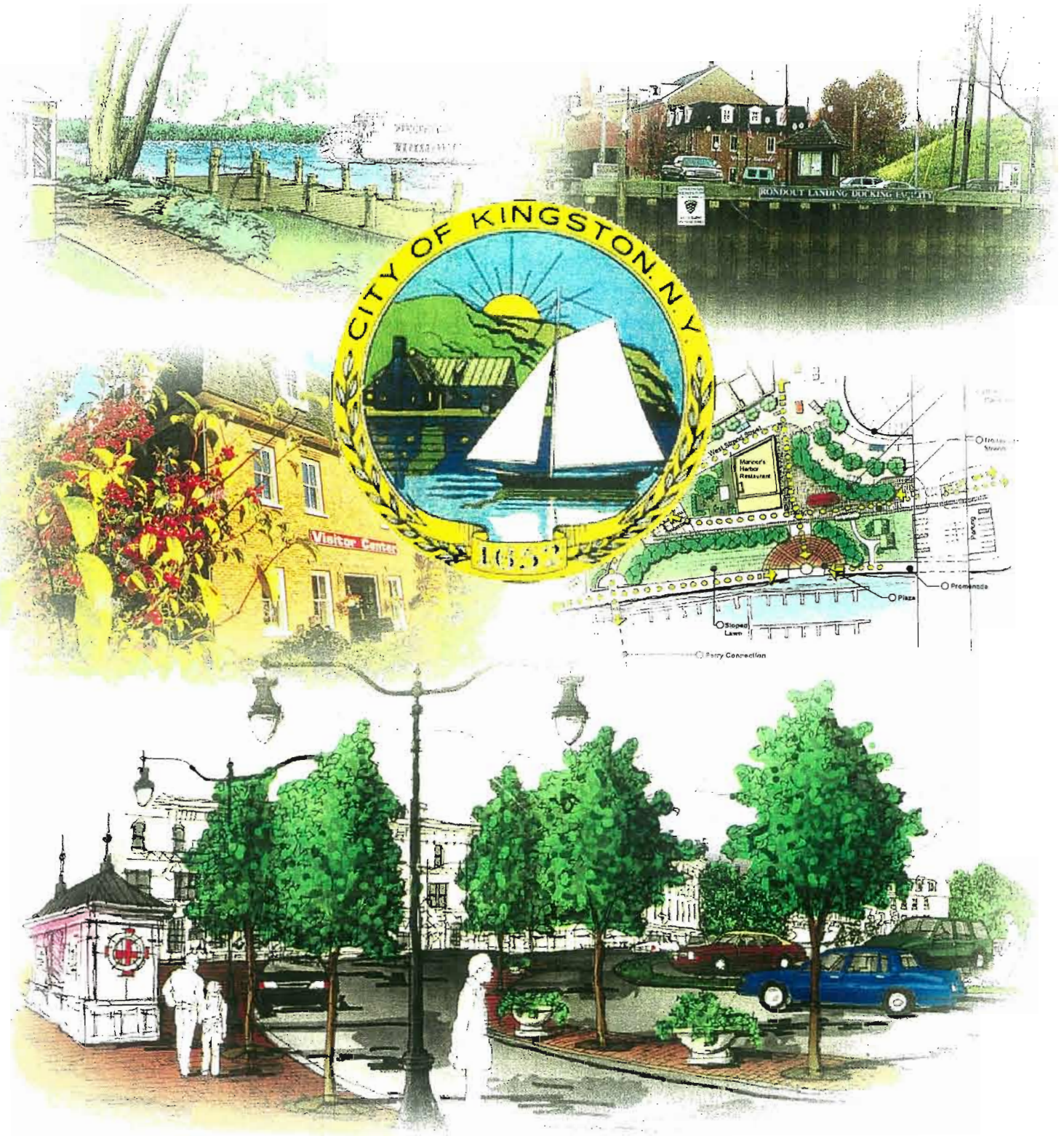
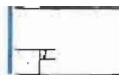


Kingston Waterfront Development Implementation Plan



Prepared for the City of Kingston and the NYS DOS with funds provided under Title 11 of the Environmental Protection Fund

Prepared by



SYNTHESIS



**Transportation
Concepts**

Swiger Associates

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This Waterfront Plan document is the end product of nearly two years of work by dozens of individuals who worked cooperatively for the success of Kingston's waterfront. The following people contributed many hours of concerted effort to the production of the plan. Their commitment, energy and enthusiasm made this plan possible.

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Introduction

Setting the Scene¹

Kingston's Rondout Creek and Hudson River waterfronts offer incredible natural, recreational, and economic resources for the city and the region. The waterfronts are a finite resource, having as integral parts Kingston's unique history and urban character. Today, anchored by irreplaceable historic resources, the waterfront offers many recreational opportunities. Businesses and residents are looking to the waterfront as a place to live, work, and play.

Emerging transportation technologies transformed the Rondout waterfront and the entire Kingston area in the 19th Century, creating a vibrant, successful transportation and industrial hub. During the canal-building era of the early 1800s, the Delaware and Hudson Canal chose the hamlet of Rondout as the terminus of the canal and the starting point for river traffic down to New York City. Growing from two small villages in the early 1800s, by the end of the century, the City of Kingston incorporated the towns of Kingston and Rondout. Kingston boasted a booming economy almost completely reliant upon the canals, river, and creek. Indeed, the Kingston of today would not exist without its waterways.

Although the waterfront relied heavily on the Delaware and Hudson Canal and the Hudson River, development along the Rondout Creek diversified the city economy in the 1840s and 1850s. In 1844, quarrying began in the Ponckhockie section of Rondout. Similarly, bluestone quarrying emerged locally and met demand in cities throughout the country for paving and building stone. Shipyards capable of building vessels ranging from coal and ice barges to sloops, schooners, and steamboats lined the shores of the Rondout Creek. Other industries included brick making; ice-cutting, storage, and shipping; and the manufacture of patent-medicines.

By the late 1800s railroads were replacing the canal and river as the most rapid and economical form of commercial transportation. Kingston's waterfront weathered this initial transition, becoming a hub for the Ulster and Delaware Railroad, providing passenger service to the Catskills, and connections between the rail and the river steamboat. The West Shore Rail Line connected with the Ulster and Delaware Railroad providing service from northern New Jersey to Albany. By the mid 20th century, competition with highways and a general decline in tourism in the Catskills meant that the waterfront transportation hub and industries in Kingston faltered.

By the 1970s, much of the city's waterfront was in deteriorated condition. Kingston Point Lighthouse, once a proud beacon welcoming travelers, had deteriorated due

¹ Sources: Kingston Urban Cultural Park/Heritage Area website: www.cr.nps.gov/nr/travel/kingston; City of Kingston website: www.ci.kingston.ny.us; City of Kingston Local Waterfront Revitalization Program, 1992

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to the ravages of weather and vandalism. Kingston Point itself, former gateway to the Catskills for steamships traveling from Albany and New York, had become a landfill. Railroad tracks that had carried thousands of visitors lay rusting and overgrown with weeds. Today, the evidence of the waterfront's decline is still apparent. Metal recycling facilities, oil tank farms, abandoned factories, and deteriorated bulkheads all bear witness to it. But these pockets of blight no longer tell an accurate story of the waterfront's recent past or bright future.

The Kingston waterfront is experiencing an amazing renaissance. Incremental improvements over the last twenty years have made a positive impact. Kingston Point is once again a park. At the other end of the Rondout corridor, the impeccably restored S&WB Fitch Bluestone House stands as indisputable evidence of the feasibility and rewards of preservation.

The West Strand commercial district and lower Broadway have seen dramatic improvements. The West Strand and west side of lower Broadway has redeveloped as a mixed-use area of shops, offices, and apartments. They occupy rehabilitated 19th century structures, which in the late 1970s were abandoned and boarded up. Across the street on the east side of lower Broadway, a formerly vacant Urban Renewal site has been developed for a mix of uses in two and three story brick structures that mimic the 19th century character of their neighbors across the street.

West Strand and the municipal marina provide on-water and waterfront recreation opportunities. Nearby along East Strand, Maritime and Trolley museums pay tribute to once-thriving waterfront transportation systems. The former Millens Steel and Cornell Steamboat Company buildings on East Strand are important historic assets ripe for redevelopment.

Purpose of this Plan

Recent waterfront success stories have not occurred by chance. Rather they were the result of careful planning, marketing, and the implementation of significant financial investments and public improvements to support desired development. The most significant planning efforts have been the development of a Local Waterfront Revitalization Program and an Urban Cultural Park Management Plan. The Kingston Waterfront Development Implementation plan builds on these and other planning and redevelopment efforts implemented over the last 15 years for the Rondout Creek and Hudson River waterfronts.

One of the earliest planning efforts that helped to effect change at the waterfront is the Kingston Urban Cultural Park Management Plan. Kingston is one of 17 New York State Office of Parks, Recreation, and Historic Preservation - designated Urban Cultural Park Heritage Areas. The program helps showcase the unique histories of communities throughout New York State. More than a collection of restored buildings and green spaces, each Urban Cultural Park follows a central theme. The UCP may include supporting themes as well, through which its unique attributes are interpreted and promoted. The core theme for the Kingston Heritage Area is transportation, with architectural history and government as supporting themes.



Designation as an Urban Cultural Park, with the subsequent name change to Heritage Area in 1999, has enabled Kingston to take advantage of a number of programs that have contributed to the waterfront's revitalization. Through economic development and revitalization programs, the Heritage Area has stimulated new development and increased tourism levels. In addition the Heritage Area has developed a series of outreach programs, and events that interpret the history of the area. Other Heritage Area efforts were creation of a waterfront visitor center (the first of any of the designated UCPs), assistance to the waterfront trolley, and events such as concerts in West Strand Park and the annual waterfront Shad Festival.

The genesis for this planning effort is the 1992 City of Kingston Local Waterfront Revitalization Program (LWRP). The LWRP provides the direction and a policy basis for this document and for all of Kingston's waterfront redevelopment efforts by defining waterfront zoning districts and establishing policies for public access and open space. In addition, the 1992 LWRP proposed a set of fourteen projects to enhance and encourage redevelopment of the waterfront. These projects included:

- Enhancements to Block Park including access and parking improvements, repairs to picnic and playground facilities and removal of outdated equipment
- Improvements to the Rondout neighborhood including new sidewalks, curbing and landscaping, and low-interest loans for home rehabilitation
- Creation of a park with a potential aquarium site at Island Dock
- Improvements to West Strand Park, including an extension of the plaza and waterfront walk east to connect with the Maritime Museum and an extension of the waterfront walk as far as the Port Ewen Bridge
- Redevelopment of urban renewal parcels adjacent to the Rondout waterfront for mixed use development
- Construction of approximately 100 parking spaces on East Strand
- Improvements to the Trolley Museum and waterfront trolley service
- Sewage treatment plant improvements including capacity expansions and enhanced worker safety
- Upgrades to Hasbrouck Park including vegetation removal and provision of historic interpretive information
- Improvements to the Ponckhockie neighborhood including housing rehabilitation efforts and sidewalk construction
- Construction of pedestrian access to the Kingston Lighthouse
- Delaware Avenue street improvements including the reconstruction of lower Delaware Avenue
- Kingston Point Park improvements focusing on passive recreation opportunities
- Development of a Rondout Creek Harbor Management Plan

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Implementation Planning Process

Beginning in 2001, this waterfront implementation plan was charged with creating a formal structure for implementing the adopted Local Waterfront Revitalization Program and supplemental actions developed as a part of the planning process. The following implementation plan provides a detailed guide for future development, a context for projects and investments, and strategies for funding and marketing projects that will support and enhance the continued implementation of Kingston's adopted LWRP.

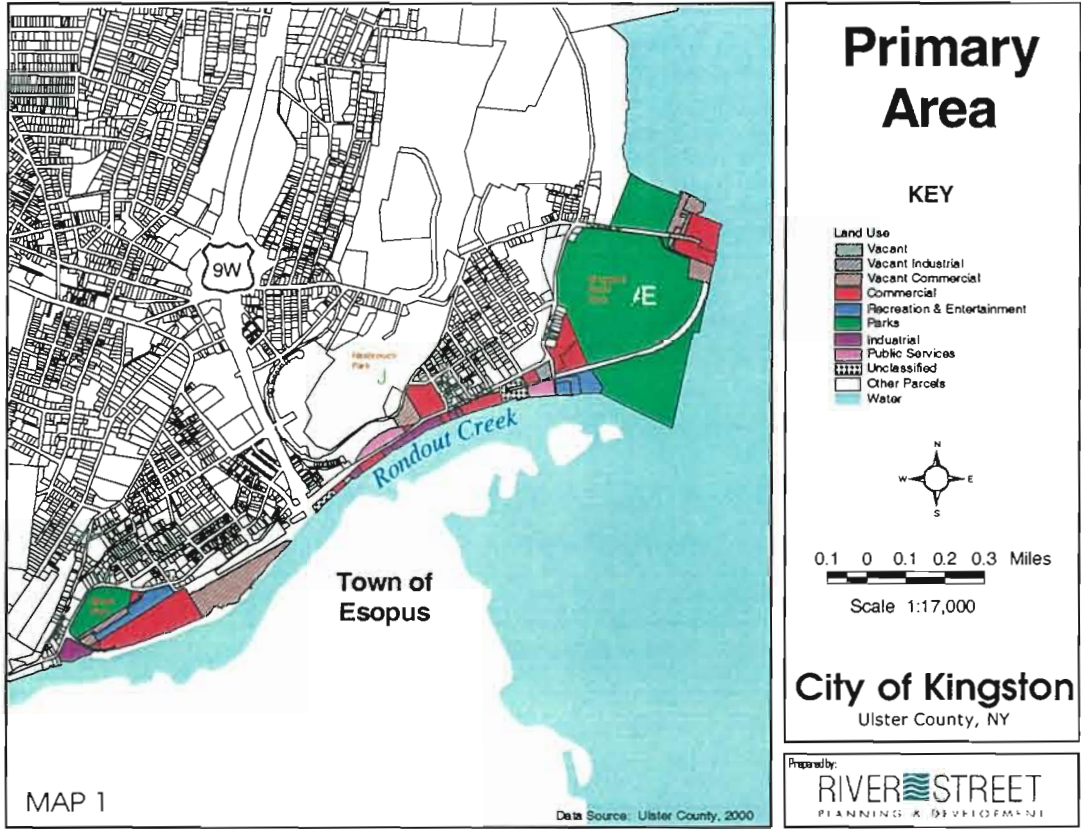
The planning process fused land use planning, economics, consensus building, design, and environmental sciences to create a detailed plan of action for redeveloping the Rondout waterfront. Its approach is preservation-oriented, creating a strong waterfront community that builds on recent successes. It is market-driven. Focused on critical policies and the encouragement of partnerships between government agencies, developers, waterfront businesses and property owners, the implementation plan will make the vision identified in the planning process a reality.

Primary Planning Effort

The current planning effort uses previous plans as a starting point. It focuses efforts on finding solutions to the waterfront challenges that have eluded the city and its partners in the extensive redevelopment efforts that have occurred thus far. The primary task is to address the redevelopment needs of the Rondout waterfront. The Hudson River waterfront has only two large parcels that are anticipated to be redeveloped as Planned Unit Developments. For this reason, and to focus planning on the multiple Rondout parcels, the Hudson Riverfront was not considered in this Implementation Study. The key challenges to redevelopment in the Roundout area are site configuration, property ownership patterns, and potential site contamination by prior industrial uses.

As shown on the Map 1, most of the Rondout waterfront is made up of small parcels scattered between a variety of private owners. The parcels are narrow, some with depths of less than 200 feet from the water's edge. Many contain viable businesses that are non-conforming uses according to current waterfront zoning regulations. Very few of the businesses are water-dependent or related uses. The historic and current industrial uses of many parcels raise environmental contamination issues. Taken together, the site, ownership, and environmental challenges make redevelopment of these parcels more difficult, but far from impossible. With careful planning, good working relationships with current property and business owners, thorough understanding of the site characteristics, and knowledge of market opportunities and available resources, the city should be able to create a set of incentives which will mitigate the challenges.



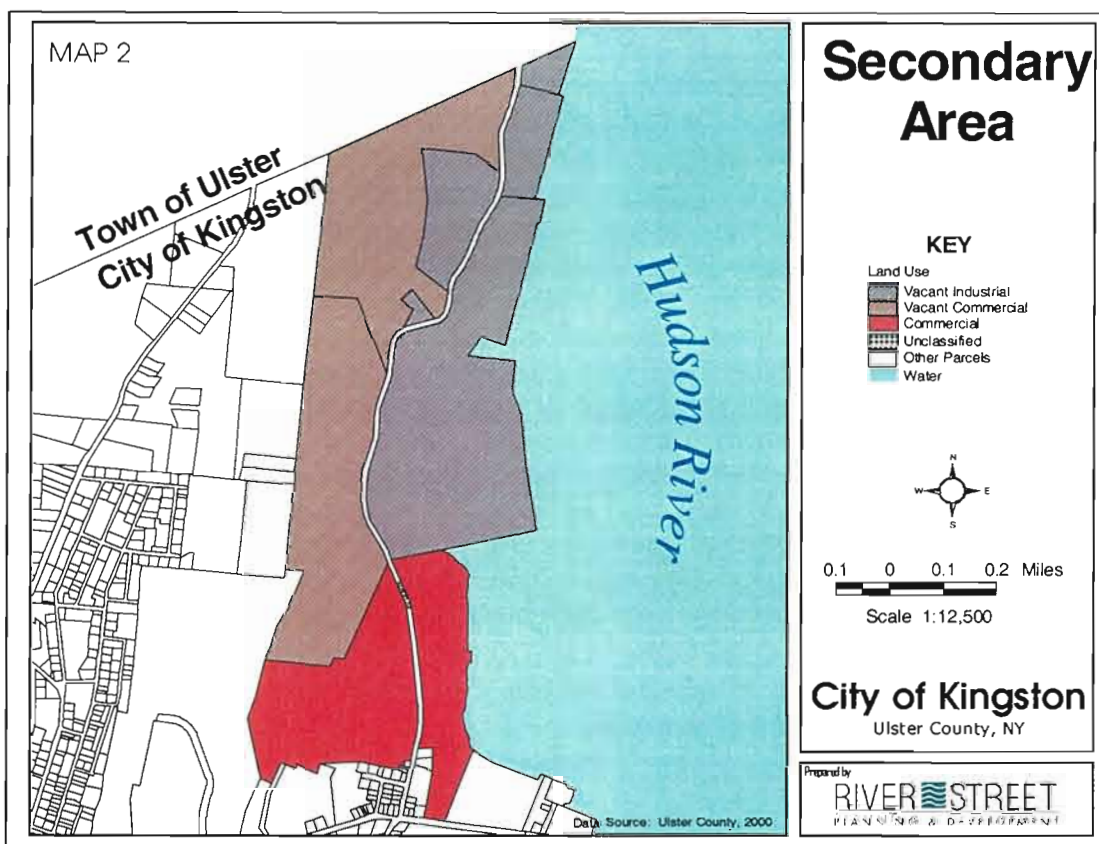


This Waterfront Development Implementation Plan is based upon comprehensive site analysis, including Phase I environmental assessments, a city-wide and waterfront market opportunity analysis, and considerable input from waterfront stakeholders, particularly current property and business owners. All of these factors were considered in identifying a preferred land use pattern and in outlining the specific action strategy of changes and improvements needed to achieve it. The following sections of this document discuss the future land uses and strategy for establishing them in some detail.

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Secondary Planning Area

The secondary planning process focused on a general consideration of future uses for the Hudson River waterfront. These include the former Brickyard and Tilcon properties as shown on the Map 2 below. Unlike the Rondout waterfront, these sites are large, encompassing over 300 acres in several large parcels. In reviewing these sites, this planning process outlined how they fit into the overall waterfront redevelopment strategy and identified potential roles they could play for the city's economic development efforts. This evaluation considered market, tax base, and environmental analysis of the sites, but did not provide detailed recommendations for future land uses or development strategies.



Planning Process

The following section describes the planning, analysis and public participation process that outlined alternative land uses and resulted in the selection of the preferred future use scenario for the Kingston waterfront.

A Steering Committee made up of waterfront business and property owners, and other private, public and non-profit stakeholders was formed to oversee the planning process. The committee met periodically during the planning effort to set priorities, review materials and identify potential strategies for redevelopment. Community feedback from an extensive community outreach effort supplemented Steering Committee input to guide the plan direction. The project team also met with Rondout Creek and Hudson River property owners to understand their business needs and plans for their waterfront properties.

Community and stakeholder outreach created the foundation for a waterfront vision and goals that would guide the planning process. The outreach process was complemented by research and technical analysis including a detailed site assessment, market analysis and shoreline infrastructure inventory. The site assessment and infrastructure inventory identified the existing waterfront needs and resources. The market analysis helped to understand the city's and the waterfront's strengths and weakness and was an important tool in identifying realistic and market-based waterfront redevelopment strategies.

Economic Considerations for Waterfront Development

In crafting a development plan for the waterfront, the project team considered not only community needs and preferences as identified in the vision and goals above, but the opportunities and constraints presented by the local economy and the project site. While the plan was drawn from a "vision," it is market-based. Hence the plan accommodates the market and environmental opportunities and limitations inherent in the city's waterfront. Site and market analyses are included as Appendix A and Appendix B.

An economic analysis of the city and waterfront 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 well ahead of national percentages of total employment in service occupations. Its strongest growth sectors are in transport/communication, services, and FIRE. The city's location at the juncture of the Hudson and Rondout, significant historic resources, and good access to I-87 and thence 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.

There are some economic caveats to consider when crafting a development strategy for the waterfront. Since 1970, the city's population has decreased by 7.4%, although it saw a small gain between 1990 and 2000, perhaps reversing a trend. In

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addition, income growth for the city between 1990 and 2000 did not keep pace with inflation. This was likely influenced by the closure of IBM, but it represents decreased spending power by Kingston residents. The Kingston area has a substantial amount of office and industrial space available and some retail space. New development along the waterfront must 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 Rondout waterfront presents a set of opportunities and challenges that influence the city's economic opportunities. Two key constraints are the narrow site alignment of parcels and limited transportation access. The physical constraints, along with the citywide and waterfront economic analysis, lead to the conclusion that new waterfront development in the primary study area (the Rondout waterfront) should be carefully focused to serve well-defined and limited audiences including neighborhood residents, recreational boaters, and tourists and visitors. Large-scale housing, office, and retail were identified as inappropriate uses for the primary study area due to land, access, and parking constraints. These uses should be limited to the Secondary Study Area (the Brickyard and Tilcon properties) where they can support new commercial development along the Rondout waterfront.

The following paragraphs summarize the key opportunities and constraints identified in the market analysis conducted for the Rondout waterfront area.

Neighborhood Resident Market Opportunities

The census tracts surrounding the study area experienced significant growth in population and housing units between 1990 and 2000. Population increased by one-third from 3,616 to 4,841 persons. Occupied housing units increased by 45% from 1,432 to 2,089 units. Owner-occupied housing units accounted for nearly one-third of the growth, with the remainder in new rental units. The waterfront area is the fastest growing community in the city. The significant population growth within the study area brings new market demands for increased goods and services, particularly in the area of food stores, personal services, video rentals and other home entertainment options, card and gift shops, restaurants, and banking.

Recreational Boating Market

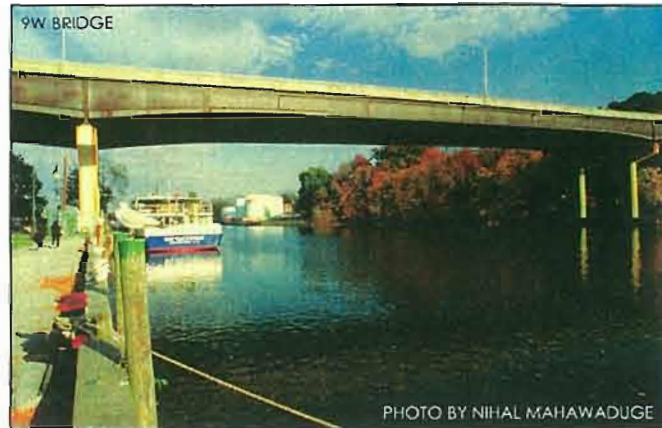
Kingston is already well-established in the recreational boating market with seven marinas (one managed by the city), a sailing center and a private boat club. The city offers amenities, including a good harbor, waterfront attractions and the urban environment of the city itself. Its location between New York City and Albany make it a convenient stop for boaters from the north and south. The recreational boating market is substantial and growing. Participants are generally young and relatively affluent, creating significant market opportunities to expand and diversify the waterfront economy.

Kingston offers over 1,000 boat slips, but the majority are seasonal, meaning that long-term tenants occupy them for most of the year. Other than those offered by the city marina, few transient slips are available during the peak boating season.



Most are at capacity on weekends. From a waterfront development perspective, transient slips generate more revenue for local shops, restaurants, and attractions than seasonally rented slips. The development issue is that seasonal slips are more economically feasible from the marina operator's perspective, so there is a built in market bias to construct seasonal rather than transient slips.

Additional transient slips are needed to generate more potential customers for waterfront businesses. In encouraging marina expansion and the development of more transient slips, the city will need to work with marina operators to address revenue inequities. While it may be possible for some existing marinas to expand by dredging their current facilities, most of the new capacity will likely be created between the State Route 9W Bridge and the eastern edge of the L&M Auto Parts site.



On the private-sector side, local operators are considering the implementation of a water taxi between marinas and a ferry to the train station across the river.

Tourism Market Opportunities

While Kingston has a particular interest and advantage in recreational boating, it is only one element of a broader tourism base for the city and waterfront. The Hudson Valley enjoys a strong tourism market thanks in large part to its proximity and access to the New York City metro area. The valley has considerable natural and heritage resources that draw tourists from New York City. Kingston already offers opportunities in each of three most popular vacation activities: shopping, outdoor activity and visiting historic sites. Kingston operates a visitor center at the foot of Broadway. While this is a good start, sites, programs, amenities, and services in all three of these activities need enhancement to make the waterfront an attractive tourist destination. Attracting and retaining businesses to support a "destination waterfront" including tourist-related retail offerings will require an aggressive recruitment and marketing effort and a concerted effort to tie the waterfront to other attractions in Midtown and Uptown Kingston.

Vision and Goals

The city launched the community planning process in November 2001 with a major public visioning workshop designed to expand citizen awareness of waterfront issues and future trends. More than eighty residents, property owners and business owners attended the meeting to share ideas and ask questions. The community visioning workshop was an opportunity for residents, businesses, and stakeholders to imagine the future of their waterfront. It helped residents to identify strongly held community values, challenges facing the community, and the image and flavor of a vibrant Rondout waterfront.

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Participants identified the waterfront as a critical asset for the city. Visual and physical access to the shoreline, water, wetlands, wildlife, and other natural resources were particularly important to residents. They felt that new development must not only accommodate, but enhance the waterfront's natural resources. The Rondout and Hudson are ideal for both motorized and human-powered boats. Future shoreline improvements must accommodate both. Kingston Point and West Strand Parks were identified as critical recreational resources. Organized waterfront festivals and events as well as restaurant and entertainment venues were seen as important assets.

The waterfront is also valued as a repository for human industrial and transportation history and for the significant impact that waterways had on the historical development of the city and region. The remaining historic structures, particularly the Millens Steel and former Cornell Steamships buildings were identified as assets that must be preserved. The waterfront museums and trolley service were identified as critical links to the past. People like the eclectic nature of the waterfront and feel that future development must reflect not only the history, but also the diverse "funky" character, human scale, and walkability of the area. The history and character of the area have enabled it to attract perhaps its most crucial asset: a diverse group of residents who are building strong waterfront neighborhoods. The plan must promote waterfront development that protects and enhances the adjacent residential neighborhoods.

In discussing community challenges, visioning workshop participants cited the complexities of meeting the needs of both visitors and residents. Participants wanted to draw more people to the Kingston waterfront and make it a year-round destination, but felt that it was also critical to make changes which benefit neighborhood residents. A small grocery store, food cooperative, bank, drycleaner, coffee shop, and book store were identified as current needs. Generally, people wanted to see a greater variety of commercial uses developed that are stable and successful on the waterfront. The odor problems at the wastewater treatment plant and the appearance of the auto and metal recycling facilities were identified as the biggest obstacles to redevelopment. Environmental clean up of the water and land was cited as a critical need. Participants felt that access for bikes, pedestrians, and personal watercraft needed to be improved. They felt boat speed limits need better enforcement. Improved recreational opportunities, especially for children would make the waterfront more appealing to families. Parking was also identified as a need, not only for cars, but buses, motor coach tours, motorcycles, and bicycles. All felt that the private sector should take the lead in redevelopment with some limited city support. The city was also charged with ensuring that new development be carefully designed with vegetative screening and attractive paving materials.

Lastly, participants described their preferred future for the waterfront. People said that the Rondout will be an active, urban, historic and culturally vibrant area that attracts new residents and visitors. Waterfront walking and bike trails would provide



access to the shoreline. People will be able to easily walk from place to place, drawn from one amenity to another. A clean, natural, open and safe environment will provide things to do seven days a week all year long. Some example ideas were shops, recreational opportunities, and historic and cultural venues that appeal to all ages. Strong design standards will ensure that new development builds upon and enhances the historic and eclectic waterfront environment.



The project team developed a vision statement and set of seven goals to guide the project based on feedback from the initial visioning workshop and a later community action planning workshop, issues identified by the Steering Committee and waterfront development principles provided by Scenic Hudson. The goals address waterfront amenities, development needs, access, recreational opportunities, design, site clean-up and reuse, transportation and parking needs. The vision statement and goals are summarized below.

Vision Statement

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.

Waterfront Goals

Goal 1: Increase amenities and facilities to attract and serve waterfront visitors

The Kingston waterfront offers a strong base of attractions, stores, restaurants, and events to attract tourists and boaters to the area. The plan seeks to enhance and significantly expand these facilities to provide a comprehensive set of natural, commercial, and cultural opportunities that will draw visitors to the waterfront throughout the year and expand the amount of time spent in each visit.

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Goal 2: Provide goods, services, and housing options needed to support local waterfront residents and businesses

The Kingston waterfront must serve residents, local businesses, and visitors. The plan focuses on providing new waterfront and neighborhood amenities including increased waterfront access, new parks, and improvements to existing parks. The plan includes waterfront design standards that will ensure that new development is compatible with the existing neighborhood and commercial fabric and consistent with sustainable waterfront development practices. The expanded retail and commercial opportunities include both resident-based and visitor-based businesses to improve access to goods and services on the waterfront.

Goal 3: Enhance the public access to the waterfront

The City of Kingston has committed to providing comprehensive public access to the Rondout Creek and Hudson River waterfront. The plan proposes a waterfront esplanade that would provide pedestrian and bicycle access from Block Park to Kingston Point Park and recommends that the access be extended northwards along the Hudson River Shore. The Implementation Plan recommends view corridor protections and access point provisions to ensure that new development encourages access to the water. Substantial park enhancements offer opportunities for increased waterfront access.

Goal 4: Enhance passive and active recreational opportunities

A key focus of the plan has been the expansion of waterfront recreational uses. These range from enhancements at Block and West Strand Parks to the development of new waterfront recreational facilities on Island Dock and along East Strand adjacent to the Ponckhockie neighborhood. Recreation improvements include trails, marinas, facilities for non-motorized boats, a community skating rink, and significant improvements at Kingston Point Park such as a floating stage.

Goal 5: Ensure that the design of new development is consistent with natural and historic character

The Kingston waterfront's rich architectural history and natural resources are its strongest assets. Kingston's Rondout and Hudson River waterfronts are New York State-designated Significant Habitat Areas. The waterfront plan recommends a specific set of design standards to ensure that future development protects and enhances environmental and historic resources.

Goal 6: Facilitate clean-up and reuse of industrial sites

One of the waterfront's biggest challenges is the perception of environmental damage caused by its long industrial history. The waterfront plan identifies specific strategies and resources to facilitate contaminant remediation and reuse of waterfront industrial sites.

Goal 7: Improve transportation access and parking

Significant new waterfront development will require substantial transportation access improvements. The plan calls for a multi-modal transportation strategy that will encourage waterfront visitors and residents to walk, bike, and take transit. An



extensive trail system will allow people to walk or bike to all attractions on the waterfront. Expansions of the trolley service and jitney service on the waterfront will allow visitors to circulate without using an automobile. The plan calls for reconstructing East Strand to create a more bike and pedestrian friendly environment with sidewalks, street trees, bike paths, and other amenities. The plan creates new parking to serve the new development, focusing about half of the initial supply in a central lot adjacent to the waste water treatment plant. The plan seeks to minimize the amount of parking to be constructed on the water side of East Strand, recommending more remote storage of automobiles.

Structuring a Development Alternative

The vision, goals and research summarized above was the basis for the project team to outline a set of project assumptions and “givens” to use with the project Steering Committee in framing land use alternatives. The project assumptions essentially document expected results and outline the key implementation methodology. The givens include several projects that address key issues identified during the initial outreach and research phase; these were taken as “given” that they would ultimately be included in the preferred land use alternatives. The assumptions and givens for the project are described below:

Assumptions

- Sustainable tax base enhancement is the development priority.
- Proposed land uses must address the needs of both residents and tourists.
- This will be a phased and incremental development strategy that will show significant accomplishments in the Rondout waterfront in the first five years of implementation.
- Future land uses will drive clean up standards so that environmental issues are addressed in a cost-effective manner that is fully protective of human health and the environment.
- The city will work with existing industrial property owners to address land use conflicts in a manner that respects the business and economic needs of current property and business owners.
- Connections to the Rondout Creek will be enhanced for recreation and tourism opportunities.
- The development strategy will be practical and implementable within the staff and financial framework reasonably believed to be available to the city and its partners over the planning horizon.
- Land intensive uses, such as large-scale commercial, offices or residential development will be limited to the secondary area (Brickyard and Tilcon properties) due to land constraints.
- The city will make a concerted effort to package and market the primary study area as one development site.

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Givens

- There will be public access along the waterfront in a riverfront trail.
- The odor and appearance problems of the sewage treatment plant will be solved within the first three years of implementation.
- The museums will be clustered in a district and supported by the overall redevelopment strategy.
- Trolley service will begin at West Strand Park and continue east along the length of the primary study area.
- Redevelopment of the primary area will be mixed-use with no single use dominating, creating an active corridor throughout the day and all through the year.
- The waterfront will be developed to maximize multi-modal access, with high-quality pedestrian connections.

Proposed Waterfront Land Uses

The project team developed the preferred development alternative over several months in consultation with the city, Steering Committee, community members, project stakeholders, and the NYSDOS Division of Coastal Resources. In April 2002, the project team held an alternatives development workshop with the Steering Committee and key project stakeholders. The workshop reviewed the key research findings, introduced and refined the project assumptions and givens, and walked participants through a group mapping exercise to identify potential waterfront projects and development opportunities.

The project team used Steering Committee and stakeholder ideas from this workshop to craft a proposed waterfront development alternative. The alternative included the full range of improvements proposed by the Steering Committee to implement and support a mixed-use Rondout waterfront including new commercial development, trail and recreational projects, shoreline infrastructure needs, transportation improvements, support for local museums, and a set of design standards for all waterfront development. The project team prepared a full-color concept plan depicting proposed projects needed to implement the waterfront strategy as well as estimates of implementation costs and benefits to be used at a community design workshop.

The proposed land use alternative was presented to the community at a May 2002 design workshop. A large group presentation described the proposal and its estimated costs and development impacts. Participants were then split into three groups to review the project plan and propose changes. At the end of the evening each group reported back to the full assembly. Feedback from the design workshop and a meeting with the Rondout and Ponckhockie neighborhood associations in June was used to refine the proposed alternative in order to develop a final draft alternative for presentation to the Steering Committee and local community.

A concept plan depicting the preferred development alternative is included as Figure 1 at the end of the document. A financial impact analysis of the



implementation of the plan is included as Appendix C. The following paragraphs describe the preferred alternative which resulted from this process.

Waterfront-Wide Improvements

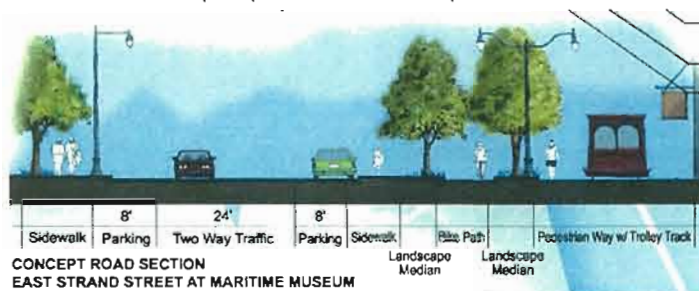
Several of the proposed projects will be implemented along the entire waterfront and are needed to support the overall waterfront development. These include:

- **Design Standards:** The city will develop a set of design standards to guide future development and rehabilitation of buildings on the waterfront. These standards will help the city to direct the way the waterfront develops and ensure that it becomes an active and vibrant regional destination. The standards will also allow the city, the community, and developers to work more effectively as new projects are proposed throughout the study area.

