

CITY OF KINGSTON BROWNFIELD OPPORTUNITY AREA STEP 3

Final Implementation Plan | Volume |

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FINAL BOA PLAN / DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT KINGSTON WATERFRONT BROWNFIELD OPPORTUNITY AREA PLAN (HUDSON RIVERPORT VISION PLAN) CITY OF KINGSTON, ULSTER COUNTY, NEW YORK

December 1, 2015

LEAD AGENCY:

City of Kingston Common Council
City Hall
420 Broadway
Kingston, NY 12401

LEAD AGENCY CONTACT:

Gregg Swanzey
City Hall
420 Broadway
Kingston, NY 12401
845-334-3962

PREPARED BY:

Perkins+Will

AECOM

JLL

Nautilus

SCAPE

Watts Engineering

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This executive summary outlines the key issues, opportunities and challenges on defining an overall conceptual vision for the City of Kingston's Waterfront Brownfield Opportunity Area and the recommendations for Implementation to achieve this vision. This document is the third step in the New York State Brownfield Opportunity Area (BOA) program and is focused on implementation. This document is a draft and is subject to change; an update will be made public after agency review. Key takeaways are provided from the following topics that are further described in this document:

- The Brownfield Opportunity Area Program
- BOA Step 2 Nomination Study Findings
- BOA Boundary Extension
- BOA Step 3 Implementation Plan Process and Schedule
- · Kingston Background
- Community Engagement
- Design Framework
- Design Strategy
- Implementation Strategy and Compliance
- State Environmental Quality Review (SEQR) Compliance

THE BROWNFIELD OPPORTUNITY AREA PROGRAM

The City of Kingston has worked with community members, partners and New York State agencies to prepare this Step 3 Implementation Plan for the Brownfield Opportunity Area Program (BOA). This New York State Department of State (NYDOS) program was created to assist communities in fostering redevelopment of brownfield properties. It enables local governments and community based organizations to:

- 1 Address a range of problems posed by multiple brownfield sites;
- 2 Develop locally-driven land use strategies, revitalization plans and implementation strategies;
- 3 Improve neighborhoods or portions of communities that have been affected by multiple brownfield sites;
- 4 Build consensus on the future uses of strategic or priority brownfield sites;
- **5** Establish the multi-agency and private-sector partnerships necessary to leverage assistance and investment to revitalize neighborhoods and communities.

The program has three steps that are defined by the NYDOS as: Step 1 - a Prenomination Study, Step 2 - Nomination Study, and Step 3 - Implementation Plan. This document serves as the third step – the Implementation Plan for the Waterfront BOA. As the City and the nation grapple with economic downturn it is more important than ever that they work with the State and Federal governments to maximize access to technical assistance, grant funding and financing incentives to redevelop brownfield sites. The BOA process is also important because it underscores the planning goals of the City that are focused on stimulating compatible redevelopment while protecting public, recreational and water-related or water-dependent commercial access to the waterfront. Nearby communities have faced intense residential development pressure. Taking former productive industrial land out of the mix puts even more pressure on the City to conserve waterfront resources and encourage complementary uses.

BOA STEP 2 NOMINATION STUDY FINDINGS

The BOA Step 2 Nomination Study builds upon and carries forward many of the recommendations from previous planning studies especially the Phase I Site Assessments for strategic sites and the Environmental Site Classification of the majority of sites in the BOA prepared by the Mid-Hudson Land Revitalization Partnership.

These Strategic sites can anchor future development efforts and are key parcels necessary for the overall redevelopment plan to be completed. Based on Phase I Site Assessments, the City of Kingston and its partners identified three priority sites. Phase I Environmental Site Assessments have been completed for four of these sites. While some environmental concerns have been identified and future analysis is necessary, none of the findings represent a substantial obstacle to redevelopment. The three strategic sites identified within the BOA Step 2 Nomination Study are:

- · "The Landing;"
- KOSCO Assemblage;
- · Millens and Son Scrap Metal Recycling

Other Key BOA Step 2 Nomination Study findings include:

- As part of the BOA planning process, the City commissioned a full parking strategy
 which found that there is a marginally sufficient supply of parking in the Rondout area
 and that 1,656-1,956 additional parking spaces may be required at full buildout.
- The BOA is outside an existing, established historic district but is close to the Rondout/ West Strand Historic District and the Chestnut Street Historic District and contains numerous National and State Resister listed historic resources.
- Land immediately adjacent to the Rondout Creek and Hudson River are subject to flooding.
- The Waterfront BOA "underperforms" from a tax base perspective.
- There is a slowing climate for economic development as investors react to national economic trends.
- The preferred future land use plan includes a full range of improvements proposed to support a mixed-use Rondout waterfront including new commercial development, trail and recreational projects, shoreline infrastructure needs, transportation improvements, and support for local museums among other actions.

BOA BOUNDARY EXTENSION

In order to fully create a holistic vision for the revitalization of the Kingston Waterfront it was deemed necessary to expand the BOA Boundary to include an additional 12 parcels, totaling 23.6 acres. This allowed for the inclusion of key sites that are integral to creating a cohesive redevelopment. While the Step 2 Nomination Study provided limited information on some of the properties within the proposed expanded BOA boundary, the formal BOA boundary evaluated in Step 2 did not include these subject parcels. This boundary expansion has been be issued and accepted by NYDOS and this current BOA Step 3 Implementation Plan includes this additional area in its findings and recommendations. As part of the boundary extension two additional strategic sites have been added:

- · Noah Hotel Site;
- Block Park & Island Dock (former Block Plant).

BOA STEP 3 IMPLEMENTATION PLAN PROCESS AND SCHEDULE

The Kingston Waterfront BOA Step 3 Implementation Plan sets out to define an overall vision for the Waterfront and a set of recommendations that guide the revitalization. The final Kingston BOA Step 3 Implementation Plan contains the following documentation:

- BOA Nomination
- · Revised Executive Summary
- Implementation Strategy
- · Final Generic Environmental Impact Statement
- Redline/Strikeout version of Draft Implementation Strategy

The entirety of the BOA Step 3 Implementation Plan scope of work is 20 Months. The study began in July, 2014 and is scheduled to finish in March, 2016.

COMMUNITY ENGAGEMENT

The strategy for creating a public driven processes included both focused direction from a Steering Committee and outreach to the public with traditional and non-traditional engagement tactics. The success of the revitalization vision and Implementation Strategy is dependent on community engagement early and often.

The Steering Committee comprised of over a dozen key stakeholders and were used to focus issues and provide relevant context to the team. This advisory group was engaged in workshops and small scale meetings to inform design and respond to decisions before public consumption. This group was integral in forming the direction of the revitalization plan.

Most importantly the plan set out to reach a larger audience to not only solicit feedback but to also garner excitement for what the Kingston Waterfront could be. The public was engaged through traditional community presentations but also through digital outreach and non-conventional tactics- such as leading walking tours and setting up information booths at local Kingston Events. Feedback was collected and used to refine ideas as the plan evolved.

Beyond digital outreach there were seven key engagements for the Kingston Waterfront BOA Step 3 Implementation Plan.

- September 16th, 2014 Steering Committee Introduction and Boat Tour on the Clearwater
- October 28th, 2014 Steering Committee Framework Workshop
- February 24th, 2015 Community Presentation and Scoping Session
- March 22nd, 2015 Community Event- Greenline Walking Tour
- June 29th, 2015 Steering Committee Design Update and Management Structure
- August 21st, 2015 Community Event- Night Market
- Mid November 2015 Community Presentation, SEQR Hearing Process

DESIGN FRAMEWORK

The steering committee was engaged to begin the visioning process and unmask the potential of the Kingston Waterfront. Four frameworks were established to evoke excitement, develop ideas, raise concerns and foster momentum towards creating a one of a kind revitalized and realized Kingston Waterfront. The four focused frameworks are:

COHESIVE:

Creating a two-mile holistic, end to end waterfront that provides a variety of unique moments along the way that are tied together with a common language and vision. Using distinct park bookends as anchors that provide local and regional amenities.

CONNECTED:

Creating a waterfront for all by connecting upland, at the waterfront and to the water through physical, visual and social links. Connect to people, to the neighborhoods, to the water, to the history and to nature that makes Kingston special.

VIBRANT:

Creating a sustainable waterfront development that activates the entire area through exciting and innovative land use, programming, branding, character and building typologies.

ACHIEVABLE:

Identifying the opportunities and constraints for implementation of an exciting waterfront vision. Explore the projects that will catalyze revitalization and develop the funding and management to achieve it.

FEEDBACK

In order to facilitate this conversation, a workshop was set up to allow the Steering Committee to engage on each topic and frameworks were issued virtually to the public for comments. Some of the key take-aways were:

- 1 Incorporate some of the other great planning initiatives currently happening around the Rondout, such as the Greenline, to attract local and regional cyclists.
- 2 Make habitat a priority.
- Reinforce existing community and make sure the waterfront is a place for locals as well as visitors.
- 4 Celebrate the culture, history, heritage, and waterfront economy.
- 5 Deal with water and flooding both at the ground and upland to make the waterfront a desirable place to develop and inhabit.
- 6 Host outdoor activities and parks throughout the waterfront to encourage a range of users both locally and regionally.
- 7 Make water quality and environmental concerns a priority.
- 8 A hotel with Hudson views could be a destination draw to pull people the length of the waterfront.
- Water recreation should be a focus along the entire two-mile stretch.
- 10 The sewage treatment plant needs to be addressed visually and efforts need to be made to minimize odor.
- 11 Creating a second access point that doesn't affect boat traffic is needed at Island Dock so people don't have to walk all the way to the end.



FIGURE 01.1 Overall Waterfront Vision

DESIGN STRATEGY

The Hudson Riverport Vision Plan is a long-term structure for revitalization that allows for development to happen naturally overtime within the goals and priorities of the City. It sets out to focus attention and create an exciting view of what the Kingston Waterfront could be in 20+ years. The overall vision for the Hudson Riverport at Kingston is for a resilient, balanced and achievable waterfront district that unlocks the full potential of the neighborhood and excites the community.

The overall landuse strategy is to convert underutilized brownfield sites, vacant lots, vacant buildings and industrial sites with more active uses that create a mixed-use waterfront community for a spectrum of locals and regional users. Key projects along the waterfront are identified to draw people the length of the waterfront and create unique moments that establish a special world class waterfront. These catalytic projects may include:

- Leverage currently planned projects (Irish Cultural Center, Boat Building School);
- Cornell Building Arts and Culture Incubator Space;



- Eco Hotel at Millens & Sons Strategic Site;
- Destination park/playgrounds at Kingston Point Park;
- Island Dock Park;
- Noah Hotel and Island Dock Access Point;
- Mid-Point civic destination and bike center.

The remaining development is focused on quality mixed-use developments that celebrate the character of the Hudson Riverport at Kingston Vision and uses resiliency strategies as part of the cohesive language to establish a vibrant community. The vision is laid out in three distinct zones:

- Zone 1: Resilient Rondout
- Zone 2: Adaptive Edge
- Zone 3: Eco Zone

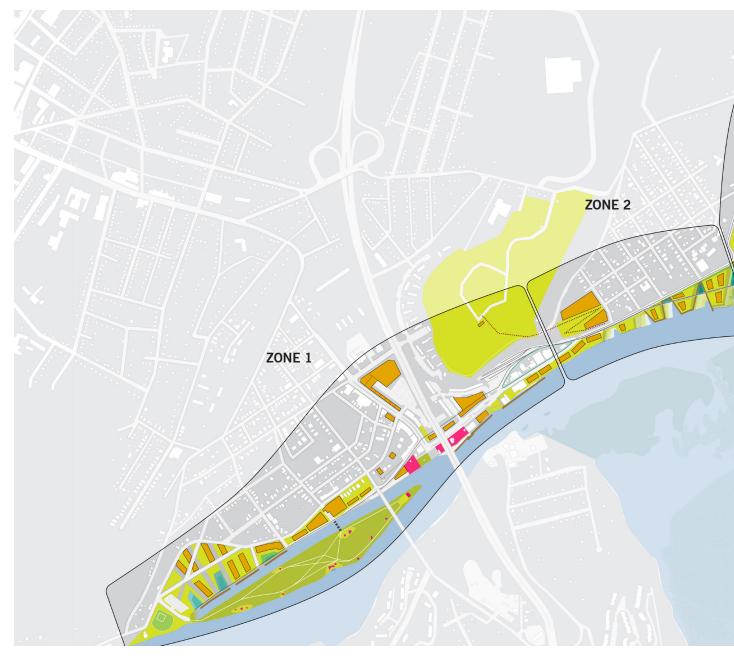


FIGURE 01.2 Design Strategy zones

ZONE 1: RESILIENT RONDOUT

The Resilient Rondout zone focuses on existing assets and strengthens the cultural legacy of the waterfront. It creates a double-sided Broadway and some larger retail destinations such as an urban grocery store at Spring Street. The strategy is then to draw attention beyond Broadway by creating charming mixed-use fabric that creates a new standard for Hudson Valley Waterfront development. There are opportunities to work, live and play all in a cohesive language that celebrates the water. Key features of this zone may be a new destination public park or other publicly beneficial components at Island Dock, a long-term residential anchor development at Block Park, a 150-key hotel and the revitalization of the Cornell Building as a culture and food incubator.

ZONE 2: ADAPTIVE EDGE

The Adaptive Edge zone sets out to address the serious flooding and remediation concerns that are preventing viable development and revitalization. It uses resiliency as part of the identity and strategy for redevelopment by utilizing a cut and fill method. This allows development parcels to be raised above the floodplain and treats contamination in-situ. Active ground floors such as community retail and maker space help create a lively public interface, while residential units above bring a variety of residents to create a true mixed-use neighborhood at the waterfront. Smaller development footprints are offset by allowing buildings to be built taller (up to four stories) but views remain expansive as the space between developments is kept open.



ZONE 3: ECO ZONE

The Eco Zone promotes wildlife habitat in and around the water and celebrates the larger regional connections to the Hudson River. The idea here is to provide limited development that acts as a focused draw and allows people to interact with nature in unique ways. Some of the key features of the area are restored wetlands, an eco-hotel, an event pavilion, regional playgrounds, and a restored day-liner with trolley access.

PROJECT PHASING

In order to achieve this vision a strategic phasing strategy has been established to balance the need of providing a critical mass without exceeding market absorption. In general the strategy is to focus around Broadway and existing assets in the near term then create distinct destinations to draw people the length of the waterfront. Development is then in-filled as the market demand is established and can be flexible based on trends. The proposed phasing timeline is as follows:

PHASE 0 (0-2 YEARS) - QUICK TACTICAL WINS

In order to gain momentum and raise awareness it is important to have an identity that visitors can connect with the waterfront to show physical improvements and actions associated with the BOA plan.

PHASE 1 (2-5 YEARS) - CENTER AND INVEST.

The goal of this phase is to set the regulatory framework to incentivize revitalization and leverage currently planned projects.

Approximate Total SF 40,500 sf

PHASE 2 (5-10 YEARS) - CONNECT.

Create catalytic projects that develop the market and draw local and regional visitors to the waterfront.

Approximate Total SF 240,000 sf

PHASE 3 (10-20 YEARS) - GROW THE RONDOUT.

Capitalize on new demand and synergies to develop new complete neighborhoods at the waterfront.

Approximate Total SF 757,500 sf

PHASE 4 (20+ YEARS) - LONG-TERM DEVELOPMENT.

The final phase allows a large scale anchor development to capitalize on the success of the established waterfront.

Approximate Total SF 618,250 sf

LONG-TERM BUILD OUT

APPROXIMATE TOTAL SF - 1,656,250 sf

IMPLEMENTATION STRATEGY AND COMPLIANCE

The design standards and guidelines currently in place for the Kingston Waterfront BOA are high-quality, cohesive and comprehensive. Scenic Hudson showcased the Rondout District guidelines as a case study of how to protect maritime character, preserve historic architecture and enhance waterfront connections in its Revitalizing Hudson Riverfronts published in 2010. Overall, Kingston's design standards and guidelines are intended to protect historic and natural assets while encouraging appropriate new development. Some key standards already adopted include requirements to:

- · protect scenic quality, water quality and views;
- preserve existing landscapes, trees and vegetation;
- protect historic facades and encourage adaptive reuse of historic structures;
- · create mixed-use, mixed-income, walkable neighborhoods;
- cluster and orient buildings to preserve open space;
- · emphasize pedestrian connections and buffer parking areas;
- provide public access and a continuous riverfront esplanade;
- give priority to water-related and water-dependent uses;
- design new construction to be compatible with existing buildings in scale, form, materials, color, and height;
- · and encourage affordable housing.

The current zoning is consistent with and easily accommodates the future land use plan outlined in this implementation plan with potential modifications for additional height on consolidated development footprints to accommodate resiliency and flood control. Few if any changes are anticipated. Likewise the design standards completed in 2003 contemplated the land use pattern that was described in the Local Waterfront Revitalization Plan (LWRP) Waterfront Implementation Plan which remains the foundation of this nomination. The design standards will be reviewed and revised if necessary. No changes to other incentive programs or economic development programs are anticipated.

Management of the Kingston Waterfront BOA Implementation Plan (the BOA Plan) will require cooperation and dedication from many because implementation will span over a more than a 20-year period and will involve a wide variety of projects ranging from public infrastructure, transportation, and open spaces to large-scale private developments and individual properties. This will require not only the active participation of the City of Kingston, Ulster County and New York State, but also of numerous stakeholders from property owners and private developers to existing businesses, residents, community members, and other local organizations. Funds will need to be raised from multiple sources; strategic development sites marketed; incentives negotiated with potential investors; and progress overseen. Successful implementation of the BOA Plan will require a strong management structure to coordinate these efforts and to lead the BOA implementation projects forward.

STATE ENVIRONMENTAL QUALITY REVIEW (SEQR) COMPLIANCE

Later in this document the team describes the SEQR process, assesses potential environmental impacts and evaluates alternatives to the proposed action. Potential impacts assessed in the SEQR Chapter include: land use and community character, natural resources, flooding, cultural resources, visual and aesthetic impacts, open space and recreation, transportation, infrastructure, and contamination related issues. The SEQR compliance chapter relies heavily on the inventory of existing conditions prepared in the Step 2 Nomination Study and augments it with information prepared for the extended BOA boundary as well as new data considered for the Step 3 Implementation Strategy. Later, a table is provided to index the required draft GEIS content to their corresponding locations in the BOA Plan.

The environmental assessment has been prepared to meet the requirements of a draft Generic EIS, and as such presents a more general set of existing conditions and analyses than a conventional or project-specific EIS. This assessment defines the Proposed Action in terms of potential implementation projects for redevelopment of the Strategic Sites. Due to the prospective nature of the BOA Plan, the analyses are based on conceptual plans and available information.

Thresholds and criteria for future review are established to help ensure that private development proceeds in accordance with the BOA Plan. This could include supplemental EISs to reflect site-specific impacts that could not adequately be addressed at this time in the BOA Plan/DGEIS. Preparation of this combined BOA Plan/GEIS will facilitate the future assessment of those planned actions. Conditions triggering future SEQR assessments are summarized below:

LAND USE

- If future project-specific proposals for the redevelopment of the Strategic Sites do not
 meet the specific permitted uses in the current zoning code, or exceed the preferred
 land use plan, then the proposed development may not have been adequately
 considered in this assessment and a new project-specific SEQR assessment should be
 undertaken.
- If future project-specific proposals for the redevelopment of the Strategic Sites
 are substantially inconsistent with the Comprehensive Plan or Local Waterfront
 Implementation Plan, then the proposed development may not have been adequately
 considered in this assessment and a new project-specific SEQR assessment should be
 undertaken.

NATURAL RESOURCES

- Future project-specific proposals that impact wetlands to the extent that require permitting or mitigation may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.
- If project-specific proposals are not designed to meet the applicable requirements of the Flood Hazard Overlay District, then they should be subject to a new project-specific SEQR assessment.

CULTURAL RESOURCES

· Additional consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) will be required for future site-specific redevelopment projects that include ground disturbance or are located in Rondout Creek and/or the Hudson River.

VISUAL IMPACTS

· Once project-specific designs are proposed, an assessment of potential visual impacts should be required for each project proposing structures over 1-2 stories.

OPEN SPACE AND RECREATION

• The proposed change in use of Block Park and Island Dock/former Block Plant, will require legislative approvals and implementation costs not completely addressed by this SEQR assessment and should be subject to further review under SEQR.

TRANSPORTATION

• As project-specific proposals are made for the redevelopment of the Strategic Sites, a more complete assessment of their potential impact to the transportation systems will need to be completed.

INFRASTRUCTURE

- · Water: Individual projects that require public infrastructure improvements to deliver adequate water supply to the site to support the project.
- · Wastewater: Individual projects that generate wastewater of a volume, rate, or composition that exceeds the capabilities of the local Municipal sanitary sewer system and/or Publicly Owned Treatment Works.
- Stormwater: Eligibility under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities may not be applicable to all BOA redevelopment projects. If not, then projects may require an individual SPDES permit, as well as other Federal, State and local permits.



The Hudson Riverport Vision Plan (Kingston Waterfront Brownfield Opportunity Area Plan) was prepared for the City of Kingston and the New York State Department of State (DOS) with state funds provided through the Brownfields Opportunity Area Program. The Brownfield Opportunity Area (BOA) Program is a New York State Program where the NYDOS provides financial and technical assistance to municipalities and community-based organizations. The BOA Program, made possible by the Environmental Protection Agency's (EPA) Superfund/Brownfield law enacted in October 2003, provides municipalities and community based organizations with assistance for up to 90 percent of the eligible project costs. Funding can be used to complete revitalization plans and implementation strategies for areas affected by the presence of brownfield sites, as well as site assessments for strategic sites.

The program has three steps that are defined by NYDOS: a Pre-nomination Study (Step 1), Nomination Study (Step 2) and Implementation Plan (Step 3).

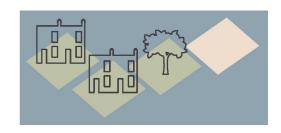
BOA STEP 1: PRE-NOMINATION STUDY

The Pre-Nomination Study is intended for preliminary findings for communities that lack information about brownfields that are impacting their community. The Pre-Nomination Study provides a preliminary description and analysis of the proposed Brownfield Opportunity Area and it provides a basic and preliminary analysis of the area affected by brownfield sites.



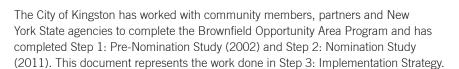
BOA STEP 2: NOMINATION

The Nomination provides an in-depth and thorough description and analysis, including an economic and market trends analysis of existing conditions, opportunities, and reuse potential for properties located in the proposed Brownfield Opportunity Area with an emphasis on the identification and reuse potential of strategic sites that are catalysts for revitalization. The Nomination concludes with a description of key findings and recommendations to advance redevelopment of strategic sites and to revitalize the area.



BOA STEP 3: IMPLEMENTATION STRATEGY

The Implementation Strategy provides a description of the full range of techniques and actions; ranging from those actions and projects that can be undertaken immediately to those which have a longer time-frame, that are necessary to implement the area-wide plan.



As the City of Kingston attempts to spur economic growth and revitalization of underutilized assets it is more important than ever that they work with the State and Federal governments to maximize access to technical assistance, grant funding and financing incentives to redevelop brownfield sites. The BOA process is also important because it underscores the City's planning goals of stimulating compatible redevelopment while protecting public, recreational and water-related or waterdependent commercial access to the waterfront.

The Kingston Waterfront Brownfield Opportunity Area Plan is a combination of the Step 2 Nomination Study and Step 3 Implementation Study. The Kingston Waterfront Brownfield Opportunity Area Plan is intended to serve as a Draft Generic Environmental Impact Statement (Draft GEIS). The BOA Plan was prepared in conformance with applicable DOS BOA Program Guidance and the State Environmental Quality Review Act implementing regulations (6 NYCRR Part 617).



FIGURE 02.3 The three steps in the BOA program



The official beginning of the Community Engagement process began when the team chose a distinct name to call the project for the purpose of social media. "Hudson Riverport at Kingston" was chosen and a Facebook page was created and can be found at: https://www.facebook.com/HudsonRiverport?fref=ts. A Twitter page was also set up under the same name, it can be found at: @hudsonriverport. These two social media pages were created in order to ensure that the public could be involved throughout the process; even between live public engagement opportunities. This sites were used to post notices informing the public of time and location of engagement activities, as well as to post presentation materials from those meetings for those who could not attend. Both of these sites were also avenues for the public to provide comments on all the materials that were presented.

There were five opportunities for the public to engage with the team, and one last Public Meeting remains which will be held on December 1, 2015. The date for this has not been set, but will be posted on the Hudson Riverport social media pages as well as the City of Kingston's website.

The public engagement process for this particular project has been slightly different than what the team has done in the past. Because many of the properties in the BOA Area are privately owned there was a need to coordinate with the owners, while also working with the public to ensure that the plans for the revitalization of the area are agreed upon by the public and ensure that public access and involvement will be a key component if the revitalization.

