process
- Revitalization and how the urban landscape can be changed
- Design opportunities for the Hopkins Street community

Information describing the existing conditions, influences on the area and opportunities for the future were discussed. The presentation included existing land use and proposed land use diagrams along with potential design precedents and early implementation opportunities. How to connect the Hopkins Street Neighborhood to South Park, Outer Harbor, Larkinville, Canalside, Central Business District and the Buffalo River was a significant focus. Facilitators engaged participants in a workshop exercise to identify immediate community needs. Feedback included opportunities for housing rehabilitation and streetscape improvements.

Meeting #3, August 28th, 2013 (Hopkins Street)

At the second Hopkins Street Neighborhood meeting/workshop the community was presented ideas on how to Connect, Restore and Transform their neighborhood. Proposed land use diagrams, a design vision for Hopkins Street and preliminary implementable projects were reviewed along with ecological opportunities connecting habitats, green spaces and communities throughout the South Buffalo BOA. Additionally, priority sites that provide the most viable opportunities for change were discussed along with opportunities for incentives through the BOA program. Participants were shown a vision of Hopkins Street and provided a description of resources that can be pursued to initiate change. Attendees were posed the question “What can you do for your community?” The workshop following the formal presentation allowed for community input that guided the final design decisions and implementable projects for the Hopkins Street Neighborhood.

Meeting #4, December 4th, 2013 (Hopkins Street, South Buffalo BOA, Golf Course Study)

The Final South Buffalo BOA meeting brought together and summarized all the activities performed per the Implementation Strategy phase. The benefits of property cleanup was stressed. The recent announcement of the Buffalo High-Tech Manufacturing Innovation Hub at RiverBend were described. These projects could not have happened without the prior site assessment, site assessment, and thorough planning initiatives that previously had been done. The Golf Course Study team presented findings that highlighted the feasibility of a 9-hole course with multi-seasonal activities which could support year-round community use. Underscoring the importance of past planning efforts the Implementation Strategy utilizes Lighter, Quicker, Cheaper techniques to create initial low-cost, but high impact changes that help empower the community. Emphasizing that partnerships and collaboration of community, business, and civic groups can have the largest impact. Prioritization maps were displayed outlining the steps to implementing three key changes: Complete Street initiatives, enhanced landscaping, and creating an enhanced network of pedestrian connections. More information can be found in *Appendix A: Meeting Minutes*.

III. EXISTING CONDITIONS ANALYSIS & OPPORTUNITIES

3.1 Introduction

Nomination Study Overview

In 2007, the City of Buffalo Office of Strategic Planning, through a BOA grant from the New York State Department of State, initiated a Step 2 Nomination Study for the South Buffalo Opportunity Area. The South Buffalo Redevelopment Plan, completed by the City of Buffalo in 1997, met the NYSDOS' criteria for the BOA Step 1 Pre-Nomination Study phase and provided the preliminary analysis and vision reviewed and refined under the subsequent Step 2 Nomination Study phase.

The South Buffalo BOA Nomination Study included an extensive public participation effort, a robust existing conditions analysis with key findings, an Economic and Market Trends Analysis, an analysis of three Land Use Development Options that culminated in a Master Plan, and an Assessment and Remediation Strategy for Strategic Sites.

The South Buffalo BOA Step 2 was completed in 2010, with the NYSDOS' approval of the Nomination Document. This document provided the impetus for early implementation projects including the RiverBend Master Plan (completed in 2011) and Golf Course Feasibility Study (to be completed in 2013), and served as the basis for the Step 3 Implementation Strategy discussed in Section 4. These early implementation projects were also funded by the NYSDOS through the BOA Program. The Step 3 Implementation Strategy phase described briefly below is the third and final step in the BOA Program process.

Implementation Strategy

The Brownfield Opportunity Areas Program provides municipalities with financial assistance to complete area-wide planning approaches to brownfields redevelopment. Completion of the program leads to a New York State designation as a Brownfield Opportunity Area. The third step in the program is the Implementation Strategy, which provides an update to the analysis of economic and market trends, existing conditions, opportunities, reuse potential and recommendations, and identifies realistic implementation projects. This section, Analysis of the Proposed BOA, provides an update of the existing conditions analysis previously presented in the Nomination Document for the South Buffalo Brownfield Opportunity Area.

The South Buffalo BOA

The City of Buffalo is the second largest city in the State of New York and the transportation hub of the Buffalo-Niagara Region. The total area within city limits is 41 square miles. It is located on the eastern end of Lake Erie and also borders the Niagara River which flows northward, over Niagara Falls and into Lake Ontario. The Buffalo-Niagara region (Golden Horseshoe) is situated upon the shores and in the midst of the Great Lakes where nearly



Map 4: Golden Horseshoe

one-fifth of the world's fresh water located. This fresh water is both a crucial resource and a precious commodity. It is growing in importance, not only for this region, but also has the potential to impact the health and welfare of the world's population. Buffalo is the fifth busiest trade city in the U.S. and at the center of North America's fifth largest market, with access to over 9 million consumers living within a 125-mile radius (Map 4: Golden Horseshoe). The city is also the center of the Buffalo-Niagara region for law and administration, banking and business, technology and communications, media and creative services, healthcare and medical research, culture and heritage, sports and entertainment, restaurants and retailing. Also, energy production such as hydroelectric and wind power have been or are becoming a regional attribute.

Located south of downtown, adjacent to Lake Erie and the Buffalo River, is the 1,968 acre South Buffalo BOA. The BOA represents a unique opportunity for the City of Buffalo to capitalize on many of these regional core strengths and mitigate its market challenges, capture current and projected regional growth industries, and leverage the BOA's natural assets, both economic and environmental, in order to transform the BOA from an underutilized industrial area into an engine of growth for the city and region. A critical component of the Nomination Study therefore included an evaluation of the local and regional economy to identify opportunities for growth within the BOA. In keeping with these ideals, the overall demographic and market trends in the nation, state, and region were examined and compared to those of the City of Buffalo, followed by a focus on the city's strengths, weaknesses, physical land base and emerging or sustainable industries. Ultimately a series of directions and strategies began to emerge for the BOA, and have been updated to reflect changing environmental, economic and physical conditions within the BOA throughout this process.

Within the region, there has been an increase in redevelopment momentum, which has resulted in numerous redevelopment projects and plans for revitalization, particularly with respect to the city's long underutilized waterfront and within the downtown core. The

strategy for the BOA must acknowledge and respect these ongoing and planned efforts, in addition to the economic clusters that are emerging in other parts of the city and region. It is important to realize that the BOA can both benefit from emerging economic, academic, cultural and environmental sectors in the Central Business District (CBD) and other parts of the region, and act as an engine of growth in complementary or new sectors. By using its unique site characteristics and assets to generate growth in new sectors, the BOA can play an important role in the economic resurgence of Buffalo and the diversification of its economic base.

Often the focus of development policy in industrial cities that have been losing population and not experiencing job growth, such as Buffalo, has been to search for one or a few economic solutions to solve the region's problems. The reliance on only one or a few companies, strategies, or initiatives to bring revitalization, makes a city vulnerable to changes in the economic climate and independent decisions of only a few businesses. Opportunities for long-term growth of multiple sectors are provided by the diversification of the labor force, the focus on several industries that have long term- growth potential, in the city, state, and country, and the incorporation of the inherent environmental, cultural and historic value of an area or city into its revitalization efforts. Ultimately this creates a residential and commercial community that is truly diverse and sustainable, with an emphasis on the environmental, economic and social attributes of the community.

3.2 Community and Regional Setting

This community and regional setting section provides an update of the demographic changes and market trends that have occurred since completion of the Step 2 Nomination Document, and includes data describing population change, income and age characteristics, labor force and employment growth and housing characteristics.

3.2.1 Demographic Context

Demographic information describes the characteristics of a population, which provides an understanding of the services, housing types, and community resources that may be in demand or required within a community. Understanding the population base enables an understanding of additional services that may be required to serve the community.

Population

Population growth or decline has direct impacts on the services required both locally and regionally. Rapid population growth may indicate the need for additional infrastructure, community services and housing demand. Similarly, population decline may indicate that certain community needs are not being met or quality-of-life issues causing residents to move elsewhere. Understanding the changing nature of the population base can better

enable a community to meet the needs of residents and sustain neighborhoods.

In the 1950s, the City of Buffalo was the 15th largest city in the United States, with just under 600,000 residents. Anticipating continued population growth, the city and surrounding areas invested in infrastructure which, in part, resulted in widespread suburbanization. Deindustrialization followed, and the city of Buffalo experienced population loss to the surrounding region and out-of-state regions as people left for outside employment opportunities. Nationally, the trend is slowly starting to reverse; younger generations are realizing the value of living and working near employment centers and companies are choosing to locate near educational institutions to capitalize on knowledge capital. Between 1990 and 2000, the city of Buffalo lost approximately 11 percent of its population. Between 2000 and 2010, the city lost an additional 11 percent of its residents. The study area reflected this trend, losing approximately 12 percent of its population between 2000 and 2010.

By comparison, the Buffalo-Niagara MSA lost only 3.3 percent of its population, suggesting the city continues to experience population loss to surrounding first and outer ring suburbs. New York State grew slightly during the same time period, increasing the number of residents by 2 percent. Population retention continues to be an important goal for the study area and the city of Buffalo.

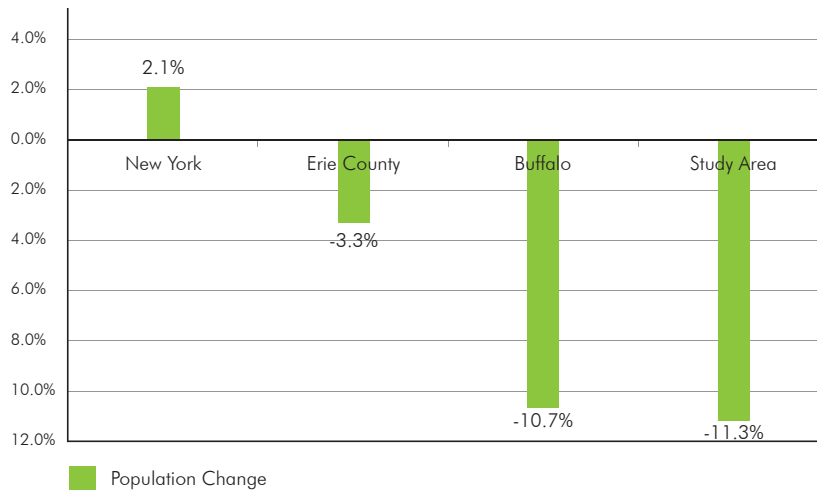


Table 1: Population Change 2000-2010

Another important indicator of a population group is the age breakdown of an area's residents as different age groups require different municipal services to contribute to their quality-of-life. A study area with a large population of school-aged children may require more active recreational opportunities or childcare facilities, whereas a neighborhood with an aging population may require accessible senior services, healthcare facilities and public transportation options. The age group of an area additionally has implications for

the community’s vision and goals. For example, if the community’s goal is to attract new families, it may need to develop specialized services and amenities to attract such families to the area.

According to the 2010 census, the majority of study area residents are between 40 and 64 years of age (33.5 percent) which essentially mirrors the proportion of residents in this age bracket in New York State and Erie County. It will be important for the city to ensure that adequate services and public amenities are accessible to these residents to enable them to continue to age in place. The second largest age group in the study area consists of residents under the age of 19 years (29 percent). This age bracket represents school-aged children who tend to utilize recreational amenities and community centers more frequently than other population groups, and rely on quality schools to provide the educational tools needed for future success. By contrast, the city of Buffalo has a larger proportion of residents aged 20 to 39 than the study area, Erie County and New York State. Many of these residents are likely affiliated with area institutions that provide educational and employment opportunities throughout the city.

Key Findings: Areas experiencing population growth are attractive places for businesses to locate. Similar to the city as a whole, the study area has been losing residents over the last several decades. However, the city has the opportunity to identify improvements and amenities to retain and attract residents to the study area. The study area is well represented by a cross section of age groups. Age diversity is beneficial to communities as each age group contributes different knowledge, experiences and skill sets .

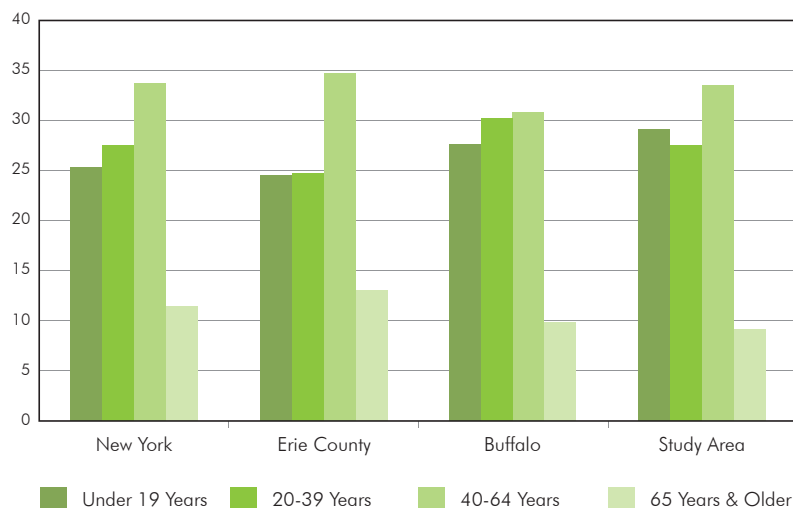


Table 2: Regional Age distribution 2010

Income

The average income in the City of Buffalo is significantly lower than the region, county and state. This trend has continued since completion of the Nomination Study. According to the American Community Survey 5-year estimates (2012), the median income in the City of Buffalo is approximately \$30,000 compared to a median income of approximately \$50,000 in the Buffalo MSA, Erie County, and median income of \$56,000 in New York State. According to 2012 census data, 55 percent of households in the City of Buffalo had earnings less than \$35,000. By comparison, 37 percent of households in Erie County and 33 percent of households in New York State earn less than \$35,000.

According to recently released census data, the city of Buffalo ranks as one of the poorest cities in the nation. Between 2007 and 2011, it is estimated that approximately 30 percent of the population was living below the federally established poverty level. Other upstate New York cities also make the list, including Rochester with approximately 31 percent below the poverty level, and Syracuse with approximately 32 percent below the poverty level. While these findings are less than ideal, the city of Buffalo has begun to adapt to its transitioning economy and is attracting new businesses ranging from small start-up companies to large, globally competitive manufacturing firms. This transition is evidenced by the recent announcement that two green energy companies (Sora and Silevo) based in California are establishing operations at the RiverBend site. This investment provides the study area and the city of Buffalo the opportunity to be on the cutting edge of the clean energy revolution and is projected to create 850 permanent jobs and 500 construction jobs. Workforce development programs would also assist in generating a trained labor pool to attract additional businesses, and provide the opportunity for residents to attain higher paying jobs.

Key Findings: Although the city continues to face challenges related to slow income growth and high poverty rates, it is slowly realizing successes in attracting new, niche businesses and industries to former industrial areas including the RiverBend Commerce Park and Buffalo Lakeside Commerce Park within the study area. This positive trend provides the opportunity to educate and train the workforce and attract skilled workers to the region. As people are attracted to the city for job opportunities, this may result in increased housing demand. The city should work with new employers and businesses to identify opportunities for employer-assisted housing or to implement rent-to-own programs in and around the vicinity of the study area.

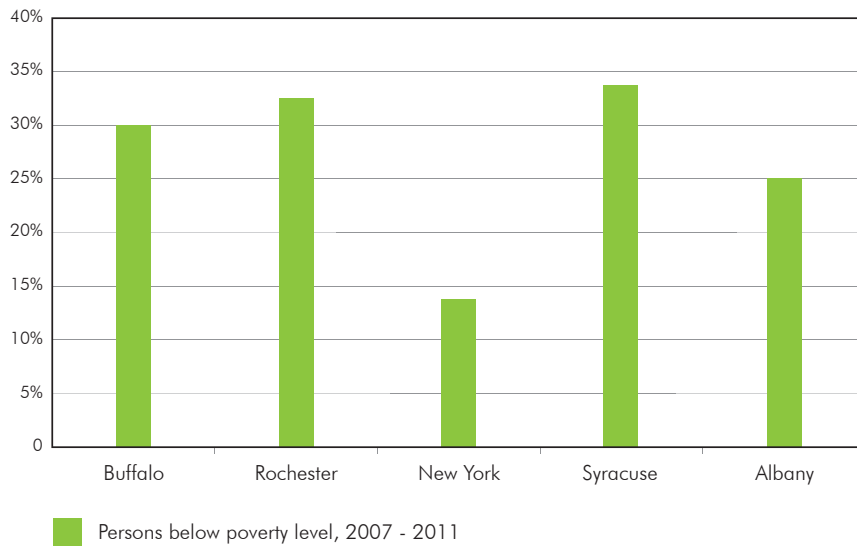


Table 3: Percentage of people living below the poverty level

Housing

Residential areas in and around the study area were developed in the late 19th and early 20th centuries due to a variety of factors. During the mid-19th century, several land companies developed areas along South Park and Abbott Road. In addition, as conditions in Buffalo’s First Ward began to change with increased industrial development, and early immigrants became more established, residents in the neighborhood opted to relocate. In addition, municipal investment in infrastructure and community services made other areas of the city more accessible. The most influential development occurred following establishment of several grain elevators along the Buffalo River. The resulting influx of workers created demand for housing close to their place of employment. Following World War II, newer housing was constructed in areas in and adjacent to the study area. The changing nature of the neighborhood has resulted in a variety of housing types that contribute to the diversity of the neighborhood. The Marilla Street neighborhood, located in the southeast area of the BOA, has a post-World War II housing stock including modest cape cods and ranch-style homes. According to 2012 data obtained from Erie County, the majority of housing in this neighborhood is assessed between \$50,000 and \$70,000. The Hickory Woods neighborhood, located west of Hopkins Street to the north of Tiff Street, was developed in the 1990’s. As part of this development, approximately 60 new single-family homes were constructed. This housing project was facilitated through the U.S. Department of Housing and Urban Development’s HOME program using Community Development Block Grant Funds. The majority of homes in this neighborhood are assessed between \$30,000 and \$50,000, although some newer homes along Abby Street are assessed at more than \$60,000.

Over the past several decades, the city of Buffalo has experienced a decline in the number of households and consequently has had an oversupply of housing stock. According to the

State of the Cities Data System (SOCDS), since 2000, there has been a 72 percent decline in the number of new construction building permits issued throughout the city. While this could indicate decreasing demand for residential and commercial building space, it may also indicate that more existing structures are being rehabilitated and reused. According to 2000 and 2010 census data, approximately 12.6 percent of housing within the study area is vacant, which is slightly lower than 2000 vacancy rates (12.7 percent). By comparison, 15.7 percent of housing is vacant in the City of Buffalo. Both the study area and the city of Buffalo exhibit higher vacancy rates than the county (8.8 percent) and New York State (9.7 percent).

Homeownership can be another important consideration for neighborhood quality-of-life. The study area's housing stock is more affordable than many homes located elsewhere in the city, and a larger proportion of residents in the study area own their homes than the city as a whole. According to the 2010 census, 43.3 percent of residents within the study area rented their homes, compared to 59.3 percent citywide. While this higher rate of homeownership is a positive quality, between 2000 and 2010 the study area's owner-occupied housing decreased and renter-occupied housing increased by nearly 10 percent. While affordable housing offers the opportunity to attract young families, professionals or singles who may be just starting out, a focus should be placed on stabilizing homeownership and/or encouraging longer-term renters. Residents who intend to live in the neighborhood over the long term generally have a vested interest in maintaining the quality of their properties and community. It is also important to note that a higher absentee landlord/ renter ratio frequently results in reported nuisances within a neighborhood. Short-term renters have less incentive to make improvements to properties they do not own or intend to reside in for prolonged periods. In addition, they may have less capacity for such investments or contributions to their community. Although these issues may not be prevalent within the study area, owner-occupancy should be encouraged to the greatest extent possible.

Key Findings: The study area has a mix of older and newer housing units that are relatively affordable . In addition, the study area is home to an increasing number of renters and decline in homeownership , which dropped by 6.4 percent between 2000 and 2010. Homeownership and investment in the community should be encouraged to improve quality-of-life and retain residents. Long-term goals for the study area should include rehabilitation of the existing housing stock and identifying programs and methods for increasing homeownership.

Educational Attainment

Educational attainment directly relates to the ability of community residents to obtain higher paying jobs, acquire the capital to invest in properties and communities, and transition from blue collar-focused employment to a knowledge-based economy. Educational attainment is an attractive quality to encourage businesses to tap into a skilled workforce. According

to the 2010 census data for 19 to 24 year olds, the study area has a larger proportion of residents who have less than a high school degree (22.3 percent) compared to the city (16.5 percent), Erie County (11.4 percent) and New York State (15.2 percent). Within this same cohort, only 9.4 percent of the study area has obtained a Bachelor's degree, and only 2.5 percent of residents 25-years or older have obtained graduate degrees. This lags behind the city of Buffalo, Erie County and New York State.

Key Findings: The South Buffalo BOA would benefit from having an educated and trained workforce, particularly with the announcement of new advanced manufacturing companies locating to the study area. The city has the opportunity to engage study area residents regarding new employment opportunities and assist with identifying workforce development opportunities, as determined relevant to the goals of the community.

3.2.2 Market Context

A comprehensive Market Study was completed by economic analysts as part of the Nomination Study. Subsequent to that project, a separate labor, economic and real estate analysis was completed for potential build-out of the RiverBend study area. The findings from each of these market analyses as they pertain to the city and the study area are described in the following sections.

Nomination Study Market Analysis

The market study completed as part of the Nomination Study determined that the city of Buffalo has a strong office market, but a smaller share of the regional industrial market. More than half of the county's regional office space is located within the city, and office vacancy rates in the city are comparable to those in the suburbs.

The study additionally illustrates the trend of a weakened industrial market, which is largely the result of older industries and facilities that have vacated since deindustrialization. Still, the city's functional manufacturing space represented approximately one-third of the county's in 2007. Although the study projected increased vacancies since completion of the Nomination Study as older facilities outlive their usefulness, it also recognized that since the city is the center for manufacturing in the region, there is potential for growth in the high tech manufacturing sector. This trend is being realized as large advanced manufacturing firms such as Sora and Silevo are selecting Buffalo to establish their operations.

Buffalo RiverBend – Labor Market, Economic and Real Estate Assessment

The market study completed as part of the RiverBend Master Plan built upon the market study completed in 2008 as part of the Step 2 South Buffalo BOA Nomination Study, focusing more specifically on the strengths and challenges associated with the brownfield site. The RiverBend site is a former brownfield that consists of 200 developable acres

adjacent to the Buffalo River in South Buffalo. Its proximity to the Central Business District, location adjacent to the Buffalo River, legacy infrastructure from historic industrial uses, and on-going initiatives to restore the Buffalo River shoreline are a few of the strengths that make the site an appealing location for future industrial and office space development. The indicators for new development demands were based on an analysis of regional assets, real estate and economic trends, and site-specific attributes including:

- Access to major transportation assets including road, freight and waterways;
- A regionally competitive industrial market (including the presence of Buffalo Lakeside Commerce Park);
- BUDC site ownership;
- Growing area institutional anchors, including a biomedical cluster;
- Available knowledge capital and a diversifying regional employment base; and
- Flexibility to accommodate a range of uses that are less appropriate in downtown areas.

The Real Estate Industry Sector Analysis was completed to assess individual market sectors including office space, industrial/flex space, residential, retail, and alternative energy opportunities. Findings from this portion of the analysis are summarized below.

- **Office Space:** indicates that Buffalo has a relatively large office market concentrated downtown and in area suburbs. Approximately one-third of regional office space is located in the Buffalo Central Business District. Vacancy rates, both regionally and locally in the CBD, indicate stability of the market, ranging from approximately eight to 11 percent. Although rates are stable, these relatively high vacancy rates and lack of market velocity may make new construction challenging.
- **Industrial/Flex:** The Buffalo industrial market is strong compared to other competitor cities. South Buffalo's market for industrial and flex space combined has approximately one third of the space available in East Buffalo, yet the vacancy rate is approximately 5 percentage points lower.
- **Residential:** Residential development is complicated due to population loss and high housing vacancy rates. Encouraging residential development on the site in the form of single family, townhouse or garden-style apartments will be complicated by environmental conditions that will likely prohibit construction of ground floor housing. However, streetscape and infrastructure improvements to South Park Avenue and along the river may encourage demand for a small amount of multifamily residential housing, which may include live/work space or senior housing.
- **Retail:** Most of the regional retail is concentrated in the CBD or in suburban shopping centers. However, there are several possible scenarios for retail development that may be viable for the RiverBend site. One scenario may be destination retail/

industrial pairing, such as a brewery or niche food producer that wants to include an on-site retail outfit. Another may include destination retail that capitalizes on the site's proximity to the river and unique views of downtown. There also may be opportunity for neighborhood retail along South Park Avenue as the area begins to develop.

- **Alternative Energy:** Regional and National trends indicate growing interest for alternative energy in the region. This is evidenced by the high visibility of the Steel Winds project, and additional grant allocation to evaluate wind energy potential in the area (e.g., EPA Wind Grant). The study identifies mid-size turbines and solar panels as a potentially viable short to medium term use for the site. While the study also identifies challenges for alternative energy development, recent state investments and tax incentives have already attracted Soraa and Silevo to the RiverBend site from out-of-state locations.

The Implementation Strategy developed as part of the RiverBend Market Analysis recognizes that development on the RiverBend site will rely on successful public and private partnerships and a coordinated effort by BUDC, the City of Buffalo, the Buffalo-Niagara Enterprise, Empire State Development Corporation and other regional leaders. The study additionally identifies interim site uses, a management and governance structure, and a financial strategy for successful marketing and build-out of the site.

Key Findings: Both office and industrial uses should be encouraged and have a role in the redeveloped BOA. The healthy office market can take advantage of the BOA's central location, with potential for both prime and back office. The industrial market analysis indicates the potential for either high tech manufacturing space or industrial flex space in the BOA. A key consideration will be to accommodate these uses without precluding future residential, high value commercial or recreational development.

3.2.3 City and Regional Challenges

The city of Buffalo's challenges have primarily stemmed from the sudden shift in its economic base during the mid-20th century without an appropriate replacement economic structure. The decline of manufacturing over a prolonged period of time had a significant impact on the city and the region and contributed to urban decay, population loss, increased housing vacancies, infrastructure oversupply and deterioration, and increased supply of brownfield, abandoned and vacant sites. This decline also led to an increased cost of doing business, and difficulty retaining and attracting new businesses and a skilled workforce. While many of these challenges still exist, changes in the regional economic climate, public investment and state subsidies have begun to mitigate these impacts and encourage reinvestment in neglected areas.

Urban Decay

Urban decay is a core impact of deindustrialization. Many of the industrial, commercial and residential properties throughout the city and within the region have experienced increased vacancies and disinvestment as older industries closed down. Today, there is increased momentum for redevelopment to counteract urban decay that has been facilitated through development of revitalization strategies, as well as through state and federal programs, subsidies, and private investment. These successes are evidenced by the redevelopment and growth of the Larkin District, expansion of the Buffalo Niagara Medical Campus, continued programming and expansion at Tiff Nature Preserve, development of the RiverBend Commerce park, and completion of this South Buffalo BOA Implementation Strategy, to name a few. In addition, the governor's commitment to invest \$1 billion in targeted areas throughout Western New York provides the potential for catalyst projects that will further bolster momentum for revitalization throughout the City and the South Buffalo study area.

Attracting and Retaining a Quality Workforce

The city of Buffalo and Western New York region have been challenged by their ability to attract a young, educated workforce. Younger generations generally relocate to the region to pursue higher education and leave following graduation for outside job opportunities. This challenge has been spurred by several area factors. First, it is well-known that the creative class is attracted to vibrant areas with diverse employment opportunities. In addition, the region's colleges and universities have produced a surplus of graduates that may be forced to look to other regions for employment. The Match-Gap analysis study completed by the University at Buffalo's Regional Institute (2008) found that an overwhelming majority of overall job openings require no college degree – nearly 16,000 (75 percent) – compared to the 5,000 annual job openings requiring a college degree. In addition, the vast majority of degrees awarded in the region (nearly half) are in the fields of education, business, liberal arts and health. One in five students earns a degree in education, resulting in a ratio of 2.5 graduates for every job opening. Many graduates within this cohort will be forced to relocate to find jobs in their respective fields, or pursue jobs in different fields, for which they may be overqualified.

There are, however, opportunities and the atmosphere throughout the city of Buffalo is generally improving due to increased investment and redevelopment momentum. The surplus of graduates with advanced degrees provides the opportunity for expansion of the region's knowledge economy if coupled with appropriate job growth. Strategic alignment of graduate supply and workforce demand will be essential to avoid "brain-drain" and encourage growth in the regional knowledge economy.

Deteriorating and Excessive Infrastructure

One of the key challenges in the city and region is the oversupply of infrastructure that was

constructed when the city had a much larger population base . As a result of population loss, the city is continually faced with increased maintenance costs associated with existing infrastructure despite a reduced tax base. Infrastructure costs and deficiencies can be a major factor in deterring investment from businesses and industries.

Since completion of the Nomination Study, several initiatives have been undertaken to address infrastructure issues in or in proximity to the study area including upgrading the Hopkins Street bridge south of Tiff Street and the Ridge Road bridge in nearby Lackawanna; pavement upgrades along Hopkins Street and South Park Avenue; and water line improvements along Hopkins Street north of Tiff Street.

High Vacancy Rates

The city of Buffalo's population today is less than half of what it was during its period of economic prosperity, yet it maintains an infrastructure, housing, and commercial and industrial building footprint for a much larger city. Population loss resulted in an increasing number of vacant properties, which have only recently begun to stabilize. In 2000, 15.7 percent of overall housing units were vacant. According to the 2010 census, the same proportion of housing units are vacant (15.7 percent). Issues associated with nuisance response, inspections, property maintenance, foregone taxes, public safety, and demolition costs represent public services and public funds that could be better spent on other city priorities.

With the more recent development momentum and the city's strategic efforts to right-size and encourage infill development, vacant properties also represent numerous opportunities including:

- Available land at affordable prices;
- Land assembly opportunities;
- Opportunities for new development incentives;
- Available areas for public spaces linked to new development opportunities;
- Brownfield and Grayfield redevelopment strategies, including the South Buffalo BOA Plan;
- Green Infrastructure Strategies, as are currently being stewarded by the Buffalo Sewer Authority and Buffalo Niagara Riverkeeper; and
- Right Sizing Approaches.

With increasing public and private investment happening throughout the city, vacant properties, more than ever, represent a tremendous opportunity for the city to encourage infill development and spur further private investment along key corridors and in key neighborhoods.

High Cost of Doing Business

Although land values generate lower costs for businesses, at the time the Nomination Study was completed, the Buffalo-Niagara region was ranked as the 57th most expensive region to do business in the nation. In 2013, Forbes completed its annual ranking of Best Places for Business and Careers, evaluating the largest metropolitan statistical areas in the United States. The study used 12 metrics relating to job growth, costs (business and living), income growth over a five-year period, educational attainment, and project economic growth through 2014. Net migration patterns, cultural and recreational opportunities and each area's inventory of highly ranked colleges were also taken into consideration. According to this study, Buffalo ranked 75th nationally as the best place for business and careers. Among its upstate peers, Rochester (45th) and Albany (60th) ranked better, with Syracuse falling behind at 118th. Similarly, the study ranked the cost of doing business for large metropolitan areas. Buffalo ranked 111th, compared to Rochester, which ranked 73rd. Syracuse and Albany came in lower at 136th and 162nd, respectively. Buffalo outperforms its peer regions for job growth, ranking 50th nationally. A key consideration during implementation will be identifying ways to leverage the region's workforce supply to attract additional new companies to the region, and mitigate the fiscal obstacles associated with operation in the region. Table 3.4 below illustrates job growth rankings for peer cities in Upstate New York based on the Forbes study.

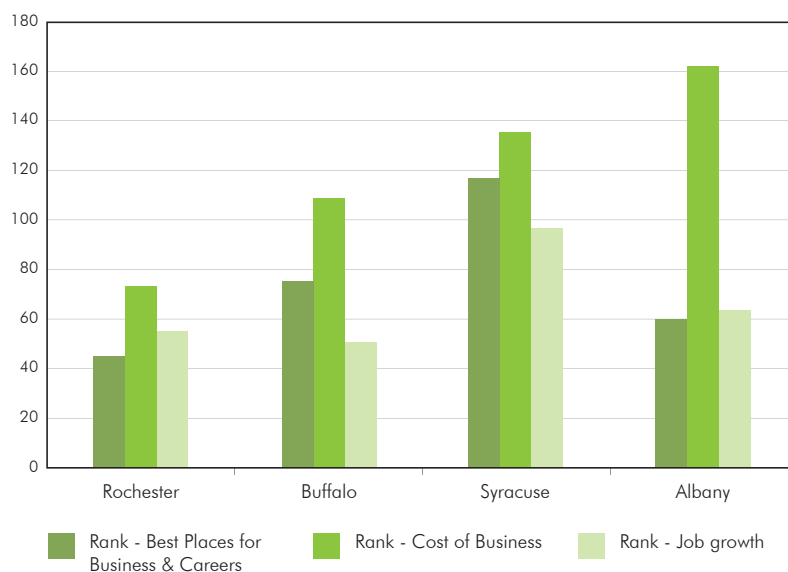


Table 4: Forbes Best Places for Businesses and Careers Statistics (2013)

High Cost of Energy

Nationally there has been a trend of increasing energy consumption, associated with the lateral expansion of communities and economies. Approximately 86 percent of the Nation's energy comes from non-renewable energy sources. The majority of energy consumption is

associated with industrial processes and transportation of goods, materials, and people. It is well documented that low-density single-use communities have higher rates of energy consumption than communities designed for higher-densities and mixed-uses.

The Greater Buffalo Region, in particular, struggles with high energy costs. According to the U.S. Department of Commerce’s Cost of Living Index (2010), compared to other peer Manufacturing Cities throughout the United States, Detroit, Chicago and Buffalo have the highest utility rates, respectively. Peer cities with the lowest utility rates include Des Moines, St. Louis and Pittsburgh. To relocate from a city with lower utility rates to Buffalo would require an after-tax salary increase ranging from 1.1 percent (Rochester) to 22 percent (Des Moines).

Cost of Living Ranking, Selected Cities	Urban Area	Utilities
67	Des, Moines, IA	90.2
58	St., Louis, MO-IL	92.9
82	Pittsburgh, PA	97.0
249	Milwaukee-Waukesha, WI	98.6
19	Louisville, KY	99.1
136	Cincinnati, OH	103.8
275	Minneapolis, MN	104.7
234	Akron, OH	107.9
242	Cleveland, OH	109.0
232	Rochester, NY	114.4
174	Buffalo, NY	115.6
290	Chicago, IL	117.3
225	Detroit, MI	129.5

Table 5: Cost of Living Ranking

Incentives offered throughout New York State are increasing the viability of incorporating renewable energy sources on a site and project-specific basis resulting in decreased energy costs. For example, there are currently incentives for installation of solar panels on residential units or ground-mounted on properties which include a 30 percent Federal tax credit, 25 percent state tax credit, and 30 percent tax credit from NYSERDA. This equates to a 15 percent project cost for the entire system. As renewable energy sources continue to be promoted and energy efficiencies are gained through improved technologies, it is anticipated that regional utility rates will improve .

Tax Burden

Population loss contributes to a lower tax base, impacting the city’s fiscal health. These conditions complicate the city and region’s ability to attract desirable businesses and a

skilled workforce to sustain the local and regional economy. Lower property values and limited commercial development result in a lowered tax capacity, which may challenge a municipality's ability to provide adequate public services. At the time the Nomination Study was completed, New York State had established Empire Development Zones, which provided incentives to businesses within designated Empire Zone boundaries. Since that time, the program has been terminated and is no longer accepting new applicants. However, businesses that were approved prior to program termination may continue to receive tax benefits. The city of Buffalo continues to struggle with a tax burden resulting from these issues, however, increased investment from the city and state have spurred increased interest from private developers.

3.2.4 City and Regional Strengths and Opportunities

Although the city and region have faced development challenges over the past several decades, they possess existing and emerging strengths and opportunities which can be used to regain a foothold as a nationally competitive city and region. The South Buffalo BOA has ample supply of rail, port access, and infrastructure which can aid in this effort. Additional regional and local strengths are highlighted below.

Affordable Cost of Living

The Buffalo-Niagara region continues to be an affordable place to live. According to the U.S. Department of Commerce's Cost of Living Index (2010), of the 325 selected cities evaluated, Buffalo ranked 174th for cost of living. Key factors used to determine the cost of living for a selected city include the cost of groceries, housing, utilities, transportation, health care and miscellaneous goods and services. Compared to peer manufacturing cities, the city of Buffalo has lower grocery, health care and miscellaneous goods and services costs than the majority of its peer cities, despite having higher housing and transportation costs compared to the same areas. The composite cost-of-living index for the city of Buffalo is 95.8 compared to 100.0 for Rochester, NY. This indicates that an individual choosing to relocate from Rochester to Buffalo would require four percent less of their after-tax income to live in Buffalo than Rochester. Table 3.6 summarizes peer metropolitan areas and their respective cost-of-living indexes.

Table 6: Cost of Living Index

Location

The Buffalo-Niagara region is strategically located at one of the primary borders between the U.S. and Canada, serving as a gateway for bi-national trade. The Buffalo-Niagara region continues to strive for economic synergies with its Canadian neighbors. The region has abundant road, rail and water transport infrastructure making it easily accessible from international and national locations. In addition, the city continues to boast an extensive waterfront, providing significant opportunities for cultural, entertainment and recreational amenities. Regional organizations, such as Buffalo-Niagara Riverkeeper, are actively

Rank	Urban Area	100% Composite Index
19	Louisville, KY	87.7
58	St. Louis, MO-IL	90.4
67	Des, Moines, IA	90.9
82	Pittsburgh, PA	91.5
136	Cincinnati, OH	93.8
174	Buffalo, NY	95.8
225	Detroit, MI	99.4
232	Rochester, NY	100.0
234	Akron, OH	100.2
242	Cleveland, OH	101.0
249	Milwaukee-Waukesha, WI	101.9
275	Minneapolis, MN	111.0
290	Chicago, IL	116.9

Table 6: Cost of Living Index

working to restore the environmental integrity of the region’s waterfront and waterways, which will enable the region to capitalize on this asset as a focus for reinvestment, recreation and tourism opportunities.

Tourism

Tourism continues to be an increasing selling point for regional economic growth. The Buffalo-Niagara region boasts a wealth of tourist attractions, including notable architectural assets, the historic Olmsted Parks System, Niagara Falls and area waterways, the Roycroft Campus, and various presidential sites. Continued redevelopment, historic preservation, and environmental restoration initiatives throughout the region provide increased opportunities to market the region’s assets for economic growth. Organizations and initiatives such as the Buffalo Niagara Convention & Visitors Bureau and Buffalo Niagara Cultural Tourism Initiative continue to promote tourism throughout the region.



Image 5: Buffalo Botanical Gardens

Economic Diversification

The Western New York region is moving away from an industrial-based economy and is continuing to diversify. Economic diversification is a key characteristic of resilient regions, enabling them to weather the impacts of economic stagnation or shifts and respond accordingly. Manufacturing, which was the former economic driver in the region, is diminishing as professional and health services become the greatest job generators. Health and Professional Services account for one in four jobs in the region (15 percent). Retail services (11.8 percent), Professional and Business services (11.6 percent) and Education (10.9 percent) closely follow. By comparison, manufacturing comprises 10.4 percent of available job opportunities within the region. The region's current economic profile closely mirrors the nation's more than ever before. Regional economic diversification provides Western New York with the opportunity to attract a broader range of businesses and capture the surplus of graduates from area-wide higher educational institutions to further strengthen its knowledge economy.

Research and Higher Education Institutions

Western New York consists of 22 higher education institutions, which are estimated to contribute approximately \$3.2 billion annually to the regional economy. These institutions are pivotal in providing a knowledgeable workforce to support the region's employment base and attract new industries. The wealth of institutions throughout the region provides the opportunity to develop strategies to better align the workforce with employment opportunities. In addition, supporting these institutions and encouraging their growth will spur further investment in the local and regional economy. According to the University at Buffalo Regional Institute's Impact of Higher Education In Western New York report (2008), the current ripple effect spending stimulated by these institutions is estimated at approximately \$1.2 billion.

Buffalo Billion Investment Strategy

The Buffalo Billion Investment Strategy is an initiative that seeks to address Western New York's shifting economic structure, from an industry-based to knowledge-based economy. The initiative seeks to build on the priorities established by the Western New York Regional Economic Development Council, and is intended to leverage public dollars allocated by the state to invest in six strategies for economic growth including manufacturing, life sciences, tourism, workforce development, entrepreneurship and revitalization. Collectively, these strategies are intended to provide a framework to guide future economic growth initiatives. This substantial investment provides the region with the opportunity to identify high-impact projects that can spur smaller scale redevelopment initiatives and additional private investment in target areas throughout the region.

3.3 Land Use Patterns & Controls

The purpose of the land use analysis is to better understand the environmental conditions of the area, identify barriers and opportunities for redevelopment, clarify the regulatory framework governing the project area, and identify assets and opportunities that can leverage additional public and private investment within the BOA. Since development of the Nomination Study, the South Buffalo BOA has experienced significant redevelopment momentum, evidenced by the establishment of the Buffalo Lakeside Commerce Park, completion of the RiverBend Master Plan, the Buffalo River Shoreline Restoration, Buffalo River Dredging and commencement of the Golf Course Feasibility Study. In addition to these public investments significant private investment has also occurred by; Sonwil Distribution, Certain Teed Corporation, Cobey Incorporated, Modern Recycling & Transfer Center, Hydro Air, English Pork Pies, and the recent announcements of Sorra and Silveo committing to the High Tech Manufacturing Innovation Hub at RiverBend. The recent announcements by Sorra and Silveo will lead to \$1.5 Billion in investment and 1,000 new jobs to start with more than 2,000 proposed.

3.3.1 Land Use Patterns

The South Buffalo BOA has a transitioning land use base. Historically, properties within the BOA were used for heavy industrial operations, and commercial operations with some nearby residential uses. As older factories within the BOA started to close, they left behind large empty tracts of land and underutilized buildings, such as the former Republic Steel and Donner Hanna Coke properties and the grain elevators located in and around the BOA. The BOA and adjacent areas are categorized by a mix of land uses, including existing light and heavy industrial, rail yard, closed landfills, scrap yards, commercial, residential, natural heritage and park and open space uses, in addition to vacant, abandoned and/or underutilized sites that formerly served heavy steel manufacturing industries. According to City of Buffalo 2010 parcel data, the predominant land use within the BOA is vacant land or

properties that do not have a New York State Office of Real Property Services (NYSORPS) class code, typically rights-of-way. Together, these vacant and/or underutilized properties comprise 52.4 percent of the land area within the BOA. The primary land uses as they exist throughout the BOA study area are further described below. Existing land uses, as presented, exclude transportation rights-of-way.

Residential

Approximately 45.5 percent of the parcels located in the BOA (2.6 percent of land area) are characterized by residential land uses. The primary residential land uses in the BOA are located to the north, as part of the Hickory Woods residential development, and to the southeast. The number of residential properties located within the BOA is comparable to the amount present during completion of the Nomination Study in 2009. Residential neighborhoods are primarily located adjacent to the study area on the eastern side of Hopkins Street.

Vacant

Approximately 30 percent of the land area in the BOA is characterized as vacant properties. These primarily consist of large tracts of land formerly used for commercial and industrial purposes located along Tift and Hopkins Streets, and adjacent to the BOA's existing and former rail corridors. Uses east of the rail corridor include the abandoned grain elevators on the Buffalo River, and vacant former commercial and industrial properties including the former Republic Steel. Significant vacant properties which includes the RiverBend redevelopment sites provide the BOA with the greatest redevelopment opportunities. The recent announcement by Governor Andrew M. Cuomo that two new companies (Sorra and Silveo) will be located on RiverBend provides an example of the potential for vacant sites in the South Buffalo BOA. The three new projects on RiverBend are projected to provide \$1.5 Billion in investment and 1,000 new jobs to start with more than 2,000 proposed. These projects will transform the former Republic Steel site into a new clean energy manufacturing campus called the High Tech Manufacturing Innovation Hub at RiverBend.

Commercial and Industrial

Commercial and industrial properties within the BOA are primarily located along Hopkins and Tift Streets. Cumulatively, commercial properties comprise approximately 8.2 percent of land area within the BOA, representing a two percent increase from the time the Nomination Study was completed. New commercial operations exist along South Park Avenue, including the English Pork Pie Company, recently established by British ex-pats on the former "Village Farms" site. Other commercial operations within the study area are limited; however, viable commercial and industrial operations exist along South Park Avenue and some side streets in the southeast portion of the BOA along Reading Street. Existing industrial properties make up approximately seven percent of the BOA project area, which is slightly less than the amount of industrial property present at the time the

Nomination Study was completed (nine percent). Recent announcements by Sorra and Silveo to locate on 200 plus acres of RiverBend show significant increase in Manufacturing and Research & Development within the South Buffalo BOA.

Wild, Forested, Conservation Lands and Public Parks

While the study area was historically characterized by heavy industrial uses, considerable investment has been made in restoring natural and wildlife areas throughout the BOA. Today, approximately 14.9 percent of land use in the study area is classified as wild, forested, conservation lands and public parks. Much of this area consists of Tiff Nature Preserve, a 264-acre refuge, opened in 1976, dedicated to environmental and conservation education. A portion of the site, a former municipal waste site, was capped in clay and covered with soil excavated from other areas. Today, the area is a natural setting consisting of ponds, marshes, and plantings that serve as habitat for a host of wildlife. Current plans include expansion of the visitor and education center, and acquisition of the former Lehigh Valley rail properties to the east for incorporation into the preserve. In addition to Tiff Nature Preserve, South Park and the Botanical Gardens anchor the BOA to the southeast. The Botanical Gardens is in the midst of a multi-year restoration effort and has completed construction of new offices, greenhouses, and parking facilities. Both of these assets form part of the Cazenovia Park-South Park System of Olmsted Park and Parkways, and are listed on the National Register of Historic Places.

Property Class Code	Property Class Description	Parcels		Acreage	
		Count	% BOA	Acres	% BOA
0	Not Classified	64	7.2%	453.1	24.5%
100	Agricultural	0	0.0%	0.0	0.0%
200	Residential	407	45.5%	47.1	2.6%
300	Vacant	304	34.0%	514.5	27.9%
400	Commercial	71	7.9%	151.9	8.2%
500	Recreation & Entertainment	1	0.1%	147.9	8.0%
600	Community Services	2	0.2%	2.2	0.1%
700	Industrial	28	3.1%	126.9	6.9%
800	Public Services	13	1.5%	128.1	6.9%
900	Wild, Forested, Conservation Lands and Public Parks	4	0.4%	274.3	14.9%
Totals		894	—	1845.9	—

Table 7: Property Class Acreage

Key Findings: Land use patterns within the South Buffalo BOA are comparable to those exhibited at the time the Nomination Study was completed. The study area’s open space network continues to be one of the area’s most important assets, and continues to be strengthened and leveraged through public and private investment. Nonetheless, land uses

within the South Buffalo BOA still reveal a pattern of lower value uses, as illustrated by the number of vacant properties within the study area (27.9 percent of land area).

3.3.2 Existing and Proposed Land Use Controls

Land use throughout the City of Buffalo is governed by a mix of development controls, including regulatory land use restrictions, special review districts, urban design review frameworks, a heritage conservation framework and other city-wide policies and programs. The city is currently in the process of updating its zoning code from a traditional Euclidean Zoning Code to a Form-Based Code intended to be a place-based development strategy building off the City of Buffalo's Queen City in the 21st Century Comprehensive Plan. The updated zoning code focuses on the placement and design of buildings rather than separation of specific uses. The revised Uniform Development Ordinance (UDO) is intended to streamline the development process by combining zoning, subdivision and public realm standards into a single document. The existing and proposed zoning, as well as other land use controls are described further in the following sections.

Existing and Proposed Zoning

The City of Buffalo's existing zoning regulations were adopted in the mid-20th century with numerous subsequent amendments. The zoning regulations divide the City of Buffalo into districts based on use and include various residential, commercial and industrial districts. The City of Buffalo has 15 zoning districts that are intended to address development throughout the city. In addition, the existing zoning code is cumulative, and therefore less restrictive zoning districts permit all uses allowed in more restrictive zoning districts as well as certain higher intensity uses, with some exceptions. The city has also established a number of "special districts," designed as overlay districts, to address unique character areas that exist throughout the city.

Within the South Buffalo BOA, there are six zoning designations, which include a residential district (R2 Two Family District), two commercial districts (C2 Community Business District and CM General Commercial District) and three industrial districts (M1 Light Industrial, M2 General Industrial and M3 Heavy Industrial). The majority of the BOA is zoned for industrial uses, which comprise 80 percent of the study area. Uses currently permitted within industrial zones include trucking terminals, manufacturing facilities, automobile assembling and repair establishments, and other light to heavy industrial uses (Map 5: Current Zoning).

There are 13 new zoning designations proposed as part of the new Unified Development Ordinance within the BOA study area. New zoning designations include two neighborhood zones (N-3E Edge, and N-3R Residential), eight district zones and three corridor zones (C-H Highway, C-R Rail, and C-T). The district zones comprise approximately 72 percent of the BOA, and primarily consist of districts established to



Map 5: Current Zoning

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- C2 - COMMUNITY BUSINESS
- CM - GENERAL COMMERCIAL
- M1 - LIGHT INDUSTRIAL
- M2 - GENERAL INDUSTRIAL
- M3 - HEAVY INDUSTRIAL
- R2 - DWELLING

preserve natural and green spaces or promote office and light industrial development patterns (Map 7: UDO / Buffalo Green Code). The proposed zoning designations within the South Buffalo BOA are summarized in Table 8.