- **Public Access:** Public access will be provided along the waterfront in a riverfront trail. The trail, which may deviate from the shoreline in some locations, will offer pedestrian access around Island Dock to its connection to Block Park, and then eastward along West Strand Street through West Strand Park. From there it will continue along the shoreline to the tip of Kingston Landing. At Kingston Landing it will split into two trails, one to go around the west side of Kingston Point Park continuing around the park to the current Rotary Park entrance. The other leg of the trail will follow the trolley tracks to the former Dayliner dock and the bridge connecting into Kingston Point Park.



- **Reconstruct East Strand:** East Strand will be reconstructed to accommodate cars, pedestrians, bicyclists, trolley service, and local business delivery needs. The reconstruction will include two lanes of traffic, parallel parking on some portions of the street, sidewalks on both sides of the street, a bike trail, trolley tracks, street trees, period lighting and other improvements that will extend the existing Broadway streetscape amenities onto East Strand. The following cross section shows the proposed concept for East Strand at the Maritime Museum.



Kingston Waterfront Development Implementation Plan

- **Resolve Problems at the Treatment Plant:** Resolution of odor problems at the wastewater treatment plant will receive priority attention. Short-term strategies will include chemical treatment to mask the odor problem while the city secures funding to construct tank seals and implement system-wide controls.



Restored Day Liner Dock

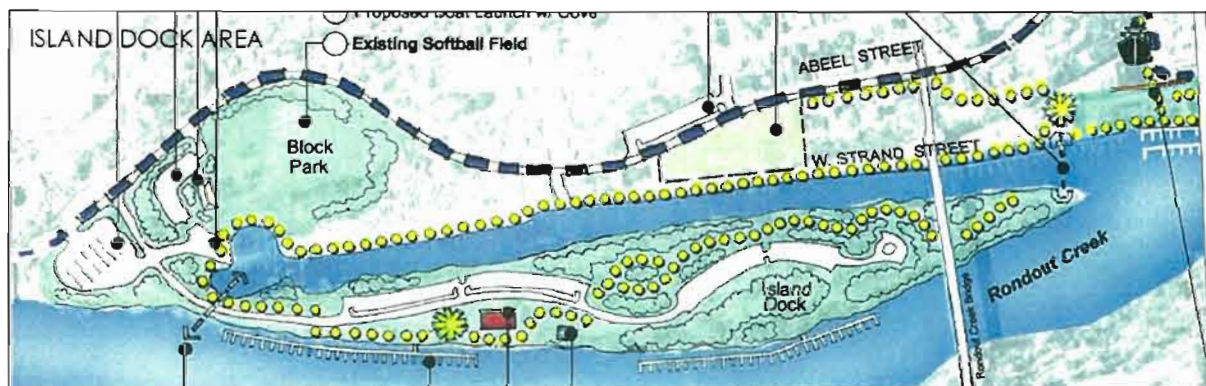
- **Trolley Service:** Trolley service will be provided along the entire length of the primary study area, with service operating from West Strand Park to the former Dayliner dock. Future extensions may include service to Island Dock, particularly if a proposed Hudson River aquarium is located there, the former Tilcon quarry, and Hasbrouck Park with the potential for connections from the park to the rest of the city.

Sub-Area Improvements

For the purpose of crafting and describing specific improvements, the Primary Study Area was split into three sub-areas. These are the Island Dock Area, East Strand and Kingston Point. The following sections describe the improvements proposed for each sub-area.

Island Dock Area

This sub-area included Island Dock, Block Park and West Strand Park. It is bounded on the west by Block Park and on the east by the Route 9W Bridge. It is located immediately adjacent to the established commercial areas on Broadway and Abeel Street and the proposed Noah Hotel. The city marina and Block Park provide good access to recreational amenities.



The Abeel Street reconstruction project will include continuous sidewalk and possible bicycle access. Island Dock itself includes two unused boat launches and would be suitable for waterfront and passive recreational uses. A bridge for pedestrian



access to the east tip by bridge was considered but not pursued due to feasibility issues.

The key site constraints are access and terrain. The only land access point for Island Dock is at the western tip, away from the focus of waterfront commercial activity. The peninsula's soil characteristics (it is made up mostly of loose fill) limit development opportunities and create significant structural challenges for building construction. In addition, the area between Island Dock and the mainland is in need of dredging if additional marina operations and boat slips are to be constructed. The dredging should include changes to the causeway at the western end of Island Dock to improve the flushing action of the creek, reducing the need for future dredging activities

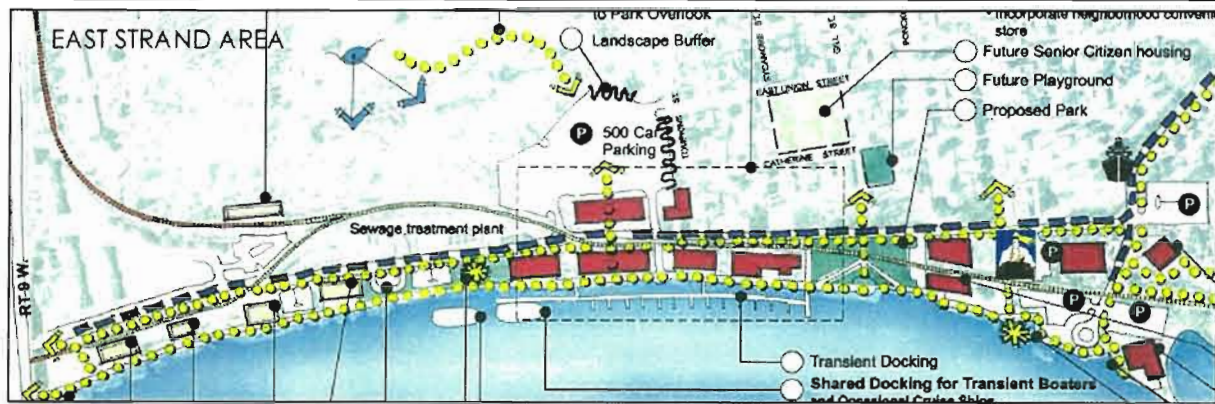
The preferred alternative calls for Island Dock to become a new recreation node on the waterfront. Proposed improvements include:

- Two new boat launches, one for motorized boats, the other for human powered vessels. The trailer launch would be located at the intersection of Island Dock and Block Park in a cove constructed by dredging.
- Development of a channel at the western end of Island Dock to facilitate access from the boat launch/cove to the Rondout channel.
- Up to 60 transient boat slips on the south side of Island Dock
- A crew pavilion for local rowing teams and clubs (located on Island Dock or immediately west of it)
- A boat/bike rental concession
- New park facilities and trails
- Continued display of sculpture on the tip of Island Dock, with the potential to identify opportunities for other permanent public art displays along the waterfront
- New pedestrian connection from the east end of Island Dock to West Strand Park, likely to be some sort of small ferry service to begin with, but could expand to a drawbridge in the future
- New parking near Block Park to serve trailer storage for the new boat launch on Island Dock and to enable the removal of the existing shoulder parking for the park
- A potential location for the proposed Hudson River aquarium

East Strand

The East Strand sub-area begins at the Route 9W Bridge and continues eastward to Kingston Landing and the lighthouse jetty. Its eastern border is formed by Kingston Point Park. The East Strand area is well-located for new commercial development. It is close to existing residential and commercial development, making it a prime area for new retail, commercial, service, and entertainment uses. This area is home to the Trolley and Hudson River Maritime Museums and the Tugboat Exhibit. The former Millens Steel and Cornell Steamships buildings are beautiful historic structures with excellent reuse potential. Its long shoreline offers considerable marina potential.

Kingston Waterfront Development Implementation Plan



The wastewater treatment plant is located in this segment and the odor problems are a development constraint. Another constraint is that development parcels are small and shallow, for commercial redevelopment. Some are less than 200 feet deep from East Strand to the shoreline. The current fuel storage and metal recycling operations are incompatible with the future uses desired for this segment. Some environmental site contamination issues from current and historic industrial uses have been identified. The implementation strategy outlines a number of strategies to mitigate site constraints and conflicts including improvements at the wastewater plant to reduce odors, relocation strategies for the incompatible uses, and environmental remediation at contaminated sites.



The preferred alternative calls for the East Strand area to become a commercial/entertainment node with:

- Enhancements to the Trolley and Maritime Museums
- Recreational amenities, including a possible environmental education center, waterfront park, and new water feature/ice skating rink
- Reuse of existing historic structures for arts, retail, entertainment and museum uses
- 106,000 sq. ft. of new retail, including community based retail with a local food market or coop, dry cleaner and laundromat
- 106,000 sq. ft. for a mix of office and commercial space and multi-family residential development



- 12,000 sq. ft. destination restaurant entertainment venue at Kingston Landing
- Transient marina and new docking space for cruise and tour boats
- Creation of a Tugboat Museum
- Destination restaurant/entertainment at Kingston Landing

Kingston Point

This sub-area is made up of Kingston Point Park, the Heritage Oil redevelopment site, and Kingston Beach. Kingston Point Park offers excellent recreational opportunities, views of Rondout Creek and the Hudson River, and significant natural areas. The Heritage Oil site is the largest privately held parcel in the primary study area. Its prominent location on the Hudson River makes it an important anchor for the waterfront. Kingston Point Beach is the only public beach in the city and provides water access for swimmers, a boat launch, a large parking lot and parking overflow in a lawn area. The entire sub-area has excellent visibility from both the Hudson and the Rondout, making it the gateway to the entire study area from the water.

The primary development constraints in this subarea are related to terrain, drainage, and location of wetlands. Significant floodway, floodplain and state designated wetlands will need to be evaluated and enhanced. Strong currents at the mouth of the Rondout limit long-term marina storage of small boats, but this area is still usable for larger boats or short-term storage. A former landfill and the oil storage operations in this area have raised environmental quality issues. The oil storage operations have been well-managed and have a good track record for addressing environmental needs, but leaching from the former landfill is still a concern. The overall impact of the landfill is not fully understood at this time and will require additional evaluation.



The plan calls for enhancing Kingston Point Park through a number of initiatives to increase recreational opportunities and recognize the historic role it played in the development of the waterfront and city. The preferred alternative includes the following improvements and proposals:

- Construction of a carousel and consideration of the feasibility of reconstructing other former historic amusement park structures
- Feasibility analysis of a 400 person amphitheater with floating stage
- Restored Dayliner dock to serve visiting cruise ships
- Restrooms with seasonal concession booth
- Possible location for an environmental education center with a boardwalk constructed into the wetland area of the park
- Possible reconstruction of trolley tracks on the west side of the park to connect beach parking with waterfront along the Rondout Creek

Kingston Waterfront Development Implementation Plan

A number of uses were considered for the Heritage Oil site. All of the alternatives considered assumed that public waterfront access to this visual and natural resource would be provided. The environmental, economic, and community issues surrounding the ultimate use of this site were the most complex of any encountered in the planning process. Alternatives considered and key issues raised with each included:

- **Condominium development:** Concerns were raised about the compatibility of public access and high-end residential use. Topography, soil and other structural challenges of the site would create higher construction costs, requiring an upscale product. Design standards needed to ensure compatibility with the natural environment would also affect the development economics of a residential build-out. The marketability of such a product in proximity to a number of public uses such as Kingston Point Park and Kingston Beach was questioned.
- **Development of a restaurant/yacht club/marina complex:** A more detailed market and structural analysis of the site is needed to determine the economic feasibility of this proposed use.
- **Hotel and conference center:** Analysis indicated inadequate market for a facility at Kingston Point in addition to the proposed Noah Hotel at the current time. If the Noah Hotel is not constructed for some reason, this site should be reanalyzed as a potential hotel and conference center.
- **A “no build” option:** This option assumed that the ultimate use for the site would be recreation or open space.

Given the complexity of the issues raised, recommendation of a single end use of this site was beyond the scope of the waterfront planning effort. This site will be greatly influenced by the redevelopment of the Brickyard and Tilcon sites located immediately to the north in the Secondary Study Area. While this plan does not recommend a specific use for the site, it does assume that development in the remainder of the Primary and the Secondary Study Areas will make the redevelopment of the Heritage Oil site an attractive economic opportunity for the property owner and the city. The final recommendation of the waterfront plan for this site is that further analysis of potential future uses for the site be conducted. The financial impact analysis for this plan (Appendix C) assumes that the site will be redeveloped within the 15-year planning horizon, and it includes the economic impacts of that redevelopment.

Proposed improvements for Kingston Beach include upgrades to the existing boat ramp to provide improved boat access to the Hudson River. Realignment of the parking lot to enhance the beachfront and facilitate shared parking with Kingston Point or the Rondout waterfront is proposed. Kingston Beach parking might be improved with a shuttle service to Rondout Creek and nearby trolley service to beach or Kingston Point Park parking lots. Public purchase of the site immediately to the west of the park to be used for public festivals and events is another proposed improvement.



Implementation Framework

This plan will be implemented in the context of the city's adopted LWRP with assistance and coordination from New York State Department of State. Implementation and management of the plan will be a complex and long-term challenge requiring the active participation of the city, NYS Department of State, specialized consulting and development talent, public funding agencies, property owners and developers and other local and regional partners.

The plan recommends that the city create or designate a specific agency or entity to implement and manage the plan. Given the plan's complexity and funding needs, it is likely that the waterfront development entity will take the form of an industrial development agency or a waterfront authority. Such organizations can have bonding authority and can provide financing for private development. It is possible that an existing organization, such as the Ulster County Development Corporation, could take on such a role for the waterfront. Such a partnership between the city and county would require close coordination and a commitment by the county to provide adequate staffing and resources to support the broad range of waterfront initiatives described in the implementation strategy. The economic development section of the implementation strategy describes the benefits and role of a waterfront development agency in more detail.

Development will be facilitated with a mix of private and public investment. Key public investments will include improvements to the sewage treatment plant, transportation infrastructure and relocation assistance for the existing waterfront recycling uses. The city can also offer incentives to invest in the waterfront through state and federal funding programs described in the implementation strategy and through the existing development incentives in its waterfront zoning.

Kingston Waterfront Development Implementation Plan



Financial Impact Analysis

The waterfront plan guides growth and investment in the Rondout Creek waterfront with the goal of maximizing and sustaining public benefit, wealth creation and economic stability. The “Implementation strategy” section of the plan describes each project in detail including its costs and possible funding sources. This section summarizes the financial information and discusses the economic impact of the plan as a whole. Supporting proforma spreadsheets showing plan totals and project by project breakdowns can be found in Appendix C.

All summary figures in this section are presented as ranges reflecting the four development scenarios considered for the Heritage Oil site on Kingston Point. The lowest cost and revenue figures reflect no redevelopment of the site during the 15-year planning horizon. The highest estimates assume redevelopment of the site for condominiums. Two other development options, a yacht club/marina and a hotel/conference center, result in intermediate levels of cost and revenue.

The thirty-five projects delineated in the Implementation strategy would result in the investment of \$59 to \$85 million in Kingston’s waterfront over the 15-year planning period. Of this investment, the plan projects \$5.7 million from city funds, \$25.5 million in other public support (including federal, state, and county funds, public financing, and foundation support) and \$28.1 million to \$53.4 million in private investment, depending on the end use of the Heritage Oil site.

This financing strategy leverages a city commitment of \$5.7 million with a minimum of \$53.8 million in other funds, a 1:9 leverage ratio. In other words, every dollar the city spends on plan implementation will result in at least \$9.00 of additional investment in the city of Kingston.

Using a conservative analysis, the increased property and sales tax revenue to the City anticipated from these projects during that same 15 year window ranges from \$6.3 million to \$9.1 million depending on the plan for the Heritage Oil site. Regardless of which scenario comes to pass for that site, the increased revenue is more than enough to offset the \$5.7 million city cost to implement the plan.

In addition to this City revenue, the School District would see a significant increase in revenue. Depending on the Heritage Oil site scenario, the School District would receive between \$6.8 and \$10.9 million in total additional property tax revenue by year 15.

Revenue Projection Methodology

The revenue projections included in this impact assessment use a conservative analysis that includes only property and sales tax revenues expected to be derived directly from major new construction and redevelopment projects specifically identified in the plan.

Kingston Waterfront Development Implementation Plan

The initiatives described in this plan would clearly have positive impacts on revenue that are not included in these conservative projections. The plan calls for infrastructure improvements, streetscape enhancement, parks and recreation area upgrading, brownfields remediation, and transportation improvements, all of which will revitalize the waterfront and stabilize surrounding neighborhoods. As a result, this plan is likely to result in enhanced property values and additional development that is not specifically identified in the plan. The plan will also generate jobs that will in turn increase consumer spending in the city.

None of the revenue associated with increasing property values, additional development or 'spin-off' consumer spending is included in the revenue projections for this analysis. Because of this conservative approach, in all likelihood these proformas significantly underestimate the true financial benefits of plan implementation.

Phasing

The Implementation strategy is divided into three phases: short term for projects that can be implemented in the first three years, medium term for projects to be implemented in years four through seven, and long term for projects expected to be implemented within the eight to fifteen-year time frame of the waterfront plan. The sections below describe the cost and revenue associated with each phase.

Of the total, 22 projects are characterized as short term (years one through three), nine are medium term (years four through seven), and four are long term projects that will be implemented in years eight through fifteen. Note that there is some overlap between the short, medium, and long-term projects. Phasing categories indicate when a project begins. Some projects that begin in years one through three will still be active in the medium term and a number of projects that begin in years four through seven will not yet be complete when the long-term projects begin implementation in year eight.

Phasing priorities were based on input from project proponents, the local community (including neighborhood groups) and the city of Kingston, as well as on the consulting team's professional judgment and past experience. Ultimately, development activity may vary from the proposed phases, as some projects will mature more quickly and others may fade.

Short Term Actions

The short term actions generally include highly feasible projects that were considered a priority by most of the community. The majority of these short term projects have undergone some pre-planning and funding sources have already been identified. Total costs for short term projects are estimated at about \$19.5 million, of which approximately \$1.9 million is projected to come from city funds. As currently outlined, the city would need to budget approximately \$660,000 annually during each of the first three years to implement these short term actions.



Ultimately, full implementation of the Implementation Strategy projects will translate into a significant increase in annual tax revenues resulting from an expansion of the city's tax base. However, most of this expansion will come in Phases 2 and 3 (see spreadsheets C-3 and C-4). So while the total cost to the city for years one through three is \$1.9 million, the total new revenue projected by the end of Year 3 is only \$432,000 (\$366,000 in property tax revenues and \$66,000 in sales tax revenues). Revenue to the School District over this period is projected at \$462,000.

Medium Term Actions

Medium term actions are those proposed for years four through seven. Total costs for medium term projects are estimated to range from \$18.6 million to \$28.6 million, of which \$2.1 million is projected to come from city funds. As currently outlined, the city would need to budget approximately \$527,000 annually for each of the four years of Phase 2 to implement the medium term actions.

During this phase Kingston would begin to see an expansion of its tax base as some of the major development projects are implemented. **Without any increase in the city's tax rate**, annual property tax revenues should increase by at least \$268,000 during years four through seven due to tax base expansion. If the higher value condominium development option for the Heritage Oil site is implemented, this could be as much as \$381,622 annually. Under all options, sales tax would increase by about \$50,000 annually. These additional property and sales revenues would offset at least 60% of the projected annual city costs during years four through seven.

Including both short and medium term actions, the cumulative city outlay at the end of year 7 will be approximately \$4.0 million. The total tax new tax revenue generated by the end of Year 7 is estimated at between \$1.7 million and \$2.1 million. Revenue to the School District over this period is between \$1.8 and \$2.5 million.

Long Term Actions

Long term actions are proposed for years eight through 15. Total costs for long term projects are estimated at between \$21.3 million and \$36.5 million, of which \$1.6 million is projected to come from city funds. As currently outlined, the city would need to budget an average of \$205,000 annually for the eight years of Phase 3 to implement the long term actions. During this phase the city would realize the full expansion of its tax base with the completion of all Implementation strategy projects. **Without any increase in the city's tax rate**, annual property and sales tax revenues should increase by between \$580,000 and \$867,000 during Years 8-15 and each year thereafter. These additional revenues would more than offset city costs for long term actions within the 15-year planning window.

Including short, medium and long term actions, the cumulative city outlay at the end of Year 15 will be approximately \$5.7 million. Total tax base expansion in terms of additional tax revenues generated by the end of Year 15 is estimated at between

Kingston Waterfront Development Implementation Plan

\$6.3 million and \$9.1 million. Revenue to the School District over this period is projected at between \$6.8 and \$10.9 million.

Summary of Financial Impacts

Many of the projects evaluated herein can be designed, constructed, and launched into operation within the 15-year window, effectively implementing the waterfront plan and enhancing the city of Kingston with exciting, culturally-rich, and economically sustainable development. The economic benefits resulting from plan implementation are diverse and considerable, and more than pay for themselves within the 15 year planning window.

For an investment of \$5.7 million over a 15-year period, the city will stimulate between \$53.8 million and \$79.0 million in additional investments. Using a conservative estimate of tax revenue generation, these projects will result in increased tax revenues to the City of between \$6.3 million and \$9.1 million over that period, generating a net profit on the city's investment during the fifteen year planning period and continuing to generate between \$580,200 and \$866,700 annually thereafter. The School District will also see increased revenues of between \$6.8 and \$10.9 million over the 15 year planning window and between \$620,000 and \$1,048,000 annually each following year.



Implementation Strategy

The following section presents a series of feasible actions supported by the community that will facilitate the implementation of the preferred development alternative. The implementation strategy outlines what needs to be done, how to do it, and how to pay for it to ensure that the long-term needs of the waterfront and city residents will be met. It also identifies three 'catalyst projects' that, on their own, have the power to transform the waterfront. They include improvements to the wastewater treatment plant, the development of waterfront design standards, and the relocation of waterfront scrap recyclers. The catalyst projects are supplemented by an array of supporting projects in five implementation areas: shoreline infrastructure improvements, recreation projects, transportation amenities, museum enhancements, and land use strategies. An Action Plan Matrix, included as Appendix D, summarizes the implementation strategy.

Catalyst projects

Early and effective implementation of the three catalyst projects identified below is critical to the success of the waterfront redevelopment effort. All projects are described as "short term" efforts, meaning that they are expected to be implemented in the first three years of plan adoption. In some cases timelines are shorter, and these are noted in the project description.

Infrastructure Catalyst Project: Address odor from the wastewater treatment plant and make façade improvements

Kingston's wastewater treatment plant located in the center of the study area has an odor problem that has discouraged investment in the waterfront. A critical element of the waterfront redevelopment effort is the mitigation of the odor problems as well as improved screening and façade improvements at the plant.



Investigation of the odor problem has indicated that the primary problem may not be due to deficiencies at the plant, but rather due to delivery problems in the piping system. In some weather conditions, materials sit in the pipes for some time and rot. By the time they arrive at the treatment plant, odor problems caused by the rotted materials overwhelm the system's existing odor controls.

The city was awarded a \$50,000 grant to complete a detailed study of the odor problems. The study was conducted between October and December 2002. It analyzed flows and examined the treatment processes to pinpoint improvements needed to mitigate the odor problem. The study identified three separate strategies

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to control odor: 1) on-site chemical additives; 2) construction of tank seals; 3) system-wide chemical controls.

The city expects to receive \$500,000 in Empire Opportunity Funds to implement initial improvements identified by the study. The city expects to implement on-site chemical controls by the end of 2003.

Time frame:	Short Term
Potential stakeholders/partners:	City Kingston, Empire State Development Corporation, NYS Department of Environmental Conservation (DEC)
Estimated costs:	Odor Control: \$50,000 for evaluation of odor source/solution, \$1.5 to \$2 million for implementation (estimated) Façade: \$150,000
Potential funding sources:	NYS Empire Opportunity Funds, municipal bonding, NYS Revolving Loan Fund

Economic Catalyst Project: Facilitate the relocation of auto and scrap recycling facilities

During the planning process, city staff and planning team members met with waterfront property owners to gain a better understanding of the future needs of local waterfront business owners. Several owners expressed an interest in partnering with the city in the redevelopment, as long as strategies can be crafted to meet their current business needs. For some owners, the waterfront is no longer a desirable location because of poor landside transportation access and limited land to upgrade and/or expand operations.

To address the relocation of uses that are incompatible with the proposed waterfront redevelopment strategy, the city will continue to work with property owners to determine alternative site needs, providing assistance as appropriate to help firms relocate. For the waterfront recycling businesses, the relocation strategy must also include steps to relocate or sell bulky and heavy materials, and ensure site remediation of



environmental issues. Technical and financial resources will likely be necessary to make the relocations financially and technically feasible.

Funding and technical assistance will be critical to making relocations practically and financially feasible for waterfront businesses and property owners. The Mid-



Implementation Strategy

Hudson Valley Land Revitalization Partnership, which funded Phase I environmental assessments for all waterfront properties through an EPA Brownfields grant, has secured funding for some Phase II environmental assessments on the waterfront. The Phase I studies identified problems and proposed mitigation measures. The Phase II studies will provide for detailed documentation and removal of environmental issues. The city could target these funds to the recycling facilities, with agreement from the current property owners, as a tool to facilitate reuse of these sites. Once Phase II studies are complete the city could access relocation funds available from the EPA's Brownfield Revolving Loan Program and the HUD Brownfield Economic Development Initiative.

The city will work with property owners to determine the best tools for site remediation. Property owners may choose to go through the NYS Voluntary Clean Up Program. This program provides a framework for property owners to work with the NYS Department of Environmental Conservation and the NYS Department of Health to remediate a site. When a property owner completes remediation in accordance with its agreement with NYSDEC and NYSDOH, the NYSDEC provides a release from the Department for remedial liability for the work completed. Under this program, remediation efforts must be funded by private sources.

Another option for site remediation is the New York State Brownfields Program. Under this program a site can be remediated using Clean Water/Clean Air Bond Act funds. A site must be municipally owned to qualify for this program. Site ownership must be demonstrated before receiving the grant but not necessarily at the time of application, allowing the city and property owner to determine whether the property transfer makes sense after determining that the project would be funded under the program. The advantage of this approach is that public funds can be used for the clean up, reducing the costs of the private property owner. The disadvantage is that the NYSDEC does not release the former property owner from liability stemming from the remediation or former site contamination.

Another potential tool to facilitate relocation efforts is the U.S. Department of Housing and Urban Development's (USHUD) Brownfields Economic Development Initiative (BEDI) funding. BEDI funds are a flexible funding source that can be used for many different elements of brownfields redevelopment. At this time, a request for new Section 108 loan guarantee authority must accompany each BEDI application, and the BEDI, and Section 108 funds must be used in conjunction with the same economic development project. Currently, the minimum BEDI to Section 108 ratio is 1:1, and the maximum grant amount is \$2 million, though USHUD is considering elimination of the Section 108 matching requirement. BEDI funds can be used for:

- Land acquisition
- Site remediation costs
- Funding reserves
- Section 108 loan
- Direct enhancement of the security of the Section 108 loan
- Provision of financing to for-profit businesses at below-market interest rates

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The city of Kingston is currently at its Section 108 loan limit, making BEDI funding infeasible at this time. As the city's loan status changes or the Section 108 matching requirement is removed, BEDI could become a good flexible funding resource

Time frame:	Short Term
Potential stakeholders/partners:	City of Kingston, waterfront property owners, Mid-Hudson Valley Land Revitalization Partnership, Empire State Development Corporation, Kingston Local Development Corporation, Ulster County Development Corporation, private developers
Estimated costs:	\$1-2 million for site remediation, \$2 million for business relocation
Potential funding sources:	NYS Empire Opportunity Funds, USEPA Brownfields Pilot Program and Revolving Loan Fund Initiative, USHUD Brownfields Economic Development Initiative, USHUD Section 108 loan funds, NYSDEC Brownfields Program, New Markets Tax Credits, private developers

Land Management Catalyst Project: Develop waterfront design standards

The City of Kingston has a desirable well-established design vocabulary in its downtown and wants to carry that character along the waterfront in future development. The city has developed a set of design standards to guide future development and rehabilitation of buildings on the waterfront. These standards will help the city to direct the density, appearance, and massing of waterfront development so that it accomplishes the goal of an active vibrant waterfront. The standards will also allow the city, the community, and developers to work more effectively as new projects are proposed along the waterfront.

The standards address a number of different areas including: neighborhood context, building height and roof design, building scale, building proportions (including setbacks), façade materials and fenestration, building materials, lighting and signs and awnings. These are all important considerations in the design of any building, but are of utmost importance in the design of the waterfront as a whole. The design standards will also address sustainable development principles and practices including energy efficiency, estuary management, ecologically sound shoreline treatment and non-point source pollution prevention. Key elements include:

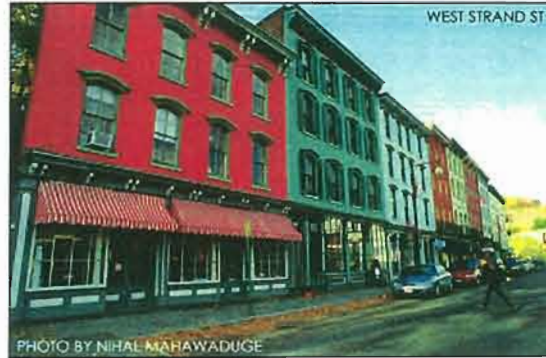
Environmental Context: Design standards promote the awareness of the existing environment and encourage new construction that is sympathetic to the existing character and design of the waterfront and protective of natural resources.

Building Height and Scale: The city has identified appropriate minimum and maximum building heights. These standards ensure that buildings are human-scaled, pedestrian oriented, and compatible with adjacent buildings.



Building Materials: The city also recommended materials for use in building façades, requiring a style that is consistent with surrounding buildings and prohibiting materials that detract from the character of the existing buildings.

Site Planning: The design standards will regulate new development to control negative environmental impacts, with shoreline setbacks, drainage, and landscaping requirements to protect water resources.



A supporting technical memorandum describes the specific issues to be addressed in the city's waterfront design standards and provides an outline of sample language to form the basis of the development standards. It is included as Appendix E.

Time frame:	Short Term
Potential stakeholders/partners:	City of Kingston, NYS Department of State (DOS), current museum operators, historic preservation organizations, Scenic Hudson, and other local business/property owners
Estimated costs:	\$20,000 for professional and design services
Potential funding sources:	City of Kingston, NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program

Supporting Projects

The projects described below will support the redevelopment of the waterfront. However, none of them alone has the transformative power of the catalyst projects described above. This section outlines the basic tasks to be completed, implementation timeframe, potential stakeholders and partners, estimated costs, and potential funding sources for each supporting project. The projects are listed in five topic areas below: shoreline infrastructure improvements, recreation projects, transportation amenities, museum enhancements, and land use strategies.

Projects are described as short, medium or long term efforts. Short term projects are expected to be implemented within three years of plan adoption. Medium term projects should be implemented within seven years and long term projects could take up to fifteen years. The city has committed to an aggressive implementation timeline, with visible changes on the waterfront within the first few years of

Kingston Waterfront Development Implementation Plan

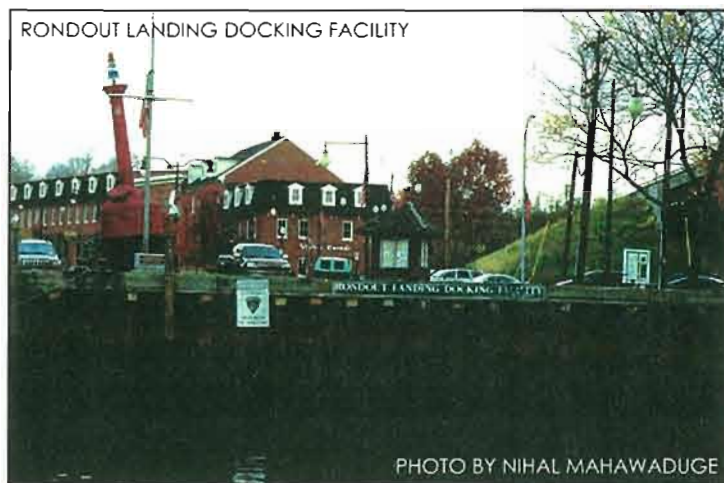
implementation. Due to this, only projects that are very complex or require earlier development to be completed are listed as long term efforts.

Shoreline infrastructure

Shoreline 1: Bulkhead reconstruction

A visual assessment of the Rondout Creek and Hudson River bulkheads from Island Dock/Hideaway Marina to Kingston Landing and along the Hudson River at the Tilcon and Brickyard properties was conducted as a part of the planning process. The complete assessment is included as Appendix F. In some locations, the bulkhead is in very poor condition and may not be salvageable, while in others property owners have maintained the timber bulkheads or installed sheet piling. Some areas lack any type of bulkhead and will likely require shoreline stabilization.

Edwards and Kelcey, consulting engineers to the project, developed cost estimates to determine the overall project costs associated with completed bulkhead and shoreline stabilization repairs identified in the shoreline assessment. The preliminary cost estimate for needed repairs along the Rondout was just under \$1.6 million. Repairs for the Hudson River properties were estimated at about \$3.2 million. More



detailed cost estimates and a conditions summary conducted on a parcel-by-parcel basis are included in Appendix F. Most of the repairs will be completed by private investors as waterfront properties are redeveloped. The city will complete needed repairs on city owned or controlled properties.

Bulkhead reconstruction and shoreline stabilization will be completed by the city for publicly owned segments and by private developers as redevelopment occurs. The bulkhead and shoreline conditions analysis and cost estimates will be useful tools for private developers in understanding the costs of needed improvements for their properties. The city will use information on the city-owned parcels to help prioritize improvements and secure funding for implementation.

Time frame:	Short to Medium Term
Potential stakeholders/partners:	City of Kingston, waterfront property owners, NYSDOS, NYSDEC, Scenic Hudson, US Army Corps of Engineers
Estimated costs:	\$4,816,075 total, with an estimated city expenditure of \$450,000

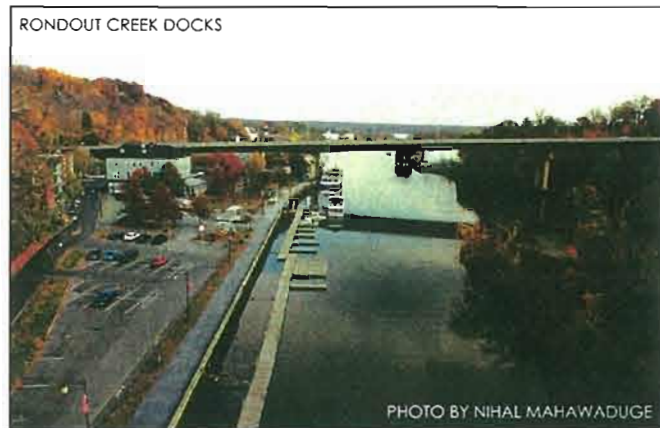


Potential funding sources: Private property owners, US Army Corps of Engineers, NYS Environmental Protection Funds, USDOT Transportation Enhancement Program, USHUD BEDI (as the city becomes eligible), NYS Governor's Office for Small Cities CDBG Program

Shoreline 2: Transient marina and dock construction

Planning and economic analysis identified a shortage of transient marina slips. Seven marinas and a private boating club provide over 1,000 boat slips along Kingston's Hudson River and Rondout Creek waterfronts. However, the majority of these slips are seasonal and occupied by long-term tenants most of the year. Overall, Rondout Creek marinas are at 90 to 95 percent capacity. In 2001, between early May and early November, the city's transient facilities were at capacity from Friday night through Sunday afternoons, but are generally less crowded during the week.

Additional transient slips would provide new access for visitors arriving by boat, encouraging stops in Kingston to visit local shops, restaurants and attractions. Related docking needs identified a new location for the Rip Van Winkle cruise boat and temporary docking for visiting Hudson River cruise ships. The Rip Van Winkle currently docks and boards passengers under the 9W bridge, but would like to move to a site further east where the creek widens, making it easier to maneuver. Visiting cruise ships also use the Rip Van Winkle dock. These ships are even larger than the Rip Van Winkle, making turns impossible in some cases. Cruise ship docking also needs to be accommodated further east. While the long term solution (at least for visiting cruise ships) may include docking at the former Dayliner dock, in the short term new facilities should be located on the Rondout.