Another key component of the public engagement process was reaching out to other businesses in the area adjacent to the project, but not located in the actual BOA area. Beginning in August 2014, the Project Team began meeting with community stakeholders to better understand the challenges of the subject site, to seek development ideas, and to solicit feedback on the proposed plans and design interventions. Project team members also interviewed and had meetings with business owners in Kingston and the Hudson Valley to complement the learning from these community stakeholder meetings. The purpose of these interviews and meetings was to discuss real estate market dynamics, whether for the Residential, Retail, Office or Hospitality sectors. The following list, which is not exhaustive, provides a selection of those companies and organizations, whose feedback has been incorporated, whether from community stakeholder meetings or through interviews:

- Armadillo Bar & Grill
- AVR Realty Company
- · Diamond Mills Hotel
- Empire State Development
- · Fleisher's Craft Butchery
- Gate House Realty
- · Hudson Valley Landing
- · Kingston Waterfront Business Association
- · Kingston Wine Co.
- Morgan Management, LLC
- · Olivieri's Arts, Crafts, & Coffee
- · The Roundhouse at Beacon Falls

Feedback from the public has been open throughout the process and will be open before the last public meeting on December 1, 2015 and will be open for a time after that. The team and the City feel that there has been ample opportunity for public input throughout this process and that with the implementation of the plans over the next few years the public will be able to see and use the newly revitalized Hudson Riverport at Kingston.

This section provides more details on the Community Engagement Process.

STEERING COMMITTEE **MEMBERS**

- Alderman Ward 2
- Artist Workspace
- At Home Antiques
- CB Developers
- · City of Kingston
- Clearwater
- CLG Consultant
- Community Residents
- Esopus Business Alliance
- Feeney's Shipyard
- Friends of Kingston Waterfront
- Guardia Architects
- Heritage Energy
- Historic Kingston Waterfront
- Honorable Mayor of the City of Kingston
- HRMM
- Hudson River Cruises
- Hudson River Ventures
- Hudson Valley Developers
- Irish Cultural Center Hudson Valley
- Jewish Federation of UC
- Joseph Hurwitz & Associates, Architects
- Kingston CAC
- Kingston City Marina, Harbormaster
- Kingston Fire Department
- Kingston Land Trust
- Kingston Times
- Lyghtforms
- Mariners Harbor
- Merrill Lynch
- Millens Steel
- New Central Baptist
- NYS DOS
- NYSDEC
- Ponckhockie Residents
- R&F Paints
- Reher Center
- Riverview Missionary Baptist Church
- Rondout Consulting
- Rondout Resident
- Rondout Rowing Club
- S. Finkle Associates
- · Savona's
- Scenic Hudson
- Ship to Shore
- Steelhouse
- Steelhouse Community Relations
- Town of Esopus
- Trolley Museum of NY
- Ulster County Planning Department



FIGURE 03.4 The team and stakeholders hoisting the sail on the Clearwater

STEERING COMMITTEE INTRODUCTION AND BOAT TOUR ON THE CLEARWATER

In an effort to help the Steering Committee and other key stakeholders meet the BOA Team and be able to better understand the BOA Area a tour was held aboard the Clearwater on September 16th, 2014. This enabled the team to become more familiar with the physical area and with the concerns, plans etc. of the Steering Committee and the local community.



FIGURE 03.5 A breakout group during the Steering Committee Framework Workshop

STEERING COMMITTEE FRAMEWORK WORKSHOP

A meeting with the Steering Committee and the City of Kingston was held on October 28th, 2014. This was the first opportunity for the City and the Steering Committee to give feedback on the initial design strategies that the team has been formulating. The comments and other discussions generated at this time allowed the design team to move forward with a better understanding of what are the best development / design strategies moving forward.



FIGURE 03.6 The team presenting to the community at City Hall



FIGURE 03.7 A breakout group discussing the overall vision of the BOA plan

COMMUNITY PRESENTATION AND SCOPING SESSION

The next public outreach session for the BOA Plan was held on February 24th, 2015. This meeting also served as the public scoping session, as part of the New York State Environmental Quality Review (SEQR) process, was held. During this session the official public comment period was open until March 10th as the public was allowed to see the latest developments and to discuss the proposal design strategies.

STEERING COMMITTEE DESIGN UPDATE AND MANAGEMENT STRUCTURE

The next opportunity for engagement was focused on the possible Management Structure of the BOA Area; it was held on June 29th, 2015. This gave an opportunity for another update on the design progress and for a discussion on the possibilities for management of the Implementation Plan projects.



FIGURE 03.8 The team explaining the vision for Island Dock and Dock Street.

COMMUNITY EVENT - GREENLINE WALKING TOUR

The team was initiated by the Kingston Greenline to co-host a walking tour of the site area on March 22, 2015. The tour included information about key projects within the BOA plan. This allowed the public to better understand the vision of the plan in the context of the actual site and to ask questions.

COMMUNITY EVENT- NIGHT MARKET

The team, along with representatives from the City of Kingston, had an area at the Kingston Night Market held on August 21st, 2015. This gave the public an open forum to ask any questions about the BOA plan.

FALL COMMUNITY PRESENTATION

The final presentation to the public for the BOA Plan is on December 1, 2015. This meeting will serve as the SEQR hearing process.



FIGURE 03.9 The team speaking with community members at the Kingston Night Market



The City of Kingston is located on the western bank of the Hudson River approximately 54 miles south of Albany and 104 miles north of New York City. Kingston is the county seat of Ulster County and is a major regional commercial and business center. The significant frontage on the Hudson River and a lengthy and protected shore on Rondout Creek, a major tributary of the Hudson is what makes the City of Kingston so appealing to residents and visitors alike. For over 150 years, a continuous flow of industry including rail yards, boiler facilities, a coal gasification plant, a bulk petroleum facility, and salvage and scrap metal yards have been located along the Rondout Creek. The Hutton Brick Company, Cornell Steamship Company shops (currently used as the Headquarters of Historic Kingston Waterfront and Fleet Obsolete), Steelhouse Restaurant/ Millens Steel building (now famed local restaurateur Butch Guido's Ole Savannah Restaurant), Island Dock, and Feeney's Boatyard remain as evidence of a once-thriving industrial complex. Most of the former industrial sites are being transitioned to commercial public usage (ie expanded Hudson River Maritime Museum). Several of these industries continue today, though the KOSCO oil tanks have been removed on the Kingston side of the Creek. Today, however, increased interest in the City of Kingston and its surrounding area are making the city more appealing for growth and development which will also encourage the clean-up of the former industrial sites in the area. Changing economic conditions have resulted in the abandonment of these historic industries and created opportunities for reuse of a number of sites. Lower Broadway, for example, has been extensively revitalized, creating a vibrant mixed-use area providing shops,



FIGURE 04.1 Regional context

restaurants, homes and offices. Also of importance for the redevelopment of the area is incorporating resiliency strategies to ensure that when the inevitable flooding due to sea level rise and storm surges inundates the area that the new development is prepared and can handle those sort of conditions. The key to the redevelopment of the area is to ensure that the new development will not be ruined by climatic changes and can continue on for many years after implementation is complete.

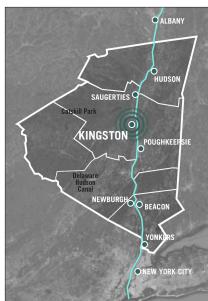


FIGURE 04.2 Hudson River Valley context

EXPANDED BOA BOUNDARY



FIGURE 04.3 Original and Extended BOA Boundary

PROPOSED EXTENSION OF BOA BOUNDARY

This section of the BOA Plan presents supplemental inventory information supporting the extension of the designated BOA boundary to the west of the original boundary. Since completion of the Step 2 Nomination Study, the BOA Boundary has been proposed to be extended by 12 parcels (23.6 acres - including water area) in order to include several key parcels that might support the redevelopment planning for the Kingston Waterfront. While the Step 2 Nomination Study provided limited information on some of the properties within the proposed expanded BOA boundary, the formal BOA boundary evaluated in Step 2 did not include these subject parcels. The proposed Extended BOA boundary is depicted in relation to the overall BOA Boundary in Figure 04.3.

All the parcels within the proposed extended BOA boundary are either on Rondout Creek or front on Abeel Street. The additional area to be included in the BOA is bounded to the west by the former block plant property on Abeel Street. Abeel Street bounds the subject parcels to the north from the former Block Plant Site at the west to its east end at 144 Abeel Street (abutting the current BOA boundary). Rondout Creek serves as the southern bounds of the proposed extension of the BOA boundary.

The subject parcels have been grouped into five areas based on common ownership or existing use. The parcels in Figure 04.4 are included within the proposed extended boundary which is depicted on Figure 04.3.

Parcel	TAX MAP PARCEL NO.	STREET ADDRESS	PROPERTY OWNER	
Noah Hotel Site				
1	56.43-5-1	144 Abeel Street	Hudson Valley Dev LLC	
2	56.50-6-20	146-168 Abeel Street	C&B Developers LLC	
3	56.50-6-19	146-168 Abeel Street	C&B Developers LLC	
4	56.50-6-18	146-168 Abeel Street	C&B Developers LLC	
5	56.50-6-16	146-168 Abeel Street	C&B Developers LLC	
Hideaway Marina				
6	56.50-6-25	170 Abeel Street	Rondout Holding Co Inc.	
7	56.50-6-24	194-198 Abeel Street	Rondout Holding Co Inc.	
P&T Surplus				
8	56.50-6-14	194 Abeel Street	Rondout Holding Co Inc.	
9	56.50-6-13	198 Abeel Street	Rondout Holding Co Inc.	
Block Park				
10	56.50-6-12	208-304 Abeel Street	City of Kingston	
Former Block Plant and Island Dock				
11	56.50-6-22	308-322 Abeel Street	Historic Kingston Waterfront	
12	56.50-6-11	"Rear Abeel" Street	Historic Kingston Waterfront	
	56.43-5-44	within Step 2 BOA Boundary	Historic Kingston Waterfront	
	56.50-6-21	within Step 2 BOA Boundary	Historic Kingston Waterfront	

FIGURE 04.4 Parcels within the proposed extended boundary

JUSTIFICATION FOR THE PROPOSED CHANGE TO BOA **BOUNDARY**

Each of the five groupings offers unique opportunities for brownfield redevelopment:

- Sites 1 5 Noah Hotel Site
- Sites 6 7 Hideaway Marina
- Sites 8 9 P&T Surplus
- Site 10 Block Park
- Sites 11-12 Former Block Plant and Island Dock

The proposed area for the BOA boundary extension is an organic extension of the BOA originally studied in Step 2. It includes a group of vacant and underutilized properties previously studied and cleared for redevelopment (the Hotel Site – Sites 1-5). The Hideaway Marina (Sites 6-7) is an existing water-dependent business with excellent access, no major brownfield issues and several ancillary buildings. The P&T Surplus property (sites 8 and 9) is an underutilized property that based on a Phase I Environmental Site Assessment does not have significant contamination concerns.

The Former Block Plant and associated parcels (Sites 11 and 12) are part of the same holdings as Island Dock, which has significant potential for redevelopment as a water-dependent site. Site 12 includes the abandoned Block Plant. The available environmental site assessments for these sites indicated that there is low to moderate potential for degraded environmental conditions. The proposed BOA extension also includes the existing City-owned Block Park (Site 10).

Taken together the 12 subject parcels make a reasonable extension to the Kingston Waterfront BOA which would now incorporate the entire slipway on Rondout Creek up to and including the causeway.

SITE PROFILES

Site Profiles have been prepared for each of the five groupings of parcels within the proposed extended BOA boundary. The site profiles provide: a location map, street address, tax map parcel number, ownership, current land use and condition, existing infrastructure and transportation, natural features, cultural resources, and known environmental conditions and potential contamination issues (based on environmental site assessments conducted for Step 2). For purposes of describing existing conditions, the site profiles for Sites 11 and 12 also include the Island Dock parcels which are under common ownership by Historic Kingston Waterfront.

SUPPORTING DOCUMENTATION FOR BOA DESIGNATION

The final steps of the BOA process is the formal designation of the BOA by the New York Secretary of State, which will give private landowners access to tax incentives for redevelopment of brownfield sites. The findings below are provided in order to support the BOA designation request with information that may not have been included in the Step 2 Nomination Study relevant to the proposed boundary extension.

OWNERSHIP PATTERN

The ownership pattern within the proposed extended BOA boundary is depicted on Figure 04.5 - Private and Public Land Ownership. Of the 12 subject parcels, all but one are privately owned by one of five different landowners. The only exception is the City-owned Block Park.

PROXIMITY TO EXISTING TRANSPORTATION

As seen in Figure 04.59, the primary road access to the subject parcels is via Abeel Street or Dock Street/West Strand Street (from the East). The closest bridge that connects Kingston to the east bank of the Hudson River is approximately four miles to the north (U.S. Highway 9W). 9W runs north-south through Kingston. The nearest airport is the Kingston –Ulster airport, situated near the Kingston-Rhinecliff Bridge. There is a water taxi service which operates between Kingston and Rhinecliff

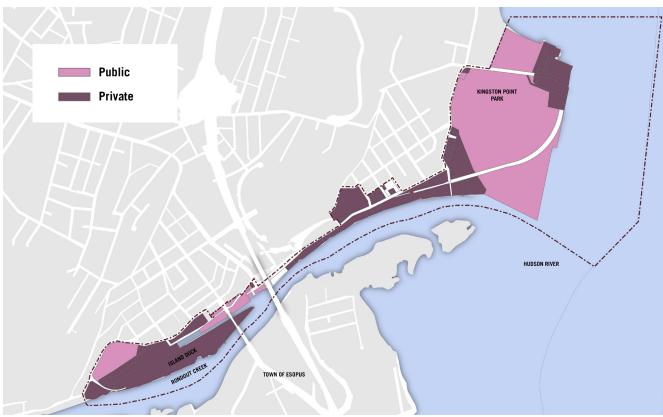


FIGURE 04.5 Public/Private Ownership Pattern

OWNER		
Armstrong, Nathan	Kgn Point Terminal	Sensini , Aldo
B Millens & Son Inc	Manatee LLC	VanWert, Brenda
Blue, John	Martin, Lloyd	Vivianni, Catello
Central Hudson Corp	Melke Land Co LLC	Washington, Hattie
City of Kingston	Millens, Barney	Wolfeil, Bruce
Historic Kgn Waterfront LLC	Mohegan Vista Prop LP	Wolfeil, Craig
Jackson, Fred B	Nauta, Gary	Wolfeil, Craig P
Jacobson, Amy	New Central Bap Church	Wolfeil, Frank
JAF Partners Inc	ONeil, Judy	Wolfeil, James
JKJ Properties LLC	Rondout Land Corp	
Jones, Patricia	RW Garraghan Inc	

FIGURE 04.6 Table of Private owners in the BOA Boundary

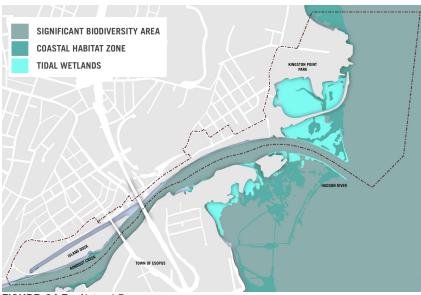


FIGURE 04.7 Natural Resources

WETLANDS AND FLOODPLAIN

Figure 04.7 depicts water features in the subject area. The entire area proposed to extend the BOA boundary is located within areas designated as wetlands by the US Fish and Wildlife Service's (USFWS) National Wetland Inventory maps. There are no New York State Article 24 designated wetlands within the subject area.

In this area of the BOA, Rondout Creek is a protected stream under New York State (NYS) regulation (855.4-1). The Rondout Creek has a Standard and 701.8 Class C - fresh surface waters. Best usage is for fishing, suitable for fish propagation and survival. Suitable for primary and secondary contact recreation although other factors may limit the use for these purposes. The majority of the subject area is located within the Federal Emergency Management Agency (FEMA) mapped 100 year flood plain.

As part of the Hudson River Estuary, the BOA is located within an area designated by the New York State Heritage Program (NYSDEC & SUNY College of Environmental Science and Forestry) as having Significant Natural Communities, which require an assessment of environmental impacts. The purpose of the program is to facilitate conservation of rare plants and animals and natural ecosystems.



FIGURE 04.8 Cultural Resources

CULTURAL RESOURCES

As depicted on Figure 04.8 Cultural Resources, the proposed extended BOA boundary is located adjacent to the Rondout-West Strand Historic District, a National Register-listed historic resource (90NR01103). The district is roughly bounded by Broadway, Rondout Creek, Ravine, Hone and McEntee Streets. According to the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) – State Historic Preservation Office (SHPO), the entire BOA Plan area is located within an area designated as sensitive for archeological sites and therefore, future redevelopment projects may require cultural resources investigations prior to construction.

ADDITIONAL STRATEGIC DEVELOPMENT SITES

Of the five sub areas included in the proposed extended BOA boundary, the following have been identified as Strategic Sites.

- Noah Hotel Site
- Block Park & Island Dock (former Block Plant)

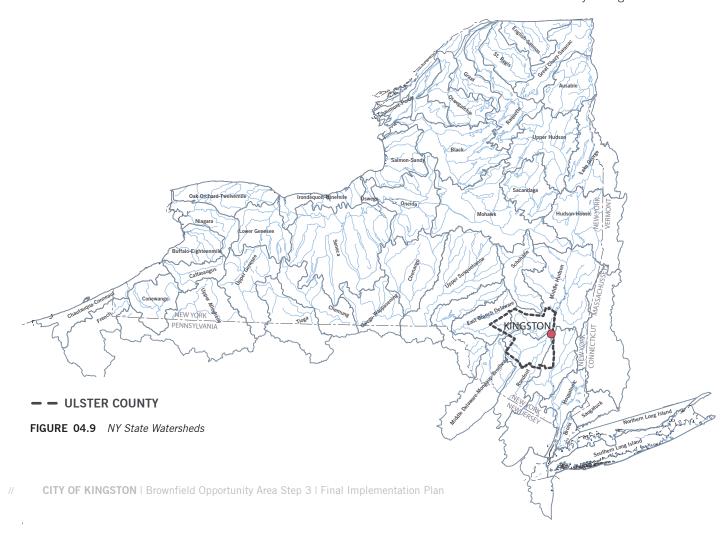
This section forms an important update to the August 19, 2010 Waterfront Brownfield Opportunity Area - Step 2 Nomination Report. At that time, the 2010 Census data and the 2012 American Community Survey (2012 ACS) data was not available. The Project Team has reviewed data from these sources, along with reports from the Ulster County Chamber of Commerce and field interviews to drive the analysis of the economic dynamics in the Study Area.

PHYSICAL CONTEXT

The BOA offers incredible natural, recreational, and economic resources that are a key to the economic prosperity of the City of Kingston. The presence of Regional assets attracts tourists, visitors and new residents to live in and around the historic Rondout district and encourage them to take advantage of the City's recreational resources at Kingston Point Park and Kingston Point Beach. Protecting these finite resources has been a central priority for the City leadership, residents, and nonprofit organizations and property owners. The strategic location and the developable portion of the Rondout and Hudson River Waterfronts and portions of the nearby Rondout and Ponckhockie neighborhoods are a vital asset to the area. These areas have long been affected by the environmental conditions and heavy industrial uses of the past. Property values in these neighborhoods are not as high as the surrounding City.

REGIONAL SETTING

New York State as we know it, attributes much of it's boundaries through strategic connections and alignment with important resources. The Hudson River and the Mohawk River are two key connections. Historically these links have proved to be critical transportation and migration paths to the west as a passage through the Appalachian Mountains, between the Catskill Mountains and Allegheny Plateau to the south and the Adirondack Mountains to the north. Historically linking New York



City with the Great Lakes, the Northeast Region and to the Western United States. Kingston was part of this extensive network.

UNDERSTANDING THE NEW YORK ECOLOGIES

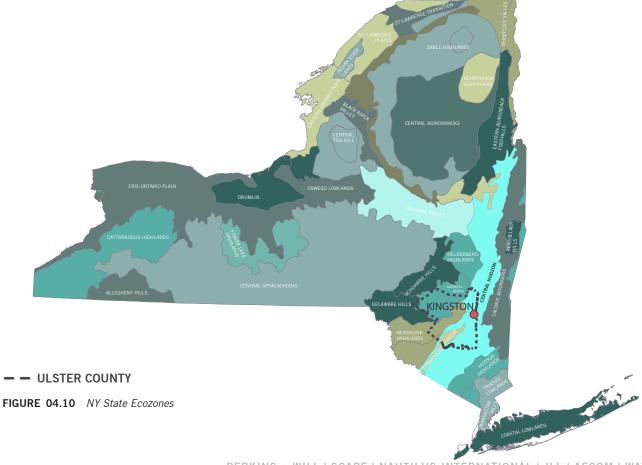
Understanding the larger ecological systems are key to revitalizing the Kingston Waterfront. They illuminate key synergies and look beyond political boundaries that may be arbitrary.

Figure 04.9 depicts how the boundaries of watersheds extend beyond political jurisdiction. The watersheds of New York state cross the boundaries of four different states as well as international borders. The Rondout is a critical link to intersecting sheds. Straddling the Walkill and Rondout watersheds, the Rondout Creek is one of the Hudson River's largest tributaries. The water that flows past the Kingston waterfront was collected across an area totaling nearly 1,200 square miles, including five counties and two states.

Source: NYSGIS, USGS

Figure 04.10 illustrates the New York State Ecozones and highlights Kingston, New York and Ulster County within the state ecozone fabric. The City of Kingston is spread between the Catskill Peaks, Neversink Highlands, Shawankgulk Hill, and the Central Hudson ecozones. The BOA study site lies within the Central Hudson ecozone.

Source: NYSDEC, NYSGIS



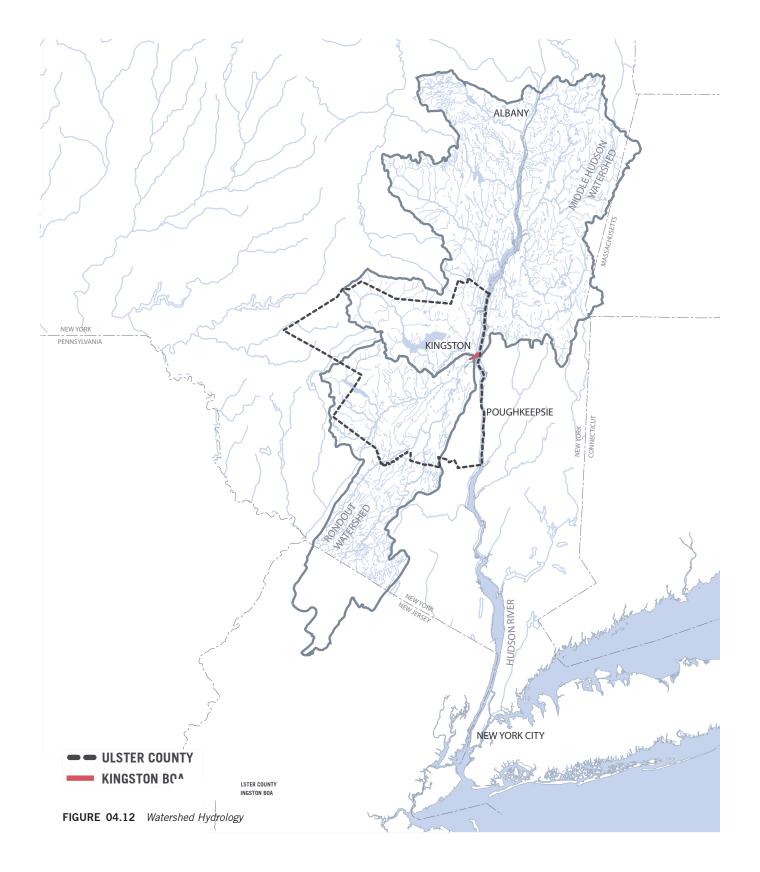
HUDSON RIVER VALLEY

Henry Hudson explored the area of present-day New York in 1609 and claimed it for the Netherlands. His journey stimulated Dutch interest, and the area became known as New Netherland. In 1625, the city of New Amsterdam (the location of present-day New York City) was designated the capital of the province.

The Mid-Hudson Valley and Ulster County began as farming communities and prospered during the industrial revolution later to emerge as a regional economic powerhouse in New York State. The City of Kingston is located on the western bank of the Hudson River approximately 54 miles south of Albany, and 104 miles north of New York City. It is roughly bounded by the New York State Thruway to the west, the Town of Ulster to the north, the Town of Esopus to the south, and the Hudson River to the east. Kingston is located in the northeastern portion of Ulster County directly across the Hudson River from the Town of Rhinebeck. As mentioned earlier, Kingston is the county seat of Ulster County and is a major regional commercial and business center. The City has significant frontage on the Hudson River and a lengthy and protected shore on Rondout Creek, a major tributary of the Hudson. Rondout Creek in particular offers space for marina activity for small craft and river tour vessels. The river and creek once had a considerable amount of barge traffic. Kingston is on the edge of the Catskill Mountains, which are home to the Catskill Park and the well-known Catskill resort area. Interstate Highway 87, the New York State Thruway, crosses the western edge of Kingston and is connected to the City center by Interstate 587. US Highway 9W provides additional north-south highway access, paralleling the Hudson River, US Highway 209 intersects the Interstate to the west of the City. State Highways 28 (east-west) and 32 (north-south) provide access to other communities in the county.

Figure 04.12 shows how Kingston is made up of two distinct watersheds: Rondout and Middle Hudson. This map illustrates the City of Kingston's watershed reach at a regional scale. Water that emerges at the mouth of Rondout creek begins at the northern portion of New Jersey.

Source: NYSGIS, USGS



KINGSTON AND THE WATERFRONT

UPTOWN, MIDTOWN, DOWNTOWN

Kingston's Uptown neighborhood is where visitors will find many fine examples of America's early colonial history. The first permanent settlement was built in 1652. Governor Stuyvesant ordered the original stockade built in 1658 to protect the early settlers from local Indian attacks. Originally called Wiltwyck, Uptown Kingston is the largest remaining example of early Dutch settlement in New York State. In 1777, Uptown Kingston's Senate House is where the first capital of New York was established, and visitors can explore many historic sites and museums that represent that era.