Proposed Zoning	Acres	Percentage
Not Designated	105.83	5.71%
C-R Rail	336.45	18.14%
C-T	2.57	0.14%
C-H Highway	1.58	0.09%
D-ON Natural	382.76	20.63%
D-IL Light Industrial	370.30	19.96%
D-IO Office	202.43	10.91%
D-R	187.73	10.12%
D-OO	158.98	8.57%
D-OG Green	16.77	0.90%
D-IH Heavy Industrial	10.88	0.59%
D-S Strip Retail	4.06	0.22%
N-3E Edge	11.28	0.61%
N-3R Residential	63.36	3.42%

Table 8: Proposed Zoning

Key Findings: The current zoning code reflects development patterns that occurred traditionally throughout the City of Buffalo and the South Buffalo BOA study area. Historically, light and heavy industrial land uses were encouraged throughout the South Buffalo BOA, and the original zoning designations reflect that. The proposed zoning code recognizes changing land use patterns and serves as a mechanism for preserving and promoting current desirable land uses. For example, Tiff Nature Preserve, which historically was zoned for industrial uses, has been re-designated as a Natural Zone, intended to preserve open spaces typically set aside for land conservation, passive recreation or ecological restoration. Within the BOA, the proposed D-ON Natural district represents the largest proposed zoning designation, comprising 20.6 percent of the BOA.

Local Waterfront Revitalization Program

In 2005, the City of Buffalo completed a Draft Local Waterfront Revitalization Program (LWRP) which was submitted to the NYSDOS for review, comment and approval. Subsequent revisions were made to the draft LWRP since its initial submission, and the draft is currently under review by the NYSDOS. A revised and expanded boundary was proposed to ensure that the LWRA includes the full reach of Scajaquada Creek, Buffalo River, Cazenovia Creek; the Great Lakes Seaway Trail National Scenic Byway; the



Image 6: Illuminated Grain Elevator & Bridge Lighting Proposal

city's waterfront Olmsted Parks, including Riverside, the southern portion of Delaware Park, Front Park, Cazenovia Park and South Park; and the Canalside and Cobblestone areas.

As part of the LWRP planning process, major development nodes and sites, future build-out potential within these areas, and the proposed zoning designation, were identified. The plan focuses on nine development areas, which include: Black Rock Harbor Village, the Niagara Belt Line, Cotter Point/Porter, Waterfront Village, the Erie Street Corridor, Canalside, Cobblestone, Michigan to Ohio Bridge Corridor, and the Outer Harbor.

In addition, the LWRP identifies several short-term projects, intended to induce private investment in the redevelopment areas identified in the UDO. These redevelopment projects are intended to enhance the vibrancy of the waterfront and contribute to the long-term tax base of the city. Redevelopment projects identified within the South Buffalo BOA study area include:

- **Grain Elevator and Bridge Lighting Project:** The Erie Canal Harbor Development Corporation has approved a phased master plan to install lighting to celebrate Buffalo's collection of grain elevators and bridges with lights and video projections. The phased master plan includes future phases to illuminate all 13 elevators located along the Buffalo River.
- **Open Space and Recreation Master Plan:** The LWRP recommends the City of Buffalo complete a city-wide open space and recreation master plan including full property survey, facilities inventory, updated parks and open space master plan, a capital improvement plan, operations maintenance plan, and recreational facilities plan. The process is to include a review of existing open space and master recreational plans (i.e. Olmsted Parks Master Plan, Niagara River Greenway Plan, etc.), and may impact existing open space and recreational resources located within the South Buffalo BOA. Buffalo Urban Development Corporation is in the



Map 6: Current Land Use

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- ▭ RAILROAD ROW
- ▭ RESIDENTIAL
- ▭ VACANT LAND
- ▭ COMMERCIAL
- ▭ CLOSED LANDFILLS
- ▭ INSTITUTIONAL
- ▭ INDUSTRIAL
- ▭ PUBLIC SERVICES/UTILITIES
- ▭ PARKS & OPEN SPACES



Map 7: UDO / Buffalo Green Code

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- D-S (RETAIL STRIP)
- N-3R (RESIDENTIAL)
- D-IO (OFFICE)
- D-IL (LIGHT INDUSTRIAL)
- N-3E (MIXED-USE EDGE)
- D-OG (GREEN)

beginning stages of this master planning process.

- **Cargill Superior and Concrete Central Grain Elevator:** The City of Buffalo owns two major vacant grain elevators located along the Buffalo River and located within the South Buffalo BOA. The Concrete Central Grain Elevator is listed on the National Register of Historic Places. The proposed project relating to the elevators would evaluate the required actions to stabilize the sites as well as opportunities for short-term heritage interpretation and long-term adaptive reuse.

Buffalo Coastal Special Review District

The Buffalo Coastal Special Review District was established as part of the city's zoning ordinance to protect the lakefront and riverfront from incompatible uses. The district encompasses a majority of the BOA, including areas west of Hopkins Street, north of the City of Buffalo-City of Lackawanna municipal line, and south of the Buffalo River. Restricted use permits are required to establish or expand a use within the district. In addition, the Buffalo River Open Space Corridor requires a 100-foot shoreline setback for non-water dependent development. Water-dependent uses are exempt from the 100-foot setback requirement.

The proposed new Unified Development Ordinance establishes new districts that reflect the changing land use patterns throughout the city. As part of the zoning update, new overlay districts were established, including the C-W Waterfront overlay district. The purpose and intent of the C-W Waterfront overlay district is similar to the former Buffalo Coastal Special Review District. The proposed overlay addresses land areas within 500 feet of the high water line of lakes, rivers, streams, channels, ponds and other water bodies. The C-W zone has two designations: the C-W-25 and C-W-100 zones. The C-W-25 zone is located on highly urbanized waterfronts that enable intense public interaction with the water's edge. The C-W-100 zoning designation is located on less urbanized waterfronts that are generally characterized by shoreline buffers of native vegetation to protect and restore wildlife habitat and the natural ecosystem.

Union Ship Canal Urban Renewal Plan

The Union Ship Urban Renewal Plan (URP) was authorized by the Common Council of the City of Buffalo on January 2003 and amended in 2005. The Union Ship URP was developed to address conditions within a 275-acre former industrial area targeted for redevelopment. The project area is bounded by Tiff Street to the north, the Seneca Rail Yard to the east, the City of Buffalo municipal boundary on the south and New York State Route 5 to the west. Today, this redevelopment area is referred to as Buffalo Lakeside Commerce Park. The Union Ship URP was intended to provide the legal mechanism to implement the Union Ship Master Plan, which was intended to focus on attracting office, research, clean industry and light manufacturing to locate within the study area. The Renewal Plan established a land use plan and design and development standards for the study area. The Unified Development Ordinance that is being drafted by the City of Buffalo is intended to update and replace the requirements set forth in

the Union Ship Urban Renewal Plan, which is therefore proposed to be terminated.

Citywide Design and Site Plan

The Citywide Design and Site Plan Code, as part of the City of Buffalo's original zoning ordinance, established urban design controls to review development that may have adverse impacts on adjoining uses. The Code authorized the City Planning Board to review and approve, approve with modifications or disapprove design and site plans, including proposed development or activities within the South Buffalo BOA. The Code additionally governed elements such as parking, means of ingress and egress, pedestrian sensitivity, screening, signage, landscaping, architectural features, location and dimension of buildings, impact of development on adjacent properties, and environmental matters impacting the health, safety and general welfare of the community.

In an effort to streamline the development review process for both city staff and prospective developers, the Citywide Design and Site Plan Code will be replaced by the UDO. The UDO, drafted with a form-based approach, intends to reinforce the mixed-use, walkable places that historically have characterized the City of Buffalo. The regulations are modeled to emphasize character-of-place as the overarching principle as opposed to strictly use based regulations. The design controls and development review that are comprehensively incorporated throughout the new code therefore serve to replace the Citywide Design and Site Plan Code.

Preservation Standards

Chapter 337 Preservation Standards of the City of Buffalo's Charter of Ordinances establishes controls for preservation of city-designated landmarks, landmark sites and historic districts, to avoid the loss of historic or architecturally important properties, and to preserve the economic and architectural integrity of vacant and underutilized landmark properties through rehabilitation and adaptive reuse. The Standards authorize the Preservation Board, in part, to approve or disapprove certificates of no effect, certificates of appropriateness, or certificates of exception, for the erection, alteration, restoration, renovation, relocation, demolition or site improvement of any landmark, landmark site or of any building, structure, or site within an historic district when the exterior of such property would be affected. Within the BOA, South Park is the only designated City of Buffalo Landmark District and, therefore, any proposed construction or alteration activities within the park would be subject to the Preservation Standards and would require Preservation Board approval.

The City of Buffalo's Preservation Standards are regulations independent of the city's Zoning Ordinance, and therefore will not be impacted by the new zoning regulations. As opportunities arise, the city may opt to conduct future historic surveys, which may result in the identification of new or revised historic district boundaries, or additional buildings or properties considered worthy of local, state or national designation.

3.4 Economic Development Designations and Incentive Programs

Much of the BOA is supported by State and Federal economic development programs, though there have been some changes to those available since the Nomination Study effort.

New York State Empire Zone

The Empire Zone was a state incentive program that allowed businesses located within those zones to apply for state sales tax exemption, real property tax credits and business credits for increasing employment in a designated area. Within the BOA, a portion of the Buffalo Lakeside Commerce Park was located within an Empire Zone. Other Empire Zone-designated areas included the former “Village Farms” parcels north of South Park Avenue, parcels along Colgate Avenue and the Sorrento Lactalis parcels along South Park Avenue. Since completion of the Nomination Study, the New York State Empire Zone program no longer accepts applications for new entrants. The program, however, continues to provide benefits to existing certified businesses, which must still submit Business Annual Reports to the local Zone Administrative Board for processing and review. Although a portion of the South Buffalo BOA located within Empire Zones, no businesses have applied for certification prior to the program’s termination.

New York State Environmental Zone

As part of the Brownfield Cleanup Program, the Conrail/CSX “peninsula” area adjacent to the Buffalo River is designated an Environmental Zone by the Empire State Development Corporation. Based on poverty rates by census tracts, the designation provides enhanced tax credits for remediation and redevelopment of this area. The New York State Environmental Zones have not been modified since the time of the 2000 U.S. Census. The 2010 Census Data might suggest modification of the Environmental Zone boundaries throughout the City of Buffalo based on changes to census tract poverty rates.

Brownfield Cleanup Program

The Brownfield Cleanup Program (BCP) provides liability relief and tax credits associated with the cleanup and remediation of brownfield sites. Tax credits are provided in four areas including cleanup, redevelopment, real property taxes, and for the purchase of environmental insurance. The benefits associated with each of these areas are highlighted as follows:

- **Site Preparation and Remediation:** The credits cover site preparation and on-site groundwater cleanup. Activities include remediation, demolition, excavation, fencing, security, site acquisition and other capital costs to make the site usable

for redevelopment. Tax credits range from 22-50 percent of the total cost of remediation, based on the level of cleanup.

- **Tangible Property Credit Component:** Credits associated with this area cover the cost of buildings and improvements, including structural components of buildings that are placed into service within 10 years after a certificate of completion is issued by the NYSDEC for site cleanup. Credits range from 10-24 percent of eligible costs with the base credit being increased based on the level of cleanup, location of site in an Environmental Zone, and redevelopment of the site in conformance with a Brownfield Opportunity Area plan. Tax credits are capped based on whether the project is manufacturing (\$45 million or six times site preparation and remediation costs, whichever is less) or non-manufacturing (\$35 million or three times the site preparation and remediation costs, whichever is less).
- **Real Property Tax Credit:** This credit is provided for a portion of real property taxes for a qualified remediated site. The credit amount is determined by formula based on the number of employees on the site, with a maximum credit of \$10,000 per employee.
- **Remediation Insurance Credit:** The Remediation Insurance Credit is for premiums paid for environmental remediation insurance and is capped at 50 percent the cost of the premium or \$30,000, whichever is less.

Key Findings: Although state and federal economic programs have changed since the time the Nomination Study was completed, there are still economic incentives through New York State programs that can assist property owners and prospective buyers with redevelopment opportunities and projects.

3.5 Brownfield, Underutilized and Vacant Sites

The majority of properties located within the SBBOA are brownfield, underutilized or vacant sites. Although these properties often represent disinvestment and can have widespread impacts, lowering property values, discouraging redevelopment and imposing potential health threats on surrounding neighborhoods, they also represent the largest redevelopment opportunities to spur area-wide revitalization. Properties most poised for immediate or future redevelopment are defined as meeting one or more of the following criteria, which are not mutually exclusive.

- **Underutilized:** Underutilized properties have an active use and/or are occupied, but are not being utilized to their highest and best use, given their location, zoning and size or percentage of developed area. Underutilized properties also include lands with viable structures or buildings not being utilized to their intended use or capacity.
- **Vacant:** Vacant properties are identified through the City of Buffalo tax rolls and New York State Office of Real Property Service's Property Classification Codes. Reported

results were verified or refined during field visits.

- **Brownfield:** Brownfields sites are often former commercial or industrial properties that may have had environmental impacts. A brownfield site may have an active commercial or industrial operation, or may be a vacant or abandoned property. According to New York State Environmental Conservation law, a brownfield is defined as “...any real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.” Examples of sites that fit this description include abandoned gas stations, old factories, mill complexes or foundries.

Much of the publicly owned land within the BOA has been remediated and is ready for public or private investment and/or redevelopment. These properties include RiverBend Commerce Park (formerly Steelfields) and vacant land within Buffalo Lakeside Commerce Park. A few publicly owned sites require additional site characterization and/or remediation. Privately owned land within the BOA generally includes active businesses, many of which are underutilized and considered brownfields or have no site characterization. Before redevelopment can occur, these privately owned lands require further characterization. One of the benefits of the BOA program is the ability for public and private property owners to apply for Phase II Environmental Site Assessment funding, an investigation consisting of invasive environmental sampling to better determine the type and extent of potential contamination on a site. The various types of environmental site assessments are summarized below:

- **Curbside Assessments:** completed as part of this investigation, these are visual assessments that are intended to identify the types of activities taking place on a property and characteristics of a site that might imply prior environmental impact (e.g. the presence of groundwater monitoring wells). This assessment is conducted independently of the EPA certified standard practices for environmental site assessments (ASTM standards) and is intended to be a preliminary investigation.
- **Phase I Environmental Site Assessments:** A Phase I Environmental Site Assessment is a voluntary, non-intrusive investigation into historical uses of the site and visible evidence of environmental conditions based on publicly available records. Generally this phase consists of: site inspection, interviews with property owners, review of available documents and databases, and consideration of potential impacts from adjacent properties. Property owners willing to participate in the Phase II Environmental Site Assessment applications who have not previously had a Phase II ESA completed may opt to complete both concurrently with funding available through the NYSDOS.
- **Phase II Environmental Site Assessments:** If a Phase I establishes there are Recognized Environmental Conditions (REC), a Phase II Environmental Site Assessment may

be conducted to further evaluation potential impacts to the property. Typically this includes sampling of environmental media which may include soil, air, groundwater and surface water. Funding for Phase II Environmental Site Assessments is available through the BOA program.

- **Phase III Environmental Site Assessments:** Based on the Phase II ESA, a Phase II may be determined necessary. A Phase III ESA consists of design and implementation of remediation measures and necessary reports, permits and engineering/institutional controls to achieve cleanup of the site to redevelopment objectives. Participation in the Phase II Environmental Site Assessments through the BOA program can better poise a site for inclusion in a number of remediation programs available through the EPA and NYSDEC. The Brownfield Cleanup Program, for example, provides a number of incentives for remediation and redevelopment of brownfield properties (*see Appendix C: Environmental Site Profiles*).

As part of the Nomination Study, a total of 86 individual tax parcels on approximately 311 acres were initially identified as priority strategic sites for which site assessments were recommended. Information pertaining to site selection and site characteristics was summarized as part of an Assessment and Remediation Strategy for Strategic Sites. Under the Step 3 Implementation Strategy, funding for the environmental site assessments is made available on a competitive basis. Remediation activities are not eligible for funding under the BOA program, however may be eligible for funding and tax incentives through other programs administered by the EPA or NYSDEC. As a result, the 86 tax parcels identified during the Nomination Study were refined to identify properties that would be most strategic for redevelopment and benefit most from inclusion in the Phase II ESA program. These sites are discussed in more detail in 3.6 Strategic Brownfield Sites.

3.6 Strategic Brownfield Sites

A majority of the properties located within the South Buffalo BOA were researched to identify past and present uses during the Nomination Study and the information for these sites was updated during the Step 3 Implementation Strategy effort. This inventory was used to develop site specific recommendations to help the city determine viable next steps for properties as redevelopment opportunities are presented. Recommendations stemming from this analysis are sometimes pertinent to a change in land use or ownership and are not intended to suggest necessary actions on the part of land owners who are actively and appropriately using their properties. This research serves as one layer of analysis that was then used in the context of strategic sites and existing land uses to further refine recommendations.

Research was conducted on the historic use and potential environmental impact of each parcel located within the South Buffalo BOA. Facility and site information, maintained at

both the state and federal level, was reviewed to determine changes in site conditions since preparation of the Nomination Study. Information was obtained from the following main sources:

- **Spills Incident Database (NYSDEC):** This database, maintained by the NYSDEC, contains listing of chemical and petroleum spills throughout New York State, dating back to 1978. Information includes the type and/or volume of contaminant spilled, media impacted, and the status of the spill. Closed spills have been successfully addressed by NYSDEC standards, and active spills are those still undergoing cleanup.
- **Remedial Site Database (NYSDEC):** The remedial site database includes a listing of all properties that are currently enlisted in one of the NYSDEC's remediation programs. The NYSDEC programs are distinguished by property ownership, type of assistance and level of cleanup required. Programs include the Brownfield Cleanup Program, Environmental Restoration Program, State Superfund Program, Resource Conservation and Recovery Program, and the Voluntary Cleanup Program.
- **Bulk Storage Database (NYSDEC):** This database lists all properties that are considered Bulk Storage Facilities in New York State. Such facilities include petroleum bulk storage, chemical bulk storage and major oil storage facilities. Each facility is classified by the volume and type of substance stored on-site.
- **Envirofacts Database (USEPA):** Information contained within this database is used to identify whether or not a facility is certified to handle hazardous waste. The EPA utilizes specific testing methods to determine whether or not a material is hazardous. Hazardous waste generators are divided into three categories based upon the quantity of waste they produce:
 - Large Quantity Generators (LQGs): generate 1,000 kilograms per month or more of hazardous waste, more than 1 kilogram per month of acutely hazardous waste, or more than 100 kilograms per month of acute spill residue.
 - Small Quantity Generators (SQGs): generate more than 100 kilograms but less than 1,000 kilograms of hazardous waste per month.
 - Conditionally Exempt Small Quantity Generators (CESQGs): These facilities generate 100 kilograms or less per month of hazardous waste, or 1 kilogram or less per month of acutely hazardous waste, or less than 100 kilograms per month of acute spill residue or soil.

All hazardous waste generators are subject to 40 CFR 262, which establishes requirements for how generators can accumulate hazardous waste and how it is managed.

- **Parcel Data (Erie County):** This database, provided by Erie County, includes New York State Office of Real Property Services (NYSORPS) land use classes, which identifies the types of activities occurring on individual properties (e.g., commercial,

industrial, or residential uses).

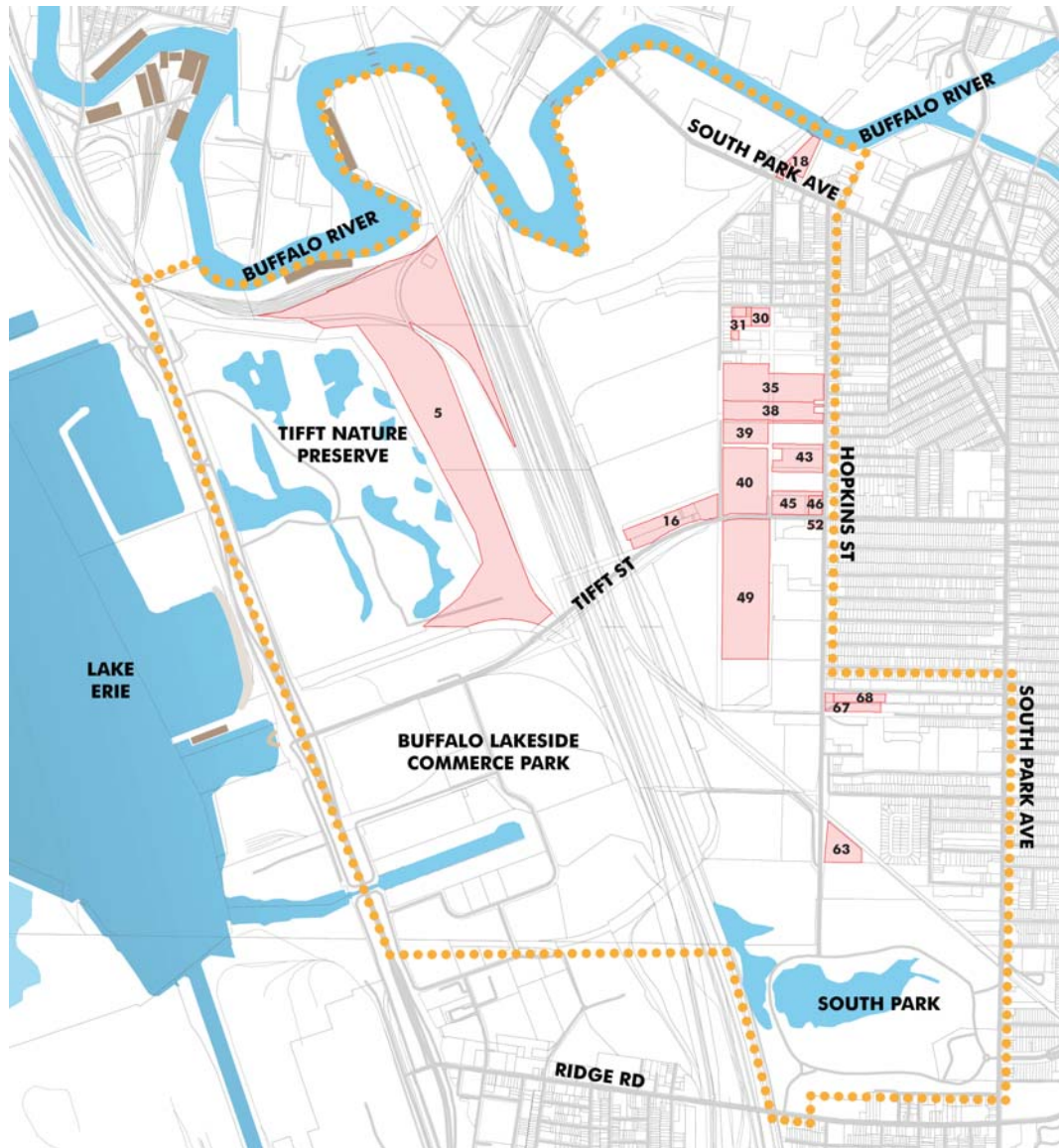
- **Sanborn Maps:** Sanborn maps were obtained for a range of dates to identify historic uses of sites within the BOA. Historically, Sanborn maps were created for assessing fire insurance liability for urbanized areas. Sanborn maps inform of the historic use of properties and can also provide a baseline for determining potential sources of environmental impacts based on prior land uses.

During the Nomination Study, Strategic Sites were identified utilizing existing environmental information, through extensive input from the Steering Committee and with consideration given to the following: overall importance to the community, location, ownership, property size, and capacity for redevelopment or potential to spur additional economic development or positive change in the community. In addition, consideration was given to the potential for the site to improve quality-of-life within the community, to site new public amenities, and the adequacy of supporting or nearby infrastructure, utilities and transportation systems.

A total of 86 individual tax parcels on approximately 311 acres were initially identified as priority strategic sites for which site assessments were recommended. Information pertaining to the site selection and site characteristics was summarized as part of an Assessment and Remediation Strategy for Strategic Sites. Under the Step 3 Implementation Strategy, funding for the environmental site assessments is made available on a competitive basis. Remediation activities are not eligible for funding under the BOA program; however, applicants may be eligible for funding and tax incentives through other programs available through the EPA or NYSDEC. As a result, the 86 tax parcels identified during the Nomination Study were refined to identify properties that would be most strategic for redevelopment and benefit most from inclusion in the BOA Site Assessment program.

As a result of refined analysis during this Step 3 Implementation Strategy, 49 tax parcels were identified to be included in targeted landowner outreach (Map 8: 49 Strategic Brownfield Sites). Fliers were mailed to each property owner and door-to-door visits were conducted to describe the project, gauge potential interest in being involved in the project, and request voluntary participation in the BOA Site Assessment application process. Of those identified, there was potential interest on the part of eight property owners in learning more information and possible involvement with the Site Assessment program. These properties included:

- **Krog Site:** The Krog site consists of seven parcels comprising approximately seven acres located at the southernmost portion of the RiverBend site area along Tiff Street. These parcels are collectively owned by Krog USC Associates LLC. Current and past uses and proximity to nearby past and present industrial operations indicate this area may have environmental impacts. Consultation with Krog Associates indicated



Map 8: 49 Strategic Brownfield Sites

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- ENVIRONMENTAL SITE ASSESSMENT PARCELS

that environmental investigations have already been completed at the property. The property owner is willing to participate in short, mid and long-term implementation strategies, the BCP program, and has a strong desire to secure a tenant for the premises.

- **620 Tift Street, L.A. Woolley:** The L.A. Woolley site is primarily used for office space and distribution of electrical products. Woolley acquired the property in 1986. The site consists of approximately six acres of paved area and four acres of meadow to the rear of the property.
- **478 Hopkins, Inc., L.C.A. Development:** The properties located at 456 Hopkins and 263 Germania (contiguous properties, separated by a paper street), are currently being utilized for trucking operations. The property owner/operator has a desire to continue the business at this location, but indicated a desire to contribute to the South Buffalo BOA through participation and consideration of early implementation projects (i.e., art installations).
- **637 Tift Street, Skyway Auto Parts:** Since the time of the Nomination Study, Skyway Auto Parts changed ownership, but is still being operated as an automotive scrap yard, as it has been since approximately 1963. Skyway Auto Parts has operated on the site since 1982, and there is history of environmental impacts associated with adjacent uses. Representatives of Skyway Auto Parts were engaged to determine interest in pursuing BOA Site Assessment funding, and a meeting was held to describe the South Buffalo BOA project and vision for the study area. To date, Skyway Auto Parts does not have plans to relocate from the current site.
- **420 Hopkins Street, Kulp Waco:** The property owned by Kulp Waco (420 Hopkins Street) is currently for sale. The property was formerly operated as a trucking terminal, and prior to that was a vacant residential property circa 1950. Records indicate that the site had aboveground storage tanks storing diesel fuel and that three underground storage tanks storing diesel fuel and leaded gasoline were removed from the site in 1998. The project team engaged this property owner but was unable to set-up an independent meeting to discuss applying for Site Assessment funding.
- **666 and 744 Tift Street and 360 Hopkins Street, Frontier Service:** Frontier Service is located at 666 and 744 Tift Street, and 360 Hopkins Street. Automotive repair and parts and service operations are currently associated with this site. The current property owner purchased the property in 2000-2001. Historic records indicate that polyaromatic hydrocarbons were found on the site, and that six abandoned underground storage tanks were removed from the site in 2005.
- **346 Hopkins Street, JP Auto Sales and Repair:** The site was formerly operated as an automobile repair shop at the southwest corner of Tift and Hopkins Streets. At the

time the Nomination Study was completed, the site was active. Since that time, the repair facility has ceased operations and the owner has expressed interest in selling the property. According to historic Sanborn maps, prior to auto sales and repair the site was used as a filling station. Conversations with the property owner indicated no testing has been completed on this property. The site is strategically located at the corner of Hopkins and Tiff Streets, and redevelopment of this site could serve as a catalyst for other revitalization opportunities.

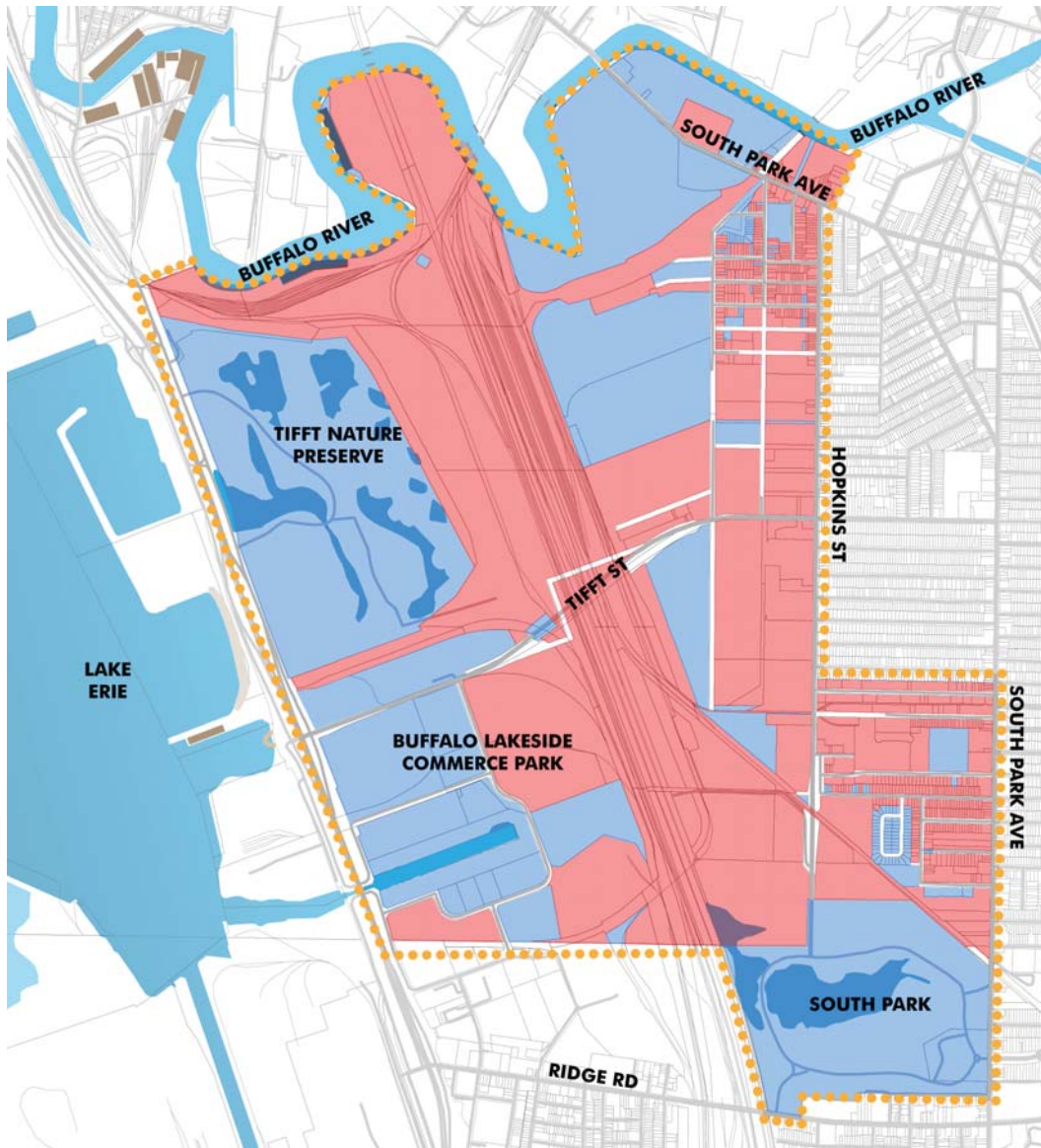
- **49 Hopkins Street, Bob & Don's Auto Parts Site:** Bob and Don's Auto Parts is located at 49 Hopkins Street and is an underutilized site. Given the historic operation of the site as an auto salvage yard, a Phase II ESA would be recommended to determine the amount and extent of environmental impact, if any. The site is currently for sale and the property owners and real estate agent were engaged to gauge interest in submitting a Phase II ESA application.

Out of the eight property owners that were engaged as part of this process, two private property owners indicated a desire to complete and submit Phase II ESA applications for BOA site assessment funding. Of the remaining six properties numerous showed interest in the site assessment process however passed on the application but maintained engagement in the BOA planning. This engagement provided an opportunity to discuss small and medium implementation projects that they could champion (Re-tree, art installations, landscape improvement). In addition to the two successful site assessment applications for the private properties, a city-owned property (170 Germania Street) was selected as a candidate to apply for Site Assessment funding.

3.7 Land Ownership

The total land area within the South Buffalo BOA is approximately 1,968 acres, which includes public and private lands, as well as transportation rights-of-way. Transportation rights-of-way comprise approximately 100 acres within the BOA, and are not considered developable areas. Of the South Buffalo BOA's remaining land area (approximately 1,846 acres) public land accounts for approximately 40.5 percent of the land area; this is less than private land holdings that make up approximately 59.5 percent of the South Buffalo BOA study area (Map 9: Private and Public Ownership). The distribution of publicly and privately owned properties is comparable to the distribution at the time the Nomination Study was completed. The percentage of publicly owned properties calculated at the time of the Nomination Study was slightly higher as a result of including public rights-of-way, which are not considered to be immediately developable properties.

The study area is unique in that it contains a large number of publicly owned properties which provide immediate redevelopment opportunities. Public land is primarily owned by two public sector entities – the City of Buffalo and BUDC, which together control 704



Map 9: Private and Public Ownership

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- PUBLIC SECTOR
- PRIVATE SECTOR

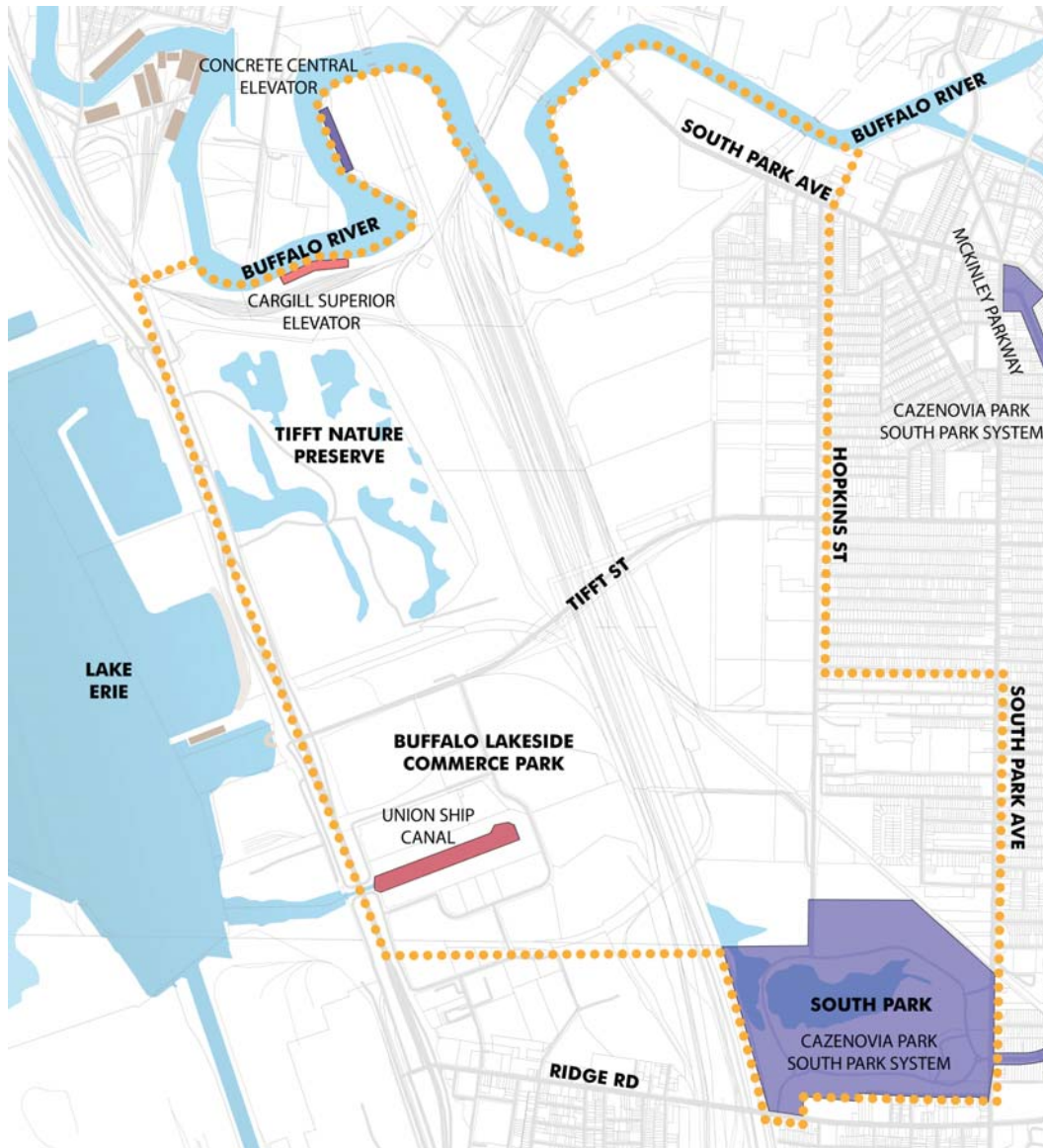
acres in the BOA. The majority of city-owned properties are associated with Tifft Nature Preserve and South Park. BUDC owned properties are primarily located within the Buffalo Lakeside Commerce Park, in which lands remain available for development, and within RiverBend Commerce Park, the former Steelfields property. Both BUDC- owned areas are being actively programmed and marketed for redevelopment. As mentioned previously the recent announcement by Sorra and Silveo to locate on 200 plus acres of RiverBend will reduce the acreage of city and BUDC ownership. The Buffalo Economic Renaissance Corporation, a public benefit corporation, owns a portion of the former Village Farms property on the north along the Buffalo River.

3.8 Historic and Archeological Resources

There are several historic assets within the BOA study area that celebrate the area's industrial past and highlight the area's park and open space system. Historic designations provide an advantage to projects seeking to obtain State and Federal funding. (Map 10: Historic & Archeological Resources) illustrates Historic Resources and Archaeologically Sensitive Areas located within the BOA. These resources include South Park, which include the Botanical Gardens and 1927 golf structure as contributing structures, the Concrete-Central Elevator on the Buffalo River, Cargill Superior Elevator on the Buffalo River, and the Union Ship Canal. The historic grain elevators provide opportunities for reuse and to promote the industrial heritage of the area. More recently, the city has embraced event programming to celebrate the structures, and there is some evidence of interest in reuse of the grain elevators along the Buffalo River and Lake Erie. Just outside of the study area, developers are interested in investing \$15 million dollar into the Buffalo RiverWorks project, which proposes to convert the Wheeler GLF grain elevator site into a mixed-use waterfront destination, including bars, restaurants and a brewery as well as locations for seasonal events.

In addition to the cultural resources located within the study area, according to the New York State database for Archeological Sensitivity, the majority of the BOA is included within an Archeologically Sensitive Area. The only areas not identified as archaeologically sensitive are along the western boundary of Okell Park and east of South Park Avenue. Areas that are identified as archeologically sensitive are subject to a measure of protection when State and Federal agencies fund, license or approve projects. Since completion of the Nomination Study, no new buildings or sites have been designated as historic or cultural resources.

Key Findings: The South Buffalo BOA has the opportunity to capitalize on the momentum stemming from investment occurring elsewhere in the city and to celebrate its historic and cultural assets. Celebrating the area's industrial heritage provides educational and economic opportunities, and promotes pride in the area. The BOA has a unique opportunity to capitalize on these assets to attract visitors through creative adaptive reuse.



Map 10: Historic & Archeological Resources

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- NATIONAL REGISTER SITE
- NATIONAL REGISTER ELIGIBLE SITE

3.9 Transportation Systems

The BOA is located at the intersection of an international transportation hub with rail, navigable waterway and roadway infrastructure. The existing transportation networks contribute extensively to the study area's accessibility, and provide it with the opportunity to attract additional industrial and commercial development that will utilize and benefit from these assets. The transportation network and system improvements since the Nomination Study are described further in the following sections.

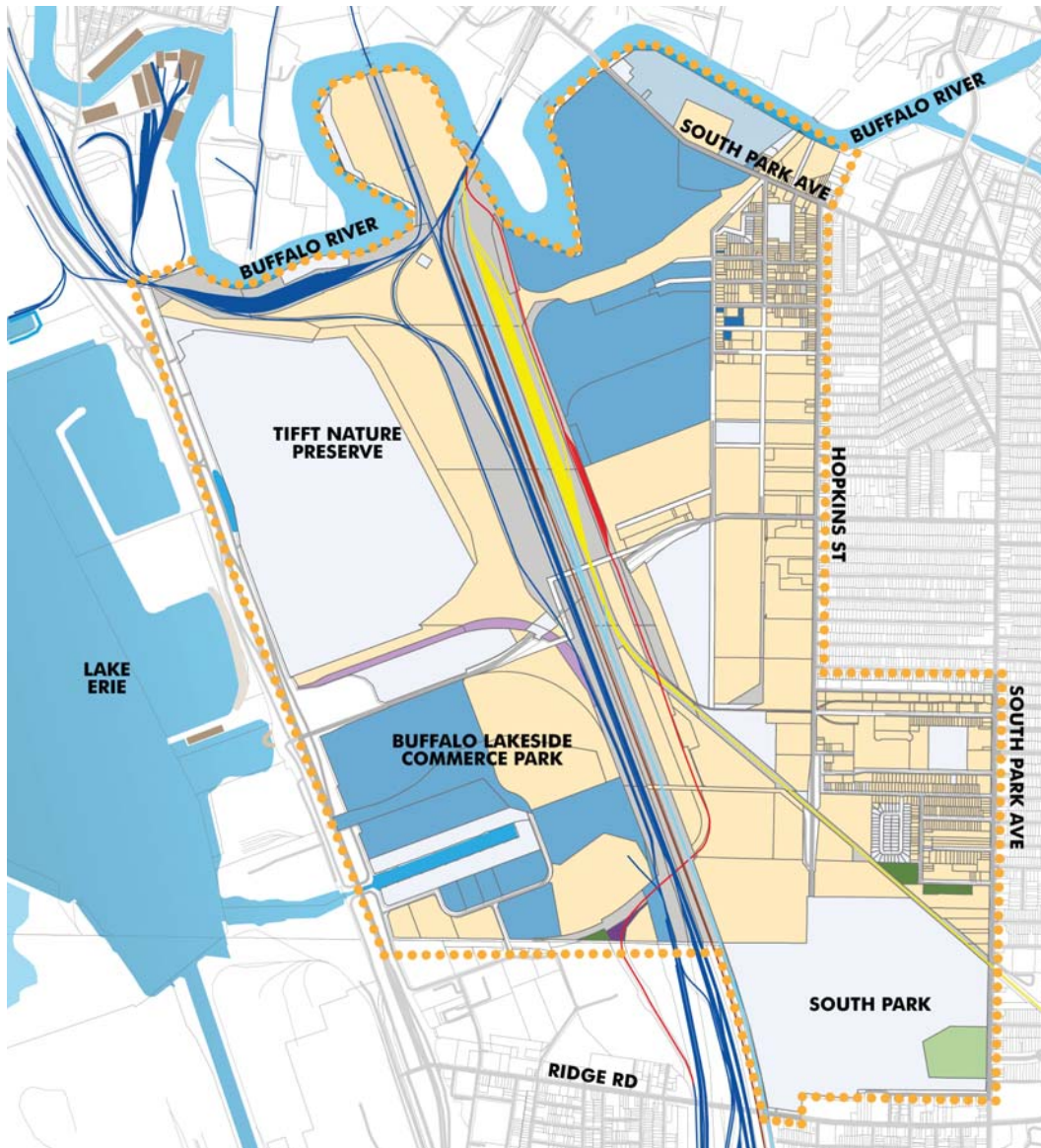
Rail

The BOA is divided by an active rail corridor which provides the study area with opportunities, as well as physical constraints on redevelopment (Map 11: Rail Network). The primary railroad operators within the study area include CSX Transportation (Class I), Norfolk Southern Railroad (Class I), Buffalo and Pittsburgh Railroad (Class II), and Buffalo Southern Railroad (Class III). Generally all rail lines are active freight lines, which make the study area an ideal location for industrial operations. There is one inactive CSX line located in the study area just north of the Union Ship Canal and one line that is utilized for mixed freight and passenger service, with Amtrak maintaining track rights. The BOA additionally includes several rail yards including the Ohio Street Yard, operated by CSX, the Tiff Street Yard, operated by Buffalo Southern and Norfolk Southern, and the Buffalo Creek Yard, operated by the Buffalo and Pittsburgh Railroad.

Navigable Waterways

According to the United States Army Corps of Engineers (USACOE), the Buffalo River Entrance Channel and Buffalo Ship Canal are considered navigable waters. The shipping channel has direct access to the St. Lawrence Seaway by way of Lake Erie. Historically the Buffalo River was utilized for industrial shipping until the decline of the steel industry. The USACOE is charged with maintaining the Buffalo River channel to a depth up to 23 feet. The channel depth is measured annually and dredged at 2 to 3 year intervals (Map 12: Navigable Waterways).

In 2011, the Great Lakes Restoration Initiative (GLRI) was commenced with funds obtained from the United States Environmental Protection Agency. The Buffalo River Restoration project was included as part of this initiative. The scope of the project included dredging the channel, which added a foot of depth, and removal of legacy sediment contamination. The dredging maintains the channel depth to benefit commercial navigation and contributes to the ecological restoration of the Buffalo River and Great Lakes. Removal of contaminated sediment moves the Buffalo River closer to "delisting" as a Great Lakes Area of Concern.



Map 11: Rail Network

LEGEND

●●●● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

PROPERTY OWNERSHIP

- PRIVATE OWNERSHIP
- CITY OF BUFFALO (PUBLIC)
- BUFFALO ECONOMIC RENAISSANCE CORPORATION (BERC)
- BUFFALO URBAN DEVELOPMENT CORPORATION (BUDC)

TRAIN OWNERSHIP

- CSX
- BUFFALO & PITTSBURGH
- BUFFALO SOUTHERN RAILROAD, INC (ERIE COUNTY)
- NORFOLK SOUTHERN RAILWAY, INC
- SOUTH BUFFALO RAILWAY

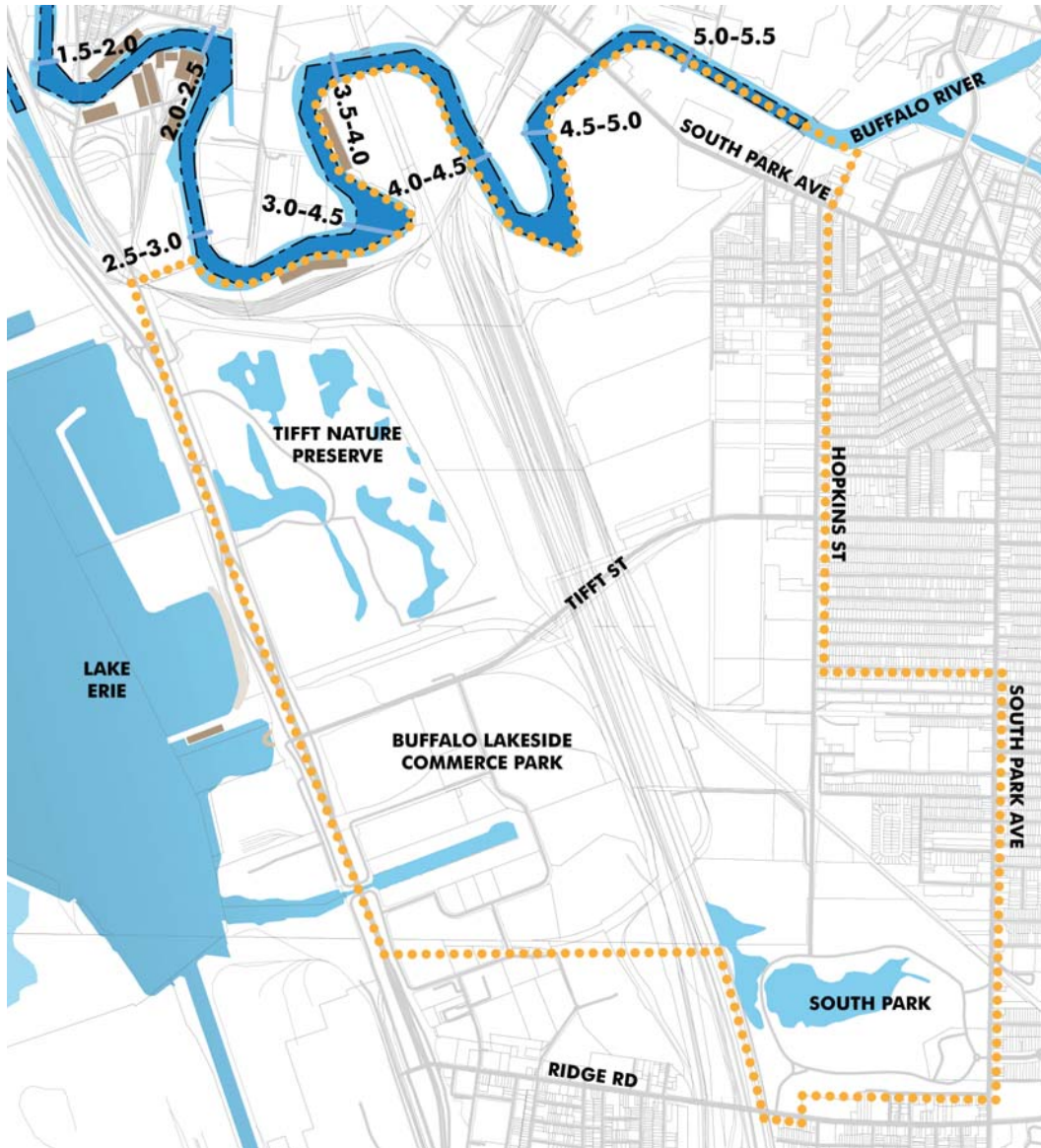
Roadways

The study area is well accessed by several main roadways including Route 5, a major arterial commuter route located along the western boundary of the BOA. In addition, Fuhrmann Boulevard and Ohio Street run parallel to New York State Route 5 and serve as at-grade service roads. Several improvements have been made to the road network since the time the Nomination Study was completed, as discussed in the following sections.