The conceptual drawing shows permanent docking facilities for the Rip Van Winkle and temporary facilities for cruise ships along the shoreline of the L&M Auto Parts site. The cruise ship facility would be available for transient docking when not in use by a larger vessel. The concept plan proposes considerable new transient marina construction along the outer edge of Island Dock, along West Strand Park, and along the L&M Auto Parts site. The concept drawing includes 95 new boat slips and as facilities for the Rip Van Winkle and visiting cruise ships

Time frame: Short to Medium Term
Potential stakeholders/partners: Private marina developers and property owners, City of Kingston, Scenic Hudson, NYSDOS, NYSDEC, Hudson River Valley Greenway
Estimated costs: \$225,000

Kingston Waterfront Development Implementation Plan

Potential funding sources: Private developers, City of Kingston, NYS Environmental Protection Fund, Empire State Development Corporation

Shoreline 3: Increase access to the lighthouse

During the planning process the city of Kingston took ownership of the Kingston Lighthouse. It is leased to the Hudson River Maritime Museum, which provides boat access to the lighthouse for visitors. Today the Kingston Lighthouse can only be safely accessed by boat. A stone jetty extends from Kingston Landing on the Rondout to the lighthouse, but it is submerged during high tide, making the lighthouse inaccessible to pedestrians.



Tours of the Rondout Lighthouse are available from the Hudson River Maritime Museum between May and October. The lighthouse is located on the Hudson River north of the mouth of Rondout Creek, a short boat trip from the museum. Access to the lighthouse is provided by the museum's motor launch *Indy*, which operates on a regular schedule during the summer months.

As part of its effort to attract more visitors to the waterfront, the city plans to make the lighthouse more accessible to the public. Specific proposals have included making it available as a bed and breakfast inn and as a venue for small events. Just north of Kingston, the Saugerties Lighthouse Conservancy has had success in operating the Saugerties lighthouse as a museum and bed and breakfast. The museum is open weekends from Memorial Day to Columbus Day, and the bed and breakfast operates all year. The Saugerties Lighthouse is accessible by foot or by shuttle boat when the museum is open.

As a part of its effort to expand access to the lighthouse, the city is considering providing pedestrian access. The United States Army Corps of Engineers recently rebuilt the jetty, but improvements were limited to bulkhead repairs and riprap scour protection, without provision for pedestrian access. The jetty is over 2,000 feet in length and 30 feet wide. It extends from the tidal flats along the Rondout to the lighthouse. The jetty would need to be raised approximately four feet to make the lighthouse accessible during mean high water conditions.



Implementation Strategy

Two potential options for pedestrian access were evaluated as a part of the waterfront planning process. The first option includes building a wooden boardwalk above the jetty at an estimated cost of \$1.5 million. The second option involves raising the jetty itself by about four feet and constructing a 10-foot wide concrete sidewalk to create a level surface for pedestrians at an estimated cost of \$2.6 million. Option 2 was identified as the preferred alternative, despite its significantly higher construction costs, because it created a more stable amenity that could withstand annual spring ice floes.

The next step in the process for expanding lighthouse access will be a market study/feasibility analysis for creating bed and breakfast and events facilities at the property. The study will analyze the market potential, the potential impacts of the proposed uses on the historic character, and the natural environment surrounding the lighthouse. The study will summarize potential operational strategies for these new uses.

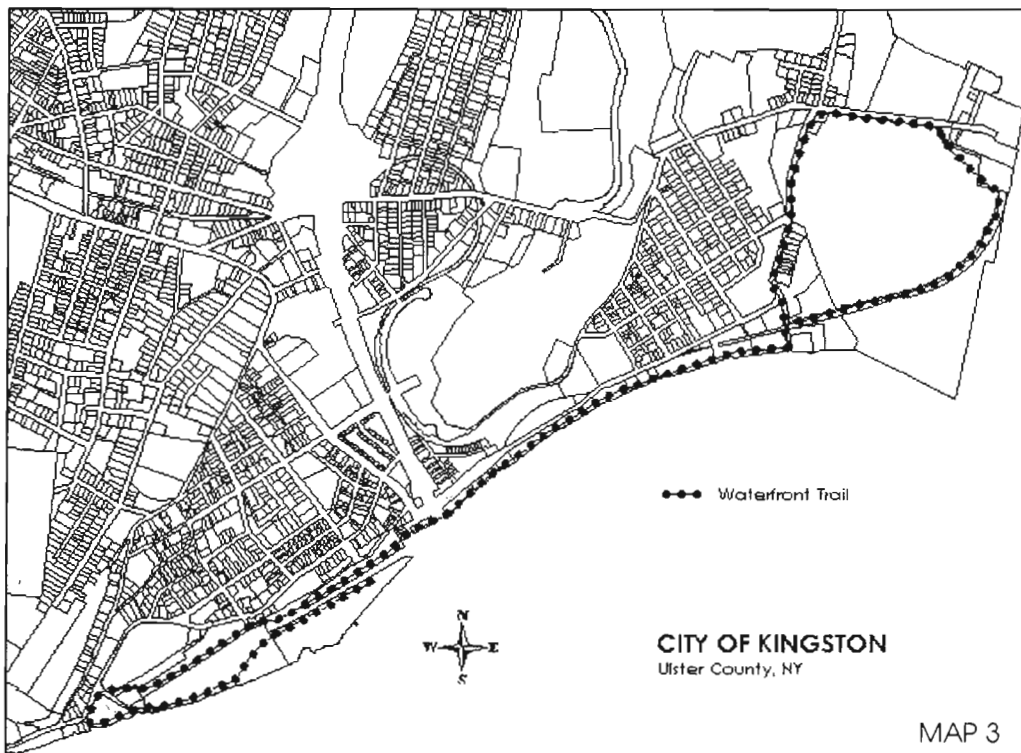
Time frame:	Short to Long Term
Potential stakeholders/partners:	City of Kingston, Hudson River Maritime Museum, Hudson River Valley Greenway, NYS Office of Parks, Recreation and Historic Preservation (OPRHP), Scenic Hudson, US Army Corps of Engineers
Estimated costs:	\$10,000 for a market study \$1.5-2.6 million for jetty construction
Potential funding sources:	US Army Corps of Engineers, NYS Environmental Protection Funds, Empire State Development Corporation, USDOT Transportation Enhancement Program, private foundations.

Recreation

Recreation 1: Develop a waterfront trail along the entire study area.

One of the “givens” from the planning process is the development of a landscaped trail along the entire Kingston waterfront. The trail would begin on Island Dock, pass Block Park and then continue along West Strand through the West Strand Park, the commercial district of East Strand Street and Kingston Point Park. The trail would eventually extend around Kingston Point to Kingston Beach.

Kingston Waterfront Development Implementation Plan



When completed, the waterfront trail will provide a new waterfront recreational opportunity, with greater access to the Rondout and waterfront commercial district. It will offer a recreational attraction and quality of life amenity for residents and businesses along the waterfront. The planned trail will connect to key destinations and enhance existing neighborhood and waterfront view corridors. It will allow public viewing of water-based and waterfront businesses, where compatible with business needs and safety objectives. The trail will celebrate the waterfront's historic character and environmental resources, incorporating maritime design themes.

The trail will be built on publicly-owned land and easements negotiated from private property owners as part of property transactions and development projects. It will be constructed as waterfront properties are redeveloped. The city will work closely with waterfront property owners to incorporate the trail into redevelopment projects in a manner that supports the waterfront and the proposed development projects. Where needed, it will diverge from the immediate shoreline and, with property owner agreement could even include development of a boardwalk along the shoreline. The trail will be designed to minimize runoff from adjacent development with a drainage system that will feed into a storm sewer system that detains runoff before discharging into the Rondout Creek.

Time frame:

Short to Medium Term

Potential stakeholders/partners:

City of Kingston, waterfront property owners, NYS Office of Parks, Recreation and Historic Preservation (OPRHP), NYSDOS, Scenic Hudson, Trolley Museum



Implementation Strategy

Estimated costs:	\$720,000 for landscape trail from Route 9W Bridge to Kingston Landing \$100,000 for crushed rock trail along peninsula from Kingston Landing to Dayliner Dock \$100,000 for crushed rock path between waterfront and Delaware \$100,000 for crushed rock along Delaware Avenue from North Street to Kingston Point Park entrance
Potential funding sources:	City of Kingston, NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancement Program

Recreation 2: Construct enhancements to West Strand Park

West Strand Park is a critical waterfront asset, anchoring commercial development along Broadway at the Rondout waterfront. A number of park improvements were identified as a part of the waterfront planning process. These include improvements to the waterfront trail as it passes through the park, creation of a waterfront plaza in the park, and landscaping improvements.



The park is envisioned as the western endpoint for the waterfront trolley service. A trolley ticket booth and passenger waiting area will be located immediately adjacent to the park at the foot of Broadway.

Time frame:	Short to Medium Term
Potential stakeholders/partners:	City of Kingston, NYSDOS, NYSOPRHP, Scenic Hudson, Hudson River Valley Greenway
Estimated costs:	\$750,000
Potential funding sources:	City of Kingston, NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancement Program, Hudson River Valley Greenway

Recreation 3: Develop Island Dock Park

During the planning process, Island Dock was identified as a potential recreational node because that use is most compatible with the soil conditions on the peninsula, adjacent uses at Block Park and existing natural vegetative growth. Island Dock is made up of loose man-made fill from a variety of building materials including concrete block, masonry rubble from abandoned buildings, and dredged materials that will not support significant building construction. The area has considerable potential to meet the needs of boaters, particularly human-powered vessels such as kayaks, sculls, and crew shells, which lack current facilities. Local crew teams store

Kingston Waterfront Development Implementation Plan

boats off-site and bring them to the Rondout via trailer. Boat launches are available for human-powered vessels, but they are not optimally located, often requiring paddlers to compete with motorized boats for access. Proposed projects for Island Dock to meet the needs of boaters and general recreation uses include:

- Two new boat launches, one for motorized boats, the other for human powered vessels. The motor launch at the intersection of Island Dock and Block Park could be located in a cove constructed by dredging
- Creation of a channel at the western end of Island Dock to facilitate access from the boat launch/cove to the Rondout channel
- A crew pavilion for local rowing teams and clubs (on Island Dock or immediately to the west)
- A boat/skate/bike rental concession
- Restrooms
- Walking and biking trails
- Potential location for a proposed Hudson River aquarium
- Parking for Island Dock and nearby waterfront attractions
- Future new connection from the east end of Island Dock to West Strand Park, likely to be some sort of small ferry service to begin with, but could expand to a draw bridge further in the future

The city is working with the property owner to determine the feasibility of acquiring the site. If an opportunity presents itself, the city will seek grant funding to develop specific plans and designs. Park amenity construction will be phased to accommodate priority needs and to take advantage of funding opportunities, with a first step of completing a preliminary design and environmental review of proposed improvements.

Time frame:	Short to Medium Term																						
Potential stakeholders/partners:	City of Kingston, waterfront property owners, NYSOPRHP, NYSDEC, Hudson River Valley Greenway, Scenic Hudson, local crew teams																						
Estimated costs:	<table border="0"> <tr> <td>Boat launch and cove:</td> <td>\$200,000</td> </tr> <tr> <td>Channel analysis:</td> <td>\$ 5,000</td> </tr> <tr> <td>Crew pavilion:</td> <td>\$400,000</td> </tr> <tr> <td>Concession facility:</td> <td>\$100,000</td> </tr> <tr> <td>Marina slips:</td> <td>Included in Shoreline 2</td> </tr> <tr> <td>Restrooms:</td> <td>\$500,000</td> </tr> <tr> <td>Walking and biking trail:</td> <td>\$100,000</td> </tr> <tr> <td>Roadway:</td> <td>\$412,000</td> </tr> <tr> <td>Landscaping/signage:</td> <td>\$100,000</td> </tr> <tr> <td>Shoreline improvements:</td> <td>Included in Shoreline 1</td> </tr> <tr> <td>Ferry connection:</td> <td>\$25,000 for feasibility analysis</td> </tr> </table>	Boat launch and cove:	\$200,000	Channel analysis:	\$ 5,000	Crew pavilion:	\$400,000	Concession facility:	\$100,000	Marina slips:	Included in Shoreline 2	Restrooms:	\$500,000	Walking and biking trail:	\$100,000	Roadway:	\$412,000	Landscaping/signage:	\$100,000	Shoreline improvements:	Included in Shoreline 1	Ferry connection:	\$25,000 for feasibility analysis
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Potential funding sources:	City of Kingston, NYS Environmental Protection Fund, NYS Governor’s Office for Small Cities CDBG Program, USDOT Transportation Enhancements Program																						



Recreation 4: Construct enhancements to Block Park

Like West Strand Park, Block Park is an existing recreational asset for the Kingston waterfront. The planning effort identified an important safety improvement and a number of other initiatives to take better advantage of Block Park's waterfront location. A proposal for a boat launch and cove are described in the above Island Dock project. This improvement would be constructed at the intersection of the two parks. Parking for the new boat launch would be accommodated in Block Park, with a 60,000 square foot paved area to accommodate boats and trailers if the launch proves feasible.

Improvements proposed for the existing Block Park facility include a new off-street parking lot and landscape enhancements. The approximately fifty space surface parking lot will serve people using the playing fields or other park facilities. By removing existing street parking along Abeel Street, the city will address limited sight distances and remove an existing safety hazard. Landscape enhancements will create a more pleasant environment for park users. A new multiuse trail is planned around the perimeter of Block Park. The multiuse trail will connect to a continuous sidewalk eastward to Broadway.

Time frame:	Short Term
Potential stakeholders/partners:	City of Kingston, Scenic Hudson, Hudson River Valley Greenway, NYSDOS, NYSOPRHP, NYSDEC
Estimated costs:	Construct Inlet/cove: \$100,000 Boat Launch: \$50,000 Parking: \$135,000 Boat/trailer staging: \$120,000 Landscape enhancements: \$ 40,000
Potential funding sources:	City of Kingston, NYS Environmental Protection Fund

Recreation 5: Construct an environmental education center

Kingston's Rondout and Hudson waterfronts offer extraordinary environmental assets. Despite its long industrial history, local residents view these waterfronts first and foremost as natural resources. An environmental education center would take advantage of this exceptional area to provide a local and regional educational resource. A potential location for the proposed center is just east of North Street at the current B. Millens Recycling facility, immediately adjacent to a large wetland. An environmental education center could include classroom/meeting space with hands-on facilities to educate students on issues generally affecting streams, rivers, estuaries, and wetlands with specific information on the Rondout Creek and the Hudson River. It could also include a short path to the wetland/lagoon in Kingston Point Park with a boardwalk constructed over the wetland.

A center would target elementary through high school students in Ulster, Dutchess, and Orange Counties. Other activities that the environmental education center could facilitate include field tours and trips to provide support and educational opportunities on issues such as wetlands conservation practices, habitat restoration,

Kingston Waterfront Development Implementation Plan

pollution remediation efforts, or demonstration of best management practices for waterfront development.

The center could periodically host workshops to give participants an opportunity to share knowledge and get in-depth instruction on a particular topic. Another role for the education center would be in the long-term enhancement and maintenance of environmental quality on Kingston’s waterfront. This could include organization and management of a variety of service projects such as tree planting, stream cleanup, and storm drain labeling. Such projects are an important component of any watershed education effort. The center could also take a role in water quality monitoring, helping to build awareness and draw attention to known impairments

Time frame:	Long Term
Potential stakeholders/partners:	City of Kingston, Scenic Hudson, Hudson River Valley Greenway, NYSDEC, NYSDOS
Estimated costs:	Building: \$1.6 million Boardwalk: \$175,000 Operating: \$150,000 annually
Potential funding sources:	NYS Environmental Protection Fund, foundations, Hudson River Valley Greenway

Recreation 6: Construct a waterfront park adjacent to the Ponckhockie neighborhood

The Ponckhockie neighborhood is currently cut off from the waterfront by industrial and recycling uses. An important element of this plan will be reconnecting this neighborhood to the adjacent waterfront. A waterfront park will be developed adjacent to the neighborhood to serve both area residents and waterfront visitors. The passive recreational facility will provide visual and physical access directly from the neighborhood to the Rondout.

The proposed park location is a portion of the waterfront parcel currently operated by Kingston Oil Supply Company (KOSCO). Redevelopment as a park would require negotiating with the owner for a property transfer to the city and environmental remediation to bring the site to recreational land use standards. This site is not currently used for bulk petroleum storage, though it was used in that manner for over seventy years. For the past four years, the site has

been operated by KOSCO as its base for service technicians, employee training, and as a marine fuel terminal. The site includes a number of above ground storage tanks and was historically used for rail operations. The past industrial and fuel



Implementation Strategy

storage uses will increase the intensity and cost of environmental remediation needed in order to reuse this site as a park. One potential strategy could be to clean the existing soil, cap it with an impermeable membrane and then top that with up to two feet of clean fill.

Given that the site is currently in active economic use, and tank removal must precede cleanup, this project is identified as a long term strategy.

Time frame:	Long Term
Potential stakeholders/partners:	City of Kingston, neighborhood residents, waterfront property owners, Scenic Hudson, NYSDOS, NYSOPRHP
Estimated costs:	\$500,000
Potential funding sources:	NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancements Program, City of Kingston

Recreation 7: Construct a water feature/small skating rink adjacent to the former Cornell Steamship building

One of the goals of the waterfront development effort is to create opportunities for year-round activity. New commercial, entertainment, and restaurant development should be supplemented by recreational amenities that can be enjoyed year round. A key recreational amenity will be the construction of a community ice skating rink that can also be used as a water feature. The skating rink would be used by Kingston families and waterfront visitors during the late fall, winter and early spring. The small rink, reminiscent of a community skating pond, would be focused on family skating and would not accommodate organized sports such as hockey. It could be changed to a fountain in late spring through early fall. The water feature could be designed as an interactive element that would allow visitors to adjust water spray flow or direction or even get into the feature. An example of such a fountain exists in the Willamette River waterfront park in Portland, Oregon.

The proposed site for this recreational amenity is the on the current location of L&M Auto Parts. Redevelopment as a recreational amenity would require negotiation with the property owner for public purchase and environmental remediation. Environmental issues associated with the former industrial and current automotive recycling uses of the site will need to be considered in developing the project. The water feature can be incorporated into the environmental remediation effort, with the paved surface of the water feature/ice rink forming the final impermeable surface over this area of the L&M site.

Time frame:	Medium Term
Potential stakeholders/partners:	City of Kingston, waterfront property owners, Scenic Hudson, NYSOPRHP, NYSDOS
Estimated costs:	\$250,000

Kingston Waterfront Development Implementation Plan

Potential funding sources: NYS Governor’s Office for Small Cities CDBG Program, US Department of the Interior Urban Parks Program, NYS Environmental Protection Fund, USDOT Transportation Enhancements Program, City of Kingston, private developers

Recreation 8: Implement improvements to Kingston Point Park

Kingston Point Park is a critical amenity for the Hudson and Rondout waterfronts. It was the historic landing for the Dayliner ferries 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.



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 (also the location of the former Dayliner 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. Proposed park improvements include:

- Reconstruction of the former Kingston Point Park carousel and consideration of the reconstruction of other former amusement park structures. This proposal includes work to relocate a carousel to the park and a study to determine the feasibility of moving or constructing other amusement park amenities and structures formerly located on the site.
- A feasibility analysis of the construction of an amphitheater with a floating stage. The proposed amphitheater could include seating for four-hundred patrons along a terraced grass slope. Potential uses for the amphitheater include community theater, concerts, and dance programs. The feasibility study will include a market analysis, environmental analysis, and detailed cost estimates for constructing such an amenity at the park.
- Reconstruction of the former Dayliner dock to be used by large cruise ships that visit the waterfront. Passengers could disembark and visit the park or ride the trolley to the waterfront commercial area.
- Construction of restrooms and a seasonal concession booth.



Implementation Strategy

Time frame:	Medium to Long Term
Potential stakeholders/partners:	City of Kingston, Kingston Rotary, park users, Scenic Hudson, NYSDOS, NYSOPRHP
Estimated costs:	Carousel: \$250,000 Amphitheater: \$350,000 Restroom facilities: \$350,000 Dayliner Dock: \$670,000 Disabled access: \$ 50,000
Potential funding sources:	NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancements Program, City of Kingston

Recreation 9: Implement Kingston Beach improvements

Kingston Beach is an important recreational asset for the city. It provides access to the Hudson River for swimmers and boaters. The beach park includes playground facilities for young children and seasonal recreation opportunities such as volleyball. The parking lot serves beachgoers, boaters, and even users of Kingston Point Park. Local kayakers have commented that the boat ramp at the Beach is one of the best



locations to put a non-motorized boat into the Hudson River. Specific beach improvements proposed in this plan include:

- Landscape enhancements for recreational areas
- Improvements to the existing boat launch
- Acquisition of the site adjacent to the park to be graded for festival and event usage. The city does not currently have a site for seasonal carnivals. This site would provide for that use, drawing new people to the waterfront, and would create an additional venue for waterfront festivals, events, and activities.
- Reconfiguration of the parking lot to improve beach access.

Time frame:	Short to Medium Term
Potential stakeholders/partners:	City of Kingston, Scenic Hudson, Hudson River Valley Greenway, NYSDEC, NYSDOS
Estimated costs:	Boat Launch improvements: \$ 25,000 Landscape improvements: \$125,000 Parking lot: \$ 75,000 Festival Site: \$200,000

Kingston Waterfront Development Implementation Plan

Potential funding sources: NYS Environmental Protection Fund, NYS Governor’s Office for Small Cities CDBG Program, USDOT Transportation Enhancements Program, City of Kingston, private developers

Recreation 10: Connect Hasbrouck Park to the waterfront

Hasbrouck Park overlooks the Rondout waterfront, with excellent views along the Creek and the Hudson River. As the waterfront develops, the city will work to create a connection from the waterfront to the Park. The extremely steep slope that gives the park its excellent views is also a challenge to creating waterfront access. For this reason, a trail or other pedestrian access will have a relatively high cost per linear foot. Due to its relative expense versus immediate impact on the waterfront, this action has been identified as a long term project.

Time frame: Long Term
Potential stakeholders/partners: City of Kingston, Scenic Hudson, NYSOPRHP
Estimated costs: Pedestrian connection: \$500,000
Overlook and walkway: \$250,000
Potential funding sources: NYS Environmental Protection Fund, NYS Governor’s Office for Small Cities CDBG Program, City of Kingston

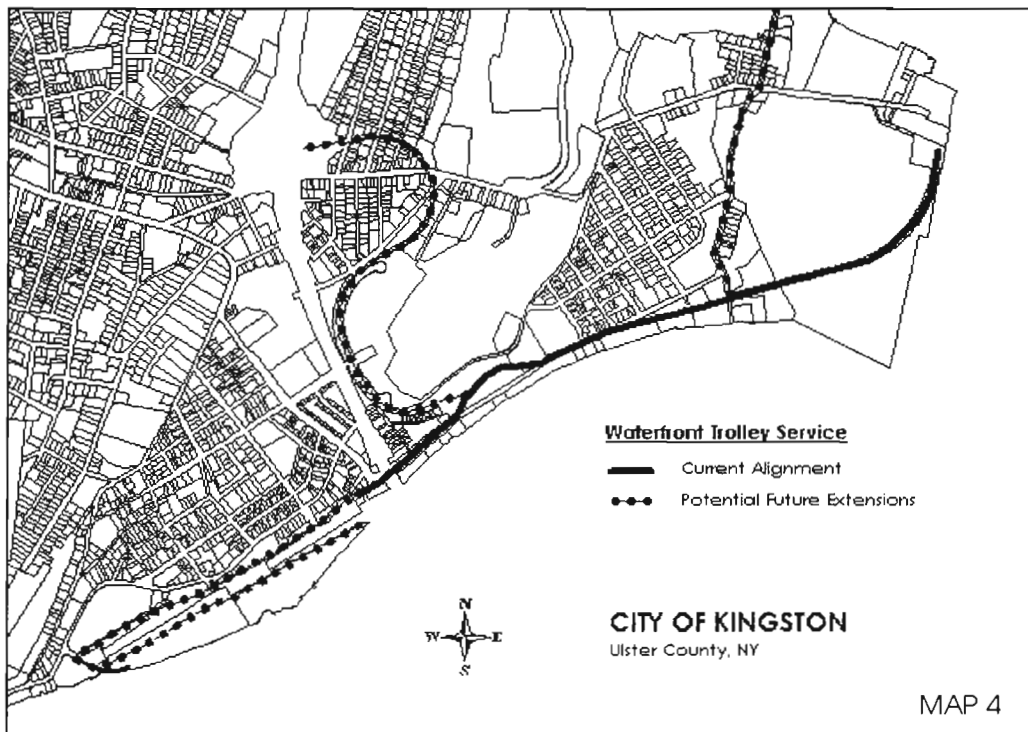
Transportation

Transportation 1: Expand trolley service to serve the entire waterfront

Improved waterfront trolley service will provide an important transportation amenity and tourist draw and will complement the transportation theme identified in the Urban Cultural Park Management Plan. The trolley and Trolley Museum are key assets that demonstrate the role transportation played in the development of the city and the State of New York. The trolley could also offer a practical mode of transportation that efficiently moves groups of visitors.

The waterfront plan proposes facility and service improvements and extensions to provide trolley service from West Strand Park to the former Dayliner dock in Kingston Point Park. Service could eventually extend to Island Dock and the former Tilcon quarry, as desired by future developers and property owners to support proposed projects. Eventually Trolley service could even extend up the hill around Hasbrouck Park to provide connections into mid-town Kingston.





Today, service is provided by self-propelled trolley cars. The Museum owns two, one diesel powered the other propelled by gasoline. Only the diesel car is currently in operation. The city and the Trolley Museum have worked over the last few years to rebuild a portion of the rail line to provide trolley access along the Kingston Point causeway. Track improvements and rehabilitation will be needed to expand trolley service operation from its existing seasonal weekend and holiday service to a year-round operation. Track rehabilitation will include replacing existing rail ties, adding ballast, and clearing trees and shrubs.

The long term plan for enhancing the quality of service and appearance of the rail line is to electrify the line, and Trolley Museum volunteers have begun this process but will need additional resources to complete it. The ultimate goal will be to 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. In order to operate at this level, the trolley service would require management and staff to operate the vehicles. Part of this could be accomplished by the museum, but as a volunteer organization, it will almost certainly require assistance from the waterfront development agency described in the economic development section of the implementation strategy.

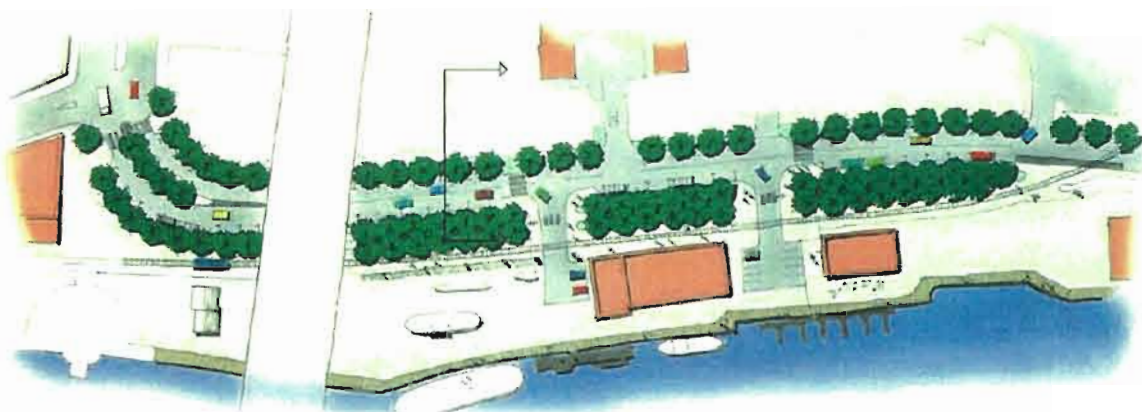
A ticket booth and waiting pavilion is planned near the Maritime Museum as a part of trolley service and streetscape enhancements. This location is intended to be the primary starting point along the trolley line. Other stops to be located approximately eight-hundred feet apart near entrances to key attractions. These stops will include an attractive transit shelter for waiting passengers.

Kingston Waterfront Development Implementation Plan

Time frame:	Short Term
Potential stakeholders/partners:	City of Kingston, Trolley Museum, waterfront property owners
Estimated costs:	\$1 million to completely rebuild and electrify the line from West Strand Park to Kingston Point Park \$1.4 million to rebuild and electrify the segment to connect to Broadway and mid-town Kingston \$50,000 to rehabilitate two existing electric trolley cars to provide service on electrified lines \$80,000 to rehabilitate an additional two trolleys to expand service \$25,000 per year for part-time trolley operator salary
Potential funding sources:	USDOT Transportation Enhancements Program, US Department of the Interior Urban Parks Program, NYS Environmental Protection Fund, foundation grants, private foundations, NYSEDA

Transportation 2: Reconstruct East Strand Street to support desired development

East Strand Street currently functions as a two-lane industrial access facility, and does not meet the needs of many current industrial users. It is inadequate to serve the needs of commercial waterfront development. East Strand will be reconstructed as a two-lane facility providing vehicular, pedestrian, bicycle, and trolley access to the Rondout waterfront. Planting, lighting, and street furniture will provide a pedestrian-scaled environment and reduce traffic speeds. The concept sketch below shows two lanes of traffic, parallel parking, and sidewalks on both sides of the street, street tree planting, and period street lighting. It also includes a separated bikeway and trolley tracks.



**EAST STRAND STREET ROADWAY
RECONFIGURATION CONCEPT**

As East Strand narrows, the trolley tracks would veer to the south along their current alignment and the bike trail would continue along the track alignment to connect to the waterfront trail. The reconstruction will also include improvements to the trolley stop near the Maritime Museum including a ticket kiosk and sheltered waiting area. The overall goal of the reconstruction is to create a multi-modal



Implementation Strategy

transportation spine that can serve the much higher level of traffic expected for East Strand Street. Street tree planting, textured pavement, frequent pedestrian crossings, and other design elements will serve to keep traffic speeds low. During events and busy seasons, congestion will still exist, providing additional traffic calming at busy times.

The East Strand project could also include the reconstruction of the intersection of East Strand and Broadway. The existing angle of this intersection paired with diagonal parking creates a traffic bottleneck. The proposal to reduce the angle of the curve and switching to parallel parking at this intersection will improve traffic flow and create a site for a new waterfront plaza/focal point at the foot of Broadway. The parcel on the northeast corner of Broadway and East Strand will be considered for development that would "anchor" this important intersection.

The first step will be to perform an engineering analysis and preliminary design for the upgraded facilities. This information will be used to develop a budget and schedule for project implementation.

Sketch Looking East Along
East Strand Street At Maritime Museum



Time frame:	Short Term for analysis Medium-Long Term for construction
Potential stakeholders/partners:	City of Kingston, NYS Department of Transportation, property and business owners, museums, NYSDOS
Estimated costs:	\$50,000 for engineering study \$1.9 million for construction
Potential funding sources:	US Department of Transportation, City of Kingston, NYS Environmental Protection Fund

Kingston Waterfront Development Implementation Plan

Transportation 3: Expand waterfront parking to meet development needs

Waterfront parking is inadequate to meet current needs. Most parking is provided on street (81 spaces), supplemented by a parking lot under the Route 9W Bridge. The parking strategy outlined below is designed to reduce current shortages and provide parking for new development. The strategy has been balanced to meet development needs while minimizing the environmental and visual impacts on the waterfront. The proposed parking is less than would be required under the city's current zoning ordinance and will require a change to the waterfront district zoning. In addition to lower parking ratios, the waterfront design standards (see land management catalyst project page 29) will address parking placement, screening and design requirements to minimize visual and environmental impacts. It will be city policy to minimize the location of parking directly on the shoreline to limit the visual and environmental impacts of additional parking on the waterfront.

Parking projections assume that parking will be shared among waterfront uses. The plan assumes that visitors will park once to visit many waterfront locations, walking, biking, or taking the trolley between destinations. It assumes that much of the parking need will be accommodated in public surface lots and distributes parking throughout the waterfront to ensure that no destination is more than eight-hundred feet (the equivalent of about four city blocks) from parking.

In all, the plan provides 1,186 new parking spaces (including 55 on-street spaces) and removes 87 existing spaces, resulting in a net gain of 1,099 spaces. A substantial amount of this parking, 280 spaces, is proposed for Island Dock, a facility that in the short term is not going to be easily accessible to the mainland. The proposed 224,000 square feet of new development, results in a need for about 819 new spaces located within 800 feet of the proposed development.

The city's current zoning would require about 1,240 spaces for the major waterfront trip generators including the new marina development (57 spaces for 95 new slips), 159,000 square feet of office, retail, and museum uses (530 spaces) and 65,000 square feet of new restaurant uses (650 spaces). This estimate does not include any parking provision for active recreational uses, such as the proposed crew pavilion, canoe and kayak facilities, or a proposed 8,000 square foot environmental education center.

Proposed sites for new parking include:

- Parking at Block Park to serve the needs of current park users and to serve the proposed boat launch and cove at the intersection of Block Park and Island Dock. This will include fifty spaces for Block Park and a 60,000 square foot paved staging/parking area for boats and trailers to serve the new boat launch/cove.
- The Island Dock Park development includes parking for park, marina, and boat launch users with 280 spaces in two lots along the park access road.
- A site adjacent to the Noah Hotel will provide seventy parking spaces for the hotel, with some spaces available to the general public.



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- While most waterfront parking will be accommodated in small lots at development nodes along the waterfront, one large lot is planned. The proposed site currently houses a storage facility for B. Millens and tanks for KOSCO. Three-hundred eighty spaces are proposed for this site. The lot will be located behind new commercial structures on East Strand and buffered from adjacent residential uses on the north and east by extensive landscaping and appropriate fencing. Ground level lighting or other non-obtrusive lighting will be used to minimize the impact of the parking lot on adjacent residents as well. Extensive way-finding signage will direct visitors to this lot.
- The existing lot under Route 9W will stay in its current location, providing parking for businesses along Broadway, though it will lose about 6 spaces when the intersection of Broadway and East Strand is realigned.
- Improvements to the Trolley Museum site include a 50 car parking lot.
- A 30 space lot is proposed between the former Millens Steel and Cornell Steamships buildings.
- A motor coach pick-up and drop-off facility and a forty car parking lot are proposed on a portion of the L&M site immediately adjacent to the former Cornell Steamships building.
- A small 20 space lot is proposed just east of the motor coach facility.
- Several lots are proposed at the eastern end of the primary study area with parking for up to 221 cars.
- Street parking will be reconfigured to eliminate the diagonal parking at the foot of Broadway and to create parallel parking along the entire length of East Strand. This will result in the loss of 81 spaces to be replaced by 55 spaces, a net loss of 26 spaces.

Time frame:	Short to Long Term as needed to support development
Potential stakeholders/partners:	City of Kingston, private developers, property and business owners
Estimated costs:	\$3,000 per space
Potential funding sources:	City of Kingston, private developers, NYS Governor's Office for Small Cities CDBG Program, Empire State Development Corporation

Transportation 4: Implement a comprehensive way finding signage program

Waterfront access is limited to two key routes, Broadway and Delaware Avenue via Route 9W, and a couple of secondary routes including Wurts Street from the north and Abeel Street from the southwest. Geographic barriers including Route 9W, steep slopes, and the waterfront itself make it relatively inaccessible from other areas of the city and region. The vitality of the waterfront depends on an ability to attract visitors from the water and land. A comprehensive, easy to understand wayfinding signage program is needed to direct visitors to the waterfront.

The city will work closely with its partners including the New York State Department of Transportation to develop and implement a network of signs to direct visitors to area attractions. The city should consider a comprehensive system that recommends the most effective route to each end of the waterfront. Signs could direct visitors to

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Kingston Point, the lighthouse, and Kingston Beach along Route 9W and Delaware, allowing them to avoid congestion along Broadway and the East Strand commercial district if that is not their destination. Visitors to East Strand could be directed along Broadway as the most direct route.