Midtown Kingston reflects a history of industry and expansion. Following the opening of the railroad in the mid-nineteenth century, which ran between (Uptown) Kingston and Rondout, there was a natural growth towards the new transportation line. When the two villages merged, City Hall and other municipal features were built in this newest part of the city. Visitors will find an eclectic mix of shops, music venues, restaurants, specialized manufacturing (many related to the arts), micro breweries, city government offices, Kingston Hospital, and many fine examples of Victorian and early twentieth century architecture.

The Rondout neighborhood is located on the shore of Rondout Creek near where it meets the Hudson River. Initially a key port for the shipment of timber and agriculture to the colonies and beyond, the area boomed with the opening of the Delaware and Hudson Canal in 1828; it became a trade hub for coal from Northeast Pennsylvania, bluestone from the Catskill Mountains, cement from Rosendale, and bricks made from local clay. The area grew so rapidly that it incorporated as the Village of Rondout in 1849, and by 1872 it merged with the then-Village of Kingston to form today's city. By the time the canal closed in 1899, the port area featured buildings in all the nineteenth century architectural styles.

Activating the Rondout and creating upland connections is key to the revitalization of the waterfront. The waterfront will be an exciting place for locals and a regional draw for visitors.

HISTORICAL CONTEXT

T 1614

The Town of Esopus begins as a trading post between the Dutch and the Esopus Indians. The town grows but sees many violent conflicts with the Indians in the following decades.



1683

The colony of New York is divided by the British into counties and Kingston becomes part of Ulster



1777

Kingston is New York's first capital before it is burned by the British and the capital is moved to Albany.

1828

Port of Rondout grows to rival the stockade area with the construction of the Delaware and Hudson Canal.

1962

Urban Renewal is included in city's comprehensive development plan.



1950s

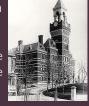
As the State's highway system expands, trucks and cars gradually overtake the railroads as the major transporter of goods.

Late 1800s

Railroads replace the canal and river as the dominant form of commercial transportation.

1872

The City of Kingston is created including the Village of Rondout, the Village of Kingston, and the Hamlet of Wilbur.





1970s

Much of Kingston's waterfront is in deteriorated condition, the Kingston Point Lighthouse is abandoned, Kingston Point is a landfill, commuter railroad tracks are rusting and overgrown with weeds, Rondout is a series of vacant and deteriorating structures.

1992

The city's Local Waterfront Revitalization Program (LWRP) is adopted.

1995

After operating its main plant in Kingston for 40 years, IBM closes its doors, leaving thousands of residents unemployed.



2005-2007

Historic Kingston stitches together the waterfront

CLIMATE

On average, there are 177 sunny days per year in Ulster County, NY. The July high is around 79 degrees and the January low is 15. Given the extreme temperature variances across the calendar year there is a need to design an adaptable all season waterfront. An actively programmed waterfront that allows a flexible range of uses and celebrates each season, including the colder months. There should be areas of refuge from the cold and extreme heat and they should provide active recreation during all months. Building ground floors can be used as public amenities and opportunities to get out of the weather. Pleasant months offer opportunities to provide open air atmosphere that leverage the breezes and sound of the Rondout.

WIND

The average wind speed is comparable to the national averages and are slightly higher in the winter. Typically the wind blows into the Rondout from the Hudson and can be quite strong at times. Careful considerations should be made to orientate buildings and landscape to protect from the wind and provide areas of refuge. The wind can be an asset for recreational boaters choosing to sail but also tend to change quickly.

SOLAR

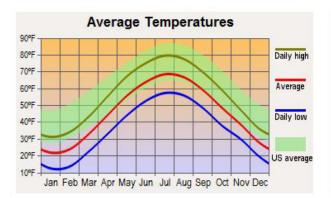
Given the breadth of the Rondout Creek and low scale buildings much of the waterfront is exposed to direct southern exposure. This is an asset in the winter when maximum sun exposure is desirable. In the stronger summer months shade structures and landscaping will be needed to provide respite from the heat.

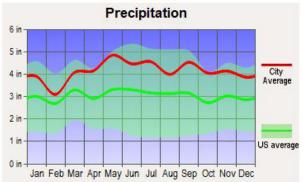
PRECIPITATION

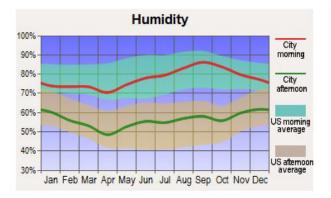
Ulster County, NY, gets 46 inches of rain per year compared to the US average of 37. Ulster County also gets 45 inches of snowfall compared to the US average of 25 inches of snow per year. The number of days with any measurable precipitation is 120. Given the high level of precipitation, strategies should be implemented to capture rain water and increase permeable surfaces to reduce strains on infrastructure and the potential of contaminates washing into the creek.

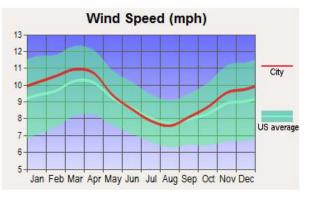


FIGURE 04.15 Winter in Kingston

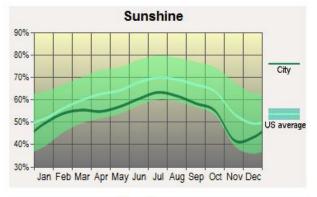












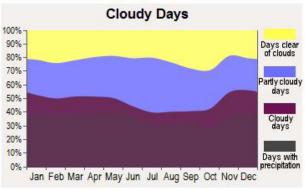


FIGURE 04.16 Annual climate trends

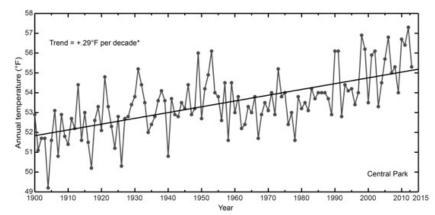


FIGURE 04.17 Temperature trends (1900-2013)

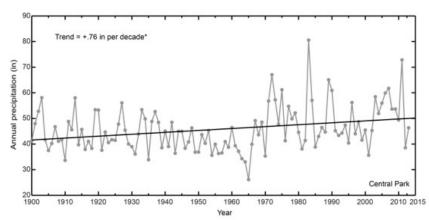


FIGURE 04.18 Precipitation trends (1900-2013)

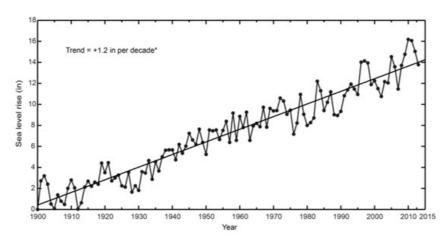


FIGURE 04.19 Sea Level trends (1900-2013)

	SPATIAL SCALE OF PROJECTION	DIRECTION OF Change by 2050s	LIKELIHOOD	SOURCES
TROPICAL CYCLONES				
Total number	North Atlantic Basin	Unknown		
Number of intense hurricanes	North Atlantic Basin	Increase	More likely than not	USGCRP, 2013; IPCC, 2012
Extreme hurricane winds	North Atlantic Basin	Increase	More likely than not	USGCRP, 2013; IPCC, 2012
Intense hurricane precipitation	North Atlantic Basin	Increase	More likely than not	USGCRP, 2013; IPCC, 2012
NOR'EASTERS	NYC area	Unknown		IPCC 2012; Colle et al. 2013

FIGURE 04.20 Projected direction of climate event change by the end of the century

OBSERVED CLIMATE TRENDS (1900 – 2013)

The following climate trend observations were made in the New York City Region and are described in Cynthia Rosenzweig's Center for Architecture AIA Responding to Climate Change in New York City (NPCC 2015 Report).

TEMPERATURE

Mean annual temperature has increased at a rate of 0.3°F per decade (total of 3.4°F).

PRECIPITATION

Mean annual precipitation has increased ~0.8 inches per decade (total of 8 inches).

Year-to-year (and multi-year) variability of precipitation has become more pronounced, especially since the 1970s.

SEA LEVEL

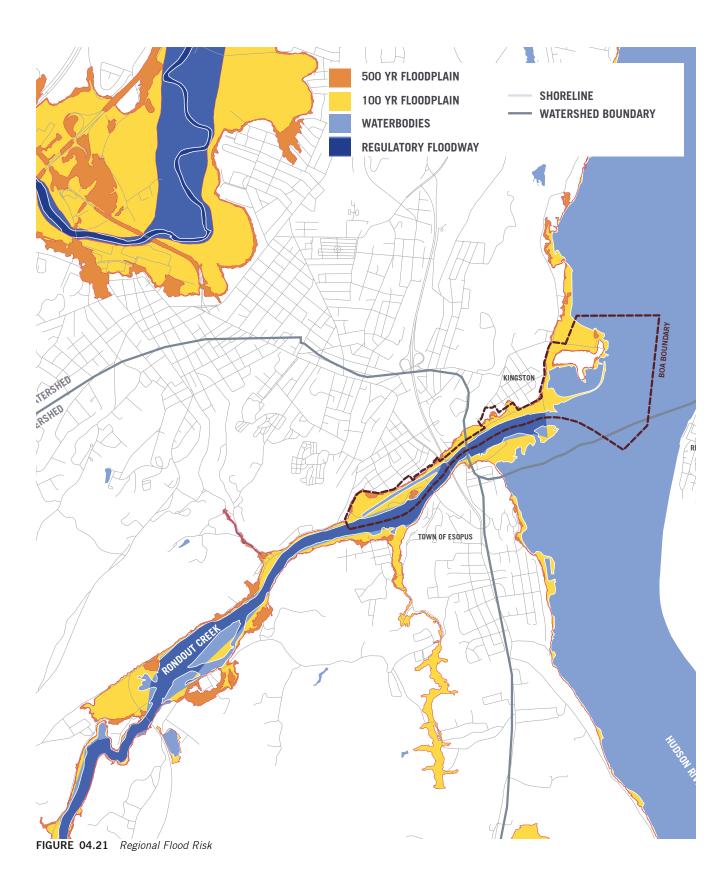
Sea level rise in New York City has averaged 1.2 inches per decade (total of 1.1 feet), nearly twice the observed global rate over a similar time period.

CHANGES IN EXTREME EVENTS

As noted above the probability of occurrence and likelihood of intense hurricanes and other extreme weather events will more likely than not increase by 2050. This has a tremendous effect on what and how we build at exposed development sites like those along the Rondout.

RECOMMENDATIONS DUE TO CLIMATE CHANGES

Given the concerns for increasing temperature and more frequent storm events there is a tremendous need to address these issues through the redevelopment plan for the Rondout. There is potential to reduce the amount impervious surfaces, and focus on vulnerable populations who may not be able to afford air conditioning. Other at risk population, such as the elderly will need alternative means of transportation and plenty of shade at the waterfront.



REGIONAL HYDROLOGY + FLOOD RISK

The Kingston BOA site area is susceptible to flooding from two different watersheds—Middle Hudson Watershed and Rondout Watershed. It is also vulnerable to storm surge from the lower Hudson, as during Hurricane Sandy. As illustrated in Figure 04.21, the bright yellow zones highlight the 100-year floodplain. The majority of the BOA site lies within this area. It is important to consider BOA recommendations that take into consideration the impacts of residing in the 100-year floodplain. However (see sea level rise), the 100 year floodplain will be shifting upland over the next century, expanding the areas now vulnerable to flood and inundation.

Sources: FEMA, USGS, Scenic Hudson

The following map series (Figure 04.24 - Figure 04.27) illustrate the increased movement and projected 100 year floodplain over time. Many significant waterfront sites within the BOA—including the sewage treatment plant—will be inundated or made more vulnerable to flooding. So the question is how do we make recommendations that consider the vulnerable Kingston waterfront edge through our BOA research and recommendations? The areas of highest risk of contamination are also at greatest risk of inundation. How can we use the process of remediation and clean-up to create vibrant public spaces, linking Kingston to the Hudson, while acknowledging how the shoreline will change in the coming decades?

Sources: Scenic Hudson, USGS



FIGURE 04.22 Flooding at the Kingston Waterfront

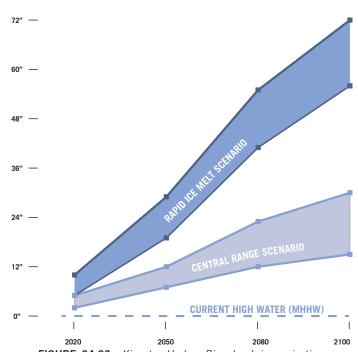


FIGURE 04.23 Kingston Hudson River level rise projections

Kingston's location on the Hudson River makes it vulnerable to sea level rise. As sea levels around the world rise due to global warming, Kington's 100 year floodplain will be shifting upland over the next century, expanding the areas vulnerable to flood and inundation. Using datasets created by Scenic Hudson, these diagrams depict the areas that could be impacted by rising waters under two of the most common sea level rise scenarios outlined by the NYS Sea Level Rise Task Force Report (2010) and NYS 2100 Commission Report (2013)). The Central Range scenario (Figure 04.24

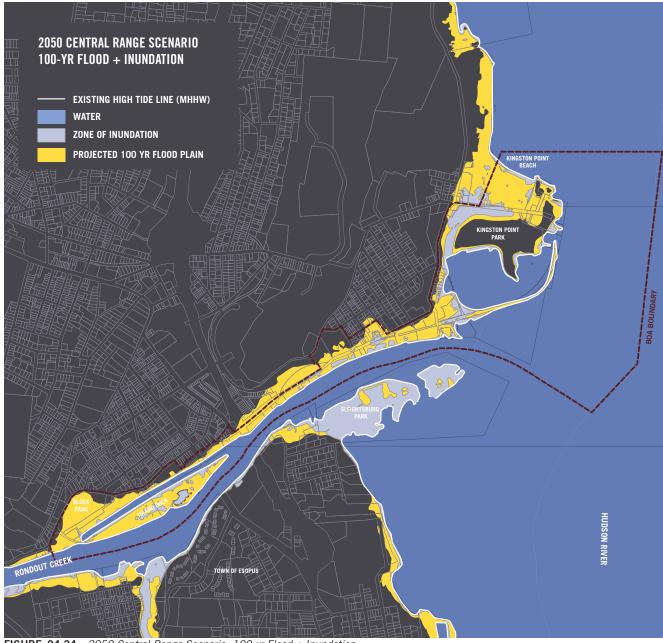


FIGURE 04.24 2050 Central Range Scenario: 100-yr Flood + Inundation

and Figure 04.25) depicts the central range of model-based probabilities, while the Rapid Ice Melt scenario (Figure 04.26 and Figure 04.27) is based on a more accelerated rate of ice melt as currently seen in Greenland and the West Antarctic. As the future of sea level rise is dependent on so many interdependent and unpredictable integers, any development in the Rondout must be flexible to a range of outcomes in the coming century. In both scenarios, substantial portions of the BOA are impacted by increased flooding and inundation.

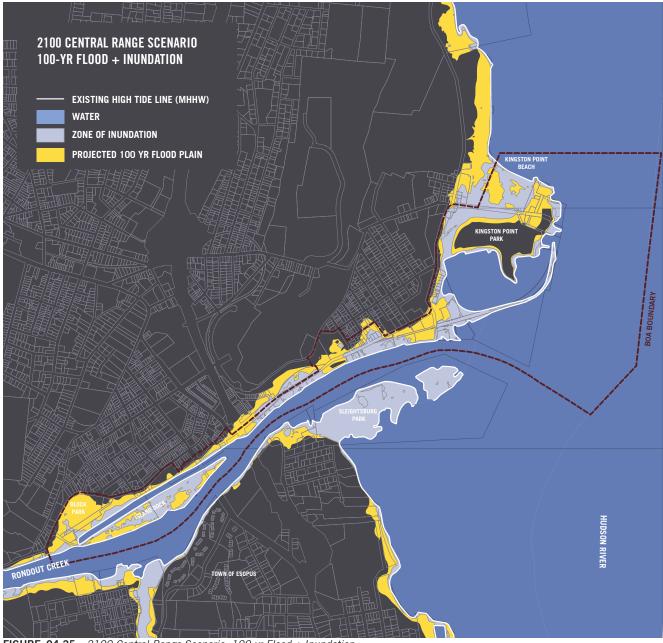


FIGURE 04.25 2100 Central Range Scenario: 100-yr Flood + Inundation

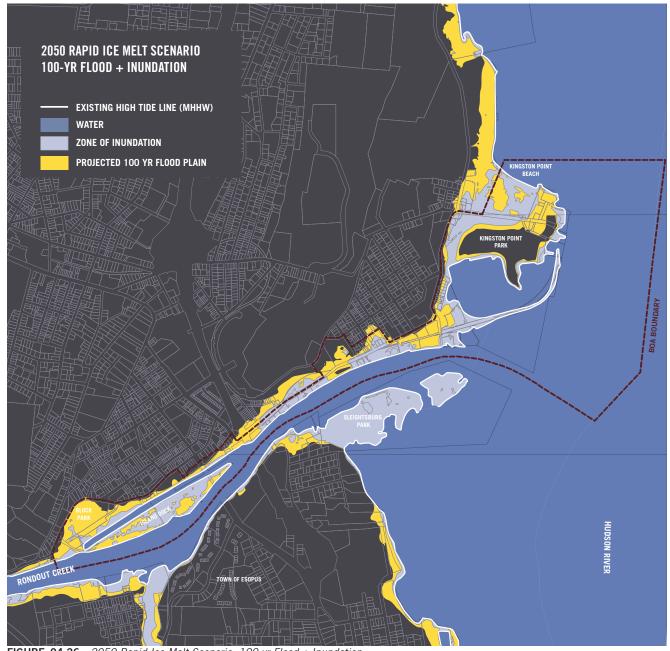


FIGURE 04.26 2050 Rapid Ice Melt Scenario: 100-yr Flood + Inundation

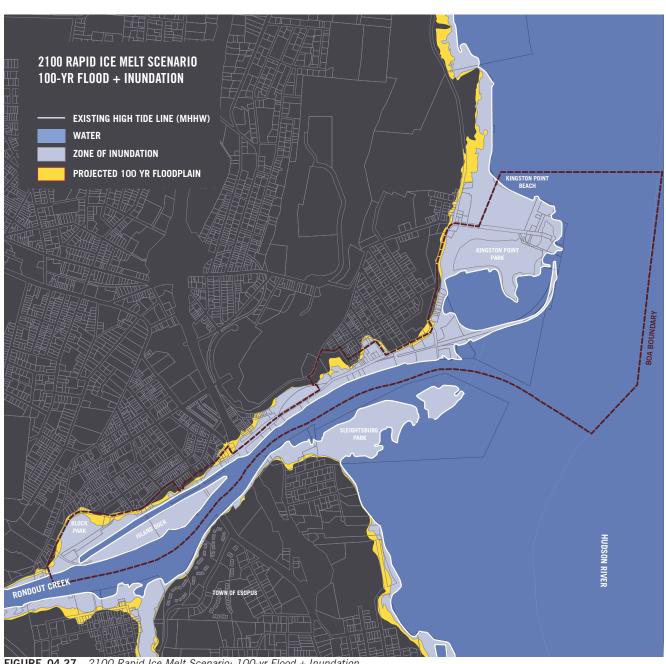
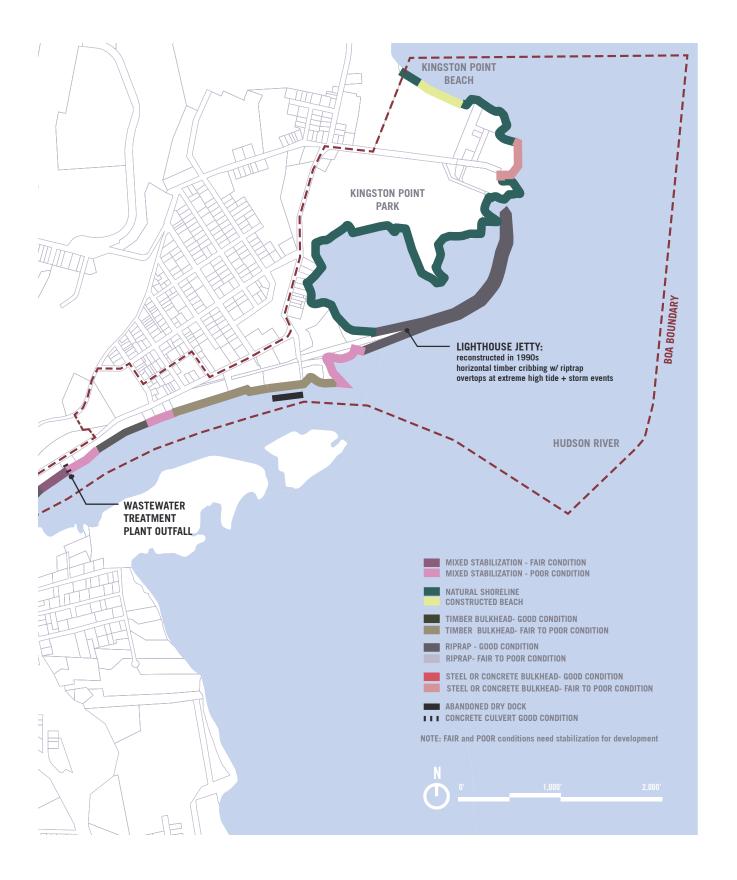


FIGURE 04.27 2100 Rapid Ice Melt Scenario: 100-yr Flood + Inundation

EDGE CONDITIONS Based on an US Army Corps study and our own site observations, we have categorized the entire BOA site area edge condition into a series typologies. Each typology is graded based on good to fair to poor condition. The accompanying site photos provide an additional layer of illustrative information of the different edge types and material palette. Source: USACE Kingston Harbor Waterfront Management Plan KINGSTON CULVERT CONNECTS INNER CHANNEL + RONDOUT CREEK RONDOUT CREEK TOWN OF ESOPUS FIGURE 04.28 Kingston Waterfront Edge Conditions Map



EDGE CONDITION ANALYSIS

In an inspection conducted in 2011 for the Planning Assistance to States (PAS) study, the creek was found to be segmented with large areas of underutilized, abandoned, and deteriorating shoreline. As the LWRP supports mixed use, waterbased land uses along the Rondout Creek, it envisions improving the appearance and stability of the shoreline via a joint effort by the City of Kingston and the private sector. Part of this vision has already been realized, with the northern shoreline of Rondout Creek having already been extensively developed for marinas, dry docks, and residential and commercial uses.

As Figure 04.29 and Figure 04.29 indicate, the shoreline is in a variety of conditions along the Rondout Creek waterfront and the Hudson River waterfront.

Source: Rondout Harbor Management Plan, 2014







RIPRAP - GOOD CONDITION
RIPRAP- FAIR TO POOR CONDITION

FIGURE 04.29 Kingston Waterfront Edge Conditions Photos



NATURAL SHORELINE CONSTRUCTED BEACH

TIMBER BULKHEAD- GOOD CONDITION
TIMBER BULKHEAD- FAIR TO POOR CONDITION







ABANDONED DRY DOCK
CONCRETE CULVERT GOOD CONDITION

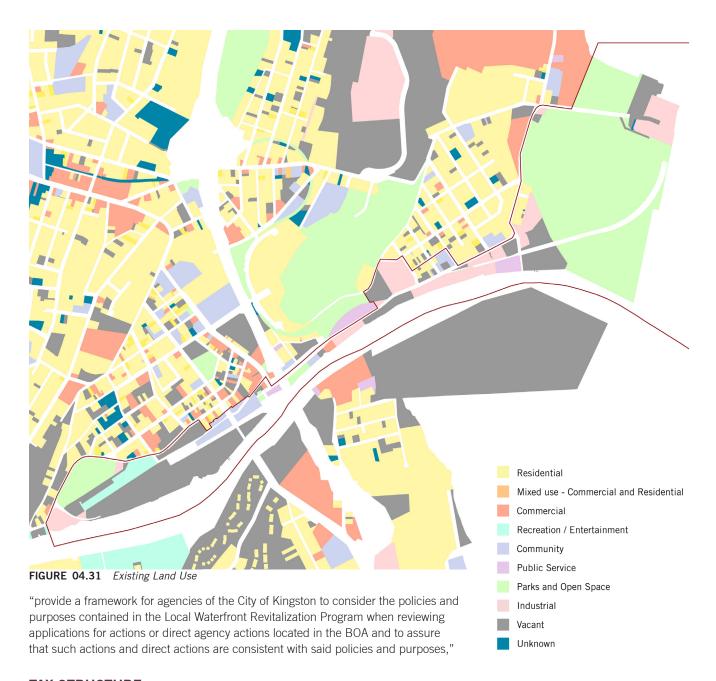


FIGURE 04.30 West Strand Street

LAND USE, ZONING AND URBAN FORM

LAND USE AND ZONING

The zoning designation for the main BOA is RF-R (Rondout Creek District). The purpose of the Riverfront District RF-R Rondout Creek zoning is to "afford priority to water dependent uses, achieve public access to the BOA, control development, create distinct Hudson River and Rondout Creek waterfront districts and to implement the policies and purposes of the City of Kingston Local Waterfront Revitalization Program. Further, it is the purpose of the districts to provide opportunities for permanent public views and access to the Hudson River and Rondout Creek and to encourage the phase out of certain uses which are incompatible with and detract from the Hudson River and Rondout Creek waterfront areas." Most of the remaining land in the BOA is zoned RFH (Hudson Riverfront District). A one-family residential district (RRR) covers the Ponckhockie Neighborhood. Parts of the East Strand and Abeel Street area are zoned as General Manufacturing (M-2) and General Commercial (C-2). The following table (Table One - Page 51) summarizes the uses allowed as of right in each district. Related codes affecting the BOA and adjacent lands include the control of "Waterfront Facilities." These codes identify the uses and policies related to marine facilities in the general harbor area under the administration of the City Harbor Manager. The area is also subject to "Waterfront Consistency Regulations." The purpose of that article is to



TAX STRUCTURE

The Waterfront BOA "underperforms" from a tax base perspective. While the area represents more than three percent of the City's assessed land area, it accounts for less than one-half of one percent of the tax base, in large part because its substantial redevelopment potential has not yet been implemented.