In 2006, a Final Design Report/Final Environmental Impact Statement was completed for the Southtowns Connector/Bufalo Outer Harbor Project. The Project included a series of road improvements on the NYS Route 5 corridor along the Lake Erie waterfront. The improvements were intended to provide improved and/or new road access to redevelopment sites within the corridor. These sites include the NFTA Outer Harbor Lands, Union Ship Canal Redevelopment Area, former LTV/Republic Steel site and the former Bethlehem Steel site. In addition, road reconfiguration was proposed to create a system more compatible with surrounding land uses. Finally, proposed improvements were intended to improve local access to and along the waterfront for alternate modes of transportation including public transit, bicycles and pedestrians while continuing to serve as an adequate system for commuter and commercial traffic between the Southtowns and downtown Buffalo (Map 13: Roadway Improvements). To date, road reconfiguration of Fuhrmann Boulevard, the Union Ship Canal Enhancements, and the Time and Gallagher Beach Improvements have been completed. Construction of the Industrial Heritage Trail and Tiff Street pier is underway and should be completed in the near future. The project was substantially completed in February 2012.

In addition to the Route 5 reconstruction, other local road and trail improvements were made at the following locations near the study area:

- A new internal access road was implemented by the City of Buffalo for the Union Ship Canal Redevelopment Area, extending from Commerce Drive in the City of Lackawanna;
- A NYSDOT in-kind replacement of the Ridge Road Bridge passing over the CSX rail corridor in the City of Lackawanna;
- A new truck access road connecting Lake Avenue with Milestrip Road (Route 179);
- Design of a multi-purpose greenway along the Outer Harbor to create interim and permanent pedestrian and bicycle access improvements along Fuhrmann Boulevard and Ohio Street; and
- A Tiff Street Greenway, designed by the City of Buffalo, to pedestrian and bicycle access improvements along the Fuhrmann Boulevard and Tiff Street corridors.
- The City of Buffalo reviewed the condition of the Hopkins Street Bridge and made select repairs.
- Mill and pavement work was completed on Hopkins Street and South Park Avenue. South Park Avenue was restriped to include a bike lane.



Map 12: Navigable Waterways

LEGEND

- ● ● ● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- · · NAVIGATION CHANNEL
- RIVER MILE



Map 13: Roadway Improvements

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- COMPLETED ROADWAY IMPROVEMENTS

Key Findings / Underutilized transportation infrastructure throughout the SBBOA, such as inactive rail lines, provides the city with opportunities to pursue adaptive reuse initiatives that can contribute to redevelopment throughout the study area. In addition, there is the opportunity to improve road networks to provide increased access to developable properties and promote neighborhood walkability.

3.10 Infrastructure

Adequate public utilities for power, public water supply and sanitary sewer are generally available around the perimeter of the South Buffalo BOA study area and in developed areas along Abby Street, Hopkins Street and South Park Avenue. The majority of vacant interior lands, as is the case with the RiverBend project area, will require new utility extensions.

EPA Wind Grant

In 2011, the Environmental Protection Agency announced funding for a Wind Feasibility Study as part of its RE-powering America's Land initiative. The program aims to encourage renewable energy development on formerly contaminated properties and mine sites when it is aligned with the community's vision for the site. The EPA is partnered with the U.S. Department of Energy's National Renewable Energy laboratory to evaluate the feasibility of locating renewable energy on reclaimed brownfield sites.

As part of this initiative, the EPA selected a 3,500-acre area in South Buffalo to determine the feasibility for solar or wind power generation. This area included the South Buffalo and Buffalo River BOAs. This area in the City of Buffalo is one of 26 sites selected nationwide to receive this renewable energy grant. Other sites selected in New York State include the ArcelorMittal Tecumseh Redevelopment, Inc. property located in Lackawanna, and TechCity located in Ulster County.

The area includes numerous brownfield sites associated with the South Buffalo BOA and the Buffalo River BOA. The feasibility study will evaluate the technical and economic opportunities and challenges associated with the site and additionally may:

- Provide a preliminary analysis of the viability of the site
- Assess solar or wind resource availability
- Identify possible system size, design and location
- Review the economics of the proposed system

The renewable energy feasibility study is currently underway.

Public Water System

The city of Buffalo's public water system is essential for water distribution, which is used for human consumption, public safety, and numerous industrial applications. The City of

Buffalo's existing public water system was designed to handle the high demands of the area's former industries. Since demand in the BOA is reduced from historic peaks, the capacity of the existing system is adequate, with few exceptions. In 2011, the city of Buffalo treated 23.7 billion gallons with an average of 65.4 million gallons each day. Potable water is distributed to approximately 276,000 and covers 46 square miles of piping network.

The Buffalo Water Authority is responsible for maintaining the city's network of pipes, valves, service connections and hydrants. In the past year, the Buffalo Water Authority replaced or renovated approximately 2.2 miles of water mains. The city has approximately 800 miles of pipes, which include 25,000 valves to 80,000 service connections and to 7,800 fire hydrants. The city has been coordinating public infrastructure and rights-of-way improvements.

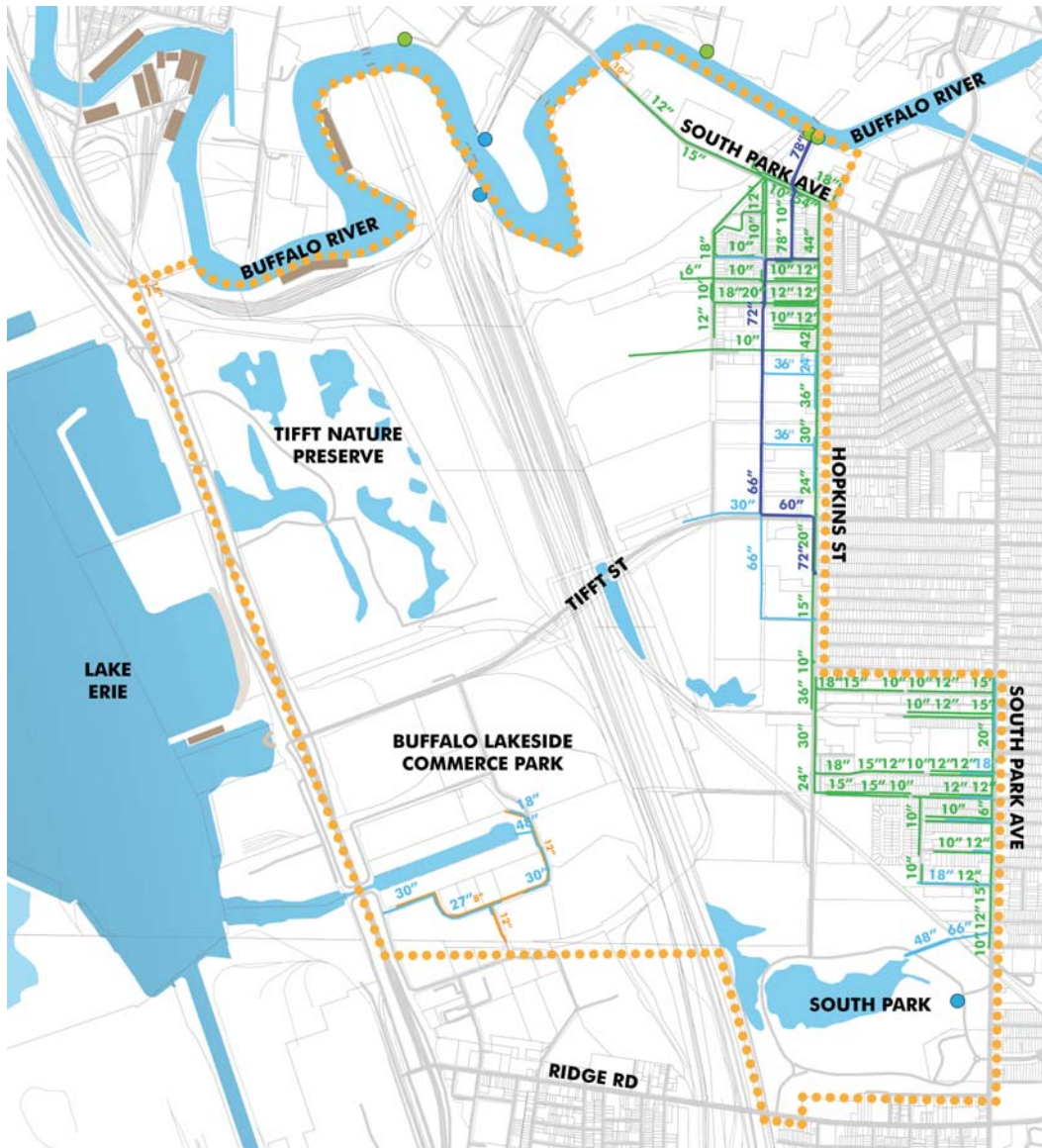
Buffalo River Improvement Corporation Water System (BRIC)

The Buffalo River Improvement Corporation was developed in the mid 1960's to develop a source and distribution system to supply industrial cooling water to specific sites in and around the South Buffalo BOA study area. These sites include the former Republic Steel site (RiverBend Commerce Park) located on the northern portion of the BOA. The BRIC system was designed to supply 120 million gallons per day for industrial uses. However, due to plant closures and process shutdowns, only one company, PVC Chemicals, Inc. (located outside of the study area), is utilizing and maintaining the system.

The BRIC system is non-potable water, which is not suitable for consumption but continues to be usable for industrial cooling and makeup water supply. Currently, the system is supplying approximately 5-6 million gallons per day to PVS Chemicals. Once the water is used for cooling, it is discharged into the Buffalo River which results in augmentation of the base river flow, particularly during the low flow summer months.

Municipal Sanitary Sewer System

As the City of Buffalo works to reclaim its former industrial lands for more redevelopment into more sustainable uses, there has been a growing emphasis on revitalizing the city's waterfront and waterways. Within the city, both the Niagara River and Buffalo River have been identified as Areas of Concern by the International Joint Commission that governs the Great Lakes. Part of the degradation is attributed to legacy industrial contamination and habitat loss resulting from development. However, part of the degradation is also a result of sewage and stormwater outfalls resulting from lack of capacity in the city's combined sewer outfalls (Map 14: Municipal Sanitary Sewer System). Raw sewage from CSOs reduce the oxygen content of waterways, which negatively impacts aquatic wildlife, and also poses a health threat to those who may come in contact with impacted waters. One method to address the issues associated with CSOs is to perform upgrades to the city's grey infrastructure, either through separation of the sanitary and stormwater systems, or by expanding the treatment capacity. The last time the city was modeled for stormwater was in 2001.



Map 14: Municipal Sanitary Sewer System

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- COMBINED (292)
- SANITARY (28)
- STORM (89)
- STORM OVERFLOW (58)

To address the challenges associated with its combined sewer system, in 2011 the Buffalo Niagara Riverkeeper prepared the Green Infrastructure Solutions To Buffalo's Sewer Overflow Challenge Draft Feasibility Study. In its report, they recommended the City of Buffalo enter into agreements with the United States Environmental Protection Agency and New York State Department of Environmental Conservation to incorporate a green infrastructure approach in order to satisfy the CSO abatement conditions of Buffalo's State Permitted Discharge Elimination System Permit. This approach would utilize natural stormwater management techniques to mitigate the amount of stormwater entering the combined sewer system and therefore reduce the number of CSO events. As part of the Step 3 BOA Implementation Strategy, BUDC and the City are recommending an integrated green infrastructure stormwater management system within the RiverBend site (see RiverBend Master Plan).

The city's goal is to reduce impervious surfaces throughout the city by 1,315 to 1,620 acres over the next 20 years. Hopkins Street and Hickory Woods have been identified as areas with high amounts of impervious surfaces and therefore candidates for Green Infrastructure installation projects. Implementing green infrastructure techniques requires consideration of several factors. Identifying the best approach requires individual evaluation of each street, block and landowner buy-in, which is crucial to the success of such projects. Incorporating green infrastructure techniques to planned infrastructure projects typically proves the most viable option.

Examples of green infrastructure techniques include:

- Disconnection of downspouts
- Rain barrels
- Pavement reductions
- Bumpouts
- Permeable asphalt and concrete
- Rain gardens

Key Findings: Infrastructure upgrade opportunities provide the city with the opportunity to invest in green infrastructure techniques, where feasible, to further enhance the environmental quality throughout the study area. In addition, as redevelopment occurs over time, the city has the opportunity to introduce creative solutions to address infrastructure needs in an environmentally beneficial manner.

3.11 Natural Resources and Environmental Features

Some of the most important assets of the study area are the natural resources and

environmental features. These assets include the Buffalo River (located to the north), Tift Nature Preserve on the western boundary, Union Ship Canal, and South Park. In addition to these waterways and established parks and preserves, the study area contains fish and wildlife habitats, federal and state wetlands as well floodplain areas.

Topography

The BOA is located in the Erie-Ontario lake plain province which has minimal topographic relief, and generally slopes north and west towards the Buffalo River and Lake Erie. Elevations within the study area range from 571 feet above mean sea level (AMSL) to 630 feet AMSL. The highest elevations within the study area are associated with man-made landfill areas in the southwest corner of the Tift Nature Preserve and in the Marilla Street landfill, as well as areas within South Park.

Soils

The majority of the study area is classified as Urban Land (approximately 72 percent). This map unit is a miscellaneous area characterized by 80 percent or more of the soil surface being covered by asphalt, concrete, buildings, or other impervious structures. The soils underlying impervious urban land areas are not practical to evaluate and therefore careful on-site investigations are necessary to determine the suitability and limitations of abandoned areas for any proposed use. Abandoned areas in this soil class may be suitable for asphalt-covered playgrounds or other recreation uses requiring a hard, impervious surface. The remaining non-urban soils within the study area are mostly located in Tift Nature Preserve, South Park, the area in the vicinity of Okell Playground and the northern portion of Buffalo Lakeside Commerce Park where State freshwater and mapped NWI wetlands are located. In addition, soil types classified as dumps (Dp) are located within the Tift Nature Preserve, the Marilla Street Landfill, and the Alltiff Landfill (Map 15: Soils).

Geology

The bedrock underlying the BOA is composed of three formations roughly dividing the area into three areas from north to south. The formations present within the study area include Onondaga Limestone (13.8 percent), Marcellus formation (52.4 percent), and Skaneateles formation (33 percent). The Onondaga Limestone formation consists of Moorehouse Limestone and is approximately 120 feet in depth; the Marcellus Formation, consisting of Oatka Creek Shale Formation is approximately 30-55 feet in depth; and the Skaneateles Formation, which consists of Levanna Shale and Stafford Limestone approximately 60-90 feet in depth (Map 16: Geology).

Surface Waters and Tributaries

















Surface waters within the study area consist of the Buffalo River to the north, the Union Ship Canal to the south in Buffalo Lakeside Commerce Park, and small lakes, ponds and wetlands within Tift Nature Preserve, South Park and along the rail corridor.



Map 15: Soils

LEGEND

●●●● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

- | | |
|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
|  CANANDAIGUA MUCKY SILT LOAM |  UDORTHENTS, SMOOTHED |
|  COLLAMER SILT LOAM, TILL SUBSTRATUM |  URBAN LAND |
|  DUMPS |  URBAN LAND / GALEN COMPLEX |
|  HAPLAQUOLLS, PONDED |  URBAN LAND / LIMA COMPLEX |
|  NIAGARA SILT LOAM |  URBAN LAND / NIAGARA COMPLEX |
|  NIAGARA SILT LOAM, TILL SUBSTRATUM |  URBAN LAND / TEEL COMPLEX |
|  PALMS MUCK |  URBAN - CHURCHVILLE COMPLEX |
|  RAYNHAM SILT LOAM |  WATER |



Map 16: Geology

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- ONONDAGA LIMESTONE
- MARCELLUS FORMATION
- SKANEATELES FORMATION

The Buffalo River is classified by the NYSDEC as a Class C, Standard C watercourse suitable for fishing, fish propagation and survival, and for primary and secondary contact recreation, although other factors may limit the use for these purposes. The Buffalo River is additionally listed as a Great Lakes Area of Concern (AOC) by the EPA. The area is listed due to the historically heavy industrial development along the river. Three major streams create the AOC “source area,” including Cayuga Creek, Buffalo Creek and Cazenovia Creek.

The EPA requires preparation of a three-phase Remedial Action Plan (RAP) for all areas of concern throughout the Great Lakes. Stage I identifies and assesses use impairments and sources of contamination, Stage II identifies proposed remedial actions and method of implementation, and Stage III documents evidence that uses have been restored. To date, the EPA and US Army Corps of Engineers (USACOE) have partnered with the Buffalo-Niagara Riverkeeper to form the Buffalo River Restoration partnership. This partnership most recently completed a Buffalo River RAP Status Report in October 2005..

Parks and Open Space

Taking in the broader landscape and natural resources of the region, the South Buffalo BOA can support enhanced habitat for migratory bird, fish, and other native wildlife (Map 17: Parks & Open Space). The Buffalo River is a key regional ecological corridor, connecting to Lake Erie and the Niagara River. The Niagara River Corridor, which connects the Niagara Escarpment area south to other Atlantic Flyway tributaries, was recognized as a globally significant important Bird Area (NRCIBA) in 1996 by an international consortium of conservation and nature organizations including the National Audubon Society. The region is noted as an important wintering area for thousands of waterfowl and gulls, as well as an important stop-over and breeding ground for migrating birds, with important habitat including: old growth forest, marsh, and meadow.

In the South Buffalo BOA there are important ecological stepping stones that provide sensitive habitat zones and potential broader connections including Tiff Nature Preserve (an Audubon Important Bird Area and one of the largest remnant wetlands in Erie County) and Olmsted’s South Park and the Botanical Gardens. Significant open space and park areas within the South Buffalo BOA also include the planned meadow park at the RiverBend Commerce Park, the George J. Hartman Play Fields, and the Ship Canal Commons at Lakeside Commerce Park – which all offer further open space and habitat patches that promote connectivity and ecological function throughout the BOA. The Buffalo River is a significant ecological corridor and its health and function will be considered below. The RiverBend planning and implementation effort is opening up new opportunities for accessing the river for neighborhood residents. Planned shoreline restoration work along the Buffalo River at the RiverBend site has already begun. The comprehensive green infrastructure approach developed for the RiverBend master plan is recommended to be maintained in the new proposed development for Sorra and Silveo.



Map 17: Parks & Open Space

LEGEND

- ● ● ● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- PARKS & OPEN SPACES



Image 7: Remediation and shoreline restoration along Buffalo River

The South Buffalo BOA provides an opportunity to restore ecological processes and connections to the Olmsted Parks system, Times Beach Nature Preserve, the Buffalo River and Lake Erie waterfront. Integrated ecological restoration promotes the return of forest, grasslands, wetlands, and the natural shoreline of the Buffalo River, providing habitat for birds and other native wildlife and contributing to ongoing river restoration efforts. Developed areas – such as the Hopkins Street corridor – can be interspersed with “green infrastructure” that bridges the natural landscape and the built environment, providing more ecological approaches to stormwater and landscape management. The combination of ecological restoration and green infrastructure will result in a functional and sustainable landscape while cultivating a thriving and complementary human and natural resource community. The interstitial neighborhood spaces (vacant lots and small gardens) and streets can help better connect neighbors to open space and also act as green corridors, with the integration of various green infrastructure practices. These practices range from front yard rain gardens and conversions of turf to gardens and meadows, to stormwater treatment swales along streets that integrates trees and plantings.

Increased tree canopy can help provide further connections for birds and other wildlife that depend on these patches as they travel across the landscape. In RiverBend the aim is to promote a diverse and ecologically rich tree canopy through a combination of mesic forest zone (with widths of 100’ – 300’ for increased habitat), riparian woodland along the Buffalo River (as a restored riparian corridor), and street trees. Created wetlands can help treat water and provide new amenity spaces that foster habitat linkages to the natural wetlands found at Tiff Nature Preserve. Stormwater treatment can be designed into parking lots and other paved spaces to create spaces with treatment, as well as increased shade and new aesthetics. Opportunities exist for enhanced habitat in existing preserves and new connections to strengthen the urban ecology of the area. Streets can be considered green corridors, vacant lots could be habitat patches and community spaces, recreational spaces can have integrated stormwater treatment and habitat improvements, and there can

be improved connections between the River and the historic parks and preserves within the BOA. Within the BOA there are significant opportunities to cultivate community engagement, stewardship, and educational activities with Tiff Nature Preserve, Botanical Gardens, Olmsted Parks Conservancy, and Buffalo Niagara RiverKeeper.

River Habitat and Shoreline Restoration

The Great Lakes Legacy Act provides funding to take the necessary steps to clean up contaminated sediments in Areas of Concern (AOCs). Remedial Action Plans (RAPs) are being developed for each of these Areas of Concern, to address impairments to beneficial uses. The Buffalo River AOC impact area is 6.2 miles long and extends from the mouth of the river to the farthest point upstream at which the backwater condition exists during Lake Erie's highest monthly average lake level. Land use in the tributary watersheds consists of residential communities, farmland, wooded areas and parks interspersed with commercial land use. There are six beneficial use impairments (BUIs) identified along the Buffalo River: restrictions on fish and wildlife consumption, fish tumors or other deformities, degradation of aesthetics, degradation of benthos, restriction on dredging activities, and loss of fish and wildlife habitat. The U.S. Army Corps of Engineers, Buffalo District performed a reconnaissance level study from 2001-2003, which determined that there was Federal interest in initiating a cost-shared feasibility study of environmental dredging on the Buffalo River from Hamburg Street to the confluence of Cazenovia Creek and the River. The non-federal sponsor for the feasibility study was Buffalo Niagara Riverkeeper, who agreed to cost share half of the \$2.1 million feasibility study. Based on the feasibility study it was determined that the US Army Corp of Engineers did dredge contaminated sediment from areas of authorized Buffalo Harbor Federal navigation channels in 2011.

Groundwater Resources

According to the USGS Map, Potential Yields of Wells in Unconsolidated Aquifers in New York State – Niagara Sheet, the BOA is not located over an unconfined aquifer. According to the NYSDEC, however, the northern portion of the South Buffalo BOA is located over a New York and New England carbonate-rock aquifer, which is considered a principal aquifer. According to the NYSDEC, principal aquifers are “aquifers known to be highly productive or whose geology suggests abundant potential water supply but which are not intensively used as sources of water supply by major municipal systems at the present time.” Groundwater within the study area has been impacted by former industrial operations, including Republic Steel and Hanna Furnace. At many of the sites throughout the BOA, remediation has been completed or is planned. Remediation activities include source removal and mitigation. Both the South Buffalo BOA and the city of Buffalo are served by public water and therefore exposure to contaminated water is not expected.

Floodplains

Flood Insurance Rate Maps (FIRM) are prepared by the Federal Emergency Management

Agency (FEMA). The FIRM for the BOA indicates Special Flood Hazard Areas associated with Tift Nature Preserve, the Buffalo River, and Lake Erie. In addition, large portions of the Buffalo Lakeside Commerce Park are located within a Special Flood Hazard Area. Development activities within Special Flood Hazard Areas are regulated by the City of Buffalo's Flood Damage Prevention Law, which requires a Floodplain Development Permit. Since completion of the Nomination Study, the boundaries of the 100-year floodplain have not changed (Map 18: Floodplains).

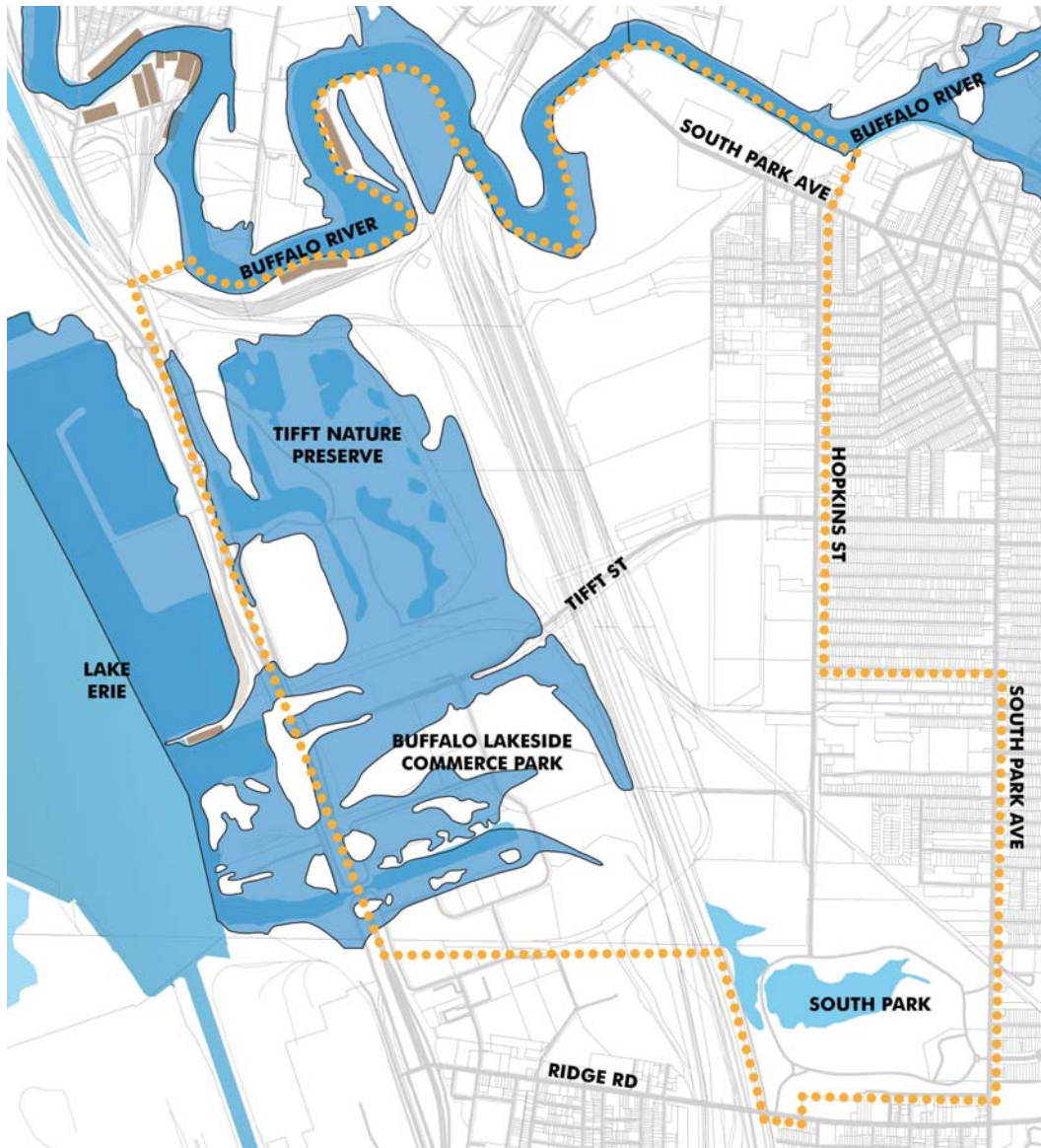
Wetlands & Wildlife Habitat

Large areas within the BOA, comprising approximately 425 acres, are designated as either State freshwater wetlands or wetlands mapped on the National Wetlands Inventory (NWI). State freshwater wetlands, which comprise 34 percent of wetlands in the BOA, are associated with Tift Nature Preserve, the northern side of Buffalo Lake Commerce Park along Tift Street, and linear areas extending along the railroad corridor from Tift Street to the northwest portion of South Park. NWI wetlands, which make up 66 percent of wetlands within the BOA, include lake and pond areas in the Tift Nature Preserve, portions of the Hydro-Air property, small areas adjacent to Alltiff and Marilla Street landfills, areas around South Park Lake, and portions of Buffalo Lakeside Commerce Park including the areas surrounding the Union Ship Canal (Map 19: Wetlands).

As part of the Golf Course Feasibility Study, the project team sent an ecologist to conduct a field reconnaissance to identify dominant ecological communities and habitats present throughout the proposed golf course study area. As part of this field reconnaissance, an ecological field report was prepared detailing the existing cover types, habitat assessment and enhancement and restoration opportunities associated with the golf course study area. Potential wetlands of various types were identified on several of the properties evaluated as part of the Golf Course Feasibility Study. Wetland types identified include both forested and emergent wetlands. In addition, the following ecological community types were identified:

- Meadow Habitat
- Shrub Scrub and Scrub Shrub Wetland Habitat
- Upland Forest and Forested Wetland Habitats
- Emergent Wetlands and Open Water
- Developed and Disturbed lands

Although a formal wetland delineation was not completed, the Ecological Field Report details the wetland communities and habitat types present throughout the Golf Course Feasibility Study area as well as their importance to local wildlife. In addition, enhancement and restoration opportunities were identified, including:



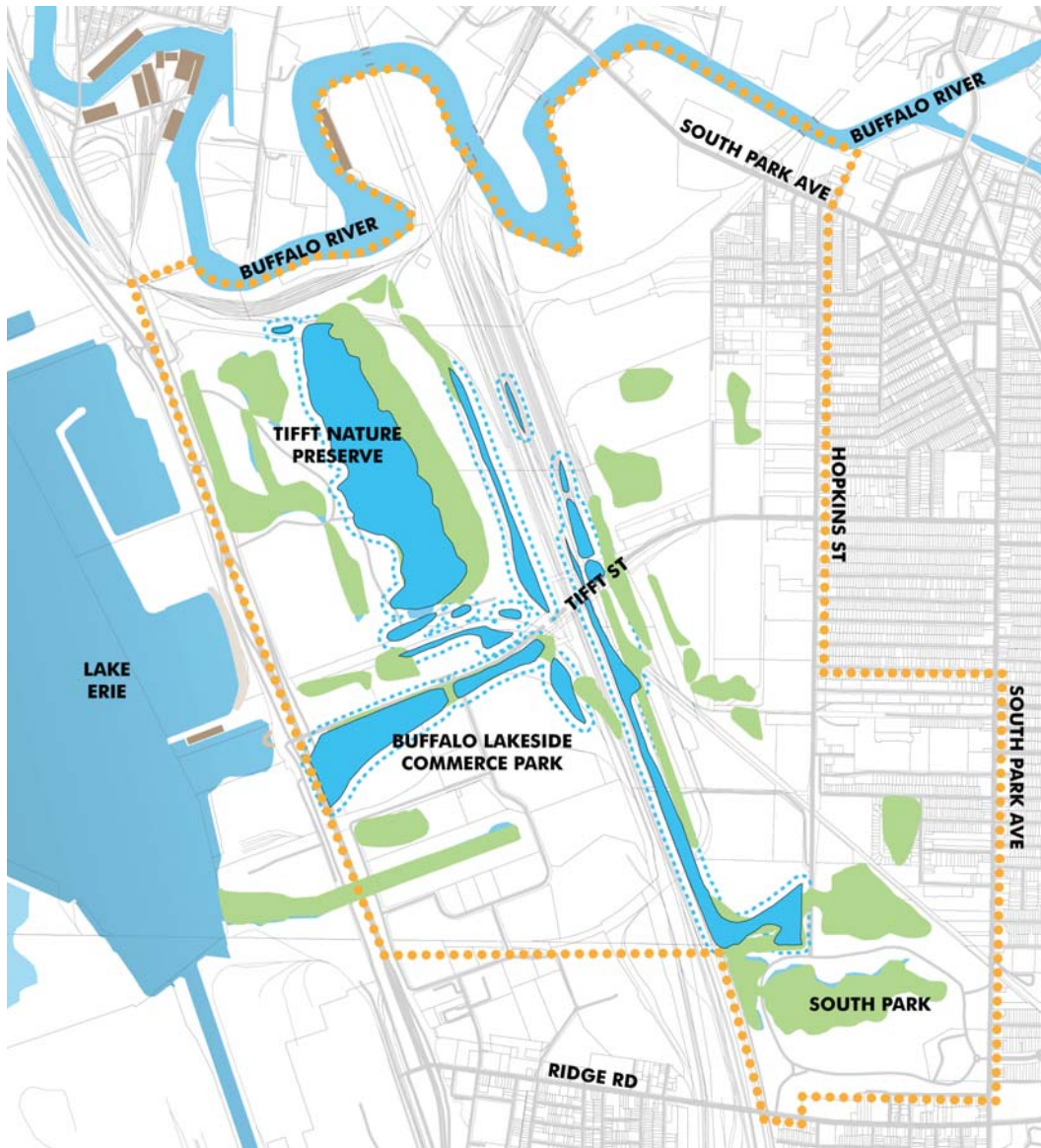
Map 18: Floodplains

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- 100 YEAR SPECIAL FLOOD HAZARD AREA

- **Development of an Invasive Species Control Plan:** Many of the wetland communities throughout the study area include non-native invasive species. Invasive species that are not native to a particular ecosystem have the potential to adversely impact the economy, human health and/or the environment. Many of the properties within the study area are dominated by phragmites as well as other non-native plant types.
- **Wildlife Habitat Management Plan:** Wildlife habitat management within the study area would benefit many species that depend on the habitat and are experiencing population declines throughout New York State and the region. In particular, the area's meadow habitat and white-tailed deer population were recommended to be assessed and addressed. Concern of deer overpopulation suggests the need to conduct an assessment of the deer population. If overpopulation is determined, coordination with the NYSDEC to develop an approach to population control and vegetation protection is recommended.

Key Findings: Natural resources and environmental features located within the BOA provide the greatest opportunities for enhancements and connectivity to other parks, open space and recreational areas in proximity to the South Buffalo BOA. One of the key challenges will be to identify ways to provide access to natural features and environmental education opportunities in consideration of access issues associated with some of the BOA's existing physical infrastructure.



Map 19: Wetlands

LEGEND

- ● ● ● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- ● ● ● 100 FOOT STATE FRESHWATER WETLANDS BUFFER
- STATE FRESHWATER WETLANDS
- NATIONAL WETLANDS INVENTORY



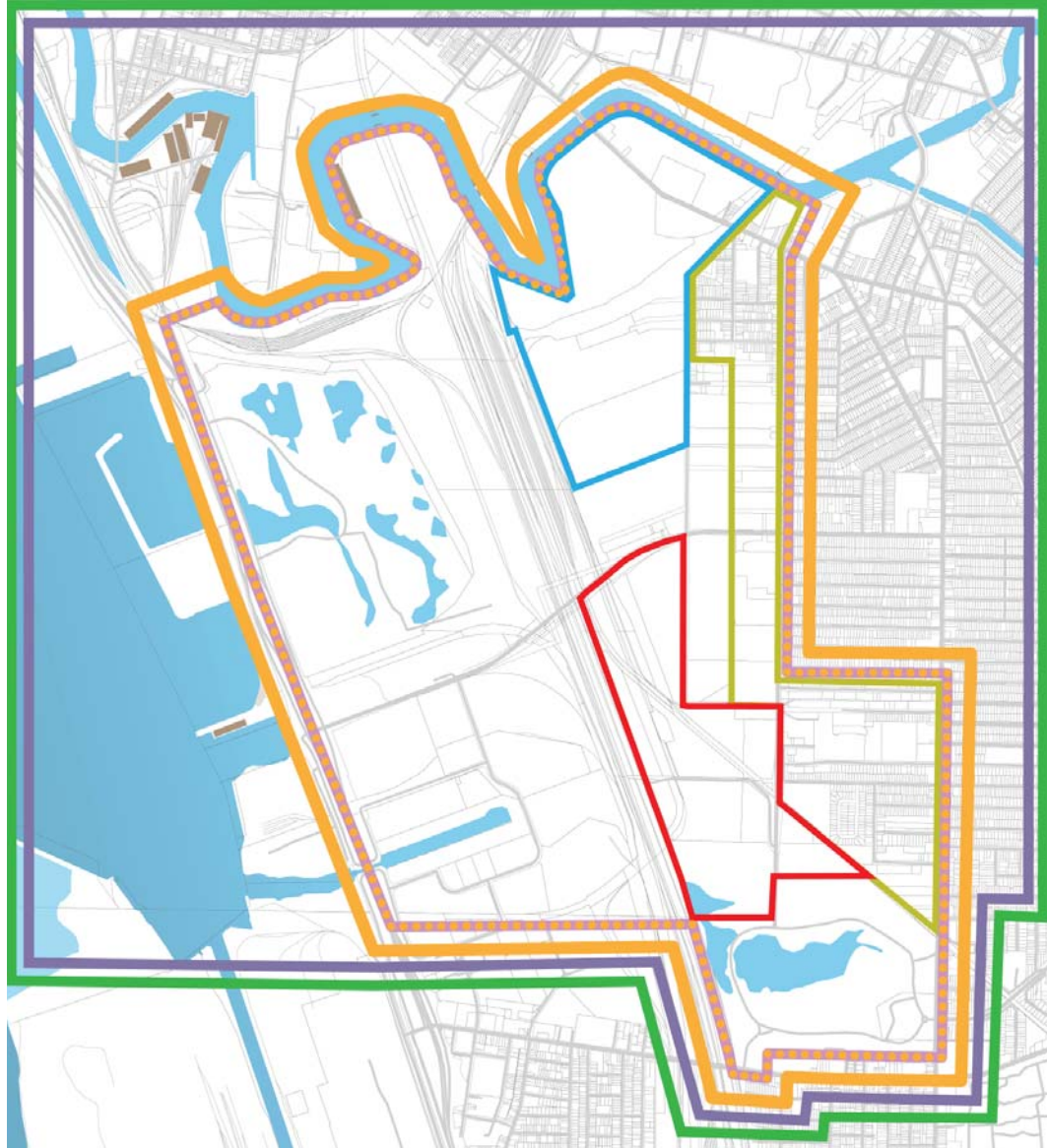
IV. IMPLEMENTATION STRATEGY

4.1 Introduction

The citizens of the City of Buffalo have come together to imagine the future of the South Buffalo Brownfield Opportunity Area (BOA). During the past seven years, the City of Buffalo, New York State Department of State, and the New York State Department of Environmental Conservation have guided significant efforts through the (BOA) program. Urban planning efforts have provided abundant information about the existing community, its neighborhoods, demographics, built and natural assets as well as existing conditions of property and infrastructure. Community engagement was integral to understanding the desires of the community, and numerous innovative planning initiatives, collaborations, and techniques have been used to identify transformational projects.

The City of Buffalo, community organizations, and local developers have recently undertaken lighter, quicker, cheaper (LQC) projects to make Buffalo a great place to live, learn, work, and play. LQC approaches aim to provide low cost, high impact interventions in the public realm to generate interest in a project area, thereby attracting additional investment and/or reclamation of a natural asset. Examples of this approach are evident at Canalside, with Erie Canal Harbor Development Corporation's use of brightly painted Adirondack chairs. At Larkinville "Food Truck Tuesdays" are a staple of spring, summer, and fall. New kayak/canoe launches established along the Buffalo River are other key examples allowing public access to the Buffalo River and Central Wharf. In addition to the LQC approaches, larger infrastructure investments have been made at the Central Wharf, along Main Street, and at Buffalo Lakeside Commerce Park. These projects have attracted a critical mass of visitors and acted as a catalyst to additional private and community investments. Taken together, the South Buffalo BOA is a pillar of Buffalo's Renaissance: a foundation of innovative planning techniques and initiatives that has resulted in the creation of unique and authentic Buffalo experiences. It is the goal of the Implementation Strategy to provide guidance for transformational projects that are or will contribute to positive views and excitement about Buffalo's near and longer term future.

The South Buffalo BOA Implementation Strategy builds off the success of initiatives implemented across the city and provides a comprehensive strategy with varying scale, cost techniques, timeframes and actions required to achieve the community's desired vision. These strategies include improving the public realm, creating places for all users and embracing the city's unique natural habitat. The plan encourages grassroots investment in line with City of Buffalo policies including, local laws and the recently drafted Green Code. The Implementation Strategy is grounded in a community vision and includes the following transformative plans: Neighborhood Revitalization Strategy, Step 3 Road Map to Success Strategies, Step 2 Nomination Study, RiverBend Master Plan, Buffalo Green Code, South Buffalo Golf Course Feasibility Study, and Recreational Needs Assessment. The following sections detail these Implementation Plans and the initiatives proposed to transform the South Buffalo BOA. See (Map 20: Planning Map Areas).



Map 20: Planning Map Areas

LEGEND

••••• SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

— GREEN CODE (CITY-WIDE)

— RECREATION NEEDS ASSESSMENT (CITY-WIDE)

— STEP 2 IMPLEMENTATION STRATEGY

— NEIGHBORHOOD REVITALIZATION

— RIVERBEND

— PROPOSED GOLF COURSE

4.2 Step 2 Nomination Study Summary

The South Buffalo BOA Master Plan prepared during the Step 2 Nomination Study phase represented extensive analysis and consultation that occurred over a two year period ending in 2009. The Master Plan establishes a framework for guiding the evolution of the BOA to a higher value employment area complemented by a mix of new uses, strengthened communities, significant open space and natural areas. Since the Master Plan was prepared, numerous economic and development changes have occurred; however, the guiding principles and framework developed through the Nomination Study process remain relevant.

Transforming the South Buffalo BOA by encouraging a diverse range of land uses will lead to enduring economic stability and growth. The Master Plan proposes several prevailing themes that are drawn from key assets and opportunities of the study area. The prevailing themes place an emphasis on economic development, ecological restoration and neighborhood revitalization. From the Nomination Study Master Plan these key areas are described below:

High Environmental Performance and Economic Resiliency: This theme focuses on capitalizing on the existing workforce, significant available land and beautiful ecological surroundings in an effort to promote a “green” cluster of mixed-use development.

Emphasis on Employment: A diverse land use throughout the South Buffalo BOA provides an opportunity to have a mix of business that supports the economic strengths of the region and the study area. It is critical to target marketing towards green industries, research and development, light industry and business parks that are supported by the surrounding community.

Strong Places and Mixed Use Communities: This theme prioritizes negotiating quality urban development with a strong sense of place and scale. This can be achieved through the use of compact development, attractive streets, an improved public realm and green linkages (Image 9: Public Amenities at Ship Canal Commons)(Image 8: Complete Street on Delaware Ave, Buffalo, NY).

Complete Streets along Hopkins Street, Tiff Street, South Park Avenue and RiverBend Drive: Connectivity and neighborhood revitalization are critical components to the development of the South Buffalo BOA. Strengthening connections between assets such as the Buffalo River, South Park, Lake Erie, Tiff Nature Preserve and surrounding neighborhoods is of greatest importance. South Park Avenue provides a critical connection to the Central Business District, Canalside and the Erie Basin Marina from South Buffalo.



Image 8: Complete Street on Delaware Ave, Buffalo, NY



Image 9: Public Amenities at Ship Canal Commons

Enhanced and Integrated Network of Open Space: This theme focuses on expanding the existing open space assets throughout the South Buffalo BOA study area to accommodate a range of active and passive recreational activities.

Restoration and Development along the Buffalo River: The Buffalo River has long been a critical component to Buffalo’s industrial success. Moving forward, redevelopment along the river must balance enhanced ecological function, natural resource conservation, and new recreational opportunities.

Since the completion of the Nomination Study Master Plan, numerous planning projects and initiatives set forth in its framework have been successfully completed. The master plan required updating due to the changing conditions in the economy as well as increased development in the region and city. Section 4.2.1 & 4.2.2 illustrate the progress in each precinct area defined by the master plan and the proposed changes.

4.2.1 Master Plan Land Use Update

The Nomination Study Master Plan provides a broad mix of land use recommendations to achieve economic viability throughout the South Buffalo BOA while encouraging smart growth (Map 21: RiverBend Master Plan, Nomination Study, 2009). The land uses are based on a market analysis and designed to encourage a diverse community offering a range of employment and housing typologies. The master plan draws upon the tenets set forth in Buffalo’s Comprehensive Plan (The Queen City in the 21st Century) and the Buffalo Green Code.

The Green Code is a legislated and enforceable zoning ordinance that provides the support required to implement the South Buffalo BOA Master Plan. In collaboration with the Office of Strategic Planning, the final South Buffalo BOA Master Plan proposes land use patterns that are consistent with the proposed zoning set forth in the Unified Development Ordinance (UDO) which is part of the overall Green Code effort. The UDO is designed to create a community that embraces its existing assets and encourages infill development. The future land use types proposed as part of the Land Use Plan include: commercial and



Map 21: RiverBend Master Plan, Nomination Study, 2009

office (e.g. research and development, business park, business services), light industrial, rail, mixed-use, residential, recreational (i.e. proposed golf course), and parks and open space (e.g. Tift and South Park) (Map 22: UDO / Buffalo Green Code).

Since the Nomination Study was approved, city officials and residents determined that encouraging a light industrial land use in certain portions of the BOA was pivotal to support the goals of the South Buffalo BOA. This land use is envisioned to primarily be located adjacent to RiverBend, All-Tift Landfill, and on to Reading Avenue (Map 23: South Buffalo BOA Proposed Land Use). These areas provide opportunities for front-of-house office space and back-of-house light industrial space. Typically this use will have 5,000 to 30,000 square foot floor plates with supported surface parking based on the proposed



Map 22: UDO / Buffalo Green Code

LEGEND

●●●● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

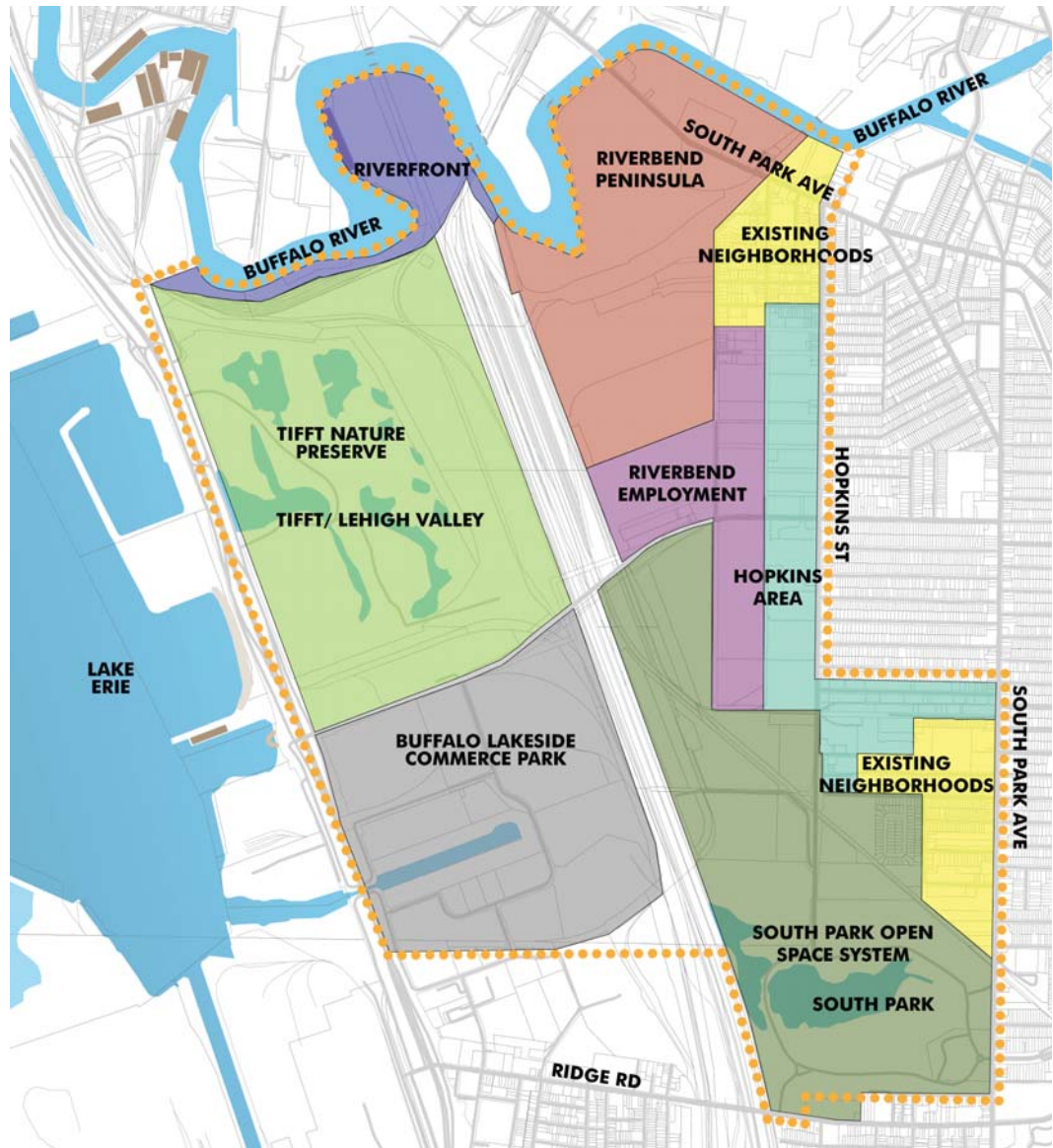
- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| D-S (RETAIL STRIP) | D-IL (LIGHT INDUSTRIAL) |
| N-3R (RESIDENTIAL) | N-3E (MIXED-USE EDGE) |
| D-IO (OFFICE) | D-OG (GREEN) |



Map 23: South Buffalo BOA Proposed Land Use

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- RESEARCH & DEVELOPMENT
- NEIGHBORHOOD INVESTMENT
- BUSINESS SERVICES & LIGHT INDUSTRIAL
- MANUFACTURING, WAREHOUSE/DISTRIBUTION
- MIXED USE
- RECREATION / OPEN SPACE



Map 24: South Buffalo BOA Precincts

LEGEND

●●●●● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

zoning recommendations in the UDO. This proposed commercial and industrial mixed-use expands on the Business Office commercial land use proposed in the Nomination Study.

In addition, areas identified for warehouse and distribution have been updated to include manufacturing. These uses are intended to accommodate larger scale single or two-story warehouses with an estimated build-out between 100,000 – 500,000 square feet. These land uses would be supported by the existing rail connections and accessible by large trucks, encouraging regional and super-regional trade.

4.2.2 Precinct Areas Update

The South Buffalo BOA consists of numerous areas distinguished by character and scale. The Master Plan defines nine precinct areas that are distinguished by complementary land uses and varying development opportunities. This approach allows for analysis and recommendations that address the diverse characteristics and specific needs of each area.