Time frame: Short Term
Potential stakeholders/partners: City of Kingston, NYS Department of Transportation, Ulster County
Estimated costs: \$20,000
Potential funding sources: City of Kingston, Hudson River Valley Greenway, Greenway Conservancy Grants, private foundations

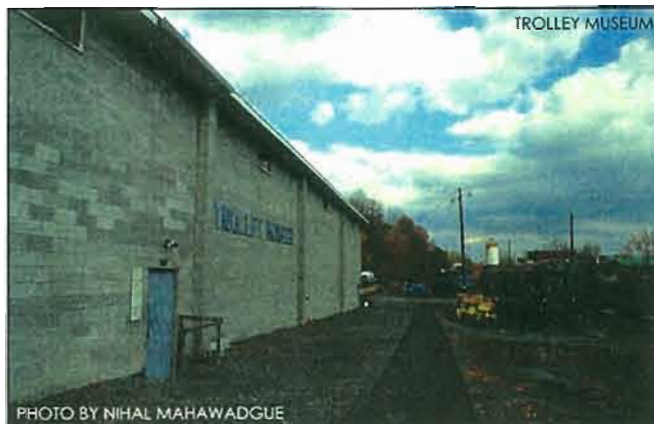
Museums

Museum 1: Implement Trolley Museum façade and facility improvements

The Trolley Museum is a critical asset for the Rondout waterfront. The Trolley Museum of New York is a non-profit educational museum founded in 1955. The goals of the museum are: 1) to share the rich history of rail transportation and the role it played in the Hudson Valley region through exhibits and educational programs and 2) to demonstrate how trolleys work by providing rides to the public. In addition to static displays of trolley, subway, and rapid transit cars, an excursion ride runs one and a half miles from the foot of Broadway to Kingston Point Park.

The museum operates the existing trolley service and operates the museum facility providing displays of trolley and transportation history and historic trolley vehicles. The museum structure is built on the foundation of a former Ulster & Delaware engine house. The upper level features a visitors' center with seasonal and permanent displays, a video viewing area, and large windows overlooking the restoration shop. Visitors can see trolley cars housed and under restoration on the lower level.

Façade improvements and visitor amenities will create a more attractive visitor environment and enable the museum to fit better into the waterfront setting. Façade improvements are planned to mimic the appearance of the original Ulster and Delaware engine house on this site. Historic photos document the building materials and will be used to recreate the original building appearance. Other improvements will include a passenger platform and pavilion, parking lot paving and screening, and improved fencing materials to meet the design standards proposed for the waterfront.



Implementation Strategy

Time frame:	Short Term
Potential stakeholders/partners:	City of Kingston, Trolley Museum
Estimated costs:	\$400,000
Potential funding sources:	Trolley Museum, City of Kingston, USDOT Transportation Enhancements, US Department of the Interior Urban Park Program

Museum 2: Implement Maritime Museum façade and facility improvements

Founded in 1980, the Hudson River Maritime Museum is the only museum in New York State exclusively preserving the maritime history of the Hudson River, its tributaries, and the industries dependent on the river. The present property was purchased in 1982, and the Museum's nearly four hundred feet of bulkhead on Rondout Creek was partly rebuilt in 1992. The Museum's permanent collection related to Hudson River transportation, industry, and commerce, has grown through generous donations. A library is available for use by researchers. The museum attracts over 20,000 visitors annually.

During the warmer months, visiting vessels such as the sloops *Clearwater* and *Sojourner Truth*, historic vessels, and classic wooden boats may be seen at the Museum's bulkhead. In winter, U.S. Coast Guard vessels regularly tie up at the dock to provide shore-leave for their crews. School programs host over 2,000 school children a year, and exhibitions, a lecture series, children's workshops, waterfront programs and festivals, and boat rides to the Rondout Lighthouse create a greater awareness of the heritage of the Hudson River.



The museum is an important waterfront asset that builds on the transportation theme of the Urban Cultural Park Management Plan. According to an assessment conducted on behalf of the museum by the American Association of Museums over the winter of 2001/2002, the museum is ripe for a number of facility and operations enhancements or changes. The museum is located at a critical transition point between lower Broadway's renovated commercial structures and the currently industrial Rondout waterfront. General clean up, improved signage, ornamental plantings, and a more open appearance to the building front would create a more welcoming environment to visitors to the museum and the rest of the waterfront.

Operational issues include the museum's ongoing role in providing access to the lighthouse now that ownership has transferred from the U.S. Coast Guard to the City of Kingston. The city is considering expanded use of the lighthouse, including rentals for private events and operation of a bed-and-breakfast inn. The next step in this effort is for the city and Maritime Museum to consider the appropriate on-going role of the museum in light of these changes. This discussion may consider how the city

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and museum can work together to address the appearance and ongoing operational needs of the Maritime Museum. Several steps were identified in this plan and American Association of Museums assessment report completed in January 2002.

Time frame:	Medium Term
Potential stakeholders/partners:	Maritime Museum, City of Kingston
Estimated costs:	\$100,000 for façade and other exterior enhancements
Potential funding sources:	Maritime Museum, City of Kingston, NYS Environmental Protection Fund, USDOT Transportation Enhancements Program

Museum 3: Assist the operators of the tugboat exhibit in finding technical and financial resources to develop a land-based museum

The tugboat display located near the eastern end of the Rondout provides an educational resource for waterfront visitors. The display is opened to students, seniors, and other community groups by appointment. The display encompasses several tugboats undergoing restoration on the Rondout, though there is no land-based facility.



The group that owns and is restoring the tugboats has developed an expansion plan that includes the construction of a land-based museum to house exhibits and educational facilities. The group envisions that the development would include indoor and outdoor exhibits. The planned improvements would create a museum that would focus on the restoration and historic importance of tugboats in the industrial/transportation history of the city of Kingston and Rondout Creek as described in the Urban Cultural Park Plan.

The tugboat organization has considerable experience in the acquisition and restoration of tugboats, but would need technical assistance in the market analysis, development, and operational steps needed to create a full-fledged tugboat museum. In addition it would likely require outside financial resources to purchase land, construct, and operate a facility. The next step in the process is to connect the tugboat organization with technical assistance needed to conduct a market and feasibility analysis and a business plan for the development of a tugboat museum. These documents could then be used as the basis to secure funding for museum development. One potential resource is the American Association of Museums (AAM) described above. The AAM offers publications and other technical assistance that can advise individuals and groups on the efforts involved in starting a museum, including advice on creating an organizational structure including sample by-laws, mission statements, long-range plans, budget, sample job descriptions, and collections management policies. For more information, see the group's website at: http://www.aam-us.org/resources/reference_library/2starting.cfm



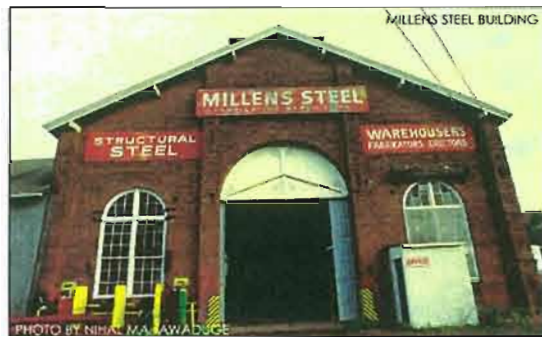
Implementation Strategy

Time frame:	Medium Term
Potential stakeholders/partners:	City of Kingston, Tugboat Museum, NYS Department of Transportation
Estimated costs:	Analysis/organization: \$ 20,000 Construction: \$500,000 Operation: \$100,000
Potential funding sources:	Tugboat Museum, US Department of the Interior Urban Parks Program, NYS Environmental Protection Funds, USDOT Transportation Enhancement Program

Land use

Land Use 1: Ensure the preservation and reuse of historic waterfront structures

Throughout the planning process, it was clear that many residents and stakeholders are enthusiastic about the waterfront's architectural and industrial heritage and would like to see these resources preserved and enhanced. The historic structures contribute to the transportation, industry, and architectural history themes of the city's Urban Cultural Park Management Plan. The Kingston Urban Cultural Park Management Plan recognizes the former Millens Steel and Cornell Steamboats Company buildings as particular assets and recommends that they be redeveloped for water-dependent or water-related uses that support the Urban Cultural Park/Heritage Area interpretive themes.



These historic structures anchor the western edge of the study area and, along with Broadway, provide guidance for the rhythm, scale, and building materials desired for development along the waterfront. Both are eligible for listing in the National Register of Historic Places, making them eligible for preservation tax incentives, but neither is currently listed. The Cornell Steamboats Company Building is protected under the city's local landmarks law, but the Millens Steel building is not. Preservation and reuse of these buildings in the redevelopment of the waterfront will be a critical element to maintaining the desired character and recognizing the industrial and transportation history of the area.

As a next step, the city should provide formal protection for the Millens Steel Building under the City of Kingston Historic Landmarks Preservation Commission by designating it as a historic landmark subject to the privileges and restrictions established by the city's Landmarks Preservation Code. The city should consider

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listing both buildings in the National Register of Historic Places to enable a developer to take advantage of federal historic preservation tax incentives as well as New York State resources available through the Office of Parks, Recreation and Historic Preservation. The city should also survey other waterfront structures not located in the Rondout-West Strand Historic District to determine whether any others should be listed locally or nationally.

Time frame: Short Term
Potential stakeholders/partners: City of Kingston, property owners, Kingston Historical Society
Estimated costs: Staff time
Potential funding sources: City of Kingston

Land Use 2: Conduct an alternatives analysis for the reuse of Kingston Point

Working with the property owner a number of uses were considered for the Heritage Oil site including the development of condominiums, a restaurant/yacht club/marina complex, hotel and conference center, and a “no build” option. All of the alternatives considered assumed that public waterfront access to this visual and natural resource would be provided. The environmental, economic, and community issues surrounding the ultimate use of this site were the most complex of any encountered in the planning process and ultimately could not be resolved in the scope of this plan. The final recommendation of the waterfront plan for this site is that the city conduct further analysis of potential future uses for the site.

Time frame: Medium to Long Term
Potential stakeholders/partners: Property owner, City of Kingston
Estimated costs: \$50,000
Potential funding sources: City of Kingston, property owner

Land Use 3: Facilitate site remediation strategies to make land available for redevelopment

During the planning process, city staff and planning team members met with waterfront property owners to gain a better understanding of the future needs of local waterfront business owners. Several expressed an interest in working with the city to redevelop the waterfront, as long as redevelopment strategies can be crafted to meet their current business needs. Several indicated that the waterfront location was no longer efficient for them due to transportation access limitations and lack of land available for expansion or improvement.

The opportunities and needs presented by all of the waterfront industrial land are similar to those of the auto and scrap recycling facilities described in the catalyst project section. The city would take advantage of the same programs and resources described in that project to facilitate remediation of all formerly industrial waterfront land.



Time frame:	Short to Medium Term
Potential stakeholders/partners:	City of Kingston, private property owners, NYSDEC, NYS Department of Health, Scenic Hudson
Estimated costs:	Remediation cost for the Rondout and Hudson waterfronts (excluding the recycling facilities) are estimated at approximately \$1.5 million, based on very preliminary estimates completed as a part of the Phase I site assessments conducted as a part of this planning efforts.
Potential funding sources:	NYS Empire Opportunity Funds, USEPA Brownfields Pilot Program, USHUD Brownfields Economic Development Initiative (as the city becomes eligible), USHUD Section 108 loan funds (as the city becomes eligible), NYSDEC Brownfields Program

Land Use 4: Conduct market and feasibility analyses for improvements to the Ponckhockie neighborhood

The Ponckhockie neighborhood is located immediately adjacent to the Rondout waterfront and has been negatively impacted over the years by the ongoing industrial and recycling uses on the waterfront. The plan identifies proposed projects that will build on the waterfront enhancements. The projects will improve the quality of life for neighborhood residents and provide needed services for the neighborhood and the city as a whole.

The plan identifies the largely vacant and underutilized block bounded by East Union, Sycamore, Catherine, and Gill Streets as a potential site for senior housing. The next step in process for this proposal is to complete a formal senior housing market analysis for the city and waterfront. A preliminary assessment conducted as a part of the waterfront planning process indicated some market for additional senior housing.

The plan also identifies a site at the intersection of Catherine and Gill Streets for potential playground improvements. Further analysis should be conducted for this proposal, particularly given its close proximity to a proposed neighborhood-oriented park on the waterfront.

Time frame:	Medium Term
Potential stakeholders/partners:	City of Kingston, Ulster County Office for the Aging, senior housing providers
Estimated costs:	\$4,000 for senior housing market assessment Staff time for parks assessment
Potential funding sources:	City of Kingston, Ulster County, USHUD

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Economic Development 1: Develop or Designate Waterfront Development Agency

Management and implementation of the plan will be a complex long-term challenge requiring the active participation of the city, specialized consulting and development talent, public funding agencies, property owners and developers, and other local and regional partners. It will require the city to form new partnerships and continue to nurture relationships with existing public and private stakeholders. Successful implementation will require strong project management to coordinate the efforts and needs of many stakeholders.

This plan recommends that the city form an industrial development agency (IDA) or a waterfront authority to manage the redevelopment of Kingston's waterfront. An IDA or authority can stimulate development by acting as a pass through for private sector financing, in essence becoming the "borrower" (typically qualifying for four percent tax exempt loan funding) and can provide developers eighty to one-hundred percent financing for construction and equipment. An IDA or waterfront authority could also take title to waterfront property, leasing it back to a developer so that the developer's lease payments would be used to amortize the loan. An IDA can charge fees for the loans it makes and can also grant property tax abatements and sales tax abatements. Like municipalities, an IDA can loan itself funds from brownfield and other economic development loan funds to facilitate clean up.

Rather than form a new development entity, the city may also consider working with the Ulster County Development Corporation to act as the waterfront development agency. In order for this to be successful, the city and county would need to be able to come to a clear agreement about county and city roles and contributions, waterfront priorities and the level of staff and other resources to be invested in the waterfront.

At this point it appears that an IDA would be the most appropriate agency to lead the city's revitalization effort. It would be directly accountable to the city, but clearly focused on the waterfront. It would provide staffing, strong project and contract management services, facilitation of the public process and development-related business deals and coordinate efforts to raise funds from the public and private sectors. The city would guide these efforts, maintaining project control and accountability. By creating a separate redevelopment entity, the city removes itself from the role of day-to-day management of the revitalization effort, freeing staff and resources for other efforts throughout the city.

The new IDA should maintain a close working relationship with key city staff assigned to project implementation including planning, engineering, and economic development departments. The IDA would need to build and maintain good working relationships with other funding and implementation partners including federal, state and county agencies, business and property owners, and potential developers. Though IDAs generally cannot secure state and federal grant funds, it could develop projects that the city could then submit for funding. The IDA could be a sub-grantee using funds from the city for staffing, acquisition, and development financing.



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The IDA would also need to supervise a team of specialized consultants assembled by the city to complete the waterfront design guidelines, conduct engineering analyses related to transportation and marine infrastructure improvements, conduct a feasibility analysis of the redevelopment of Kingston Point, and other planning and engineering studies necessary to facilitate implementation. When preparations are ready, it would coordinate the procurement of a developer or developers for key projects including marina expansion. Under one approach, the selected developer(s) could have primary responsibility for site assemblage, master planning, and marketing of the redevelopment district.

There are key supporting projects that the new IDA would oversee early in the implementation process including:

- **Development of marine infrastructure and enhanced marina facilities:** The expansion of transient slips is a critical element in expanding the tourist market and capturing new buying power for the existing Rondout and new businesses. Since the market economics argue against development of these facilities the city will need to develop and operate the facility or subsidize the operations of a preferred operator for a period of time. The development organization should evaluate the best course of action to enable development of expanded marine infrastructure and marina operations. In other communities, cities have successfully constructed the infrastructure and then entered into an agreement with a preferred contractor to operate a for-profit marina. This approach would enable the city to subsidize the development and still maintain control over the quality of services and the targeting of slips to tourist boaters. This short term project will involve city Staff, the IDA, current marina operators, and prospective developers. Estimated infrastructure cost for this task is described in Shoreline actions above.
- **Evaluate Feasibility of Commercial use of the Lighthouse:** In an effort to improve access to the Lighthouse, the IDA will conduct a market study/feasibility analysis for creating bed and breakfast and events facilities at the property. The study will analyze the market potential, the potential impacts of the proposed uses on the historic character and the natural environment surrounding the lighthouse, and summarize potential operational strategies. Estimated cost of this task is \$20,000.
- **Conduct Feasibility Analysis of Reuse of Kingston Point:** During the planning process, a number of uses were considered for the Heritage Oil site including the development of condominiums, a restaurant/yacht club/marina complex, hotel and conference center, and a “no build” option. All of the alternatives considered assumed that public waterfront access to this visual and natural resource would be provided. The environmental, economic, and community issues surrounding the ultimate use of this site were complex. They could not be resolved in the scope of this plan. The final recommendation of the waterfront plan for this site is that the city conduct further analysis of potential future uses for the site. This project should be undertaken within the

Kingston Waterfront Development Implementation Plan

first five years of plan implementation. It will involve the property owner and city staff. The cost is estimated at \$50,000.

Time frame:	Short Term and ongoing
Potential stakeholders/partners:	City of Kingston, City of Kingston Industrial Development Agency
Estimated costs:	\$50,000 annually for staff support and other funds as indicated in this implementation strategy on a pass through basis for projects the IDA will oversee.
Potential funding sources:	NYS Environmental Protection Funds, USDOT Transportation Enhancement Program, HUD BEDI (as the city becomes eligible), US Department of Commerce EDA Loan Fund, USEPA Revolving Loan Program, NYS Governor's Office for Small Cities CDBG Program.

Economic Development 2: Develop Brownfield Revolving Loan Fund

The city needs an established and dedicated fund to be used to relocate existing waterfront property owners, clean up contaminated property, and market property to future developers. The fund would be available to assist projects throughout the waterfront and should prioritize redevelopment of sites currently in industrial use. A critical implementation tool, likely investments may include the following projects:

- Package and facilitate clean up of contaminated properties of the study area which are currently available for purchase including the L&M Auto Parts, the former Millens Steel and the Cornell Steamboats Company Shops. These sites could be packaged to receive assistance from the Rebuild NOW New York initiative. A multi-party voluntary clean up agreement could be developed. The city's redevelopment organization could consider acquiring these properties for the purpose of expediting remediation of the sites for sale to targeted developers or transfer to a preferred developer.
- Provide financing to firms currently considering relocation from the waterfront, enabling them to build new state of the art facilities in other identified locations elsewhere in the city or county as they desire.
- Identify a preferred site for and provide incentives to encourage development of an expanded marina.

The lead agency and administrator of the loan fund would be the city's designated redevelopment agency, likely to be its Industrial Development Agency as described above.

A variety of funds are available to capitalize the loan fund, with the primary grant makers being the United States Department of Housing and Urban Development's Brownfield Economic Development Initiative (BEDI) and the United States Environmental Protection Agency's Brownfield Revolving Loan Fund Program. The HUD BEDI combines up to \$2 million in grant funds with matching city Section 108



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Community Development Block Grant Loan Funds and can be used to support construction financing, public infrastructure enhancements, and amenities to support economic development. The BEDI provides flexible project financing and a revolving source of program income that will facilitate the initial land transactions proposed in this waterfront redevelopment plan.

The city has formed strategic partnerships with other local organizations to secure significant resources for brownfields remediation. The U.S. Environmental Protection Agency (EPA) Brownfields Assessment Demonstration Pilot being implemented by the Mid-Hudson Land Revitalization Partnership will support city efforts to complete site assessments and remediation planning, investigate legal and ownership strategies to facilitate site clean-up and redevelopment, create planning-based marketing tools, and conduct an extensive public involvement effort. The pilot will also enable the city to resolve open questions about environmental quality and identify clean-up schedules and costs.

Time frame:	Short to Medium Term
Potential stakeholders/partners:	City of Kingston, City of Kingston Industrial Development Agency and other economic development partners (included in project budget above)
Estimated costs:	\$5.0 million, initial capitalization
Potential funding sources:	USHUD BEDI (as the city becomes eligible), US Department of Commerce EDA Loan Fund, USEPA Revolving Loan Program, NYS Governor's Office for Small Cities CDBG Program

Economic Development 3: Implement Marketing Strategy

This plan includes a detailed marketing approach including a description of materials to be developed, dissemination plan, and strategy for interacting with site selectors and developers.

An information package for the waterfront district should be designed as a two-part package. The first part would be high level marketing materials that promote Kingston and the benefits and opportunities it offers to businesses. The second part would be a very detailed package that sets out the terms and conditions of developing in the waterfront including proposed design standards. The same content should be on the city and other appropriate websites, including a concept plan showing possible build-out and planned amenities.

The cost of advertising in specialty publications including newsletters and web sites can be significant, and while there are many other specialty publications covering subjects of interest to the city (e.g., science and technology, small and home-based business), the likelihood of attracting investment or business as a result of advertising in such publications is questionable. A low cost alternative to paid advertising would be for the city to seek out free publicity through articles and write-ups in regional and state-wide publications.

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The marketing element addresses image development, attraction of developers, new owner-occupants (both residential and commercial), and specific strategies to target businesses, industry groups, and tourism. The city anticipates that most prospective tenants for the waterfront will come from within the region, and it will orient its marketing efforts locally rather than nationally or internationally.

Key elements of the marketing strategy include:

- **Establishing a Positive Image of the City:** The marketing plan must accentuate the city's many advantages and attributes including its historic buildings, reasonably priced real estate, attractive downtown, cultural programming, restaurants, progressive City government, and emerging plan to rebuild Kingston for the new economy.
- **Physical Improvements:** The city's focus will be on creating the proper physical environment that will appeal to prospective tenants. The city will guide the implementation of key flagship initiatives that demonstrate commitment, leadership, and action. By implementing design standards, establishing site control, facilitating relocation of businesses, supervising demolition, coordinating infrastructure improvements, and completing environmental remediation the city demonstrates action.
- **Attracting Investors to the waterfront:** This element of the plan will focus on attracting owner-occupants and long term investors with a commitment to the community. In the early years, the city will seek qualified developers rather than specific end users, relying on the development community to market sites through their broker/tenant network. The city's role will include orienting developers to the targeted industries and sharing relevant growth projections for these industries in the regional market.
- **Development Incentives** -The city or the new IDA will provide developers with a package of incentives directed at mitigating development costs including perhaps favorable land pricing and terms or development density bonuses. A density bonus grants a developer the right to build additional square footage (above what would normally be allowed) if certain requirements are met. Requirements typically include developer commitment to borrow funds from available local loan funds or participating financial institution, to pay for infrastructure costs or agree to maintain park space or green areas. This system ensures high value and amenity-rich development that market economics might not otherwise support.
- **Empire Zone Tools:** The Kingston waterfront is located in a designated New York State Empire Zone. The Empire Zone includes a number of tax and utility savings to help developers attract tenants and businesses to the "new" waterfront. Empire Zone benefits include:
 - **Wage Tax Credit** is available for up to five consecutive years for hiring full-time employees in newly created jobs. For employees in targeted groups,



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this credit equals \$3,000 a year. A credit of \$1,500 a year is available for all other new employees.

- **Investment Tax Credit** is available for the purchase of production property and equipment. The credit is 10% for corporate franchise tax and 8% for personal income tax. An additional Employment Incentive Credit is also available to corporations that create new employment. This credit equals 30% of the Investment Tax Credit for each of the following three years in which the investment was made.
- **New Companies to New York State** are entitled to a 50% cash refund for both the Wage Tax and the Investment Tax Credits if they cannot use property tax credits.
- **Utility Rate Savings**, reduced electric, gas, and telephone rates may be available to businesses that locate or expand in the Zone.
- **Zone Capital Credits** include a 25% tax credit against personal or corporate income taxes available for a direct equity investment in a certified zone business or for contributions to approved community development projects within the Empire Zone.
- **Sales Tax Refund** including purchase of building materials to be used in the development of commercial or industrial real property located in the EZ is eligible for a refund of New York State sales tax.
- **Real Property Tax Abatement**, the Empire Zone offers an abatement from the increase in assessment based on improvements to real property for up to ten years.

Time frame:	Short to Medium Term
Potential stakeholders/partners:	City of Kingston, Industrial Development Agency, other economic development organizations, and preferred developer(s)
Estimated costs:	\$100,000
Potential funding sources:	NYS Revolving loan funds, Empire State Development Corporation, NYS Environmental Protection Funds, NYS Governor's Office for Small Cities CDBG Program

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Appendices

The following documents were prepared as a part of the planning process and provide supporting documentation to the Waterfront Development Implementation Plan:

- Appendix A: Inventory and Analysis
- Appendix B: Market Analysis
- Appendix C: Financial Impacts Analysis
- Appendix D: Action Plan Matrix
- Appendix E: Design Standards Recommendations
- Appendix F: Waterfront Infrastructure Analysis
- Appendix G: Scenic Hudson Sound Principles of Waterfront Development

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Appendix A: Inventory and Analysis

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City of Kingston Waterfront Development Plan



Inventory and Analysis

Inventory and Analysis

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Inventory and Analysis

Site Review¹

Overview

Kingston's Rondout Creek and Hudson River waterfronts had been historically used for heavy industrial purposes. The Hutton Brick Company, Cornell Steamship Company shops, Millens Steel building, Island Dock Feeney's Boatyard and Forst Packing remain as evidence of a once-thriving industrial complex. Changing economic conditions have resulted in the abandonment of these historic industries and created opportunities for reuse of a number of sites. The Forst meat packing plant is now the site of a proposed boutique hotel. Lower Broadway has been extensively revitalized, creating a vibrant mixed-use area providing shops, restaurants, homes and offices.

The task of the Waterfront Development Plan is to build upon the successes in the Rondout over the last 10 to 15 years and expand the redevelopment from lower Broadway and the West Strand to the entire Rondout Creek and Hudson River waterfronts. The remainder of this section describes the current condition of the Waterfront Redevelopment Study Area.

The Rondout Creek waterfront redevelopment area is a narrow commercial and industrial area, bordered on the west by commercial development and a waterfront park and on the east by the Kingston Point Park. Industrial uses include the Kingston Wastewater Treatment Plant, a metal fabricator, two auto/metal recycling facilities, two tank farms, a boat marina and vacant industrial lands. Commercial and non-profit uses include a restaurant and three museums including trolley, tugboat and maritime museums. Some sidewalks are present, but they are discontinuous and generally in fair to poor condition. Some trees exist along East Strand, with much more vegetation, including trees, visible immediately north of the study area and along the shore of the Rondout Creek. The buildings on the south side of East Strand have views of the water, though the creek is not always visible from the street/sidewalks.

The secondary redevelopment area along the Hudson Riverfront is bordered on the south by Delaware Avenue, to the north by a large vacant, to the east by the Hudson River and to the west by a new business park mix and a mix vacant or underutilized commercial and industrial properties. The secondary study area is comprised of several large, underutilized or vacant properties. Two large parcels have waterfront access and views of the Hudson River that make them important redevelopment sites.

Primary Study Area

The Hudson River Maritime Museum is located on Ferry Street, immediately east of the Route 9W overpass. The site includes 0.78 acres along the Rondout Creek waterfront. The museum is dedicated to preserving the maritime history of the Hudson River and includes a variety of indoor and outdoor exhibits. Most of the museum including exhibit space, offices and a gift shop are housed in an older, well-maintained 1.5 story brick building. The building sits slightly above the sidewalk, with a ramp leading to the main entrance from the outdoor exhibit area. The walkway in front of the building is separated from the public sidewalk with a brick and wrought iron fence. The outdoor exhibit area has a gravel surface with a wrought iron fence separating the outdoor facility from the creek. Historical uses of the property include a lumber

¹ Information taken from a variety of sources including site visits, photographs and summary information from the Strategic Cluster Report prepared by The Chazen Companies for its environmental assessment of the waterfront prepared for the Mid-Hudson Land Revitalization Partnership.

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shop and coal storage. The site immediately to the east of the museum is the old Dock Riverside Restaurant, recently renovated into Rosita's Restaurant. The property includes about 0.35 acres of land and a stucco covered one-story brick and block structure. The restaurant abuts the Rondout Creek and has dock facilities that are in a state of disrepair. Historically, the site has been used for coal storage and was surrounded by industrial facilities dating back to the nineteenth century.

A 1.13 acre vacant parcel of land sits across the street from the Maritime museum and Rosita's Restaurant. Located on the north side of East Strand Street between the Route 9W overpass and the City of Kingston Wastewater Treatment Plant, the site has been vacant since the late 1960s. Historically, the property has been used as a lumberyard, a junkyard and for coal storage. The property has significant potential for reuse. It is in close proximity to existing restaurants and tourist attractions.

Also on the north side of East Strand, just east of the vacant parcel is the Kingston Trolley Museum. The museum building is a long, nearly windowless two-story concrete block structure with an asphalt shingle roof. This structure is set at the back of the lot, well behind the rail road tracks that cross the site and directly in front of a thick row of trees. A number of historic trolleys, railcars in various states of repair and a diesel engine are stored on sidings on the trolley museum site. Historically this site was a part of a rail yard, engine house and turn table. The museum offers trolley rides on the existing tracks from the museum site along the waterfront to Kingston Point Park.

Trolley tracks run along the south side of East Strand to the Trolley Museum, where they cross and enter the museum grounds. They leave the museum, cross to the north side of East Strand and run parallel to the street until they reach KOSCO's waterfront parcel. They cross this parcel diagonally, and then continue along the waterfront into Kingston Point Park.

The Millens Steel and Fabricating Service, Inc. is located east of Rosita's on East Strand. The site encompasses 0.61 acres, lying between East Strand to the north and the Rondout Creek to the south. Millens Steel has operated at this location since 1952. Before that, the property was utilized as a boiler repair shop for the Cornell Steamship Company. Millens Steel is housed in a very attractive nineteenth century brick building that is eligible for listing on the National Historic Register. The 1.5 story structure has been in continuous industrial use since its construction and is in excellent condition. A one-story corrugated metal addition has been constructed on the east side of the historic structure.

Just east of the Millens Steel site on East Strand is the former Cornell Steamboat Company Shops. Most of the 0.90 acre parcel is covered by a large multi-story brick shop building. The west end of the site is leased by Millens Steel for storage that includes empty paint cans, scrap metal and other materials. Since the nineteenth century, the site has contained machine shops, carpenter shops and lumber storage sheds. Today the site is privately owned and a portion of it is used as residences and artists' lofts, with the remaining space vacant. This building is protected under the City's local landmarks law and is eligible for listing on the National Historic Register.

The City of Kingston Waste Water Treatment Facility is across the street from the former Cornell Steamboat Company Shops. This 2.26 acre facility on the north side of East Strand Street treats wastewater from the City of Kingston and portions of the Town of Esopus. The structure

Inventory and Analysis

is constructed largely of brick, surrounded by a chain-link fence and hedges. It is somewhat screened from view along the sidewalk's edge, though a fairly frequent problem with odor announces its presence. Together with the Trolley Museum, this site was historically used as a rail yard, large engine house, turn table, machine shop, foundry and coal bunker in the late nineteenth and early twentieth centuries.

L & M Auto Parts is located across the street from the treatment plant between East Strand and the Rondout Creek, just east of the former Cornell Steamboat Company Shops. L & M is an automobile recycling facility. The site includes a one-story corrugated structure used as a garage and an open storage facility surrounded by a corrugated and chain link fence. Cars are regularly parked in front of the garage and the gate leading into the storage area. Previously the site was used for auto body and painting work, but has not been used in that capacity for about 15 years. Historically the site was used as a locomotive service facility, boiler shop and ship dismantling operation.

B. Millens & Son Scrap Metal Recycling operates its vehicle and equipment maintenance facility across the street from L & M on the north side of East Strand. 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.

Just East of B. Millens Scrap, also on the north side of East Strand, the Kingston Oil Supply Company (KOSCO) owns a bulk petroleum storage and dispensing facility. The facility is currently inactive and used by KOSCO for storage of maintenance and repair materials and for classroom training. The property is separated from the sidewalk with a chain link fence. It includes storage tanks, paved parking area and a covered platform over dispensing equipment.

The next four blocks of the north side of East Strand make up the southern edge of the Ponckhockie residential neighborhood, identified as a historic resource in the Urban Cultural Park Management Plan. Though not listed in the National Register, a portion of it was identified as a supplemental preservation area in the Urban Cultural Park Management Plan in 1987.

A vacant boarded up late nineteenth century building stands on the corner of East Strand and Tomkins (next to KOSCO). The bottom floor of this two-story structure is a garage with an apartment or offices upstairs. An attractive late 19th or early 20 century two-story brick building sits on the corner of East Strand and Sycamore. It is built to the edge of the sidewalk, has a corner door entrance flanked with windows. It appears to be occupied with residential uses. The East Strand block face between Gill and Abruyn is vacant. A private school and associated playgrounds sits on East Strand between North Street and Abruyn.

KOSCO owns a 4.14 acre facility on the south side of East Strand, adjacent to L & M Auto Parts. As with its other Rondout location, this site is not currently used for bulk petroleum storage, though it was used in that manner for over 70 years. For the past four years, the site has been operated by KOSCO as its base for service technicians and as a marine fuel terminal. The site is surrounded by a chain link fence and includes a number of above ground storage tanks, several one-story structures and a low brick wall painted white. Historically, the site was used for rail operations.

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Central Hudson Gas and Electric Corporation operates a natural gas regulating station just east of the KOSCO site. Not visible from East Strand due to its location between B. Millens and the creek, this 1.61 acre waterfront site includes docking facilities for small craft, several small structures and pipe systems. Prior to conversion to a gas regulating station, the property was used as a coal gasification plant for almost 70 years.

The main operating site of B. Millens & Son Scrap Metal Recycling lies to the north and the east of the Central Hudson facility. Part of the operation is located between East Strand and the Central Hudson facility. The remainder is on the east side of North Street. The majority of the metal scrapping and recycling activities are performed on the East Strand site. This property includes a long one-story brick structure and a fenced working scrap area. The property on North Street is fenced and mainly used for storage of various metals and roll-off containers.

Kingston Landing is located southeast of the intersection of North Street and East Strand, bordered on the north and the west by B. Millens' operations. This 3.77 acre vacant parcel is located at the mouth of the Rondout Creek, offering unobstructed views of the Hudson River, Kingston Point Lighthouse and surrounding environs. The parcel is a filled tidal marsh area, and about half of the parcel is submerged at high tide. The site was formerly used as a marina.

The Kingston Lighthouse is located in the Hudson River at the mouth of the Rondout Creek. The first lighthouse was constructed at the mouth of the Rondout in 1839. The current lighthouse was completed in 1915 and is the third Rondout lighthouse. A stone jetty extends to the lighthouse, but is underwater during high tide. The only possible access to the lighthouse is across this jetty at low tide or by boat. The Hudson River Maritime Museum provides boat access and tours of the lighthouse.

East Strand ends as the road jogs to the left becoming North Street. The west side of North Street is steeply sloped and undeveloped. An old concrete retaining wall is visible, and the slope above is heavily vegetated. Older, small, single-family homes line the east side of North Street between East Strand and Delaware Avenue. Homes and businesses continue on both sides of North Street above Delaware, ending at the Brickyard (described below). North Street ends just past the Brickyard.

Kingston Point Park

Kingston Point Park lies between the primary and secondary study areas at the end of Delaware Avenue on Kingston Point. The park includes both passive and active recreation opportunities. The area known as Kingston Point Rotary Park provides a peaceful bucolic setting, with spectacular views of the Hudson River. This portion of the park consists of about 2.5 acres of land on the western bank of the Hudson River. The park is well planted with trees, shrubs, grasses and riparian vegetation. Benches, picnic tables, and pavilions dot the landscape. A spit of fill land extends from Kingston Landing, providing additional pedestrian access into the park from Kingston Landing. A planned extension of the trolley tracks would restore rail service into the park. Kingston Point Beach and Ball Park provide a number of active recreational opportunities. The beach includes a playground, a seasonal activities (volleyball etc.) area, and a boat launch into the Hudson River. Across Delaware Avenue, ball fields and a BMX track are well utilized.

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Secondary Study Area

The Brickyard is a part of the secondary study area. It encompasses about 76 acres of land and is situated on North Street along the west bank of the Hudson River. The site was a brick manufacturing facility from the 1880s until 1980. The site includes a very large dilapidated structure that is missing much of its roof and many wall panels, three large-diameter bulk storage tanks, several smaller industrial buildings and a large new restaurant building that is not currently in use. Piles of scrap metal, abandoned vehicles, open tanks and other waste are visible throughout the site.

To the north of the Brickyard, currently inaccessible by public road from the waterfront is the Tilcon Minerals property. This 264 acre property extends along the Hudson River from the Brickyard to the Kingston City line on the north. The site has been used for mining and as a processing plant for cement products. Much of the site is characterized by steep slopes and many areas are undevelopable due to prior mining activities. The flat waterfront area is largely fill, the stability of which may impact future construction activities.

Kingston Waterfront Development Implementation Plan

Environmental Assessment

Overview

The Chazen Companies were selected by the Mid-Hudson Land Revitalization Partnership (MHLRP) to complete Phase I Environmental Site Assessments of 27 separate sites on the Rondout Creek and Hudson River waterfronts in the City of Kingston as a part of an U.S. Environmental Protection Agency Brownfields Pilot Project. Together these sites make up the primary and secondary study areas of the Kingston Waterfront Redevelopment Plan.