The various opportunities to encourage and incentivize economic development are currently being explored in the comprehensive planning exercise and will be further assessed later in this process.



FIGURE 04.32 Historic Kingston Waterfront

DESIGN GUIDELINES

In 2006 the City prepared and adopted a set of design guidelines to shape future development and rehabilitation of buildings on the waterfront within the BOA. These guidelines help the City to direct the density, appearance and massing of waterfront development so that it accomplishes the goal of an active vibrant waterfront. Key elements include:

- a. Environmental Context
- b. Building Height and Scale.
- c. Building Material
- d. Site Planning

These guidelines are being reevaluated in the new comprehensive planning process.

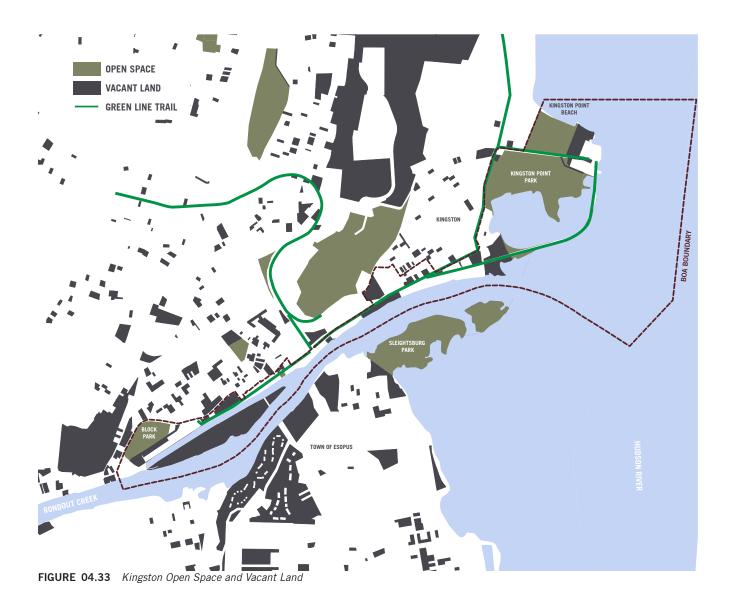
WATERFRONT ZONING REGULATIONS

Chapter 398 of the Kingston Charter that regulates waterfront development including the development found abutting the Rondout. These particular regulations and standards dictate access, setbacks, protect the environment and spur economic development.

These guidelines are being reevaluated in the new comprehensive planning process.

OPEN SPACE

Kingston Point Park is a critical amenity for the Hudson and Rondout waterfronts. It was the historic landing for the Day Liner boats from New York City. Passengers disembarked and could visit the amusement park then on site, take a trolley into Kingston, or stroll along the waterfront. The Day Line Dock held two sets of Rail Road tracks for the Ulster and Delaware Rail Road and passengers would disembark, and could also go elsewhere in the City of Kingston or the northern Catskill Mountains. Today, parts of the site have been restored with landscaping, picnic pavilions, and a bridge connecting the park's mainland to the peninsula that connects the park to the Rondout waterfront and the trolley tracks (the location of the former Day line boat dock). Kingston Point Park is well utilized for events and by neighborhood residents. With additional investment, it would become a major attraction for waterfront visitors. Kingston Beach is adjacent to Kingston Point Park and is heavily used as



PERKINS + WILL | SCAPE | NAUTILUS INTERNATIONAL | JLL | AECOM | WATTS



FIGURE 04.34 Kingston Waterfront

a summer recreation site. Block Park is also included within the BOA and is largely unprogrammed for recreation at this time.

URBAN FORM

The City's population continues to decrease and income growth has been slower than projected and did not keep pace with inflation between 1990 and 2000. This was likely influenced by the closure of the IBM campus nearby, but it represents decreased spending power by Kingston residents, as will the declining rate of consumer confidence throughout the current year. Incomes among Rondout area residents were slightly lower in 2000 than the City as a whole, but are increasing faster than other city neighborhoods. Recent data indicates that this trend is continuing. The Rondout waterfront experienced significant growth in population and housing units between 1990 and 2000, though the pace has slowed significantly in the past three years. Constriction in the housing market in general and a rising rate of home foreclosure is a concern for the adjacent low and moderate income neighborhood. In migration of some second homeowners indicates an increased need for goods and service providers. Though the pace of growth has slowed, a strong "buy local" mentality exists in the neighborhood. Kingston has experienced the same impacts as the surrounding Mid-Hudson Valley including skyrocketing housing costs, continual immigration from the greater NYC metro area, and more recently, a slowing climate for economic development as investors react to national economic trends. Though the current economic recession and world-wide financial

crisis will continue to impact the City, the economic analysis of recent years found that the City of Kingston is a regional commercial and business center with strengths in services and health care, retail and finance, insurance and Real Estate (FIRE) sectors.

Kingston's strong "new economy" orientation means that it is ahead of national percentages of total employment in service occupations. Its strongest growth sectors are in transport, communication, services and FIRE. The Kingston area has a substantial amount of office and industrial space available and some retail space. New development along the waterfront should differentiate itself from the City's current inventory of space so that it will attract and accommodate new business and residents without contributing to higher city-wide vacancy levels.

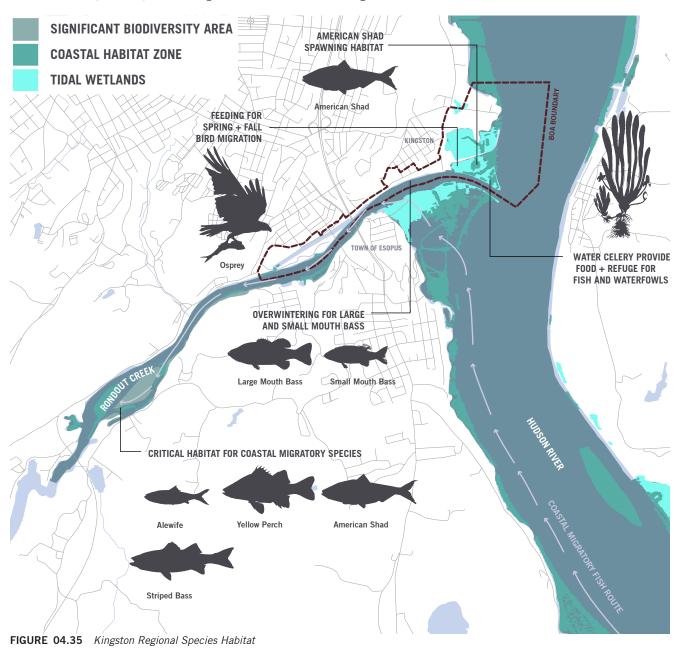
The City's location at the juncture of the Hudson River and Rondout Creek, along with significant historic resources, and good access to I-87 and thence to the New York metropolitan area create some currently unexploited tourism opportunities. The Hudson River is currently an under-used waterway with regard to tourism potential. The strong "influence" of the New York metropolitan area which offers unique opportunities for tourism and visitor activity, cultural and destination retail, and economic development for high value added activities (both service and production) where proximity to final customers does not require companies to be located in that metro region. The obvious downside of dependence on the NY metro market at the current time is that it may take many years for key industries (and their employees) to recover from the recent recession. This population feeds the City of Kingston's tourist and visitor base but has also been a source of disposable income from second home owners and artists relocating to the City. The region has significant "facilities assets" that are available for development (some with and some without the need for significant renovations). These could be utilized without adversely affecting Ulster County's open land assets. Redevelopment of existing facilities, buildings, and industrial land including brownfield sites can be made more competitive during this period if state and federal agencies do not disrupt the flow of funds for infrastructure improvement, economic development incentives and access to specialized lending pools and subsidized loan products. The region was still undergoing economic change following adjustments by major employers (including the reduction and re-establishment—albeit in a neighboring county—of IBM as one of Ulster County's largest employers). The new economic downturn will frustrate efforts to recover from earlier business losses. The region has also experienced an increasing number of inmigrants who work outside of Ulster County due to housing market developments in the greater Hudson Valley region. Economic development policies could be explored to take advantage of these new in-migrants that may represent an opportunity to cultivate quality jobs for those new residents that could also encourage a new level of level of entrepreneurship in the region.

HABITAT

REGIONAL SPECIES HABITAT

This map illustrates the critical habitat zones within Kingston's harbor on the Hudson River. Kingston is part of the majestic North American Flyway for migrating birds. The Hudson River creates a significant habitat zone for birds and fish to flourish. Kingston harbor and Rondout Creek provide critical habitat for migratory fish species that move from the Atlantic to freshwater havens for spawning. The American Shad uses the Hudson and Roundout Creek for spawning. The Osprey uses the Kingston waterways for feeding for spring and fall bird migration.

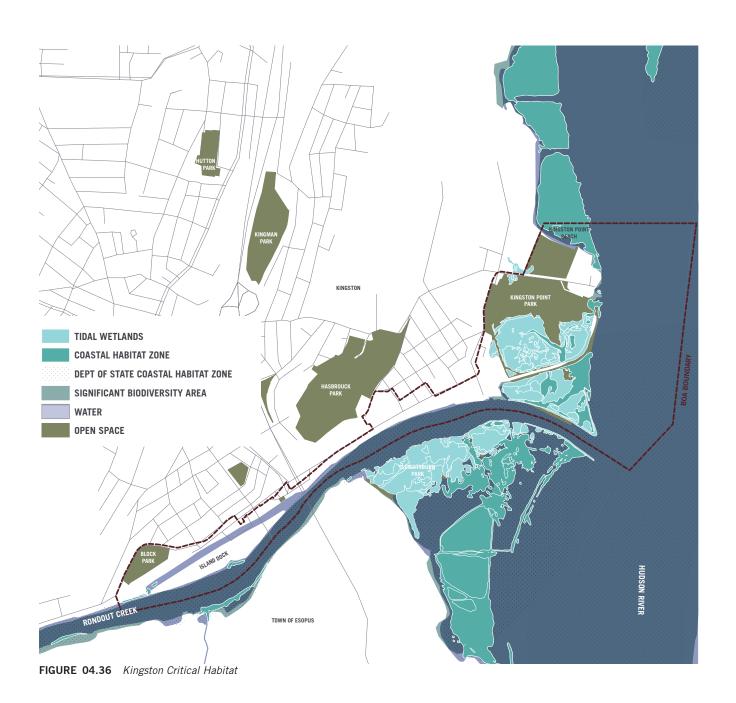
Source: NYSDEC, NYSGIS, USACE Kingston Harbor Waterfront Management Plan



KINGSTON CRITICAL HABITAT

This map illustrates the critical habitat zones associated with the Kingston waterways. There are significant tidal wetlands, coastal habitat zones, and biodiversity areas all around our BOA study site. These areas create important zones for ecological biodiversity.

Source: NYSDEC, NYSGIS, USACE Kingston Harbor Waterfront Management Plan



ECONOMIC CONTEXT

The viability and feasibility of the proposed rehabilitations and redevelopments on the subject sites will ultimately depend upon market dynamics. To this end, an important task for this Brownfield Opportunity Assessment is evaluating the project site within its local, regional, and national economic, demographic and real estate market contexts to assess the site's development potential. For this analysis, the team has utilized a variety of sources, including published economic, demographic and real estate data complemented with primary research/interviews with business owners and real estate professionals in Kingston and the surrounding Lower Hudson Valley. Through this process, the Project Team offers market-driven recommendations for the subject site rooted in an understanding of the local context.

In this section, we will describe:

- 1 Demographic trends
- 2 Economic trends
- 3 Real Estate trends

This section forms an important update to the "August 19, 2010 Waterfront Brownfield Opportunity Area - Step 2 Nomination Report." At that time, key government statistical reports, including the 2010 Census data and the 2012 American Community Survey data were not available. The data has been reviewed from these sources, along with reports from the Ulster County Chamber of Commerce and field interviews to drive the analysis of the economic dynamics in the City of Kingston.

DEFINING THE STUDY AREA

While Figure 04.3 displays the study area for the BOA – Step 3 project, we must examine a wider geographic area to assess the economic context and opportunities for the Kingston Waterfront Revitalization project. For the purpose of this analysis, we have identified three "Economic Study Areas," including, from macro-to-micro, Ulster County, the City of Kingston, and the 2010 Census Tract 9517, depicted in Figure 04.37.



FIGURE 04.37 Economic Study Areas from left to right: Ulster County, City of Kingston, 2010 Census Tract 9517

DEMOGRAPHIC TRENDS

POPULATION GROWTH

Ulster County's population grew from 2000 to 2010. As per the 2010 Census, there were 182,493 people residing in Ulster County – up from 177,749 people, as noted in the 2000 Census. This data demonstrates an approximately 0.26% compound annual growth rate for the population. The majority of the population growth was concentrated in the northern and southern municipalities of the County. Saugerties, to the north, and New Paltz, Lloyd and Shawangunk, to the south, experienced the highest growth rates in the County – significantly higher than the City of Kingston. In fact, although the City of Kingston made up approximately 13% of the County population in 2010, the City only accounted for 9% of the total growth over the 2000 to 2010 period. The growth in the southern municipalities of Ulster County is attributed to the growth of the State University of New York (SUNY) - New Paltz and the proximity of those areas to the Metro-North connection in Poughkeepsie.

The City of Kingston's population remained relatively stagnant from 2000 to 2010. As per the 2010 Census, there were 23,893 people, 10,217 households, and 5,441 families residing in the City of Kingston – slightly up from 23,456 people, 9,871 households, and 5,497 families, as noted in the 2000 Census. This data demonstrates a 0.2% compound annual growth rate for the population. The natural growth rate in the City of Kingston has been supported by in-migration. Anecdotally, the City of Kingston has witnessed growth due to the rising cost of living in the New York City metro area, as young professionals, particularly artists, have moved to Kingston from places, such as Brooklyn, seeking cheaper artist lofts/studios.

As compared to the County and the City, the population of Census Tract 9517 decreased from 2000 to 2010. As per the 2010 Census, there were 4,782 people residing in Census Tract 9517 – down from 4,841 people, as noted in the 2000 Census. The loss of the 59 people translates to a -0.12% compound annual growth rate for the population.

Another recent survey, the 2012 ACS, paints a more positive picture for Census Tract 9517. Paradoxically, while the populations of the County and the City remained stagnant or declined from 2010 to 2012, the population of Census Tract 9517 increased 0.48% per annum over the same period. Per anecdotal evidence from interviews with the community, the increase is due, in part, to the number of young professionals who have relocated from New York City into the Hudson Valley.

In summary, Figure 04.39 provides the total population of each Economic Study Area.

TOTAL POPULATION	CENSUS 2000	CENSUS 2010	ACS 2012	
Ulster County	177,749	182,493	182,516	
City of Kingston	23,456	23,893	23,864	
Census Tract 9517	4,841	4,782	4,828	

FIGURE 04.39 Total Population of Economic Study Areas

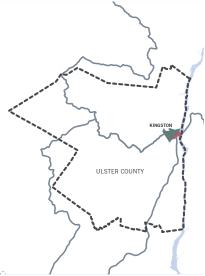


FIGURE 04.38 Ulster County + Kingston

DEMOGRAPHICS TRENDS

One of the greatest population trends negatively impacting the City of Kingston is the aging population. Figure 04.40 compares the age distribution of the three Economic Study Areas as per the 2012 ACS.

In addition to the distribution by age, Figure 04.41 provides the demographic breakdown of the three "Economic Study Areas" per the 2012 ACS.

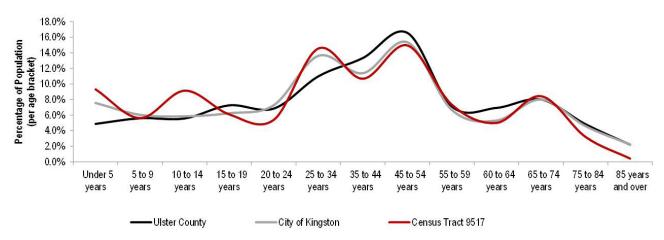


FIGURE 04.40 Age Distribution of Economic Study Areas

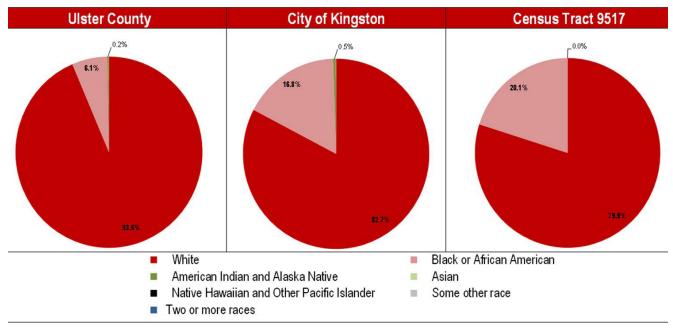


FIGURE 04.41 Demographic Distribution of Economic Study Areas

KEY TAKEAWAYS:

- 35.3% of the City of Kingston's population is over the age of 50, with 43% of that group over the age of 65, the traditional age of retirement.
- 30.1% of the population of Census Tract 9517 is under the age of 20 as compared to 25.7% for the City of Kingston and 23.3% for Ulster County, which indicates that the quality of primary schools may be of great importance to the community.
- The median age in the City of Kingston was 39.2 years as compared to 35.0 in Census Tract 9517, which is important as the population around this age is typically establishing families.
- Although the three levels of the "Economic Study areas" are overwhelmingly white, the Census Tract is slightly more racially diverse than the other two parts of the "Economic Study Areas." The increasing diversity of the Census Tract population may impact the spending habits, tastes and preferences of the study area, which may, in turn, lead to a medium-to-long term shift in the area's retail offering.

ECONOMIC TRENDS

One of the key indicators or measures of an economy's health is the total dollar value of all goods and services produced within a specific time period. For the United States of America, this calculation is called the Gross Domestic Product – but the size of any economy, whether down to the State or County level, is calculated and published by the U.S. Department of Commerce's Bureau of Economic Analysis. Regional planning authorities also project the economic growth of respective districts. For example, in "A Three-County Regional Housing Needs Assessment: Ulster, Orange and Dutchess Counties From 2006 to 2020" prepared by the Planning Departments of Ulster, Orange and Dutchess Counties of New York:

"The Gross Regional Product (GRP) of Ulster County is expected to grow at a yearly compounded rate of 1.2% from \$5.1 billion in 2006 to \$5.4 billion in 2010. Growth in GRP out to 2020 will be at about 1.8% per year and GRP will reach \$6.4 billion. Total non-farm employment in Ulster County will increase from 64,810 in 2006 to 67,390 in 2010, an increase of 0.9% per year. Continuing the forecast out to 2020, total non-farm employment will continue to grow at an annual rate of 0.8% per year to 73,070 jobs."

As an update to the projections of the aforementioned planning departments, the project team has analyzed data from the Bureau of Economic Analysis's 2015 update for the Gross Regional Product (in billions of real dollars, indexed to 2009) for the Kingston Metropolitan Statistical Area, which encompasses all of Ulster County:

	2006	2007	2008	2009	2010	2011	2012	2013
Kingston MSA - GRP (billions of real dollars)	5.069	5.016	4.970	4.937	5.012	4.884	4.858	4.888

Please note our analysis of the Bureau of Economic Analysis examines the real values as indexed to 2009, which are adjusted for inflation. Nominal or current values are not; therefore, nominal GDP will often appear higher than real GDP. Following the Great Recession, the growth of the Kingston MSA economy has not kept pace with the nation or with New York State. Further, as of 2013, the Kingston MSA GRP had not yet reached pre-recession levels. Figure 04.43 compares the year-on-year change in the Gross Domestic Product of the USA to the Gross State Product of New York State to the Gross Regional Product of the Kingston MSA for the 10-year period from 2004 to 2013:

Employment is another important indicator of the health of the economy. Figure 04.42 provides the 2014 employment by industry in Ulster County as published by the New York State Department of Labor.

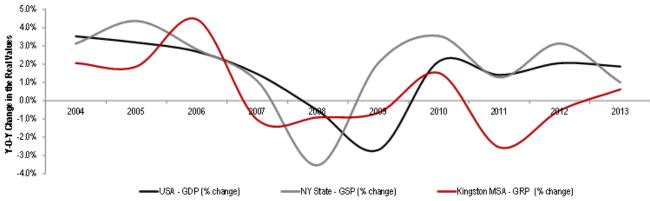


FIGURE 04.43 Year-on-year comparison of US GDP, NY State GSP, and Kingston GRP

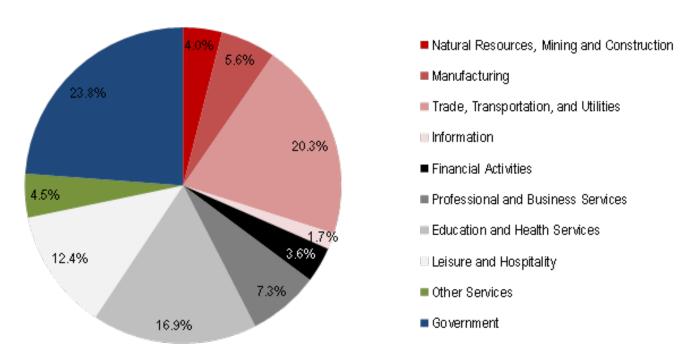


FIGURE 04.42 2014 Employment by Industry in Ulster County.



FIGURE 04.44 A local market in Kingston's TR Gallo Waterfront Park

The economy in Ulster County is predominantly focused on the healthcare sector. The key healthcare employers include UnitedHealth Care, HealthAlliance of the Hudson Valley and Ulster-Greene ARC. Per the Ulster County Chamber of Commerce, other important private sector employers include: Ulster Savings Bank, Ametek Rotron, Alcoa Fastening Systems, Zumtobel-Staff Lighting, and Ceres Technologies, Inc.

Another often overlooked fact is that Ulster County has one of the largest concentrations of higher education institutions in the Lower Hudson Valley. With over 12,000 students and faculty, Ulster County's colleges and universities include The State University of New York (SUNY) at New Paltz and SUNY - Ulster in Kingston and Stone Ridge. As the StartUp New York program, which provides tax incentives for businesses that locate near eligible colleges or universities, grows and becomes better understood, positive community and economic benefits are anticipated to increase enrollment.

In addition to institutions of higher education, another significant employment driver is the Kingston City Schools. There are one high school, two middle schools and seven elementary schools in the district.

The economy of the Economic Study Area continues to struggle with the impacts of structural and cyclical unemployment. Figure 04.45 compares the annual unemployment rate for Ulster County and New York State for the 25-year period from 1990 to 2014 as sourced from the New York State Department of Labor.

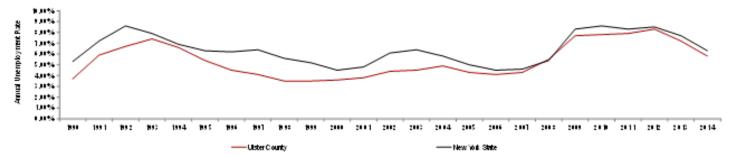


FIGURE 04.45 Annual Unemployment Rate for Ulster County and New York State

In terms of structural unemployment, approximately 20 years after IBM's closure of its operations on a 256-acre campus in northern Ulster County, which served as the major employer for many years, the Economic Study Area continues to adjust to the new technology driven economy.

In terms of cyclical unemployment, the Economic Study Area is slowly recovering from the Great Recession. Entrepreneurs along with the musician/artist community have helped to revitalize the entire study area. There has been an increasing focus on the food industry, given the proximity to the Culinary Institute of America (CIA) and Hudson Valley farms who provide fresh fruits, vegetables, dairy products and meat. In addition to various retail operations (restaurants, butchers, wine shops), the area has been successful at attracting food-based industrial operations. Specifically, a company called Farm to Table Co-packers is a "full service contract packaging facility that produces everything from frozen vegetables and soups to jarred pickles and sauces." The company occupies over 28,000 SF within TechCity, at the former IBM campus.

In order to reverse the negative impacts on consumer spending and consumer confidence as driven by these structural and cyclical economic conditions, various State and Municipal agencies will need to continue working to re-train workers, educate the next generation, and craft incentive packages to draw new companies to the region. Given the diverse 100G fiber optic network that runs along the I-87 corridor between New York City and Albany, it is also important for the Economic Study Area to capitalize on its proximity to this resource to drive the growth of the technology sector.

KEY TAKEAWAYS:

- Only 14% of the City of Kingston's households have an income above \$100,000 as compared to 25% for the County of Ulster
- The median income for a household in the City of Kingston was \$44,646, while the median income for a household in the County of Ulster was \$58,934

REAL ESTATE TRENDS

In order to understand the condition of the existing real estate market and the plans for future development to inform the planning process, the team studied the key real estate trends for the Residential, Retail, Office, and Hospitality markets. The following sections provide details on the key trends for each of the aforementioned asset classes in the catchment area, which we have defined as being any property with a 10 - 15 minute drive of the BOA Plan area. The catchment area is inclusive of the following municipalities within Ulster County, as shown in Figure 04.46:

- City of Kingston, which is comprised of three major sub-markets, the Uptown Stockade Area, the Midtown Area, and the Downtown Waterfront Area;
- Town of Kingston;
- · Town of Ulster, and
- Esopus.