Since the Nomination Study, these precincts have been further refined with development of the RiverBend Master Plan, South Buffalo BOA Implementation Strategy, and the South Buffalo Golf Course Feasibility Study. These studies analyzed future land use opportunities through land owner outreach and existing conditions analyses. The precinct boundaries associated with the RiverBend Peninsula, RiverBend Employment, South Park Open Space System, Hopkins North and Hopkins South have been adjusted as a result of these studies (Map 24: South Buffalo BOA Precincts).

As part of the Implementation Strategy the Nomination Study Master Plan has been updated to incorporate ongoing planning initiatives and economic development in the area (Map 25: Step 2 Nomination Study Master Plan) (Map 26: Step 3 Implementation Strategy Master Plan Update). The following paragraphs provide updates pertaining to each area.

A Master Plan for RiverBend, a 260-acre study area within the South Buffalo BOA was developed in 2011. This plan advances the work completed as part of the Nomination Study for the RiverBend Peninsula and RiverBend Employment area while also redefining these precincts. Similar to the Nomination Study Master Plan, the RiverBend plan proposes a sustainable mixed-use development with a multi-modal transportation system and a holistic approach to the site's ecology. The Master Plan is based on themes to Connect, Restore, Transform, and Engage with an emphasis on the creation of a regional asset. The land uses and performance criteria considerations defined in the Nomination Study and expanded upon in the RiverBend Master Plan have been summarized in Section 4.4 RiverBend Summary. The complete RiverBend Master Plan can be found in *Appendix E*.

South Park Open Space System precinct is an area with a range of social, cultural and recreational activities that is an asset to the neighborhood and commercial uses. This precinct includes the Olmsted-designed South Park, Buffalo and Erie County Botanical Gardens and two landfills that have been capped and closed: Marilla Street Landfill and Alltft Landfill which are currently publicly inaccessible open spaces. Since the Nomination Study, a South Buffalo Golf Course Feasibility Study has been completed and an Open Space and Recreational Needs Assessment study has been initiated. The results of these studies can be examined further in Sections 4.6 and 4.7, and *Appendix D and I* provides the complete report. The Athletic Center and Library originally proposed for this precinct in the Nomination Study have since been determined as not feasible.



Map 25: Step 2 Nomination Study Master Plan



Map 26: Step 3 Implementation Strategy Master Plan Update



Image 10: Concrete Central and Buffalo River

Buffalo Lakeside Commerce Park (BLCP) precinct is a successful “smart-growth” urban commerce park that has capitalized on its adjacency to operating rail lines and a major highway (NYS Route 5) to facilitate product distribution. These facility assets support the investments made by CertainTeed, Cobey Inc, and Sonwil Distribution. Since the Nomination Study, additional implementation investments have been made to the existing infrastructure and public realm. A new road, Laborers Way, was installed to provide improved access to parcels located on the north side of the Union Ship Canal. At Ship Canal Commons a Steel Ladle feature was installed as a monument to the steel industry and as an asset to Union Ship Canal Park.

The Union Ship Canal Redevelopment Area, Urban Renewal Plan developed in 2003/05, established design and development standards for the BLCP. During the Nomination Study recommendations were provided to refine these standards. With the adoption of the Buffalo Green Code all existing design and development standards for the city including the majority of the Urban Renewal Plans will be incorporated into the code. These new zoning regulations will govern proposed development within the BLCP and will be the primary tool for implementing the community’s vision.

The Riverfront precinct incorporates a large naturalized area that overlooks the Buffalo River along with two monumental grain elevators that are important icons of the city’s rich industrial past. Pedestrian access to this area is restricted by active rail lines that border the precinct on the south and also cut through a naturalized peninsula to the north. These natural areas and former industrial lands provide an opportunity to maintain a naturalized area that encourages passive recreation along the riverfront, while improving ecological function through enhancement and conservation.

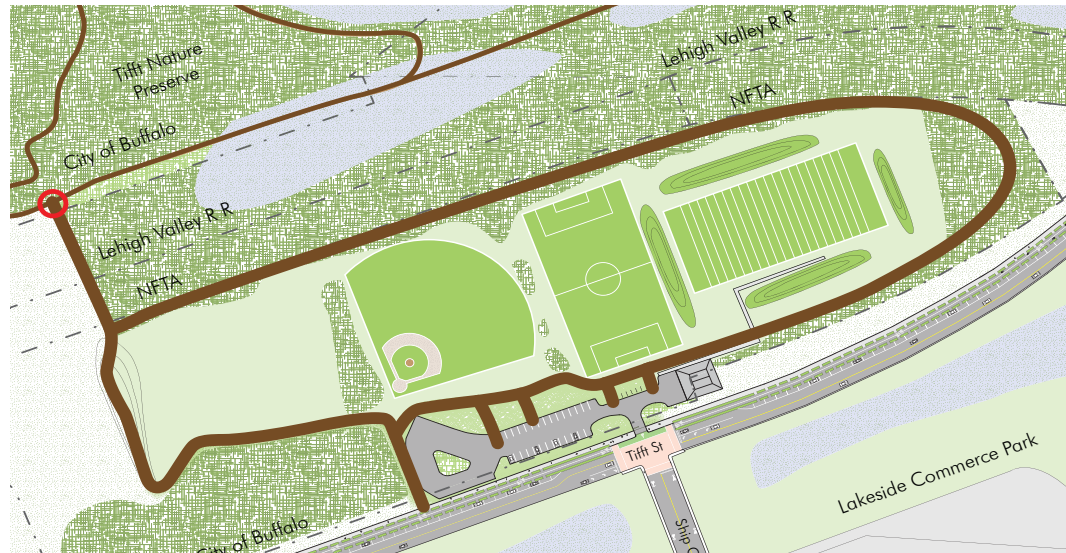
The Nomination Study Master Plan proposed creating a renewable energy campus south of the rail lines that would be part of the Buffalo Green Belt. Since the completion of the Nomination Study, the proposed Buffalo Green Belt plan faced challenges that led to abandoning this effort and the proposed projects. Also based on further investigations

during the implementation phase, it was determined that access to this site is extremely difficult and that the land was more appropriate as an expansion of Tift Nature Preserve. With its remote location and value as an ecological preserve and cultural tourism node, conserving the peninsula through a land trust offers interim protection of the property until a proposed use can be implemented. It is recommended that a non-for-profit organization with a mission to protect land with significant conservation value be pursued to acquire this property. With the exception of Concrete Central the property is currently owned by CSX. The peninsula, with its location, history and adjacencies to major ecological assets, deserves a form of protection (Image 10: Concrete Central and Buffalo River).

Tift/Lehigh Valley precinct includes Tift Nature Preserve, which is a 264-acre nature refuge dedicated to conservation and environmental education (Image 4.11). The preserve originally was a dairy farm in the 19th century that was converted to a rail trans-shipment center primarily for iron ore and coal. In the 1950's and 1960's, the site was used as a dumping location for city refuse near the present day Route 5. Since the 1970's, Tift Nature Preserve has been transformed into a destination for recreation and ecological education. Tift Nature Preserve, which is operated by the Buffalo Museum of Science, continues to pursue opportunities to expand its boundaries to the east, south and north on non-publicly owned lands. Approximately 100 acres within this precinct consists of inactive rail lands owned by Lehigh Valley. In collaboration with the City of Buffalo, Tift Nature Preserve is pursuing acquisition of the Lehigh Valley property located east of the preserve. Environmental conditions determined in the Lehigh Valley Phase I Environmental Analysis (*Appendix F*) indicate that there are suspect contaminants on the Lehigh Valley Railroad properties. While this conclusion has made property acquisition difficult representatives of Tift Nature Preserve continue to work with the city and Lehigh Valley on acquiring this property.

Since completion of the Nomination Study, efforts have begun to expand the existing Tift Nature Preserve visitor facility to include a Sustainability Center. The facility upgrade and expansion plans incorporate green building techniques including alternative energy options and sustainable materials. The facility and its programming are designed to be an educational tool for visitors. The addition to the existing visitor center was selected over development of a new facility along Tift Street as identified in the Nomination Study.

The Nomination Study recommends a new north-south road west of the rail corridor and an east-west road south of the Buffalo River to improve connectivity to within this precinct and the South Buffalo BOA. During the RiverBend Master Plan and Implementation Strategy planning efforts, it was determined that these connections were not required to support the build out and vision of the South Buffalo BOA. In its place the expansion of Tift Nature Preserve east to the rail lines and north to the Buffalo River will enhance the ecological and environmental goals of the South Buffalo BOA.



Map 27: Enhanced trail system at George J. Hartman Play Fields

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- PARCEL BOUNDARY
- 8' - 10' BERM
- ENTRANCE TO TIFFT
- NATURAL VEGETATION
- RAIN GARDEN
- WETLAND
- TRAILS

Throughout the Implementation Strategy, special focus was placed on the George J. Hartman Play Fields which forms a southern connection to Tiff Nature Preserve. Through the public input process, citizens informed the planning team that the fields are a key community recreational resource utilized by city residents for football, baseball, soccer, and other athletic activities. Although the Hartman fields are an important asset, there is limited community access. Additionally, an undefined pathway, known as the ‘human cowpath,’ traverses wetlands and private property along the western edge of the fields connecting Hartman fields to Tiff Nature Preserve. These assets sit at the gateway to the Outer Harbor and Buffalo Lakeside Commerce Park providing an optimal gateway location for South Buffalo.

Through collaboration with the City of Buffalo Parks and Recreation Department and Tiff Nature Preserve, there is an opportunity to use portions of the George J. Hartman Play Fields for passive ecological education and recreation. Tiff Nature Preserve is supportive of developing a formal pathway to connect to the fields and create a southern entrance to the preserve. Extending this new pathway around the field with educational signage about the ecology and history of the area provides an opportunity to inspire a vast and diverse population. Currently, metal bleachers exist around the fields and require ongoing maintenance to the structures and vegetation surrounding them. In the short-term, the Implementation Strategy proposes creating grassy berms to provide additional seating, and over time introducing permanent benches built into the earth mounds to further connect visitors with the surrounding environment. By modifying the seating, maintenance will be

reduced to mowing, which is already a required maintenance activity (Map 27: Enhanced trail system at George J. Hartman Play Fields).

The Hopkins Area precinct was defined as South Hopkins and North Hopkins in the Nomination Study Master Plan and includes areas primarily along Hopkins Street and Reading Avenue. Due to similar land use designations in these areas, as well as recommendations made in the Green Code, the precincts have been joined and are now referred to as the Hopkins Area. The Hopkins Area also incorporates part of the Alltiff landfill and is proposed as a light industrial park in the Nomination Study.

The Hopkins Area is defined by its light industrial and residential uses that coexist throughout the community. The Nomination Master Plan recommends that Hopkins Street be transformed into a mixed use Main Street community with 2-3 story structures comprised of commercial uses at grade and potential residential, office or commercial uses above. Through the development of the Green Code and Implementation Strategy it was determined that retail and commercial uses are most desirable on South Park Avenue where a Main Street condition already exists. Hopkins Street and Reading Avenue provide an opportunity to have small scale support uses for RiverBend and Buffalo Lakeside Commerce Park. These uses along with appropriately scaled development, as defined in the Green Code, will create a desirable transition and buffer between the residential community and the adjacent light industrial uses.

Existing Neighborhoods precinct boundaries define the edges of residential neighborhoods within the South Buffalo BOA. The Nomination Study Master Plan expanded the residential areas to include new development opportunities at Nevilly Court and the adjacent streets. Since completion of the Nomination Study it has been determined that an expanded residential area is not desired and that reinvestment in the existing neighborhood is preferred. The updated precinct areas include this revision.

Many of the existing residential streets include incompatible uses and vacant lots which impact the quality and character of the community. The Green Code provides specific zoning and design guidelines that eliminate the future potential of these conflicts in use and character. The city's proposed zoning regulations are consistent with the South Buffalo BOA's vision to create a community that embraces its existing assets and encourages infill development.

The Existing Neighborhoods precinct in the north includes three Buffalo Urban Renewal Agency (BURA) owned parcels. These sites have been assessed and are waiting funding to complete remediation pursuant to a U.S. Environmental Protection Agency Consent Order. This Strategy reiterates the Nomination Study recommendation that these specific parcels be remediated. It is recommended that the city explore remediation funding opportunities through the Environmental Restoration Program. These remediated parcels will improve the quality of the neighborhoods and allow for stronger, long-term investment in the area by residents.

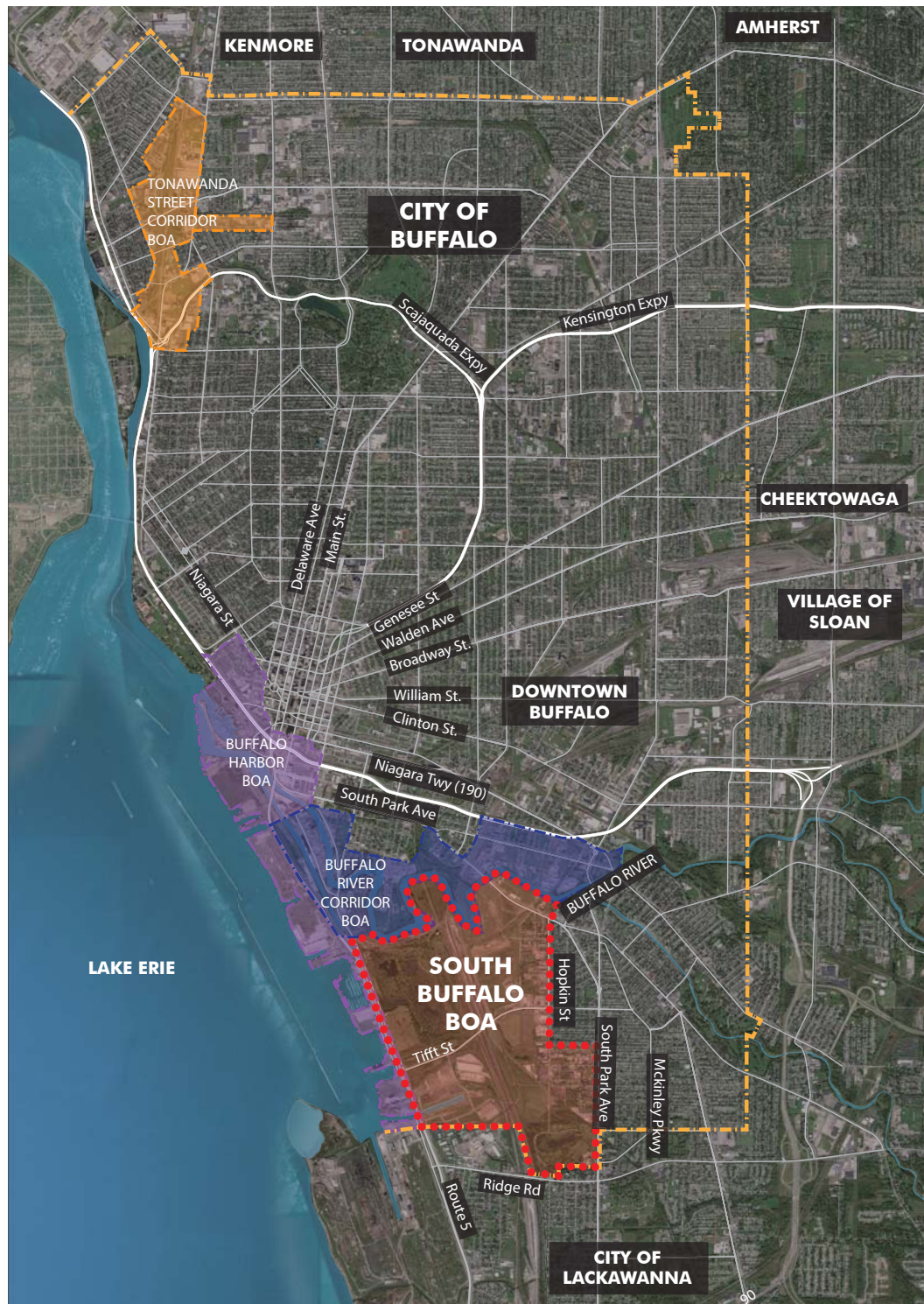
4.3 Buffalo Green Code Summary

The Green Code is a place-based development strategy intended to implement Buffalo's Comprehensive Plan: The Queen City in the 21st Century. The Green Code functions as two parts. The first step applies the principles of the Comprehensive Plan to a Future Land Use Plan that will guide the city's physical development over the next 20 years. The new Land Use Plan was developed to add detail to the goals of the Comprehensive Plan. The second step is a new Zoning Ordinance designed to implement the Land Use Plan. The Buffalo Green Code also brings together and codifies land use strategies from an array of planning initiatives that comprise the Buffalo Consolidated Development Framework. This framework includes: Green Code Land Use Plan, four BOA's, Local Waterfront Revitalization Program (LWRP), Green Code UDO, and disposition of Urban Renewal Plans.

The BOA planning effort places renewed focus on vacant and underutilized land in commercial and industrial districts. A majority of these lands are considered brownfields, which is defined as land that has perceived or actual environmental conditions that hamper redevelopment. Since 2006 the City of Buffalo has been evaluating the redevelopment potential of various locations that have a concentration of potentially contaminated lands. With financial and technical assistance from the New York State Department of State (NYS DOS) and New York State Department of Environmental Conservation (NYS DEC), the City has been able to advance planning efforts for four BOAs in the City. These BOAs include: South Buffalo, Buffalo River Corridor, Buffalo Harbor and Tonawanda Street Corridor (Map 28: City of Buffalo and Brownfield Opportunity Areas). The BOA Master Plans will identify redevelopment and reuse strategies for these areas.

Although the City is finalizing the Buffalo Green Code, many areas of the City have an additional layer of regulations that are found in the 30 existing Urban Renewal Plans (URP). The plans associated with Urban Renewal Areas were intended to guide development in specific areas of the City. In practice, the URPs acted as another layer of zoning which, at times, conflicted with the base zoning of an area. Removal, replacement or modification of these plans will eliminate zoning conflicts and are intended to give additional predictability to developers proposing projects in these areas under the new UDO.

The City has approximately 57.7 linear miles of waterfront land along Lake Erie, the Niagara River, the Buffalo River, and the Scajaquada Creek. This waterfront land is a recreational, economic and ecological resource. Many of the areas along these waterways are located in a State-designated Coastal Management Program Boundary. In order to protect and enhance these areas the City has prepared a Local Waterfront Revitalization Program (LWRP) which establishes waterfront development and protection policies.



Map 28: City of Buffalo and Brownfield Opportunity Areas

LEGEND

- BORDER OF THE CITY OF BUFFALO
- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

The second element of the Green Code is a new zoning ordinance designed to implement the Land Use Plan described above. The Green Code is based on the concept of place-based planning. This new approach puts emphasis on building form and design instead of the more conventional designations of land use. The Green Code will create place-types that reflect the community's vision for certain areas, as well as embrace mixed use development where residential, retail, office, recreational and institutional spaces coexist, creating diverse urban centers.

The principles of the Green Code are represented by a three tiered approach, prioritizing economic well-being, social equity and environmental quality. The Code translates these principles into three main themes, all of which must be addressed in order to achieve true sustainability. The themes are:

- *Economy:* Reinforce downtown as a regional hub, support emerging knowledge economy, grow employment centers, increase retail activity, optimize access and circulation
- *Neighborhoods:* Reinforce walkable neighborhoods, build on existing neighborhood strengths, maximize housing choice and affordability, improve transportation options
- *Environment:* Enhance natural resources, reinvigorate public health, preserve natural, cultural and historic resources, protect and enhance open spaces and waterways

The intent of the document is to create sustainable development that reinvests in the city's core while preserving and enhancing the natural environment. The goal is to achieve maximum social benefit, creating vibrant neighborhoods that have a clear blueprint for sustainable growth. The Green Code is expected to be complete and adopted by the end of 2014. More detail can be found in *Appendix H*.

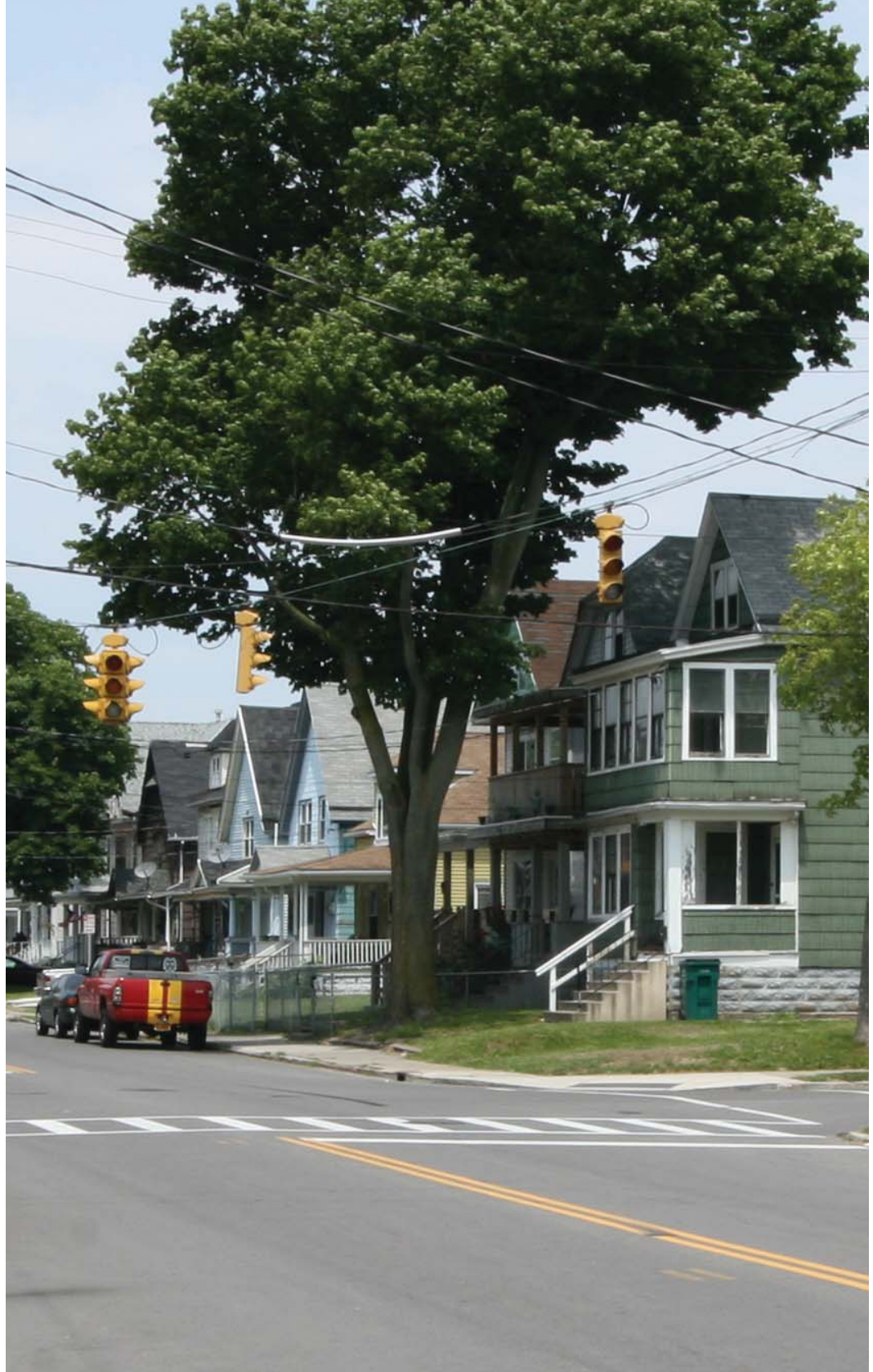
4.4 RiverBend Summary

After completion of the Nomination Study, the RiverBend Master Plan (2011) was developed and provided a revised land use plan and employment projections for the RiverBend site. This plan is the first Implementation Strategy that was completed for the South Buffalo BOA and incorporates 260 acres. RiverBend is defined on the south by Tiff Street, the rail corridor on the west, Buffalo River on the North and Rittling Drive, Abby Street and New Abby Street on the east. Similar to the Nomination Study Master Plan, the RiverBend Master Plan proposes a sustainable mixed-use development with a multi-modal transportation system and a holistic approach to the site's ecology. The Master Plan is based on themes to Connect, Restore, Transform, and Engage with an emphasis on the creation of a regional asset. At full build-out, the RiverBend Master Plan, predicts that 3,550 jobs will be created and 3,115,000 gross square footage (GSF) of development will occur over a twenty year period.

Since the release of the RiverBend Master Plan, Governor Andrew M. Cuomo announced the creation of the Buffalo High-Tech Manufacturing Innovation Hub at RiverBend (2013). This facility will create more than 2,000 jobs and \$1.5 billion of investment and will occupy approximately 10% of the South Buffalo BOA acreage. On the northern end of RiverBend at the former Village Farms site, the English Pork Pie Company, which produces traditional English pork pies for distribution nationally and internationally, relocated their food manufacturing plant and headquarters to an existing facility in 2011. The company is currently studying options for expanding their product and employment opportunities in the near future. The diversity of manufacturing represented by these companies demonstrates that economic redevelopment is viable in the South Buffalo BOA.

In addition to the development announcements, one phase of a shoreline restoration project proposed in the Nomination Study Master Plan and RiverBend Master Plan has been completed on the north-east side of South Park Avenue. A second phase is planned on the south-west side, both within the South Buffalo BOA. The RiverBend Master Plan emphasizes public access throughout the 1.3 miles of riverfront in the form of naturalized trails and public promenade.

The RiverBend Master Plan provides development guidelines that encourage a green, modern and vital urban neighborhood to create a regional destination for jobs and a new urban destination. A new system of roads, pedestrian circulation and transit defines the framework for the urban grid. A comprehensive green infrastructure plan will restore damaged ecosystems and allow the riverfront to be better utilized and appreciated by the local community. Over three million square feet of new development will transform the vacant site into an active engine of job creation for the region. The RiverBend Master Plan and Design Guidance document can be found in *Appendix E*.



4.5 Hopkins Street Neighborhood Revitalization Strategy

The Hopkins Street neighborhood is located in the South Buffalo Brownfield Opportunity Area (BOA). The BOA program is a New York State initiative that provides communities with the planning and decision-making tools necessary to develop revitalization strategies for areas impacted by the presence of brownfields. The state program is a three step process that includes: Pre-Nomination Study, Nomination Study and Implementation Strategy. The South Buffalo BOA was entered into the program in 2007 and was approved to bypass the Pre-Nomination Study phase due to the city's completion of the previous planning effort with the South Buffalo Redevelopment Plan in the late 1990's. The South Buffalo BOA Nomination Study was completed in 2009 and includes a comprehensive analysis of existing conditions, revitalization strategies, master planning and economic analysis. This document along with the Implementation Strategy represents the final product of the BOA program. The South Buffalo BOA Implementation Strategy builds on prior and concurrent planning efforts to identify a range of potential projects that focus on redevelopment of strategic sites, encourage public investment and improve the environmental quality throughout the study area. The final South Buffalo BOA Implementation Strategy will provide stakeholders with a roadmap of opportunities that can lead to a transformative change in both the short and long term.

The Neighborhood Revitalization Strategy focuses on the Hopkins Street Neighborhood which is located along Hopkins Street, and runs north-south on the eastern edge of the South Buffalo BOA. This community includes a mix of residential, commercial and industrial uses. For most of this community's history, the neighborhood has been defined by the steel industry which was in operation for much of the 20th century. The image of a 'pub on every corner' with vibrant commercial districts and dense residential neighborhoods intermingled with industrial facilities was typical for this era. Strong neighborhood connections existed, linking residents to places of commerce and to social and recreational amenities in the community. As the steel industry diminished and no longer held a presence in the South Buffalo BOA, the neighborhood fabric deteriorated.

There is a growing trend in municipal planning to focus on developing Neighborhood Revitalization Plans to address many of these issues, particularly in rust-belt cities where economic opportunities drastically changed over the course of the past century. Effective Revitalization Plans are typically resident-led to give those most affected by the plan a voice. In addition they generally adopt a place-based approach to improve quality-of-life, address critical environmental, economic, and social challenges, and focus on the strengths of the community to more effectively capitalize on future development opportunities.

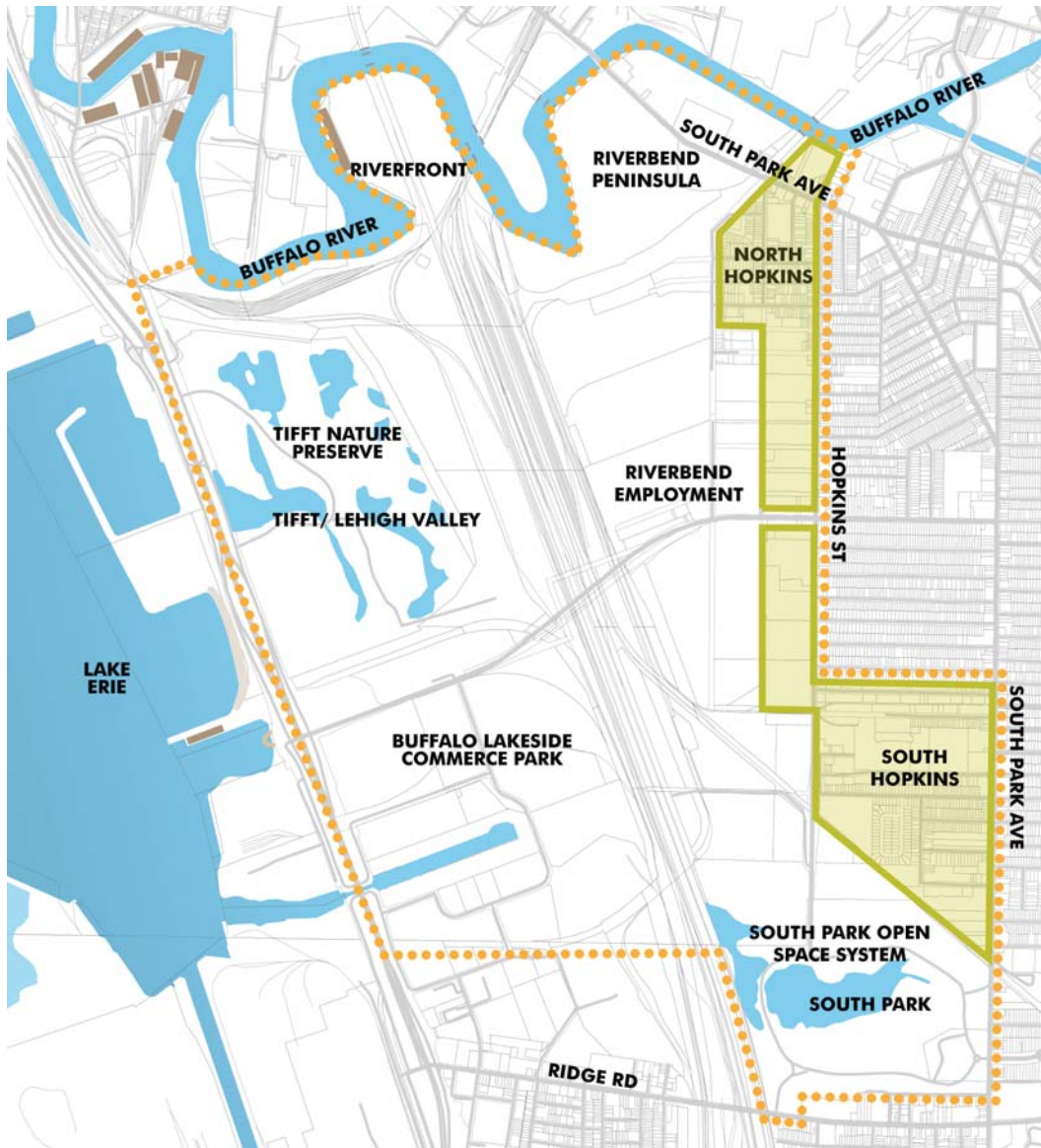
The Revitalization Strategy for the Hopkins Street neighborhood seeks to address many of these similar challenges. As the steel industry left the area, people relocated and many homes and businesses became vacant and experienced disinvestment. In recent years, brownfield cleanup efforts and public infrastructure investments throughout the South Buffalo BOA have paved the way for redevelopment.



Image 11: Rendering of the Buffalo High-Tech Manufacturing Innovation Hub

The Hopkins Street Neighborhood is now undergoing transformation and has the opportunity to develop as a place where residents can live, work, play and learn. Ongoing planning and development efforts by New York State and the City of Buffalo are kick starting further development in South Buffalo. The creation of the Buffalo High-Tech Manufacturing Innovation Hub at RiverBend will provide a center for green manufacturing and become a catalyst for investment in the area (Image 11: Rendering of the Buffalo High-Tech Manufacturing Innovation Hub). The Innovation Hub is a major stepping stone towards making Buffalo a hub for innovation, and attracting businesses from around the world. This initiative projects the generation of over 1,000 jobs and \$1.5 billion of investment in properties adjacent to the Hopkins Street Community. In addition to these investments, there has been increased growth of existing companies within the Hopkins Street Community including: the English Pork Pie Company and Modern Recycling. Business investments and job opportunities in the Hopkins Street Community and adjacent neighborhoods further enhance the potential to create a thriving live-work community.

By empowering residents to embrace the community's assets, untapped resources, energy and creativity, the collective desires of the community for a better future can become a reality. Developing area-wide initiatives that build on and enhance ongoing investments will provide the groundwork for the future of the neighborhood. The Neighborhood Revitalization Strategy (NRS) outlines guiding principles and initiatives that have been developed through community and stakeholder input throughout the planning process. These principles aim to create a community that includes spaces to live, work, play and learn in order to achieve the community's vision. An attractive, healthy and vibrant community is one that has businesses that support housing, educational facilities, community services and includes recreational destinations. Therefore, the key strategies in the NRS are intended to address issues associated with and improve: quality of life, workforce development and housing.



Map 29: Map of Neighborhoods

Two target areas are identified within the Hopkins Street Neighborhood. The northern section (“North Hopkins”) is defined by New Abby Street and South Park Avenue on the North, Abby Street to the west, Tift Street on the South, and Hopkins Street on the east. The southern section (“South Hopkins”) is bounded by Reading Avenue on the north, Hopkins Street on the west, South Park on the south and South Park Avenue on the east. A map of the Hopkins Street Neighborhood Revitalization Study area and target areas is included as (Map 29: Map of Neighborhoods).



Image 12: Hopkins Street Landowner Meeting

4.5.1 Community Outreach

Public and stakeholder participation was an invaluable component to the development of community vision for the NRS. The community outreach process, which included stakeholder interviews, public open houses, steering committee meetings, and attendance at local community meetings, contributed directly to the plan development. As detailed in Section 2.5 of the South Buffalo BOA Implementation Strategy, numerous outreach techniques were utilized to engage as many of the community members as possible which included the use of print media, the internet (i.e. social media), fliers and outreach through community organizations, City and State Representatives. (Image 12: Hopkins Street Landowner Meeting) (Image 13: Public Outreach Fliers)

Local community advocates played a pivotal role in providing community insight on varying issues from crime, building inspections, housing, infrastructure, local investments and community resources. These advocates included: individual land owners, elected officials, city department staff and community groups, including the Neighborhood Housing Services (NHS) of South Buffalo and the Old First Ward Community Association. NHS and Old First Ward Community Association provide housing and human services while promoting economic redevelopment to improve quality of life. Grassroots organizations such as these are a critical component to improving the neighborhood through small but important investments.

The NRS will set the stage for the transformation of the Hopkins Street Neighborhood's natural, economic and social conditions through targeted initiatives. The NRS presents strategies and identifies potential partners and funding sources to achieve success. The successful transformation of the Hopkins Street Neighborhood will require continued community engagement with champions for each initiative and to hold people in power accountable.



Image 13: Public Outreach Fliers

4.5.2 Existing Conditions Summary

A plan is only as good as the information on which it is based. To develop a comprehensive Neighborhood Revitalization Strategy it is therefore necessary to conduct a thorough review of the demographic, economic, physical and environmental conditions of the community, which was completed in Section 3, Existing Conditions Analysis of the South Buffalo BOA Implementation Strategy. Information Sources such as the United States Census Bureau and the Bureau of Labor Statistics were used to compile the data to portray the physical and demographic information related to the study area. A more comprehensive existing conditions analysis for the entire SBBOA study area is included in the Nomination Study, with an update provided as part of this Step 3 Implementation Strategy. The existing conditions for the study area, as identified through the initial inventory, are summarized below.

Population

Population composition as well as growth or decline has a direct impact on the services required both locally and regionally. Population change may additionally indicate the inability of a community to meet the needs of its residents, causing them to relocate to areas with improved quality-of-life. Between 1990 and 2000, the city of Buffalo lost approximately 11 percent of its residents, with an additional 11 percent loss between 2000 and 2010. The Hopkins Street neighborhood has mirrored city-wide trends, losing approximately 12 percent of its population between 2000 and 2010 (Table 2: Population Change). By comparison, the Buffalo-Niagara MSA lost only 3.3 percent of its population, suggesting the city continues to experience population loss to surrounding first and outer ring suburbs.

Another important consideration is a community’s age breakdown. Different age groups require different services to enhance their quality-of-life. The age breakdown of an area

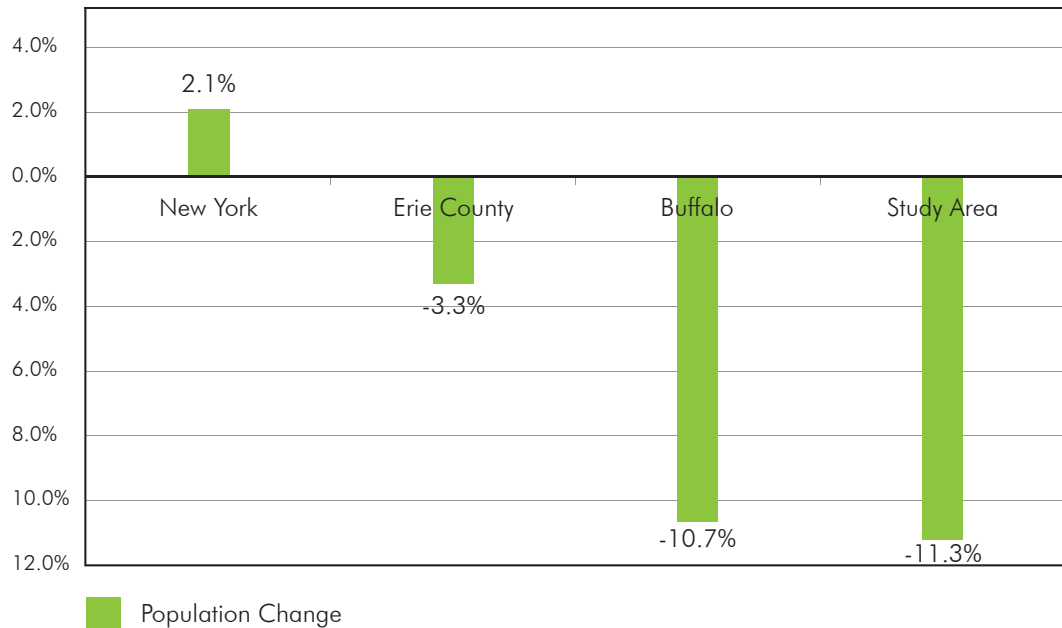


Table 2: Population Change

additionally has implications on the community’s vision and goals, and may require the addition of specialized services and amenities in order to realize their vision. According to the 2010 census, the majority of the study area residents are between 40 and 64 years of age (33.5 percent). The second largest age group in the study area consists of residents under the age of 19 years (29 percent). This age bracket represents school aged children who tend to utilized recreational amenities and community centers and require quality schools to provide the educational tools required for future success.

The study area is well represented by a cross section of age groups. Age diversity is beneficial to communities as each age group contributes different knowledge, experiences and skill sets. However, the study area has experienced population loss, similar to the City of Buffalo. Population retention and quality-of-life are key considerations to promote long-term residency and ownership in neighborhoods. The City has the opportunity to identify improvements and amenities to retain and attract residents to the study area as has been seen with the recent economic announcements.

Income

According to the American Community Survey 5-year estimates (2012), the median income in the City of Buffalo is approximately \$30,000 compared to a median income of \$50,000 in Erie County and \$56,000 in New York State. Approximate income data through the U.S. Census Bureau is only released for larger geographic areas due to the sensitivity of the information, and therefore is not available for the study area, which was evaluated at the census tract level. However, other demographic information, such as population and



Image 14: Hopkins Street

housing characteristics, suggest that income growth within the study area mirrors the city. Recent successes throughout the city to attract new, niche industries to former industrial areas (i.e. RiverBend Commerce Park) are increasingly providing opportunities for the city to educate and train the workforce and attract skilled workers to the region. New employment opportunities may additionally provide higher paying job opportunities for existing and new residents.

Educational Attainment

Educational attainment directly relates to the ability of residents to attain higher paying jobs, acquire the capital to invest in their communities, and to adapt to changing economic conditions. According to the 2010 census, the study area has a larger proportion of residents who have less than a high school degree (22.3 percent) compared to the city, Erie County, and New York State. In addition, only 9.4 percent of the study area has obtained a Bachelor's degree and only 2.5 percent of residents have obtained graduate degrees. The study area lags behind the city, county and state with respect to residents attaining advanced degrees. The study area would benefit from having an educated and trained workforce, particularly with the announcement of new advanced manufacturing companies locating to the study area. The city has the opportunity to engage residents regarding new employment opportunities and assist with identifying workforce development opportunities, as determined to be relevant to the goals of the community.

Housing

The study area has a mix of older and newer housing units that are relatively affordable (Image 14: Hopkins Street). The Hickory Woods neighborhood (i.e. the North Hopkins target area), was developed in the 1990s. As part of this development, approximately 60 new single family homes were constructed. The majority of homes in this neighborhood are assessed between \$30,000 and \$50,000, although some newer homes along Abby Street are assessed at more than \$60,000. At both steering committee meetings and community meetings, residents and stakeholders raised concern over the poor neighborhood housing



Image 15: Existing street condition on Reading Avenue

conditions that exist. Stakeholders and residents noted that the majority of property maintenance issues are due to absentee landlords failing to maintain their rental units. As part of this NRS, a neighborhood survey was completed. During field visits, several vacant buildings and lots were observed in disrepair with numerous code violations. An overview of building conditions per block is included in the Curbside Assessment Surveys (*See Appendix B*) to identify areas that would benefit from additional enforcement or investment.

Over the past several decades, the city of Buffalo has been experiencing a decline in the number of households and consequently has had an oversupply of housing stock. According to the 2000 and 2010 census, approximately 12.6 percent of the housing within the study area is vacant, which is slightly lower than 2000 vacancy rates (12.7 percent). By comparison, 15.7 percent of housing is vacant in the City of Buffalo. High vacancy rates have an adverse impact on neighborhood quality, often signaling disinvestment or inviting nuisance activities.

Homeownership is another important consideration for neighborhood quality-of-life. Residents who intend to live in the neighborhood over the long-term generally have a vested interest in maintaining the quality of their properties and community. It is important to note that higher numbers of absentee landlords frequently contribute to reported nuisance activity. While the majority of area residents are homeowners (56.7%) there has been an increase in the number of renter-occupied housing over the past decade. A larger proportion of residents within the study area own their homes than the city as a whole. However, between 2000 and 2010, home ownership declined by 6.4 percent.

Homeownership and investment in the community should be encouraged to improve quality-of-life and retain residents. Long-term goals for the study area should include rehabilitation of the existing housing stock and identifying programs and methods for increasing homeownership.

Infrastructure

As part of the existing condition summary, a visual assessment was performed to determine the condition of the existing infrastructure in the Hopkins Street Neighborhood. These observations include assessment of the existing land use, street, sidewalk, building stock and landscape conditions. The assessments are intended to provide information to determine areas that require investment and where opportunities exist for development.

The condition of the streets and sidewalks in the Hopkins Street Neighborhood varies throughout the corridor from recently paved and striped to unimproved areas lacking curbs and sidewalks. The assessment accounts for these conditions along with the condition of the material (Image 15: Existing street condition on Reading Avenue). The quality of the community's streets and sidewalks should enhance a sense of community while providing accessibility for all users. Streets that have delineated areas for motorists, bicyclists and parked cars provide a sense of safety for users. Continuous and accessible sidewalk networks improve mobility for all pedestrians and are particularly important for pedestrians with disabilities.

An example of the curbside assessment is below with the complete Hopkins Street Curbside Assessment included in *Appendix B*.

4.5.3 Vision, Guiding Principles, Objectives and Actions

The vision for Hopkins Street was developed through input from residents, non-for-profit organizations, private sector representatives, neighborhoods groups, government agencies, and other interested parties. Below is the vision for the community:

Vision Statement

The Hopkins Street Neighborhood is a community with a vibrant, engaging setting that embraces its natural assets and invests in sustainable development projects. The Hopkins Street Neighborhood is characterized by clean and safe streets that promote alternative transportation options and connect residents to assets and destinations outside of the community. Residents invest in the existing residential building stock to maintain the character of the area, and new investments continue to be made to generate housing for a mix of income levels. Hopkins Street is known for its successful retail, office, service and hospitality businesses, which enable residents to enjoy all the attributes of urban living. (Image 16: Vision for Hopkins Street Rendering)

The NRS offers techniques and best practices to achieve the vision set forth above. The NRS is a working document that is intended to be flexible and adapt to external factors while being guided by the vision and principles set forth by the community. Success will be achieved through small incremental actions and continued community advocacy.



Image 16: Vision for Hopkins Street Rendering

Guiding Principles, Objectives and Actions

This NRS identifies five guiding principles that are supported by specific objectives and actions. They represent the core values identified through the stakeholder working groups and align with the development priorities established by the Western New York Regional Economic Council. The guiding principles for the Hopkins Street Neighborhood include workforce development, building community resources, housing, quality-of-life, and sustainable development. The principles, when considered together, will contribute towards achieving the community’s vision.

1. Workforce Development: The Hopkins Street Community was defined by the steel industry throughout the late 19th and early 20th Century. During this era the residents fulfilled the needs of the local manufacturing plants providing a blue collar workforce. With the demise of the local steel industry, these workers and the community were left with an employment void. The community and City at large have an opportunity to increase business investment and expand employment by training its workforce with the skills required for growing and hiring industries. This guiding principle aligns with the goals and vision outlined in the Buffalo Billion Investment Strategy for workforce development. Supporting workforce development opportunities promotes aligning the skills of workers behind career paths, certificates and degrees required for core industries, such as manufacturing, healthcare and tourism. This approach will create a flexible, industry-demand-driven and inclusive training environment.

Challenges and Opportunities: Western New York has an abundance of colleges and universities, which are a critical source of educated labor for employers throughout the region. However, the graduates entering the workforce do not necessarily align with workforce needs. In Western New York, for example, a majority of job openings (75 percent) require no college degree. This gap often leads to “brain drain,” where much of knowledge capital opts to relocate, impacting the region’s competitive advantage in attracting and

sustaining businesses and residents. With the recent economic announcements of incoming industry, Buffalo, and particularly the Hopkins Street neighborhood, have the opportunity to identify workforce needs and create workforce development programs to better align job seekers to meet those requirements.

Objective A: Educate neighborhood residents to training opportunities in targeted industries.

Actions:

- Identify opportunities to provide evening adult basic education and computer classes at neighborhood schools, through existing community centers and faith-based organizations.
- Use best practices to link non-profits, community organizations, community colleges and technical schools to enable residents to develop hard skills, soft skills and support services training.
- Work with area schools to design and support early and middle college programs that provide students with the skills they need to advance to higher education and in-demand occupations.
- Work with neighborhood businesses to create scholarship funds for neighborhood students.

Objective B: Ensure that neighborhood residents are aware of job opportunities that align with their skills or available training opportunities.

Actions: Connect neighborhood residents to training opportunities in targeted industries. Promote adult education opportunities such as programs offered at the Buffalo Center for Arts and Technology.

- Collaborate with local schools and churches to provide evening adult education courses.
- Work with local businesses and intermediaries to ensure local residents are aware of job opportunities.
- Work with local businesses on work training programs for neighborhood residents who work in entry-level or apprentice jobs in companies where advancement potential exists.

2. Building Community Resources: The availability of and access to community resources is an important neighborhood quality that may directly impact an individual's desire to reside in an area. Community resources, including community centers, childcare facilities, continuing education opportunities and others contribute to quality-of-life.

Objective A: Establish partnerships and provide resources necessary to encourage mixed income and mixed-use neighborhoods.

Actions: Strengthen public and private partnerships to align neighborhood revitalization efforts with this Neighborhood Revitalization Strategy.

- Support and promote home-buyer education, financial and budget management programs to help households maintain and increase the value of their investments in homeownership.
- When possible, co-locate workforce development programs with homeownership centers and vice versa.

Objective B: Create the organizational capacity necessary to see recommendations of the NRS and South Buffalo BOA Implementation Strategy through to implementation.

Actions:

- Create the North Hopkins Community Association. The current community has two city registered block clubs: Abby Street and Hickory Woods. Currently there are no strong business advocates that have been defined in the community. These existing block clubs have been very vocal in the past and would provide engaged community members that can form and lead a community association effort. Leaders of the Association can contact the City Board of Block Clubs to organize and guide its effort for forming the association.
- Create the South Hopkins Community Association. The current community has two city registered block clubs: Colgate Avenue and Marilla Street. There are numerous successful local and international businesses in the community including Sorrento Lactilis, Pellicano Specialty Food and Heintz & Weber Company to name a few. The Reading Avenue community has come together in the past for the South Buffalo Italian Festival showing a strong interest in celebrating its community. Create a single association that focuses on community wide issues led by residents and business leaders. This approach will provide the most leverage in pursuing the initiatives defined in this strategy and ongoing community concerns. Strong engaged leaders within these groups should form the association. These leaders can contact the City Board of Block Clubs to organize and guide its effort for forming the association.
- Strengthen the relationships between residents and businesses to facilitate alignment of the neighborhood efforts with this strategy
- Promote the Revitalization Strategy throughout the community to build on community support
- Promote membership to new community associations
- Create a Hopkins Street Steering Committee formed by the local city councilmember

that includes leaders from the following organizations: proposed North Hopkins Community Association, proposed South Hopkins Community Association, Office of Strategic Planning, Office of Public Works, Parks & Streets, South Buffalo Neighborhood Housing Services, Olmsted Parks Conservancy, South District Council Member (currently Christopher Scanlon), Buffalo Niagara Riverkeeper. The goal of the committee is to coordinate the initiatives defined for the community and advocate as one voice.