A Phase I Environmental Assessment typically describes current and past uses that may affect a property's environmental condition. Assessments are typically conducted when change in use or sale of a commercial or industrial property is planned. They include a visual survey of the site and surrounding sites, interviews with owners and regulators, review of historic maps and aerials, and searches of federal, state and local databases.

The purpose of this effort was to complete a preliminary assessment of environmental risks in the waterfront redevelopment area and to identify additional assessment needs and a very general set of "ball park" costs for further assessment and site clean up. The study further attempted to identify the opportunities and constraints to redevelopment in the context of the recognized environmental conditions.

The Phase I Assessments completed for Kingston's waterfront did not find any big surprises, and none of the findings would be classified as serious constraints to urban redevelopment. The initial clean up estimates are reasonable for the past uses and are not expected to be more than \$500,000 for any one parcel, with many costing far less than that. The bulk of the issues identified were petroleum product-related, which are relatively easy to address. The assessments recommend additional analysis at some sites to document existing site conditions and create a clearer idea of ultimate clean up costs.

This section of the Inventory and Analysis summarizes the findings of the Chazen Companies report, providing a brief description of the overall environmental setting of the Rondout and Hudson waterfronts, and identifying perceived environmental risks investigation and/or remediation requirements for typical parcels. Redevelopment will require an evaluation of the potential future land uses and the creation of a dedicated plan to reach the desired clean up goals, implementation of additional assessment to define the nature and extent of environmental problems, and the development of appropriate remedial strategies based on the intended re-use of the properties.

To facilitate analysis the redevelopment area was broken into four separate sectors. The properties in each of the sectors were not necessarily contiguous but are related geographically and share some unique characteristics that distinguish them from the other sectors.

Sector 1

Sector 1 is comprised of Concrete Blocks, Inc., Island Dock Lumber, Kingston Block Park, P&T Surplus, Hideaway Marina and Island Dock.

Inventory and Analysis

In general, the environmental issues associated with Sector 1 would be characterized as low to moderate and there are no significant constraints to redevelopment in the area. Cleanup costs are not likely to exceed \$250,000 at any of the properties and are likely to be substantially less.

Some minor clean up issues were identified at Block Park, including the storage of some drums and other materials on site. (These materials have been removed from the site since the site assessment occurred.) Limited site testing would ensure that there are no exposure routes to children using the park. Mitigation of contamination in this case would involve either removal of the impacted soils or capping. Groundwater is not likely to be an issue because there are no exposure routes at this site. Material storage was also identified as an issue at P&T Surplus, and some additional assessment should be considered for this facility. Estimated investigation and cleanup costs are likely to be on the order of \$50,000.

Environmental issues were identified at the Hideaway Marina. The source of the problem is unknown and may be coming from another site. Additional characterization is needed to define the nature and extent of the problem. Defining the source of contamination at this facility could be accomplished straightforwardly using readily available and relatively inexpensive technology. However, groundwater beneath the site is contaminated and appears to be widespread. If groundwater treatment were to be required, clean up would be costly. The sediments in the yacht basin also evidence contamination, which would be very costly to remediate, though at some point in the future, the channel will need to be dredged to facilitate entrance and access into the site. The environmental condition of the sediments will need to be addressed at that time.

Sector 2

Sector 2 has experienced the heaviest industrial uses over time and presents the most significant environmental issues in the study area. The sector includes the Hudson River Maritime Museum, vacant land, Rosita's Restaurant, the Millens Steel building, the Kingston Waste Water Treatment facility, L&M Auto Parts, KOSCO tank storage facilities, Central Hudson Gas Regulating Station, Millens & Son Scrap Metal Recycling and Rondout Landing. Several parcels have a moderate to high risk of environmental contamination based on current or past commercial or industrial uses. The highest risk sites in this sector include the auto salvage facility, the metal recycling facility, the bulk oil storage terminal and the former coal gasification plant location. These properties are all in close proximity to each other, so coordination of future assessment and clean up efforts among the properties in Sector 2 would facilitate more efficient and cost effective remediation.

Clean up costs for these properties moderate and should not create significant barriers to redevelopment. There is substantial latitude in this price range, and subsurface testing would be needed to determine actual costs. The bulk of the issues identified are associated with the handling and/or release of petroleum products. As such, any identified problems can be dealt with readily.

Several of the properties in Sector 2 have fairly low environmental risk associated with them. The Maritime Museum and the vacant parcel of land on the western edge of this sector have little in the way of significant risk, other than that associated with the industrial past of the area. A subsurface investigation could be implemented to evaluate environmental quality of the properties; however, it is unlikely to uncover any significant impediments to development of these two properties.

Kingston Waterfront Development Implementation Plan

Millens Steel, adjacent properties to the west, as well as the Kingston Sewage Treatment plant also have low to moderate risk associated with them. Millens Steel and the adjacent property to the east are similar brick buildings with significant character. Both facilities have the same general characteristics and environmental questions. Costs to investigate and mitigate problems associated with these facilities would likely be on the order of \$25,000 to \$100,000. The sewer plant has an odor control problem that must be mitigated.

The environmental issues associated with Rondout Landing could be described as moderate. Investigation of this parcel would be straightforward, and proposed mitigation would depend on the intended use of the property, with housing requiring the most stringent level of cleanup. Costs to implement remediation at this facility could range between \$50,000 and \$200,000, based on the limited amount of information available.

Sector 3

Sector 3 includes the Heritage Energy Terminal overlooking the Hudson River and Kingston Point Park at the intersection of the Hudson and Rondout. Environmental issues at the Heritage Energy Terminal are well defined. The first issue is a documented release of petroleum products on the site, which is being mitigated by the business owner. The second issue is the impact of leachate onto the site from the off-site, closed landfill. Although remediation structures limit the impacts of the leachate, the site owner has less control over the source of the leachate. Any redevelopment of the property would need to include controls to minimize the impact of the leachate. The park is also affected by leachate from the closed landfill.

Sector 4

Sector 4 includes two properties, the Brickyard and the Tilcon Minerals site. The constraints to redevelopment are few, and the environmental risk associated with the Brickyard parcel is probably moderate. The issues are typical of any industrial facility and investigation/mitigation can be implemented readily. Much of the Tilcon Minerals property is not usable due to past quarrying activity, but the waterfront has tremendous development potential. The environmental problems associated with the Tilcon waterfront area are presumed to be on the same order of magnitude as those observed on the Brickyard parcel. Estimated costs to investigate and remediate the Brickyard property range between \$50,000 and \$250,000, though additional investigation would be required to accurately estimate the costs.

Inventory and Analysis

Real Estate Tax Base Analysis

Issues, Opportunities, Challenges

- The full value of assessed acreage in the City of Kingston decreased slightly between 1996 and 2001. When inflation is taken into account, the full value assessment of the City of Kingston actually decreased by over 12%. Adjusting for inflation, taxable value decreased by 13.2%, and tax-exempt value decreased by 11%. These changes mean not only a decreased value of the City's tax base but a larger portion of tax-exempt land in the tax base in 2001 than in 1996.
- Kingston property taxes represent a more significant portion of Kingston's revenues than other cities statewide (31.5% versus 23.8%) and the amount generated per capita is nearly a third more (\$406 versus \$279).
- Kingston generates a significant portion of its revenue from sales tax, accounting for 20.3% of revenues (\$261 per capita). Sales taxes for cities statewide account for 16.7% of revenues an average or \$195 per capita.
- Residential land uses account for 36.5% of the City's total acreage and 64.3% of tax revenues generated. A smaller imbalance exists for commercial uses, which constitute 15.8% of assessed land area and 26.6% of revenues.
- Industrial, community service and vacant land significantly undercontribute to the tax base. Industrial uses account for 3.5% of acreage and 1.2% of revenues. Community services comprise 9.8% of the land area and generate less than 1% of revenues.
- Vacant land accounts for a relatively large 26.6% of land area while it contributes less than 2% to the tax base.
- The current per acre value for commercial property in the primary waterfront redevelopment area along Rondout Creek is \$14,335 while the value for commercial land uses citywide is \$64,112. Interestingly, waterfront industrial land is valued at \$18,770 per acre and only \$13,170 citywide.

Introduction

The following section presents a preliminary analysis of the general characteristics of the City of Kingston's tax base by major use categories as classified for assessment purposes. These include agricultural, residential, vacant or undeveloped land, commercial, industrial, recreation and entertainment, community services, public services, park and conservation uses based on the property type classification codes established by the New York State Board of Equalization and Assessment and displayed in the assessor's database. The system of classification consists of numeric codes in nine general categories. Divisions and subdivisions to delineate specific uses further define each category. For the purpose of this initial analysis, we have relied on only the general category codes as described below:

- **Agricultural** (100 series) Includes property used for the production of crops or livestock;

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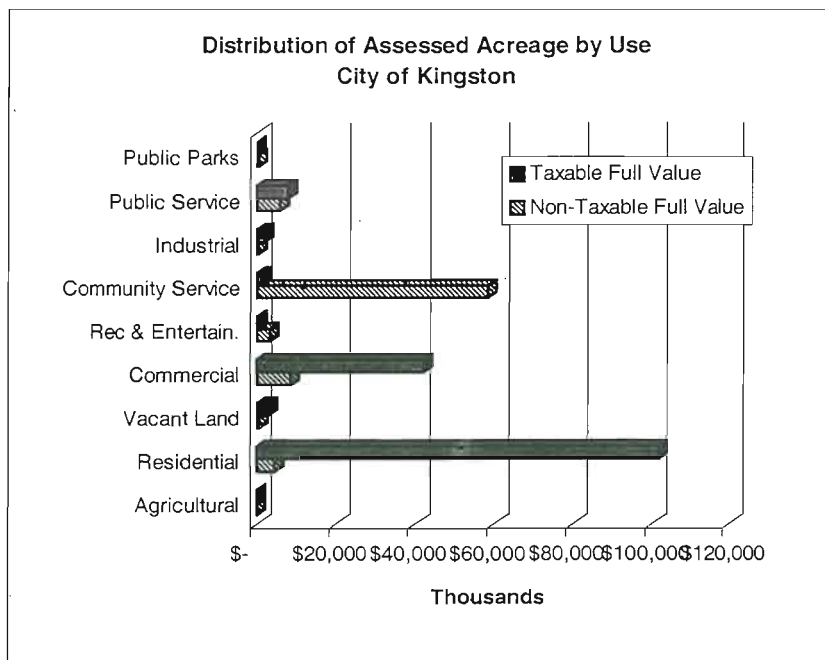
- **Residential** (200 series) Includes single family; two family; three-family and mobile homes but not multi-family; mobile home parks or other residential/mixed-use, which are classified in the commercial category.
- **Vacant land** (300 series) Property not in use or in temporary use or lacks permanent improvement;
- **Commercial** (400 series) Property used for sale of goods and services and residential uses noted above;
- **Recreation & Entertainment** (500 series) Property used by groups for recreation, amusement or entertainment;
- **Community services** (600 series) - Property used for the well being of the community;
- **Industrial** (700 series) - Property used for the production of durable and non-durable goods;
- **Public services** (800 series) - Property used to provide services to the general public;
- **Conservation** (900 series) - Wild, forested, conservation lands and public parks.

Land Use Characteristics – Citywide

The City of Kingston contains 7.4 square miles of land area, according to US Census data, which is equivalent to 4,736± acres. The City maintains assessment data on 8,450 parcels that contain approximately 4,173± acres, indicating that approximately 563± acres are dedicated to roads and right of ways, or roughly 12% of the City.

Approximately 34.1% of the assessed land area is tax exempt for assessment purposes indicating that about 2,750± acres are generating real estate taxes or 58% of the total land area in the City, as represented by the US Census.

The predominant assessed land use in the City is residential use (36.5%), followed by vacant land (26.6%), commercial land (15.8%) and community service (9.8%). The remaining uses: agriculture, recreation and entertainment, industrial, public service and parkland account for 11.3%.



Inventory and Analysis

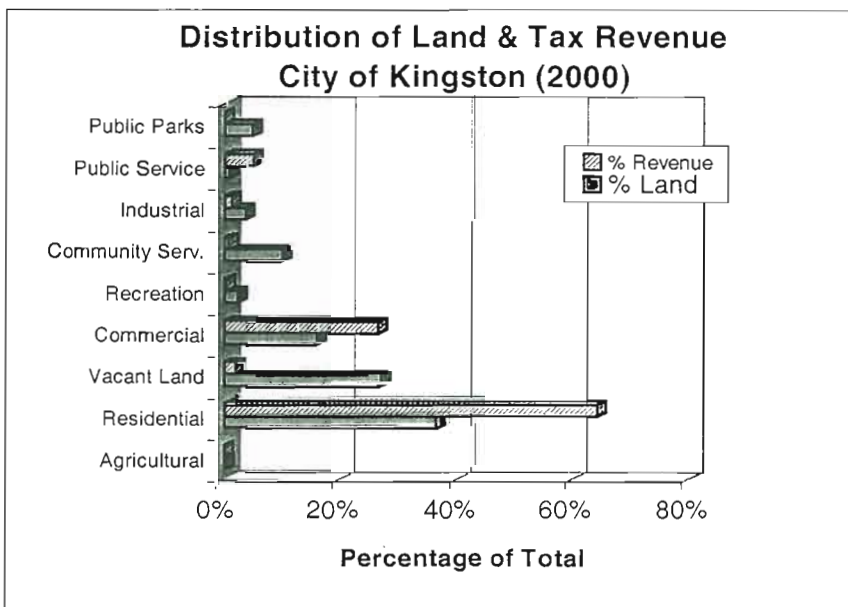
As illustrated on the chart above and table below, residential land use provides the majority of tax base value in the City accounting for nearly 64.3% of the assessed value according to a 2001 database for the City obtained from Ulster County. Commercial uses represent another 26.6% of the taxable assessed value in the City and Public service uses contribute 4.9%. All other land use categories comprise the remaining 4.2% of the taxable assessment base in the City of Kingston.

Land Use	Acreage	% Total	Assessed		Taxable	
			Full Value	% Total	Full Value	% Total
Agricultural	1.8	0.0%	\$ 22,640	0.0%	\$ 22,640	0.0%
Residential	1,521.28	36.5%	\$ 106,329,599	44.3%	\$ 101,787,927	64.3%
Vacant Land	1,111.16	26.6%	\$ 3,644,764	1.5%	\$ 3,036,024	1.9%
Commercial	657.42	15.8%	\$ 50,561,399	21.1%	\$ 42,148,200	26.6%
Recreation	94.74	2.3%	\$ 3,692,232	1.5%	\$ 391,194	0.2%
Community Service	407.97	9.8%	\$ 59,716,634	24.9%	\$ 1,165,181	0.7%
Industrial	147.81	3.5%	\$ 2,197,349	0.9%	\$ 1,946,698	1.2%
Public Service	34.61	0.8%	\$ 13,415,361	5.6%	\$ 7,681,255	4.9%
Public Parks	196.17	4.7%	\$ 329,186	0.1%	\$ -	0.0%
Total	4,172.96	100.0%	\$ 239,909,163	100.0%	\$ 158,179,119	100.0%

Source: Ulster County Real Property Services, 2001, Analysis by River Street Planning & Development, LLC

Real Estate Tax Revenue Distribution

The chart below compares the distribution of taxable property by use to the distribution of land area in the City of Kingston. It should be noted that while the City of Kingston has a Homestead Tax for residential properties, it was not incorporated into this analysis, as it would not provide an accurate comparison of land acreage to tax revenue generation based on actual land value. A significant imbalance exists in terms of the percentage of land that is used for



residential use (36.5%) in comparison to the percentage of tax revenues generated (64.3%).

A somewhat lesser imbalance exists for commercial use as shown, where commercial property constitutes only 15.8% of Kingston's assessed land area while it generates 26.6% of the City's property tax revenue. Industrial uses account for 3.5% of the land and contribute only 1.2% of the tax revenue. Public services comprise

only 0.8% of the land area but generate 4.9% of the property tax revenues in the City.

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This disparity is due in part to the high percentage of certain property categories that receive tax exemptions requiring other uses to carry a higher share of the property tax burden. As noted, approximately 65.9% of the City's overall assessment base is taxable leaving 34.1% nontaxable. The greatest differential (not unexpectedly) is in the community services category where total property full value assessment is in excess of \$59.7 million but 99% of this property is tax-exempt. Consequently, community service uses while comprising 9.8% of the City land area, generate less than 1% of its property tax revenues. This category of course includes government facilities and education and health facilities that are traditionally operated by not-for-profit organizations.

Similarly, vacant land uses while comprising 26.6% of the assessed land area of the City, contributes less than 2% of the City property tax revenue. Similar disparities incur with parkland uses. Public parks comprise 4.7% of the acreage and contribute 0% in City property tax revenues. This is because the parks are City-owned.

Overall, the average assessed full value of property in the City of Kingston is \$57,491 per acre while the average taxable assessed value is \$37,906 per acre. The highest per acre taxable values are in public service uses (\$221,937 per acre), residential (\$66,909) and commercial uses (\$64,112 per acre). The lowest per acre taxable values are in vacant land (\$2,732 per acre) and community service uses (\$2,856 per acre).

Land Use and Revenue Characteristics - Waterfront Redevelopment Area

Primary Waterfront Redevelopment Area

The primary redevelopment area, for purposes of this analysis, includes the Rondout Creek and Hudson River waterfront properties from Route 9W to Kingston Point (see map on following page) with a couple of non-waterfront properties as well as several waterfront parcels west of 9W. It does not include the sewage treatment plant owned by the City of Kingston even though that is in the primary redevelopment area, because the assessed value is \$13,000,000 with no taxable value and this is so significantly higher than any other parcel – it becomes an outlier that would skew the results of the tax base analysis.

Based on the 2001 Assessment Roll Database from Ulster County Real Property Services, land in the primary area is a mixture of vacant, commercial, industrial, public service, public parkland and some recreational lands. As the table below illustrates, the primary area is ±169 acres, which represents approximately 4 percent of total City assessed land area. The area has a total full value assessment of \$932,157. The taxable portion of the primary area has a value of \$771,639, representing a half of one percent of the City's taxable real estate base.

The primary waterfront redevelopment area currently represents more than four percent of the City's assessed land area but accounts for a half of one percent of the tax base.

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City of Kingston Primary Waterfront Redevelopment Area

Land Use	Acreage	Assessed Full Value	Per Acre Assessed FV	Taxable Full Value	Per Acre Tax. Value
Vacant Land	22.35	\$ 150,035	\$ 6,713	\$ 123,320	\$ 5,518
Commercial	30.26	\$ 433,782	\$ 14,335	\$ 433,782	\$ 14,335
Recreation	7.90	\$ 71,316	\$ 9,027	\$ 71,316	\$ 9,027
Industry	5.44	\$ 102,106	\$ 18,770	\$ 102,106	\$ 18,770
Public Service	1.61	\$ 41,114	\$ 25,537	\$ 41,114	\$ 25,537
Park land	101.60	\$ 295,500	\$ 2,908	\$ -	\$ -
Total Area	169.16	\$ 932,157	\$ 5,511	\$ 771,639	\$ 4,562
% of Total City	4.05%	0.39%	n/a	0.49%	n/a

Secondary Redevelopment Area

Vacant Land	239.14	\$ 304,983	\$ 1,275.33	\$ 304,983	\$ 1,275
Commercial	75.79	\$ 202,628	\$ 2,673.55	\$ 202,628	\$ 2,674
Total Area	314.93	\$ 507,611	\$ 1,611.82	\$ 507,611	\$ 1,612
% of Total City	7.55%	0.21%	n/a	0.32%	n/a

Source: Ulster Co. Property Tax Services, Analysis by River Street Planning & Development, LLC

Secondary Waterfront Redevelopment Area

The Secondary Waterfront Redevelopment area includes properties north of Kingston Point along the Hudson River Waterfront to the City line. This area is comprised of ±315 acres of land, most of which is classified as vacant land in commercial or industrial areas. There is also ±76 acre parcel classified as commercial, but is relatively undeveloped. The secondary area represents more than 21% of all vacant land in the City of Kingston and almost 7.6% of assessed land area of the City. However, as the land is largely vacant, it accounts for less than a half of one percent of the City's tax base.

Tax Rate and Assessment Trends

Economic growth of a municipality can, in part, be measured by net additions to the assessment rolls over time. New construction activity and improvements to existing property generally have a direct positive impact on overall property values. This broadens the tax base from which municipalities can draw needed revenues to provide residents with desired services. To evaluate trends in the City, assessed tax base, assessment and tax rate data were analyzed for the period 1996-2001, and are summarized below.

The full value of assessed acreage in the City of Kingston in 2001 was \$246,557,753, a slight decrease (0.9%) in value from 1996. However, when the 1996 assessed value is adjusted to Year 2001 dollars using a Consumer Price Index of 2.6% per year, the full value assessment of the City of Kingston actually decreased by 12.4% since 1996. Similarly, the taxable value decreased just slightly using 1996 dollars but, when adjusted for inflation, the taxable value decreased by \$24.1 million or 13.2%. The value of tax-exempt lands actually increased slightly using 1996 dollars, however, when adjusted for inflation, the tax-exempt value decreased by \$10,797,148 or 11%. These trends have not only resulted in a decrease in the value of the City's tax base, there has been a slight decrease in that portion of assessed land value which is

Kingston Waterfront Development Implementation Plan

taxable. In other words, the value of tax-exempt land is now a slightly larger portion of the tax base than it was in 1996. The City should seek to reverse these trends.

Assessment Trends (1996-2001)

City of Kingston, NY

	2001	1996	Adjusted 1996*	Change with Adjustment	% Change
Assessed Full Value	\$ 246,557,753	\$ 248,804,771	\$ 281,466,888	\$(34,909,135)	-12.4%
Taxable Full Value	\$ 159,151,166	\$ 161,994,407	\$ 183,263,153	\$(24,111,987)	-13.2%
Tax-Exempt Full Value	\$ 87,406,587	\$ 86,810,364	\$ 98,203,735	\$(10,797,148)	-11.0%

*Adjusted for inflation using a CPI of 2.6% per year.

The table below illustrates the tax rate trends for property owners in the City of Kingston from 1996 to 2001. The combined City, County and Kingston City School District full value tax rate for residential property owners for 2001 was \$30.61 per \$1,000. This included a homestead tax for City and School District Tax purposes. A homestead tax rate is a lower rate for residential properties and a higher rate (non-homestead tax rate) for all other types of property. Homestead tax rates are established as a local option after a revaluation when it is determined that the new market value assessments create a dramatic increase in the residential tax burden. To alleviate some of that burden, a homestead tax rate may be established.

The City's tax rate accounted for 31.5% of the overall tax rate, the school district (56%) and the county (12.5%). Over the past five years, the combined rate has increased by just 2%. The increase is attributed to a 4% increase in the school tax rate, somewhat offset by the fact that the City tax rate dropped 1%. Residential property tax rates have remained stable in the recent past. When the 1996 rates have been adjusted to 2001 dollars (see below), the small 2% increase between 1996 and 2001 does not even keep pace with inflation (about 13% over 5 years) and the adjusted 1996 rates were actually higher.

City of Kingston Full Value Tax Rate Trends

	Residential				Commercial			
	1996	Adj. 1996**	2001	% Change	1996	Adj. 1996**	2001	% Change
City Rate	9.74	11.01	9.64	-1.0%	17.75	20.06	19.11	7.7%
County Rate	3.82	4.31	3.83	0.4%	3.82	4.31	3.83	0.4%
City School District	16.46	18.60	17.14	4.1%	23.44	26.49	25.13	7.2%
Combined Rate	30.02	33.93	30.61	2.0%	45.01	50.86	48.07	6.8%

*EQ Rate for 1996 was .4626 and .4528 for 2001

** 1996 rates have been adjusted for inflation using a CPI of 2.6% per year.

For commercial properties, which are charged the non-homestead tax rate, the combined City, County and Kingston City School District full value tax rate trends are somewhat different. The combined rate for 2001 was \$48.07 per thousand. This rate is a 6.8% increase since 1996. The increase is associated with a City rate increase of 7.7% and a school district rate increase of 7.2%. When the 1996 rates have been adjusted to 2001 dollars (see above), the 6.8% increase between 1996 and 2001 does not even keep pace with inflation (about 13% over five years) and the adjusted 1996 rates were actually higher.

Inventory and Analysis

Revenue Trends

The City of Kingston generates revenues from a variety of sources including real property taxes, sales tax receipts, other sources such as the mortgage tax, federal, state and local aid. Based on data from the NYS State Office of the State Comptroller for fiscal year 1998, real property tax and assessment revenues levied by the City accounted for 31.5% of total revenue generated or \$9,370,772. This equates to \$406 per capita (using 1990 Census population figures). On average, real estate property tax revenues for New York State cities account for 23.8% of all of revenues for or \$279 per capita. Therefore, property taxes represent a more significant portion of Kingston's revenues than other cities statewide and the amount generated per capita is nearly a third more.

Comparison Cities

Real Property Tax Rates (2000)

City	County	2000 Population	Land Area (sq. mi.)	Full Value Tax Rates			
				City	School	County	Combined
Poughkeepsie	Dutchess	29,871	5.1	\$ 13.42	\$ 18.85	\$ 3.79	\$ 36.06
Glen Cove	Nassau	26,622	6.6	\$ 7.40	\$ 17.47	\$ 2.53	\$ 27.40
Newburgh	Orange	26,454	3.8	\$ 16.77	\$ 18.74	\$ 3.92	\$ 39.43
Middletown	Orange	25,388	5.2	\$ 12.93	\$ 24.50	\$ 4.19	\$ 41.62
Kingston	Ulster	23,456	7.4	\$ 13.49	\$ 20.44	\$ 3.64	\$ 37.57
Lockport	Niagara	22,279	8.5	\$ 10.36	\$ 20.32	\$ 6.90	\$ 37.58
Lackawanna	Erie	19,064	6.1	\$ 15.00	\$ 12.42	\$ 6.53	\$ 33.95
Plattsburgh	Clinton	18,816	5.0	\$ 5.21	\$ 19.95	\$ 5.42	\$ 30.58
Amsterdam	Montgomery	18,355	6.0	\$ 11.47	\$ 16.87	\$ 12.80	\$ 41.14

Source: NYS Office of Real Property Services, US Bureau of Census

Kingston also generates a significant portion of its revenue from sales taxes and governmental aids. Currently, the City of Kingston receives 11.5% of the annual sales tax collected by Ulster County. Sales taxes account for 20.3% of all Kingston revenues, or more than \$6 million, this equates to approximately \$261 per capita. Sales taxes for cities statewide account for 16.7% of revenues on average or \$195 per capita. Thus, the City of Kingston receives a greater amount of sales tax per capita than other New York State cities. Federal, state and other intergovernmental aids comprise about 24.6% of Kingston's revenue which is just slightly less than that of all cities statewide. Likewise, the per capita amounts are similar for Kingston and the average per capita for all cities statewide. The other revenues which include income (fees) from various departments and other unclassified revenues account for 20.5% of all revenues for the City of Kingston which is less than the 27.2% that those revenues account for when all New York State cities are combined.

Potential Redevelopment Impacts on Real Estate Tax Base

Property taxes are a key source of revenue for the City of Kingston, so it is important to analyze the potential impacts that different new land uses could have on the real estate tax base as a result of redevelopment of the primary and secondary study areas.

The current per acre full value of land used for commercial purposes in the primary waterfront redevelopment area is \$14,335, while the value of commercial land uses citywide is \$64,112. Industrial land uses are valued at \$18,770 per acre in the primary redevelopment area and

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\$13,170 Citywide. Therefore, existing commercial land uses on the waterfront are contributing far less to the tax base than commercial uses citywide, while industrial uses on the waterfront are contributing more per acre than the average acre of land used for industrial purposes citywide.

	Per Acre Tax Value	Total Taxable Value	Revenue Generated
Existing Redevelopment Primary Area	\$ 4,562	\$ 771,639	\$ 14,746
60 Acres Redeveloped as Commercial	\$ 64,112	\$ 3,846,720	\$ 73,511
60 Acres Redeveloped as Residential	\$ 66,909	\$ 4,014,540	\$ 38,700

For purposes of this analysis, the citywide average assessment per acre by land classification is used as the basis for analyzing potential development impacts in the primary development area on the City's real estate tax base. Generally speaking, commercial and residential properties in the City have traditionally contributed the most to the City's tax base. Therefore, for every acre of land redeveloped as commercial from any existing use in the primary area, the City would gain on average between \$45,342 per acre (for converted industrial lands) and \$58,594 per acre (for converted vacant lands). If any existing use were redeveloped as residential, the City would gain between \$48,139 (for converted industrial lands) and \$61,391 per acre (for converted vacant lands).

Theoretically, if the 60 acres of existing vacant, commercial, industrial and public service lands in the primary redevelopment area were redeveloped as new commercial, the City real estate tax base could gain at least \$58,764,796 in taxable assessment based on existing per acre values for commercial properties in the City. If those 60± acres in the primary redevelopment area were redeveloped as new residential, the City's real estate tax base could be enhanced by at least \$23,954,142 in taxable assessed value.

As the City currently has a homestead tax on residential properties, under the current tax rate system, the new commercial development (with no homestead tax rate) would contribute more than \$73,511 in revenue to the City. Residential development would contribute more than \$38,700 in revenue to the City with the homestead tax rate.

Inventory and Analysis

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. Appendix E, *City of Kingston Waterfront Conditions Assessment*, describes the analysis and cost estimates presented below in detail.

Rondout Creek Bulkheads

The condition of the Rondout Creek bulkheads were evaluated from the City docks at West Strand Park to Kingston Landing south of Kingston Point Park to provide an overview of needed improvements and a preliminary range of cost estimates to complete the identified improvements.

The visual assessment focused on the condition of the shoreline and bulkheads along Rondout Creek from Island Dock/Hideaway Marina to Kingston Landing as well as along the Hudson River at the Tilcon Materials and Brickyard properties. An in-depth conditions assessment of the Rondout Creek and Hudson River waterfront was conducted at low tide. The bulkheads were visually observed above the water line at low tide to determine the need for and extent of repair. Areas that do not obtain bulkhead but are located within the project area were also noted.

In some locations bulkhead is in very poor condition and may not be salvageable. Some property owners have maintained the timber bulkhead and others have installed sheet piling. In other areas, however, the bulkhead is completely deteriorated and collapsed. There is no bulkhead in some locations, but the shoreline is in need of stabilization. The preliminary estimate for repairs and reconstruction of the Rondout Bulkheads is \$1.6 million, about \$450,000 of which would be for City-owned facilities. Hudson River bulkhead repairs were estimated at \$4.8 million. All of these are privately owned. A complete discussion of needed repairs and preliminary cost estimates is included in Appendix E.

Pedestrian access along the wooden jetty to Light House Point

The existing condition of the wooden jetty extending from Kingston Landing to the Kingston Light House was evaluated to determine the improvements needed to provide pedestrian access to the light house. The United States Army Corps of Engineers recently constructed improvements to stabilize the jetty; however, it did not construct it to a height adequate to provide pedestrian access along the jetty to the lighthouse.

The current Kingston-Rondout Lighthouse was commissioned in 1915. During the late 19th and early 20th centuries, coal was conveyed north along the Delaware and Hudson Canal from Pennsylvania and loaded on barges at Kingston for transport to New York City. In the 20th Century, goods such as ice, stone, and bricks were shipped from Kingston to New York City. Although barge shipments along the Hudson River have declined substantially since the early 20th Century, the Rondout Creek serves as a popular destination for recreational boating.

Currently, the Kingston-Rondout Lighthouse can be accessed only by boat from the Hudson River Maritime Museum or by walking the stone jetty during low tide. The United States Army

Kingston Waterfront Development Implementation Plan

Corps of Engineers recently rebuilt the jetty extending from the area adjacent to the tidal flats to the Kingston Lighthouse. Improvements were limited to bulkhead repairs and riprap scour protections; however, and provisions were not made to provide pedestrian access to the lighthouse. The existing jetty is submerged during high tide.

A visual site assessment was completed on April 16, 2002 to evaluate the condition of the jetty above the water level. The jetty is in excellent condition. At over 2,000 linear feet in length and 30 feet in width, it extends from the tidal flats to the Kingston Rondout Lighthouse. To be accessible by pedestrians during mean high water conditions, the jetty must be raised approximately four feet.

Two options were evaluated to provide for pedestrian access to the lighthouse. Option I included building a wooden boardwalk above the jetty at a height that would clear the mean high water level. The boardwalk would be constructed using pressure treated timber. Because the jetty extends a significant distance into the River, a wooden structure would be susceptible to ice floes during the spring so that ice and storm damage could be expected with this type of pedestrian access. The approximate cost of this alternative is \$1.5 million for initial construction.

Option II involved raising the jetty approximately four feet above the existing jetty height. Pressure treated timbers would be used to raise the jetty, thus giving the new construction a look similar to the existing jetty. Ties between the faces of the jetty would be installed at appropriate intervals for stability. A 10-foot wide concrete sidewalk would then be poured on top of the extended riprap to create a level surface for pedestrians. Ten feet of riprap would be located on each side of the concrete sidewalk. This alternative is preferred, since it is less susceptible to ice and storm damage and would have a lower maintenance cost. The approximate cost of this alternative is \$2.6 million.

Rondout Creek and Hudson River Depths

Research was completed to assemble available data on Rondout Creek depths between the Island Dock causeway and the mouth of the creek at Kingston Landing and the Hudson River at the Brickyard property. Preliminary cost estimates were performed for dredging. The role of the Army Corps of Engineers and other relevant agencies was outlined.

Historically, Rondout Creek and the Hudson River at Kingston Point were used to haul goods such as coal and agricultural produce to New York City by barge. In the latter half of the 19th century, Kingston became well known for building materials such as cement, bricks, and bluestone slate that was used in much of the infrastructure in New York City. Now, Rondout Creek is primarily used for recreational boating, although barges do carry goods along the Hudson to New York City.

Silt deposits from stormwater runoff and barge activities are prevalent along the bottom of the Hudson River and Rondout Creek, making travel by large vessels difficult in many locations. The New York State Department of Environmental Conservation is in the final stages of developing topographical maps of the Hudson River bottom at Kingston as part of a large-scale mapping project performed in conjunction with Columbia University. This mapping will provide river bottom characteristics, such as silt deposits and soil conditions of the Hudson River at the mouth of the Rondout Creek and along the Hudson. This mapping will be the first river bottom

Inventory and Analysis

mapping of the Hudson River since the 1930s. The new maps are needed to accurately estimate dredging needs.

Dredging at the mouth of the Rondout Creek and along the Hudson will likely require a full Environmental Impact Statement. Several environmental factors will determine the significance of the dredging project. First, the dredging project must be performed in a manner that minimizes impacts to sensitive plant and animal species. Sensitive plant and animal species are located within the tidal flats. In addition, there have been several sunken barges identified within the project area. These barges have historical value that is significant to the City of Kingston. The State Historic Preservation Office will likely require a mitigation plan to ensure the barges are not damaged or destroyed.

As part of the Environmental Impact Statement, a hazardous materials assessment will be needed to determine a suitable sediment disposal method. If contamination is found, the dredged material must be disposed of as a special of hazardous waste, significantly impacting the cost of the proposed project.

The Army Corps of Engineers is the regulatory agency for all dredging projects along Waters of the United States which include the type Hudson River, (and waters tributary to). All projects of this nature must be in compliance with the Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899 and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972. Prior to beginning work, the applicant must complete the Joint Application for Permit. The permit must include technically accurate project plans and the Environment Questionnaire. The Environmental Questionnaire must be submitted with the Joint Application to provide a synopsis of the project. The Army Corps of Engineers will make a decision on the permit. Following permit approval, construction may commence. The United States Army Corps of Engineers will be involved throughout the duration of the project to ensure the project is completed in compliance with the terms set forth in the Joint Application.

The Army Corps of Engineers will review each application and will determine if the selected disposal location is suitable by reviewing public comments and laboratory test results. The Army Corps of Engineers will progress the project in compliance with all regulations and statues adopted by the United States Environmental Protection Agency involving the disposal of dredged material.

The cost estimates provided below incorporate several assumptions. The actual costs may vary depending on actual site conditions encountered. The cost estimate assumes that dredged material will be disposed of upland and there is no contamination present. It also assumes that an environmental impact statement will be necessary to complete the dredging project. The project would include dredging for recreational vessels only, given the current redevelopment efforts along the waterfront. This preliminary estimate does not include the costs to raise any sunken barges found within the dredging area. Costs per cubic yard for extracting dredged material were from the United States Army Corps of Engineers Fiscal Year 2002 Contract Dredging Program. Costs for preparation of an environmental impact statement, permitting, feasibility assessment, and program design are estimated at \$200,000. Environmental mitigation expenses are estimated at \$300,000, with actual material dredging costs of \$10 per cubic yard.