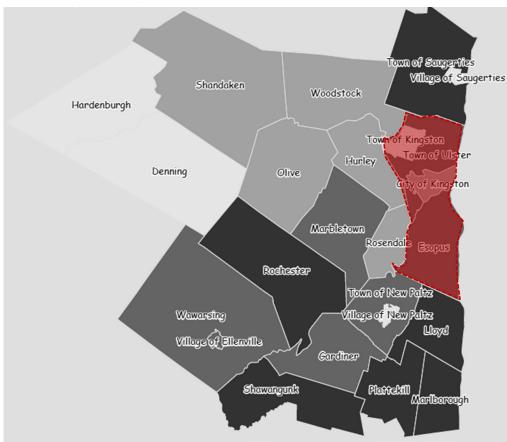


FIGURE 04.46 Ulster County

HOUSING TRENDS

SUPPLY ANALYSIS

The following table provides the total number of housing units and the total number of occupied housing units for each municipality within the catchment area for 2000 and 2010.

As noted in Figure 04.47, the average occupancy was 92.6% in 2000 and 91.1% in 2010. In general, market-wide occupancy over 88% tends to indicate a scenario whereby there is limited fluidity in the market.

Over this time period, the supply of housing units across various price points was constrained in the catchment area and led to rising home prices and an increased rental market. Many households chose to rent given the high cost of home ownership. Per the "2010 Census" Ulster County had 48,189 or 26.4% of the population living in rental housing. Although around a quarter of the households choose to rent, even renting is increasingly not affordable. According to the American Community Survey 2012 ACS, 53.6% of Ulster County renters pay more than 30% of their incomes toward housing costs and 28.3% pay more than half their income toward housing costs. The City of Kingston has the most rental units in the County (5,897 units or 21% of the total rental units in the County).

The Ulster County Planning Department conducts the Non-Subsidized Housing Survey every year. Each year, the Ulster County Planning Department sends the survey to approximately 130 owners/managers with around a 60% participation rate. Figure 04.48 provides the average monthly rents for non-subsidized housing in Ulster County in 2011 and 2014 and the Compound Annual Growth Rate (CAGR) over the same period.

UNIT TYPE	2011 SURVEY AVERAGE Rent (Per Month)	2014 SURVEY AVERAGE RENT (PER MONTH)	COMPOUND ANNUAL GROWTH RATE
Studio	\$564	\$677	6.28%
1-BR	\$796	\$887	3.67%
2-BR	\$959	\$1,023	2.18%
3-BR	\$1,147	\$1,153	0.17%

FIGURE 04.48 Average monthly rents for non-subsidized housing in Ulster County.

		2000		2010			
	Total Housing Units	Occupied Housing Units	Market-wide Occupancy	Total Housing Units	Occupied Housing Units	Market-wide Occupancy	
City of Kingston	10,637	9,871	92.8%	11,147	10,217	91.7%	
Town of Kingston	398	356	89.4%	432	380	88.0%	
Town of Ulster	5,239	4,850	92.6%	5,368	4,961	92.4%	
Esopus	3,724	3,439	92.3%	3,969	3,492	88.0%	
Total	19,998	18,516	92.6%	20,916	19,050	91.1%	

FIGURE 04.47 Housing Units Within the Catchment Area

In addition to the market-wide supply indicators, we also examined the subject project's existing and future competitive set, which, given the attributes of the study area and the key sites, we determined to be multi-family projects with water views. Figure 04.49 and Figure 04.50 provide the location of a competitive set of multi-family residential properties.

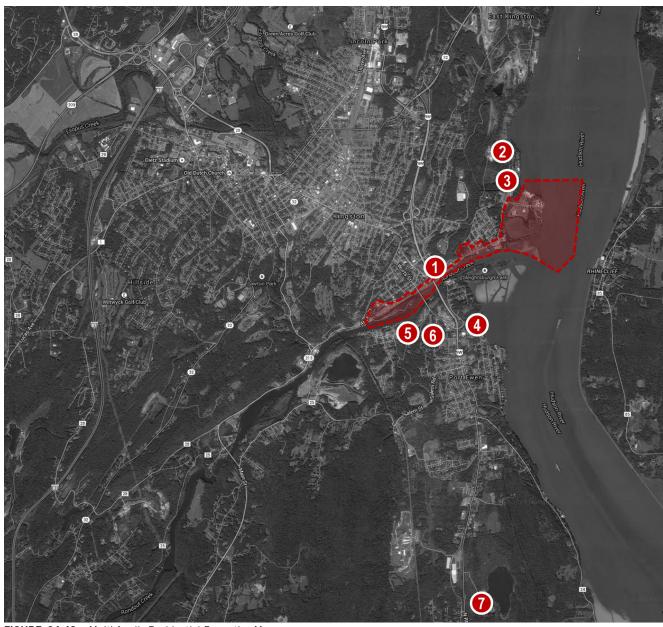


FIGURE 04.49 Multi-family Residential Properties Map

MAP #	NAME OF PROPERTY	LOCATION	DEVELOPER(S)	UNITS (#)	ТҮРЕ	STATUS / YEAR OF Completion
1	Hudson Valley Landing	City of Kingston	-	34	Apt	Completed, 1990
2	Hudson Landing	City of Kingston	AVR	1,682	Condo	Under Construction, 2017-2033
3	Sailor's Cove	City of Kingston	771 Polaris Ltd	383	Condo	Under Planning, TBD
4	Riverview on the Hudson	Port Ewen	-	80	Condo	Completed, 1988
5	Rondout Harbor	Port Ewen	-	78	Condo	Completed, 1986
6	The Hills	Port Ewen	-	42	Condo	Completed, 1987
7	Lakeshore Villas	Port Ewen	Morgan Management	152	Apt	Completed, 1970s
Total				2,451		

FIGURE 04.50 Multi-family residential properties chart

NAME OF PROPERTY	AMENITIES	VIEWS	UNIT TYPES		
			Bedrooms / Bathrooms	SF	Monthly Rent / Asking Price
Hudson Valley Landing	N/A	Rondout Creek	4 Bed / 2 Bath	1,800	TBD
Hudson Landing	78,500 SF of retail 350 acres of the 525 acre site is dedicated to open space, including hiking and bike trails and paths	Hudson	TBD	TBD	TBD
Sailor's Cove	Clubhouse, Swimming Pool, Tennis Courts	Hudson	TBD	TBD	TBD
Riverview on the Hudson	the Clubhouse, Swimming Pool, Tennis Courts	Hudson	1 Bed / 1 Bath	1,307	TBD
			TBD	TBD	TBD
			TBD	TBD	TBD
Davida di Jankan	Olubbanca Onimaria Deal	Daniel and Oncolo	1 Bed / 1.5 Bath	1,372 – 1,972	TBD
Rondoul Harbor	Clubnouse Swimming Pool	Rondout Creek	3 Bed / 2.5 Bath	TBD	\$1,250
The Hills	N/A	Rondout Creek	TBD	TBD	TBD
	Fitness Center, Clubhouse, Tennis & basketball courts and 2 Swimming Pools		1 Bed / 1 Bath	737 - 910	\$945 - \$1090
Lakeshore Villas		Esopus Lake	2 Bed / 2 Bath	1,012 - 1,077	\$1,160 - \$1,325
			3 Bed / 2 Bath	1,160	\$1,375 - \$1,515
	Hudson Valley Landing Hudson Landing Sailor's Cove Riverview on the Hudson Rondout Harbor The Hills	Hudson Valley Landing 78,500 SF of retail 350 acres of the 525 acre site is dedicated to open space, including hiking and bike trails and paths Sailor's Cove Clubhouse, Swimming Pool, Tennis Courts Riverview on the Hudson Clubhouse, Swimming Pool, Tennis Courts Clubhouse, Swimming Pool, Tennis Courts Rondout Harbor Clubhouse Swimming Pool The Hills N/A Fitness Center, Clubhouse, Tennis & basketball	Hudson Valley Landing N/A Rondout Creek Hudson Landing 78,500 SF of retail 350 acres of the 525 acre site is dedicated to open space, including hiking and bike trails and paths Sailor's Cove Clubhouse, Swimming Pool, Tennis Courts Hudson Riverview on the Hudson Clubhouse, Swimming Pool, Tennis Courts Hudson Rondout Harbor Clubhouse Swimming Pool Rondout Creek The Hills N/A Rondout Creek Fitness Center, Clubhouse, Tennis & basketball Faguis Lake	Hudson Valley Landing N/A Rondout Creek 4 Bed / 2 Bath Hudson Landing 78,500 SF of retail 350 acres of the 525 acre site is dedicated to open space, including hiking and bike trails and paths Sailor's Cove Clubhouse, Swimming Pool, Tennis Courts Hudson TBD Riverview on the Hudson TBD Clubhouse, Swimming Pool, Tennis Courts Hudson TBD TBD TBD TBD TBD TBD TBD TBD	Hudson Valley Landing N/A Rondout Creek 4 Bedrooms / Bathrooms 5F Hudson Landing Aluding Aluding Aluding Aluding Aluding Aluding Space, including hiking and bike trails and paths Hudson TBD TBD Sailor's Cove Clubhouse, Swimming Pool, Tennis Courts Hudson TBD TBD Riverview on the Hudson TBD TBD TBD Hudson TBD TBD TBD TBD TBD TBD TBD Rondout Creek TBD TBD TBD The Hills N/A Rondout Creek TBD TBD Lakeshore Villas Fitness Center, Clubhouse, Tennis & basketball courts and 2 Swimming Pools Esopus Lake 2 Bed / 2 Bath 1,012 - 1,077

FIGURE 04.51 Multi-family Residential Properties Chart

SUPPLY AND DEMAND FORECASTS

Figure 04.52 provides the supply and demand forecasts for the catchment area.

Our analysis indicates the catchment area may be able to absorb an additional 750 - 900 units (30 - 40 additional units per annum) from 2015 through 2033.

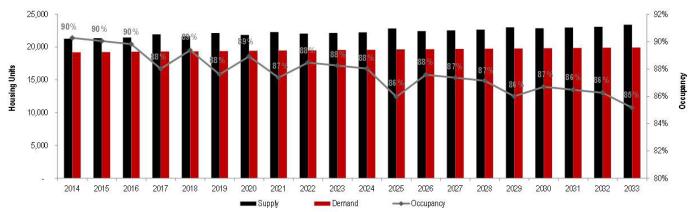


FIGURE 04.52 Supply and Demand Forecasts for the Catchment Area

RECOMMENDATIONS FOR KINGSTON WATERFRONT

Based upon our market research and the "fair share pull" of the subject project given its attributes, Kingston Waterfront may be able to support 75 – 150 units by 2033.

Developing and successfully managing a multi-family residential project at Kingston Waterfront requires:

- Innovative economic incentive packages for the development community.
- · Given the issues of affordability within the City of Kingston, from a market demand perspective, there is significant demand for multi-family development for full-time residency within the study area. It is likely to attract a wide range of end users – from young students to professionals/artisans/artists to retired senior citizens. A targeted approach to the spatial needs and recreational desires a diverse set of end users during the detailed design process will be important.
- Those seeking vacation/second homes is another sub-set of potential project demand. This segment, while difficult to calculate, can anecdotally be further bifurcated into those who seek single family homes for space or gardens or the ability to customize versus those who might prefer to live within a well-managed, waterfront community for the convenience and proximity to shopping, dining, and water activities. Thus, a strong focus on servicing requirements and a community management system is critical. Sustainable and successful residential communities typically have strong covenants regarding service charges.
- Speed to market and keeping a pulse on the movement of the absorption of residential product. According to market sentiment, and the current and anticipated absorption levels, the timing of rental units is most likely to be effective from now through mid-2019, after which demand may soften due to the increase in supply from the anticipated handover of units in Hudson Landing: Phase 1b and Sailor's Cove.
- Hudson Valley Comparable Developments: 1 East Main (Beacon, NY): 19 loft-style condominiums and 5,744 SF of ground floor retail.

Finally, based upon our analysis, the initial properties developed at Kingston Waterfront are likely to garner net rental rates of \$1,000 per month for a onebedroom up to \$1,750 per month for a three-bedroom, depending upon size and quality of construction. We recommend units slightly larger than the competitive set, but as noted, it will be important to rationalize the efficiency of the space during the detailed design process.

RETAIL TRENDS

This section provides an overview of the retail market in Kingston, which is comprised of two major sub-markets, the Uptown Stockade Area and the Downtown Waterfront Area.

SUPPLY COMMENTARY

Both sub-markets within the City of Kingston are characterized by ground floor, street front retail. The majority of the businesses are locally owned. Various business organizations, including Kingston Waterfront Business Association and Kingston Uptown Business Association, support the local retailers by programming events, such as farmers' markets, street music festivals, holiday activities, and art fairs.

The project team has surveyed the key retailers in both submarkets, and given that the majority of the retailers are Food and Beverage ("F&B"), the team further segmented the F&B market.

DOWNTOWN WATERFRONT RETAILER	USE
Armadillo Bar & Grill	F&B – Restaurant
Bella Mia's	F&B – Ice Cream Parlor
Dermot Mahoney's Irish Pub	F&B – Bar
Dolce	F&B – Ice Cream Parlor
Golden Ginza Sushi Bar	F&B – Restaurant
Grounded	F&B – Restaurant
Karmabee	Apparel –Infant & Children
Kingston Wine Co.	Specialty F&B – Wine Shop
Mariner's Harbor	F&B – Restaurant
Milne's At Home Antiques	Housewares
Mole Mole	F&B – Restaurant
Next Boutique	Apparel
Ole Savannah	F&B – Restaurant
Olivieri's Arts, Crafts, and Coffee	Homewares & F&B - Cafe
Pirate Upholstery	Homewares
Rachel's Deli	F&B – Quick Service
P&T Surplus	Hardware
Rondout Music Lounge & Bistro	F&B – Restaurant
Savonas	F&B – Restaurant
Ship to Shore	F&B – Restaurant
Skillypot Antiques Co.	Homewares
The New Leaf	Specialty F&B – Tea Shop
Trends Hair Design	Salon

UPTOWN STOCKADE RETAILER	USE
Boitson's	F&B – Bar
Colonial Health Food Center	Specialty F&B – Organic
Ecce Terra	F&B - Restaurant
Elephant	F&B – Wine Bar
Fleisher's Grass-Fed & Organic Meats	Specialty F&B – Butcher
Hoffman House Restaurant	F&B - Restaurant
Jane's Ice Cream	F&B – Ice Cream Parlor
Keegan Ales	F&B - Bar
Outdated	F&B - Cafe
Santa Fe	F&B - Restaurant
Sissy's Cafe	F&B - Cafe
Snapper McGee's	F&B – Bar
Stella's Restaurant & Artie's Bar	F&B - Restaurant
Yum Yum Noodle Bar	F&B - Restaurant

FIGURE 04.53 Selection of key Kingston retailers in primary submarkets

KEY TERMS

- Asking rents (NNN) range from \$12.50-17.50 per SF
- Retail units range from 500 to 1,000 SF for specialty uses / apparel shops and 1,500 to 7,500 SF for restaurants.

Nationally and internationally branded retailers, whether Big Box, Apparel, Homewares, or F&B companies (including supermarkets), are concentrated just north of the city in the Town of Ulster at the junction of Highway 9W and Highway 209/199. However, these malls are becoming obsolete as shoppers turn to online retailing and as the nationally and internationally branded retailers are closing stores in secondary and tertiary malls. For example, Hudson Valley Mall opened in1981, when the economic impact of IBM was reaching its height. Today, the 810,000 SF shopping center has over 40,000 SF sitting vacant. While the shopping center has tenants such as Sears, Macy's, Target, Best Buy, a food court and a 12-screen Regal Cinemas, overall market trends may require an asset repositioning.

DEMAND COMMENTARY

Demand for retail space is driven by two segments of the population:

- Residents
- Visitors

For the first segment, Residents, it is important to examine household income data to understand the affordability levels of the population and disposable income trends. Unfortunately, the City of Kingston lags behind other areas in Ulster County regarding household incomes – and over 50% of its Residents spend are 'housing cost burdened', meaning +30% of household income is spent on housing. This scenario results in lower spending power and disposable income. Per data from the "2012 ACS American Community Survey," Figure 04.54 displays the percentage of households within each household income bracket for the City of Kingston versus Ulster County.

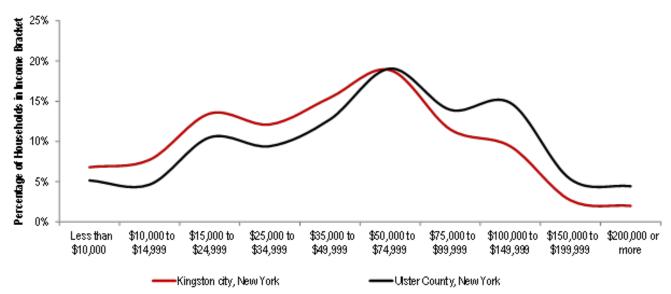


FIGURE 04.54 Percentage of Households within Each Household Income Bracket

RECOMMENDATIONS FOR KINGSTON WATERFRONT

Based upon the feedback from current retailers along the Kingston Waterfront, community stakeholder feedback, and the quantitative analysis of consumer spending power and patterns in the catchment area, the project team recommends:

 An 8,000 – 10,000 SF retail market development, similar to the San Francisco Ferry Building, Chelsea Market or Gotham Market, characterized by architecture that reflects the mid-Hudson vernacular and ensures relatively standardized retail unit sizes with the ability and flexibility to easily expand units. This concept would cater to entrepreneurs seeking smaller units, who would be able to grow their business and expand their footprint over time. The merchandizing mix envisions a significant portion of the units

KEY TAKEAWAYS:

Within the framework of a challenging, albeit slowly growing economy household incomes in the City of Kingston are not anticipated to significantly increase. As this segment is the larger of the two demand segments for retail in the City of Kingston, it is imperative that the retail offer matches the affordability of the population.

In terms of demand from retailers for "brick-and-mortar" space and feedback from the community regarding the proposed merchandising mix, it might be difficult to attract additional restaurant concepts to the Rondout given that over half of the existing shops are F&B. However, there are multiple successful "Specialty F&B" concepts (i.e. meaning the companies sell prepared foods, not meals) in Kingston:

- Anarchy in a Jar, which makes over 15 types of small-batch preserves;
- Blackcreek Mercantile & Trading Co., which sells locally made cooking tools, dishes, and kitchen furniture;
- Fleisher's, which butchers and sells humanely, pasture raised meats with two New York locations (Brooklyn and Kingston);
- Kingston Wine Co., which sells and promotes wines from responsibly farmed vineyards and hosts tastings and dinners;
- Treeline Cheese, which makes multiple types of dairy-free, gluten-free cheeses.

There are multiple companies in Kingston, Ulster County, and the greater Hudson Valley focusing on this Specialty F&B segment, and these companies may be seeking to expand existing facilities or to create multiple outposts. Additionally, as young professionals have moved from New York City, particularly Brooklyn, into the mid-Hudson Valley many have relocated or expanded their existing culinary businesses – or started new concepts. Two such examples are Kingston Wine Co. and Fleisher's Grass-Fed & Organic Meats. Retail demand, in the short to medium term, is likely to be from these Specialty F&B companies, as they seek to cluster in the Rondout.

would be leased to Food & Beverage retailers, whether offering quick service or selling pre-packaged food. There should be an opportunity for communal seating overlooking the water, as sales per square foot for the F&B retailers tends to increase when there is an opportunity for outdoor, particularly waterfront, space.

- A smaller format grocery store. Several grocery stores are testing 15,000 – 20,000 SF "urban footprints" rather than the typical 30,000 – 60,000 SF grocery stores. These new concepts include expanded hot and cold prepared food bars, along with the typical offering of produce, dairy, meat/ fish, and dry goods.
- Hudson Valley Comparable
 Developments: Basilica Hudson
 (Hudson, NY): a 17,000 SF multipurpose space, hosting art/design events, flea markets, food festivals, concerts, and weddings.

OFFICE TRENDS

This section provides an overview of the office market in Kingston, which is comprised of two major sub-markets, the Uptown Stockade Area and the Downtown Waterfront Area.

KEY TERMS:

- Asking rents (NNN) range from \$10-15 per SF
- Office space tends to range from 2,500 to 20,000 SF

There is unlikely to be significant demand from "traditional" users of office space within the study area. Empire State Development has identified various sectors for growth potential in the Mid-Hudson Valley, including energy (high-technology, biotechnology and green technology), film television, financial services, advanced manufacturing, agribusiness, tourism and international opportunities. Not all of these sectors are applicable to the subject site. There are strong opportunities for the hightechnology and agribusiness on the subject site:

- 1 Given the proximity of the fiber optic network, there could be an opportunity to attract data centers or other companies that rely on high-speed connections.
- 2 As noted, there is an opportunity to capitalize on fostering agribusiness and becoming the conduit between famers and the New York City market. The abundance of fresh food and the proximity to innovation and young entrepreneurs at the Culinary Institute of America generates an opportunity for packaging companies, like Farm to Table Copackers, or industrial kitchens for co-production.

HOSPITALITY TRENDS

SUPPLY COMMENTARY

The hospitality industry in Kingston is segmented into the branded, hotel/motel market and the inn/bed & breakfast market. There is also a third, albeit informal segment, "Consumer-to-Consumer" market, which has risen over the last several years with the growth of companies such as AirBnB and VBRO. This section focuses on the branded, hotel/motel market and the inn/bed & breakfast market:

HOTEL/MOTEL MARKET

All of the hotel/motel supply in Kingston is clustered around highway junctions, whether to the west at the junction of the NYS Thruway and Highway 28 or to the north at the junction of Highway 199 and 9W. There are six hotel/motels in Kingston, totaling 679 keys. Over the next 2-3 years, the northern cluster at the junctions of Highway 199 and 9W will add two more properties (anticipated to add +/- 193 keys).



FIGURE 04.55 Branded Hotels/Motels Map

MAP#	NAME OF PROPERTY	LOCATION	KEYS (#)	TYPE	AMENITIES	STATUS DELIVERY
1	Hampton Inn	Town of Ulster	90	Hotel	Fitness Center	Completed
2	Courtyard by Marriott	Town of Ulster	89	Hotel	Fitness Center	Completed
3	Residence Inn	Town of Ulster	92	Hotel	TBD	Under Construction 2016
4	Holiday Inn Express	Lake Katrine	101	Hotel	Water park	Under Construction 2017
5	Super 8	City of Kingston	84	Motel	N/A	Completed
6	Best Western (formerly Garden Plaza Hotel and Holiday Inn)	City of Kingston	212	Hotel	Ballroom	Under Renovation
7	Quality Inn	City of Kingston	144	Motel	Fitness Center, Game Room, Meeting Space	Completed
8	Rodeaway Inn	City of Kingston	60	Motel	Fitness Room, Outdoor Pool	Completed
Existing			679			
Future			+/- 193			
Total			872			

FIGURE 04.56 Branded Hotels/Motels Key Information

INN/BED & BREAKFAST MARKET

The inn/bed & breakfast supply in Kingston is clustered on North Front Street in the Stockade District or down in the Rondout. These two areas of town have lent themselves well to the rehabilitation of historic space for the hospitality market. Indeed, all of the inn/bed & breakfast supply is repurposed space on the upper floors of businesses (operated by the proprietor of the ground floor business), rehabilitated Victorian homes, or rehabilitated special purpose buildings (ie. firehouses). In total, there are eight inn/bed & breakfast properties in Kingston, totaling 19 keys.

Map #	Name of Property	Street	Keys (#)	Amenities	Status Delivery
Rondou	ut District				
1	Rondout Inn	Broadway	2	Kitchen, WiFi	Completed
2	The Gallery Inn	Broadway	1	Kitchen, WiFi	Completed
3	Firehouse Inn	Abeel	1	Suite	Completed
4	Maison Bleu	W. Chestnut	5	Renovated Victorian Home w/ Pool	Completed
Stockad	de District				
5	Suite Dreams	N. Front	2	Rooftop Balcony	Completed
6	The Inn at Boitson's		2	Full Kitchen	Completed
7	Schwartz's Inn	N. Front	2		Completed
8	A Kingston B&B at Thomas L. Southwick House	Fair	4	Marble Bathrooms; Country Breakfast	Completed
Total			19		

FIGURE 04.58 Inn / Bed and Breakfast Properties Key Information



FIGURE 04.57 Inn / Bed and Breakfast Properties Map

RECOMMENDATIONS FOR KINGSTON WATERFRONT

Based upon discussions with General Managers at hotels/motels in Kingston, the lack of hotel supply at the Rondout, community stakeholder feedback, and our understanding of hotels as "place-makers and catalysts," the project team recommends:

UPSCALE HOTEL

A 125-150 key upscale hotel catering to the Meetings, Incentives, Conferences, Events (MICE) business. This tourism segment is characterized by large groups, often planned in advance, for a specific purpose. For example, the MICE market could cater to a wedding ("Event") or to a corporate retreat ("Incentive"). The proposed hotel property should be designed such that majority of its rooms and suites have views overlooking the water to drive higher Average Daily Rates. The property's design should convey the vernacular of the Hudson Valley, as tourists, travelling for whatever purpose, are increasingly seeking authentic, and hyper -local experiences. It should include amenities such as a restaurant, spa, ballroom, meeting space, and fitness center. The hotel should offer activities for guests including sunset sails along the Hudson River, hot air balloon rides, hikes/horseback rides in the Catskills, and other unique experiences. Similarly styled hotels include The Sanctuary (South Carolina) and Keswick Hall (Virginia), both owned and operated by the Virginia Investment Trust, and Woodstock Inn (Vermont), owned and operated by The Rockefeller Foundation.