- Pursue initiatives defined in the revitalization strategy based on priority list and available funding.

3. Housing: A mix of market rate and affordable housing are central to the health of a community. The healthiest neighborhoods have individuals and families of varying income levels living side-by-side, in safe environments.

Challenges and Opportunities: One of the primary challenges associated with housing in the Hopkins Street Neighborhood is an aging housing stock. In particular, homeowners with modest income levels may have a more difficult time rehabilitating or maintaining their properties if the proper resources are not available. In addition, the neighborhood may experience difficulty establishing new, market rate housing and overcoming environmental issues associated with former industrial operations in the area. However, large numbers of vacant properties and new industrial development at RiverBend provide the opportunity to attract new residents and introduce market rate housing to the area.

Objective A: Introduce market-rate and mixed-use housing to the neighborhood. (Image 17: Market Rate Housing)

Actions:

- Identify publicly owned properties that are candidates for short-term redevelopment opportunities.
- Collaborate with major employers to provide a comprehensive Employer-Assisted Housing Program to attract and retain new residents along with a diverse, quality workforce, thereby reinforcing the connection between housing and economic development.
- Encourage incorporation of new housing into RiverBend development.

Objective B: Develop and promote housing programs that advocate homeownership and maintenance, while increasing the value of neighborhood assets and improving quality-of-life.



Image 17: Market Rate Housing

Actions:

- Promote homeownership as a means to build wealth.
- Encourage home-buyers and existing homeowners to work with NHS for education, financial and budget management programs to help maintain and increase the value of their investments. NHS offers additional programs on predatory lending practices and identity theft.
- Encourage existing homeowners to work with NHS weatherization team to evaluate their existing homes and identify opportunities to create a more comfortable and efficient environment.
- Provide down payment assistance programs that help buyers build equity through homeownership.

4. Quality of Life: The natural, open space and historic assets surrounding the Hopkins Street Community can be a catalyst for strengthening its competitive advantage and attracting higher value uses to the area. In particular Tiff Nature Preserve, Buffalo & Erie County Botanical Gardens, South Park, the Outer Harbor, and Buffalo River can be used to leverage both public and private investment. By connecting these natural assets and branding them as a whole, the community will be distinguished from other areas in the city and attract visitors, new residents, infill development and new business opportunities.

Objective A: Support development and further integration of pedestrian path network to connect residents and businesses to commercial, social, recreation and natural amenities. The Implementation Strategy provides six detailed targeted initiatives to achieve these objectives.

Actions: Section 4.8.2 of the Implementation Strategy details the initiatives defined to implement this strategy. The initiatives include:

- **RiverBend Trail Initiative:** Create a north-south recreational pedestrian and bicycle connection that connects the trails along the Buffalo River and South Park Avenue



Image 18: Paper Street Trail

in the north with Tifft Street and the proposed All-Tifft trail system in the South.

- All-Tifft Trail Initiative: Creation of a pedestrian trail system at the All-Tifft recreational site will connect South Park and the residential community on the southern end of the South Buffalo BOA with the proposed RiverBend trail system. This connection will provide a trail system from South Park to the Buffalo River.
- Paper Street Trails Initiative: Paper streets are public streets identified in the real property system but never constructed. The South Buffalo BOA has two significant paper streets, Germania Street and Colgate Avenue, which provide an opportunity to be linkages to a larger trail system. (Image 18: Paper Street Trail)

Objective B: Transform the existing street network into an integrated community system for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. In conjunction with the South Buffalo BOA implementation effort the City of Buffalo Department of Public Works installed bike lanes along South Park Avenue to improve the bicycle connectivity to the downtown core and begin the transformation of the street condition. (Image 19: Complete Street Infrastructure at South Park Avenue)

Actions: Section 4.8.1 of the Implementation Strategy details the initiatives defined to implement this strategy. The initiatives include:

- Tifft Street Initiative: Tifft Street from Route 5 to Hopkins Street is the major connector between South Buffalo and the Outer Harbor. Creating a safe and welcoming condition for all users with gateways, on the east and west of Tifft Street, will create a welcoming condition that transforms the appearance of this community.
- South Park Avenue Initiative: South Park Avenue provides a critical link from downtown Buffalo to the South Buffalo Community. Creating a gateway condition at the South Park Bridge and improving the infrastructure can provide a desirable and memorable entry to the South Buffalo BOA.
- Hopkins Street Initiative: Hopkins Street represents a key north-south connector



Image 19: Complete Street Infrastructure at South Park Avenue

for the South Buffalo BOA with a variety of uses, property conditions and street conditions. The vision for Hopkins Street is a tree lined condition that incorporates all standards of the complete street practices to encourage community engagement and development in this area.

- Reading Avenue Initiative: Reading Avenue is an important east-west connector between Hopkins Street and South Park Avenue. The development of this corridor will create a gateway condition for the southern portion of the South Buffalo BOA.
- Germania Street Initiative: Germania Street bisects a residential and light industrial area on the east edge of the South Buffalo BOA. The location that bisects the Hickory Woods neighborhood should continue to serve the community as a pedestrian friendly and low-speed neighborhood street. Germania Street, from Beacon Street to Tiff Street, can offer back door access for the Hopkins Street light industrial and commercial businesses. By allowing rear access the truck traffic can be diverted to Germania Street to create a safer and improved residential condition along Hopkins Street
- New Abby Street and Amelia Street Initiative: The connection of New Abby Street and Amelia Street allows for the removal of New Abby Street from Amelia to South Park Avenue. This approach provides an area for additional residential development, expanded landscape buffer at RiverBend and a improved intersection condition at Hopkins Street and South Park Avenue.

Objective C: Enhance the feeling of safety and security within the neighborhood. In conjunction with the South Buffalo BOA implementation effort Modern Recycling has announced they will conduct a neighborhood cleanup day in the spring of 2014 in partnership with NHS, Old First Ward Community Association, the Buffalo Sabres Green Team and other local partners.

Actions:

- Establish and/or support a neighborhood watch group to deter crime and promote



Image 20: Vacant lot community garden

property maintenance by providing “more eyes on the street.”

- Evaluate locations within the study area in need of lighting improvements.
- Promote increased police presence in areas identified with safety issues.

5. Sustainable Development: Creating a community that offers a better quality of life for everyone, without sacrificing the ability of future generations to meet their own needs is the core philosophy of sustainable development. As is the case with many industrial downtowns in the past, they were built in response to the needs of the time while not taking into consideration the long term economic and health of the area and its residents. Sustainable development policies and practices challenge us to undertake neighborhood revitalization in ways that protect the physical environment, efficiently use resources, promote social equality/social responsibility and improving the quality of life and well being of residents.

Objective A: Promote clean-up and redevelopment of former industrial properties to promote economic development opportunities. (Image 20: Vacant lot community garden)

Actions:

- Section 4.8.3 of the Implementation Strategy details an initiative defined to implement this objective. The initiative includes:
 - Vacant Lands Initiative: Vacant lands are often perceived as places of crime, neglect, and abandonment, with legitimate concerns for safety. These parcels, some of which may remain vacant during revitalization, can instead have a positive influence in the community, especially if considered as temporary gardens or habitat areas. Vacant lands located throughout the South Buffalo BOA vary in condition. However, they should be considered when creating new connective spaces throughout the neighborhood, in order to provide community benefits and accommodate a range of uses



Image 21: Storm water mitigation using rain gardens

- Continue to work with property owners of strategic sites to inform of benefits associated with environmental testing/remediation.
- Identify funding sources to provide assistance with testing, remediation, and property redevelopment.

Objective B: Promote the use of green infrastructure in redevelopment and infill development projects. (Image 21: Storm water mitigation using rain gardens)

Actions:

- Section 4.8.3 of the Implementation Strategy details the initiatives defined to implement this objective. The initiatives include:
 - Re-Tree Streetscapes Initiative: Urban forests play an important role in the overall ecological health of city and street trees. Improved streetscapes may provide a seamless transition between formerly isolated areas. Creating a healthy and diverse tree canopy will transform streetscapes in the South Buffalo BOA into an inviting and vibrant condition.
 - Stormwater Management Initiative: Green infrastructure practices are critical to improving the condition of our natural waterways and reducing the demand on the cities stormwater infrastructure. Integration of green infrastructure throughout the urban landscape will provide treatment of stormwater and safe conveyance of treated runoff to the Buffalo River. This cost-effective and sustainable approach to stormwater management includes technologies to infiltrate, capture and reuse stormwater.

4.6 South Buffalo Golf Course Feasibility Study Summary

The South Buffalo Golf Course Feasibility Study (2014) explores a range of issues affecting the feasibility of developing an 18-hole golf course on a 201-acre brownfield site located within the South Buffalo BOA. A golf course on the site was a recommended implementation action proposed in the Nomination Study. It was seen as an option to put remediated lands to productive use while helping to connect the open space network in the area. The golf course would be a recreational amenity and add value for surrounding uses. In addition, a new golf course would enable the removal of the existing golf course from historic South Park and the restoration of Olmsted's 1894 vision for an arboretum in the park.

The study area is approximately 201 acres in size, consisting of 27 parcels with nine separate owners. A variety of constraints effectively limit the useable area to about 62 acres. While most of the parcels are vacant, some remain in active use, including two automobile scrap yards. One 24-acre parcel included within the study area is no longer available for sale. Many of the parcels present significant environmental issues, including closed landfills and former industrial uses. The site is bisected by an active railroad line, constraining the ability to use the entire site. The central area of the site includes a large wetland area and a lime pile that further complicate connections between the northern and the southern sections. The wetland, created as part of the remediation of the property, is a valued resource. Removal of the lime pile is underway, but will likely require a number of years before complete.

The study included Environmental Site Assessments (ESAs) for 10 properties within the study area to determine the extent of prior contamination, and evaluated the ecological and habitat conditions of the property. Based on the physical analysis, the southern portion of the property, known as the Steelfields/ Marilla Street Landfill property, emerged as the best option to support development as a golf course. The study included an extensive analysis into the market feasibility of the project, such as existing supply and expected demand, and factored in area demographics, a range of proposed fees, the type of course (private vs. public; executive vs. 9-hole vs. 18-hole, etc.) and proposed marketing efforts. The results suggest that the golf market in the Buffalo area is reaching the saturation point, and a new course must be carefully positioned in order to be successful. A 9-hole facility that essentially replaces the existing golf course at South Park with no new addition of supply has a greater chance for success, particularly since development costs would be significantly lower (Image 23: Proposed Golf Course Aerial).

The study carefully analyzed what the appropriate price range for the new course would be, balancing the desire to stay affordable with the need to be financially sustainable. Based on an analysis of the competing supply, it was recommended that the course be targeted at the



Image 22: Proposed Golf Course Plan



Image 23: Proposed Golf Course Aerial

affordable “Public Price” market, with a published fee of \$31.60 per round, including cart. While this is higher than the current comparable rates of \$26.50, the higher rate takes into consideration that these rates are projected out to 2015, and the course will be a high quality facility. Consistent and effective marketing will help operators achieve these rates. The study includes a strategy for implementing a comprehensive marketing program, including affinity programs, clinics, outings, and player development programs. The proposed new golf facility will include practice greens, a putting course, a ‘pitch and putt’ facility and a driving range, ideally positioning it as a golf learning center.

Several alternative course routing plans were developed. The cornerstone of the design was the desire to place the clubhouse at the highest point, which offers spectacular views of the Buffalo skyline. The idea is to make the clubhouse a community gathering place. Its scenic character will help attract visitors and create a year-round destination, increasing the revenue potential of the facility. Other considerations included a desire to design a course that would play quickly, be accessible to players at differing skill levels, and offer a fun playing environment. These factors were balanced with considerations of adequate space (length/width per hole), safe sightlines, hole separation, flow and the variety of hole configurations.

The final conceptual master plan is designed to fit on one contiguous 62-acre parcel. The site is owned by one entity, simplifying the development process. This owner is willing to consider a long-term lease, eliminating land acquisition costs. Although further environmental evaluation will be needed, the site appears to be solid. As a landfill that received largely inorganic waste, issues with organic wastes, such as landfill gases, leachate

or subsidence, are less likely to occur. It may be possible to plant trees and shrubs in select areas to add character and enhance habitat value. The site is generally well drained and should support growing golf course grasses if properly irrigated. Using a municipal water source is recommended to guarantee high quality water and reduce issues of soil salt build up.

The design of the course is intended to provide a fast playing, fun golf experience that reduces delays and lost balls, and increases chances for pars and birdies. The final design includes holes of varied length that play in four different compass directions, both up and down the slopes. A great variety of sun and varying wind directions adds to the playing experience. The course is designed to appeal to all skill levels, with multiple tees for each hole. It also includes two starting and two finishing holes near the clubhouse. This design gives the golf course maximum flexibility to host the greatest number of golfers. Golfers can choose a variety of loops (four, five or nine holes), and operators can double load the course for leagues or during peak times, getting golfers on the course twice as fast.

While the design is conceptual in nature, it is recommended that the facility incorporate a strong theme to create a distinct identity. Given its location in South Buffalo, one suggestion is an Irish theme. The design would include small pot bunkers instead of big sand traps, wide bluegrass fairways, undulating greens, and the use of stonewalls as visual separators of holes.

Total development costs are estimated to be approximately \$10 million. This estimate includes building the golf course; construction of buildings (club house/ community center, maintenance building, cart storage and a pavilion for outside events); interior furniture, fixtures and equipment; utilities; and soft costs.

The study also detailed a plan to restore the historic arboretum in South Park. South Park is considered to be one of the best preserved remaining Olmsted-designed parks in the country. Relocating the existing South Park Golf Course from the park would enable a more historically sensitive implementation of Olmsted's vision from 1894. This has the potential to establish a world-class attraction. Capital costs for the arboretum are estimated to be \$2.3 million. Plans will need to be phased in gradually over time, as the landscape is transitioned away from a golf course and historic park elements are reintroduced.

This project has the potential to be the “New Face of Golf - Post Recession.” It is a creative adaptive reuse of underutilized land for recreational, business and environmental objectives that could be a model for other similar sites. The golf course will be a source of pleasure and pride for South Buffalo golfers and a stimulus to grow the game of golf in an inexpensive manner. The detailed Study can be found in *Appendix D*.

4.7 Buffalo Recreational Needs Assessment

TBD

The recreational needs assessment will be used to determine the need for and feasibility of relocating or constructing one or more indoor and/or outdoor recreational facilities within the South Buffalo BOA. The Assessment will include a full feasibility study that incorporates market research and comparable facilities, and local financial analyses. The study is underway and expected to be completed in ?

Creating opportunities for additional recreational offerings has been identified as an important early-action project that will help make the entire South Buffalo BOA more attractive. The Assessment will ultimately determine if the South Buffalo BOA is the optimal location for a recreation facility. Elements of the study will include: Preliminary Analysis, Existing Conditions/Supply Analysis, Demand Analysis, Market Analysis, Comparable Identification and Analysis , Location Analysis, Construction Cost Estimates, Financial Operations Analysis, and Economic Impact Analysis.



4.8 Road Map to Success

While there are myriad initiatives that have been developed throughout the master planning effort, the purpose of this Implementation Strategy is to focus on critical initiatives that can lead to immediate and lasting change. While there remain challenges to redevelopment throughout the South Buffalo BOA, small scale implementation strategies can have a cumulative impact, creating a critical mass of successes. Initiatives, such as creating pedestrian friendly streets, an integrated pedestrian trail system and environmentally sustainable developments, will induce positive change. This transformation will require tangible short-term lighter, quicker, cheaper (LQC) projects to generate momentum, excitement and community buy-in. The South Buffalo BOA transformation has begun with the recent completion of Ship Canal Commons and investment announcements at RiverBend. In addition, smaller neighborhood cleanup partnerships between community organizations and local businesses have also spun off as part of the Implementation Strategy initiatives. Small scale, visible and tangible neighborhood projects will be the transformational energy needed to moving forward.

The Implementation Strategy identifies three priority strategies, targeted for completion within one to three year, three to five year, and five to fifteen year timeframes. In addition to guiding future funding decisions, the Implementation Strategy provides a framework to enable and promote public-private partnerships that will benefit the South Buffalo BOA and City of Buffalo residents. Each initiative provides a partnership and a funding matrix to help direct resources more effectively.

Strategy 1 is the transformation of the existing street network into an integrated community system for pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Streets account for a significant amount of public space and the community desires tree lined avenues, green infrastructure and integrated pedestrian systems. Transformation of the street infrastructure has the potential to foster business activity and generate community pride. *We must Create enjoyable streets for everyone.* (Image 24: Complete Street of Main Street, Buffalo, NY)

Strategy 2 complements Strategy 1 by integrating a network of pedestrian paths to connect residents and businesses to commercial, social, recreation, and natural amenities throughout the South Buffalo BOA and beyond. *We must Integrate pedestrian trails for community access.* (Image 25: Pedestrian nature trail)

Strategy 3 takes into account the vast amount of land that is under utilized and represents a significant asset in the South Buffalo BOA. Although much of this vacant land has historically been industrial, many properties have been remediated, redeveloped, or allowed to return to a natural setting. While portions of the South Buffalo BOA will be best utilized as a natural preserve, much of the vacant land is poised for greater economic and social benefit. *We must Leverage nature's economic and social potential.* (Image 26: Maintained vacant lot & community driven art, Philadelphia, PA)



Image 24: Complete Street of Main Street, Buffalo, NY



Image 25: Pedestrian nature trail



Image 26: Maintained vacant lot & community driven art, Philadelphia, PA

These strategies are designed to transform the community and link its assets. The South Buffalo BOA has numerous ecological and community assets that provide significant value to the area including: South Park, Buffalo River, Tift Nature Preserve, Buffalo & Erie County Botanical Gardens, Ship Canal Commons. The current street conditions throughout the South Buffalo BOA do not encourage multi-modal transportation. Numerous street conditions are over designed and create dangerous conditions for bicyclists, pedestrians and motorists. The trail system and street bicycle facilities are not inter-connected nor are they safe for all users. (Map 30: Existing connections in the South Buffalo BOA)

To rectify these issues the City of Buffalo has undertaken an aggressive approach to implementing a Complete Streets ordinance mandating that all new street construction, street reconstruction and street maintenance projects undertaken by the City of Buffalo include bicycle and pedestrian facilities. Since the Nomination Study bicycle lanes have been installed on South Park Avenue, Tift Street, Fuhrmann Boulevard, and surrounding streets which connect the South Buffalo BOA with the adjacent neighborhoods. The city has recently announced that they will be completing a bicycle master plan to further link the community and encourage multi-modal transportation.

The connection component of the South Buffalo BOA is critical to achieving the transformative vision as defined in the Master Plan. During the planning effort the city was engaged to review connection opportunities and initiatives as defined in the strategies above. An integrated system of streets and trails was proposed with short, medium and long term investments to achieve this plan. (Map 31: Proposed connections in the South Buffalo BOA) These initiatives provide the basis for reconnecting the community's assets and further enhancing the South Buffalo community. These initiatives provide the basis for strengthening the community's assets and laying the groundwork for large-scale redevelopment opportunities in the South Buffalo BOA.



Map 30: Existing connections in the South Buffalo BOA

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- PUBLIC SPACE
- ←(bicycle)→ DEDICATED BIKE PATH
- ←(bicycle with house)→ SHARROWS (SHARED BIKE FACILITIES)
- ←(bicycle)→ FUTURE BIKE INFRASTRUCTURE (CITY)
- ←(bicycle and person)→ MULTI USE PATH
- ←(person)→ PEDESTRIAN PATH
- (K) KAYAK



Map 31: Proposed connections in the South Buffalo BOA

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- PUBLIC SPACE
- ← (bicycle icon) → DEDICATED BIKE PATH
- ← (sharrows icon) → SHARROWS (SHARED BIKE FACILITIES)
- ← (bicycle icon) → FUTURE BIKE INFRASTRUCTURE (CITY)
- ← (pedestrian icon) → MULTI USE PATH
- ← (pedestrian icon) → PEDESTRIAN PATH
- Ⓚ KAYAK



4.8.1 Strategy 1: Create Enjoyable Streets for Everyone

Why is this needed?

Streets are the most dominant public spaces; they are the most visible and plentiful. We engage with them everyday. The best designed streets meet the needs of all people, whether walking, driving, cycling, or by mass transit. They generate dramatic private investment, increase property values, provide opportunities for integrated stormwater management, and enhance the vibrancy and image of place. The best street design also adds to the value of local businesses, offices, and civic places located along the street. During the middle of the 20th century, streets were transformed from places for people to places for vehicles. Prior to this policy, streets accommodated the many means that people use to transport themselves; i.e. vehicle, mass transit, bicycle, and foot. They provided a fertile environment for a variety of businesses, including corner stores, restaurants, and pubs to name a few. From public health and safety to environmental and economic sustainability, Complete Streets are valuable to everyone. Complete Streets provide benefits to the community through design of streets for users of all ages and abilities while providing vehicular, bicycle, and by foot options in better and safer ways. Implementing Complete Streets policies allows for an efficient and optimal use of limited resources including time, fuel, land, and money. A long-term vision of implementable Complete Street strategies will incentivize the physical and economic environment of the 21st century.

Tiftt Street Initiative

Tiftt Street, from Route 5 to Hopkins Street, is challenged by a number of conditions that can be addressed in the short term. These existing conditions include a four-lane thoroughfare oversized for its low traffic volumes, lack of continuous sidewalks and poorly defined or lack of continuous bicycle lanes. The foremost strategy to improve Tiftt Street is to reduce the number of lanes, and devote the remainder of street space to pedestrian walkways and dedicated bike lanes. The wider traffic lanes and low traffic volumes, which currently exist on Tiftt Street, promote higher vehicle speeds and alienate pedestrian and bicycle use. Establishing gateways and nodes, to provide breaks along long stretches of continuous roadway, will improve the character of the public realm and calm traffic. (Map 32: Major road initiatives and nodes)

Immediate Strategy (1-3 yrs.):

Re-striping Tiftt Street from a four-lane thoroughfare to a two-lane road, with dedicated bike lanes, defined pedestrian walkways and on-street parking will provide an appropriately scaled, safe and desirable connection to the Buffalo Lakeside Commerce Park, George J. Hartman Play Fields, Tiftt Nature Preserve and the Outer Harbor (Map 32: Major road initiatives and nodes). The City of Buffalo's effort to incorporate Complete Streets initiatives throughout the



Map 32: Major road initiatives and nodes

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- COMPLETED ROADWAY IMPROVEMENTS
- 🚦 TRAFFIC LIGHT & GATEWAY POINTS

city offers an encouraging sign that this work will be completed. Councilman Christopher Scanlon has already initiated this effort for Tift Street with the City’s Department of Public Works, Parks & Streets. (Image 27: Existing conditions on Tift Street Bridge)



Image 27: Existing conditions on Tift Street Bridge

Near Term Strategy (3-5 yrs.):

Other strategies that will transform Tift Street and further calm traffic are to create gateways on the east and west side of the Tift Street Bridge. Currently when entering the South Buffalo community from the Outer Harbor there is no significant feature that welcomes you to the community. Placing a gateway feature at the entrance to Buffalo Lakeside Commerce Park and George J. Hartman Play Fields will provide that desired outcome. A gateway feature at this location will further define these assets while transforming Tift Street from a thoroughfare to a destination.

The entrance to Rittling Boulevard on Tift Street is a second important gateway to South Buffalo. This location is a future entrance into RiverBend, the future community recreational area at the All-Tift landfill, and the greater South Buffalo community. Installation of a traffic signal at this location will also reduce the travel distance between signalized intersections and provide an additional traffic calming technique. Study of this condition should be performed as development increases in the area. Each gateway should incorporate monumental signage, paving patterns and lighting that relate to each other and the surrounding community while maintaining a vehicle flow.

In addition to creating gateways on each side of the Tift Street Bridge, there is also a desire by the community to create a lookout area at the top of the bridge. This location provides remarkable views of downtown, Lake Erie and the operating rail lines below. Community members noted that this location provides the ideal vantage point to observe the numerous styles of trains that pass through the community. Given the excessive width of the existing bridge, there is an opportunity to create a pedestrian node for sightseeing at the apex of the bridge while still maintaining two lanes of traffic, dedicated bike lanes, and pedestrian space. (Image 28: Short-term striping on Tift Street Bridge)

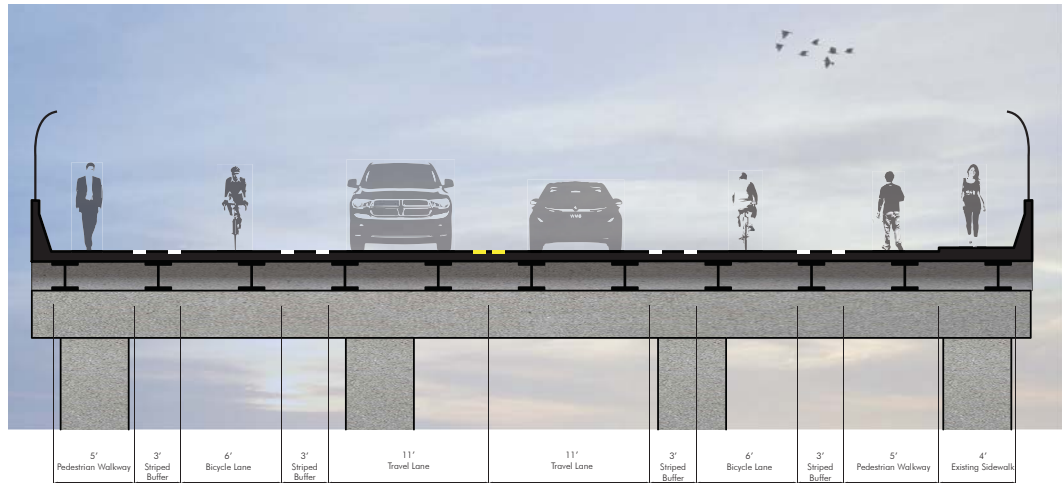


Image 28: Short-term striping on Tift Street Bridge



Image 29: Long-term complete street design for Tift Street Bridge

Long Term Strategy (5-15 yrs.):

Based on increased development in the BOA and availability of funding, implementation of more robust infrastructure improvements is recommended. Enhancements to the streetscape that will benefit pedestrians, bicyclists and vehicular users include permanent physical dividers to increase safety and separate users, green infrastructure that integrates stormwater treatment, and amenities such as benches and pedestrian-scaled lighting. These physical separations provide an opportunity to incorporate additional amenities for the pedestrian areas designed to observe the trains, downtown and Lake Erie, as well as a well defined route to the Outer Harbor. (Image 29: Long-term complete street design for Tift Street Bridge)

Tiftt Street Initiative

Initiatives	Potential Partners			Funding
	Community	Cultural	City	
	Local Community Organizations Local Business Owners Buffalo Niagara Riverkeeper GoBike Buffalo Grassroots Gardens Re-Tree: Buffalo Green Fund Community Canvases	Buffalo Olmsted Parks Conservatory Buffalo & Erie County Botanical Gardens Tiftt Nature Preserve	City of Buffalo Office of Strategic Planning City of Buffalo Sewer Authority City of Buffalo Public Works, Parks & Streets City of Buffalo Permit and Inspection Services	Refer to 4.8.6 for Funding Sources
(1-3 Years)				
Re-Stripe Tiftt Street				
(3-5 Years)				
Gateways along Tiftt Street				9
Protected pedestrian node at Tiftt Street Bridge				9,11,15
Physical buffers along Tiftt Street Bridge				15

Partnership & Funding Chart: Tiftt Street Initiative



Image 30: Restriping on South Park Avenue

South Park Avenue Initiative

South Park Avenue provides a critical link from downtown Buffalo to the South Buffalo community. South Park Avenue has historically been an important mixed-use corridor for the community and will continue to be an essential component to the area's success. Despite years of disinvestment and vast vacant lands in this area of the South Buffalo BOA, success is being realized. The RiverBend Master Plan that was developed in 2011 proposed transforming the area into a mixed-use Commercial, Research and Development, and Recreation district. Since that plan, two major companies announced they will be locating to the RiverBend site and plan on investing \$1.6 billion and providing 2,000 jobs. These projects are expected to commence in 2014-2015. To the north of South Park Avenue, the English Pork Pie Company (EPPC) has established a successful international food production facility and is eager to expand on the adjacent properties. The EPPC is planning an English style, publicly accessible, commercial street ('High Street') and recreation field ('pitch') between South Park Avenue and the Buffalo River. The combination of future private investment by the EPPC alongside existing public investment in shoreline restoration at the Buffalo River shows promise and demonstrates positive public / private partnerships. Planned investment to the South Park Avenue corridor and at RiverBend will draw more residents to this area for employment and recreation.

Smart growth strategies are integral to linking communities with local economies while protecting the environment. Providing connections for vehicles, bicyclists, and pedestrians is key to the overall health and prosperity of the South Buffalo BOA. In tandem with creating a network of trails and a complete street, South Park Avenue provides a unique gateway to the South Buffalo BOA.



Image 31: Example of Complete Street

Immediate Strategy (1-3 yrs.): Extend the South Park Avenue striping onto the South Park Avenue Bridge.

The South Park Avenue Bridge which crosses the Buffalo River on the northern edge of the South Buffalo BOA provides a natural gateway for the South Buffalo community. The current bridge does not have defined lane markings for vehicles or bicyclists, has limited pedestrian access and is not designed or designated as a gateway. The City's recent re-striping of South Park Avenue (Fall 2013) from downtown to South Buffalo reduced the traffic to two vehicular lanes and provides dedicated bicycle lanes on each side of the roadway with the potential for striping on-street parking (Image 30: Restriping on South Park Avenue). This roadwork has made a significant change to the quality and character of the street condition providing a more pedestrian friendly environment. Currently, the improvements do not extend onto the bridge. By continuing the striping onto the bridge and redefining the bridge as a gateway through signage and lighting, the entrance to the South Buffalo community will be significantly improved.

Near Term Strategy (3-5 yrs.):

New development at RiverBend will require additional access points from South Park Avenue. Modifications and improvements to South Park Avenue from the South Park Avenue Bridge to the neighborhoods at Hopkins Street include Complete Street components, e.g. canopy trees, planted bumpouts, sidewalks, pedestrian and street lighting (matching district wide standards) and green infrastructure (bioswales, permeable pavement, planter boxes). Public realm and infrastructure enhancements will serve as a catalyst to attract public and private investment contributing to the overall economic health of the South Buffalo BOA (Image 31: Example of Complete Street). Further importance of these initiatives will be outlined in 4.8.3.

South Park Avenue Initiative

Initiatives	Potential Partners								Funding						
	Community				Cultural		City								
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory		Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets	City of Buffalo Permit and Inspection Services
(1-3 Years)															
Stripe South Park Avenue Bridge												●		15	
(3-5 Years)															
Plant Street Trees	●	●				●						●	●	16, 21	
Green Infrastructure, Bulb-outs, Sidewalks	●		●	●								●	●	●	3, 4, 5, 12, 14, 19, 22
District Standard for Pedestrian & Street Lighting	●	●										●	●		

Partnership & Funding Chart: South Park Avenue Initiative



Image 32: Hopkins Street Complete Street rendering

Hopkins Street Initiative

Hopkins Street represents a key north-south connector for the South Buffalo BOA with a variety of uses, property conditions and street conditions. The street includes commercial and light industrial uses on one side, and residential neighborhoods on the other, with the exception of the North Hopkins community where residential land uses exist on both sides of the street (refer to Map 7: Current Land Use). This unique dichotomy poses challenges that must be addressed in a way that provides a vibrant, inviting and safe condition for all users.

Many of the commercial and light industrial properties along Hopkins Street include buildings with significant front setbacks or characterized by large vacant areas. The vacant areas provide an opportunity to improve the streetscape. Lighter Quicker Cheaper (LQC) strategies, such as landscape and street enhancements, will improve the character of the neighborhood, encourage investment and lead to increased property values. A primary strategy for successful project development along the Hopkins Street Corridor is the creation of partnerships between residential neighborhood organizations and businesses. The long-term vision includes a street that accommodates all users, is lined with canopy trees creating a defined promenade, low-maintenance green buffers, district wide neighborhood scaled lighting and provides screening for select industrial parcels. The long term goal along Hopkins Street includes the development of small scale office and commercial buildings along the street frontage with supporting uses in the rear of the property.

Immediate Strategy (1 yr.):

By striping the street to define street parking, bike lanes and turning lanes, movement by both bicyclist and motorist will be more predictable and safe. Installation of street trees will further define the streetscape providing a sense of enclosure and safety (Image 32: Hopkins Street Complete Street rendering). In



Image 33: Example of Public Art component on Elmwood Avenue

studying human behavior it has been stated that streets ‘feel’ like they have greater safety and greater value when they are lined with trees. Streets that are not lined with trees inversely feel like they are less safe or desirable and have less value.

Private property owners with open space or vacant land on street frontage are encouraged to maintain existing open space and invest in low cost, low maintenance native vegetation along their frontage. Another LQC approach is to install artwork in underutilized spaces, similar to the painted electrical boxes project on Elmwood Avenue (Image 33: Example of Public Art component on Elmwood Avenue). Organizations like Community Canvases have provided these services on Grant Street, Elmwood and Allen Street, which has created an inspiring community movement.

Near Term Strategy (3-5 yrs.):

Additional clean energy and research and development facilities in the area will draw upon employment from the surrounding neighborhoods and encourage investment on Hopkins Street. This growth creates additional need to improve the street infrastructure with new sidewalks, curbs, planted bumpouts, pedestrian and street lighting (matching district wide standard) and green infrastructure (bioswales, permeable pavement, and planter boxes). As part of this major infrastructure investment and construction project the relocation of above grade utilities to below grade is recommended.

Long Term Strategy (5-15 yrs.):

The southern portion of Germania Street from Beacon Street to Tiff Street is currently an underutilized city paper street backing up to numerous light industrial uses. With the projected growth in the area, upgrading Germania Street will provide

Hopkins Street Initiative

Initiatives	Potential Partners										Funding		
	Community					Cultural			City				
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve		City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority
(1-3 Years)													
Re-Stripe Hopkins Street				●						●	●		15
Plant Street Trees	●	●				●				●	●		16, 21
Advocate Public Art	●					●				●	●		1, 6, 7, 8, 9, 10, 11, 12
(3-5 Years)													
Improved Street Infrastructure Greening	●	●				●	●	●	●	●	●	●	3, 4, 5, 14, 17, 19, 22
(5-15 Years)													
Reinstate Germania Paper Street for Trucks	●									●	●	●	

Partnership & Funding Chart: Hopkins Street Initiative

secondary truck access to adjacent properties. This approach would mitigate truck traffic along Hopkins Street while providing access to both sides of existing and future commercial and light industrial uses. The future development in RiverBend and Buffalo Lakeside Commerce Park is projected to spur opportunities along Hopkins Street that would support this effort. Implementation of the Germania Street project will reduce industrial traffic on Hopkins Street and create a more pedestrian friendly mixed-use street for the neighborhood.



Image 34: Reading Avenue Complete Street & Proposed Development Infill

Reading Avenue Initiative

Reading Avenue is an important east west connector between Hopkins Streets and South Park Avenue. This street provides the only connection between the two streets that does not bisect a residential neighborhood. The development of this corridor will create a gateway condition for the southern portion of the South Buffalo BOA. Reading Avenue is currently characterized by vacant and commercial parcels, a wide curb-less street, no sidewalks, and few public realm amenities. Greater aggregations of occupied businesses are located mid-block and near South Park Avenue. Some businesses, like Heintz & Weber, Co. and Power Drives, loosely occupy the north side of the street near Hopkins Street. While existing businesses show signs of growth, large parcels show signs of neglect. Development on this secondary street is critical to connecting Hopkins Street to South Park Avenue's mixed-use neighborhood. Smart Growth development will foster a greater sense of place and establish compact forms of development, an attractive street, an improved public realm, and green linkages from Hopkins Street to South Park Avenue. The long term vision of connecting this southern portion of the South Buffalo BOA with South Park Avenue will help stabilize existing businesses while creating a framework for future economies and sources of employment. A prioritized approach is critical, and with limited funding available, actions must be strategic.

Immediate Strategy (1 yr.):

By striping the street to define street lanes and dedicated bike lanes, movement by both bicyclist and motorist will be more predictable and safe. The prevalent condition along Reading Avenue is the large vacant lots. These can be strategically maintained with limited resources and enhance the image of the corridor. While this tactic will be further defined in Initiative 4.8.3 Vacant Lands, landowners are recommended to mow the first 5-10 feet of their property along the street allowing

the rest of the parcel to grow naturally for the full season, only mowing the whole parcel in the early spring. This tactic in the interim will create a maintained edge condition near the street deliberately creating a ‘cared for’ space. Additionally, mowing the parcels only in the early spring allows the non-mowed parcel to seasonally develop as natural meadow for bird and other wildlife habitat. This provides vegetative connections to the larger natural resource areas in South Park and Tifft Nature Preserve, and will enhance the biodiversity of the area.

Near Term Strategy (3-5 yrs.):

Sidewalks are primary components in an urban area to facilitate pedestrian movement. They are currently absent from Reading Avenue and subsequently the street is not appealing or safe for pedestrians (Image 34: Reading Avenue Complete Street & Proposed Development Infill). To become the critical connector street, the installation of sidewalks, curbs, defined business entrances (curb cuts) along with pedestrian and street lighting are strongly recommended. Accomplishing some of the near and intermediate strategies of defining Reading Avenue will encourage future small scale development.

Planting street trees is another strategy to define Reading Avenue as an urban corridor with an improved sense of place. Partnerships formed between local businesses, volunteer groups, and not-for-profit groups, like Tifft Nature Preserve and the Olmsted Parks Conservancy, can help in creating financial and volunteer labor resources. Education from knowledgeable groups specializing in ecology and plant life can assist in defining best practices for establishing a corridor of trees that will provide the most benefit to the community.

Reading Avenue Initiative

Initiatives	Potential Partners									Funding										
	Community			Cultural			City													
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens		Tift Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets	City of Buffalo Permit and Inspection Services					
(1-3 Years)																				
Re-Stripe Reading Avenue																				15
Maintain Edge of Vacant Parcels	●	●								●	●									●
(3-5 Years)																				
Construct Sidewalks & Street Curbs																				
Plant Street Trees										●										16, 21

Partnership & Funding Chart: Reading Avenue Initiative

Buffalo Lakeside Commerce Park Initiative

Buffalo Lakeside Commerce Park (BLCP) is a successful industrial business park located east of Route 5 and south of Tift Street. Ship Canal Commons, located at the heart of the business park, provides a rare South Buffalo BOA open space amenity mixing commerce, industrial heritage, and nature in the public realm. Buffalo Lakeside Commerce Park provides a place for all of these activities in one location. Connecting this asset to the rest of the South Buffalo BOA and the city is critical to its development (Image 35: Buffalo Lakeside Commerce Park Aerial).



Image 35: Buffalo Lakeside Commerce Park Aerial

Current conditions at BLCP emphasize the streetscape and truck access to support the three anchor distribution businesses already established. Ship Canal Commons has a diverse grouping of bike paths, trails, dock, and interpretive areas that connect to the Outer Harbor. BLCP district standards have provided nearly all the components of complete streets, including consistent lighting fixtures, street tree plantings, and green buffers that mitigate the visual impact of the large warehouse structures. The remaining elements to create an accessible route to and around the BLCP includes a network of connected bicycle lanes and pedestrian sidewalks where most applicable (See map 31). BLCP is poised to connect the South Buffalo Community through business development and recreation as well as take advantage of its unique position along the Route 5 artery and secondary Tift Street connector. This unique position, paired with the railroad corridor to the east enhances the viable commerce options in the area.

Immediate Strategy (1 yr.):

BLCP is situated at an ideal location to harness the redevelopment momentum that is occurring on the Outer Harbor by connecting to the trail system with a dedicated bike lane throughout BLCP roadways. The existing roadway provides sufficient width for incorporating dedicated bike lanes and should be extended throughout the campus. Installation of wayfinding signage, to educate visitors about surrounding amenities, is recommended throughout the campus identifying Ship Canal Commons, the Outer Harbor, Tift Nature Preserve and George J. Hartman Play Fields (Image 36: Tift Street and Ship Canal Parkway Gateway rendering). The planting of street trees will further define the streetscape lending a sense of enclosure and safety. Local businesses and residents can partner with organizations such as the Buffalo Green Fund or the City of Buffalo to achieve a dense tree canopy throughout BLCP.



Image 36: Tiftt Street and Ship Canal Parkway Gateway rendering



Image 37: Larkinsville's "Food Truck Tuesdays"



Image 38: LQC providing Adirondack chairs at Canalside

Near Term Strategy (1-3 yrs.):

Ship Canal Commons is a unique amenity to the South Buffalo BOA providing water access, a community park and the capacity to hold community events. The events at Larkinville, Canalside, and Riverfest Park demonstrate that programming in unique city locations attracts people. Canalside offers educational, cultural, health and charity events for all ages. The regularly scheduled diverse activities animate Buffalo's waterfront during all times of the day. The "Food Truck Tuesdays" event at Larkinville provides a precedent for a LQC type of event that can bring interest to Ship Canal Commons and increase marketability (Image 37: Larkinville's "Food Truck Tuesdays")(Image 38: LQC providing Adirondack chairs at Canalside). Programming Ship Canal Commons to hold community and potentially private events is an important step to expanding investment and community awareness in BLCP.

The ongoing success of BLCP requires the development of a sustainable maintenance program. A business association comprised of BLCP business owners and city officials whose purpose is to promote the growth of the business environment and enhance the quality of life within BLCP can support long-term goals. One of the benefits to locating at BLCP is Ship Canal Commons and its connection to the Outer Harbor. Maintenance of these assets will require oversight and monetary support that a business association can provide. Membership to the association should be included in all property sales and incorporated into the deed along with a monetary requirement. (Tax rebates, lower sale cost, etc. may be required to encourage potential businesses to locate to BLCP and support an association)

Long Term Strategy (5-15 yrs.):

With increased development and traffic throughout BLCP, further refinement to the street infrastructure is recommended. This work can include introducing green infrastructure (bioswales, permeable pavement, planter boxes), relocating the bike lanes to cycle tracks adjacent to the street, on street parking as demand requires, bumpouts and additional landscaping. Due to the size of the properties and significant street frontage, the ecological recommendations suggested in Strategy 3 will help to transform the street conditions throughout BLCP. These recommendations include: installing low cost, low maintenance vegetation along the entire street frontage and increasing the tree canopy along the street edge.

Buffalo Lakeside Commerce Park Initiative

Initiatives	Potential Partners											Funding	
	Community					Cultural			City				
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve	City of Buffalo Office of Strategic Planning		City of Buffalo Sewer Authority
(1-3 Years)													
Stripe for Bike Lanes & Sharrows	●	●		●								●	15
Plant Street Trees	●	●				●					●	●	16, 21
LCQ Initiatives/Program Activites	●	●				●							1, 6, 7, 8, 9, 10, 11, 12
BLCP Business Association													
(5-15 Years)													
Green Infrastructure & Cycle Track		●	●	●							●	●	4, 5, 14, 15, 17, 18, 19, 22

Partnership & Funding Chart: Buffalo Lakeside Commerce Park Initiative



Image 39: Example of LQC Community garden

Germania Street Initiative

Germania Street bisects a residential and light industrial area on the east edge of the South Buffalo BOA. Partially a paper street, from Beacon to Tiff Street, Germania Street is abutted by light industrial and commercial uses on the Hopkins Street side and large vacant or underutilized properties on the west close to RiverBend. The curbside assessment (refer to *Appendix B* indicates that the community is fairly stable and has moderate to low parcel vacancies. The majority of the housing stock is in good condition as well. Current investment in RiverBend along with future investment in the area parcels will increase revenue through area property taxes helping to stabilize the community and provide greater services.

Germania Street should continue to serve the Hickory Woods neighborhood as a pedestrian friendly and low-speed street, allowing South Park Avenue and Hopkins Street to serve as the primary connectors in the immediate area. Repairing existing infrastructure and maintaining the tree lined streets will emphasize the intimate neighborhood and reinforce safety. Germania Street, from Beacon to Tiff Street, can offer a back door for Hopkins Streets' light industrial and commercial businesses. By allowing a rear or interior entrance to the existing businesses, truck traffic can be diverted off Hopkins Street to engender a greater sense of place in the area.

Strategies for Germania Street include initial and long-term implementation steps that will be based on socio-economic demand;

Immediate Strategy (1 yr.):

Striping Germania Street, from South Park Avenue to Mystic Street for two-way traffic (currently 1-way) will reinforce the Amelia / New Abbey Street improvements described in the following section and enhance the connectivity in the neighborhood. While this is a recommendation to creating a safer street



Image 40: Existing Germania paper street condition



Image 41: Germania paper street trail concept

environment neighborhood outreach would be important for implementation. Plant street trees in areas where none exist to further define the neighborhood character while supporting the local ecology. This planting effort should be coordinated with the Buffalo Green Fund and the City of Buffalo.

Where vacant land is underutilized, the possibility exists to incorporate a community garden, a place where the community may rally behind, clean up, generate local food, and create awareness on how food is grown (Image 39: Example of LQC Community garden). To be successful, Grassroots Gardens, a local not-for-profit, can gather support, supply as-available resources, and provide necessary insurance. It is critical to have a strong leader(s) to clearly define the vision of the garden. Careful consideration should be given to any legacy contaminants that may exist from prior industrial uses on these lands. Access should be limited if there is a risk of exposure to contamination and raised gardens with lined beds should be designed to bar any interaction with any existing soils that have any legacy contaminants.”

Near Term Strategy (3-5 yrs.):

With continual investment in the area, a pedestrian trail placed along the paper street portion of Germania Street can provide a strong recreational connection between Tift Street and South Park Avenue. Local coordination with City of Buffalo Office of Strategic Planning and the Public Works, Parks & Street Department will help assist in this transformation. This new pedestrian corridor can be designed to enhance ecological function and aesthetics, through the use of a diverse array of native plants (Image 40: Existing Germania paper street condition)(Image 41: Germania paper street trail concept). Strong volunteer groups to champion and maintain the trails are also necessary.

Long Term Strategy (5-15 yrs.):

With the development forthcoming in RiverBend and increased development opportunities on Hopkins Street, an increase in traffic is predicted for the area. The paper street portion of Germania Street provides an ideal support street to business on Hopkins Street and Rittling Drive. By locating a city street at this location, truck traffic can be redirected from Hopkins Street to an improved Germania Street (Map 32: Major road initiatives and nodes), allowing for additional traffic calming on Hopkins Street. To mitigate truck traffic north along Germania Street to South Park Avenue, new Germania Street will not be physically connected and a traffic turnaround will exist on the north end of new Germania Street. A dedicated turning lane on Hopkins Street from the west is recommended. This strategy aligns with future zoning (UDO) and reinforces the vision for the Hopkins Street area and can retain a pedestrian trail for recreational use.

Germania Street Initiative

Initiatives	Potential Partners										Funding				
	Community					Cultural			City						
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve		City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets	City of Buffalo Permit and Inspection Services
(1-3 Years)															
Stripe Germania Street for 2-way Traffic											●		●		
Infill Street Trees						●							●	●	16, 21
Vacant Lot Community Garden	●	●			●			●	●	●				●	6, 7, 8, 9, 10, 11
(3-5 Years)															
Paper Street Pedestrian Trail	●							●		●		●		●	2, 6, 7, 8, 9, 10, 11, 15
(5-15 Years)															
Germania Paper Street Truck Access						●		●		●		●	●	●	

Partnership & Funding Chart: Germania Street Initiative

New Abby and Amelia Street Initiative

To coincide with the master planning efforts developed at RiverBend and the new zoning in the forthcoming Unified Development Ordinance, connecting New Abby and Amelia Streets is recommended. This connection will eliminate a section of New Abby Street from the proposed Amelia Street extension to South Park Avenue. This section of roadway is currently bordered by a mowed but defunct rail road abutment and vacant lightly treed parcels. At South Park Avenue, the intersection is confused by the additional intersection of Germania Street creating difficult sight lines for vehicle traffic. With no built development along this part of New Abby Street and all land locked parcels owned by the City of Buffalo, the existing street infrastructure is not being supported by a tax base and could be better utilized. The RiverBend master plan proposes that a mesic forest (temperate hardwood forest) with an integrated trail system be located along Abby and New Abby Street. The proposed approach provides an opportunity to expand on this design and further enrich the ecological function of the space.

Near Term Strategy (3-5 yrs.):

Engage the public regarding removal of New Abby Street from Amelia Street to South Park Avenue. Perform a traffic study to determine the impact on Germania Street, Amelia Street and South Park Avenue (Image 42: Plan Existing condition at New Abby and Amelia Streets) (Image 43: Realignment of New Abby and Amelia Streets, RiverBend). Implement proposed plans as envisioned by project representatives of the community and the city.