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Kingston Point Causeway

The Kingston Point Causeway from Kingston Landing to its end at Kingston Point Park was evaluated to provide an overview of needed improvements and preliminary cost estimates to complete identified improvements.

The shoreline along the Kingston Point Causeway begins at the tidal flats adjacent to a boat launch and extends to the Kingston Point Park. Eight-hundred feet of railroad track along the end of the causeway has recently been rebuilt by the Trolley Museum and has completed a critical link in the trolley line that connects Kingston's downtown to the Kingston Point Park. A portion of the trolley line is located on the causeway between the tidal flats and the Hudson River.

The shoreline along the Kingston Point Causeway has been stabilized by heavy stone fill. In most locations, the shoreline is in excellent condition. In several locations, however, scour along the roots of large trees is evident. Additionally, stone fill should be placed to prevent further damage to the shoreline and protect the trolley tracks located nearby. Left unchecked, the tracks could become undermined resulting in collapse and failure of the tracks. The estimated cost for needed improvements is \$48,750.

Inventory and Analysis

Historic Resources

Heritage Areas

The City of Kingston is one of seventeen Heritage Areas formally designated by the New York State Office of Parks, Recreation and Historic Preservation to further the four state-wide goals of preservation, education, recreation and economic development. The Kingston Heritage Area interprets its role in local, state and national history through three major themes:²

Transportation (primary interpretive theme): Kingston's location provided access to oceangoing vessels of the colonial era, and later the Rondout Creek and Barge Canal played a major part in the growth of the industrial base for New York State. The development of the railroad in conjunction with the port increased Kingston's significance further.

Government (secondary interpretive theme): Kingston played a significant role in the evolution of New York State government. The first State constitution was adopted in Kingston. As New York's first capital city, its importance to the history of New York State provides a unique opportunity for the interpretation of this theme.

Architectural History (secondary interpretive theme): Kingston has an inventory of architecturally significant buildings that spans generations uncommon for a community its size. These styles include early Dutch, Federal, Greek Revival, Italianate, Victorian, Stick, and late 19th century commercial. The existence of such a broad spectrum of architectural styles demonstrates the evolving heritage of the City and creates a rich environment with exceptional interpretive opportunities.

The primary transportation theme is interpreted within the Rondout Creek and Hudson River neighborhoods; secondary government and architectural history themes are interpreted outside the study area in the Stockade district (where New York State government originated) and throughout the City. Visitors centers are located in the Stockade and Rondout areas. The Rondout visitors center is located across Route 9W from the primary study area. Along with Kingston Point, both of these areas are considered to be "core areas" of the Kingston Heritage Area.

Located in the primary study area, Kingston Point was historically a transportation hub for dayliners from all over the state. Visitors disembarked at the Point, and then traveled by railroad to destinations throughout the Catskill Mountains and beyond. The Urban Cultural Park Management Plan calls for future restoration of Kingston Point's Dayliner dock at the terminal of the trolley line.³

National Register of Historic Places

The City of Kingston has five historic districts and eight individual buildings or sites listed in the National Register of Historic Places. Although none of these districts or buildings is located within the study areas, the National Register-listed Rondout-West Strand Historic District is just across Route 9W to the west and the National Register-listed Ponckhockie Union Chapel/Congregation Church (91 Abruyn Street) is located in the neighborhood on the east side

²Adapted from the City of Kingston Urban Cultural Park Management Plan, prepared by the Reimann-Buechner Partnership in 1987, p. I.2.

³City of Kingston Urban Cultural Park Management Plan, V.17.

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of East Strand and North streets. The City of Kingston Buildings List of Historic Properties indicates that 93-97 Abruyn Street is listed in the National Register and protected by the City's local landmarks law.⁴ Also, although the Ponckhockie neighborhood has not been listed in the National Register, a portion of it was identified as a supplemental preservation area in the Urban Cultural Park Management Plan in 1987 (see Preservation Plan and Ordinance section below).

Historic Resource Surveys

The Ponckhockie neighborhood was included in a formal historic resource survey conducted during the preparation of the City of Kingston's Urban Cultural Park Management Plan in 1987. The survey was conducted in accordance with procedures established by the New York State Office of Parks, Recreation and Historic Preservation and each building was evaluated in terms of its historic and architectural significance as well as the amount of original character it retained.⁵

Of approximately 138 buildings surveyed in the Ponckhockie neighborhood (including East Strand and North streets), approximately 5 buildings (3.6%) were considered to be of major importance with few alterations, 50 buildings (36.2%) were found to be older, not exceptionally significant buildings with very few exterior changes, 63 (45.7%) were older buildings so significantly altered that their historic character was obscured, 7 (5.1%) were compatible with surrounding structures but not historic, and 13 (9.4%) were incompatible with surrounding structures.⁶

Based on this survey, the Management Plan recommended that Ponckhockie (and another neighborhood known as Wilbur) "be developed as an educational and interpretive tool for the Kingston Urban Cultural Park." Noting that the neighborhood has a unique residential quality with several well-maintained historic homes that exemplify classic residential styles (including the Thomkins House, Cordts Mansion, and the Moses Yeoman House), the Plan recommends that houses in Ponckhockie be rehabilitated. It also identifies the Ponckhockie neighborhood as an important "peripheral area" that complements Kingston's National Register-listed historic districts and core areas of the Heritage Area, and provides additional opportunities for interpretation and economic development. As a result, the Plan notes that the preservation and revitalization of the Ponckhockie neighborhood is a high priority objective of the Heritage Area.⁷

Buildings Eligible for National Register Listing

The Plan also indicated that several other buildings may be eligible for listing in the National Register of Historic Places and related tax incentives. These include:⁸

Millens Steel Building: The Kingston Urban Cultural Park Management Plan recommends that since the 1987 use was not water-dependent, efforts should be made when possible to

⁴ City of Kingston Buildings List of Historic Properties, 19-page facsimile received from Wayne Platt, City of Kingston Building Safety Division, 10/24/01.

⁵ Each building is classified as being "pivotal," "matrix," "filler," "compatible," or incompatible." Although these terms are not used in this section, their corresponding definitions are.

⁶ This count is based on historic resource inventory maps developed in conjunction with the preparation of the City of Kingston Urban Cultural Park Management Plan. They are included in the plan.

⁷ City of Kingston Urban Cultural Park Management Plan, p. V.4 - V.6.

⁸ City of Kingston Urban Cultural Park Management Plan, p. V.12.

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redevelop the building for water-dependent or related use(s) and the building and surrounding land be incorporated into the adjacent West Strand Park.

Cornell Steamboat Company Shops: Located at 94-112 East Strand and constructed in c. 1890, this building is a "...significant landmark in the Rondout Creek National Register. Once the site of steamboat construction, repair and maintenance activities, the privately owned buildings today are used as artist studios and residential lofts." The Kingston Urban Cultural Park Management Plan recommends exploration of alternative opportunities for adaptive re-use that may integrate more directly with the Urban Cultural Park upon sale or change in use. This building is protected under the City's local landmarks law.

Both of these buildings were ranked as having major importance with few alterations. Their loss (through demolition, alteration or neglect) would substantially diminish interpretation of the Kingston Heritage Area's primary interpretive theme of transportation. Although neither of these buildings has been listed in the National Register of Historic Places, the City of Kingston's Historic Landmarks Preservation Commission has provided formal protection for the Cornell Steamboat Company building by designating it as an historic landmark of the City of Kingston, subject to the privileges and restrictions established by the City's Landmarks Preservation Code. Both buildings should be formally listed in the National Register of Historic Preservation to enable developers to take advantage of federal historic preservation tax incentives and local building rehabilitation incentives.⁹

Preservation Plan, Ordinance, and Zoning Code

The City of Kingston Urban Cultural Park Management Plan includes a preservation plan section that outlines how the Heritage Area's historic resources should be protected and enhanced. It identifies three existing historic districts (additional districts have been listed in the National Register since 1987), describes the historic resource inventory prepared with the Management Plan, and identifies "supplemental preservation districts," including the portion of the Ponckhockie neighborhood generally bounded by Union, North, East Strand and Gill Streets.¹⁰

The Plan also establishes preservation standards, guidelines, and procedures for buildings and sites located within the City's historic districts or identified as individual landmarks, and recommends that they also be applied to supplemental preservation districts identified in the plan. The Landmarks Ordinance requires Landmark Commission review and approval of all applications for any changes made within these districts, including construction, reconstruction, alteration, restoration, removal, demolition, or painting. These requirements apply to all buildings, structures, out-buildings, walls, fences, steps, topographical fixtures, earthworks, landscaping, paving, and signs. Additional regulations stipulate that all buildings eligible for

⁹ Although there continue to be many misconceptions regarding National Register designation and its impact on property owners, formal listing is primarily honorific, but also makes income-producing properties eligible for a 20% Federal tax credit on certified rehabilitation work. Because of their National Register listing, properties can also qualify for local building rehabilitation tax credits if the municipality adopts appropriate legislation. In 1997, New York State enacted legislation which enables local governments to establish building rehabilitation tax credit programs. To qualify for such local tax credits, properties must be listed in the National Register of Historic Places and be rehabilitated in accordance with the Secretary of Interior's Standards for Building Rehabilitation. In addition, historic homeowner tax credit legislation is pending at the federal and state levels and is expected to be adopted at some point in the future because of the potential for stimulating revitalization.

¹⁰ City of Kingston Urban Cultural Park Management Plan, V.27-33. Parcels on Gill, Abruyn, Grove and East Strand are excluded from the proposed Ponckhockie supplemental preservation district.

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listing in the National Register of Historic Places must be rehabilitated in accordance with the Secretary of Interior's Standards for Rehabilitation of Historically Significant Buildings.¹¹

Chapter 405 of the City of Kingston Municipal Code encompasses the City's Zoning Ordinance, which was approved as of 4/26/85, and subsequently amended periodically. Article IX of Chapter 405 establishes the City of Kingston's Landmarks Preservation Commission (amended and approved in 1989) and gives it jurisdiction over four local historic districts: the Stockade Historic District, Rondout-West Strand Historic District, Chestnut Street Historic District, and the Fair Street Historic District; all districts are also listed in the National and State Registers of Historic Places.

There is no indication in Chapter 405, Article IX or in the City's brochure "Historic Kingston: Preservation Guidelines," that there are any supplemental preservation districts or protections for such districts.¹²

In addition to the National Register listed 93-97 Abruyn Street, the City of Kingston Buildings List of Historic Properties indicates that 94-122 East Strand Street (Cornell Steamship Co.) and 82-152 Lindsley Avenue in the Ponckhockie neighborhood are also protected by the City's local landmarks law.

Building Rehabilitation Incentives

As of 1987, the City's Urban Renewal Agency administered a Rehabilitation Loan Program and the Urban Cultural Park Management Plan recommended that the City explore the feasibility of creating additional incentives, including grants, loans and tax relief, within key priority preservation areas as they are identified and developed.

¹¹ City of Kingston Urban Cultural Park Management Plan, V. 35-37.

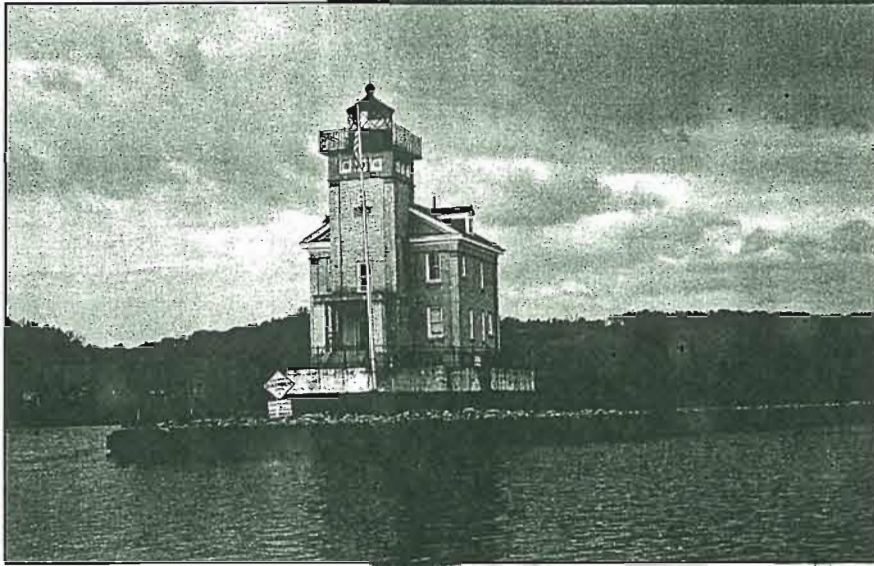
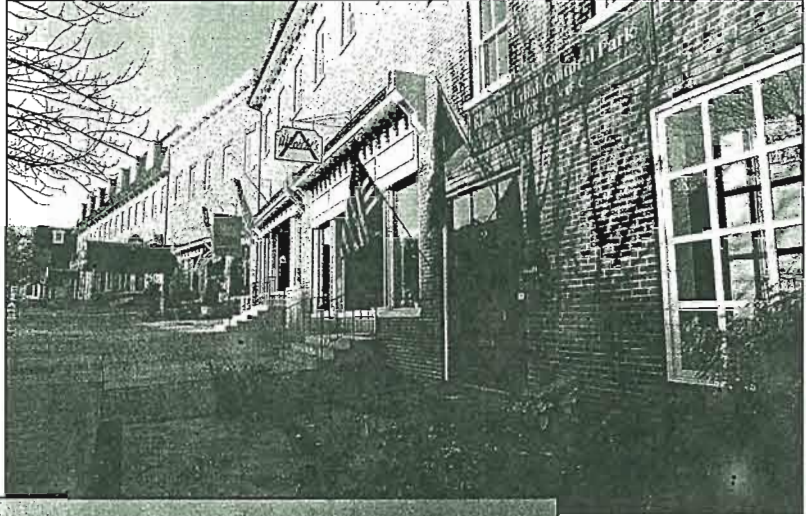
¹² Telephone conversation with Wayne Platt, City of Kingston Building Safety Division, 10/24/01.

Appendix B: Economic Profile

Kingston Waterfront Development Implementation Plan



City of Kingston Waterfront Development Plan

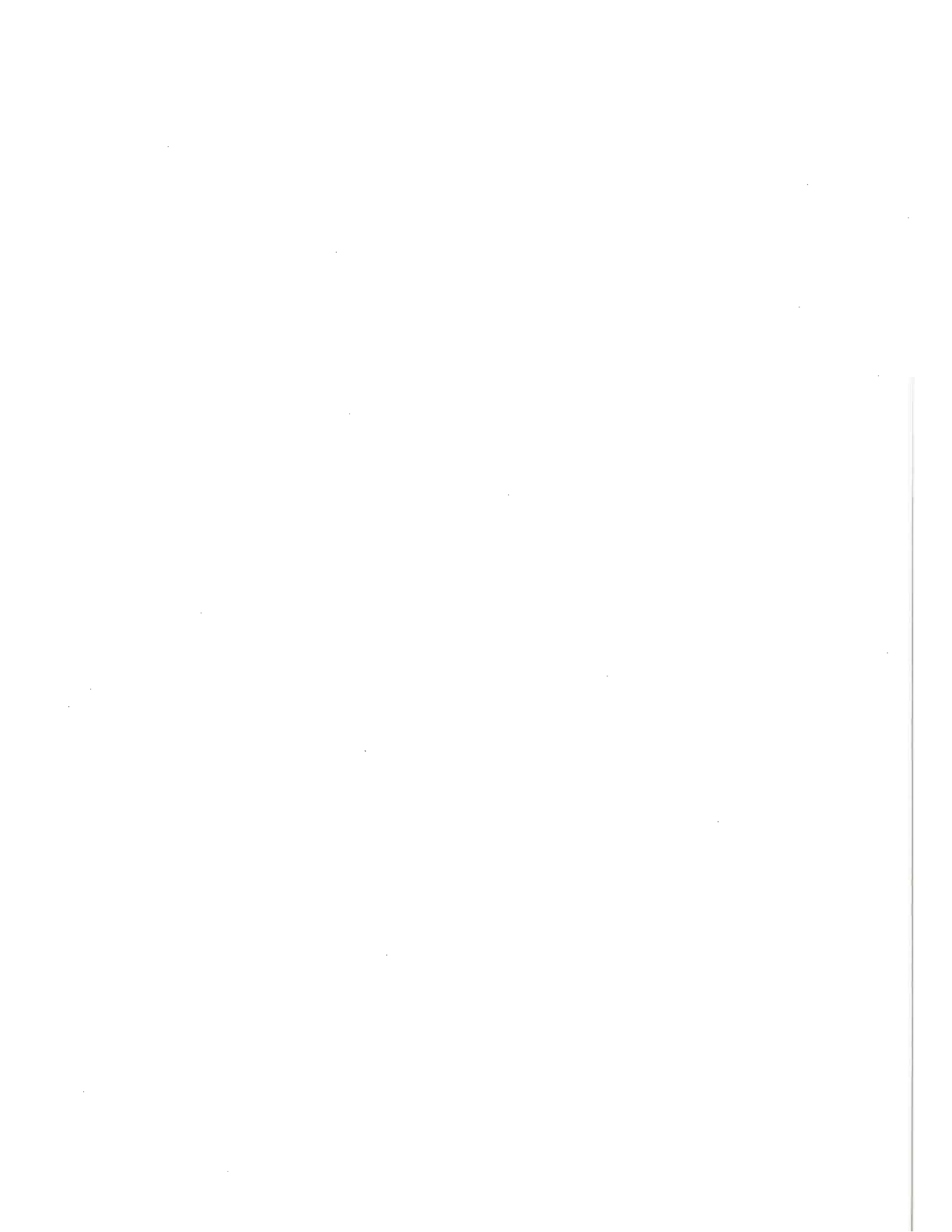


Economic Profile

Economic Profile

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City-wide Market Assessment

Location

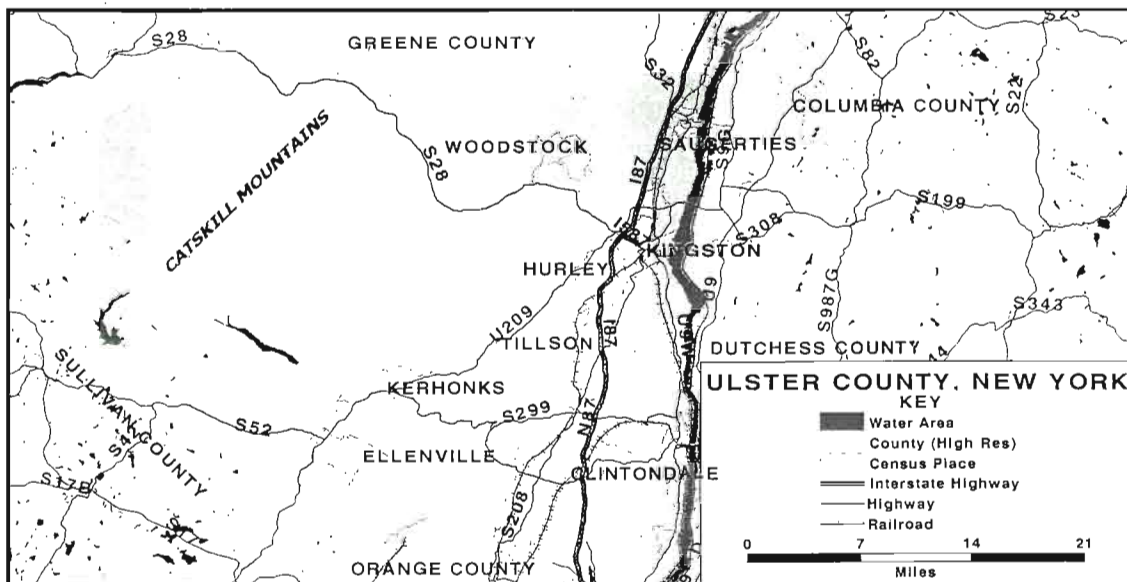
The City of Kingston is located on the western bank of the Hudson River approximately 54 miles south of Albany, and 104 miles north of New York City. Kingston is the county seat of Ulster County and is a major regional commercial and business center. Kingston has significant frontage on the Hudson River 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.

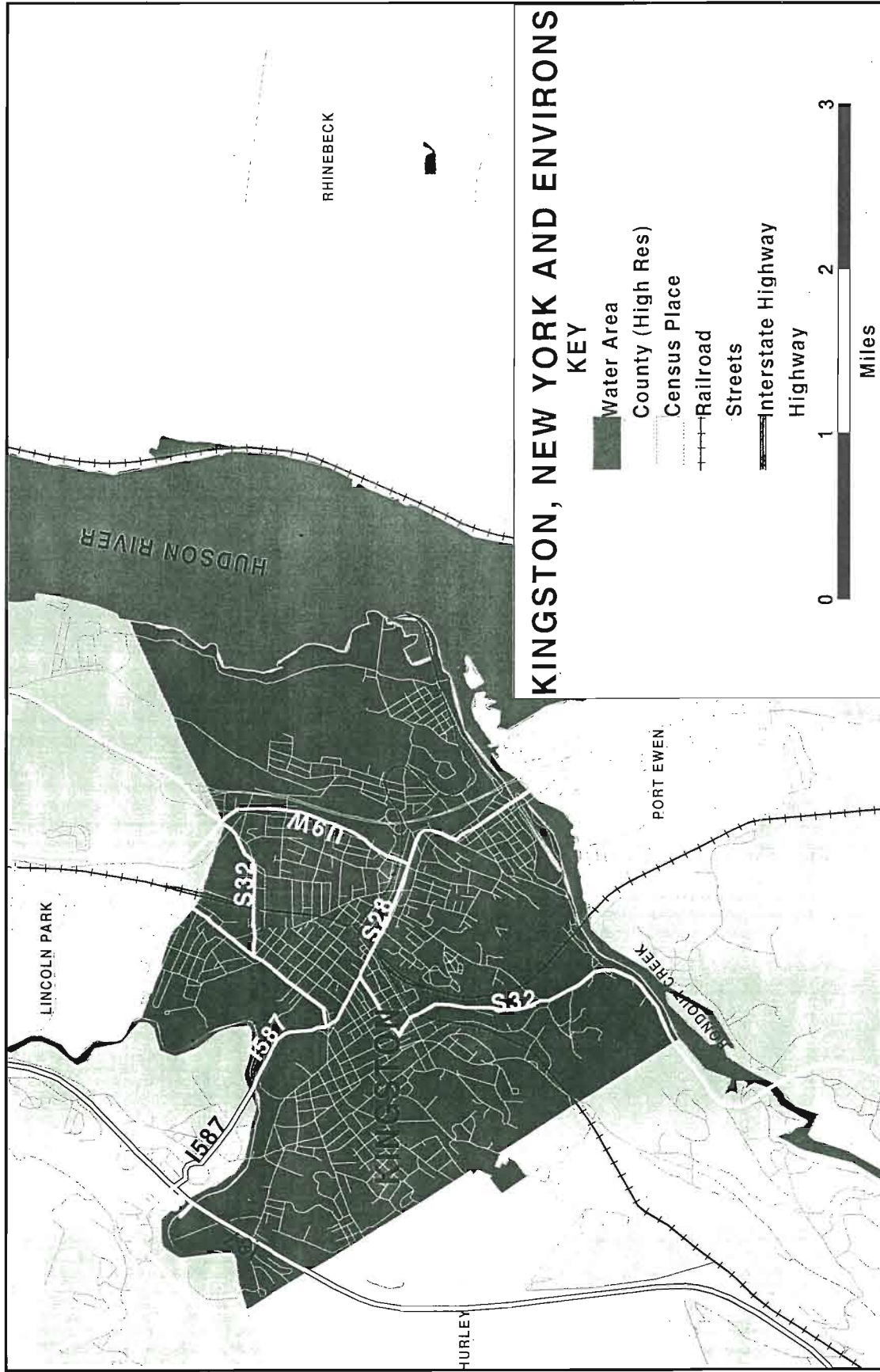
A rail line bisects the city. The railroad splits in three at the vicinity of Grand Street, Arlington Place, and Smith Avenue. One line continues to the Rondout Creek study area, though it is no longer in active use. The other lines continue one to the south and east following the river, the other to the south and west.

The topography of the city is hilly, rising sharply from a narrow flat area along the riverfront. The uneven lay of the land influences construction and land use, and contributes to the fact that 26.6% of the assessed land in the city is vacant.

Map 1.1 shows Ulster County and its major municipalities. Map 1.2 shows Kingston and its major highways and streets.



Kingston Waterfront Development Implementation Plan

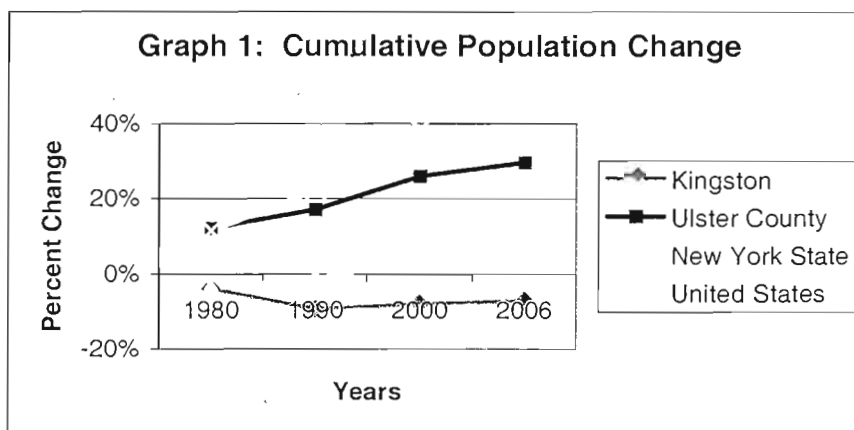


Kingston Waterfront Development Implementation Plan

Demographics

The city encompasses approximately 7.4 square miles (19.11 square kilometers) in area and according to the 2000 Census and has a population of 23,456 people. From 1970 until 1990, the city experienced a 9.6% decrease in its population. The population loss during this period may be attributed to suburbanization trends facing many older cities, especially considering that Ulster County experienced a population gain. From 1990 to 2000, however, Kingston had a gain of 1.6% in total population, reversing a trend of population loss and resulting in a 30-year cumulative change between 1970 and 2000 of -7.4%.

Though the city lags behind the population growth rate in Ulster County, New York State, and the nation, this positive growth marks the reversal of a long-term trend. Growth, though still modest, is projected to continue through 2006. Graph 1 (below) demonstrates Kingston's population change in relation to those other growth rates from a 1970 base year. The figures for 2006 are estimated projections provided by Claritas.



The population density of the city is 3,170 persons per square mile. Though this figure is indicative of an urban environment, the figure is lower than that of the metropolitan New York area or even municipalities such as Newburgh, thirty miles to the south.

The following table shows the age distribution of Kingston compared to that of Ulster County, New York State, and the United States. The median age of Kingston's population in 2000 was 38.1, slightly less than the median age of the county population (38.2), but higher than that of the state (35.9) and the nation (35.3). The median age of Kingston's population increased from 35.2 in 1990, a gain of 2.9 years, which is a significant increase. This finding has impacts on labor availability (with more residents aged 65 years or older as seen in the Table 1 below) and the kinds of goods and services demanded from city residents.

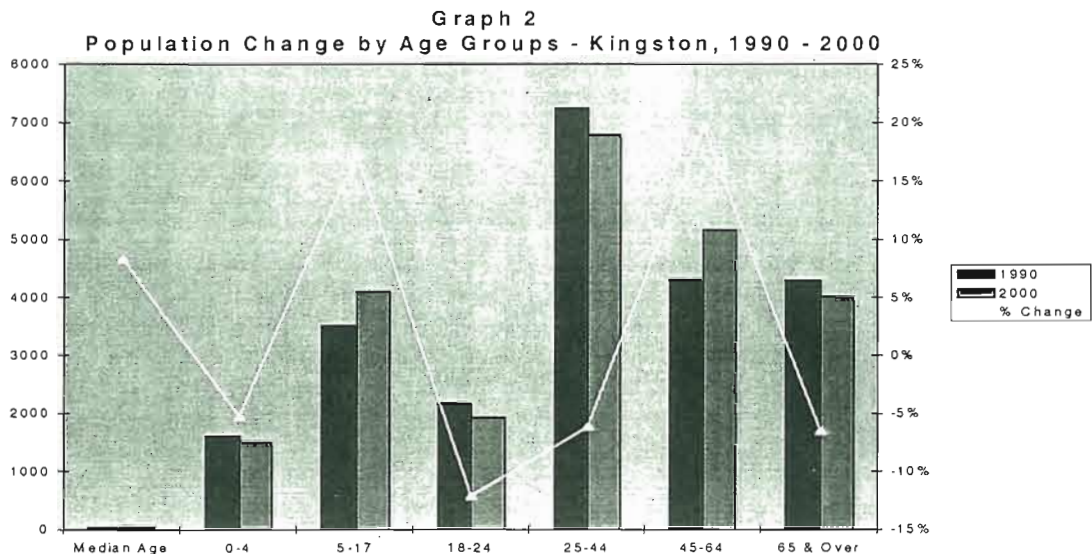
Economic Profile

Table 1
Year 2000 Percentage of Population by Age Group
Kingston, Ulster County, New York State and the United States

Age Group	Kingston	Ulster County	New York	United States
Under 20	26.1%	26.2%	27.4%	28.6%
20 to 44	34.8%	35.7%	37.3%	36.9%
45 to 64	22.0%	24.8%	22.4%	22.1%
65 and over	17.1%	13.4%	12.8%	12.4%

The table shows that while Kingston's population in the Under 20 group is on par with that of the county, it is below state and national percentages. The percentage of the population in the working age categories (20-44 and 45-64) is behind the other three by two to three percent, while the percentage of those over 65 is four percentage points greater than the state or national figures. The implication is that Kingston's population is older than that of the state and nation and not only has a smaller percentage of persons in the working age groups, but has a smaller than average percentage of young persons to enter the work force in the future.

Graph 2 corroborates this trend in showing the changes in population by age groups in Kingston. Though the 5 to 17 and 45 to 64 age brackets increased over the decade, the other brackets declined, notably the 18-24 and 25-44 groups, the younger working age brackets. Though the 65 and over population declined, it remained above national percentages as noted above. The median age figures are included to show the 8% increase in the median age between 1990 and 2000.



Racially, the city of Kingston is becoming an increasingly diverse community according to 2000 Census findings. Although the categories have changed since 1990 with the introduction of a "Two or More Races" category in the 2000 survey, some general observations can be noted. During the ten-year period between 1990 and 2000, Kingston saw a loss in white and American Indian population and gains in Black, Asian, and other races.

Kingston Waterfront Development Implementation Plan

The population of Kingston remains predominantly White and the percentage of Whites remains higher than that of the nation and well above the state percentage. The percentage of Blacks in the city is approximately that of the nation, though somewhat lower than that of the state. The total number of Asians, Pacific Islanders and Others remains small relative to 1990, but has increased. The large percentage increases in some cases stem from a small 1990 base. Table 2 shows the numbers and percentages of change.

Table 2							
Population by Race							
	White Alone	Black Alone	American Indian Alone	Asian Alone	Pacific Islander Alone	Some Other Race Alone	Two or More Races
United States							
<i>% of 1990 Population</i>	80.35%	12.03%	0.81%	2.76%	0.14%	3.90%	
<i>% of 2000 Population</i>	75.14%	12.32%	0.88%	3.64%	0.14%	5.46%	2.43%
<i>Ten Year Change (%)</i>	5.82%	15.80%	22.87%	48.96%	13.76%	58.18%	
New York State							
<i>% of 1990 Population</i>	74.47%	15.90%	0.33%	3.81%	0.02%	5.47%	
<i>% of 2000 Population</i>	67.95%	15.88%	0.43%	5.51%	0.05%	7.07%	3.11%
<i>Ten Year Change (%)</i>	-3.76%	5.38%	39.57%	52.44%	133.16%	36.44%	
Ulster County							
<i>% of 1990 Population</i>	92.96%	4.64%	0.32%	1.13%	0.01%	0.93%	
<i>% of 2000 Population</i>	88.91%	5.43%	0.27%	1.24%	0.03%	2.15%	1.98%
<i>Ten Year Change (%)</i>	2.84%	25.71%	-9.92%	17.53%	168.42%	147.80%	
City of Kingston							
<i>% of 1990 Population</i>	87.41%	10.15%	0.39%	1.18%	0.00%	0.86%	
<i>% of 2000 Population</i>	80.38%	12.77%	0.30%	1.53%	0.00%	1.90%	3.13%
<i>Ten Year Change (%)</i>	-6.61%	27.72%	-22.22%	31.14%		124.12%	

Just 6.5% of persons in Kingston classified themselves as Hispanic in the 2000 Census, a figure that is about one half that of the nation (12.5%), and less than one-half of the state's 15.1%.

The household structure of Kingston's population differs from that of the state and nation in several important respects. The percentage of Family Households in Kingston is 55.7 percent, compared to 66.1% for the United States and 65.7% for the state. The percentage of married couple households (35.2%) is well below the national percentage of 51.7. The percentage of households headed by females with no husband present in Kingston is 15.8, while that of the nation is 12.2, and that of the state is 14.7. The implications of these statistics affect marketing, social programs and needs, as well as income levels and spending patterns.

At the same time 44.3% of the city's population resides in non-family households. This percentage is almost one-third higher than the state percentage and almost 40% higher than the national percentage. Of this 44.3%, 36.8% of householders lived alone in 2000, and 14.8% of these were individuals 65 and over. These percentages compare to 25.8% and 9.2% respectively for the nation, and 28.1% and 10.1% for the state. This reinforces the age breakdown data presented above and again serves to define the community's needs, capabilities, and situation.

Economic Profile

Economic Vitality

Census data for 2002 indicated a drop in median household income from 1990 to 2000 for both the city of Kingston and Ulster County. This is contrary to the overall increase for New York State during the same time period.

Income Characteristics

One of the most commonly used measures of economic vitality is median household income (MHI). In the 1990 Census, Kingston reported a median household income of \$29,133. A preliminary review indicates that the city's 2000 MHI is 72.8% of the state figure. However, in order to effectively compare 1990 to 2000, income data must be adjusted to reflect inflation. When adjusted to reflect 2000 dollar values (determined by the difference in the Consumer Price Index, or CPI), today's value of the 1990 median income is approximately \$38,455. According to the 2000 Census Kingston's median income was \$31,594, resulting in a 17.8% decrease in median household income when adjusted for today's dollars. Table 3 (below) shows more detailed information.

Table 3		
Median Household Income		
New York State		
	Median HH Income	Adjusted*
1990	\$30,056.00	\$39,673.92
2000	\$43,393.00	\$43,393.00
% Change		9.38%
Ulster County		
	Median HH Income	Adjusted*
1990	\$34,033.00	\$44,923.56
2000	\$42,551.00	\$42,551.00
% Change		-5.28%
City of Kingston		
	Median HH Income	Adjusted*
1990	\$29,133.00	\$38,455.56
2000	\$31,594.00	\$31,594.00
% Change		-17.84%
* - Adjusted for inflation to reflect 2000 dollar values. CPI information obtained from the Federal Reserve Bank of Minneapolis < http://minneapolisfed.org/economy/calc/cpihome.html >		
Source: Bureau of the Census		

Income growth is another aspect of economic vitality. Overall, Kingston lags behind Ulster County and New York State in its median household income. The state had a median household income of \$43,393 for 2000, more than a 9% increase since 1990. Ulster County had exceeded the state's median household income in 1990, but is about equal to the state in 2000 at \$42,551, about a 5% decrease from 1990. Kingston reported median household

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income levels below Ulster County and the state in 1990. For 2000, Kingston fell further behind county and state projections, with incomes nearly \$11,000 less than the county projection and nearly \$12,000 behind the state's projection.

Other measures of income reflect the city's slow economic growth. The percentage of households in Kingston reporting incomes of less than \$25,000 in the 2000 Census was 39.1%, compared to 29.6% for the state and 28.60% for the nation. However, the more telling point is that though this number is lower than the 43.4% of households in Kingston in 1990, the decline was greater for the state as a whole (37.4% to 29.6%) and for the nation (37.9% to 28.6%). At the other end of the income spectrum, households with incomes greater than \$75,000 constitute 14.0% of Kingston's households, but are 25.5% and 22.5% of the state and nation respectively.

The US Bureau of Economic Analysis provides statistics on Per Capita Personal Income (PCPI) and Total Personal Income (TPI) at the county level. The most recent figures for Ulster County compare 1999 data with that from 1989 and 1998. In 1999 the PCPI for Ulster County was \$25,367, which ranked 21st in the state and was 75% of the state average and 89% of the national average. However, in 1989 the county ranked 17th in the state and has thus lost ground over the decade. The average yearly growth rate for the county for the period was 3.3%, which lagged the state and national growth rate for the same period of 4.4%. The one-year growth rate (1998 to 1999) was 5.0%, which was slightly behind the state change of 5.1%, but ahead of the national growth of 4.5%. Thus, over time the county, and by inference Kingston, have lagged state and national growth in PCPI, though recently the rate of growth appears to be improving.