BOUTIQUE HOTEL

In order to draw tourists to the site, a boutique art hotel with 15-30 keys should be incorporated into the master plan. A similarly styled hotel is the ACE Hotel. The Hudson Valley has several boutique hotel properties, the majority of which are upscale; however, this unique art concept would serve to capitalize on the artists' community in Kingston. This hotel would serve a distinctly different segment than the proposed upscale hotel, but would also serve as a strong "place-maker."

Hudson Valley Comparable Developments:

- Roundhouse at Beacon Falls (Beacon, NY): 14 keys
- Diamond Mills (Saugerties, NY): 30 keys

TRANSPORTATION AND ACCESS

As with so many cities, the key to Kingston founding, and later, its growth, development and current conditions can be linked to its transportation and access. The original growth and development of Kingston was based on its location on the Hudson River when the Hudson was used as a major pathway between New York City and Albany. This, of course, also contributed to the state of the Rondout today; which is an underutilized area due to the downturn in use by industry.

However, access and transportation can once again be part of the revitalization of Kingston. Being so close to Poughkeepsie, the end of the Metro North commuter rail line, allows the City of Kingston to be a convenient; and less expense; location for many New Yorkers to move to while still having easy access to the City.

In addition to the Metro North access the City of Kingston has excellent access via surface transportation lines and of course the Hudson River. Kingston the Rondout area's ties to transportation will allow the planned revitalization of the BOA Area to be realized by allowing residents, both new old, visitors, both via the train or via the Hudson, to enjoy the planned growth and development of the Waterfront.

This sections further details the transportation and access of the City of Kingston.

REGIONAL CONNECTIVITY

VEHICLE ACCESS

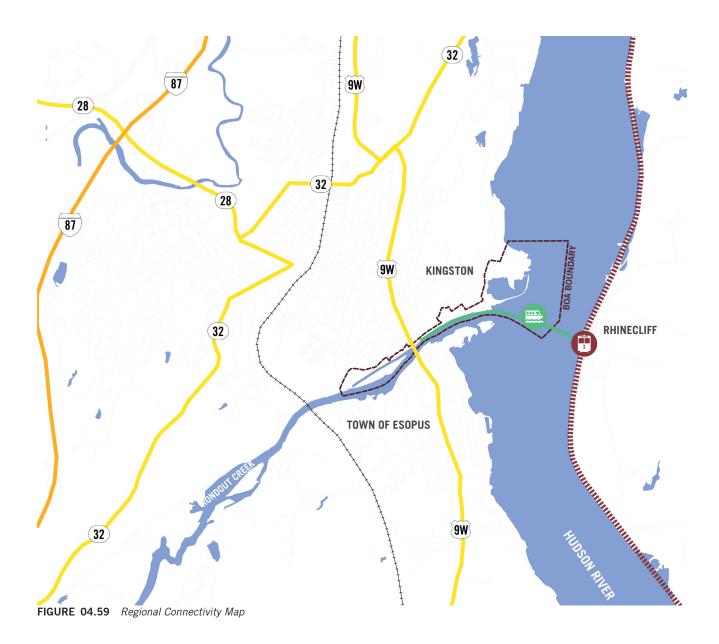
The nearest bridge connecting Kingston to the east bank of the Hudson River is just over four miles to the north, on New York State Route 199. The New York State Thruway (Interstate 87) passes through the western part of Kingston, while U.S. Highway 9W runs north-south through the city.

AIRPORTS

Kingston-Ulster airport, located at the western base of the Kingston-Rhinecliff Bridge, serves the area. The major airports closest to Kingston are Stewart International Airport in Newburgh, 39 miles to the south, and Albany International Airport, about 65 miles north. The three major airports serving the City of New York metropolitan area, John F. Kennedy International Airport, Newark Liberty International Airport, and La Guardia Airport, are approximately 93, 86, and 80 miles to the south, respectively.

RAIL

While passenger rail service to and from Kingston was discontinued decades ago, there is a Rhinecliff-Kingston Amtrak station 11 miles away, and a Poughkeepsie Amtrak/Metro-North station 17 miles away. Freight rail service through Kingston is operated by CSX Transportation on the River Line Subdivision, and there is a small rail yard of about 7 tracks in the city. Commuter bus service between Kingston and New York City is available daily.



FERRIES

Water taxi service between Kingston and Rhinecliff operates on weekends from May through October.

KINGSTON GREENLINE

The Kingston Greenline comprises four separate sections across the City of Kingston. The Wallkill Valley section establishes a route that will eventually link Midtown to Rosendale, New Paltz, Gardiner, Highland and Poughkeepsie.

The Uptown section is the gateway to the Rondout Valley, via the O&W Link Trail, and the Catskill Mountains, via the proposed Catskill Mountain Rail Trail.

VEHICLE NETWORK

Kingston's waterfront area is accessible via an interconnecting network of local streets, state highways and the interstate system. N.Y. Route 9W crosses the Rondout Creek at Kingston. This portion of 9W is part of the proposed Scenic Roads System for the Hudson Valley.

BRIDGES

Three bridges span the Rondout within Kingston's BOA. They include the West Shore railroad trestle, Port Ewen Suspension Bridge, and the Route 9W Bridge.

VEHICLE ACCESS

The Rondout waterfront is easily accessible to motor vehicles via city streets and highways. Abeel Street, closely parallels the waterfront for much of its length. Dock Street, West Strand and East Strand connect with Abeel Street to form a continual route for the entire length of the City's waterfront between Wilbur and Kingston Point. This east-west street system connects with north-south routes which, in turn, connect with other regional transportation routes including New York State Routes 32 and 28 and N.Y. Route 9W. Route 9W also connects with the New York State Thruway, part of the nation's interstate highway system. The waterfront's accessibility via streets and highways is a positive factor in encouraging use by residents and tourists alike.

PARKING

As part of the BOA Step 2 planning process, the City commissioned a parking strategy addressing needs of the adjacent Rondout area and parts of the BOA. The results of the study indicate that there is currently a marginally sufficient supply of parking within the Rondout Study Area.

- Peak occupancy rates during the weekday: 34% 40%
- Peak occupancy rates during the weekend: 56%

The Step 2 report projected that anywhere from 1,656 to 1,956 additional parking spaces may be required to accommodate future development assuming a full build out of the BOA and based on a conventional approach to calculating parking needs.

The Parking Study recommends:

- Movement away from conventional parking solutions to parking management strategies.
- A shared parking approach to the provision and management of future parking as it is developed in the BOA.
- That the City should adopt/develop the following long and short term parking management strategies.

SHORT TERM RECOMMENDATIONS

- 1 2 Years
- Provide Parking Information to Users

- Adopt a Special Event Parking Management Plan
- Create Shared Parking Opportunities
- Provide Bicycle Facilities

LONG TERM RECOMMENDATIONS

5 – 10 Years

- Expand Trolley Services
- Develop Remote Parking Facilities
- Redesign Existing Parking Facilities
- Regulate Parking
- Improve Pedestrian Conditions
- Address Spillover Parking



FIGURE 04.60 Vehicle Map

TRANSIT, BICYCLE, AND PEDESTRIAN NETWORK

BUS LINES

Bus service within Kingston is provided by the city-owned CitiBus system, while service to other Ulster County locations is offered by Ulster County Area Transit (UCAT). Boasting a thriving arts community, the City of Kingston offers the service of an "art bus," usually a CitiBus tourist trolley, which, on the first Saturday of every month, takes riders on a guided tour of the city's art galleries, all of which have openings on such days.



FIGURE 04.62 Kingston Trolley

TROLLEY

The City is planning for expanded trolley services to serve the entire waterfront, and ultimately, provide regular weekend, holiday and event service throughout the year, operating with 15 or 20 minute headways between trolleys to make the service an attractive circulation option for visitors. The plan also calls for trolley services to connect the waterfront with mid-town Kingston via Broadway and Hasbrouck Park. Because 52 percent of commuters travel less than 15 minutes to work, it may be appropriate to offer weekday trolley services if demand warrants. Recent improvements along East Strand provide an excellent example of improved pedestrian conditions. The recent development of a multi-use trail, improved sidewalk conditions, and the

narrowing of the roadway (through diagonal parking) has efficiently increased parking capacity and provided for a more friendly pedestrian experience – encouraging overall pedestrian usage.

KINGSTON GREENLINE

The Greenline will be a combination of shared use paths, sidewalks, and on-road bicycle accommodations and will be made of four sections: the Wallkill Valley section, the Rondout Section, the Uptown Section, and the Midtown Hub.

In the Rondout, the Kingston Greenline will connect Midtown to the Rondout Creek, the lower Broadway business district and the Hudson River.

Starting as a multi-use trail, the Greenline will link neighborhoods across busy US Route 9W with parks and schools. One segment along East Strant has been constructed. At East Strand, the trail will give way to on-street connections that link Broadway and the existing Rondout Promenade to North Street and Delaware

Avenue. Additionally, the segment that extends to Kingston Point Park has been constructed as a pedestrian trail. Farther up North Street, the trail will connect with the proposed Hudson Landing Promenade.

In Uptown Kingston, the Greenline provides a protected pedestrian and bicycle link from midtown to the Kingston Plaza and the Stockade business district.

Midtown Kingston, along the center of the region's railroad network, is a natural hub for the growing network of trails in Ulster County.

A network of shared and dedicated bicycle and pedestrian pathways is envisioned as part of the City's overall complete streets initiative.



FIGURE 04.63 Transit / Bike / Ped Map

WATER ACCESS

Kingston was once a busy transportation hub, with the Hudson River, Rondout Creek, and the Delaware and Hudson Canal all serving as significant commercial waterways. The Rondout was, in fact, the terminus of the D&H Canal, with the canal transporting coal over the Shawangunk Mountains to the Hudson. From here, the canal barges were unloaded and the coal transferred to river boats that took it down to New York City.

This burgeoning water traffic prompted the construction of a lighthouse at the mouth of the Rondout Creek, a necessity to warn captains of the dangers of the shore and the shallow tidal flats surrounding the mouth of the Rondout. The first two lighthouses were located on the south side of the Rondout Creek. The first of the two, a wooden structure, was destroyed by fire. The second lighthouse, Rondout I, a stone structure, was abandoned in 1915 and demolished in 1953. The foundation is still visible.

The current Rondout II Lighthouse is located at the eastern end of the entrance dike, where the dike begins to extend northward. It was built in 1915. Its predecessors, built in 1837 and 1867, were located on the south side of the southern dike of the channel entrance.

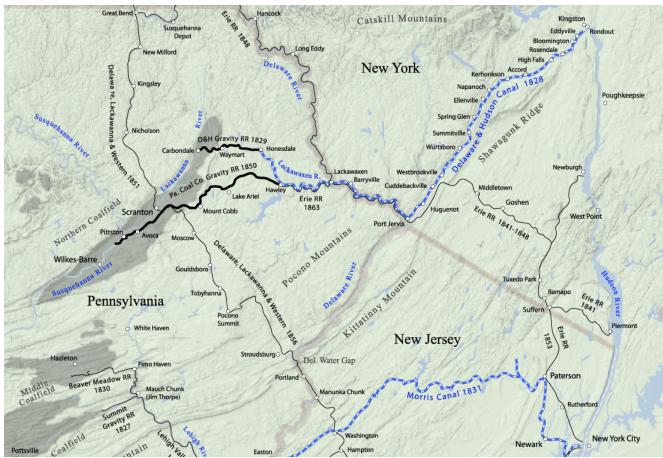


FIGURE 04.64 The Delaware and Hudson Canal

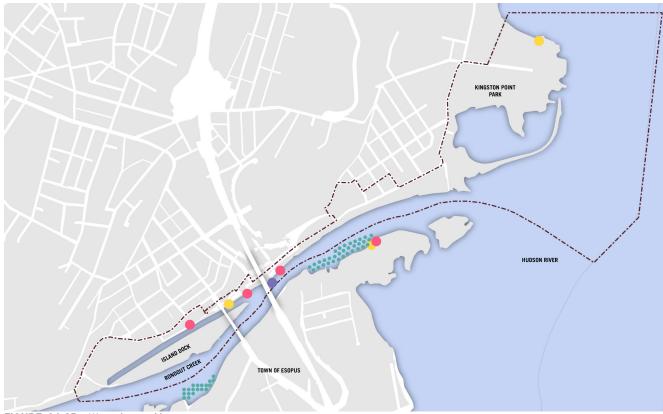


FIGURE 04.65 Water Access Map

MOORING FIELD PROPOSED LOCATIONS

The entire extent of Rondout creek within Kingston City limits was studied for proper placement of mooring fields. The proposed locations for this harbor infrastructure have been identified as openings in the main navigational waters on the right bank of the creek across Island Dock, and across the cities Cornell building. These locations serve as optimal areas for vessel anchoring due to their inland outline and ground transportation accessibility. These benefits prove essential in significant weather events where water levels become highly volatile towards the center of the channel. The locations depths range 10-13 feet, which suffices for private and recreational smaller to moderate sized vessels. In addition, the amount of vacant land in proximity to these locations could be repurposed to serve these docking facilities. The mooring fields would be directly visible from the city of Kingston busy waterfront and be aesthetically pleasing due to its encouragement of marine activity.

COMMERCIAL WATER TRANSPORT

In addition to local commercial transportation activity, the Kingston harbor hosts larger commercial vessels that have significant influence on the local economy. American and Blount, two cruise lines, dock within the harbor on a regular basis, with ships ranging from 184 ft to 215 ft. Annual commercial cruise visits have been recorded on an average of 20-25 separate dockings. While each vessel provided the town with approximately 100 individuals, about 1500 people pass through the city of Kingston annually.





DEEPWATER PORTS

Kingston's waterfront offers one of the best harbors along the length of the Hudson River with potential for more than 2,000 feet of deepwater dockage space from the Cornell Building along the former Steelhouse Restaurant (now Ole Savannah) and past the Hudson River Maritime Museum to the new 9W Bridge. Regular visitors to this area are Tall Ships such as Clearwater, Half Moon, Ernestina (official vessel of the Commonwealth of Massachusetts) and many other historic vessels. The waterfront is also home to Fleet Obsolete's collection of historic WWII PT Boats and historic Tugboats. There is unlimited historic maritime development potential such as Mystic, CT.

Source: Rondout Harbor Management Plan, 2014

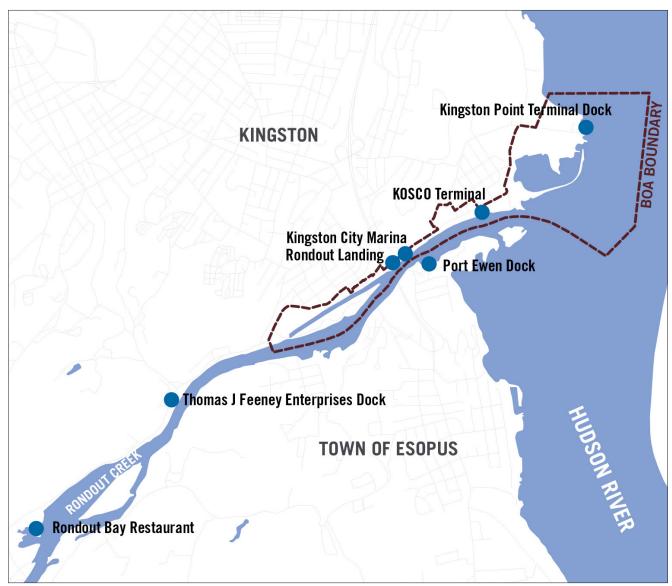


FIGURE 04.66 Deepwater Ports

Name	Dist.	Depth	Amenities
Kingston City Marina	150'	8'-12'	Electricity, water, pump-out services, showers, restrooms, marine repair facility
Rondout Bay Restaurant			150-slips, no-wake zone, dockage, indoor and outdoor dining, swimming pool, land and water winter storage for winter (includes hauling, towing, washing, blocking, and spring launch), seasonal trailer storage, crane, forklift, pumping, haul, launch, block, load/unload services, and pressure-washing
Rondout Landing Marine Terminal SIte D Dock	120'	9'	Dock is used for boarding river-excursion passengers
KOSCO Terminal			Connected via three pipelines to five steel storage tanks at the rear of the facility, with a total capacity of nearly 88.4 thousand barrels. Owned by Getty Realty. Site is available for redevelopment.
Port Ewen Dock	150'	9'	
Kingston Point Terminal Dock	250'	13'	Three pipelines connect this wharf to 13 steel storage tanks with a total capacity of over 89.6 thousand barrels. Owned by HeritagEnergy Corporation and operated by Kingston Point Terminal Corporation to receive petroleum products by barge.
Thomas J Feeney Enterprises dock	290'	7'-20'	Mooring for floating dry docks and vessels for repair, 1200-ton floating dry dock, 2400-ton dry dock. 20-foot dredged basin allows operation of floating dry docks off the bulkhead. Privately owned and operated by Thomas J Feeney Enterprises.

FIGURE 04.68 Table of area deepwater ports



FIGURE 04.67 Kingston City Marina

INFRASTRUCTURE

The following section will go into more detail about the existing infrastructure of the BOA Area. At present, utilities on the Rondout waterfront area are underutilized. Business and industry in this area have declined during the last century, and that trend has dramatically reduced the demand on utilities in this section of the City. Because of this circumstance of the growth and later decline of the area there is appropriate infrastructure to support revitalization of the area; however, it is not that simple and the team has done research into the state of the various infrastructures and will report on those in the following section.

WATER

The Kingston Water Department, established in 1895, is an autonomous and financially independent department within the City of Kingston. It is governed by a Board of Water Commissioners and each is appointed by the Mayor to a five-year term. The daily operation of the department is under the supervision of the Superintendent.

The water system consists of a series of upland reservoirs and transmission mains that supply the City's Edmund T. Cloonan Water Treatment Plant in the Town of Woodstock. This facility, an American Water Works Historic Landmark, was constructed in 1897. It uses direct, in-line pressure filtration with alum coagulation, chlorination and calcium carbonate for pH adjustment. It has a nominal capacity of 8 million gallons per day (MGD) and produces, on average, 4 MGD. Approximately 100 miles of cast iron and ductile iron pipe comprise the distribution system that serves the City of Kingston and IBM facility in the adjacent Town of Ulster.

At present there are about 8,500 service connections and 1,000 fire hydrants in the system. With the exception of two small high-pressure districts, all flow from the City's reservoirs to the consumer's tap by gravity. The City's public water supply services most of the waterfront area. The area, once occupied by the cement plant on the Hudson River, is the only one not serviced by public water. This availability of public water is a positive factor in determining the feasibility and desirability of development projects of all types (industrial, commercial, residential) along the waterfront and within the BOA.

SANITARY SEWER

Most of the City of Kingston is served by municipal sanitary and storm sewers. The sewage treatment plant currently has a capacity of 4.8 MGD and improvements are currently underway to increase this to 6.0 MGD. In addition the City conducts a federally mandated pre-treatment program to monitor specific users for discharge of pollutants into the sanitary system. Most of the Kingston waterfront along the Rondout is serviced by sanitary sewers. The City is continually upgrading the sanitary sewer system and has been concentrating on renewal areas such as the Rondout, West Strand and Ponckhockie neighborhoods. Originally a combined sanitary and storm system was built in Kingston. The City is now in the process of separating these two lines. Currently pollutants are discharged into the Rondout Creek during heavy rainstorms when storm runoff generates flows that exceed the capacity of the sewage treatment plant. Continued separation of these two systems will reduce frequency of this discharge and eventually eliminate it. As part of a program to update its sanitary sewer system and eliminate pollution of the Rondout Creek, the



FIGURE 04.69 Aerial View of Kingston's Waste Water Treatment Plant

City has completed projects to correct situations where direct sewage discharge had occurred at Wilbur Avenue, North Street/East Strand area, Hudson Street, Block Park and at the waste water treatment plant.

Kingston's wastewater treatment plant located in the center of the BOA had an odor problem that has been mitigated through installation of new equipment, filtration and improved processed. The City has invested over \$2.5 million in the upgrades and has a long term contract for sludge control.

SOLID WASTE TREATMENT

There are no active landfills within the City of Kingston's waterfront area. Solid wastes are disposed of outside the BOA and the City's corporate limits.

STORM DRAINAGE

Currently the City has a combined sanitary-storm system. As improvements in the overall system area made, sanitary and storm systems will be separated. The Rondout Creek waterfront is also serviced by a storm drainage system in the same general areas serviced by the sanitary system. Areas not serviced by storm sewers, such as the Wilbur Avenue area and the Hudson River, utilize natural drainage channels and runoff patterns.

Rainfall is expected to become more intense, and periods of heavy rainfall are expected to become more frequent. The Northeast Regional Climate Center (NRCC) reports that severe precipitation events that once occurred with a 1 percent chance in any given year are now likely to occur twice as often.



FIGURE 04.70 Kingston Wastewater
Treatment Plant

MARINE INFRASTRUCTURE ASSESSMENT

The waterfront planning process included a detailed assessment of marine infrastructure for the Rondout Creek and Hudson River. The assessment included an evaluation of the presence and condition of the Rondout Creek bulkheads and the bulkheads along the west bank of the Hudson River adjacent to the Brickyard and the Tilcon properties. The conditions evaluation also addressed the condition of the Kingston Point Causeway, the potential for pedestrian access along the jetty leading to the Kingston Lighthouse and Hudson River water depths. The City of Kingston Waterfront Conditions Assessment is

incorporated by reference and available at Kingston City Hall.

EAST STRAND

The City of Kingston intends to lay the groundwork for redevelopment of the East Strand waterfront through the physical construction of infrastructure, zoning and policy changes, economic development, and tax incentives to potential developers. Implementation of an effective stormwater management system and standardization of the East Strand roadway elevation will enhance the development potential of the East Strand area. The purpose of this study is to understand the causes of the periodic flooding of the roadway and surrounding area and to develop a plan to mitigate it to the extent possible. The specific goals of this study are:



FIGURE 04.71 Kingston Watersheds

- 1 Identify and quantify the contributions to flooding in the East Strand Street waterfront area that riverine, tidal, and stormwater influences have under current conditions.
- 2 Discuss the potential for flooding to worsen under future conditions based upon the influence of SLR and the trending increase in frequency and magnitude of heavy precipitation events.
- 3 Provide potential solutions and recommendations for the future adaptation of the East Strand area to minimize the frequency and severity of flooding along the waterfront.

KNOWN ENVIRONMENTAL CONDITIONS

For this study, the team did not undertake any new environmental testing or evaluations, the scope of the project included using existing environmental condition assessments that have previously been completed. This includes studies completed during the Step 2 BOA process and studies that were funded through other sources in the time since the Step 2 was completed. The following section discusses those previous studies that have been completed in order to create a clearer picture of the known environmental conditions in the BOA Plan area.

KOSCO ASSEMBLAGE

Existing contamination issues for the KOSCO Assemblage site (KOSCO) are identified and discussed in the Step 2 Nomination Study (Map 15 - Strategic Sites and Appendix 4) and further discussed in Section 4.h (Strategic Sites) and Section 5 (Design Framework) of the current BOA Plan. When last used, the KOSCO site was the base for 25 technicians for residential and commercial heating customers and a marine fueling terminal. The bulk petroleum storage tanks have since been removed from the site. The site is surrounded by a chain link fence and includes four one-story structures. The NY State Police, Ulster Country Sheriff's Department and the NY state DEC currently dock their emergency response vessels at this site.

Groundwater monitoring wells were noted throughout the property during the site visit (conducted as part of the 2001 Phase I ESA), as well as stained soils in areas of the former bulk storage tank areas. This site has had a history of responsible operation by onsite managers. Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

THE LANDING

As presented in the Step 2 Nomination Study (Section III.C.2.b.i and Appendix 4), an ESA was performed at the site in 2001. The ESA identified the presence of construction debris and unknown fill material onsite; the site was formerly used as a marina which may have included fuel storage as part of its operations; and there is a potential that contaminated groundwater from the adjacent site (former manufactured gas plant) may have migrated to the Landing site. Based on the 2001 ESA, a 2005 Site Characterization Investigation of the site was performed. The investigation identified Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds SVOCs and elevated metals exceeding New York State Department of Environmental Conservation (NYSDEC) standards were found in soil and groundwater on the western one-third of the property (possibly attributed to the current and historic operations of the western and northern adjoining properties). Any contamination emanating from adjoining property owners is the responsibility of those adjoining property owners to remediate.

Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

MILLENS & SON SCRAP METAL RECYCLING

According to the 2008 Phase I ESA performed for The Landing Site (Appendix 4 of the Step 2 Nomination), Millens Scrap Yard is identified as a delisted Inactive Hazardous Waste Disposal Site. This facility (site code 57480) has soils contaminated with Polychlorinated Biphenyls (PCBs), petroleum, and metals. Groundwater is also contaminated at the site and the plume has migrated off-site. The site is also listed as a Petroleum Bulk Storage, Chemical Bulk Storage, and Aboveground Storage Tank site. Six spills were reported at the Millens scrap yard. The spills mainly involved oil run-off associated with car crushing operations, with one spill associated with an unknown 55-gallon drum. One of the spills (NYSDEC ID 9604764) from the car crushing operation remains open in the NYSDEC database. There is known contamination at this property associated with the car crushing operation (Appendix 4 of the Step 2 Nomination).