Image 42: Plan Existing condition at New Abby and Amelia Streets



Image 43: Realignment of New Abby and Amelia Streets, RiverBend

New Abby and Amelia Street Initiative

Initiatives	Potential Partners			Funding										
	Community	Cultural	City											
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper		GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets
(3-5 Years)														
Re-Align New Abby and Ameila Street	●										●	●	●	

Partnership & Funding Chart: New Abby & Amelia Street Initiative



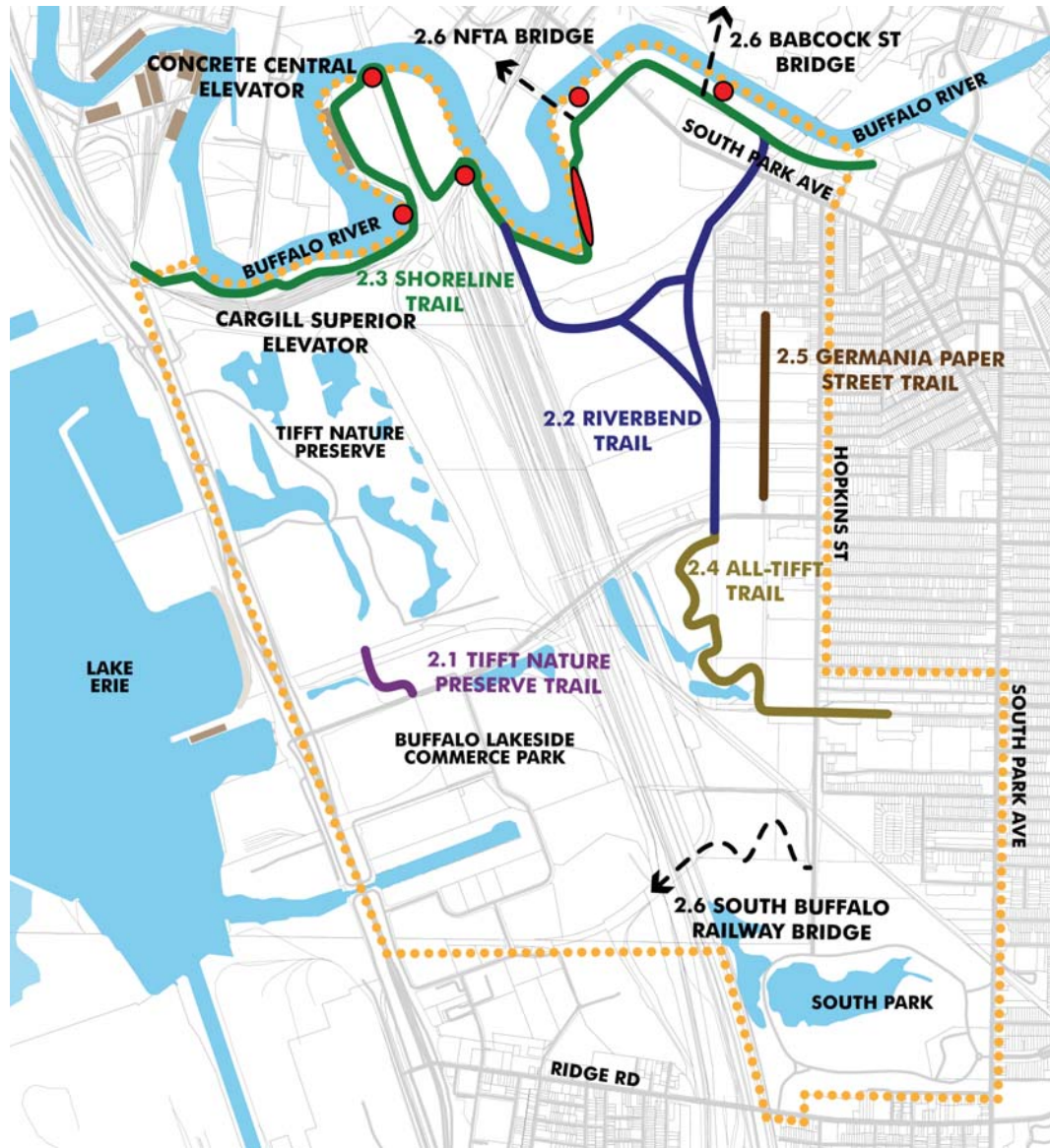
4.8.2 Strategy 2: Integrate Pedestrian Trails through the Community

Why is this needed?

Dedicated pedestrian trails are an asset to a community that make it more livable, preserve and restore open spaces, connect people with their surrounding environment, all the while providing opportunities for physical activity. Connected trail systems are ideal transportation routes for visitors to experience the city as well. From previous planning efforts the networks of trails have been reviewed and prioritized to create the most impactful strategy. The foundation of this planning embraces Joseph Ellicott's 1804 radial plan and Frederick Law Olmsted's green necklace of parks and parkways. These historic planning guidelines are also incorporated in the Queen City in the 21st Century Plan. This ambitious plan incorporates a connection to the Niagara River Greenway trail that extends the trail system from Lake Ontario to Lake Erie along the Niagara River and Buffalo River. Further organizing the South Buffalo BOA trails around the Niagara River Greenway trail, mass transit and motor vehicles will encourage multiple forms of connection that will engage more users (Map 32: Major road initiatives and nodes).

George J. Hartman Play Fields / Tiff Nature Preserve Trail Initiative

Throughout the Implementation Strategy, special focus was placed on the George J. Hartman Play Fields which forms a southern bookend to Tiff Nature Preserve. Through the public input process, citizens informed the planning team that the fields are a key community recreational resource utilized by city residents for football, baseball, soccer, and other athletic activities. Although the George J. Hartman Play Fields are an important asset, there is limited community access. Additionally, an undefined pathway, known as the 'human cowpath,' traverses wetlands and private property along the western edge of the fields connecting Hartman Fields to Tiff Nature Preserve. These assets sit at the gateway to the Outer Harbor and Buffalo Lakeside Commerce Park providing optimal connection opportunities for the City of Buffalo and South Buffalo communities.



Map 33: South Buffalo BOA Proposed trail initiative

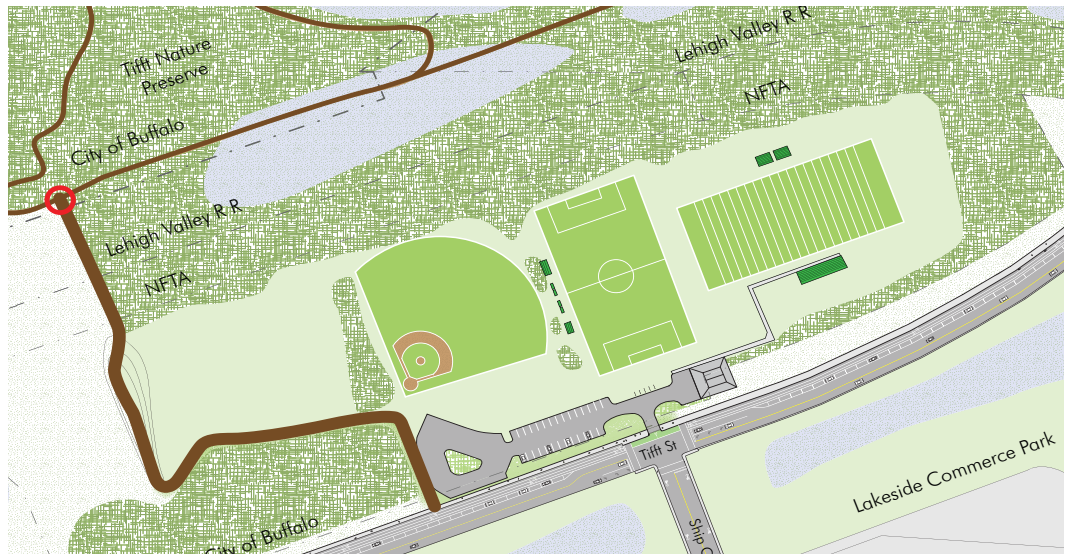
LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- AREAS TOUCHING WATER
- 2.1 TIFFT NATURE PRESERVE TRAIL
- 2.2 RIVERBEND TRAIL
- 2.3 SHORELINE TRAIL
- 2.4 ALL-TIFFT TRAIL
- 2.5 GERMANIA PAPER STREET TRAIL
- → 2.6 BRIDGING WATER AND RAIL LINES

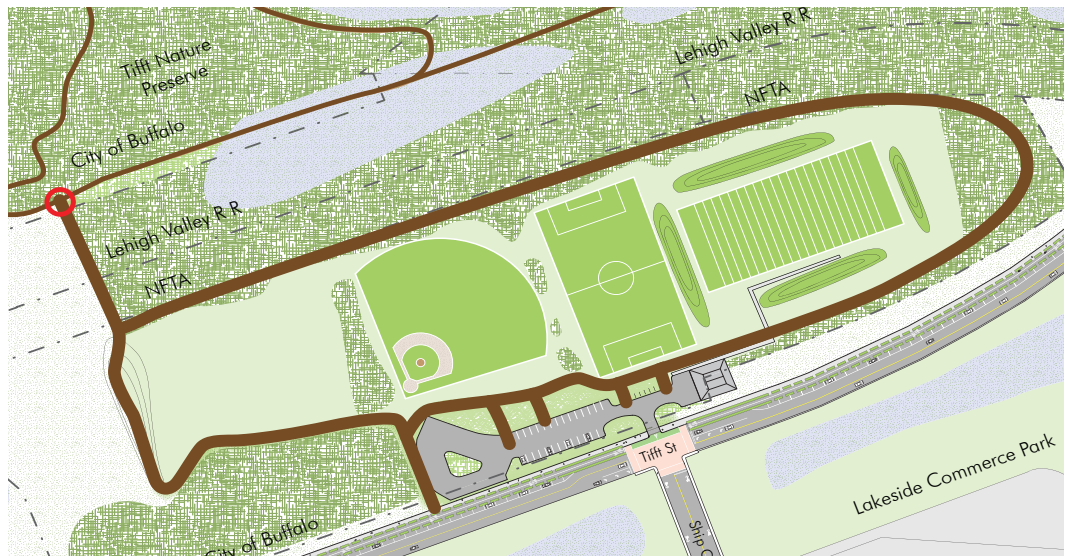
Through collaboration with the City of Buffalo Public Work, Parks and Street Department and Tift Nature Preserve, there is an opportunity to use the George J. Hartman Play Fields for passive ecological education and an enhanced recreational resource for all visitors. Tift Nature Preserve is interested in developing a formal pathway to connect to the fields and create a southern entrance to the preserve. Extending this pathway around the field with educational signage about the ecology and history of the area is another opportunity to inspire a vast and diverse population. Currently, metal bleachers exist around the fields and require ongoing maintenance to the structures and vegetation surrounding them. In the short-term, the Implementation Strategy proposes creating grassy mounds to provide additional seating, and over time introducing permanent benches to further connect visitors with the surrounding environment. By modifying the seating, maintenance will be reduced to mowing, which is an existing maintenance activity.

Access to George J. Hartman Play Fields would be enhanced through conversion of Tift Street to a Complete Street with reduced lanes, street parking, bike lanes, wide sidewalks and wayfinding signage. These infrastructure changes will safely connect pedestrians and bicyclists to the playing fields from nearby communities and the Outer Harbor. In addition, enhancing the Tift Street and Ship Canal Parkway gateway will reinforce George J. Hartman Play Fields as a community destination and create a focal point at the entrance to BLCP.

The greatest potential for immediate community impact is to connect Tift Nature Preserve with George J. Hartman Fields. Establishing a southern entrance from Tift Street will encourage a mixture of recreational activities alongside the natural environment. The proposed trail, which is approximately 1000 feet long, will begin near Tift Street along the south eastern edge of an open flowering meadow, then to a bermed area which provides views to a wetland area to the west, and finishes north at Tift Nature Preserve's existing trail system (See Map 1.1) As the shortest trail in Strategy 2, which connects two established amenities, it has the highest priority and is expected to have the greatest impact connecting the community.



Map 34: Phase 1: Entrance to Tiff Nature Preserve through George J. Hartman Play Fields rendering



Map 35: Phase 2: Enhanced trail system and field infrastructure rendering

LEGEND

- ● ● ● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- PARCEL BOUNDARY
- 8' - 10' BERM
- EXISTING TREES
- TRAIL
- ENTRANCE TO TIFFT

Immediate Strategy (1 yr.):

The proposed pathway requires crossing property owned by the Niagara Frontier Transportation Authority. Land acquisition or an easement will be required and should be pursued as an initial step (See Map XX).

Develop a detailed plan and cost estimate that includes the pathway and educational signage. Tiff Nature Preserve and the Department of Public Works, Parks and Streets are champions for this project. The following recommendations should be considered:

- The trail should be planned with a low impact trail material like compacted stone that is affordable, as well as, porous;
- Existing wetlands should not be disturbed. Users can be connected by using an elevated boardwalk; and
- Trail signage should be incorporated at key locations along the trail, such as ones found in Tiff Nature Preserve and the nearby Outer Harbor, to properly announce the entrance and display interpretive and educational information to the user.

Near Term Strategy (3-5 yrs.):

Expansion of the trail system to create a loop around the entire George J. Hartman Play Fields provides an opportunity to enhance the educational component of Tiff Nature Preserve. Extending the path and amenities including green infrastructure and signage, provides an opportunity to further expand the environmental awareness of our past and the opportunities we have for the future (See Map XX).

Hartman Play Fields / Tiff Nature Preserve Trail Initiative

Initiatives	Potential Partners							Funding								
	Community			Cultural	City											
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets	City of Buffalo Permit and Inspection Services	Refer to 4.8.6 for Funding Sources	
(1-3 Years)																
Gateway Trail to Tiff Nature Preserve										●			●			2, 6, 7, 8, 9, 10, 11, 15
(3-5 Years)																
Enhance Trails & Green Infrastructure										●		●	●		2, 4, 5, 6, 7, 8, 9, 10, 11, 15	

Partnership & Funding Chart: Hartman Play Fields / Tiff Nature Preserve Initiative



Image 44: Example of Forest Pedestrian and Bicycle Trail

Initiative 2.2: RiverBend Trail

The RiverBend Trail is a north-south recreational pedestrian and bicycle connection that connects with the pedestrian trails along the Buffalo River and South Park Avenue in the north to Tifft Street and the proposed All-Tifft trail system in the South. Although South Park Avenue offers an existing dedicated on-street bike lane Tifft Street currently does not offer continuous bike accommodations. Tifft Street Initiative proposes incorporating a dedicated on-street bike lane in the immediate future.

The RiverBend Master Plan proposes that the new trail be installed directly adjacent to the Hickory Woods neighborhood on the north and along Rittling Drive and the proposed RiverBend Drive to the south. Per this master plan, the trail is designed to pass through a planned mesic forest on the RiverBend site (Image 44: Example of Forest Pedestrian and Bicycle Trail). Connections to the adjacent neighborhoods are proposed creating a unique asset for the residents (Map 32: Major road initiatives and nodes).

Immediate Strategy (1-3 yr.): Hybrid Trail

The recent announcement of the Buffalo High-Tech Manufacturing Innovation Hub at RiverBend provides an opportunity for coordinating public amenities with the proposed development. Implementing a trail system plan early in project development provides an opportunity for community members, the city and developers to create a public/private alliance. This partnership is also necessary for long term maintenance of the trail. A maintenance plan supported by the RiverBend development and community organizations is required.

There are creative opportunities to integrate the trail system into the new street and sidewalk infrastructure at RiverBend (Image 44: Example of Forest Pedestrian and Bicycle Trail).

Riverbend Initiative

Initiatives	Potential Partners							Funding						
	Community				Cultural	City								
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases		Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tift Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets
(1-3 Years)														
Riverbend Trail	●						●	●	●	●				2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 17, 20, 22

Partnership & Funding Chart: RiverBend Trail Initiative

In some locations it may be possible to create non-traditional, trail-like sidewalk lengths which interact with increased vegetation, trees and varying pavement surfaces. This may occur where the proposed RiverBend trail is close to a proposed street allowing cost-sharing of the initiatives, i.e. road reconstruction. The eastern edge of RiverBend is planned to be a mesic forest which will line the remaining railroad embankment and provide a visual buffer to the existing neighborhood to the east and will encourage greater flora and fauna biodiversity. Providing a judiciously placed pedestrian trail, with careful placement of site lighting can provide increased amenity and a sense of safety.

Consulting with non-profit organizations like Tift Nature Preserve and the Olmsted Parks Conservancy can assist in best practice where trail materials and maintenance are considered.

Initiative 2.3: Shoreline Trail (Greenway Trail Extension)

Ongoing and planned investments in the restoration of the Buffalo River and its shoreline provide renewed hope for increased activity in this area of the South Buffalo BOA. With nearly 2.0 miles of shoreline along the northern edge of the South Buffalo BOA, the river is a significant community asset. Public access to this asset is critical and the shoreline trail is poised to provide this access while celebrating the natural ecology of the area.

Currently, the sites along the Buffalo River in the South Buffalo BOA are vacant lands or railroad tracks that bisect much of the BOA. The shoreline in this area is heavily dispersed with concrete bulkheads reminiscent of the steel industry. Buffalo Niagara RiverKeeper and the City of Buffalo have recently restored the shoreline north-east of South Park Avenue and are in the planning stages of restoring the shoreline on RiverBend south west of South Park Avenue. The new Unified Development Ordinance requires all non-water dependent development be setback a minimum of 100' from the river's edge and maintained as a natural shoreline. While much of the Shoreline Trail will not follow close to the river's edge it will utilize perpendicular spurs to provide water access. Natural planted zones permit habitat access for native wildlife and improved ecological function. At specific locations, as illustrated in (Map 33: South Buffalo BOA Proposed trail initiative), lookout points are encouraged to connect people with the water as well as the two historic grain elevators - the Cargill Superior and Concrete Central, both of which are National Register or National-Eligible landmarks.

Immediate Strategy (1-3 yr.):

Completion of the shoreline restoration on the north side of South Park Avenue provides the opportunity and ideal location to install the first stage of the shoreline trail (Image 45: Shoreline restoration east of South Park Avenue). This trail will provide two connections to South Park Avenue with the southern connection linked to the proposed RiverBend and Germania trails. Partners that may manage the trail installation include Buffalo Niagara RiverKeeper, the Buffalo Urban Development Corporation, State of New York, along with local businesses such as the English Pork Pie Company. The Shoreline Trail project is well suited to obtain funding from the Buffalo and Erie County Greenway Fund.

The planned shoreline restoration for the RiverBend site provides a potential second phase for the Shoreline Trail. The extension of the trail system from South Park Avenue to the railroad would provide approximately 2.0 miles of shoreline trails. The recent development announcement of the Buffalo High Tech Manufacturing Innovation Hub at RiverBend provides an opportunity to incorporate the shoreline trail in the development plans. A partnership between the selected RiverBend developer, Buffalo Niagara RiverKeeper and Buffalo Urban Development Corporation, provide the opportunity to implement this project.



Image 45: Shoreline restoration east of South Park Avenue



Image 46: Pedestrian trail and boardwalk under train bridge rendering

The trail connections on the north and south side of South Park Avenue will be connected via the street infrastructure in this initial phase. Interpretive signage should be located on all trails at key intersections, with indications of length traveled, points of interest, natural features, historical facts, etc. to inform and educate.

Near Term Strategy (3-5 yrs.):

The extension of the shoreline trail around the peninsula located on the northern edge of the South Buffalo BOA is proposed to be the next phase of installation where Concrete Central is located. The peninsula property is currently bisected by railroad lines owned by CSX. This rail corridor is one of the most active in the city. It is suggested that Tiff Nature Preserve acquire the property and expand its mission to include the peninsula. In the near term it is recommended that the Western New York Land Trust Conservancy purchase the property and maintain it until a community or municipal organization can acquire it.

When the property ownership is resolved the trail would hug the shoreline on the west side of the peninsula and the railroad on the east of the peninsula. The eastern portion of the peninsula is preserved and managed as an ecologically sensitive area with limited human contact. Due to the active railroad running north-south, the trail is proposed to be routed under the bridge on a boardwalk installation. Boardwalks provide a safe trail installation and eliminate the need to cross the railroad at grade. Since the boardwalk is under an active train bridge, a canopy would be required to protect pedestrians from debris above. The boardwalk must be located a minimum of 15' from the shoreline to provide important shoreline access for native wildlife. Design of the boardwalk should be done in collaboration with Buffalo Niagara RiverKeeper, as they continue work on shoreline restoration efforts along the entire river, to limit fragmentation of restored shoreline habitat. This portion of the Buffalo River is an active shipping corridor (refer to Map 4) that is regularly dredged by the Army Corps of Engineers. As a result, any constructed boardwalk protruding out past the river's edge must be approved by the Corps and Train Companies.

Long Term Strategy (5-10 yrs.):

The final connection of the shoreline trail to the Outer Harbor and the larger Niagara Greenway Trail requires more extensive infrastructure investment. Due to the proximity of the existing railroad to the shoreline at the turning basin an estimated 400' long bridge will be required that projects into the Buffalo River. This installation will require Army Corps of Engineers review similar to the aforementioned installations under the bridges. The trail system will continue along the river hugging the shoreline to maintain recommended distances from the active rail lines (Image 46: Pedestrian trail and boardwalk under train bridge rendering). Cargill Superior is located along the trail and is a historic industrial attraction and river outlook location. Currently, the property is privately owned by CSX.

The final leg of the shoreline trail is the connection with the Outer Harbor and Niagara Greenway trail on the far western edge of the South Buffalo BOA. This connection requires collaboration with CSX for at grade rail crossings. There are currently at grade maintenance vehicle crossings that extend below Route 5 and connect to the Outer Harbor and are proposed to be used for this purpose.

As the area experiences success and development increases, it is recommended that the trail connection on the north and south side of South Park Avenue, as described in the short-term phase, be relocated. The longer-term approach is to provide a boardwalk system that connects below the South Park Avenue Bridge. This installation would require relocation of the City of Buffalo amphibious vehicle storage facility, which is adjacent to the bridge on the north side.

A boardwalk installation provides the safest trail installation at this location. The boardwalk must include pedestrian overhead protection, minimum location off shore to support ecological function, and collaboration with the Army Corps of Engineers as required.

Shoreline Trail (Greenway Trail Extension) Initiative

Initiatives	Potential Partners									Funding				
	Community			Cultural			City							
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens		Tiff Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets
(1-3 Years)														
Riverbend Trail at Shoreline Restoration			●								●	●	●	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 17, 20, 22
(3-5 Years)														
Peninsula/Concrete Central Trail Section			●							●	●	●	●	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 17, 20, 22
(5-15 Years)														
Cargill Superior Trail Section			●							●	●	●	●	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 17, 20, 22

Partnership & Funding Chart: Shoreline Trail Initiative



Image 47: Grassland trail at Tiff Nature Preserve

Initiative 2.4: All-Tiff Trail

The All-Tiff Trail will provide pedestrian connections from Tiff Street and extend the RiverBend Trail in the north to the neighborhoods around the south-east edge of the South Buffalo BOA. Currently, this area is a capped landfill that, if left undisturbed, will not pose a risk to users and is currently maintained as mowed grassland. A unique characteristic of the proposed All-Tiff Trail is the substantial elevation which provides extensive views to downtown Buffalo and the shores of Lake Erie (Image 47: Grassland trail at Tiff Nature Preserve). Along the trail are protected wetlands, which allow for passive education by visitors, as well as unique ecological ‘stepping stones’ for migratory bird species. A significant component to the development in this area of the South Buffalo BOA is the creation of the South Buffalo Golf Course and Recreation Area. While this development is not currently funded, a plan and design has been completed and will further integrate this area of the BOA with recreation and community amenities.

Long Term Strategy (5-10 yrs.):

The capped landfill is maintained by Honeywell, a global Energy and Technology Company, and would require an easement or transfer to the City of Buffalo to allow pedestrian access. In support of the feasibility of the proposed golf course project recreational facilities such as trails, are recommended to diversify the appeal and draw more visitors to the site.

All-Tiff Trail Initiative

Initiatives	Potential Partners				Funding									
	Community		Cultural	City										
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo		Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets
(5-15 Years)														
All-Tiff Trail	●						●			●	●			2, 6, 7, 8, 9, 10, 11, 15

Partnership & Funding Chart: All-Tiff Trail Initiative

Initiative 2.5: Paper Street Trails

Paper streets are public streets defined on paper but not built. The South Buffalo BOA has two significant paper streets, Germania Street and Colgate Avenue, which provide an opportunity to be linkages to a larger trail system. While the paper streets are currently underutilized, and in some cases are being utilized by adjacent landowners, these publicly owned lands can better serve the public realm. Trailheads and appropriate seasonal mowing can provide meadow-like trails that are ecological and recreational amenities for the community. These properties are city owned and will require a community organization to oversee and maintain the property in a manner similar to what is proposed for the community.

Near Term Strategy (3-5 yrs.): Germania Paper Street

The current economic conditions in the South Buffalo BOA and the City of Buffalo do not currently support the recommendation to transform the paper streets to trails. However, with the announcement of the new developments at RiverBend, the potential for a short-term transformation is more viable. Through a collaboration of public, private and community organizations the reuse of Germania Street as a trail can provide a marketable amenity for the community (Image 48: Possible vision for Germania Paper Street). This trail will



Image 48: Possible vision for Germania Paper Street

connect from Tifft Street to South Park Avenue and will require low maintenance mowing and clean-up of refuse. There is potential for community planted areas as the trail becomes widely used. Upon successful use and maintenance of the trail over a number of years the trail may be viable as a formal path with porous trail material.

Long Term Strategy (5-15 yrs.): Germania Paper Street

In the Germania Paper Street initiative it is proposed to be developed as a city street, providing secondary access to adjacent properties with an emphasis on truck traffic. This approach would mitigate truck traffic along Hopkins Street while providing unique access to both sides of the current and future commercial and light industrial uses. If the development along Tifft Street, Hopkins Street, Rittling Drive and the future RiverBend Drive support installation of a city street on Germania paper street the recreation trail would be proposed to be removed. It is proposed the recreational trail then be refocused to the RiverBend trail, which provides a strong north-south option.

Long Term Strategy (5-15 yrs.): Colgate Paper Street

The southern portion of Germania Street from Beacon Street to Tifft Street is currently an underutilized city paper street backing up to numerous light industrial uses. With the projected growth in the area, reinstating Germania Street will provide secondary truck access to adjacent properties. This approach would mitigate truck traffic along Hopkins Street while providing access to both sides of existing and future commercial and light industrial uses. The future development in RiverBend and Buffalo Lakeside Commerce Park is projected to spur new development opportunities along Hopkins Street that would support this effort. Implementation of the Germania Street project will reduce industrial traffic on Hopkins Street and create a more pedestrian friendly mixed use street for the neighborhood.

As with the Germania paper street, the current economic conditions do not currently support transforming the Colgate paper street into a permanent corridor. However if the planned South Buffalo Golf Course and the All-Tifft Recreational development proceed, an installation of the recreational trail from All-Tifft to South Park Avenue, via the Colgate paper street, is more attainable. Unlike Germania Street, the Colgate paper street does not have the same potential for transformation into a city street as proposed for the Germania paper street. Colgate Street is truncated and does not connect to two connector roads at either end. As with the Germania paper street proposal, reuse of the Colgate paper street as a trail will only be viable through a collaboration of public, private and community. The trail will require low maintenance mowing and clean up of refuse. Incorporation of educational signage provides an opportunity to enhance the users' experience. If, over time, the trail is successful and properly maintained, a formal path with porous trail material may be viable.

Paper Street Initiative

Initiatives	Potential Partners									Funding					
	Community			Cultural			City								
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tifft Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets	City of Buffalo Permit and Inspection Services	Refer to 4.8.6 for Funding Sources
(3-5 Years)															
Germania Paper Street Trail	●	●						●	●	●	●			2, 6, 7, 8, 9, 10, 11, 15, 21	
(5-15 Years)															
Germania Paper Street Truck Access		●									●	●	●		
Colgate Paper Street Trail	●	●						●		●	●			2, 6, 7, 8, 9, 10, 11, 15, 21	

Partnership & Funding Chart: Paper Street Initiative



Image 49: Pedestrian bridge over river

Initiative 2.6: Bridging Water and Rail Lines

Over its history the Buffalo River has been a natural element shaped to connect people and goods, yet it also creates a natural barrier which creates challenges. The rail lines act in a similar manner, bisecting the South Buffalo BOA. The Implementation Strategy suggests providing connections across the river and rail lines which can be accomplished with varying degree of difficulty and expense. Each of these connections is considered a long term strategy that will respond to development demand.

Long Term Strategy (5-10 yrs.):

The South Buffalo Railroad Bridge (Map 33: South Buffalo BOA Proposed trail initiative) connects the All-Tiffit Landfill with BLCP and offers an ideal opportunity for providing an east-west pedestrian connection (Image 49: Pedestrian bridge over river). The existing bridge is still in operation and in order to provide a pedestrian connection a cantilevered walkway is recommended on the north side of the bridge. This particular installation style has been completed locally on the International Railroad Bridge at Squaw Island Park in Black Rock. The trail connection from the South Buffalo Golf Course to the bridge has been detailed in the South Buffalo Golf Course Feasibility Study. If the golf course does not proceed, this connection can still be developed using the Marilla Street underpass, eliminating any need to cross the railroad at grade.

This trail provides an opportunity to connect the Hopkins Street neighborhood with the amenities at BLCP and the Outer Harbor. Partnerships with the Buffalo Urban Development Corporation, private businesses at BLCP, Olmsted Conservancy and the South Buffalo Railroad are required to achieve this strategy. The project is well suited to pursue funding from the Buffalo and Erie County Greenway Fund since this trail will further connect the Niagara Greenway with the surrounding communities.

Long Term Strategy (10-20 yrs.):

South of South Park Avenue a Niagara Frontier Transportation Authority right-of-way (ROW) exists that extends to downtown Buffalo. This connection can provide a trail system that will enhance the connection to downtown and follow an existing ROW. Bridge abutments exist at the river's edge along with half of the structure and decking of a former railroad bridge. The bridge will require reconstruction of the decking and half of the deck structure to support a trail system. A light rail connection was proposed in the Nomination Study for this location and if the growth of the area allows for a mass transit installation, this location provides the best option due to the ROW.

The second pedestrian bridge crossing location occurs at Babcock Street on the north side of South Park. This location does not have any existing bridge infrastructure and the property on the north side of the river leading to the city ROW is privately owned. A new pedestrian bridge is proposed to connect the South Buffalo BOA with the Valley and Babcock district area along with Larkintown communities, which currently have no strong pedestrian connections to the South Buffalo BOA. The Elk Street Master Plan recommends this connection as a critical component to the revitalization of Elk Street. Construction of a new pedestrian bridge that meets the navigation requirements of the Buffalo River would be required.

The bridge infrastructure for both strategies will require significant investment that will rely on state and city funding with cultural incentives.

Bridging Water & Rail Initiative

Initiatives	Potential Partners						Funding							
	Community			Cultural	City									
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund		Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tift Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets
(5-10 Years)														
BLCP & All-Tift Pedestrian Bridge(s)			●						●		●	●		2, 6, 7, 8, 9, 10, 11, 15
(10-20 Years)														
Pedestrian Bridges over Buffalo River			●								●	●		2, 3, 6, 7, 8, 9, 10, 11, 15

Partnership & Funding Chart: Bridging Water Initiative



4.8.3 Strategy 3: Leverage Nature’s Economic & Social Potential

Why is this needed?

There are important ecological opportunities associated with the South Buffalo BOA. Considering the broader landscape and natural resources of the region, there is a need for enhanced migratory bird and fish habitats. There is opportunity to support larger ecological relationships and ecosystem functions within the South Buffalo BOA. The Buffalo River is a key regional ecological corridor, connecting to Lake Erie and the broader Niagara River Corridor and Escarpment zone. It is also an important node on the Atlantic Migratory Bird flyway and therefore provides an important stopover point for various species.

Within the South Buffalo BOA, there are important ecological stepping-stones that provide sensitive habitat zones and the potential for broader landscape ecological connections. These include Tiff Nature Preserve, Times Beach Preserve, as well as the small parks and restored areas along the Buffalo River, and South Park. There are inherent connections between these various ecological spaces within the South Buffalo BOA and the residential neighborhood along Hopkins Street. As enhancements are made to streetscapes, vacant lots, and open space parcels throughout the South Buffalo BOA, connections to the river will be expanded and enhanced. There has already been significant work completed to explore the ecological character of this area as part of the Master Planning effort at the RiverBend site, including incorporating a green infrastructure framework and the commencement of shoreline restoration efforts, overseen by the Buffalo Niagara RiverKeeper. Interstitial neighborhood spaces, such as vacant lots, small gardens, and streets can help better connect neighbors to open space and act as green corridors and ecological stepping-stones, with the integration of various green infrastructure practices. There will continue to be opportunities to increase ecosystem services and access to open space and natural resource features like the Buffalo River (Map 36: Proposed open and green spaces within the South Buffalo BOA).

Despite the benefits of green infrastructure and open space utilization, one of the major challenges to adoption of these practices is uncertainty surrounding how they will be maintained. Operations and maintenance is a technical barrier to adoption and remains a concern for local government. Some of the barriers to effective operations and maintenance are: Financing Operations and Maintenance, Lack of Awareness or Poor Public Perception of Green Infrastructure and Vacant Land Strategies, Limited Training for proper Operation and Maintenance, and Minimal or Ineffective Enforcement and Inspection Procedures.

Initiative 3.1 Buffalo River Shoreline Restoration

Restoration along the riverfront will promote ecological resilience while at the same time reconnecting the community to the native ecology of the river and its upland habitat. The



Map 36: Proposed open and green spaces within the South Buffalo BOA

area was once the home to the largest freshwater marsh along Lake Erie and has been an important spawning area for walleye and sturgeon. Buffalo Niagara RiverKeeper notes that habitat is restorative; human health can improve with increased access to open space. There has already been significant progress in establishing the framework for restoration of the Buffalo River through the Great Lakes Restoration Initiative (GLRI). The Buffalo Niagara RiverKeeper has identified 15 sites along the river as candidates for potential restoration projects over the next three years. These include a number of sites within and in

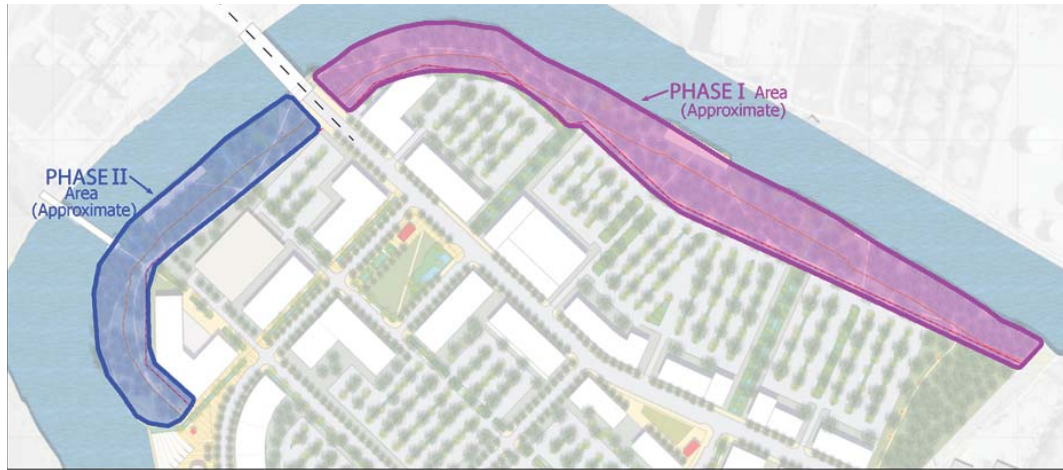


Image 50: Shoreline Restoration east of South Park Ave

proximity to the South Buffalo BOA: Concrete Central, RiverBend, Blue Tower Turning Basin, South Street Park and the Northeastern Shoreline of Katherine Street Peninsula. Phase 1 Riverbend Shoreline Habitat Restoration construction has been implemented and was completed in the Fall of 2013. Currently Phase I is in the one-year, post-construction, period of establishment with final acceptance scheduled for Fall of 2014.

Immediate Strategy (1-3 yrs.)

Within the South Buffalo BOA, the Concrete Central peninsula has been identified as a key habitat restoration opportunity (the “jewel in the crown”) along the Buffalo River. There is an active floodplain, no known serious contaminants, and fish connectivity to the Outer Harbor. There is interest in both upland habitat restoration as well as shoreline restoration along this portion of the river, to strengthen broader habitat connections to Tift Nature Preserve, Times Beach, and the Outer Harbor. Land acquisition is seen as an important part of enhancing larger habitat patches, but may also provide the largest challenge. Shoreline restoration should be prioritized along the River near the ongoing restoration efforts along RiverBend, Tift Nature Preserve, and the Peninsula where Concrete Central is located. Shoreline restoration should focus on creating a living shoreline to promote habitat. Trail and boat access should avoid restored habitat zones and should be strategically located to limit fragmentation of the natural shoreline while still providing access. The RiverBend Phase II shoreline restoration strategy should also be considered a priority in the near-term, helping to continue to strengthen the restoration efforts begun with the Phase 1 shoreline restoration (Image 50: Shoreline Restoration east of South Park Ave)(Map 37: Priority map for the Buffalo River Shoreline Restoration).



Map 37: Priority map for the Buffalo River Shoreline Restoration

Buffalo River Shoreline Restoration Initiative

Initiatives	Potential Partners							Funding						
	Community			Cultural	City									
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases		Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets
(1-3 Years)														
Continue Shoreline Restoration		●						●	●	●	●			3, 5, 13, 14, 16, 17, 18, 19, 20, 22
(5-10 Years)														
Restore Upland Areas near Shoreline		●						●	●	●	●			3, 5, 13, 14, 16, 17, 18, 19, 20, 21, 22

Partnership & Funding Chart: Buffalo River Shoreline Restoration Initiative

Near Term Strategy (5-10yrs.)

Upland restoration that extends from ongoing shoreline projects should be prioritized, in an effort to expand habitat connectivity and provide larger patches of natural resource areas that support a diverse assemblage of plant and animal species. As restoration efforts get underway at Concrete Central the next phase of restoration would include a focus on the upland areas directly adjacent to that site, for further habitat restoration. To strengthen the early actions for restoration further shoreline areas near RiverBend should be prioritized, including the mesic forest restoration and the meadow and wetland areas within RiverBend, to continue to strengthen connectivity and ecological function along the River near Tift Nature Preserve. Upland restoration may also address larger patches of vacant property that may be able to provide ecosystem services associated with restored native meadows or woodlands. The ecosystems that already exist at Tift Nature Preserve, South Park, and the proposed RiverBend ecological overlay should be considered as anchors for future restoration efforts due to their potential for habitat creation, restoration or enhancement.

Initiative 3.2 Re-Tree Streetscapes

Urban forests play an important role in the overall ecological health of a city and street trees serve to enhance streetscapes. Improved streetscapes may provide a seamless transition between formerly isolated areas. The objective for the South Buffalo BOA is to create a healthy and diverse tree canopy along streets that promotes landscape function, green infrastructure goals, and improved community health.

An increase in the amount of healthy tree canopy along major streetscapes can help meet this goal, with special attention to the main north/south thoroughfares of South Park Avenue and Hopkins Street, and the main east/west thoroughfares of Tift Street and Reading Avenue. The Germania Street and Colgate Avenue paper streets provide further opportunity for increased tree canopy and integrated native plantings to better connect smaller urban habitat patches in vacant lots and open space areas. Increased tree canopy can help provide connections for birds and other wildlife that depend on these patches as they travel across the landscape.

Currently there is limited canopy on all of the major streets within the South Buffalo BOA (Image 51: Existing street conditions in South Buffalo BOA). Mature canopy exists on a portion of one side of Colgate Street; however, the trees will have to be monitored as they continue to age. There is little to no buffer between pedestrians, trucks and cars that currently travel along these streets during peak hours. Where street trees exist, there may be a lack of adequate space for root growth and issues associated with accumulating trash and weeds.



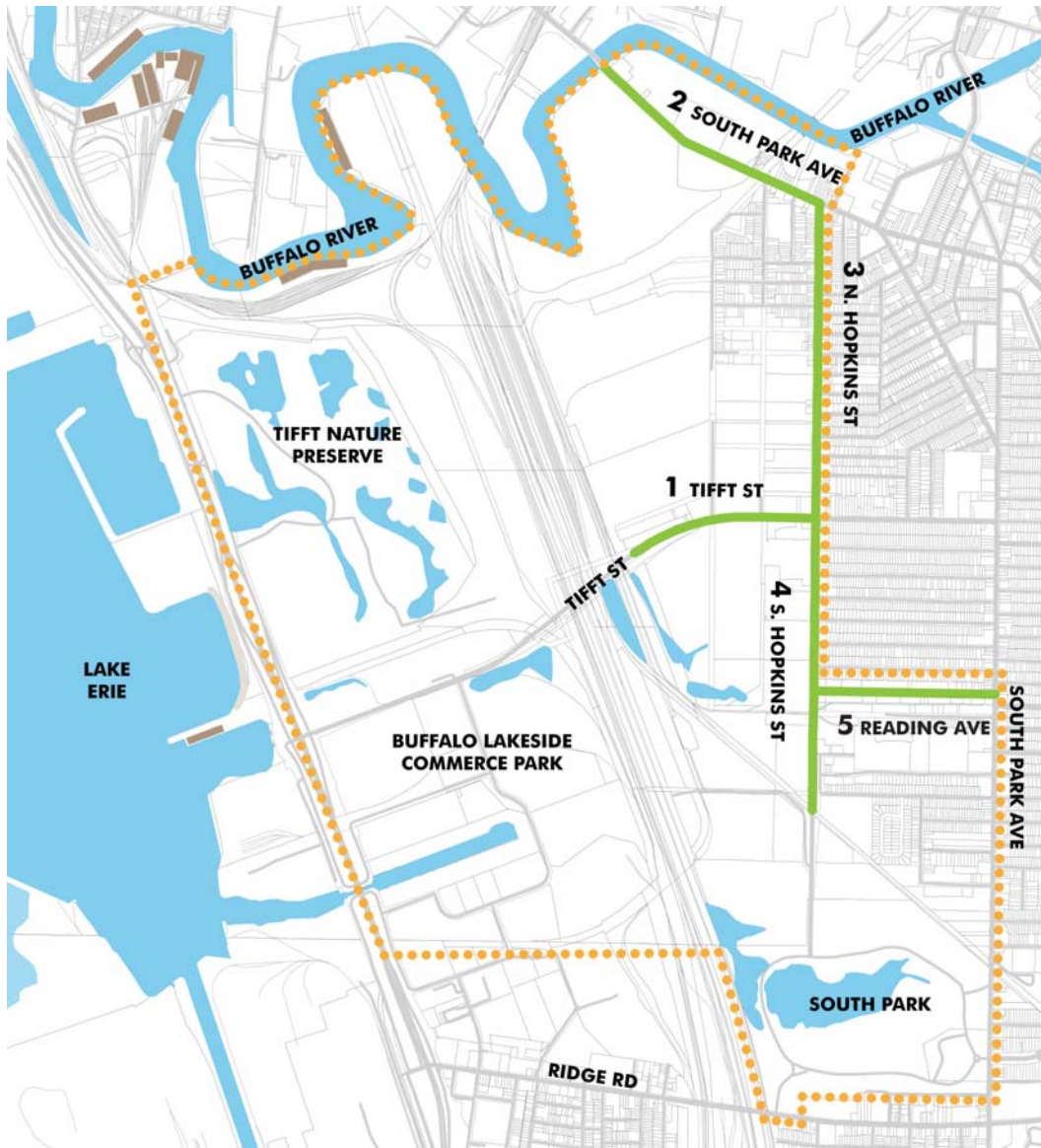
Image 51: Existing street conditions in South Buffalo BOA



Image 52: Example of well-defined street trees

The study area's streets have the potential for an enhanced tree canopy that will create an inviting and comfortable streetscape environment. There are many benefits associated with a robust urban canopy. Mature trees promote clean air and carbon sequestration. They also provide important visual screening along road corridors (Map 38: Proposed tree planting phasing for the South Buffalo BOA), food and habitat for pollinator and wildlife species, increased shade and relief from urban heat island effects, and traffic calming. When tree canopy is included in the design of stormwater best management practices they help promote evapotranspiration and infiltration of stormwater, as described in further detail in the stormwater section below. Well-maintained and designed street tree plantings can create a sense of place and a sense of safety and comfort for the pedestrian (Image 52: Example of well-defined street trees). In addition, street trees influence drivers' perception of narrower roads, which tends to lead to slower speeds. In fact, medians and roads that are planted with street trees are perceived to be safer. A healthy tree canopy can also increase open space amenities and property values.

Some important strategies for cultivating a healthy and diverse canopy along the street include:



Map 38: Proposed tree planting phasing for the South Buffalo BOA

LEGEND

●●●● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

TREE PLANTING SCHEDULE

- 1 TIFFT ST
- 2 SOUTH PARK AVE
- 3 N. HOPKINS ST
- 4 S. HOPKINS ST
- 5 READING AVE



Image 53: Planted trees at the intersection of Tiff and Hopkins Streets

- Preserve the existing mature and healthy trees in the South Buffalo BOA.
- Cultivate community or neighborhood tree-steward groups to help maintain the tree pits. Opportunities may exist through the Botanical Gardens, Olmsted Parks Conservancy, or with Buffalo ReTree (sponsored by the Buffalo Green Fund).
- Plant trees at least 15 – 30 feet apart, depending on the species and other utilities and infrastructure near the street (Image 53: Planted trees at the intersection of Tiff and Hopkins Streets).
- Tree pits or boxes should be large enough to provide adequate space for roots to grow (at least 5 feet by 10 feet). The larger the soil volume provided to the tree, the larger the mature tree size and the better chance for long-term survival.
- Adequately water all new trees, to support initial establishment.
- Maintain a healthy ground around the trees, clearing weeds, trash, and applying mulch.
- Replace mulch annually, at the end of the winter, to remove salts associated with winter street conditions.
- Incorporate a diverse selection of trees.
- Grouped plantings, where space allows, provide for even greater benefits, including increased shading, less soil compaction, greater shared soil volume, and less reflective heat absorbed by a single tree.
- Appropriate species selection is important. Avoid the use of pear trees and other short-lived or invasive plant species, as well as species susceptible to disease and pests. Utilize species that are tolerant of urban conditions. All ROW work to be reviewed by the Department of Public Works, Parks and Streets.
- Keep the root zone of trees clear and free of other deep rooted plants. Street trees should not be overwhelmed by understory plantings that could damage tree roots or raise the soil of the tree bed in a way that blocks oxygen to the roots or promotes soil compaction.

Along with street tree planters, planted medians or verges that contain native perennial plants and shrubs can act as supplemental planting zones to provide further vegetative and



Image 54: Vision for Hopkins Street Complete Street

aesthetic diversity and promote native urban ecological function. Planting large shrubs or water-hungry plants near street trees is not recommended. Instead, plant native perennial plants or shrubs in separate planting boxes or areas where street trees are not appropriate, in order to promote habitat diversity.

Immediate Strategy (1-3 yrs.)

Installation of street trees will transform the community, as described above. A targeted approach in collaboration with organizations such as the Buffalo Green Fund, the Olmsted Parks Conservancy, Tiff Nature Preserve, the Botanical Gardens, local businesses and area Block Clubs can provide the necessary resources to achieve a successful outcome without overwhelming the community with initial maintenance responsibilities. Tiff Street and South Park Avenue serve as gateways into the South Buffalo community and should be targeted for the initial phase of plantings within the next one to three years.

Near Term Strategy (3-5yrs.)

North Hopkins Street and South Hopkins Street are planned as the second phase of plantings in collaboration with the street reconstruction described in Strategy 1 (Image 54: Vision for Hopkins Street Complete Street). Collaboration with local businesses and cultural organizations are critical to this planting initiative.

Incorporating street trees as part of the reconstruction of Reading Avenue is critical for enhancing the connection between Hopkins Street and South Park Avenue. The makeover suggested in Strategy 1 will transform Reading Street into a marketable light industrial street with adjacencies to the proposed South Buffalo Golf Course and mixed use district on South Park Avenue.

It is recommended that an ongoing effort be pursued throughout the community to increase the number of trees, to enhance the tree canopy and improve ecological function. These efforts will improve the ecological benefits and curb appeal of the community.

Re-Tree Streetscapes Initiative

Initiatives	Potential Partners										Funding			
	Community					Cultural			City					
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tiff Nature Preserve		City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets
(1-3 Years)											Refer to 4.8.6 for Funding Sources			
Re-Tree Tiff Street & South Park Avenue	●	●				●		●				●	●	
(3-5 Years)														
Re-Tree Hopkins Street	●	●				●		●				●	●	
Re-Tree Reading Avenue	●	●				●		●			●	●		

Partnership & Funding Chart: Re-Tree Streetscapes Initiative

Initiative 3.3 Stormwater Management

The objective is to intercept, detain, and capture stormwater runoff throughout the South Buffalo BOA before it enters the Buffalo River or the City’s combined sewer and stormwater system, in order to maximize reuse and filtration of stormwater runoff, reduce flows and velocity of runoff, and maximize filtration to promote water quality improvement. Ideally, green infrastructure is integrated throughout the urban landscape to provide treatment of stormwater and safe conveyance of filtered stormwater runoff to the Buffalo River.

Existing stormwater management infrastructure in the South Buffalo BOA is limited. There are existing municipal storm sewers in the northeast area of the South Buffalo BOA along Abby, Germania, and Hopkins Street. Storm sewer capacity in this area is limited (Map 39: Existing stormwater infrastructure within the South Buffalo BOA). The southwest area

(south of Tifft Street) also has existing storm sewers along New York State (NYS) Route 5 and in the Buffalo Lakeside Commerce Park that drain to the Outer Harbor. These facilities are owned and operated by the NYS Department of Transportation and the Buffalo Sewer Authority (BSA), respectively. Significant new drainage improvements are included in the ongoing NYS Route 5 reconstruction project.

The predominant drainage feature in the southeast area of the Baltimore and Ohio rail corridor is South Park Lake. South Park Lake drains west to the Norfolk Southern rail tracks, then north along the tracks where it combines with the pond at the Tifft Street overpass. From there stormwater is conveyed under the rail corridor by way of railroad culverts where it eventually discharges north of Tifft Street into the former east canal, now called Berm Pond and located in the Tifft Nature Preserve.