Total Personal Income (TPI) includes 1) earnings, such as wages and salaries; 2) dividends, interest and rent; and 3) transfer payments (Social Security, public assistance) received by residents of the county. In 1999 Ulster had TPI payments totaling \$243,787,000 which ranked 21st in the state. The 1989 TPI listing ranked Ulster County 20th in the state, and the county's annual growth rate over the decade was 3.6%. This compares to the state growth rate of 4.6% per year and the national figure of 5.4%. However, the growth between 1998 and 1999 was 5.3%, matching the state growth percentage and only slightly behind the national figure of 5.4%.

It should be noted that over the decade income from earnings declined from 66.6% of the total to 62.0% while income from transfer payments increased from 12.4% of income in 1989 to 17.5% in 1999. This indicates that an increasing number of residents were receiving Social Security, public assistance or unemployment benefits while the number of persons with earned income declined.

Another measure of economic vitality is the level of poverty in a given area. Again statistics for the city itself are not available. According to the Census Bureau estimates for 1997, the most recent county level figures available, 12.3% of the county's population lived in poverty. This figure was below the state figure of 15.3% and the national level of 13.3%. Ulster County was ranked 25th among the state's 62 counties. Despite this relatively favorable ranking, the percentage translated to almost 20,000 persons living in poverty.

Consumer spending provides the final measure of economic vitality considered in this report. Data from Claritas on expenditures on selected product categories and selected store types shows that Kingston itself is not a strong market. Spending on the categories of "Food at Home" and "Nonprescription Drugs" rank 92 on an index in which the national average is 100.

Economic Profile

Spending on all categories of apparel and “big ticket” home items such as floor covering, major appliances and Entertainment Equipment (TVs, sound systems) have index numbers in the upper 60s. Expenditures by store type reflect this pattern – grocery stores have an index figure of 90, followed by gasoline stations with convenience stores at 89 and gasoline stations without convenience stores at 87.

Figures for Ulster County are stronger though lagging behind the national trends in most other categories. Grocery stores (101) and gasoline stations, with or without convenience stores (104) are the leading places for spending. Consumer waterfront spending will be examined in more detail in subsequent sections of this analysis.

Labor Market Characteristics

The size of the labor force in an area is an indicator of the area’s ability to provide an adequate supply of labor now and in the future, especially if workers can be provided with the skill sets necessary for the next generation of jobs. The projected population growth for Kingston over the next five years is not a strong asset, but projected growth in the county may offset the city’s slower growth if Ulster County can generate new jobs and attract businesses and workers.

Table 4 shows the percentage of persons by age range within a broad definition of working age (20 to 64). The number of persons in these brackets is 12,313, which is 52.5% of the total population of the city.

Age Range	Kingston	New York State	United States
20-24	5.9%	6.6%	6.7%
25-34	12.9%	14.5%	14.2%
35-44	16.0%	16.2%	16.0%
45-54	13.5%	13.5%	13.4%
55-59	4.7%	4.9%	4.8%
60-64	3.8%	4.0%	3.8%

As noted, these figures indicate that Kingston’s workforce contains fewer younger workers than either the state or the nation, though the labor force is equal to the state and nation in terms of percentage of workers in the over 35 brackets. This difference, when combined with the lower percentage of youth in the city, indicates that younger people in general and younger workers in particular are migrating elsewhere, creating a smaller labor pool for the city.

Educational attainment is used as a proxy for labor quality, as no recent labor market study is available. Overall educational attainment trends in Kingston reflect those in Ulster County, New York State and the nation. Kingston’s largest educational attainment category consists of high school graduates or those with high school equivalencies, at 31.3% of the city’s population of 25 and older. That percentage is not significantly lower than Ulster County, New York State, and national averages.

Kingston Waterfront Development Implementation Plan

Kingston has about the same percentage of persons with no diploma as the county, state, and nation. Overall, about 21% of Kingston's population has less than a high school education, compared to approximately 20% for the state or nation.

The city has a high percentage of individual's with post-high school education at 48%. About 59% of that population, or 28% of the city's total population, hold some type of college degree, from an Associates Degree through graduate and professional degrees. The national percentage for persons with more than a high school diploma is slightly higher at 50%. Overall educational attainment for Kingston's population is comparable to national norms.

The structure of employment in an area is also an indicator of the range and strength of the labor force. In 2000, about 57% of the city's population age 16 and older was employed as civilians, meaning they were not part of the nation's armed forces, and less than 1% of the total city population age 16 and older was listed as actively employed in the Armed Forces. The city's labor force characteristics are similar to that of Ulster County, New York State, and the nation.

As Table 5 shows, the percentage of Kingston males employed in 2000 was slightly below that of the county, state and nation, though the percentage of males not in the labor force was about same as for the broader jurisdictions. Conversely, a slightly higher percentage of females in Kingston were employed.

	City	County	State	Nation
Male:				
In labor force:				
In Armed Forces	0.00%	0.1%	0.14%	0.40%
Civilian:				
Employed	28.0%	31.1%	30.0%	31.8%
Unemployed	2.1%	2.4%	2.4%	2.4%
Not in labor force:	16.0%	16.0%	15.2%	14.1%
Female:				
In labor force:				
In Armed Forces	0.06%	0.02%	0.02%	0.10%
Civilian:				
Employed	29.3%	28.2%	27.0%	27.9%
Unemployed	1.5%	1.7%	2.1%	1.8%
Not in labor force:	23.0%	20.6%	23.7%	22.0%
<i>Source: Bureau of the Census, 2000</i>				

Unemployment is an important measure of labor availability and the health of the area labor market, with low rates indicating fewer individuals available to work. Unemployment rates are not available from the NYS Department of Labor for the City of Kingston; however, national, state, and county unemployment levels are available and have fallen over the past ten years according to the New York State Department of Labor. The Ulster County economy has been strong. In both 2000 and 2001, unemployment levels were consistently lower than both the state and national levels.

Economic Profile

Table 6 compares unemployment rates for the county, the state and the nation. Increases in unemployment in New York and Ulster County have been less in 2001 than in the nation as a whole. In the last quarter of 2001, unemployment in Ulster County rose in tandem with the increases in unemployment in the nation, but at a level 1.7% lower than the national percentages each month.

	United States	New York State	Ulster County
1990	5.6%	5.3%	3.6%
2000	4.0%	4.6%	3.3%
Change	-1.6	-0.7	-0.3
2001	4.7%	4.7%	3.4%
Change	0.7	0.1	0.1

Source: New York State Department of Labor

Despite the lower percentages of unemployment in Ulster County, there were still over 2,700 persons seeking employment in an average month. The highest number of unemployed persons seeking work was 3,400 in January 2001, while the lowest number was 2,200 in April and May.

Job skills and pay levels are addressed in assessing occupational structure. The top three occupations held by residents of the city of Kingston in 1990 are listed as office and administrative support, professional specialty, and sales occupations. Combined, these three occupations account for nearly 50% of the city's workforce. The administrative support positions appear to have centered upon clerical positions and other office workers, and Kingston's percentage in this category was similar to national, state, and county percentages. The professional specialty positions include accountants, lawyers, and health care professionals, and Kingston's percentage of employees in this area was above the national percentage, and on par with state and county figures.

Kingston was well ahead of national percentages in the service occupations indicating that Kingston was making good progress in moving from the manufacturing oriented "old" economy to the "new" service oriented economy. A further indication of the growth of employment in the "new" economy was the lower percentages of workers in the production categories than in the nation as a whole. This factor may indicate a more stable employment market for the city as many of the structural economic change being experienced by the state and the nation have already occurred in Kingston.

However, Kingston did lag the other jurisdictions in percentage of management, business and financial operations occupations. The implication is that Kingston was not a corporate or regional headquarters. Table 7 shows the complete figures for the city, county, state, and nation from the 2000 Census.

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	Kingston	Ulster County	New York State	United States
Managerial, professional and related occupations:				
Management, business and financial operations	10.4%	11.3%	13.5%	13.5%
Professional and related occupations	22.9%	24.2%	23.2%	20.2%
Sales and office occupations:				
Sales and related occupations	11.5%	10.6%	10.8%	11.2%
Office and administrative support occupations	15.1%	14.8%	16.3%	15.4%
Service occupations:				
Healthcare support occupations	4.4%	2.5%	3.0%	2.0%
Protective service occupations	3.0%	2.9%	2.8%	2.0%
Service occupations, except protective and healthcare	13.0%	11.2%	10.8%	10.9%
Farming, forestry, and fishing occupations				
	0.4%	0.6%	0.3%	0.7%
Construction, extraction and maint. occupations				
	7.1%	9.9%	7.6%	9.4%
Production, transportation and material moving:				
Production occupations	6.7%	6.7%	6.4%	8.5%
Transportation and material moving occupations	5.5%	5.4%	5.3%	6.1%
Total Employment	10,548	83,748	8,382,988	129,721,512

Economic Structure

Table 8 on the following page shows the economic structure of Ulster County in comparison to those of the state and the nation according to the 1999 Census Bureau publication County Business Patterns. The 1999 publication uses the new North American Industrial Classification System (NAICS) to detail employment and numbers of establishments. While this system employs many of the same categories and definitions as the earlier Standard Industrial Classification (SIC) system there are differences, especially in the areas of information and publications and computer related businesses, making direct comparisons difficult. The existing data reveals the structure of the county's economy and how it differs from the national structure.

As Table 8 shows, the retail trade in Ulster County has a greater percentage of retail employment than that of either the state or the nation. Retail employment represents 19% of total employment versus 13% on the national level. This makes sense given Kingston's role as a retail center for the surrounding communities. Further analysis reveals that one-quarter of the County's 8,694 retail employees work in food and beverage stores, most of them in grocery stores. There are few employees in convenience stores and very few persons employed in specialty stores. The amount of consumer spending in gasoline stations with convenience stores was noted earlier. These figures corroborate the strength of this type of establishment by showing that gasoline stations with convenience stores have over twice as many employees as convenience stores alone and have a payroll over four times that of convenience stores. The second largest group of employees is that in general merchandise stores (1,776 employees), who are divided almost evenly between department stores and other general merchandise stores such as warehouse clubs and superstores. Motor vehicles and auto parts dealers constitute the third largest group, but they are a distant third with 950 employees.

Economic Profile

Ulster County also has a significantly higher percentage of persons employed in the health care and social assistance sector than the nation, though it is on a par with the state percentage. The largest number of employees (2,716 or 35.5%) is in the ambulatory health care area (doctor's offices, outpatient facilities, and laboratories), followed by 1,863 (24%) employees in nursing and residential care facilities and 1,709 employees (22%) in hospitals. This reflects Kingston's position as a regional medical center and nursing care center and helps explain the higher than average percentage of elderly persons in the city.

The presence of the Catskill Mountain ski resorts is reflected in the strength of employment in the accommodations and food services sector, which is 4.2% above the national percentage and almost twice that of the state. Over sixty percent of the 5,887 people in this sector are employed in eating and drinking establishments; the remainder work at hotels and motels.

The county differs from the national percentages primarily in several areas – Administration, Support and Remediation (4.2% below the national figure); Management of Companies (2.5% below the national figure); Construction (-1.6%); Educational Services (-1.2%); and Manufacturing (-0.9%). The negative numbers the administration and management sectors are, again, indicative of the fact that Kingston has not been a “headquarters town” or regional commercial center that would require the types of businesses (large employment agencies, business service centers, credit bureaus, travel agencies, and building services) in these categories. The difference in the construction sector employment reflects the relative lack of demand for new building construction, either residential or commercial, in recent years, while the small difference in educational services results in large measure because there are no large colleges or university branches in the county other than Ulster County Community College. The difference in manufacturing is a positive element, again demonstrating that Kingston has made the transition to the service economy.

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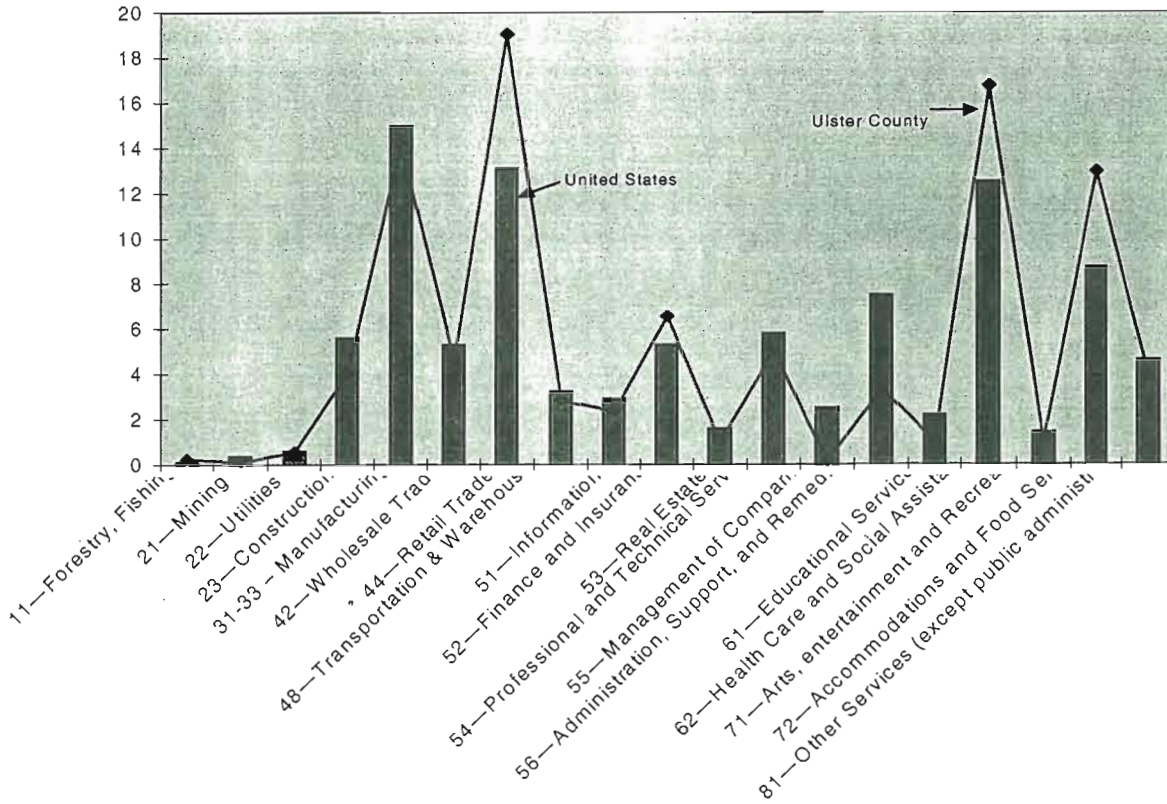
Table 8
Comparison of the Economic Structure
The United States, Ulster County, and New York State, 1999

Group	US Percentage of Employees	New York State Percentage of Employees	Ulster County Percentage of Employees	Number of Employees in Ulster County	Difference US and Ulster County Percentage
11—Forestry, Fishing	0.1%	0.0%	0.2%	106	+0.1%
21—Mining	0.4%	0.0%	0.1%	68	-0.3%
22—Utilities	0.6%	0.6%	0.5%	250 +/-	-0.1%
23—Construction	5.6%	4.0%	4.0%	1824	-1.6%
31-33 – Manufacturing	15.0%	10.2%	14.1%	6414	-0.9%
42—Wholesale Trade	5.3%	5.8%	4.6%	2099	-0.7%
44—Retail Trade	13.1%	11.3%	19.0%	8694	+5.9%
48—Transportation & Warehousing	3.2%	3.0%	2.8%	1282	-0.4%
51—Information	2.9%	3.8%	2.3%	1092	-0.6%
52—Finance and Insurance	5.3%	8.1%	6.5%	2996	+1.2%
53—Real Estate	1.6%	2.1%	1.0%	487	-0.6%
54—Professional and Technical Services	5.8%	7.2%	5.0%	2303	-0.8%
55—Management of Companies	2.5%	2.5%	>0.1%	N/A	-2.5%
56—Administration, Support, and Remediation	7.5%	6.7%	3.3%	1517	-4.2%
61—Educational Services	2.2%	4.1%	1.0%	496	-1.2%
62—Health Care and Social Assistance	12.5%	16.7%	16.7%	7636	+4.2%
71—Arts, Entertainment and Recreation	1.4%	1.6%	1.0%	486	-0.4%
72—Accommodations and Food Service	8.7%	6.8%	12.9%	5887	+4.2%
81—Other Services (except Public Administration)	4.6%	4.6%	3.9%	1806	-0.7%
95—Auxiliaries	0.8%	0.0%	>0.1%	N/A	-0.8%
99—Unclassified Estab.	0.0%	0.0%	>0.1%	N/A	--

Graph 3 on the following page depicts the same data, illustrating the discussion and the table.

Economic Profile

Graph 3
Percent Employment by Industry Sector - US and Ulster County, 1999



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The economic structure of Kingston can be examined using a database developed for Kingston by industry experts, Dun and Bradstreet. While this source uses the older Standard Industrial Classification (SIC) system, and collects data differently than the Census Bureau, it is a reliable source than can shed light upon the economic structure and activity of the city. The data presented here includes all of ZIP Codes 12401 and 12402, which extend well beyond the city boundaries, and ZIP Code 12466, Port Ewen and a significant part of Kingston, including the Rondout Creek commercial district and waterfront area. Thus, these figures cover an extended area, but still more precisely define the city's economic activity than the county figures.

The area as defined above has 2,739 business establishments operating in it as of the first quarter of 2002 data. These firms employ 25,877 persons and generate \$1,674,800,000 in sales. The average establishment has ten employees. Table 9 below shows the figures by SIC.

Standard Industrial Classification	Number of Businesses	% of Total Businesses	Number of Employees	% of Total Employees	Sales (in millions)	% of Total Sales
Agriculture	40	1.5%	149	0.6%	\$5.9	0.4%
Mining	1	0.0%	3	0.0%	\$0.0	0.0%
Construction	158	5.8%	706	2.7%	\$69.8	4.2%
Manufacturing	128	4.7%	2,104	8.1%	\$115.9	6.9%
Transportation Communication	116	4.2%	1,628	6.3%	\$51.2	3.1%
Wholesale	93	3.4%	624	2.4%	\$179.8	10.7%
Retail	631	23.0%	5,630	21.8%	\$370.8	22.1%
FIRE	243	8.9%	2,744	10.6%	\$210.2	12.6%
Services	1,264	46.1%	11,332	43.8%	\$671.2	40.1%
Public Admin.	65	2.4%	957	3.7%	\$0.0	0.0%
Totals	2,739	100.0%	25,877	100.0%	\$1674.8	100.0%

The Service sector has the largest number of establishments and employees, as well as having the largest percentage of sales of any business sector in the city. Though the hospitals, several of the skilled nursing care facilities, and one of the specialty outpatient clinics are large operations, the majority of these establishments are much smaller in size and the average establishment has 13 employees. It is interesting to note that the health care sector has 354 establishments (28% of the total service sector firms), but has 40.8% of employees (4,630), and generates 45.5% of service sector sales (\$305,500,000). In addition there are four residential care facilities, each with over 100 employees, which while not health care services directly, are related to the health care sector. Thus the role of health care is very significant to the city's economy, and represents a good base upon which to grow, perhaps in the areas of gerontology and age-related services and goods.

Beyond Health Care, the Service sector is broad and diverse, though not deep. There are many types of personal and business services available in Kingston, but most of these establishments

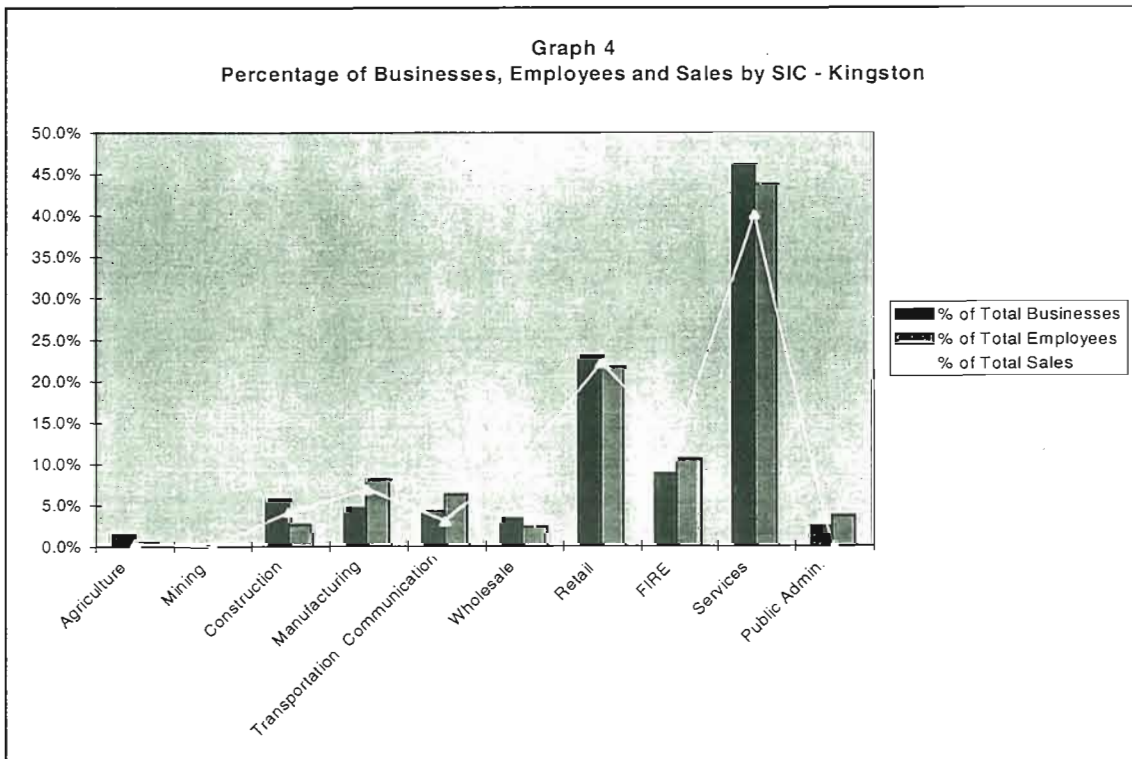
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are small and few in number. Despite the presence of a strong hospitality industry in Ulster County, the city has a relative dearth of hotels. Dun and Bradstreet counts the area school systems within the Service sector, and the school district accounts for almost 900 employees.

The retail sector is strong in Kingston and the 631 establishments represent 23.0% of the total establishments in the city, employing 5,630 persons (21.8% of jobs) and generating 22.1% of sales (\$370,800,000). Again the sector is diverse and broad, but lacking in depth overall. Within this sector four department stores and three grocery stores account for 22% of all jobs. Despite high numbers of employees in these businesses and a high average number of employees among eating places, the overall average number of employees per establishment in the retail sector is nine, with many two or three person shops in evidence.

The Finance, Insurance and Real Estate (FIRE) sector is also strong in Kingston, reflecting its position as a regional commercial center. The city has not only a number of financial institutions, but mortgage bankers, loan brokers, and security brokers. The insurance sector is also well represented – the largest single employer (Metropolitan Life) employs 800 persons, while Group Health Inc., a hospital and medical service plan firm, employs 150 persons. The presence of these establishments in particular demonstrates the city’s viability as a back office or service center location.

Graph 4 below shows the percentage of businesses, employees, and sales by SIC in the Kingston ZIP code area. The Wholesale Trade and the FIRE sectors generate sales in excess of the percentage of businesses or employees that either have in Kingston. The retail trades generate sales in rough proportion to its percentage of business presence and employment, while the service sector presence and employment exceeds its percentage of sales contribution to the overall economy. This suggests that firms in the wholesale and FIRE sectors have found efficiencies or economies that permit them to operate effectively from Kingston.



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Graph 4 does demonstrate the need to strengthen the Kingston economy in areas outside Services, Retail, and FIRE. Even within the Service sector some deepening of the types of firms operating in the city would be useful in strengthening the city economy, though this type of expansion will more likely be market driven. Mining has such a small presence in Kingston that its impact is negligible, and the Public Administration sector does not generate sales as such.

Table 10 shows the change in numbers of establishments and employment among those establishments in the two-year period from the first quarter of 2000 to the first quarter of 2002. As can be seen, the number of establishments has grown in each of the SICs. However, the number of employees has not necessarily grown in unison. The sharp growth in the Transportation and Communications sector is the result of a general growth in all types of businesses in this sector and the addition of a large marina operation and new and large entrants in the telecommunications area. Employment losses in the Wholesale sector are consistent with the national trend toward smaller, more efficient operations, while the employment differential in the Retail sector is negligible.

Standard Industrial Classification	Number of Businesses - 2000	Number of Businesses - 2002	Percent Change	Number of Employees - 2000	Number of Employees- 2002	Percent Change
Agriculture	32	40	25%	94	149	59%
Mining	0	1	0%	0	3	0%
Construction	141	158	12%	635	706	11%
Manufacturing	112	128	14%	2,042	2,104	3%
Transportation/ Communication	78	116	49%	1,208	1,628	35%
Wholesale	89	93	4%	641	624	-3%
Retail	556	631	13%	5675	5,630	-1%
FIRE	203	243	20%	2199	2,744	25%
Services	963	1,264	31%	8,904	11,332	27%
Public Administration	50	65	30%	1,021	957	-6%
Totals	2,224	2,739	23%	22,419	25,877	15%

Retail sales data from Dun and Bradstreet are not shown because a number of major employers do not report this information. However, data from other sources indicates that retail sales in Ulster County have increased at a compounded annual rate of one percent per year after adjusting for inflation. Projections developed by reliable sources indicate that the county retail sales growth will lag that of the nation in the near future. An influx of tourism spending and the anticipated redevelopment of the Rondout Creek area and other parts of the city are expected to increase retail sales beyond the current projections.

The New York State Department of Labor has made statewide projections about anticipated industry growth in the period 1998 – 2008. The industries expected to experience significant growth statewide match well to the existing economic structure of Kingston and Ulster County. Substantial growth in both percentage terms and numbers of actual positions in the health care

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field were predicted for the Hudson Valley Region between 1998 and 2008. Positions in the health care sector, which is a strength of Kingston, include medical scientists, home health aides, medical records technicians and therapists, and medical assistants. These positions represent a wide range of job skills and salary levels, affording a range of opportunity to area residents.

Positions in finance are also expected to grow in significant numbers in the Hudson Valley region over the period. These positions include high paying positions such as financial analysts (\$60.00 per hour in 1998), as well as more modest salary positions such as loan and credit clerks at about \$13.00 per hour.

However, in terms of absolute numbers of new jobs, the greatest numbers of new positions will be in the retail salesperson and cashier job classifications, followed by office clerks, secondary school teachers, food preparation workers, and waiters. These positions, with the exception of the school teaching positions, do not pay well. Most were under \$10.00 per hour in 1998 hourly wages. However, these are jobs in industries with a strong base in the area at this time.

Kingston has had efforts to tap into new job creation areas. Some paid employers do capitalize upon the city's strengths. The conversion of the former IBM plant to the TechCity complex and efforts to attract high tech back office and distribution with these functions represent one such direction. Though Kingston has not had immediate success and has been affected by the shakeup in the e-commerce industry, the functions will be necessary in the future. Kingston has the right types of space at competitive prices for these establishments. Further, the jobs created in this industry both demand more skills and pay better than typical sales or office staffing positions.

Thus, in general Kingston is well positioned to support economic growth in areas that are both expected to grow regionally and which are strengths of the city at present.

City-wide Issues, Opportunities and Challenges

- After experiencing consecutive population losses between 1970, 1980, and 1990, the City of Kingston had a small population increase of 361 people between 1990 and 2000 and is projected to continue to gain population.
- The City of Kingston is becoming increasingly diverse in its population. In 2000, the city showed a significant increase in the percentage of those reporting their race as black, Asian, or some other race. The percentage of the population that reported itself as white or American Indian fell.
- Statistics about the age of the city's population indicate a relatively large percentage of senior citizens and a percentage of young persons and young workers that is lower than the national percentages.
- When adjusted for inflation, median household income levels are projected to drop in the city since the boom between 1980 and 1990. The Census reported a nearly 18% drop in the median household income, or a loss of approximately \$6,861. Ulster County lost ground as well in median household income, with inflation adjusted income dropping by almost \$2,400. Economic growth has lagged growth rates for the state and nation

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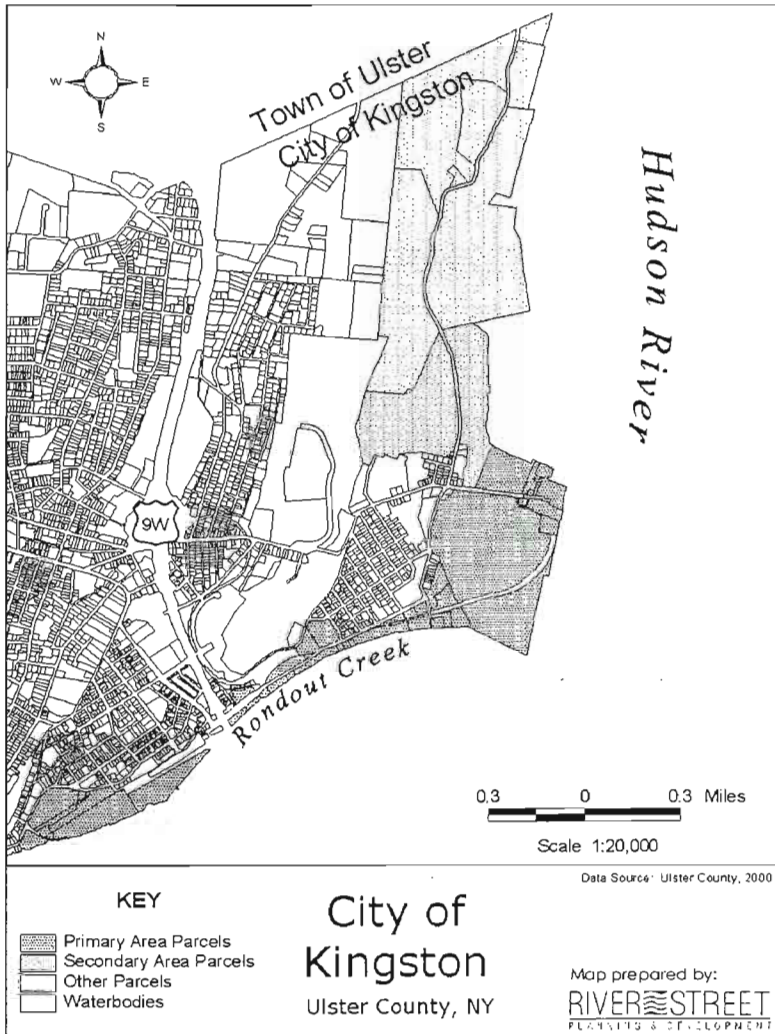
consistently over the preceding decade. Poverty rates for the county are below state and national levels. Within the city, consumer spending is weak across all categories.

- Trends in educational attainment are similar to county, state, and national trends. A majority of the population in Kingston, about 79%, has at least a high school diploma. About 28% of the city's population holds at least an Associates Degree or more.
- Following state and national trends between 1990 and 2000, unemployment in Ulster County dropped, although to a lesser extent than state or national levels. By the same token unemployment in 2001 has increased at a rate no worse than that of the state or nation in the recent economic downturn.
- The top three occupations in the city between 1990 and 2000 were professional and related occupations (22.9%), services occupations (20.4%) office and administrative support services (15.1%).
- The economic structure of Ulster County shows particular strengths in the areas of Health Care, Retail Trades, and Accommodations and Food Services. The County lags national percentages in Administration and Support functions, Management of Companies, and Construction.
- Kingston is a regional commercial and business center. Its economic structure reflects this fact with its strengths in 1) Services, especially Health Care, 2) Retail Trades, and 3) Finance, Insurance, and Real Estate (FIRE).
- Kingston has seen growth in jobs and business establishments over the past two years with strong growth coming in the Transportation/Communications area, the Service sector, and FIRE.
- Kingston's strengths and recent growth match well to the New York State Department of Labor projections for occupational growth in the coming five years.

Waterfront Market Assessment

Overview

The primary project area of this study is the waterfront area of Kingston along Rondout Creek, from Block Park to the juncture with the Hudson River. As noted in this study, the subject area is approximately 169 acres in size, having a variety of on-going operations in place. It is roughly bounded by Route 9W and Kingston Point. The secondary redevelopment area is larger, +/- 315 acres Hudson riverfront of land north of the Kingston Point area. Most of this land is currently vacant or is in industrial or commercial use. An additional 76-acre parcel, for the most part undeveloped, is included and is zoned for commercial uses at this time. These tracts are shown on the map below.



The primary redevelopment area does not offer much space and is in many parts very narrow, with frontage on the Rondout and/or the Hudson. In places the redevelopment area is less than 150 feet deep. Even in the wider areas the redevelopment tract does not have extensive depth, in places reaching approximately 1,000 feet from the water's edge. Further, access to the primary redevelopment area is limited. Though there is access from Route 9W and from Broadway, the addition of new road connections would be difficult and further diminish the area available for redevelopment.

Thus, the concepts for the reuse of the sites in the redevelopment area must focus on projects that will make maximum use of the land available and at the same time not generate large volumes of traffic or a large demand for parking. In addition the city has substantial available office,

industrial space, and some retail space. Thus, the development of significant amounts of space would further saturate the market in any of these categories.

The implications of these constraints are several-fold. First, the use of the area for housing or office development should be limited, as intensive development of these types will generate

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both traffic and parking needs. The use of the space for retail purposes should also be limited in that there is little space, or fit from a usage and design standpoint, for large-scale retail operations. Thus, the area does not lend itself to becoming a regional retail center. New uses should be focused on projects to serve well-defined audiences.

The market analysis of the waterfront area will thus concentrate on three related aspects of development. The first will be providing services and amenities for neighborhood residents. The need for additional services and types of outlets was expressed in the public meetings and appears to be a legitimate concern, especially since further residential development in the area adjacent to the waterfront is contemplated. The second aspect is providing services and shopping/dining opportunities to recreational boaters who come to the Kingston/Rondout Creek marinas. The number of such visitors is significant and represents an important opportunity for the city to capitalize upon a growing recreational pastime. Finally, the waterfront offers an opportunity for the city to expand its position as a tourist market to other visitors and tourists.

Neighborhood Market Potential

The Kingston Waterfront area is located in Census Tract 9517, an area bounded to the south and east by Rondout Creek and the Hudson River, and to the west and north by a line roughly following Hudson Street, McEntee Street, and First Avenue, roughly coinciding with the waterfront study area. The area is comprised of four Block Groups, the northeastern most of which has few residents or businesses on the waterways.

The Census Tract has seen substantial growth in the past decade. The 1990 population was 3,616 persons living in 1,432 occupied housing units. The 2000 census showed that the population was 4,851 persons living in 2,070 occupied housing units. Thus, the population had increased by 1,235 or 34.1 percent, over the decade. This was made possible in large measure because of the fact that the housing stock increased by 657 units, growing from 664 owner occupied units in 1990 to 860 (+205) owner occupied units in 2000, while renter occupied units increased from 768 in 1990 to 1,201 (+433) in 2000.

The profile of the 2000 population differs from the overall city profile. The Census Tract 9517 population is younger – the median age of the Census Tract is 35.0, while that of the city is 38.1, a statistically significant difference. Exactly 50.0 percent of the Census Tract population is under the age of 35, while 44.9 percent of the city's population is under 35. The concentration of young adults (ages 20 to 34) represents 22.0 percent of the Census Tract population compared to 18.8 percent for the city. This means that 28 percent of the population is less than 20 years of age compared to 16.1 percent of the city's population. Though the percentage of persons in the age range of 55 to 74 in the Census tract parallels that of the city as a whole, the percentage of elderly (75 and over) is sharply lower than the city percentage. Finally, the Census Tract is somewhat more diverse racially than the city. The White population of the tract is 74.1 percent, compared to 80.4 for the city, the tract has 17.7 percent of persons classifying themselves as Black (12.8% for the city), and 4.9 percent classifying themselves as Two or More Races, compared to the city's 3.1 percent.