There have been several investigations performed since 1996 at the site to delineate the location and depth of contamination. A Remediation Investigation/Feasibility Study was submitted in 2004 including recommendations for excavation of the PCB-contaminated soil, active in-situ remediation of VOC contaminated soil, and eventual capping of remaining areas. Soil vapor extraction was required to be completed and operational by April 2005. During June and July 2007, additional soil investigations were performed. The results of this investigation found one VOC in one location, SVOC exceedances in subsurface soils, and metals. Barium, chromium, lead, VOCs, benzene and Methyl Tertiary Butyl Ether (MTBE) were detected in groundwater at several wells. SVOCs were detected in an off-site well. In June 2008, the NYSDEC listed the site as a Class 2 Inactive Hazardous Waste Site. NYSDEC performed a Remedial Investigation of the site during 2012 to 2013. VOCs, SVOCs, metals, and PCBs were detected exceeding their applicable standards in subsurface soils. SVOCs and PCBs were detected in surface and subsurface soils off-site. VOCs were detected in groundwater in the southern portion of the site.

In May 2015, a Citizen Participation Plan was generated for the site. According to the Plan, an Interim Remedial Measure for in-situ treatment of groundwater and residual soil contamination at the site is currently being developed under a NYSDEC Consent Order.

BLOCK PARK/ISLAND DOCK

Upon a search of the NYSDEC Spill Incidents Database, there was one spill listed for this site. Spill #0906182, Block Park, is listed as a raw sewage spill in the soil which occurred on August 8, 2009. The spill was closed on August 8, 2009.

Phase I and Phase II Environmental Assessments were performed for the Block Plant and Island Dock sites. According to the Limited Phase II Environmental Site Assessment, Former Concrete Block, Inc. Facility (Island Dock), Kingston, New York, July 2005, environmental conditions for the sites include: historical use of the site as a coal storage yard; electric transformer casings that may have impacted surrounding soil on the island; scrap metal and wood debris located onsite; and petroleum releases were noted in nearby areas and upgrade from the site.

The Phase II field investigation at the former Block Plant facility and Island Dock site consisted of Geoprobe™ borings and test pits to collect surface and subsurface samples. A supplemental round of surface soil sampling was also performed following the initial field work. The analytical results of the field investigation resulted in the detection of VOCs and SVOCs in the surface soils. Metal concentrations along with SVOCs were detected at levels marginally exceeding their respective NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Criteria. The most likely remediation plan at Island Dock will be installation of a membrane covered with soil capping.

SVOCs were found at both the former Block Plant Factory and the Island Dock site. SVOCs were also detected in the location of a former aboveground petroleum storage tank.

Evidence of coal and coal slag were found in borings obtained from the Island Dock site. Low-levels of VOCs were identified in the area of the former Block Plant Factory.

The Island Dock site is currently in the Brownfields Cleanup Program (Voluntarily). Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

NOAH HOTEL

A search of the NYSDEC Spill Incidents database found that there was one reported spill associated with the site. The spill is listed in the NYSDEC Spill Incidents Database as Construction Site/AKA Noah Hotel. The spill is dated October 28, 2005 and was identified as unknown petroleum. The spill was closed on January 20, 2010. At this time, there is there are no additional environmental records or known environmental investigations related to this site.

ENVIRONMENTAL REMEDIATION OPPORTUNITIES

As illustrated in this map, many parcel sites within the BOA area have evidence of historic contamination. As a result, some of these properties are enrolled in the Brownfields Cleanup Program to take advantage of remediation incentive tax credits. Other properties do not qualify for the Brownfields Program because they have no significant contamination. This map highlights the varying degrees of possible environmental remediation, mostly from petroleum, which is subject to tidal flushing. However, any such environmental conditions can be mitigated. The DEC remains an important guiding force in appropriate future redevelopment of these sites. The map data is based on historic use patterns of the waterfront and adjoining areas.

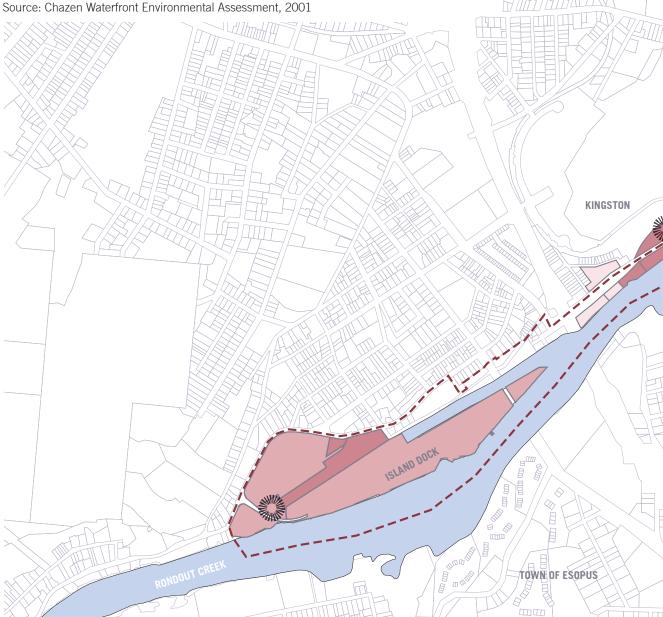
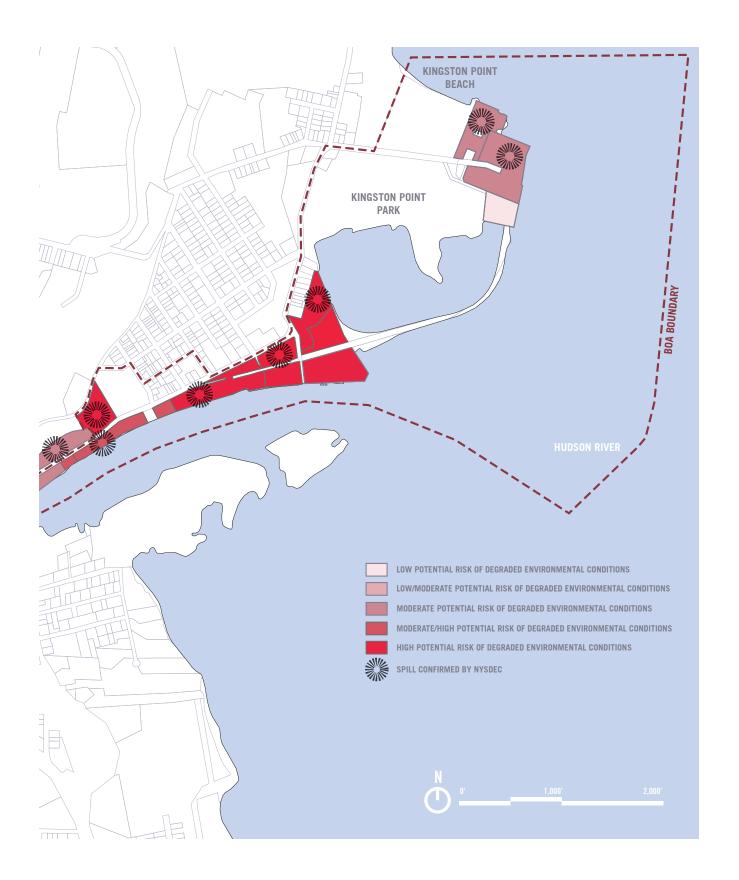
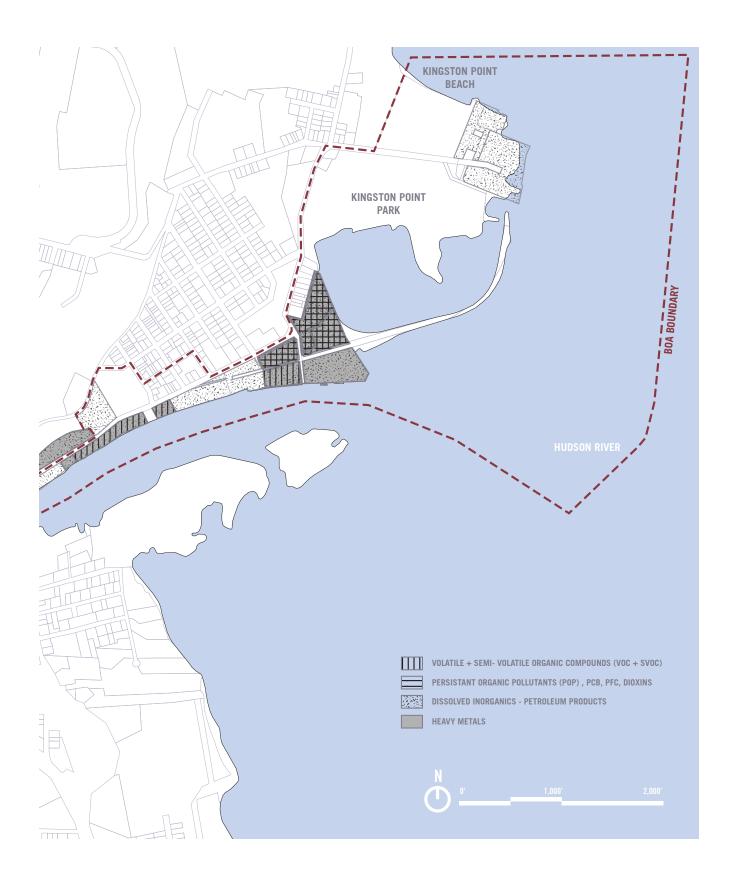


FIGURE 04.72 Kingston Waterfront Contamination Risk



POTENTIAL CONTAMINATION TYPE This map illustration accompanies Figure 04.72 and offers an analysis of potential contamination types based on current and historical site use. Contamination along the Kingston waterfront ranges from heavy metals to dissolved inorganic to persistent organic pollutants (PCB, PFC) to Volatile and semi-volatile organic compounds. Understanding the historic contamination types provides potential opportunity for future remediation strategies—including bioremediation, phytoremediation, and cut and fill operations. Source: Chazen Waterfront Environmental Assessment, 2001 KINGSTON TOWN OF ESOPUS FIGURE 04.73 Waterfront Contamination Type



OTHER PLANNED OR ON-GOING DEVELOPMENT PROJECTS

The intent of the BOA program is to leverage planning work done to date and to advance and unify previous plans and activities. The City of Kingston has invested a significant amount of resources and time in planning around the waterfront. Many of these studies overlap and have common goals for revitalization. The City's efforts to define a future land use plan and revitalization strategy for the Brownfield Opportunity Area reflects the City's collaboration with many public and private partners and its commitment to a sustainable and vibrant waterfront.

The vision and goals developed during the Pre-Nomination Study form the basis for future investments and activities at public and private levels. The Step 2 BOA Nomination and Step 3 BOA Implementation Plans draw from prior planning initiatives, identifies commonalities, focuses on environmental conditions, fill gaps in analysis and creates a unified framework for implementation. In a parallel study, and in an effort to unify planning strategies and recommendations the City is currently undergoing an update to its Comprehensive Plan, expected to be finished in 2015. The Step 3 BOA Implementation Plan is not intended to be a Comprehensive Plan but instead is supposed to set out a vision and recommendations to spur redevelopment of the BOA Area and is intended to provide flexibility within a framework that complements the ongoing Comprehensive Plan.

This BOA Program builds upon a series of important planning initiatives which are incorporated by reference and available at Kingston City Hall:

PLANNING DOCUMENTS

- Kingston 2025: Comprehensive Plan ongoing
- Kingston Midtown Revitalization Plan 2014
- Kingston Climate Action Plan Sept 2012
- Revitalizing Hudson Riverfronts 2010
- Kingston Urban Cultural Park Final Report (Heritage Area Plan) June 1987
- Rondout Local Waterfront Revitalization Program October 1993
- Rondout Waterfront Development Implementation Plan 2002
- City of Kingston-Brownfield Opportunity Area Step II Narrative
- Rail Reconstruction & Electrification Study May 2008
- Ferry Feasibility Study 2010
- Economic Impact Analysis
- Catskill Mountain Rail Trail Economic Analysis June 2013
- SCENIC HUDSON Revitalizing Hudson Riverfronts
- Ulster County Transportation Council Plans (Various)
- Energy and Greenhouse Gas Emissions Inventory 2012
- · Central Broadway Plan
- Broadway West Plan
- Hudson Landing Proposed Development Design Book
- Land Use and Zoning Analysis for County Owned Properties in the City of Kingston and Town of Ulster
- Economic Base Diversification
- Tidal Rondout Creek Watershed Management Plan Oct 2015 Draft
- Planning for Rising Waters Sept 2013

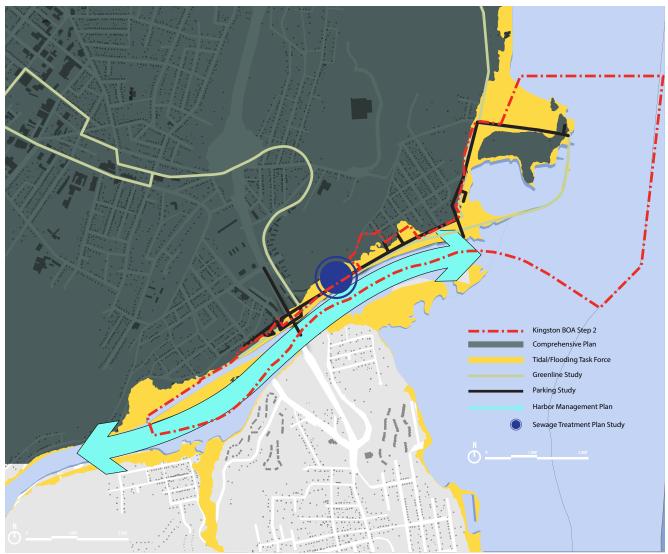


FIGURE 04.74 Selected Overlapping Studies

KINGSTON CONNECTIVITY PROJECT DOCUMENTS

- Kingston Greenline Conceptual Plan March 2014
- Kingston Connectivity Conceptual Map 2013
- Kingston Connectivity Project Overview 2013
- Transportation Enhancement Program Application 2013
- Hudson Landing Promenade Project Site Plans August 2013
- Kingston Point Rail Trail Engineering Study March 2013
- Kingston Bluestone Sidewalk Survey Report November 2013
- Kingston Point Rail Trail Survey Maps

RONDOUT WATERFRONT CURRENT INITIATIVES

- Kingston Rondout Harbor Management Plan Draft May 2014
- East Strand Stormwater Management Analysis Oct 2013
- Rondout Parking Feasibility Study Sept 2013
- East Strand Streetscape Concepts Draft Sept 2013
- Cornell Building Streetscape Improvements April 2014
- Kingston Tidal Waterfront Flooding Task Force Final Report Sept 2013
- WWTP Streetscape Screen Set of Drawings
- WWTP Streetscape Screen Bid Docs
- Rondout Creek Tidal Watershed Management Plan

KINGSTON TAX STUDIES

- Homestead Non-Homestead Study Presentation April 2014
- Kingston Homestead Tax Study Full Report March 2014

As the previous list suggests, there has been a tremendous amount of thought, time and funding put into a range of issues around Kingston. From that list, these are some of the recent and on-going studies that are critical to understand what will have direct impact on the revitalization of the Rondout Waterfront.

CITY OF KINGSTON-BROWNFIELD OPPORTUNITY AREA STEP 2

The BOA Step 2 is the legal nomination of the study area. The current Step 3 will need to build off of the ideas established, including the identified strategic sites and strategies.

The Kingston waterfront vision defined in this document states: "The Kingston waterfront will be an attractive, active, walkable, culturally vibrant district with strong linkages to the rest of the City of Kingston." Shops, restaurants, recreational opportunities, museums, and events will attract visitors and residents seven days per week all through the year. New development will be consistent with established character and will highlight the area's historic and natural resources. Trails, parks, marinas, and boat launches will maximize access to the waterways, creating high-quality recreational opportunities, and optimizing meaningful, permanent public access to the waterfront.

It is also important to note that this study was completed in 2010 and the information provided will need to be validated to ensure relevance and that we are addressing current trends.

KINGSTON 2025: A PLAN FOR THE CITY OF KINGSTON

The City of Kingston is looking towards the future and has undertaken the update of its Comprehensive Development Plan, which currently dates back to 1961. This plan is being updated in parallel to the BOA study. While the comprehensive plan is an independent exercise ideas developed in the BOA Step 3 do have the

potential to influence decisions and policy being developed in the larger plan. On October 9, 2014 the "Vision for the Future and Planning Needs" was presented as a conclusion and results of the Phase One Reconnaissance for the City of Kingston Comprehensive Plan. This is a critical step in forming the comprehensive plan expected to be completed next year.

WASTE WATER TREATMENT PLANT STUDY

An ongoing study to understand the existing conditions of this critical infrastructure. A range of scenarios are being explored from necessary upgrades to opportunities to relocate.

RONDOUT PARKING FEASIBILITY STUDY

As part of the BOA Step 2 planning process, the City commissioned a full parking study to create a strategy addressing needs of the adjacent Rondout area and parts of the BOA.

KINGSTON TIDAL WATERFRONT FLOODING TASK FORCE

Created in July 2013 by the Mayor to assess local risks of rising waters and flooding and to generate strategies that will help create a more vibrant, secure and prosperous waterfront.

KINGSTON CLIMATE ACTION PLAN

Created in September 2012 to reduce local greenhouse gas emissions. This plan is a comprehensive energy assessment and GHG emissions inventories for both the community and government operations.

KINGSTON GREENLINE

A March 2014 document proposing a network of urban trails, complete streets including direct links along the trolley line within the study area.

KINGSTON HARBOR MANAGEMENT PLAN

Created in June 2014 this document is a comprehensive conditions report of the harbor and edge conditions created by the US Army Corps of Engineers.

SCENIC HUDSON REVITALIZING HUDSON RIVERFRONTS

A partnership with the City of Kingston and Scenic Hudson and serves as an illustrated guide, designed to inspire and inform all who wish to create vibrant waterfront communities. Outlines principles and implementation strategies for waterfront revitalization that are adaptable to your community's character and circumstances.

DEVELOPMENT PROJECTS IN PROGRESS

The tremendous opportunity around the waterfront are already being seen at the time of the BOA Plan Step 3 documentation. A variety of project types are being developed within and around the BOA boundary that will help in the revitalization of the area. These include cultural institutions, infrastructure upgrades and residential, recreation and commercial developments. This is a reconfirmation of the commitment of the community which will have an immediate impact on the waterfront, bringing more people and diversity to the waterfront and creating further stability around progress. The various projects have been accounted for in the market scan and absorption assumptions when evaluating the implementation strategy.

The following projects are a sample of key projects currently in-progress at the time of the report.

- Riverport Wooden Boat School The Hudson River Maritime Museum is expanding its footprint by developing at 86 Rondout Landing. It is developing a year-round education, working and teaching facility focused on wooden boat building and other working waterfront education.
- Maritime Museum Solar Installation New solar power panels are being applied to the roof of the Maritime Museum creating a more sustainable building and commitment to a resilient Rondout District.
- Irish Culture Center Hudson Valley- New Center A new 15,000 square foot facility is being planned at Abeel Street in Kingston's Rondout District. The Irish Cultural Center Hudson Valley purchased the land in 2013 and are currently fundraising and designing. Planned completion is 2017.
- Church Residential Conversion Located at 50 Abeel Street the former church turned restaurant was purchased over three years ago. It is currently being converted into 7 apartments
- Kingston Greenline Recent funding of \$1.6 million grant is allowing further development and implementation of the network of urban trails, bikeways, water-trails, walkable sidewalks and complete streets that strive to better connect various Kingston communities. The Kingston Connectivity Project is currently underway.
- Kingston Point Upgrades Overgrown vegetation has been cleared. New picnic tables and bike racks have been installed out on the causeway and a new pathway has be laid down. A new shower and changing builind, with accompanying landscaping has been built at Kingston Point Beach.
- East Strand Streetscape Improvements Upgrades to the asphalt pavement and sidewalks was recently completed greatly enhancing the experience on East Strand in the vicinity of the Cornell Building.
- Kingston Community Rowing Kingston Community Rowing will administer and promote rowing programs based on the US Rowing America model involving the Rondout Rowing Club and the Kingston High School Crew team. A permanent base for the rowing community in the form of a Boat House and launch site on the Rondout Creek is proposed. The Boat House would provide boat storage as well as classroom and community space for outreach programs and could also be used for rentals of kayaks and bicycles, as well as a base for small boat sailing instruction.



FIGURE 04.75 Riverport Wooden Boat School



FIGURE 04.80 Kingston Point Improvements



FIGURE 04.76 Irish Cultural Center Hudson Valley



FIGURE 04.77 Kingston Green Line



FIGURE 04.79 Church Residential Conversion



FIGURE 04.78 East Strant Streetscape Improvements

STRATEGIC SITES

Five strategic sites have been identified in the BOA designation process. They can anchor future development efforts and are the key parcels necessary for the overall redevelopment plan to be completed most efficiently. Based upon the Phase I Site Assessments, the City of Kingston and its partners identified three priority assemblages. These sites were selected because they are strategically located, preferred by the neighborhood, have a high capacity for redevelopment, can catalyze other economic investment, and have historical uses that indicate a significant chance of environmental contamination which requires additional investigation.

Phase I Environmental Site Assessments have been completed for at least two of these properties. While some concerns have been identified and future analysis is necessary, none of the findings represent an obstacle to redevelopment. The willingness of property owners to work through the Voluntary Clean Up Program and other DEC initiatives is promising to expedite redevelopment. The five strategic sites are:

- 1 KOSCO Assemblage
- 2 The Landing
- 3 Millens and Son Site
- 4 Block Park / Island Dock
- 5 Noah Hotel Site





FIGURE 04.81 Strategic Sites Location Maps

KOSCO ASSEMBLAGE

This site is a 4.14 acre facility on the south side of East Strand, adjacent to the former L&M Auto Parts site. The site was acquired by Historic Kingston Waterfront, KOSCO, LLC in September 2007. The site is currently rented to local artisans and is rented by the NY State Police, Ulster County Sheriff's Department and DEC to dock emergency response vessels. It was the location of the Kingston Oil Supply Company (KOSCO) Service Department. Until seven years ago, the site was the base for 25

technicians for residential and commercial heating customers and marine fueling terminal. Tanks were removed from the site seven years ago. However, there is no evidence of any spills or leakage from the KOSCO tanks. The site is surrounded by a chain link fence and includes four one-story structures. Historically, the site was used for rail operations.



FIGURE 04.83 KOSCO Assemblage existing condition street view



OPPORTUNITIES

- 1. Access to Greenline
- 2. Road frontage
- 3. Long expanse of uninterrupted deep waterfront (900')
- 10' setback required (unless structure is a marina)
- Citibus access
- 6. Steep slope / maintained views
- 7. Commercial zone
- 8. Views

Capable of remediation Substantial brownfield tax credits

- 9. Required easement for public access on Greenline
- 10. FEMA Flood zone
- 11. Edge: Timber Bulkhead Fair to Poor condition
- 12. Existing structures

FIGURE 04.82 Kosco Assemblage Opportunities and Constraints

THE LANDING

Kingston Landing is located southeast of the intersection of North Street and East Strand, bordered on the north and the west by B. Millens Recycling operations. This 3.77 acre site is vacant land and marshland located at the mouth of the Rondout Creek. It offers unobstructed views of the Hudson River, Kingston Point Lighthouse and surrounding environs. The property was acquired by Historic Kingston Waterfront, Kingston Landing, LLC in April 2005. The site is reclaimed land. During the 1970's a portion of the eastern area was reclaimed using fill material. About half



FIGURE 04.85 The Landing existing condition street view

of the parcel is submerged at high tide. The western half of the property is marshland. There is a boat launch ramp to the Rondout Creek at the southwest corner of the property. The property has 215 feet of frontage along the east side of North Street. There are currently no on-site structures. The site was formerly used as a marina from the early 1970's to the 1980's. The most appropriate reuse for this property is likely to be a destination project that will take advantage of its prominent location, such as a high-end restaurant.



FIGURE 04.84 The Landing Opportunities and Constraints

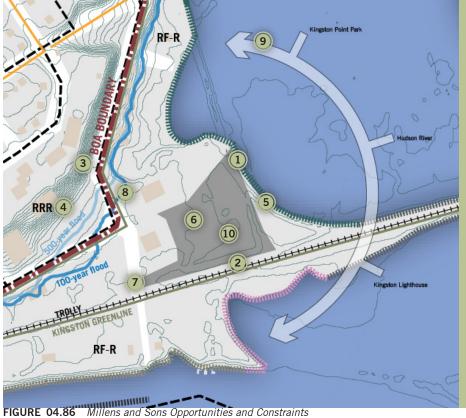
MILLENS & SONS

B. Millens & Son Scrap Metal Recycling operates its vehicle and equipment maintenance facility on the north side of East Strand Street. The site includes a small brick and concrete block structure built at the front of the lot that is used for vehicle and equipment maintenance and storage. A gravel area to the east of this building is used to store trailers, miscellaneous heavy equipment and scrap metal in roll-off containers. Historically the site has been used for cement works, storage and vehicle maintenance. The Landing and KOSCO sites assemblages are the critical areas for redevelopment. The KOSCO site is strategically located adjacent to the

Millens Property and the Central Hudson Former Coal Gas Facility, which is also under consent order. The Millens Site has been recently added to the Registry of Inactive Hazardous Waste Disposal Sites in the second half of 2008 and there is a consent order for that site as well.