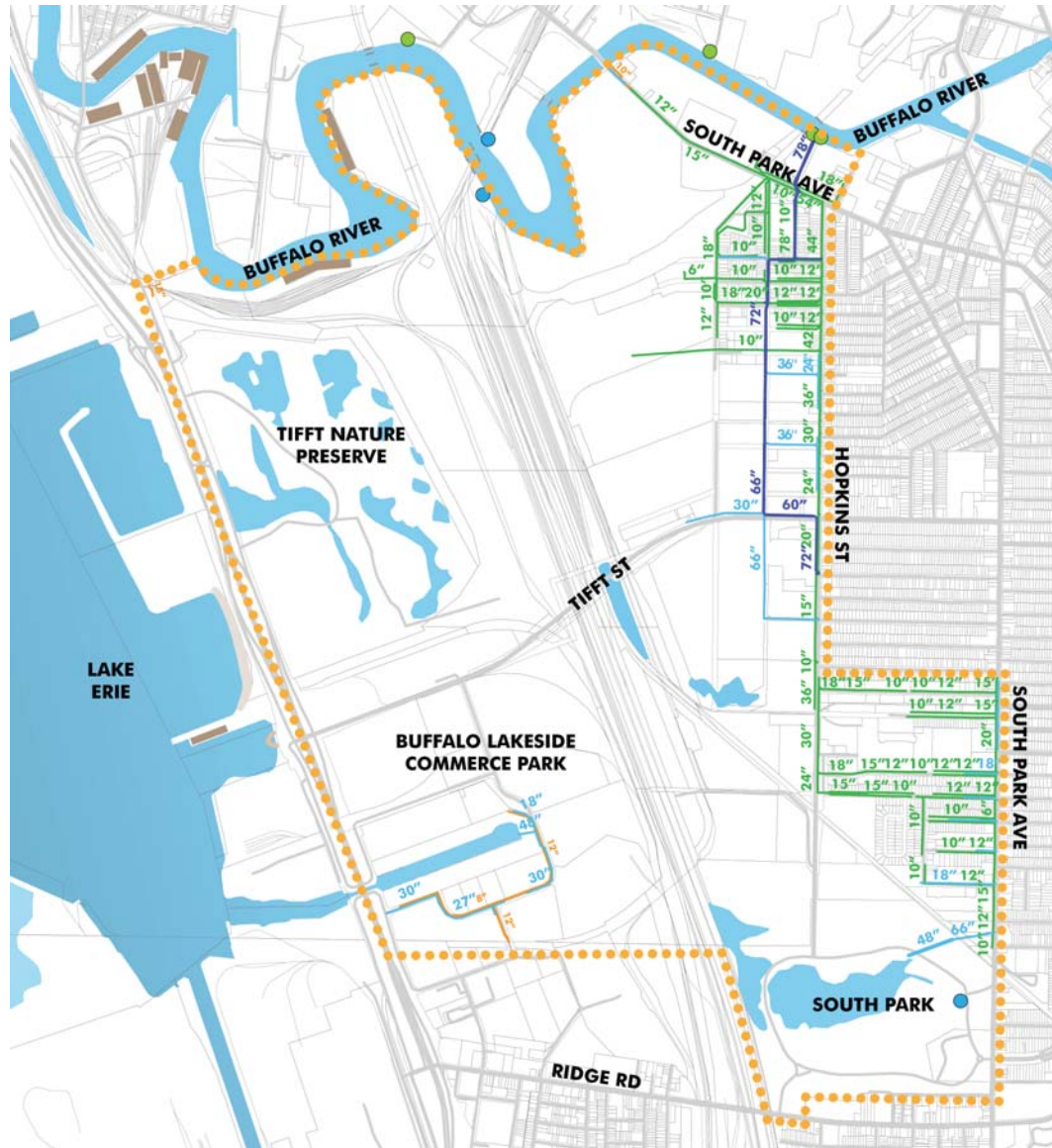
Of note, the rail corridor serves as a barrier to east-west drainage across the South Buffalo BOA. Current east-west drainage is enabled through culverts under the rail tracks. These culverts, owned by an array of rail companies, are in various states of disrepair.

As sites are developed throughout the South Buffalo BOA, new storm drainage facilities will require BSA approval and State Pollutant Discharge Elimination System (SPDES) permits for Stormwater Discharge from Construction Sites and/or Stormwater Discharge from Industrial Sites. These permits require the implementation of stormwater quality and quantity control practices. Stormwater practices are in place at sites more recently developed, including Hydro-Air and the Buffalo Lakeside Commerce Park. Older developments and residential areas throughout the South Buffalo BOA do not have practices in place to reduce stormwater runoff or improve its quality.

As the South Buffalo BOA is redeveloped and infrastructure improvements are made, green infrastructure should be implemented throughout. “Green Infrastructure” is the use of natural, living systems (including wetlands, gardens, meadow, grassland, forests, open space, rivers, and streams) at multiple scales, to provide services to people and the broader ecological community. It is also a cost-effective and sustainable approach to stormwater management that includes technologies to infiltrate, capture and reuse stormwater to maintain or restore natural hydrology. It would be useful to consider all proposed community gardens, as well as vacant lots and stormwater management practices as part of a green infrastructure framework for the South Buffalo BOA.

Benefits of introducing green infrastructure within the South Buffalo BOA may include:

- Cleaning and filtering stormwater runoff
- Providing open space connections to the Buffalo River
- Enhancing urban ecology - river and riparian habitat, bird and pollinator habitat



Map 39: Existing stormwater infrastructure within the South Buffalo BOA

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- COMBINED (292)
- SANITARY (28)
- STORM (89)
- STORM OVERFLOW (58)

- Creating new opportunities for recreation and open space, such as pocket parks
- Re-envisioning vacant lots
- Promoting opportunities for permaculture (i.e. gardening)
- Supporting healthy, vibrant, and resilient neighborhoods

The stormwater management approach proposed for the South Buffalo BOA is a series of interconnected vegetated best management practices (BMPs) in the landscape that will provide water quality treatment, reduce runoff, and safely convey flows to the Buffalo River. The guiding principles and assumptions for this approach include:

- The South Buffalo BOA may serve as a green infrastructure demonstration site, complementing on-going efforts by the Buffalo Sewer Authority (BSA) and the Buffalo Niagara RiverKeeper to demonstrate the feasibility of using green infrastructure for stormwater management in Buffalo.
- No stormwater runoff will be delivered to the City of Buffalo’s combined sewer system. Instead, treated stormwater runoff will be diverted to the Buffalo River or the Outer Harbor.
- The stormwater management approach will comply with the Buffalo Sewer Authority’s (BSA) Sewer Use Regulations, which reference the New York State Stormwater Management Design Manual (NYS Stormwater Manual).
- Runoff reduction will be maximized throughout the site through the use of rainwater harvesting and integrated vegetated BMPs.

It should be noted that little is currently known about soil conditions or the ability to infiltrate stormwater runoff throughout much of the South Buffalo BOA. Testing will be necessary at proposed BMP locations to determine the need for impermeable liners on proposed vegetated stormwater practices. In addition, guidance provided in the NYS Stormwater Manual regarding designing for cold climates should be followed to counteract the potential impacts to BMPs from snow loads and road de-icing.

Many landscape positions (from parking lots and streetscapes, to open space areas, building foundations, and rooftops), throughout the South Buffalo BOA present opportunities for innovative stormwater management strategies, utilizing a combination of best management practices (BMPs) and other regenerative practices. Together, these create the backbone of an integrated green infrastructure approach.

Runoff from parking lots may be treated by bioswales within landscaped areas between parking bays and along perimeters (Image 55: Example of parking lot Bioswale). Bioswales are vegetated swales and channels that convey and filter stormwater runoff. A diverse structure of trees and understory plants will intercept and filter rainfall while providing habitat and shade. Bioswales use soil amendments or layers of engineered soil to encourage filtration and infiltration of runoff. Underdrains and overflow drains collect water that is

not absorbed by vegetation. Impermeable liners may be necessary in some areas to prevent infiltration. These bioswales will convey treated runoff, and overflow runoff, from the parking lots to larger bioswales within street rights-of-way. Larger bioswales within street rights-of-way will filter and treat runoff from streets and adjacent areas, and collect and convey flows from smaller on-lot BMPs.

Biofilters may be used to provide treatment of stormwater runoff from future light industrial land uses. Biofilters are vegetated, depressed landscape areas which collect and either retain or infiltrate stormwater. They are meant to be integrated into the landscape, capturing runoff from the impervious areas immediately around them, rather than becoming centralized detention basins. As with bioswales, biofilters utilize a range of trees and understory plants to intercept and filter rainfall while providing habitat and shade. Soil amendments or layers of engineered soil encourage filtration and infiltration of runoff. Underdrains and overflow drains collect water not absorbed by vegetation. Impermeable liners may be necessary in some areas to prevent infiltration.

Stormwater wetlands can be created to enhance water quality treatment. These practices can be designed in a way that responds to the natural processes and contours in the landscape, providing the stormwater treatment needed while offering aesthetic effect and habitat function. These practices are as important in design as the handling capacity. Integrating native vegetation along the edges of the wetlands can provide further filtration as well as enhanced habitat benefit.

Conveying stormwater through pipes or concrete channels degrades the surrounding environment by speeding up flows, causing erosion, and denying infiltration. Outfall treatment, in the form of Regenerative Stormwater Conveyance (RSC) is recommended for stormwater discharges to the Buffalo River (Image 56: Example of newly constructed Regenerative Stormwater Conveyance (RSC)). RSC is not simply outfall stabilization (e.g., with riprap), but rather a vegetative regenerative design that creates a more stable stream-like system to help convey and filter water, and provide habitat. RSC uses stream restoration techniques to create open channel flow at stormwater outfalls, allowing sedimentation in pools, aeration in riffle structures, and restored ecological function. RSC is used to convey water down slopes from impervious areas or pipe outfalls. RSC is composed of a sand seepage bed, riffle weirs made of boulders and cobbles, a mulch and compost layer, and native plants. This technique is less intrusive than other conveyance stabilization techniques. It dissipates energy by slowing the flows, provides infiltration through the sand bed, and has a natural appearance.

Next steps for the South Buffalo BOA include the following:



Image 55: Example of parking lot Bioswale



Image 56: Example of newly constructed Regenerative Stormwater Conveyance (RSC)

Immediate Strategy (1-3 yrs.)

Collaborate with the BSA to provide guidelines for full treatment of stormwater runoff as part of all new development and redevelopment projects. Require City of Buffalo property sales within the South Buffalo BOA to provide language in the deed requiring full treatment of stormwater runoff on site. Conduct a detailed inventory of public and private properties throughout the South Buffalo BOA study area to identify locations for potential larger-scale green infrastructure projects.

Introduce a voluntary residential program that encourages homeowners to implement small practices, such as rain barrels, rain gardens, and down spout disconnection on their property. This may be possible through collaboration with local organizational partners including the Botanical Gardens, Olmsted Parks Conservancy or Tift Nature Preserve. The City of Buffalo also sponsors residential down spout disconnections to mitigate stormwater overflow.

Near Term Strategy (3-5 yrs.)

Integrate green infrastructure practices into streetscapes and rights-of-way projects as public infrastructure (i.e. streets, sidewalks, etc.) is upgraded. Incorporate green infrastructure projects on Tift Street, South Park Avenue, Hopkins Street and Reading Avenue as recommended in Strategy 1.

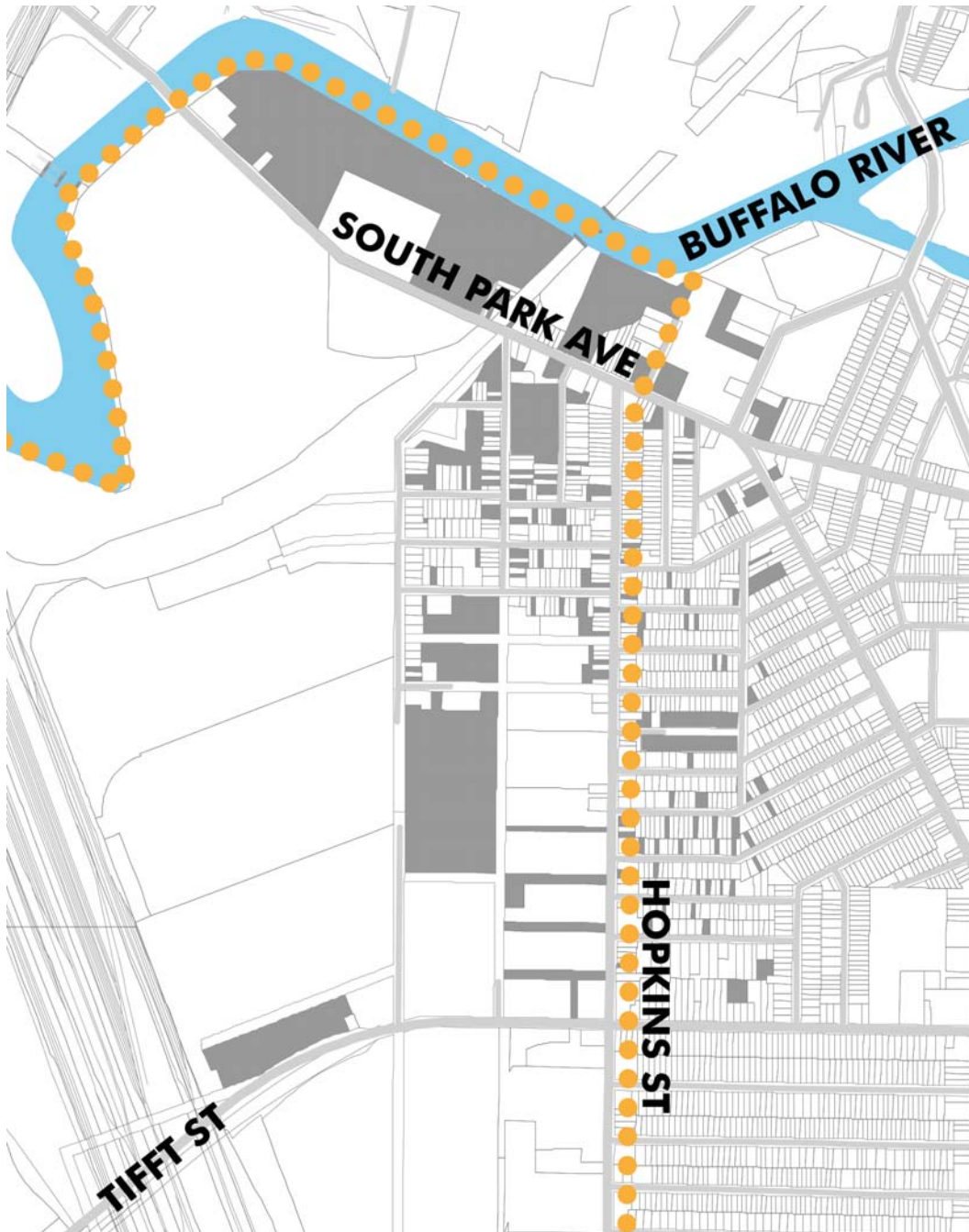
Stormwater Management Initiative

Initiatives	Potential Partners									Funding			
	Community			Cultural			City						
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens		Tiff Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority
(1-3 Years)													
Neighborhood Stormwater Treatment Survey	●	●	●			●		●		●	●	●	
(3-5 Years)													
Implement Green Infrastructure	●		●			●		●		●	●	●	3, 4, 5, 14, 22

Partnership & Funding Chart: Stormwater Management Initiative

Initiative 3.4 Vacant Lands

Vacant lands are often perceived as places of crime, neglect, and abandonment, with legitimate concerns for safety. These parcels, some of which may remain vacant during revitalization, can instead have a positive influence in the community, especially if considered as temporary gardens or habitat areas. Vacant lands located throughout the South Buffalo BOA vary in condition, however they should be considered when creating new connective spaces throughout the neighborhood in order to provide community benefits and accommodate a range of uses (Map 40: Vacant lots in the Hopkins St area of the South Buffalo BOA). Enhanced tree canopy and native vegetation in these spaces – street trees, native meadows, and wooded groves, orchards, etc. – help provide improved ecosystem services and connectivity and an opportunity to explore and reveal the natural resource legacy of the South Buffalo BOA. It is important to understand the overall number, location, and vicinity to other types of habitat and open space, in order to plan for connectivity between these spaces.



Map 40: Vacant lots in the Hopkins St area of the South Buffalo BOA

LEGEND

●●●● SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA

■ VACANT LOTS

Planting vacant lots and maintaining them as native gardens can provide aesthetic benefits along streets and corridors that are experiencing phased revitalization, and provide much needed enhanced vegetative cover and important native pollinator species for local wildlife. When located between larger restored ecological patches, these spaces will provide important tree canopy or vegetative connectivity between patches of significant size, strengthening the overall ecological value of the spaces within the South Buffalo BOA. It is important to consider the connectivity to larger open space and habitat areas to make the best planting choice, whether woodland, meadow or a combination. Small-scale rain gardens or pollinator gardens can be designed for interstitial and streetscape spaces that may not accommodate more complex habitat.

Some vacant lots can be designed as pocket parks or linear parks, to create new modes of connectivity for pedestrians between larger open space or park areas. These small parks can be designed to incorporate seating and open space for both programmed and un-programmed events. If a vacant lot is identified as an ideal location for a temporary event or gathering space, native plantings can help define edges of mown turf that accommodate different uses (outdoor festivals/food trucks/farmers markets). Art installations may be another way to temporarily enliven a vacant space. There may be a space that can serve as the perfect location for a dog park, with appropriate improvements (i.e. fencing), although consideration should be given to avoiding proximity to existing natural areas where the presence of domestic animals could disturb sensitive wildlife.

Important considerations for the use of vacant lots:

- Integrate native habitat patches and corridors (Map 41: Supporting wildlife habitat through restored ecological areas and connectivity),
- Connect natural communities,
- Consider water quality and public health in all designs,
- Design for public access to open space- sometimes visual and sometimes physical,
- Limited access to landscapes where there may be potential residual contaminants based on past uses,
- Precautions should be taken when considering vegetable gardening, including the use of raised beds, and only where the risk of soil contamination has been eliminated

As noted above, integrated stormwater management (swales, rain gardens, and bioretention) can be considered in vacant lots where feasible. Careful consideration should be given to any legacy contaminants that may exist from prior industrial uses. Access should be limited if there is a risk of exposure to contamination and stormwater treatment should not promote infiltration of clean stormwater into any soils that have any legacy contaminants. Instead,



Image 57: Vincennes Street; Buffalo, NY Community Garden

stormwater treatment should be focused on surface conveyance in lined systems that help convey and filter the water.

The use of vacant lands may evolve over time. As vacant parcels are developed or considered for alternative uses, some may remain as green space and should be chosen for their connectivity to the neighborhood community and for the ecosystem services they provide. Over time, the use of vacant lots within the South Buffalo BOA may evolve, as community needs change, but the initial clearing, planting and programming for safe public use helps improve perceptions of safety, property reuse, and ecological function. A full inventory of the vacant lots, and an assessment of their ecosystem service potential, is a first step in envisioning a holistic approach to managing and maintaining these spaces. Outreach to potential partners and landowners is also required in order to understand existing conditions and identify opportunities for reuse vacant properties.

There are multiple opportunities within the BOA for the integration of vacant lots as community gardens and gathering spaces that support connections for community, ecology, and water; providing education through teaching, learning, research; connecting the community to the landscape legacy (Image 57: Vincennes Street; Buffalo, NY Community Garden). A native plant palette is an important part of supporting a functional and regionally relevant green infrastructure framework. Native plants are often found in natural groupings based on specific conditions, including soil type, microclimate, sun/shade condition, moisture regime, topography and geologic conditions, and are also often dependent upon native wildlife that help to spread and pollinate the plants. Pollinator gardens thrive with bees, butterflies and birds while providing beautiful alternatives to squares of turf.

At present, there are few places where South Buffalo BOA residents have access to a community garden, although there are some programs offered through the Botanical Gardens and Grassroots Gardens. The green corridors recommended along Germania and Hopkins Streets can promote the integration of small pollinator gardens and pocket parks



Map 41: Supporting wildlife habitat through restored ecological areas and connectivity

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- - - PATTERN OF INHABITATION
- GREEN SPACE
- WATER

to promote ecological function and opportunities for stewardship. These can be pedestrian centered corridors framed by community gardens, stormwater management and managed open space that may provide small habitat patches for small native wildlife. Community gardens can focus on the use of native plants. Identification of a given location for a community garden should be continued with a community group, neighborhood group, or other established group, so that the location and programming of the space are an appropriate fit for the expected user group. Where gardens are planned careful consideration should be given to any legacy contaminants that may exist from prior industrial uses on these lands. Access should be limited if there is a risk of exposure to contamination and raised gardens with lined beds should be designed to bar any interaction with any existing soils that have any legacy contaminants.

Community gathering space considerations should include: space to eat, play, work (gardening/caretaking), space for engagement in the arts (music/performance/installations, etc), and space for pets to play. All activities that bring neighbors together to care for these gardens can also provide more “eyes on the street,” creating a safer and more welcoming environment for all residents. Sometimes these gardens may be linear, along streets, sometimes on public/private property, and perhaps sometimes they may be more temporary community spaces on vacant lands. One important consideration is the phasing of vacant lot redevelopment. Some properties should be prioritized as early-phase open space/community gardens.

Signage and art pieces can help tell the story of the Hopkins Street community and South Buffalo. This can include pre-settlement natural resource patterns (the Buffalo River, wetlands, streams, meadow, and woodlands rich in wildlife), the Native American presence and resource use, the later development associated with industry, as well as post-industry, the community spirit, a renewed connection to the river, the parks, woodland and meadow, and the wildlife found within. Art and signage may be best coordinated through institutional partners, to promote long-term care and maintenance as well as a consistent aesthetic for signage that may be incorporated throughout the South Buffalo BOA study area.

Institutional partners or champions for proposed community garden spaces and green fingers will be a key part of the success of these spaces. These groups or individuals can help steward spaces, lead community groups, and be advocates for funding and support. They may also be in a position to help plan parallel programming efforts that will enliven these spaces and promote continued use and care over time. To prioritize projects, it may be best to approach potential partners to determine their interest in supporting these efforts.

Immediate Strategy (1-3 yrs.)

Develop a public outreach plan lead by local community organizations, block clubs and/



Image 58: Existing vacant lot on Reading Avenue



Image 59: Ecological restoration with mown edge

or local businesses to determine potential partners. This plan will determine which spaces and what efforts are most likely to be supported, and how candidate spaces can be woven into a broader tapestry of community spaces for neighbors to experience and enjoy.

- The Botanical Gardens is interested in organic gardening and would be a potential partner to connect local gardeners to share techniques and practices.
- The Botanical Gardens has considered installation of a community learning garden at the southeast corner of their site, near Park Avenue. They are also actively working with Cornell University on a community gardening program.
- The Olmsted Parks Conservancy desires to use the northern edge of South Park as a nursery for Olmsted specimen species from around the country that could then be planted citywide.
- There are opportunities for Riverkeeper and Tift Nature Preserve to tell the story of the “blue economy” -an approach to development and redevelopment that emphasizes that access to the fresh water in the Buffalo region is central to ensuring the economic resurgence of the city and community.
- Tift Nature Preserve and Botanic Gardens have the opportunity to work together on educational efforts and urban gardening programming.
- Some business owners in the South Buffalo BOA including Modern Disposal and LCA have also suggested they would be interested in being community stewards by adopting park spaces.
- Grassroot Gardens is a non-for-profit organization that supports 73 community gardens on 135 lots throughout the City of Buffalo. These gardens are located on private property, municipal property, and property owned by schools. Grassroots Gardens facilitates access to properties by securing a master lease with the City of Buffalo, which is currently being renewed. This organization is devoted to helping people create and sustain community gardens and offers a great partnership for the

Vacant Lands Initiative

Initiatives	Potential Partners									Funding				
	Community				Cultural			City						
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens		Tiff Nature Preserve	City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority	City of Buffalo Public Works, Parks & Streets
Potential Partners Outreach Plan	●	●	●	●	●	●	●	●	●	●	●	●	1, 2, 3, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 21, 22, 27, 28, 29, 30	

Partnership & Funding Chart: Vacant Lands Initiative

South Buffalo BOA vacant lands.

Initiative 3.5 Buffalo River Dredging

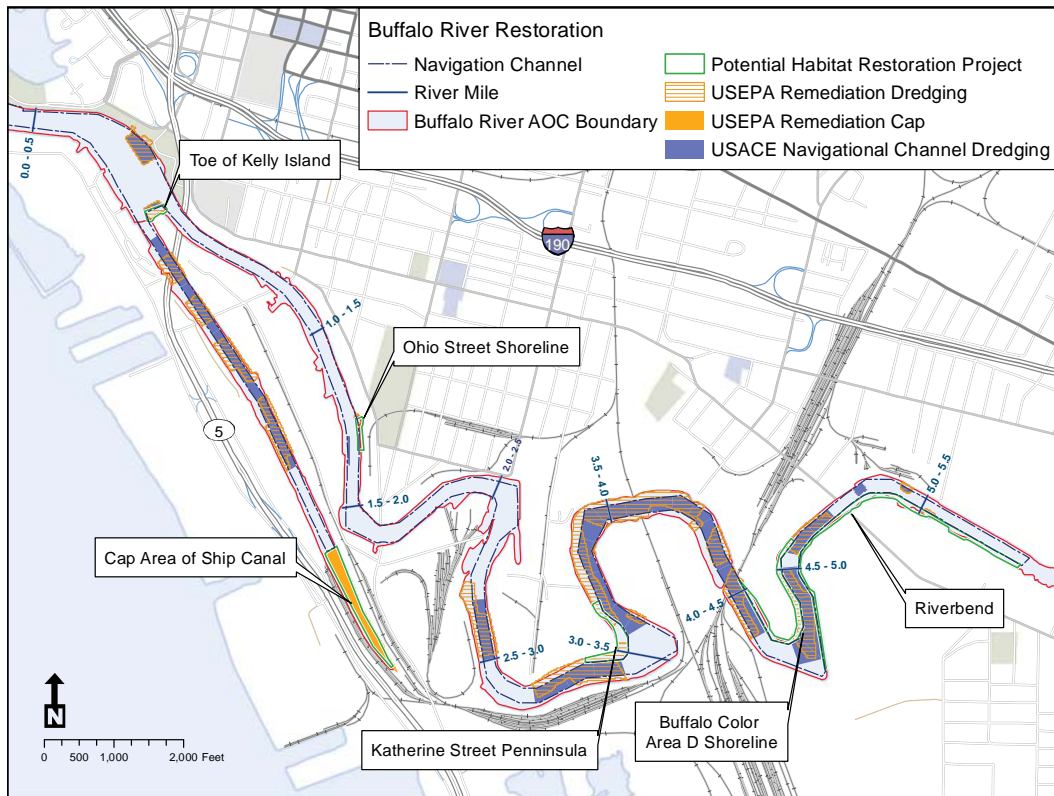
Dredging occurs on the Buffalo River to achieve two main objectives: to facilitate navigation and removal of sediments. As a 6.2-mile federal navigation channel, Congress mandates the U.S. Army Corps of Engineers (USACE) maintain the channel of the Buffalo River to a depth of 22 feet, along with an additional 1.4 miles of the City Ship Canal (Image 1.12). The second objective is to remove contaminated sediment from the River. Since the Buffalo River was designated as an “Area of Concern” (AOC) in 1987, it was required to complete a Remedial Action Plan (RAP). This RAP includes a remediation strategy of sediment assessment and action determination with the ultimate goal of delisting Beneficial Use Impairments (BUIs) associated with the AOC; seven of these BUIs are currently tied to contaminated sediments in the Buffalo River.

In conjunction with the Buffalo River RAP, the U.S. Army Corps of Engineers, Buffalo District performed a reconnaissance-level study from 2001-2003, which determined that there was Federal interest in initiating a cost-shared feasibility study of environmental dredging on the Buffalo River from Hamburg Street to the confluence of Cazenovia Creek and the River. A public-private-nonprofit collaborative, the Buffalo River Restoration Partnership (US EPA, US ACE, NY DEC, RIVERKEEPER, and Honeywell), was formed to lead the cleanup efforts in the Buffalo River. Based on the feasibility study, Phase I was completed in 2011, with the US Army Corps of Engineers, dredging approximately 600,000 cubic yards of contaminated sediment from areas of the authorized Buffalo Harbor Federal navigation channels. Under the Great Lakes Legacy Act, the US EPA dredged an additional 300,000 cubic yards from areas outside of the navigation channels in 2013 as part of Phase II Environmental Site Assessments and plans to dredge an additional 300,000 cubic yards in 2014. This work will be followed by aquatic habitat restoration in 2014 or 2015 (Map 42: Buffalo River Dredging).

Despite a significant lack of aquatic habitat within the AOC, water quality has improved and fish presence has increased in the Buffalo River. This fish community is a combination of cool-water/cold-water migrant species and warm-water resident species with some near-shore/lake species utilizing the river on a seasonal basis for spawning and/or as juveniles and adults. Many of these migratory species are known to spawn over gravel or cobbles. Although these fish species may utilize certain reaches of the Buffalo River for spawning, the influence of Lake Erie on the hydraulic conditions within the river precludes creating significant cobble/gravel riffle habitat within the AOC, as does the continued navigation dredging. The majority of the shoreline is hardened and sparsely vegetated.

Near Term Strategy (3-5yrs.)

The Buffalo River Restoration Partnership is currently completing designs for the habitat



Map 42: Buffalo River Dredging

restoration phase of the cleanup, which will include five projects intended to improve water quality and increase dissolved oxygen in the River. The Buffalo River Ecological Restoration Master Plan also identifies and prioritizes potential restoration projects. Future dredging and subsequent aquatic restoration can also be prioritized in areas outside of the navigation channel and adjacent to natural shorelines, restored shorelines and potential shoreline restoration areas. Focusing on these areas will not only expand habitat connectivity and provide critical aquatic habitat, but also provide larger stretches of natural shorelines and aquatic areas that support a diverse set of native plant and aquatic species.

Long Term Strategy (5-15 yrs.)

Opportunities outside of the navigation channel exist to create shallow, vegetated aquatic benches to provide critical habitat to resident species and fish larvae as a way to mitigate the impacts of dredging, where legacy contaminants are minimal or nonexistent. One approach to create these aquatic benches is through “living shorelines,” (Image 60: Naturalized shoreline section approach for a potential aquatic ecosystem restoration project at LaSalle Park. Source: City of Buffalo, 1998)(Image 61: An example of a living shoreline approach for a potential aquatic ecosystem restoration project at LaSalle Park. Source: Biohabitats, January 2011) where the shoreline edge is re-graded to create a gently sloping area with

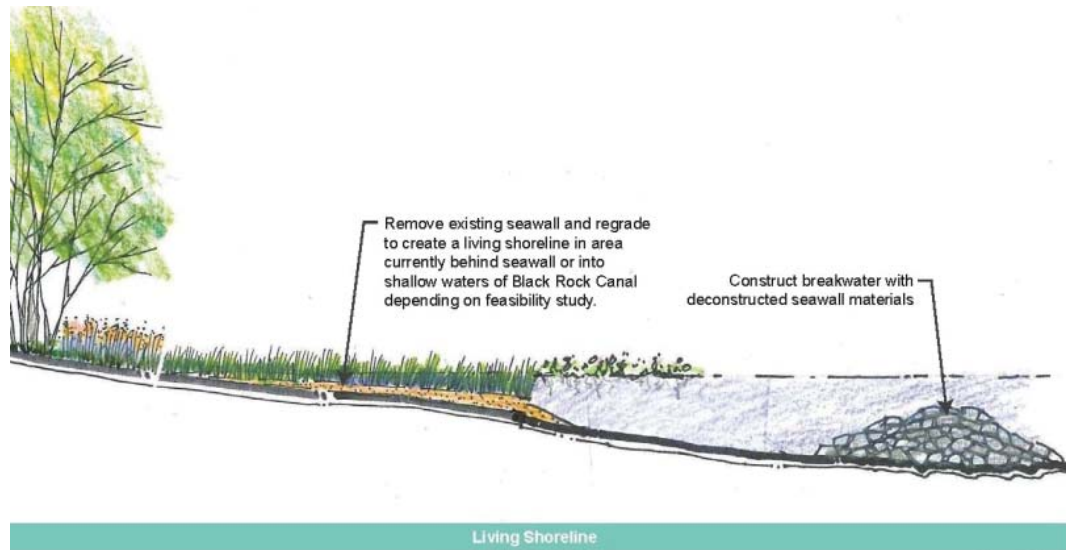


Image 61: An example of a living shoreline approach for a potential aquatic ecosystem restoration project at LaSalle Park. Source: Biohabitats, January 2011



Image 60: Naturalized shoreline section approach for a potential aquatic ecosystem restoration project at LaSalle Park. Source: City of Buffalo, 1998

shallow, calm waters, appropriate substrate, and native plants.

Other approaches to increase aquatic habitat include removing, partially removing, and/or retrofitting bulkheads, as well as exploring the concept of “green bulkheads.” A project currently underway on the Cuyahoga River in Cleveland, Ohio is exploring concepts for

Buffalo River Dredging Initiative

Initiatives	Potential Partners										Funding		
	Community					Cultural		City					
	Local Community Organizations	Local Business Owners	Buffalo Niagara Riverkeeper	GoBike Buffalo	Grassroots Gardens	Re-Tree: Buffalo Green Fund	Community Canvases	Buffalo Olmsted Parks Conservatory	Buffalo & Erie County Botanical Gardens	Tift Nature Preserve		City of Buffalo Office of Strategic Planning	City of Buffalo Sewer Authority
Refer to 4.8.6 for Funding Sources													
(3-5 Years)													
Aquatic Restoration Projects	●	●	●						●		●	●	3, 4, 5, 8, 13, 17, 18, 19, 20, 22
(5-15 Years)													
Aquatic Benches	●	●	●						●		●	●	3, 4, 5, 8, 13, 17, 18, 19, 20, 22
Remove or Create Green Bulkheads	●	●	●						●		●	●	3, 4, 5, 8, 13, 17, 18, 19, 20, 22
Future Restoration River Areas	●	●	●						●		●	●	3, 4, 5, 8, 13, 17, 18, 19, 20, 22

Partnership & Funding Chart: Buffalo River Dredging Initiative

retrofitting bulkheads to provide larval fish habitat.

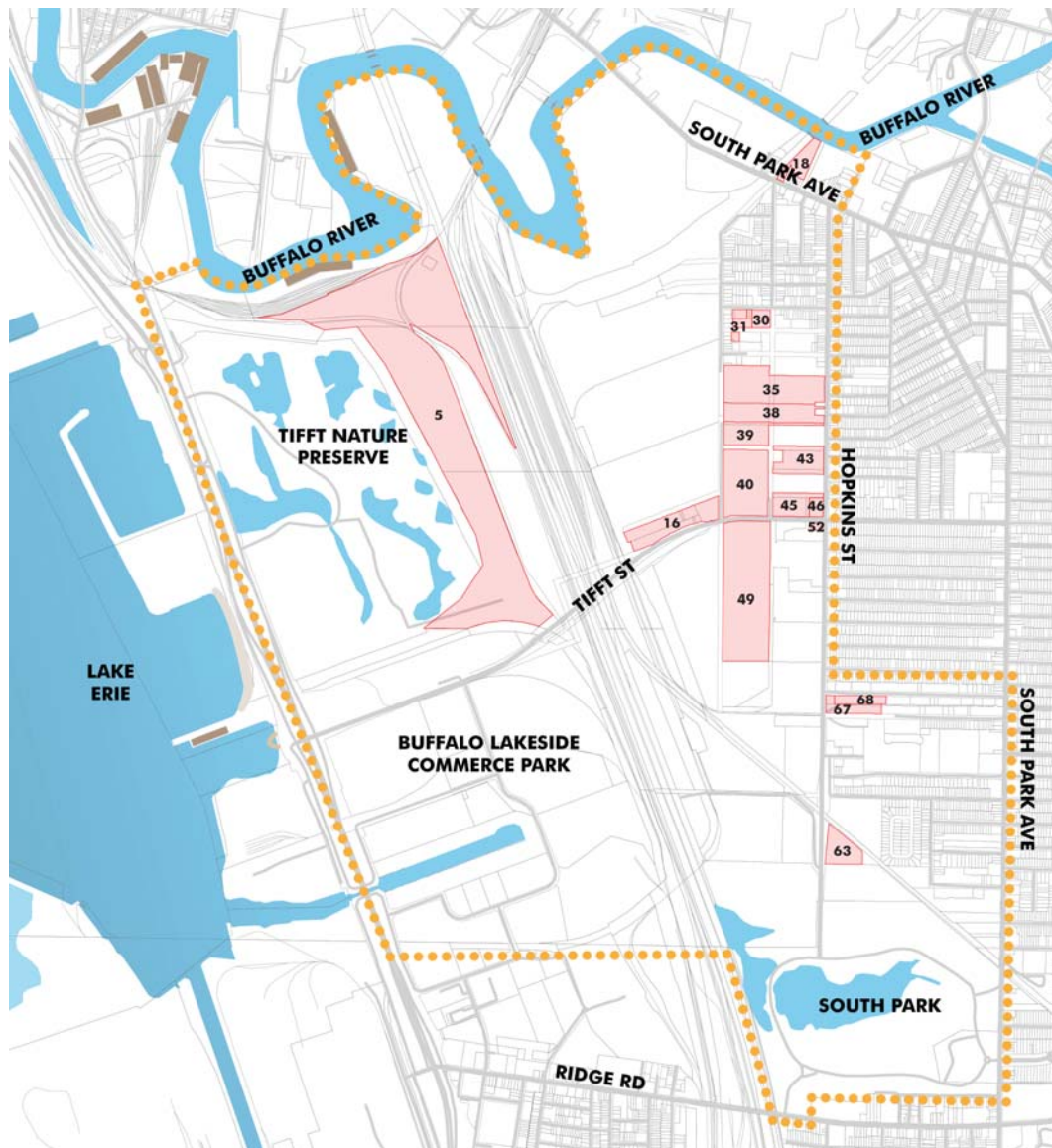
4.8.4 Brownfield Remediation Strategy

During the Nomination Study, strategic sites were identified utilizing existing environmental information, through extensive input from the Steering Committee and with consideration given to the following: overall importance to the community, location, ownership, property size, and capacity to spur redevelopment or additional economic development. In addition, consideration was given to the potential for the site to improve quality-of-life within the community, to site new public amenities, and the adequacy of supporting or nearby infrastructure, utilities and transportation systems.

Each property located within the South Buffalo study area was researched to identify past and present uses, and potential environmental impacts during the Nomination Study. Facility and site information, maintained at both the state and federal level, was reviewed to determine changes in site conditions during and since preparation of the Nomination Study. Information was obtained from six main sources: NYSDEC Spills Incident Database, NYSDEC Remedial Site Database, NYSDEC Bulk Storage Database, EPA Envirofacts Database, Erie County Parcel Data, and Sanborn Maps. This inventory was used to develop recommendations to help the City determine viable next steps for properties as redevelopment opportunities are presented. Recommendations stemming from this analysis are sometimes pertinent to a change in land use or ownership and are not intended to suggest necessary actions on the part of land owners who are actively and appropriately using their properties. This research serves as one layer of analysis that was then used in the context of strategic sites and existing land uses to further refine recommendations.

As a result of refined analysis during this Step 3 Implementation Strategy, 49 tax parcels were identified to be included in targeted landowner outreach (Map 43: 49 Strategic Brownfield Sites). Fliers were mailed to each property owner and door to door visits were conducted to describe the project and gauge potential interest in being involved in the Project and voluntary participation in the Phase II ESA application process. Of those identified, there was interest on the part of three property owners in learning more information and possible involvement with the Phase II applications. These properties included:

- **Site 16 Krog Site:** The Krog site consists of seven parcels comprising approximately seven acres located at the southernmost portion of the RiverBend site area. These parcels are collectively owned by Krog USC Associates LLC. Current and past uses and proximity to nearby past and present industrial operations indicate this area may have environmental impacts. Consultation with Krog Associates indicated that environmental investigations have already been completed at the property. The property owner is willing to participate in short, mid and long-term implementation strategies and has a strong desire to secure a tenant for the premises. Phase II Environmental Site Assessments should be completed and results updated to develop a remediation



Map 43: 49 Strategic Brownfield Sites

LEGEND

- SOUTH BUFFALO BROWNFIELD OPPORTUNITY AREA
- ENVIRONMENTAL SITE ASSESSMENT PARCELS

strategy and identify potential future site use.

- **Site 31 – BURA Hickory Woods Parcels:** The BURA properties are located between Mystic and Beacon Streets, west of Germania and Hopkins Streets and south of South Park Avenue. This site was formerly the location of the Donner Hanna Coke Corporation and was used for employee housing, parking and vehicle maintenance. Although the site was not historically used for manufacturing operations, remediation of these parcels is required as part of the historic Hickory Woods settlement as a result of elevated concentrations of PAHs that have impacted on-site surface and subsurface soils. The site is currently capped and access is limited. However, funding for remediation activities should be identified and site cleanup pursued to encourage future redevelopment. Remediating this particular site is especially important since it is part of the Hickory Woods neighborhood and would renew residents' faith in the City's interest and investment in the neighborhood.
- **Site 38 - 478 Hopkins, Inc. (Artmeier Trucking):** The properties located at 456 Hopkins and 263 Germania (contiguous properties, separated by a paper street), are currently being utilized for trucking operations. The property owner/operator has a desire to continue the business at this location, but also indicated a desire to contribute to the South Buffalo BOA through participation and consideration of early implementation projects (i.e. art installations). Involvement in a Phase II Environmental Site Assessment is contingent on the owner's acquisition of the adjacent paper street.
- **Site 39 – 170 Germania Street:** This property is located along Hopkins and Germania Streets. A Phase I Environmental Site Assessment was conducted in 2007 and recommended a Phase II Environmental Site Assessment be completed. Recognized environmental concerns identified by the ESA included cutting and/or filling activities completed between 1970 and 1990 and existing construction, demolition, and fill debris stockpiled on a portion of the site. A Phase II Environmental Site Assessment is recommended for this site prior to redevelopment.
- **Site 40 - L.A. Woolley:** The L.A. Woolley site is primarily used for office space and distribution of electrical products. Prior to site acquisition, a limited Phase II Environmental Site Assessment was conducted. The site consists of approximately six acres of paved area and four acres of meadow in the rear, which was remediated as part of the Republic Steel remediation effort. An updated Phase II Environmental Site Assessment should be conducted prior to business expansion and/or parcelizing the site for redevelopment opportunities. The property owner has opted to submit an application for Phase II Environmental Site Assessment funding under the Step 3 Implementation Strategy.
- **Site 43 - Kulp Waco:** The property owned by Kulp Waco (420 Hopkins Street) is

currently for sale. The property was formerly operated as a trucking terminal, and prior to that was a vacant residential property circa 1950. Records indicate that the site had aboveground storage tanks storing diesel fuel and that three underground storage tanks storing diesel fuel and leaded gasoline were removed from the site in 1998. The project team engaged this property owner but was unable to set-up an independent meeting to discuss applying for Phase II ESA funding. A Phase II Environmental Site Assessment should be pursued to facilitate sale of the property and encourage site redevelopment.

- **Site 45 - Frontier Service:** Frontier Service is located at 666 and 744 Tifft Street, and 360 Hopkins Street. Automotive repair and parts and service operations are currently associated with this site. The current property owner purchased the property in 2000-2001. Historic records indicate that polyaromatic hydrocarbons were found on the site, and that six abandoned underground storage tanks were removed from the site in 2005. The property owner currently intends to continue operation of the business at the existing site, and opted not to pursue Phase II ESA funding. If plans for the site should change, a Phase II ESA is recommended to further characterize environmental conditions on the site.
- **Site 49 - Skyway Auto Parts:** Since the time of the Nomination Study, Skyway Auto Parts changed ownership, but is still being operated as an automotive scrap yard, as it has been since approximately 1963. Skyway Auto Parts has operated on the site since 1982, and there is history of environmental impact. Representatives of Skyway Auto Parts were engaged to determine interest in pursuing Phase II Environmental Site Assessment funding, and a meeting was held to describe the South Buffalo BOA project and vision for the study area. To date, Skyway Auto Parts does not have plans to relocate from the current site and is not pursuing funding for environmental assessment of the site.
- **Site 52 - JP Auto Sales and Repair:** The site was formerly operated as an automobile repair shop. At the time the Nomination Study was completed, the site was active. Since that time, the repair facility has ceased operations and the owner has expressed interest in selling the property. According to historic Sanborn maps, prior to auto sales and repair the site was used as a filling station. Conversations with the property owner indicated no testing has been completed on this property. The site is strategically located at the corner of Hopkins and Tifft Streets, and redevelopment of this site could serve as a catalyst for other revitalization opportunities. It is recommended that Phase II Environmental Site Assessments be completed prior to sale and/or redevelopment of the property.
- **Site 63 - Bob & Don's Auto Parts Site:** Bob and Don's Auto Parts is located at 49 Hopkins Street and is an underutilized site. Given the historic operation of the

site, a Phase II ESA would be recommended to determine the amount and extent of environmental impact, if any. The site is currently for sale and the property owners and real estate agent were engaged to gauge interest in submitting a Phase II ESA application. It is uncertain at this time whether or not the owners will opt to pursue environmental characterization of the site, however a Phase II Environmental Site Assessment is recommended based on limited information regarding conditions.

(Table 3: Environmental Recommendations for Strategic Sites) below summarizes the environmental recommendations and next steps based on the refined strategic sites identified during the Step 3 Implementation Strategy process.

Out of the property owners who were engaged, one private property owner and the City of Buffalo have committed to participating in the Phase II Environmental Site Assessment application process through the BOA program. In addition, it is recommended that the City of Buffalo identify and pursue funding for remediation of the city-owned BURA Hickory Wood parcels. Should any additional strategic sites, as identified above, become available for redevelopment, Phase II Environmental Site Assessments are recommended to better identify site conditions and redevelopment opportunities.

Site #	Site Name	Approx. Acreage	Environmental Site Recommendations	Phase II ESA Participation	Property Status
16	Krog Site	6.9	Update Phase II ESA	No	Underutilized
31	BURA Hickory Woods Parcels	1.3	Pursue funding for remediation	No	Vacant
38	Artmeier Trucking	6.4	Pursue Phase II ESA	Pending	Active
39	170 Germania	4.4	Pursue Phase II ESA	Yes	Vacant
40	L.A. Woolley	11.0	Pursue Phase II ESA	Yes	Active/Underutilized
43	Kulp Waco	4.8	Pursue Phase II ESA	No	Inactive/for sale
45	Frontier Service	3.4	Pursue Phase II ESA	No	Active
49	Skyway Autoparts	24.3	Pursue Phase II ESA/remediation	No	Active/Underutilized
52	JP Auto Sales and Repair	0.4	Update Phase II ESA	No	Vacant
63	Bob & Don's Auto Parts	3.7	Phase II ESA/remediation	No	Inactive/for Sale

Table 3: Environmental Recommendations for Strategic Sites

4.8.5 Local Laws and Regulations

Project area recommendations for the Implementation Strategy primarily focus on improvements to the public realm, streetscape enhancements, incorporating green infrastructure strategies, improvement environmental conditions and enhancing the local identity of the study area. To facilitate implementation, the regulatory framework needs to be considered to ensure regulations will not inhibit the strategies developed for area-wide revitalization. Laws and regulations that either exist or should be considered to support implementation are described briefly by the intent of identified initiatives.

- **Complete Streets:** The City of Buffalo passed an ordinance amendment to Chapter 413 in 2008 requiring inclusion of pedestrian and bicycle facilities into all new street construction, reconstruction, maintenance and public works and parks projects undertaken by the city. This requirement closely aligns with recommendations made for various streets in the study area as part of this process. In addition in 2011, Governor Cuomo signed the Complete Streets Act, requirement state, county and local agencies to consider the convenience and mobility of all users for transportation projects using state and federal funding sources.
- **Green Infrastructure:** Various green infrastructure techniques are recommended to address environmental, aesthetic and grey infrastructure issues throughout the South Buffalo BOA. The NYSDEC Stormwater Management Design Manual establishes best green infrastructure practices to be employed for runoff reduction, and should be used as a resource when considering employing green infrastructure techniques. In addition, the City of Buffalo's Unified Development Ordinance is structured to support emerging practices, including encouraging local food production, on-site and district stormwater management, and alternative energy production. In addition, for each use outlined in the UDO, the city identifies maximum impervious surface thresholds including exceptions for inclusion of green infrastructure techniques.
- **Re-Tree:** Many of the recommendations in this Implementation Strategy relate to streetscape improvements, which are increasingly recognized as an urban amenity and important component of the green infrastructure network. Chapter 309 of the city code establishes regulations for the protection of trees. In addition, Chapter 476 sets forth regulations to protect trees located on public property or public rights-of-way. Other regulations, policies and programs that could be considered include incompatible development protection, which protect trees from development that may be damaging, requirement of a landscape protection plan to preserve the extant treescape from development impacts, tree replacement and density requirements, and adoption of a neighborhood program, through which the municipality provides residents with free trees to plant near city streets.

- **Community Gardens:** Community gardens are an emerging initiative impacting communities throughout the country. To facilitate their development, many communities are revising zoning regulations to establish them as an “As-of-Right” use. The City’s proposed Green Code establishes community gardens as an approved principal use in most of the proposed zoning designations, with the exception of areas zoned for heavy industrial uses and in certain corridor zones. Other communities establish density requirements, to ensure equitable access to healthy local food opportunities. In addition, certain Planned Development requirements require a yard or other shared space to be dedicated as a community garden. Finally, “Adopt-a-Lot” policies permit vacant public or private properties to be used as community gardens in the short-term until redevelopment opportunities present themselves.
- **Public Art Installations:** Public art can be used to create a sense of place, celebrate an area’s history, develop neighborhood identity and to improve the public realm. Chapter 409 of the City Code establishes an Art in Public Places program, which requires projects equal to or greater than \$1,000,000 dedicate 1% of the total budgeted design and construction cost to public art costs. This stipulation applies to city projects located on city-owned properties. The proposed Green Code further identifies areas located throughout the city of Buffalo that are appropriate for public art projects, establishing “Furnishing Zones.” Although the city already has public art requirements in place, other communities have taken these requirements a step further and established Private Developer Cultural Arts Requirement. These require the developer to incorporate public art into the proposed project, or contribute to an arts fund in lieu of installation. Sign regulations also may preclude art installation. The city of Buffalo currently defines signs in a way that may prevent inclusion of murals as part of property beautification. The proposed code is revising this definition so this style of public art will be more freely allowed.