FIGURE 04.87 Millens & Sons existing condition street view



OPPORTUNITIES

- 1. Kingston Point Park Access
- 2. Greenline access
- 3. Steep slope / maintained views
- 4. RRR one family residential zone
- 5. Edge: Natural shoreline
- 6. No existing structures

- 7. Minimal road frontage
- 8. FEMA Flood zone
- 10. Entire site has high risk of contamination by petrol and heavy metals

BLOCK PARK / ISLAND DOCK

Block Park is a 6.5 acre site located between Abeel and Ravine Streets and the inner channel of Rondout Creek from Island Dock. Block Park is currently a City operated public space and includes a softball diamond, basketball courts, seasonal bathrooms, handball courts, a pavilion, picnic area, and a playground. The park floods during heavy rain both from the creek and from upland water flowing down the hill to the north. The water pools in the south west corner of the park. Also included in the strategic site is the privately owned Hideaway Marina.

Island Dock is a 20 acre (including water) manmade island that is currently privately owned. Historically, it was a transfer point for coal from small boats carrying it on the Rondout to large boats that would carry it on the Hudson to New York City. The island is currently covered with trees and contains a private dirt road for vehicular access. The existing culvert between the island and the mainland does not allow for an ideal level of flushing between the inner channel and Rondout Creek.



FIGURE 04.89 Block Park existing condition street view

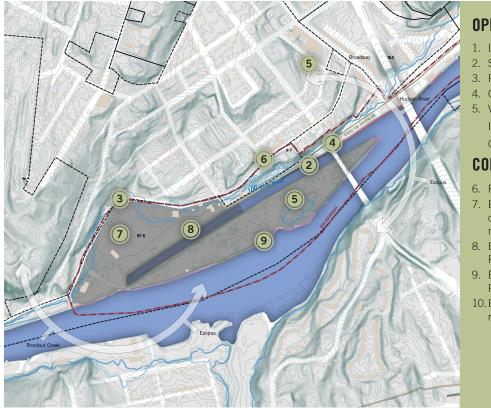


FIGURE 04.88 Block Park / Island Dock Opportunities and Constraints

OPPORTUNITIES

- 1. Limited existing development
- 2. Sheltered waterway
- 3. Road frontage
- 4. Connection to Greenline
- Views
 Island Dock Brownfields Program
 Capable of remediation

- 6. FEMA flood zone
- 7. Entire site has low to moderate risk of contamination by petrol, heavy metals. and organic pollutants
- 8. Edge: Timber Bulkhead Fair to Poor condition
- 9. Edge: Mixed Stabilization Fair to Poor condition
- 10. Existing use: Block Park is a public recreation space

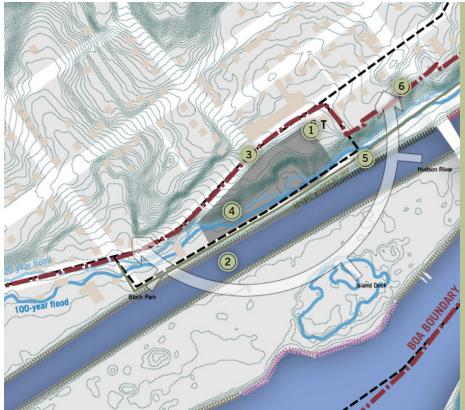
NOAH HOTEL SITE

The Noah Hotel site is approximately 1.75 acres and it includes a group of vacant and under utilized properties previously studied and cleared for redevelopment. It is located at the intersection of Abeel Street and Hone Street. The site is a hill site and therefore offers frontage both on Abeel Street and W. Strand Street/Dock Street. The site in the past has been identified as a potential hotel site and is where the site gets its informal nickname, the Noah Hotel Site. There are sweeping views of Rondout Creek from the upper level and it offers proximity to Island Dock and a potential to connect at the higher elevation of Abeel Street without affecting boating.

The site is strategically located at the mid-point between Block Park and Broadway with significant proximity to recreational boat activity. Directly across of W. Strand Street/Dock Street is the pedestrian promenade that runs the majority of the waterfront. There is no sidewalk on parcel side of the street on W. Strand/Dock Street.



FIGURE 04.91 Noah Hotel Site existing condition street view



OPPORTUNITIES

- 1. High elevation
- Sheltered waterway and substantial boating community
- 3. Road frontage on two sides
- 4. No existing development
- 5. Connection to Greenline
- 6. Views

- 7. Difficult grade at site may affect construction costs.
- 8. Currently little or no pedestrian activity at either lower waterfront level or at the upper residential

CASE STUDIES

We have set out to compare similar Hudson Valley Waterfronts to establish ideas, challenge common approaches and understand regional assets. Through a comparative analysis we can evaluate the merits of Kingston's neighbors and help unlock the potential of the Rondout.

We have selected a variety of Hudson Valley Waterfronts known for a variety of reasons. They are Beacon, Newburgh, Saugerties and Hudson. Each is evaluated at the same scale and set of lenses to identify how opportunities are captured and challenges met. Kingston has the potential to recreate and brand an entirely new destination waterfront and leverage lessons learned from the Region.



FIGURE 04.92 A view of the Hudson River



KINGSTON, NY



By establishing a baseline for scale and community make up, each area can be evaluated against similar metrics in Kingston. While the City of Kingston is larger than the areas being studied it has a very similar waterfront settings and set of challenges and opportunities. Some of the metrics that were looked at were demographics, household median income levels, age distribution and race distribution. Each area provides a unique perspective on potential things to do and not do in Kingston.

BEACON, NY



HUDSON, NY

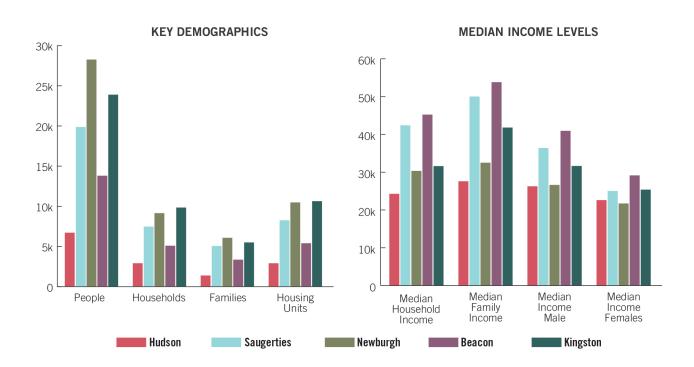


NEWBURGH, NY



SAUGERTIES, NY





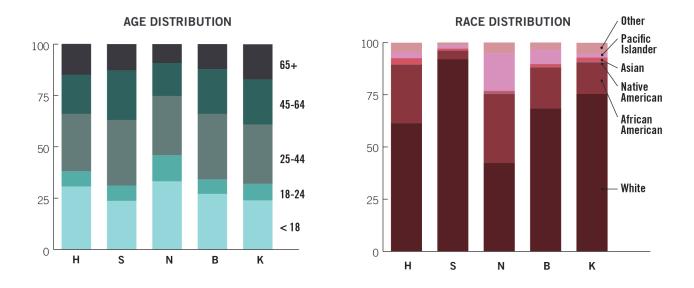


FIGURE 04.93 Case Study Site Demographics based on 2010 census

HUDSON, NEW YORK

Hudson was the first chartered city in the United States. It was first settled by the Dutch in the mid-17th century and called Claverack Landing. In 1783, the Proprietors, a group of predominantly Quaker whalers and merchants came, seeking refuge from the Revolutionary War torn east coast and purchased the land from the Dutch. The Proprietors created a city plan consisting of a large grid, with a main street running west to east and lots measuring 50 by 120 feet, with 20 foot lanes behind. That grid largely exists to this day, with Warren Street at its center.

Early Hudson flourished thanks to the whaling, sealing, fishing and shipbuilding industries. While it was never a premier whaling locale, Hudson's early prosperity was a direct result of an industry with its origins in and around its deepwater port, and it remained a shipping and manufacturing center well into the 20th century. Although the city declined during the 1960s and 1970s, many of its abandoned and derelict buildings were reclaimed in the 1980s, and its former glory slowly began to reemerge. Today, Hudson has transformed itself into a vital arts and antiques center.

The mile-long business district – centered on Warren Street – boasts dozens of first-tier antique and home furnishing shops, along with an eclectic mix of art galleries, restaurants and performance spaces, housed in buildings that constitute "one of the richest dictionaries of architectural history in New York State."

Source: gotohudson.net

DRIVE TIMES

TO NEW YORK	TO KINGSTON		
2h 20m driving	40m driving		
2h 30m Amtrak/Metro-North	2h 45m biking		

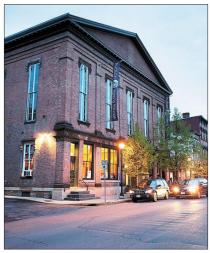


FIGURE 04.95 Hudson Opera House

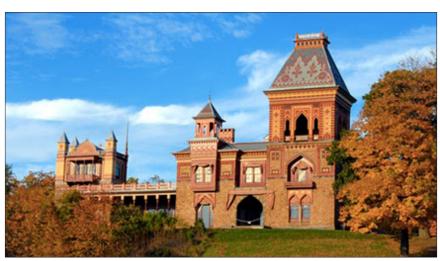


FIGURE 04.94 Olana State Historic Site

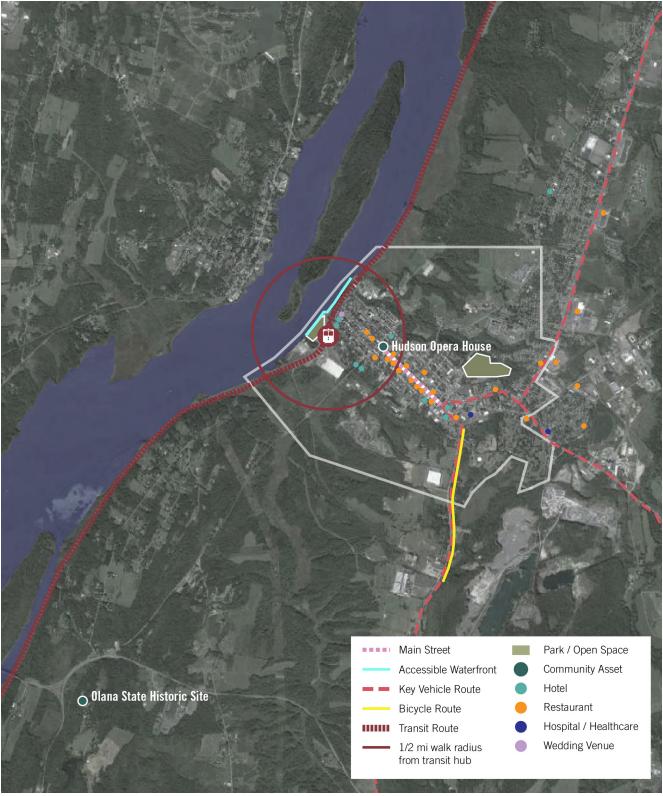


FIGURE 04.96 Case Study: Hudson

SAUGERTIES, NEW YORK

Settled in its early days by the Dutch, the Town of Saugerties sits nestled between the base of the Catskill Mountains and the Hudson River. Saugerties experienced minimal growth after the mid-1600s until two major events occurred. One was the coming in 1710 of the Palatines, a group of refugees who had fled the Rhine Valley in Germany to settle in West Camp, a hamlet of this community. The second important event was the arrival of industrialist Henry Barclay in 1825. Barclay immediately secured title to land on both sides of the Esopus Creek where he built his dam and used the water flow to generate power needed to run his mills and build an industrial community.

Irish, Italians, Germans and scores of others arrived to work in these mills. It was discovered also that the quarries here held some of the most beautiful bluestone in the world, bringing even more workers.

Today, the Town of Saugerties, which just celebrated its 200th anniversary of incorporation, is still growing and thriving. Industry still has a home here but the community has evolved into so much more. The community has become an important tourist location energized by the artists, environmentalists, historians, antiquarians, restauranteurs and sports enthusiasts who reside here today.

Source: discoversaugerties.com

DRIVE TIMES

TO NEW YORK	TO KINGSTON
2h driving	25m driving
2h 40m bus (Adirondack Trailways)	1h 10m biking
	15m bus (Adirondack Trailways)

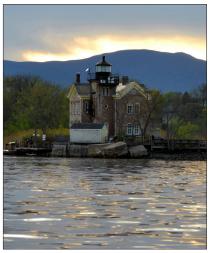


FIGURE 04.97 Saugerties Lighthouse



FIGURE 04.98 Diamond Mills

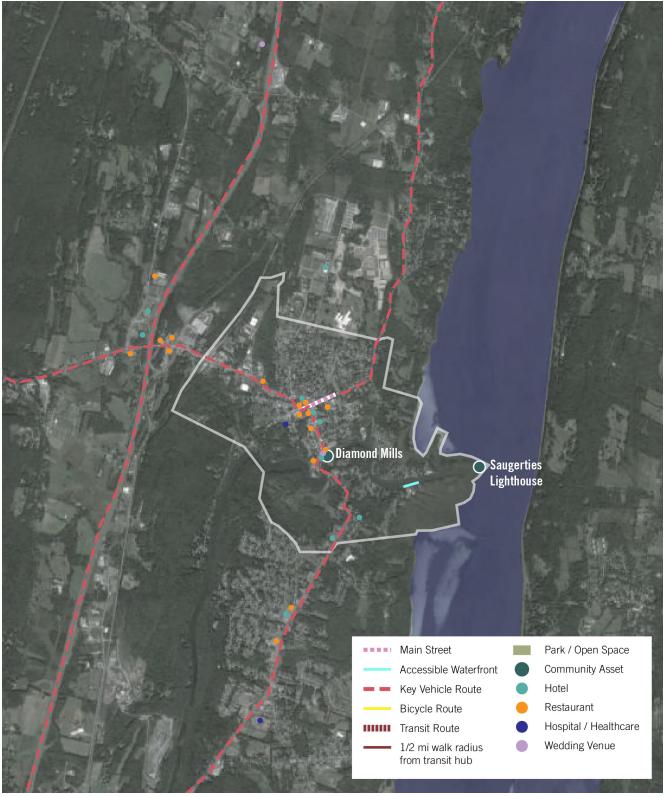


FIGURE 04.99 Case Study: Saugerties

NEWBURGH, NEW YORK

The City of Newburgh boasts the second largest historic district in New York State. An easy walking tour of the East End will encounter architectural gems from the 1800s, including the Greek Revival Dutch Reformed Church on Grand Street, a National Historic Landmark. On Liberty Street, Washington's Headquarters, the nation's first publicly owned historic site, is bordered by quaint shops and cafes. Hudson River vistas can be seen from the Headquarters' spacious grounds, as well as along the City's main thoroughfare, Rev. Dr. Martin Luther King Boulevard, and from the "Bluff" in Washington Heights.

A tour of Broadway and adjacent neighborhoods will provide not only a taste of Newburgh, but of cuisines from around the world. The City's diversity is one of our greatest assets, and it is commemorated throughout the year with festivals, parades and celebrations.

Newburgh is an "artist-friendly" City, and has a diverse population of talented and creative people, who call the City of Newburgh home. Events like "Last Saturday" and "Open Studios," draw visitors from all over the mid-Hudson.

Source: cityofnewburgh-ny.gov



TO NEW YORK	TO KINGSTON
1 h 30m driving	45m driving
2 h 30m ferry>train	3 h 15m bicycling
	55m bus (Adirondack Trailways)



FIGURE 04.102 George Washington Headquarters



FIGURE 04.101 MotorcyclepediaMuseum



FIGURE 04.100 Storm King Sculpture Center



FIGURE 04.103 Case Study: Newburgh

BEACON, NEW YORK

Beacon is a city located in Dutchess County, New York, United States. Beacon is part of the Poughkeepsie–Newburgh–Middletown, New York Metropolitan Statistical Area as well as the larger New York–Newark–Bridgeport, New York–New Jersey–Connecticut–Pennsylvania Combined Statistical Area. It was named to commemorate the historic beacon fires that blazed forth from the summit of the Fishkill Mountains to alert the Continental Army about British troop movements.

The area occupied as Beacon was originally settled as the villages of Matteawan and Fishkill Landing in 1709, which were among the first communities in the county. Beacon is located in the southwest corner of Dutchess County in the Mid-Hudson Region, approximately 90 miles (140 km) south of Albany, New York, and approximately 65 miles (105 km) north of New York City.



FIGURE 04.106 Southern Dutchess Country Club

DRIVE TIMES

TO NEW YORK	TO KINGSTON		
1h 30m driving	45m driving		
1h 45m Metro-North	3h 30m biking		



FIGURE 04.105 Hudson Beach Glass



FIGURE 04.104 DIA: Beacon

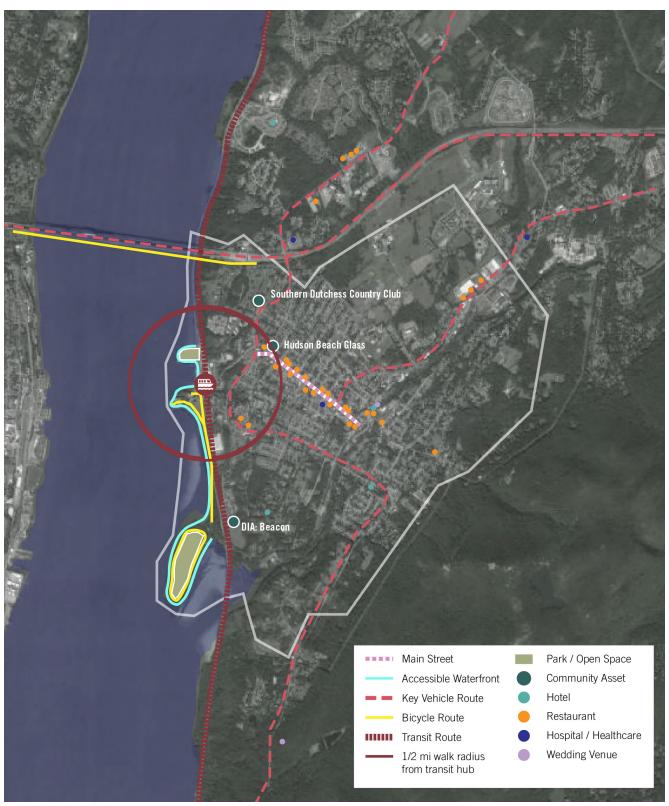


FIGURE 04.107 Case Study: Beacon



In order to engage stakeholders and set the tone for future design and implementation thinking, four distinct frameworks were developed as guiding principles. These frameworks were intended to be open-ended to evoke excitement, develop ideas, raise concerns and foster momentum towards creating a one of a kind revitalized and realized Kingston Waterfront. Achieving buy-in on these larger framework helps focus the ultimate state of the waterfront and allows the vision to always be vetted against a set of priorities and community driven decisions.

The four focused frameworks are:

- Cohesive
- Connected
- Vibrant
- Achievable

In order to solicit feedback from the steering committee on the frameworks a workshop was held on October 28th, 2014. A table was set up for each of the frameworks with a facilitator from the consulting team leading the conversation and documentation. After 25 minutes of passionate discussion steering committee members were asked to rotate onto the next topic. This repeated four times until each stakeholder had an opportunity to participate at each of the four frameworks. Each facilitator then reported out to the group on major topics and repeating themes. This feedback was presented back to the public in January and has been an integral part of the Vision Planning.













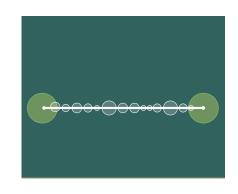
COHESIVE

Creating a 2 mile holistic, end to end waterfront that provides a variety of unique moments that establish a world class waterfront destination. Make it a year round destination with opportunities for pause along the way. Use major open space as bookends.

- Interstitial space that weaves the waterfront together
- · Overall brand of the waterfront
- Park bookends
- Special nodes and opportunities along the way

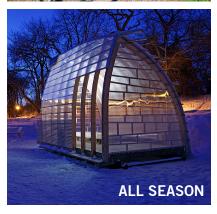














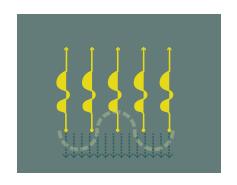
CONNECTED

Creating a waterfront for all by connecting upland, at the waterfront and to the water through physical, visual and social links. Connect to people, to the neighborhoods, to the water, to the history and to nature that make Kingston so special.

- Where are the best opportunities to connect upland
- · Critical habitat and ecological connections
- · Opportunities to get in the water
- Leverage tourism and regional assets and deficiencies
- Partnership opportunities
- Larger cultural and recreation systems to connect to

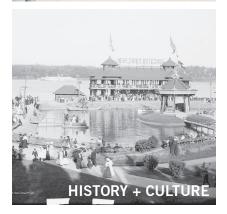














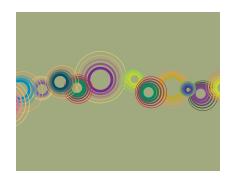
VIBRANT

Creating a sustainable waterfront development that activates the entire area through exciting and innovative land use, programming, branding, character and building typologies.

- What types of uses are exciting and appropriate?
- What types of seasonal uses and programs would work?
- What do you want your waterfront to look like?
- What is the right height and density at the water?
- Who are the potential partners and institutional anchors?











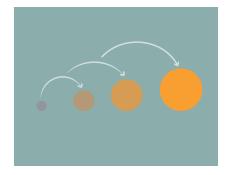




ACHIEVABLE

Identifying the opportunities and constraints for implementation of an exciting waterfront vision. Explore the projects that will catalyze revitalization and develop the funding and management to achieve it.

- Where are the shovel ready projects?
- Resiliency and Sustainability as the new standard
- Site remediation as a way to activate the site
- Potential catalyst projects
- What are the regulatory roadblocks/red tape?
- What do private owners want/need from the city?















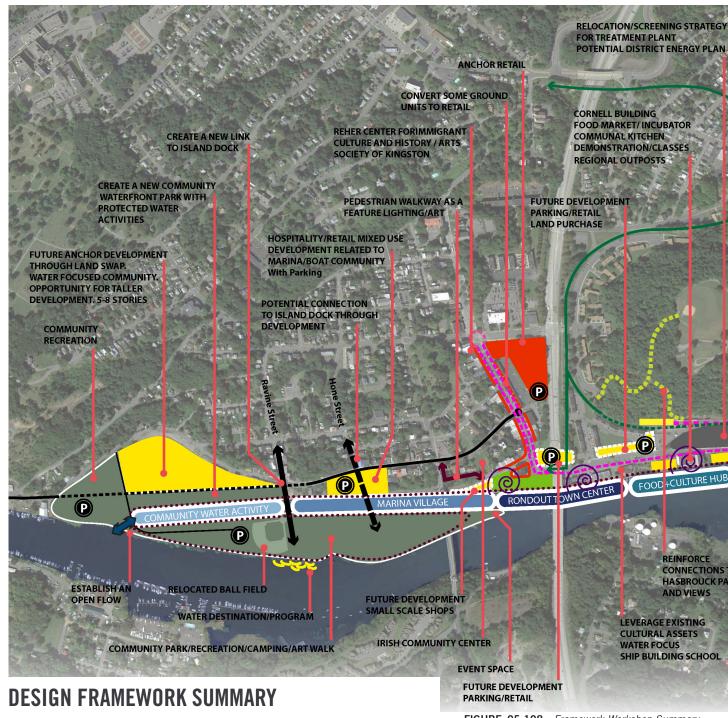
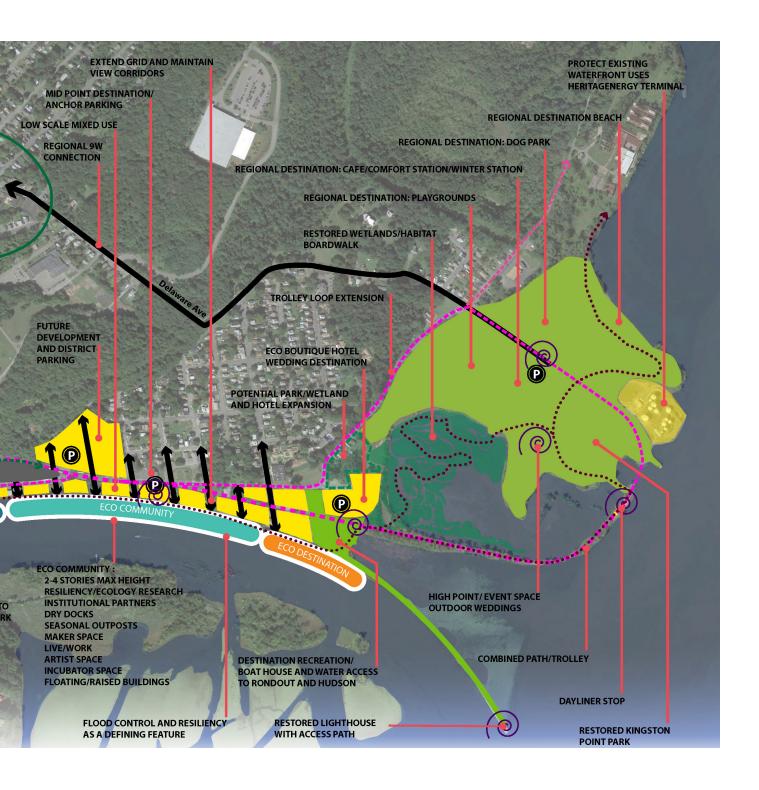


Figure 05.108 represents a summary of the feedback collected after the Steering Committee Framework Workshop. An aspirational plan for creating a vibrant and cohesive Kingston Waterfront that celebrates history and heritage and that establishes a sustainable and sensitive destination.

FIGURE 05.108 Framework Workshop Summary



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