4.8.6 Step 3 Funding Agencies and Partners

Through its course the Implementation Strategy has been an inclusive networking process to create awareness and bring together many parties ranging from; neighborhood residents, community organizations, business owners, City of Buffalo departments, civic leaders, and cultural institutions. By partnering, interested groups are equipped to share knowledge and execute implementation projects as outlined in the Implementation Strategy. Financial resources are pivotal to the success of the outlined initiatives. The following section provides a resource list of potential funding sources. In many cases, it is possible to combine smaller grants to capture a greater net sum for priority projects. Below are possible funding sources to make projects a success:

Consolidated Funding Application: In 2011, Governor Andrew M. Cuomo created ten Regional Economic Development Councils (REDC) and the Consolidated Funding Application (CFA) to advance the administration’s efforts to improve New York’s business climate and expand economic growth by directing state resources to support economic development.

The Regional Economic Development Councils developed strategic plans with advice from a broad spectrum of stakeholders taking into account the unique strengths and weaknesses of each region. The strategic plans serve as a 5-year road map, guiding each region’s efforts to stimulate economic growth. Western New Yorks strategic plan and implementation agenda can be found online at <http://regionalcouncils.ny.gov/content/western-new-york>. Information about each agency’s programs can be found below.

1. **New York State Council on the Arts – Arts, Culture and Heritage Projects**

Overview:

Funds for Local Assistance are available under Article 3 of NYS Arts and Cultural Affairs Law for the study of and presentation of the performing and fine arts; surveys and capital investments to encourage participation of the arts; to encourage public interest in the cultural heritage of the state; and to promote tourism by supporting arts and cultural projects.

Eligible Applicants:

Non-Profit Organization, New York State Indian Tribes, and units of local and state government

Available Funds:

\$50,000 - \$100,000

Contact:

www.arts.ny.gov/public/grants/index.htm

2. **Office of Parks, Recreation & Historic Preservation - Recreational Trails**

Program

Overview:

The Recreational Trails Program provides funds to develop and maintain recreational trails for both motorized and non-motorized recreational trail use. Funding is available for the maintenance and restoration of existing recreational trails, development and rehabilitation of trailside and trailhead facilities and trail linkages for recreational trails, purchase and lease of recreational trail construction and maintenance equipment, construction of new recreational trails, and acquisition of easements and fee simple title to property for recreational trails or recreational trail corridors.

Eligible Applicants:

Non-Profit Organization and units of local and state government

Available Funds:

TBD

Contact:

Nancy Stoner, 518-486-2699

nysparks.com/recreation/trails/default.aspx

3. **New York State Department of State - Local Waterfront Revitalization**

Program

Overview:

The Local Waterfront Revitalization Program provides 50:50 matching grants on a competitive basis to revitalize communities and waterfronts. This is a reimbursement program.

Eligible Applicants:

Villages, Towns, Cities

Available Funds:

TBD

Contact:

Ken Smith, kenneth.smith@dos.ny.gov

www.dos.ny.gov/opd/programs/lwrp.html

4. **New York State DEC/EFC Wastewater Infrastructure Engineering Planning Grant**

Overview:

The New York State Department of Environmental Conservation (DEC), in conjunction with the New York State Environmental Facilities Corporation (EFC), will offer grants to municipalities to help pay for the initial planning of eligible Clean Water State Revolving Fund (CWSRF) water quality projects. The ultimate goal of this wastewater infrastructure engineering planning grant program is to assist

needy communities to initiate a planning process with a follow-up implementation plan to address local water quality problems. Successful applicants will use the engineering report when seeking financing through the CWSRF program or other financial means to further pursue the identified solution.

Eligible Applicants:

Municipalities

Available Funds:

\$30,000 - \$50,000

Contact:

www.dec.ny.gov/pubs/81196.html

5. **Environmental Facilities Corporation - Green Innovation Grant Program**

Overview:

The Green Innovation Grant Program (GIGP) provides grants on a competitive basis to projects that improve water quality and demonstrate green stormwater infrastructure in New York. GIGP is administered by NYS Environmental Facilities Corporation (EFC) through the Clean Water State Revolving Fund (CWSRF) and is funded through a grant from the US Environmental Protection Agency (EPA).

Eligible Applicants:

Municipalities, State Agencies, Non-Profit Organizations, Partnerships, Individuals

Available Funds:

TBD

Contact:

<http://www.efc.ny.gov/Default.aspx?tabid=461>

Other Funding Sources

6. **Baird Foundation**

Overview:

Arts, Health & Wellness, Community Development, Education

Eligible Applicants:

Variety

Available Funds:

TBD

Contact:

Catherine Schweitzer
cfs@bairdfoundation.org

7. **M & T Bank Charitable Foundation**

Overview:

Providing resources to not-for-profit organizations that make communities better places to live and work

Eligible Applicants:

Variety

Available Funds:

TBD

Contact:

www.mtb.com/aboutus/community/Pages/TheMTCharitableFoundation.aspx

8. **The Margaret L. Wendt Foundation**

Overview:

Arts, Community Development, Education, Human Services, Energy & Environment

Eligible Applicants:

Variety

Available Funds:

TBD

Contact:

Robert Kresse
mlwendt@aol.com
716-885-2146

9. **Community Foundation for Greater Buffalo**

Overview:

Helping donors identify options for giving and carrying out their wishes. And assisting donors in making the most of their generosity.

Eligible Applicants:

Variety

Available Funds:

TBD

Contact:

www.cfgb.org/

10. **Western New York Foundation**

Overview:

The Foundation makes investments that build on nonprofits' proven strengths in order to improve their effectiveness and their ability to fulfill their missions

Eligible Applicants:

Non-profit organization

Available Funds:

TBD

Contact:

www.wnyfoundation.org/

11. **The John R. Oishei Foundation**

Overview:

To improve the lives of Western New York's residents. Focusing support on programs and organizations which are clearly based upon attainment of excellence both in concept and ultimate implementation.

Eligible Applicants:

Variety

Available Funds:

TBD

Contact:

www.oishei.org

12. **National Endowment for the Arts**

Overview:

Organizations may apply for creative place making projects that contribute to the livability of communities and place the arts at their core.

Eligible Applicants:

Variety

Available Funds:

\$25,000 - \$200,000

Contact:

arts.gov/grants-organizations/our-town

13. **NOAA Great Lakes Habitat Restoration Program**

Overview:

NOAA delivers funding and technical expertise to restore Great Lakes coastal habitats. These habitats support valuable fisheries and protected resources; improve the quality of our water; provide recreational opportunities for the public's use and enjoyment; and buffer our coastal communities from the impacts of changing lake levels. Projects funded through NOAA have strong on-the-ground habitat restoration components that provide social and economic benefits for people and their communities in addition to long-term ecological habitat improvements.

Eligible Applicants:

Municipalities, State Agencies, Non-Profit Organizations, Partnerships, Individuals

Available Funds:

TBD

Contact:

www.habitat.noaa.gov/funding/index.html

14. **Great Lakes Protection Fund**
Overview:
A funding source for research projects that protect, restore and improve the health of the Great Lakes ecosystem in New York.
Eligible Applicants:
Government, Academia, Non-governmental groups
Available Funds:
Varies, up to \$100,000
Contact:
www.glpf.org
15. **Federal Highway Administration: Transportation Enhancement Program (TAP)**
Overview:
To strengthen the cultural, aesthetic, and environmental aspects of the Nation's intermodal transportation system, including on and off road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former divided highways.
*Please check the NYS DOT website for future funding opportunities as they may change due to congressional legislature.
Eligible Applicants:
Available Funds:
Contact:
www.fhwa.dot.gov/environment/transportation_alternatives/
16. **Department of Environmental Conservation Cost-Share Grant**
Overview:
DEC is committed to providing support and assistance to communities in comprehensive planning, management, and education to create healthy urban and community forests, and enhance the quality of life for urban residents through its Cost Share Grant program.
Eligible Applicants:
Variable
Available Funds:
\$2,500 - \$50,000
Contact:
www.dec.ny.gov/lands/5285.html

17. **Sustain our Great Lakes: Stewardship Grants Program**
Overview:
To sustain, restore and protect fish, wildlife and habitat in the Great Lakes basin leveraging funding, building conservation capacity, and focusing partners and resources toward key ecological issues.
Eligible Applicants:
Non-profit Organizations; State, Tribal, Provincial & Local Governments; and Education Institutions.
Available Funds:
\$150,000-\$1,500,000
Contact:
www.sustainourgreatlakes.org/Apply.aspx
18. **U.S. Environmental Protection Agency: 5 Star Restoration Program**
Overview:
The Five Star Restoration Program provides challenge grants, technical support and opportunities for information exchange to provide environmental education and training through projects that restore wetlands and streams
Eligible Applicants:
Students, conservation corps, other youth groups, citizen groups, corporations, landowners and government agencies
Available Funds:
\$5,000 – \$20,000
Contact:
www.epa.gov/owow/wetlands/restore/5star/
19. **U.S. Environmental Protection Agency: Great Lakes Program Funding**
Overview:
Restoration and maintenance of the chemical, physical, and biological integrity of the Great Lakes basin.
Eligible Applicants:
Variety
Available Funds:
TBD
Contact:
www.epa.gov/greatlakes/fund/glf.html
20. **Fish America Foundation: Conservation Grants**
Overview:
FishAmerica provides grants to non-profits, conservation minded groups to enhance fish populations, restore fisheries habitat, improve water quality and

advance fisheries research to improve sport fishing opportunities and success.

Eligible Applicants:

Non-profit organizations such as local sporting clubs and conservation associations, educational institutions, and local and state governments

Available Funds:

\$10,000- \$75,000

Contact:

www.fishamerica.org/grants.html

21. **U.S. Department of Agriculture: Restore Urban and Community Forests**

Overview:

Existing management plans and tree cover assessments to plant and maintain tree canopy cover

Eligible Applicants:

State agencies, non-profits, academia, and municipalities

Available Funds:

\$30,000- \$50,000

Contact:

USDA

22. **U.S. Department of Agriculture: Natural Resources Conservation Service**

Plant Materials Program

Overview:

The Plant Materials Program selects conservation plants and develops innovative planting technology to address today's natural resource challenges. Six major objectives addressed by the Center are cropland erosion/soil health; water quality; native plants; biofuels/agroforestry; wildlife habitat improvement; and critical area stabilization.

Eligible Applicants:

Variety

Available Funds:

NA

Contact:

www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/northeast/nyPMC/

Brownfield Redevelopment Incentives & Benefits

23. **U.S. Department of Treasury: Community Development Financial Institutions Fund, New Markets Tax Credit**

Overview:

The New Markets Tax Credit Program (NMTC Program) was established by Congress in December 2000 to help economically distressed communities attract private investment capital by providing investors with a Federal tax credit. Investments made through the NMTC Program are used to finance businesses and real estate projects to breathe new life into neglected, underserved low-income communities. The NMTC Program is aimed at offsetting the risk of investing in distressed and low-income communities.

Advantages to Brownfield Developers:

- Community Development Entities may be willing to structure a more favorable deal than traditional lending institutions.
- Community Development Entities can offer funding for a range of development activities.
- Community Development Entities involved in brownfield projects can facilitate packaging of different public financing sources for one project. Sources include state and local programs and credits, tax increment financing initiatives, CDBG funds and the EPA's Brownfields Grants.

Eligible Applicants:

An organization wishing to receive awards under the NMTC Program must be certified as a Community Development Entity (CDE) by the Fund.

To qualify as a CDE, an organization must:

- be a domestic corporation or partnership at the time of the certification application;
- demonstrate a primary a mission of serving, or providing investment capital for, low-income communities or low-income persons; and
- maintain accountability to residents of low-income communities through representation on a governing board of or advisory board to the entity.

Available Funds:

In exchange for cash investment in a CDE's project, the investor receives 39 percent of the investment value in tax credits over a seven-year schedule.

Contact:

www.cdfifund.gov/what_we_do/programs_id.asp?programID=5

24. **U.S. Department of Housing and Urban Development: Low Income Housing Tax Credits (LIHTC)**

Overview:

The LIHTC program enables funding for affordable housing by allowing the

taxpayer to claim federal tax credits for the costs incurred during development of affordable units in a rental housing project. To the extent that these policies dovetail with local brownfields priorities, they may encourage investment in brownfields revitalization. Both profit and non-profit brownfields developers can use LIHTCs to help finance low-income housing projects. The program can be used to construct new buildings or rehabilitate existing buildings. All activities associated with the development of housing, including cleanup and demolition, can be claimed as expenses for the purposes of claiming a tax credit. The program is administered at the state level.

Eligible Applicants:

Project must have at least 20 percent of its units rented to households whose incomes are at or below 50 percent of the area median income, or at least 40 percent of its units rented to households whose incomes are at or below 60 percent of the area median income.

Available Funds:

The percentage of qualified low-income units is referred to as the “applicable fraction.” If the owner fails to achieve the projected applicable fraction, the amount of credits is reduced.

Contact:

portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/lihtcmou

25. **National Park Service: Historic Rehabilitation Tax Credits**

Overview:

This program provides investors a tax credit that can be claimed for the year in which the renovated building is put into service. A certified historic structure is defined as a building that is listed in the National Register of Historic Places, either individually as a contributing building in a National Register historic district, or as a contributing building within a local historic district certified by the US Department of the Interior. Rehabilitation of income producing certified historic structures qualifies for a credit equal to 20 percent of the cost of the work. Rehabilitation on non-certified structures built before 1936 qualifies for a credit equal to 10 percent of the cost of the work. All restored buildings and properties must be income-producing and rehabilitated according to the Department of Interior’s standards

Eligible Applicants:

Applicants must have a Project that meets IRS criteria to qualify for the credit, including:

- Structure must be depreciable;
- Rehabilitation must be substantial, defined as expenditures greater than \$5,000;
- Property must be returned to an income-producing use;
- Building must be maintained as a certified historic structure when returned to service.

Projects that plan to claim the 10 percent rehabilitation tax credit must meet several physical structure tests:

- At least 50 percent of the building's external walls existing at the time rehabilitation begins must remain in place as external walls upon completion.
- At least 75 percent of the building's existing external walls must remain in place as either external or internal walls.

Available Funds:

Tax credit amounts range between 10 and 30 percent.

Contact:

www.nps.gov/tps/tax-incentives.htm

26. **U.S. Environmental Protection Agency: Clean Energy**

Overview:

Combining energy incentives with contaminated land cleanup incentives can allow investors and communities to create economically viable, non-polluting, renewable energy projects on brownfields, particularly where local economic conditions prohibit traditional reuse of the site.

Eligible Applicants:

Through the various programs, funding is available for a wide range of renewable and sustainable energy projects for commercial and residential developers. Integrating energy tax incentives into a project's financing strategy can enhance project cash flow by offsetting cleanup and construction costs. Energy projects can be ideal at brownfield sites for which there is insufficient market interest to support more traditional economic redevelopment projects.

Available Funds:

Tax credits/incentives vary based on the project

Contact:

www.epa.gov/cleanenergy/

27. **U.S. Environmental Protection Agency (EPA): Brownfield Cleanup Grant**

Overview:

The U.S. EPA Brownfields Program is designed to empower states, communities and other stakeholders to work together to prevent, assess, cleanup and sustainably reuse brownfield properties. EPA provides the technical and financial assistance for brownfield activities through an approach based on four goals: protecting human health and the environment, sustaining reuse, promoting partnerships and strengthening the marketplace.

Eligible Applicants:

State, local and tribal governments; general purpose units of local government, land clearance authorities or other quasi-governmental entities; regional council or redevelopment agencies; state or legislatures; or non-profit organizations. Other

stipulations apply.

Available Funds:

Up to \$200,000 per site; no entity may apply for funding cleanup activities at more than five sites. Cleanup Grants require 20 percent cost share, which may be in the form of a contribution of money, labor, material or services, and must be for eligible and allowable costs.

Contact:

www.epa.gov/brownfields/cleanup_grants.htm

28. **Department of State: Brownfield Opportunity Area Program**

Overview:

Program provides financial and technical assistance to municipalities and community based organizations for development and implementation of a community based program for brownfield revitalization.

Eligible Applicants:

Municipalities and community based organizations or a partnership of municipalities and community based organizations

Available Funds:

Up to 90 percent of the total eligible project costs

Contact:

www.dec.ny.gov/chemical/8447.html

29. **U.S. Department of Environment Controls: Environmental Restoration Program**

Overview:

This program provides funds to municipalities for brownfield site investigation or remediation measures. Upon successful completion of the program, the municipality and future owners are released from liability for contaminants on the property prior to obtaining ownership.

Eligible Applicants:

Municipalities or municipalities working in cooperation with a community based organization. The municipality must own the property and must not have caused the contamination. The property cannot be listed as Class 1 or 2 on the New York State Registry of Inactive Hazardous Waste Sites.

Available Funds:

Provides municipalities with up to 90 percent of on-site and 100 percent of off-site costs associated with cleanup.

Contact:

www.dec.ny.gov/chemical/8444.html

30. **U.S. Department of Environment Conservation: Brownfield Cleanup Program**

Overview:

This program aims to encourage private sector cleanup and redevelopment of brownfield sites. BCP established a system of state funding and tax credits for cleanup of brownfields.

Eligible Applicants:

An applicant who requests to participate and has been accepted by NYSDEC and who may or may not have been the owner or operator of the site at the time of disposal of contaminants or who is otherwise responsible for the contamination. Exempt sites include sites listed as Class 1 or 2 in the Registry of Inactive Hazardous Waste Disposal Sites; sites listed on the USEPA National Priorities List; Hazardous waste treatment, storage or disposal facilities; sites subject to cleanup order or stipulation under Article 12 of the Navigation Law; or sites subject to any on-going state or federal enforcement actions regarding solid/hazardous waste or petroleum.

Available Funds:

Tax credits ranging from 22 to 50% depending on site track. BCP includes additional incentives for sites who comply with the goals of the BOA in which the site is located.

Contact:

www.dec.ny.gov/chemical/8450.html

31. **New York State Rehabilitation Tax Credit Program**

Overview:

This tax credit is used in conjunction with the Federal Historic Preservation Tax Incentive Program. Property owners can take advantage of both state and federal income taxes.

Eligible Applicants:

Any commercial, office, industrial or rental residential building if it is listed on the state or national register of historic places either individually or as a contributing building in a historic district or eligible for inclusion on the registers, or has an approved federal tax credit part I certification. For the state credit, the commercial property must also be located in a federal census tract identified as a Qualified Census Tract, having a median family income at or below the State Family Median Income level.

Available Funds:

20% tax credit for Qualified Rehabilitation Expenditures; coupled with federal program can cover as much as 40% of eligible project costs.

Contact:

nysparks.com/shpo/tax-credit-programs/



SB

SOUTH BUFFALO



BOA

BROWNFIELD OPPORTUNITY AREA

4.9 Marketing the South Buffalo BOA



Image 62: Proposed development model in the South Buffalo BOA

The South Buffalo BOA has undergone extensive market analysis during the Nomination Study to understand the local, regional, national, and bi-national contexts. Although the South Buffalo BOA's history is steeped in heavy industry, the market projections developed during the Nomination Study suggest that the study area should advance beyond historic uses to reach its full potential. The Implementation Strategy employed a place-based method to prioritize sites. The planning team identified business owners who would benefit from more in depth analysis specific to their sites. This process was conducted with multiple in-person meetings to discuss opportunities for revitalizing their property, gather current land use information and review prior planning efforts. Preliminary development concepts, specific to their property, as well as possible techniques to further the vision for the South Buffalo BOA were presented and explained to each business owner (Image 62: Proposed development model in the South Buffalo BOA).

To understand the recent chronology of the marketing process the following ideas are expanded upon:

2009 – The Nomination Study describes area-wide market trends that take into consideration the complex land base and community concerns to fundamentally shape the master plan. A Smart Growth approach was developed that balances the study area's need for economic development with the need to preserve the built environment and poise vacant properties for future development. The Nomination Study also established ten principles to guide economic development and decision-making within the BOA. The ten principles are listed below and more information can be found in the Nomination Study Document, Section 4.2.

1. Leverage Existing Assets
2. Diversify the Economic Base
3. Enhance and Leverage the Natural Environment as a Key Asset
4. Create a Strong Market Brand
5. Prioritize Investment in the Public Realm



Image 63: Buffalo Lakeside Commerce: Park Ship Canal Commons

6. Promote High Quality Urban Design and Place Making
7. Foster Collaboration and Partnerships
8. Provide Benefits to Neighboring Communities
9. Plan for the Long Term
10. Establish a Range of Implementation Activities

2011 – The RiverBend Master Plan, a 260 acre subarea located in the northeast portion of the South Buffalo BOA, is intended to provide a flexible framework to guide development of RiverBend. Implementation projects have been strategically prioritized to promote incremental improvements of the public realm. A key strategy in the RiverBend plan includes overarching design principles to allow adaptation as the market demands change over time. The Master Plan provided the framework for development of the Buffalo High-Tech Manufacturing Innovation Hub at RiverBend, a \$1.5 Billion public private partnership recently announced by Governor Andrew M. Cuomo. This project will create an economic ripple effect throughout the South Buffalo BOA and would not have been made possible without the principles illustrated in the master plan (Image 63: Buffalo Lakeside Commerce: Park Ship Canal Commons).

4.9.1 Step 3 Marketing Strategy

The South Buffalo BOA has witnessed extraordinary investment announcements in 2013 and is positioned to continue the upward trajectory of development in the near future. These investments benefit from the focus on development that the BOA program provides in addition to the expansive available ready within South Buffalo BOA. Market research performed by Buffalo Niagara Enterprise (BNE), Empire State Development and the Billion for Buffalo defines target industry clusters for the city of Buffalo. To achieve the goals defined in the Implementation Strategy, specific target industries must be pursued regionally, nationally, bi-nationally and internationally. Ongoing focused marketing efforts by BNE and its partners at the City and State government on the South Buffalo BOA and its target industries will lead to further development.

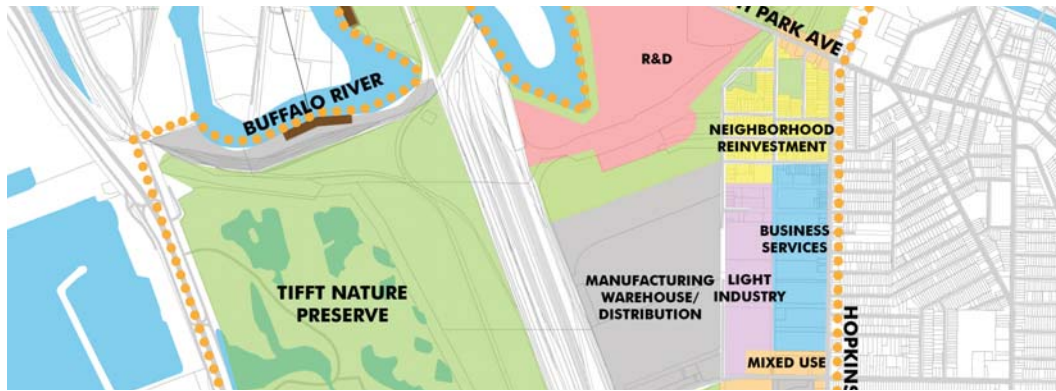


Image 64: South Buffalo BOA Land Use

The diversity and availability of land throughout the South Buffalo BOA provide an array of development opportunities. The area offers a variety of property sizes for investment, from a shovel ready 20 acre site in Buffalo Lakeside Commerce Park to less than one acre sites on Reading Street. In addition to the variety of lot sizes, the area also includes a variety of neighborhood scales from a mixed use condition on Hopkins Street to larger manufacturing character on Rittling Drive. These characteristics were taken into consideration when developing the future land uses in the South Buffalo BOA Master Plan and draft Green Code (Image 64: South Buffalo BOA Land Use). The proposed land uses include light industry, manufacturing/warehouse/distribution, business services, R&D and mixed use. This selection of land uses provides the most appropriate uses for the area while meeting the needs of its target industry goals. The target industries that are best suited for the South Buffalo BOA are: Advanced Manufacturing, Logistics/Distribution, Advanced Business Services and Life Sciences.

To advance development opportunities in the South Buffalo BOA, a strategic marketing effort is required that aligns with the ongoing efforts by BNE and its partners in City and State government. These strategies includes:

- Market Buffalo Niagara as a regional asset in our targeted industry clusters (Advanced Manufacturing, Logistics/Distribution, Advanced Business Services and Life Sciences)
- Leverage and promote the Billion for Buffalo investments in our regional infrastructure
- Focused, one on one approach with attraction project, such as the High Tech Manufacturing Innovation Hub at RiverBend and Buffalo Lakeside Commerce Park (Image 65: Buffalo Niagara Partnership Marketing Brochures)
- Unite the collective power of our region to get businesses to expand in or relocate to the City of Buffalo
- Implement marketing campaigns to improve South Buffalo BOA brand awareness

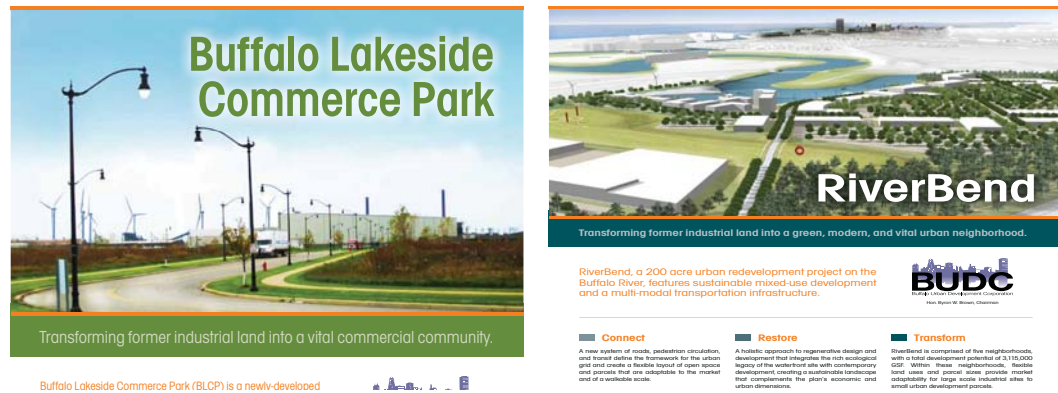


Image 65: Buffalo Niagara Partnership Marketing Brochures

- Increase Foreign Direct Investment initiative and continue market focus on Canada
- Target Canadian manufacturers that were identified through BNE industrial gap analysis
- Match companies’ needs with incentive programs to encourage relocation or expansion

Targeting the appropriate market areas for this strategy requires ongoing analysis by BNE and its partners. The target audience for the marketing strategy includes investors, private sector companies and brokers. The ongoing Canadian strategy has produced significant success and created a road map for greater outreach. While Canada remains a key focus additional national and international efforts is required using an industry-focused approach.

A marketing strategy requires multiple formats to reach potential investors. A strong web presence with industry and site specific content is an important avenue for pursuing a broad based target audience. BNE, Buffalo Urban Development (BUDC) and Erie County Industrial Development Agency (ECIDA) websites currently maintain a strong web presence that supports the South Buffalo BOA. Incorporating the marketing material developed as part of the Implementation Strategy on these websites and proactively promoting them provides an avenue for reaching the target audience. Using electronic communication tools BUDC and BNE can maintain contact with key targets, stakeholders and media to promote positive news and foster awareness for the region. Other broad forms of outreach include trade shows, industry specific news journals, e-mail blasts, blogs and direct mailers. BNE recently hosted several journalists from various target industry publications to introduce them to the region, the business community and regional assets. Using this creative approach to marketing the South Buffalo BOA would be beneficial to introducing new audiences to this exciting area.

As part of the early Implementation Strategy, outreach opportunities in Southern Ontario were reviewed because of their close proximity to the US and the need to increase Canadian

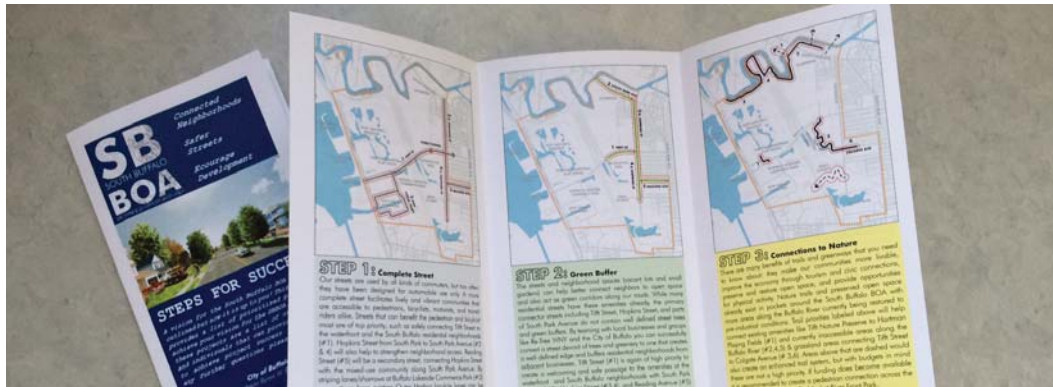


Image 66: Hopkins Street Area Brochure

market access. At that time it was determined that a workshop session in Southern Ontario would be beneficial and should include BNE staff, local Buffalo developers and the South Buffalo BOA team. BNE has found that the majority of companies that are looking to relocate or have a facility in the Buffalo area seek turn-key, move-in ready facilities. Owners are not interested in the complexity of building a new structure and dealing with potential issues associated with new construction. A majority of BNE successes have been companies that lease existing building spaces. In addition to these needs the market research performed by BNE has determined that the majority of companies looking to locate in the Buffalo market are looking for smaller capacity space to start their introduction to the area. Larger companies like Welded Tube may have interest but are harder to entice. The inclusion of local developers provides an opportunity to share their experiences, promote potential partnering opportunities and create awareness of the requirements of interested companies to local developers.

To support this effort detailed marketing materials were created as part of the Implementation Strategy. This includes marketing brochures, strategic site profiles and supportive graphics. The brochure will serve as a marketing and promotional piece to build public and private support for the revitalization of the South Buffalo BOA. The areas that were selected for the marketing brochures include the Buffalo Lakeside Commerce Park, RiverBend and the overall South Buffalo BOA. These areas include the highest concentration of development opportunities along with numerous ongoing and planned projects.

In addition to the brochures listed above for strategic marketing, a brochure was created for the Hopkins Street Community in response to the public outreach effort. This brochure was developed to assist community members with realizing the South Buffalo BOA Community Vision (Image 66: Hopkins Street Area Brochure). This brochure provides a road map outlining and prioritizing the strategies defined in sections (4.8.1, 4.8.2, 4.8.3). These strategies include: Creating enjoyable streets for everyone, integrating community trails for public access, and Harnessing nature’s economic and social potential. To support



Image 67: Complete Street Strategy



Image 68: Build-out Plan Concept

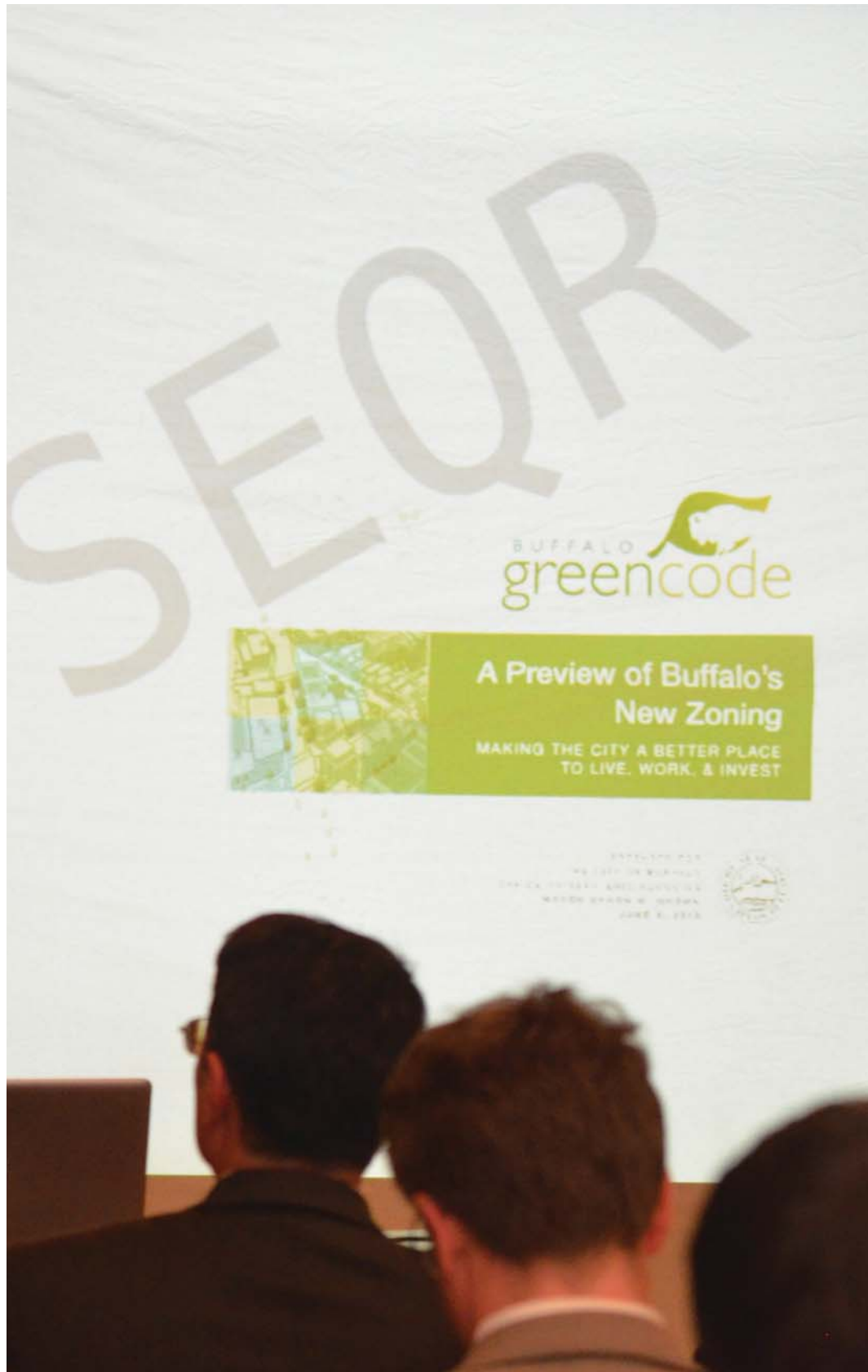


Image 69: Precinct-wide Strategy Integration

these strategies a list of potential public, private and community organizations along with their contact information is included on the brochure. The brochure is to be distributed to the Hopkins Street Community as part of the South Buffalo BOA marketing strategy in collaboration with BNE and BUDC.

The Implementation Strategy expands on previous planning efforts for the South Buffalo BOA and provides recommendations for strategic sites on a parcel-by-parcel basis. Numerous sites throughout the BOA are owned by the City of Buffalo and have sufficient environmental information regarding existing conditions for prospective buyers. However the majority of properties in the Hopkins Street Neighborhood are privately owned. This area includes a number of strategic sites. As part of the Implementation Strategy these owners were engaged to promote planning and implementation initiatives specific to their properties. This effort gave interested landowners the opportunity to apply for Phase 2 Environmental Site Assessment funding through the NYSDOS. As part of the marketing strategy descriptive profiles for ten strategic sites were prepared to publicize and market the sites availability for redevelopment (See Strategic Site Profile Real Estate Brochures on following pages). The profiles are designed to be used for real estate portfolios, marketing brochures and all forms of digital media.

To convey the information about the strategic sites and areas of interest throughout the South Buffalo BOA, graphic representations, such as section drawings, plans, and perspective views were created. These resources can be used to better inform municipal leaders, community organizations, residents, and potential investors of proposed implementation strategies (Image 67: Complete Street Strategy)(Image 68: Build-out Plan Concept)(Image 69: Precint-wide Strategy Integration). Additional advantages include use within the news media, for advertisements, or for real estate agents looking to further market properties.



V: COMPLIANCE WITH SEQRA

5.1 Overview of the SEQRA Process and Procedural Compliance

Introduction

The South Buffalo BOA (SBBOA) Plan has been prepared in accordance with the guidelines established by the New York State Department of State (NYSDOS) and the New York State Department of Environmental Conservation (NYSDEC) for the Nomination Study (Step 2) and Implementation Strategy (Step 3) phases of the BOA Program. Together, these represent the SBBOA Plan. It is anticipated that the adoption and implementation of the SBBOA Plan will result in future redevelopment of several brownfield, abandoned and/or vacant sites, enhanced parkland (including improvements at Tiff Nature Preserve and South Park), new commercial, recreational and mixed-use opportunities, and access/connectivity improvements.

This section includes a description of how, during the course of preparing the SBBOA Plan, the requirements of the State Environmental Quality Review Act (SEQRA) (Article 8 of Environmental Conservation Law and 6 NYCRR Part 617 of the implementing regulations) have been fulfilled, including the SBBOA Plan's consistency with New York State Coastal Management Program's Coastal Policies, its consistency with any applicable Heritage Area Management Plans, and specific conditions or criteria under which future actions will be undertaken or approved, including requirements for any subsequent SEQRA compliance. This includes thresholds and criteria for supplemental EIS's to reflect site-specific impacts that are not adequately addressed in the Draft Generic Environmental Impact Statement (DGEIS). This section also includes a reference table that describes how the DGEIS content requirements were satisfied and specifically where in the body of the SBBOA Plan (or other supporting documents) those content requirements are located and can be found.

The following sections provide an overview of the SBBOA process beginning with the Step 2 Nomination Phase and its integration with a larger effort under the Buffalo Consolidated Framework, more particularly described below.

SBBOA: Early SEQRA Procedural Steps

Prior to commencing the environmental impact review process for the SBBOA under Step 2, the City of Buffalo conducted a series of procedural steps in accordance with SEQRA and its implementing regulations.

The City completed Part 1 of the Environmental Assessment Form (EAF) and classified the SBBOA adoption and implementation as a Type 1 action under SEQRA. The Project was considered a Type 1 action because it would involve adoption of the SBBOA Plan with prescribed land use components; the physical alteration of 10 acres of land or more; and certain Unlisted actions conducted within South Park, listed on the National Register of

Historic Places, and Tiff Nature Preserve, a publicly-owned recreation area and designated open space. Other Type 1 activities were also assumed to apply to the Project given the number and type of projects that could be implemented in accordance with the SBBOA Plan.

Upon completion of Part 1 of the EAF and classification of the project as a Type 1 action, the City passed a resolution on February 5, 2008 proposing to seek SEQRA lead agency status for the adoption and implementation of the SBBOA Plan, and indicated its intent to conduct a coordinated review by requesting the consent from the other potentially involved agencies to act as SEQRA lead agency.

On March 18, 2008, upon receiving consent from potentially involved agencies, the City's Common Council passed a resolution resolving that it would act as lead agency for the Project and issued a Positive Declaration indicating that the adoption and implementation of the BOA Plan may have a significant impact on the environment and that a DGEIS would be prepared.

The City determined that a GEIS rather than a project-specific conventional EIS was particularly well suited for the SBBOA because the SBBOA Plan:

- Represented a number of separate actions within the BOA study area, which if considered singly, may have minor impacts, but when considered together may have significant impacts; and
- Is an entire program or plan having wide application that may have new or significant changes to affecting the range of future policies, projects and changes to land use, zoning or development plans.

Buffalo Consolidated Development Framework

Since 2008, the City of Buffalo embarked on a significant number of planning initiatives including preparation of a new land use plan and zoning ordinance, a Local Waterfront Revitalization Program and three additional BOA Nomination Studies. Based on the number and scope of these initiatives, the City decided that a consolidated environmental impact review process, through preparation of a GEIS, would be an appropriate vehicle for SEQRA compliance. As such, the City of Buffalo initiated a comprehensive SEQRA review which included the aforementioned planning initiatives including the SBBOA Plan, all under the auspices of the Buffalo Consolidated Development Framework (BCDF). The BCDF is the culmination of years of planning work that aims to support and encourage redevelopment within the City of Buffalo. This transformative effort consists of the following planning initiatives:

- A Future Land Use Plan which accommodates appropriate uses and forms and

reinforces the existing character of the City;

- Unified Development Ordinance (UDO), including new form based zoning provisions, revised subdivision and sign ordinances and standards for street design and reconstruction;
- A Local Waterfront Revitalization Program that will guide development along the City's coastal areas;
- Urban Renewal Plans Disposition to obtain recommendations on the removal, replacement or modification of these plans to better reflect the City's community and economic development needs; and
- South Buffalo, Buffalo River Corridor, Buffalo Harbor, and Tonawanda Street Corridor Brownfield Opportunity Areas Master Plans, including the RiverBend Commerce Park Master Plan.

As part of the BCDF effort, it was determined that while certain elements of the Step 2 Nomination Study met the SEQRA GEIS content requirements (i.e., Project Description and Boundary, Community Participation and Analysis of the BOA), the remaining elements necessary to satisfy SEQRA compliance requirements including analysis of the SBBOA's potential adverse environmental impacts, description of mitigation measures, description of the range of reasonable alternatives to the action, conditions for future actions, and GEIS references, would be addressed in the broader DGEIS prepared for the BCDF. The following provides an overview of the BCDF procedural steps taken under SEQRA which, in part, satisfy the DGEIS requirements for the SBBOA Plan.

Buffalo Consolidated Development Framework: SEQRA Procedural Steps

On May 29, 2012, Common Council received a Full Environmental Assessment Form prepared on its behalf by the City of Buffalo's Office of Strategic Planning (OSP) for the BCDF. The Common Council determined pursuant to 6 NYCRR § 617.4 (b) (1) that the adoption of the components of the BCDF, was a Type 1 Action under SEQRA. On May 30, 2012, the Common Council circulated a letter to other involved agencies and interested agencies stating its intent to act as Lead Agency. Since no objections were raised, on July 10, 2012 the Common Council assumed the role of SEQRA Lead Agency.

Pursuant to 6 NYCCR § 617.7, the Common Council determined that the adoption and implementation of the BCDF may have an adverse impact on the environment and that a DGEIS must be prepared. A Positive Declaration was subsequently issued on _____, 2012. The Common Council also determined that scoping for the DGEIS would be appropriate. Scoping, as established in 6 NYCCR § 617.8, is a process by which the Lead Agency, with input from the public, involved and interested agencies, identifies potentially adverse impacts that should be evaluated in the DGEIS and eliminates consideration of those impacts that are irrelevant or non-significant.

The Final Scoping Document was prepared by OSP on behalf of the Common Council as SEQRA Lead Agency. Substantive and appropriate comments received on the draft scope

were considered included in this Final Scoping Document which outlined the topics to be included in the DGEIS.

Following the issuance of the Final Scoping Document, the Lead Agency determined on _____, 2014 that the DGEIS was complete and adequate for public review, with the public comment period commencing on _____, 2014 and ending on _____, 2014. Once the Lead Agency made this determination, a public comment period commenced. During the public comment period, the public and interested and involved agencies submitted comments regarding the evaluation and conclusions summarized in the DGEIS. Following the comment period, the Common Council, as Lead Agency, assembled the comments and subsequently determined the appropriate procedural steps to complete the SEQRA review .

The following table provides a summary of the procedural steps taken by the Lead Agency which demonstrates compliance with SEQRA regarding completion of the SBBOA Plan:

SEQRA Procedural Steps	Regulatory Citation	Date Completed/Issued	GEIS Reference Section/Appendix	Comments
EAF Part 1	6 NYCRR §617.6(a)(2)	May 29, 2012	BCDF DGEIS Appendix__	
Lead Agency Status Established	6 NYCRR §617.6(b)	July 10, 2012	BCDF DGEIS Appendix__	
EAF Part 2 and 3	6 NYCRR §617.6(a)(2)		BCDF DGEIS Appendix__	
Positive Declaration	6 NYCRR §617.12(a)(2)(ii)		BCDF DGEIS Appendix__	
Draft Scoping Document	6 NYCRR §617.8(b)		NA	Draft Scoping Document incorporated into Final Scoping Document
Final Scoping Document	6 NYCRR §617.8(f)		BCDF DGEIS Appendix__	
DGEIS	6 NYCRR §617.12(a)(2)(iii)		NA	DGEIS incorporated into FGEIS
Public Comment Period/Hearing	6 NYCRR §617.12(a)(2)(iii)		BCDF DGEIS Appendix__	Includes hearing transcript. Rigorous community input is also documented in Section 2 of the SBBOA Plan
FGEIS	6 NYCRR §617.12(a)(2)(iii)		BCDF DGEIS Appendix__	DGEIS incorporated into FGEIS
Findings Statement	6 NYCRR §617.11		NA	

Table X.X : Environmental Recommendations for Strategic Sites

5.2 Fulfillment of DGEIS Content Requirements

In general accordance with the BOA Program Guidance, the DGEIS is partially incorporated into the body of the SBBOA Plan (i.e., Project Description and Boundary, Community Participation and Analysis of the BOA). The remainder of the DGEIS content requirements (i.e., analysis of the SBBOA's potential adverse environmental impacts, description of mitigation measures, description of the range of reasonable alternatives to the action, GEIS references, and conditions for future actions) are included in the BCDF DGEIS. Fulfillment of the DGEIS content requirements are summarized in the table presented at the end of this section (2.f.).

The DGEIS has been prepared in general accordance with 6 NYCRR 617.10, and as such presents a more general set of analyses than a conventional, project-specific EIS. The DGEIS describes the proposed action, and includes assessments of specific anticipated impacts commensurate to the level of detail available. The analysis is based on conceptual information due to the comprehensive and prospective nature of the SBBOA Plan and other elements addressed therein.

The following provides a brief summary of the SBBOA Plan elements and their relationship to the DGEIS content requirements.

Description of Project and Boundary

The description of the proposed action and boundary justification was prepared as part of the Nomination Study and updated accordingly in the Implementation Strategy. The project description and boundary justification satisfies both the SEQRA and BOA Program requirements. Section 1 of the SBBOA Plan includes a concise description of the Project and its purpose, public need and benefits, including social and economic considerations. The project description ties the relationship of the study area to the community and region, acreage in the study area, and the number and size of brownfield sites and other abandoned, vacant, or partially developed sites located in the BOA. This section also includes a description of the BOA's potential in terms of opportunities for: new uses and businesses; creating new employment and generating additional revenues; new public amenities or recreational opportunities; and restoring environmental quality. A Community Context Map that shows the location of the SBBOA in relation to the municipality, county and region and a Study Area Context Map that shows the location of the SBBOA in relation to the entire City of Buffalo is also included in Section 1 of the SBBOA Plan.

Community Participation

Section 2 of the SBBOA Plan includes a description of the extensive community participation program implemented as part of the SBBOA Plan development. Section 2 summarizes the partners that have been consulted about the SBBOA Plan, the consultation methods and techniques used to inform project partners about the project's status and progress

and to enlist their assistance in the process. This section also includes a description of public information meetings and other techniques that have occurred or been employed at appropriate and key stages during the SBBOA Plan process. In addition to the community participation process summarized in Section 2, Section 2.0 of the BCDF DGEIS provides an overview of the community participation process conducted for all of the planning initiatives and the associated SEQRA public scoping effort, comment period and hearing processes. These extensive community participation processes satisfy both the SEQRA and BOA Program requirements.

Environmental Setting

Section 3 of the SBBOA Plan (i.e., Existing Conditions Analysis and Opportunities) includes a concise description of the environmental setting of the SBBOA in conformance with both SEARA and the BOA Program requirements. It includes a description of the community and regional setting, existing land use and zoning, brownfield, abandoned and vacant sites, strategic or priority brownfield sites, land ownership patterns, parks and open space, a building inventory, historic and archeologically significant areas, transportation systems, infrastructure and utilities, natural resources and environmental features and economic and market trends.

Impacts, Mitigation and Alternatives

Sections 3.0 and 4.0 of the DGEIS prepared for the BCDF includes an analysis of potential adverse environmental impacts, mitigation measures, where applicable and appropriate, and an analysis of alternatives. Included in this discussion is an analysis of the BCDF's consistency with the New York State Coastal Management Program Coastal Policies (addressed as part of the Local Waterfront Revitalization Program and included in Section 3.0 of the DGEIS) and Heritage Area Management Plans, as applicable. References are included in Section __ of the BCDF DGEIS. Combined, these sections satisfy both the SEQRA and BOA Program requirements.

Thresholds and Criteria for Future Actions

Section 10.0 of the DGEIS identifies and establishes thresholds and criteria under which future actions will be undertaken or approved, including requirements for any subsequent SEQRA review. Future SEQRA review of projects is limited to topics that were not evaluated in the DGEIS or are site-specific and therefore were not fully evaluated in this DGEIS. SBBOA-specific thresholds are included in Section 10.0. Section 10.0 of the DGEIS satisfies the SEQRA and BOA Program requirements.

Summary of Fulfillment of DGEIS Content Requirements

The following reference table describes how the DGEIS content requirements were satisfied and specifically where in the body of the SBBOA Plan (or other supporting documents) those content requirements are located and can be found.

SBBOA Plan Elements	SBBOA Plan Reference Section	GEIS Content Requirements	GEIS Content Requirements Met?	Comments
Description of Project and Boundary	SBBOA Plan, Section 1	Description of Proposed Action	Yes	The project description is addressed in Section 1 of the SBBOA Plan and Section 1.0 of the BCDF DGEIS.
Community Participation	SBBOA Plan, Section 2	SEQRA public hearing is conducted simultaneously with a public hearing on the BOA Plan	Yes	Community Participation efforts are addressed in Section 2 of the SBBOA Plan and Section 2.0 of the BCDF DGEIS.
Analysis of the BOA	SBBOA Plan, Section 3	Description of Environmental Setting	Yes	Inventory and Analysis of the SBBOA, addressed in Section 3, meets the Environmental Setting Content Requirements of SEQRA.
Implementation Strategy	SBBOA Plan, Section 4	Potential Significant Adverse Impacts Description of Mitigation Measures Description of Range of Reasonable Alternatives to the Proposed Action	Yes	Addressed in Sections 3.0 and 4.0 of BCDF DGEIS.
Compliance with SEQRA	SBBOA Plan, Section 5	Consistency with New York State Coastal Management Program Coastal Policies Consistency with Heritage Area GEIS References Conditions for Future Actions	Yes	Summary of SEQRA Compliance included as Section 5 of SBBOA Plan. GEIS references and Thresholds and Criteria for Future Actions are included in Sections _ and 10.0, respectively.

Table X.X : Environmental Recommendations for Strategic Sites