The Census Tract households themselves differ from the city in only a few respects. The Census Tract has a significantly higher percentage of rental units (58.5%) than the city (52.8%), and in fact the 1,201 rental units in the tract are 23.0 percent of all rental units in the city. The age of renter householders in the Census Tract reflects the demographics described above – the percentage of younger householders is above the city's percentages, while the percentage

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of elderly householders is correspondingly lower. Household size among renters in the Census Tract very closely parallels the household size for renters citywide. The same is true for owner households – the percentage of householders under the age of 54 is slightly higher than the city percentages, but is below the city percentage after the age 55. Household size among owner occupied units again approximates city percentages except that owner occupied units with 7-or more persons in the household are 57.7 percent higher in the Census Tract than in the city. Though the number of households is not significant overall, these nineteen households are almost one-third of these large households in the city.

The marketing implications of these figures are important. The growth in population in this small area indicates an increased need for goods and service providers. This includes an increased demand for food stores, dry cleaners, barbershops and beauty salons, and card and gift shops, as well as restaurants and video stores. Given the relative youth of the area population there could be an increased demand for toy, gift, and bookstores or other types of neighborhood entertainment activities.

According to the 2000 Census the total income of the Census Tract is in excess of \$64.0 million. Further, these dollars are in the hands of a younger population in need of consumer items and services while establishing families in this neighborhood. Beyond this however, the picture that emerges is not as optimistic as the population increase might indicate. Per capita income in the Census Tract is \$17,326 and Median Household Income (MHI) is \$30,515, which are slightly lower than the city figures of \$18,662 and \$31,592 respectively. The Census Tract MHI grew at a faster rate than the city's between 1990 and 2000, but still lags behind the county, state and nation. The Census Tract figure is 96.6 percent of the city figure. At 42.5%, the percentage of households in the lower income brackets (<\$25,000) is still higher in for the entire city at 39.1%. The difference between those in the highest income brackets, (>\$75,000) is negligible with 13.4 percent of Census Tract households and 14.0 percent for the city. While the Census Tract appears to be catching up with the city in terms of income, a remaining concern is that consumer expenditure by product category and by store type for Census Tract 9517 is lower than the city's comparatively low index figures.

From the perspective of income and consumer expenditures, the waterfront area does not present a lucrative market opportunity for most types of retail operations. We recognize that firms seeking new ventures or expansions will be reluctant to relocate or expand on the basis of these figures. However, it must be emphasized first that the population growth is a strong marketing indicator. Regardless of income there are goods and services that are needed locally and can be provided successfully and profitably. Thus, there appears to be a solid market for neighborhood sealed retail and service operations.

An overview of the business structure of the Census Tract indicates an opportunity for retail and service business expansion. Based upon Claritas data, Census Tract 9517 contains 162 business establishments employing 2,077 persons and generating sales of \$170.0 million per year. Of these establishments 24 employ over 20 persons. Though there are a number of manufacturing, transportation, and service businesses in the area, the focus of this analysis is upon retail and personal service functions.

The retail sector in the Census Tract includes 43 establishments employing 188 persons and generating \$14.4 million in sales. Though all major types of retail operations are present in the Census Tract, they were few in number for most categories. For example, at the time this data

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was collected, there was only one Building Materials store in the area, one General Merchandise store and two Home Furnishing Stores. The area did have three Grocery Stores and 19 Eating-Places. Indeed, the Eating-Places generated almost one-half of the tract's sales (\$6.2 million of \$14.4 million). The three Grocery Stores are apparently smaller operations, as they have estimated sales of \$1.6 million. A Boat Dealer and a Household Appliance Store have estimated sales of \$0.9 million each. Beyond this the estimated sales of the other establishments are usually in the range of \$200,000 to \$300,000 per year.

In an area with a total income in excess of \$49 million, the capture of only \$1.6 million (3.2%) in sales in Grocery Stores indicates significant leakage of local spending, while the relatively small number of establishments and the low sales volumes indicate an opportunity for growth and development of the neighborhood economy. It should be noted, however, that the large volume of sales attributed to the Eating Establishments shows a major means of bringing "new" or "imported" money to the neighborhood, assuming these establishments are locally owned and/or employ neighborhood residents.

The Service sector is also under-represented in the Census Tract. It appears that there are only seven Personal Service establishments (barbershops and beauty salons for example), two Business Services entities (copy shops or personnel services), three auto repair shops, one gasoline station, and no banks in the area. The small number of Personal Service establishments and the lack of banking services also indicate a significant export of dollars from the area and suggests new business opportunities.

There appears to be a demand for goods and services based upon the growth of the area and the relative youth of the population, i.e., young families and children. At the same time the relatively small number of providers of goods and services and the low sales volumes of the existing operations indicate a possible opportunity for aggressive retailers offering products and services oriented toward this younger population. Though the spending figures are not a strong incentive for retailers and service providers, the demographics do provide some incentive to broaden the local business base.

Recreational Boating Market

Recreational boating represents an important market in which Kingston can enhance its position. Nationally, boating is an important recreational activity. According to a National Sporting Goods Association (NSGA) survey, 25.7 million people nationwide participated in power and pleasure boating activities in 1998, though this figure was less than the 32.5 million people who were active in the sport a decade earlier. Spending on recreational boats nationally grew from \$5,765,000,000 in 1992 to \$10,444,000,000 in 1998, an 81.1 percent increase over the six year period. Though preliminary indicators for 1999 indicated a slowing of growth, there was also a shift toward the sale of larger and more expensive vessels. Motor boating ranked third in what the NSGA calls Series II Sports, ranking behind in-line skating and working out at a club, in a survey of persons participating in selected sporting activities. Of the 25.7 million participants, 42.8 percent were persons between the ages of 25 and 45, and 70.0 percent of these persons reported household incomes in excess of \$35,000, and 23.1 percent reported incomes in excess of \$75,000. Thus, the overall market is substantial in terms of numbers of participants, and for being young and affluent.

New York State ranks seventh in the nation in terms of recreational craft registered with the US Coast Guard. Though the stipulations vary from state to state, the 525,436 vessels registered in

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New York include only motorized vessels, not sail only vessels, so the total number of craft is in excess of this number. County or regional breakdowns of registrations are not available, but even assuming a large percentage of vessels are berthed on Long Island or on the state's many lakes, the number of vessels plying the Hudson river waterways is available from the Canal Corporation. The Hudson lends itself to recreational boating by offering relatively clear channels, interesting scenery, and attractions augmented by ample opportunities to anchor, obtain services, or go ashore.

The city is already well established in the motorized and non-motorized recreational boating arena. There are seven marinas and a private rowing club on the Kingston banks of the Hudson River and Rondout Creek waterways with over 1,000 slips available. However, the majority of these slips are leased seasonally, meaning that long-term tenants occupy them most of the year. Indeed, a telephone interview with Mr. Jay Hogan, the city Harbor Master indicated that most of the marinas on the Rondout are at 90 to 95 percent capacity in season, and that, outside of the city marina, there are few transient slips available in season. These marinas employ over 100 persons according to Dun and Bradstreet data, and generate over \$7.0 million in sales, dockage, and storage fees. Thus, they are an important part of the local economy.

The city marina offers some insight into the potential for marina operations and visitor sales for the waterfront area. Though the marina generates revenue from the charges for daily visits (\$2.00 per hour) and overnight stays (\$1.00 per foot per 24-hour period), the transient slips show the number of visitors and possible sales in local establishments. In 2001 in the period May 5 through November 4, the city recorded 1,959 day boat visits and 990 overnight dockings. The slips were at capacity from Friday nights through Sunday afternoons, but were not crowded during the week. Assuming that there were three persons per vessel, this would indicate that almost 9,000 visitors came to Kingston on recreational craft in the six-month season of 2001. This number was rounded upwards because there are a few transient slips at some of the other marinas, and some restaurants and other establishments have their own slips for visitors.

A 1998 survey by *Boating Industry*, a publication for managers of recreational vessel marinas, indicated that 49.2 percent of marina customers were families with children and that 20.4 percent of customers were retired couples or singles. Assuming the average visitor spent \$25 in the course of a visit and there are 9,000 visitors annually, this would represent \$225,000 in sales at the waterfront area over and above dollars spent on docking fees, vessel service and fuel expenses, and the like. Though this sum is not great, it does indicate a potential for tapping into a large and affluent market. Sales potential includes not only food, drink, small souvenirs, and personal products, such as sunscreen, but larger and more expensive items that could be shipped to the purchaser. Also, this calculation does not include any revenues generated by potential new special events aimed at attracting both boaters and spectators.

There are constraints on the growth of such marina-based growth. The first issue is one of location for such establishments. Though it appears that some of the existing marinas may have the ability to expand by dredging current sites, there are few other opportunities. New York State considers Rondout Creek to be a significant habitat for fish and other wildlife. New York State considers Rondout Creek to be a significant habitat for fish and other wildlife. The Corps of Engineers has classified much of the open space along the Rondout as wetlands, which effectively prohibits the development of these sites.

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The Harbormaster also noted that marinas emphasizing a transient craft market need visibility from the waterway. The Rondout, though a good harbor, is not highly visible from the Hudson, and a new operator would have to find a means to establish a presence along the river. Finally, the economics of operating a marina tend toward building for and servicing a long-term clientele. In the marina operator survey mentioned above, the majority of slip rental customers (61%) were long-term (full season) renters, typically with three or more seasons at the marina. Most (91.8%) were independently owned facilities, and almost one-third of the responding marinas had fewer than 50 slips. The average seasonal slip rental rate was \$1,085 for an eight-month season. Thus, these operations usually do not generate a substantial profit, which means that there are fewer resources for advertising, amenities, and expansion.

Thus, though there are issues to be resolved in developing a larger base of marina activity for recreational boating, this market does represent a means to expand and diversify the waterfront economy. The target market is substantial and has money to spend. Further, Kingston offers a number of positives for this market including a well-protected harbor along a pleasant stretch of the Hudson River, and attractions along the waterfront and in the city itself.

Tourism Market

Kingston has a particular interest in and advantage for the recreational boating activity discussed above. However, this activity is only one segment of a larger part of the tourism/recreation economy. This is among the largest and fastest growing large industry in the United States. Though the recent recession and safety concerns have dampened travel and recreational activity, the prospects for domestic travel and vacations remain solid, especially for destinations such as the Hudson Valley. The Travel Industry Association of America, which monitors travel and vacation statistics, reported that total domestic travel revenues reached \$424 billion in 1998, and that American travelers took 898 million pleasure trips that year, as well as 272 million business trips. Those trips lasted an average of 3.6 days, and more than 80 percent of those trips were by automobile. Short vacations (fewer than 4 days) appear to be the norm in the United States, perhaps because Americans are not willing to spend much time away from work. Also, one-third of trips in the United States are made to visit friends and relatives.

Travel and tourism in the Hudson Valley, which includes Orange, Ulster, Putnam, Dutchess, Columbia, and Greene Counties, is a major industry in the region, employing over 90,000 persons annually. Figures for travel to Ulster County for 1999 show that there were 2.6 million visitors to the county, though this includes persons going to the Catskill resorts in the western portion of the county. County officials estimate that the numbers for 2000 and 2001 are in the range of 3.0 million visitors. 1999 tourist spending figures indicate that over \$306,000,000 were spent in the county for tourism-related activities, including \$61,340,000 for shopping and \$81,223,000 for food. These sales generated over \$11 million in local taxes.

It appears that most visitors to the area are on short duration leisure trips. Studies conducted for the State of New York indicate that 79 percent of visits to the state are leisure visits, which can be a vacation or trips to visit friends and relatives. Of these leisure trips in New York over one-third are vacations and about another one-third are to visit friends.

The majority of recreational trips to the Hudson Valley are thought to be day trips, and surveys verify the fact that much of the travel to destinations in the state originates in the New York Metropolitan area or in the state itself. Approximately 52 percent of leisure travelers originate in New York State with an additional 8.6 percent coming from Pennsylvania and 5.0 percent coming from New Jersey. Thus almost two-thirds of leisure travelers come from within a one

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hundred and fifty mile radius that includes over 26 million people. It should also be noted that the top three activities for domestic travelers are shopping, outdoor activities, and visiting historical places and museums.

These factors work to the advantage of Kingston as a tourist destination. The proximity to the New York City metropolitan area and its huge market coupled with easy access by automobile make Kingston a very realistic and practical vacation location for a large number of persons. Many analysts are predicting that American vacationers will increasingly use the auto for their vacations for safety reasons, and this too will work to Kingston's advantage. Furthermore, Kingston offers opportunities for each of the three most popular vacation activities, shopping, outdoor activity, and visiting historic sites. Though the three activities may need enhancement to make the waterfront area in particular more attractive, the core elements are in place and do not need to be created.

Kingston already has a number of historic sites and attractions and some significant shopping venues of interest to tourists and vacationers. In addition to these attractions and sites, Kingston offers a range of shopping to visitors and is strong in the Miscellaneous Retail sector, which includes tourist/visitor oriented stores such as antique stores, stationary stores, gift and novelty stores, and toy and game establishments. Kingston as a whole has 174 establishments in this category, generating \$53.7 million in sales and employing almost 1,000 persons. The city has four antique stores and three rare bookstores, according to Dun and Bradstreet, as well as five gift and souvenir stores. Thus tourists have the chance to shop for vacation items and souvenirs in the city.

However, the waterfront area itself is weak in the retail sector as noted earlier. Beyond lacking a wide selection of vendors for goods for the area residents, there are relatively few shopping opportunities for visitors. Within the Census Tract 9517 there are seven Miscellaneous Retail outlets, including one liquor store, one used and rare books store, one stationary store, one gift store, and one florist. These stores employ an estimated 22 persons and have sales of \$2.3 million, which is only 4.3 percent of the sales of stores in this category. There is one used merchandise store that employs eleven people and accounts for \$0.8 million in sales or 34.7 percent of all sales in this category in this geographic area. The stationary store accounts for four employees and \$0.7 million in sales, so that the other five operations employ only seven persons and have a combined \$0.8 million in sales.

Though the demand appears weak at this time, the opportunity does exist for additional visitor oriented retail establishments to open in the waterfront area. However attracting and retaining businesses will require an aggressive effort to bring tourists to Kingston and to the waterfront. It will also require a concerted effort to tie the waterfront area to the other attractions, sites, and shopping in Midtown and Uptown Kingston.

Opportunities

Several opportunities for economic and business development emerge from the preceding discussion of the economy and business structure of the waterfront area. Clearly there are opportunities for new retail and service providers to capture a portion of the sales to the rapidly growing population in the immediate neighborhood. Though the income and spending figures appear to be weak, they are subject to updating and revision as additional census data becomes available. Furthermore, the growth of the population of the area indicates a level of

Kingston Waterfront Development Implementation Plan

need for grocery stores, personal service providers, and support organizations in the waterfront neighborhood.

The Rondout Creek area is home to a number of marinas which operate at capacity in season, and receive an estimated 6,000 visitors in the period May through October. These visitors have made a significant investment in a pleasure or recreational vessel, which implies a household income in excess of \$35,000. These visitors are for the most part day-trippers, though about one-third will stay overnight at a marina. Hence, the opportunity is two-fold: first to expand the marina capacity to accommodate additional vessels, and second to develop additional attractions and venues at which visitors may spend their time and money. The latter would include additional shopping establishments and the development or expansion of attractions and activities.

To determine what types of establishments would be most likely to match the market needs and complement or complete the economic structure of the waterfront area, an analysis was prepared examining the economic structure of other waterfront communities in relation to that of Kingston. The figures presented below are based upon an examination of three similar communities in the Northeast – Mystic, Connecticut; Peekskill, New York; and Sag Harbor, New York. All three comparable communities have a distinct waterfront orientation and a mixture of uses in the waterfront area. The results of this analysis were also compared to the overall business structure of the nation to see what other insights emerged.

Table 11 below displays the results of this analysis. Major business categories are shown and selected sub-categories are presented in italics. Not all industry groups are shown and the columns may not thus add to one hundred percent. The table is intended for comparison purposes.

Industry Group	US % of Employees	Kingston % of Employees	Mystic, CT % of Employees	Sag Harbor, NY % of Employees	Peekskill, NY % of Employees
Agriculture	0.7	0.6	1.8	3.8	1.2
Construction	5.2	2.7	3.8	12.7	9.1
Manufacturing	17.7	8.4	4.0	6.0	2.7
Transportation/ Communication	5.9	6.3	4.0	6.2	6.6
Wholesale	6.5	2.4	2.0	1.7	6.8
Retail	20.9	21.8	31.4	44.8	26.2
<i>Food Stores</i>	<i>3.0</i>	<i>4.3</i>	<i>5.9</i>	<i>4.0</i>	<i>3.1</i>
<i>Eating & Drinking</i>	<i>7.0</i>	<i>4.4</i>	<i>12.6</i>	<i>12.6</i>	<i>5.2</i>
<i>Misc. Retail</i>	<i>0.8</i>	<i>4.1</i>	<i>6.3</i>	<i>7.2</i>	<i>2.8</i>
FIRE	7.0	10.6	2.4	11.0	4.2

Economic Profile

<i>Real Estate</i>	1.7	1.7	2.0	4.6	1.8
<i>Services</i>	35.5	43.8	50.3	40.9	48.0
<i>Hotels</i>	1.6	1.0	1.7	1.6	0.0
<i>Personal Services</i>	1.2	2.2	0.6	1.4	13.8

One of the first observations is that in each of the waterfront areas the manufacturing sector has a very weak presence, well below the national percentage of 17.7 percent of employment. At the same time the retail sector is stronger in the three comparable communities than in Kingston or the US typically by a large percentage. Though there appear to be more eating and drinking establishments than the norm in Mystic and Sag Harbor, the percentage in Peekskill is below the national percentage. However, the percentage of persons employed in Miscellaneous Retail is well above the national percentage in all four communities. The higher percentage in Kingston reflects the existing focus on travel and tourism in the other parts of the city, though, as noted the waterfront area itself is weak in this industry. The size of the Miscellaneous Retail category in the comparable communities is some indication of the magnitude of the opportunity and the range of stores that can be supported by a tourist economy.

The presence of hotels and accommodations does not appear to be vital to the success of the community as a tourist destination in this instance. Peekskill has no hotel presence while Sag Harbor and Mystic are at the national percentage for employees in this industry, not above as one would expect. Part of this finding may be due to the fact that these communities are not destination locations, but rather are day trip destinations that do not require overnight accommodations to succeed. If the latter is true, then visitor spending will be less overall and care should be taken in developing tourism strategies and/or developing attractions.

These observations support the premise that the waterfront area could have a larger and more diverse retail sector, especially if an objective of the premise is to increase the tourist traffic in the city and the waterfront in particular. The present situation in the area affords few opportunities for visitors, whether leisure travelers or recreational boaters, to engage in the highest ranking tourist activity, shopping. Clearly, retailers will not come without a market, and a strategy for developing the waterfront as a tourist venue must incorporate a program to attract and assist retail operations as the area grows. Whether firms are recruited to the area or local businesses expand to the area, the development of themes and attractions should include consideration of the shopping and eating establishments available.

Waterfront Issues, Opportunities, and Challenges

- The depth of parcels in the primary redevelopment area limits development opportunities for extensive housing, office or large-scale retail uses.
- The three primary market opportunities identified included neighborhood residents, recreational boaters and other visitors and waterfront tourists.
- The Rondout waterfront experienced significant growth in population and housing units between 1990 and 2000.
- Incomes among Rondout area residents are slightly lower than the city as a whole, but are increasing faster.

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- Population growth indicates an increased need for goods and service providers, including food stores, dry cleaners, barbershops and beauty salons, card and gift shops, restaurants and video stores.
- Recreational boating is an important market in which Kingston can enhance its position. The boating market is substantial in terms of number of participants and relative affluence.
- The Rondout is well-established as a recreational boating destination, and the creek offers an excellent harbor, though the potential for additional slips on the Rondout is limited.
- Additional transient slips offer the strongest market for local goods and services, though the economics of operating a marina encourage the construction of seasonal slips.
- In other related regional tourism opportunities, the entire Hudson Valley is an attractive market and Kingston's proximity access to NYC metro area offers significant opportunities
- Kingston offers opportunities in each of three most popular vacation activities, shopping, outdoor activity and visiting historic sites, though these activities need enhancement to make the waterfront more attractive.
- Attracting and retaining businesses will require an aggressive effort to attract tourists and a concerted effort to tie the waterfront to other attractions in Midtown and Uptown Kingston.

Appendix C: Financial Impact Proforma Spreadsheets

The four proforma spreadsheets that follow outline the projected costs, recommended funding options, time schedule and potential economic impacts of implementing each of the thirty-five specific actions recommended in the city's waterfront plan. Additional analysis can be found in the "Financial Impact Analysis Section".

Throughout the spreadsheets, the actions are organized by general categories such as Recreation, Transportation, etc. Each spreadsheet also includes four different cumulative totals representing each of the four possible redevelopment scenarios for the Heritage Oil site.

Spreadsheet C-1 outlines the specific actions in the plan, including estimated cost, projected timeframe, and anticipated funding sources (city, federal, state, and private).

Spreadsheet C-2 provides an analysis of the amount and timing of the City funds required to implement each project in the plan.

Spreadsheet C-3 provides a cursory analysis of the potential economic impacts of implementing the implementation strategy projects including increases in property and sales tax revenue to the City and property tax revenue to the School District.

Spreadsheet C-4 provides a side-by-side comparison of proposed city expenditures and projected new tax revenues showing at what point the city will have recuperated its costs and begin to receive a net financial benefit from the plan's implementation.

Kingston Waterfront Development Implementation Plan



Financial Impact Analysis Kingston Waterfront Redevelopment

C-1

Project Phasing

Sources of Funding

Action Plans	Project Phasing					Sources of Funding			
	Annual \$	Year 1-3	Year 4-7	Year 8-15	Total	City	Federal	NYS	Private
Catalyst projects									
C1 Address odor from treatment plant and façade improvements	\$2,200,000	\$2,200,000			\$2,200,000	\$1,100,000		\$1,100,000	
C2 Relocation of Auto and scrap recycling facilities	\$3,500,000	\$3,500,000			\$3,500,000		\$2,000,000	\$1,000,000	\$500,000
C3 Develop Waterfront Design Standards	\$20,000	\$20,000			\$20,000	\$10,000		\$10,000	
Shoreline Infrastructure									
S1 Bulkhead reconstruction	\$4,816,075	\$2,100,000	\$2,716,075		\$4,816,075	\$450,000	\$1,000,000	\$1,000,000	\$2,366,075
S2 Transient marina and dock construction	\$225,000		\$225,000		\$225,000			\$100,000	\$125,000
S3 Increase access to lighthouse	\$2,610,000	\$10,000		\$2,600,000	\$2,610,000		\$500,000	\$1,610,000	\$500,000
Recreation projects									
R1 Develop a waterfront trail along the entire study area	\$1,020,000	\$500,000	\$520,000		\$1,020,000	\$350,000	\$320,000	\$350,000	
R2 Construct enhancements to West Strand Park	\$750,000	\$300,000	\$450,000		\$750,000	\$250,000	\$250,000	\$250,000	
R3 Develop Island Dock Park	\$2,842,000		\$2,842,000		\$2,842,000	\$942,000	\$950,000	\$950,000	
R4 Construct enhancements to Block Park	\$445,000	\$445,000			\$445,000	\$222,500		\$222,500	
R5 Construct an Environmental Education Center	\$1,825,000		\$1,825,000		\$1,825,000			\$1,000,000	\$825,000
R6 Construct a waterfront park adjacent to the Ponckhockie neighborhood	\$500,000		\$500,000		\$500,000	\$150,000	\$200,000	\$150,000	
R7 Construct a water feature/skating rink adjacent to former Cornell Steamship	\$250,000		\$250,000		\$250,000	\$75,000	\$100,000	\$75,000	
R8 Implement improvements to Kingston Point Park	\$1,670,000		\$500,000	\$1,170,000	\$1,670,000	\$600,000	\$400,000	\$670,000	
R9 Implement Kingston Beach improvements	\$425,000	\$125,000	\$300,000		\$425,000	\$125,000	\$150,000	\$150,000	
R10 Connect Hasbrouck Park to the waterfront	\$750,000		\$750,000		\$750,000	\$250,000	\$250,000	\$250,000	
Transportation projects									
T1 Expand Trolley service to serve entire waterfront	\$2,530,000	\$2,530,000			\$2,530,000			\$1,530,000	\$1,000,000
T2 Reconstruct East Strand to support desired development	\$1,950,000	\$50,000	\$900,000	\$1,000,000	\$1,950,000	\$400,000		\$1,550,000	
T3 Expand waterfront parking to meet development needs	\$3,315,000	\$315,000	\$1,000,000	\$2,000,000	\$3,315,000	\$660,000	\$660,000	\$660,000	\$1,315,000
T4 Implement a comprehensive wayfinding signage program	\$20,000	\$20,000		\$20,000	\$20,000	\$10,000			\$10,000
Museums									
M1 Implement Trolley Museum façade and facility improvements	\$400,000	\$400,000			\$400,000	\$50,000		\$150,000	\$200,000
M2 Implement Maritime Museum façade and facility improvements	\$100,000	\$100,000			\$100,000	\$25,000		\$50,000	\$25,000
M3 Develop a land-based museum for tugboat exhibit	\$520,000	\$20,000	\$500,000		\$520,000			\$320,000	\$200,000
Land Use									
LU1 Ensure the preservation and reuse of historic waterfront structures	Staff time	Staff time		\$0					
LU2 Conduct an Alternative analysis for the reuse of Kingston Point	\$50,000		\$50,000		\$50,000	\$25,000			\$25,000
LU3 Facilitate site remediation strategies to make land available for redevelopment	\$1,500,000	\$750,000	\$750,000		\$1,500,000	\$750,000	\$750,000	\$750,000	
LU4 Conduct market and feasibility analyses for improvements to Ponckhockie	\$4,000	\$4,000			\$4,000	Staff time		\$4,000	
Marketing Strategy									
MS1 Implement marketing strategy	\$100,000	\$50,000	\$50,000		\$100,000	\$30,000		\$35,000	
Private Development									
D1 New retail (50%) and new office buildings (50%)	\$21,400,000	\$4,000,000	\$6,000,000	\$11,400,000	\$21,400,000		\$1,500,000	\$1,710,000	\$18,190,000
D2 New destination restaurant / entertainment	\$1,500,000		\$1,500,000		\$1,500,000		\$125,000	\$100,000	\$1,275,000
D3 Millens Steel Building redevelopment-retail, restaurant mixed use	\$750,000	\$750,000			\$750,000			\$250,000	\$500,000
D4 Cornell Steamboat Building redevelopment-retail, restaurant, artist space	\$1,500,000	\$1,500,000			\$1,500,000			\$400,000	\$1,100,000
Total Actions	\$59,487,075	\$19,585,000	\$18,607,075	\$21,295,000	\$59,487,075	\$5,724,500	\$9,194,000	\$16,392,500	\$28,156,075
Development Options for Heritage Oil Site									
O1 Condominiums	\$25,250,000		\$10,000,000	\$15,250,000	\$25,250,000				\$25,250,000
O2 Yacht Club / Restaurant / Marina	\$6,095,000	\$595,000	\$2,500,000	\$3,000,000	\$6,095,000			\$500,000	\$5,595,000
O3 Hotel / Conference Center	\$13,000,000		\$13,000,000	\$13,000,000	\$13,000,000				\$13,000,000
Total Actions with Condominium option	\$84,737,075	\$19,585,000	\$28,607,075	\$36,545,000	\$84,737,075	\$5,724,500	\$9,194,000	\$16,392,500	\$53,406,075
Total Actions with Yacht Club / Restaurant / Marina option	\$65,582,075	\$20,180,000	\$21,107,075	\$24,295,000	\$65,582,075	\$5,724,500	\$9,194,000	\$16,892,500	\$33,751,075
Total Actions with Hotel / Conference Center option	\$72,487,075	\$19,585,000	\$18,607,075	\$34,295,000	\$72,487,075	\$5,724,500	\$9,194,000	\$16,392,500	\$41,156,075
Total Actions with No Development on Heritage Oil Site	\$59,487,075	\$19,585,000	\$18,607,075	\$21,295,000	\$59,487,075	\$5,724,500	\$9,194,000	\$16,392,500	\$28,156,075

Financial Impact Analysis Kingston Waterfront Redevelopment

C-2

Analysis of City Funding of Action Plan Projects

		Total Cost	% City	Year 1-3	Year 4-7	Year 8-15	City Total
Catalyst projects							
C1	Address odor from treatment plant and facade improvements	\$2,200,000	50.0%	\$1,100,000	\$0	\$0	\$1,100,000
C2	Relocation of Auto and scrap recycling facilities	\$3,500,000	0.0%	\$0	\$0	\$0	\$0
C3	Develop Waterfront Design Standards	\$20,000	50.0%	\$10,000	\$0	\$0	\$10,000
Shoreline Infrastructure							
S1	Bulkhead reconstruction	\$4,816,075	9.3%	\$196,218	\$253,782	\$0	\$450,000
S2	Transient marina and dock construction	\$225,000	0.0%	\$0	\$0	\$0	\$0
S3	Increase access to lighthouse	\$2,610,000	0.0%	\$0	\$0	\$0	\$0
Recreation projects							
R1	Develop a waterfront trail along the entire study area	\$1,020,000	34.3%	\$171,569	\$178,431	\$0	\$350,000
R2	Construct enhancements to West Strand Park	\$750,000	33.3%	\$100,000	\$150,000	\$0	\$250,000
R3	Develop Island Dock Park	\$2,842,000	33.1%	\$0	\$942,000	\$0	\$942,000
R4	Construct enhancements to Block Park	\$445,000	50.0%	\$222,500	\$0	\$0	\$222,500
R5	Construct an Environmental Education Center	\$1,825,000	0.0%	\$0	\$0	\$0	\$0
R6	Construct a waterfront park adjacent to the Ponkhockie neighborhood	\$500,000	30.0%	\$0	\$0	\$150,000	\$150,000
R7	Construct a water features/skating rink adjacent to former Cornell Steamship	\$250,000	30.0%	\$0	\$75,000	\$0	\$75,000
R8	Implement improvements to Kingston Point Park	\$1,670,000	35.9%	\$0	\$179,641	\$420,359	\$600,000
R9	Implement Kingston Beach improvements	\$425,000	29.4%	\$36,765	\$88,235	\$0	\$125,000
R10	Connect Hasbrouck Park to the waterfront	\$750,000	33.3%	\$0	\$0	\$250,000	\$250,000
Transportation projects							
T1	Expand Trolley service to serve entire waterfront	\$2,530,000	0.0%	\$0	\$0	\$0	\$0
T2	Reconstruct East Strand to support desired development	\$1,950,000	20.5%	\$0	\$0	\$400,000	\$400,000
T3	Expand waterfront parking to meet development needs	\$3,315,000	19.9%	\$62,715	\$199,095	\$388,190	\$660,000
T4	Implement a comprehensive wayfinding signage program	\$20,000	50.0%	\$10,000	\$0	\$0	\$10,000
Museums							
M1	Implement Trolley Museum facade and facility improvements	\$400,000	12.5%	\$50,000	\$0	\$0	\$50,000
M2	Implement Maritime Museum facade and facility improvements	\$100,000	25.0%	\$0	\$25,000	\$0	\$25,000
M3	Develop a land-based museum for tugboat exhibit	\$520,000	0.0%	\$0	\$0	\$0	\$0
Land Use							
LU1	Ensure the preservation and reuse of historic waterfront structures	\$0	100.0%	Staff time	\$0	\$0	\$0
LU2	Conduct an Alternative analysis for the reuse of Kingston Point	\$50,000	50.0%	\$0	\$0	\$25,000	\$25,000
LU3	Facilitate site remediation strategies to make land available for redevelopment	\$1,500,000	0.0%	\$0	\$0	\$0	\$0
LU4	Conduct market and feasibility analyses for improvements to Ponckhochie	\$4,000	100.0%	Staff time	Staff time	Staff time	\$0
Marketing Strategy							
MS1	Implement marketing strategy	\$100,000	30.0%	\$15,000	\$15,000	\$0	\$30,000
Private Development							
D1	New retail (50%) and new office buildings (50%)	\$21,400,000	0.0%	\$0	\$0	\$0	\$0
D2	New destination restaurant / entertainment	\$1,500,000	0.0%	\$0	\$0	\$0	\$0
D3	Millens Steel Building redevelopment-retail, restaurant mixed use	\$750,000	0.0%	\$0	\$0	\$0	\$0
D4	Cornell Steamboat Building redevelopment-retail, restaurant, artist space	\$1,500,000	0.0%	\$0	\$0	\$0	\$0
Total Actions							
Average City Investment per Year		\$59,487,075	9.6%	\$1,974,766	\$2,106,185	\$1,643,549	\$5,724,500
Projected Tax Base Enhancement Per Year (minimum)		\$658,255		\$205,444	\$526,546	\$205,444	\$381,633
		\$143,841		\$318,894	\$580,183		\$423,238
Development Options for Heritage Oil Site							
O1	Condominiums	\$25,250,000	0.0%	\$0	\$0	\$0	\$0
O2	Yacht Club / Restaurant / Marina	\$6,095,000	0.0%	\$0	\$0	\$0	\$0
O3	Hotel / Conference Center	\$13,000,000	0.0%	\$0	\$0	\$0	\$0
Total Actions with Condominium option							
Total Actions with Yacht Club / Restaurant / Marina option		\$84,737,075	9.6%	\$1,974,766	\$2,106,185	\$1,643,549	\$5,724,500
Total Actions with Hotel / Conference Center option		\$65,582,075	9.6%	\$1,974,766	\$2,106,185	\$1,643,549	\$5,724,500
Total Actions with No Development on Heritage Oil Site		\$72,487,075	9.6%	\$1,974,766	\$2,106,185	\$1,643,549	\$5,724,500
Total Actions with No Development on Heritage Oil Site		\$59,487,075	9.6%	\$1,974,766	\$2,106,185	\$1,643,549	\$5,724,500

Financial Impact Analysis Kingston Waterfront Redevelopment

C-3

Annual School Tax Projections:

Annual Sales Tax Projections:

Annual Tax Projections for Period:

Analysis of Economic Impacts of Action Plan Projects	Total Cost	Annual Tax Projections for Period:				Annual Sales Tax Projections:				Annual School Tax Projections:				
		Assessment	Year 1-3	Year 4-7	Year 8-15	Year 1-3	Year 4-7	Year 8-15	Year 1-3	Year 4-7	Year 8-15			
Catalyst projects														
C1	Address odor from treatment plant and façade improvements	\$2,200,000												
C2	Relocation of Auto and scrap recycling facilities	\$3,500,000												
C3	Develop Waterfront Design Standards	\$20,000												
Shoreline Infrastructure														
S1	Bulkhead reconstruction	\$4,816,075												
S2	Transient marina and dock construction	\$225,000												
S3	Increase access to lighthouse	\$2,610,000												
Recreation projects														
R1	Develop a waterfront trail along the entire study area	\$1,020,000												
R2	Construct enhancements to West Strand Park	\$750,000												
R3	Develop Island Dock Park	\$2,842,000												
R4	Construct enhancements to Block Park	\$445,000												
R5	Construct an Environmental Education Center	\$1,825,000												
R6	Construct a waterfront park adjacent to the Ponckhockie neighborhood	\$500,000												
R7	Construct a water feature/skiing rink adjacent to former Cornell Steamship	\$250,000												
R8	Implement improvements to Kingston Point Park	\$1,670,000												
R9	Implement Kingston Beach improvements	\$425,000												
R10	Connect Hasbrouck Park to the waterfront	\$750,000												
Transportation projects														
T1	Expand Trolley service to serve entire waterfront	\$2,530,000												
T2	Reconstruct East Strand to support desired development	\$1,950,000												
T3	Expand waterfront parking to meet development needs	\$3,315,000												
T4	Implement a comprehensive wayfinding signage program	\$20,000												
Museums														
M1	Implement Trolley Museum façade and facility improvements	\$400,000												
M2	Implement Maritime Museum façade and facility improvements	\$100,000												
M3	Develop a land-based museum for tugboat exhibit	\$520,000												
Land Use														
LU1	Ensure the preservation and reuse of historic waterfront structures	\$0												
LU2	Conduct an Alternative analysis for the reuse of Kingston Point	\$50,000												
LU3	Facilitate site remediation strategies to make land available for redevelopment	\$1,500,000												
LU4	Conduct market and feasibility analyses for improvements to Ponckhockie	\$4,000												
Marketing Strategy														
MS1	Implement marketing strategy	\$100,000												
Private Development														
D1	New retail (50%) and new office buildings (50%)	\$21,400,000	\$7,750,224	\$78,009	\$195,023	\$417,350	\$13,671	\$34,178	\$73,140	\$98,681	\$246,703	\$527,945		
D2	New destination restaurant / entertainment	\$1,500,000	\$543,240	\$0	\$29,253	\$29,253	\$0	\$9,280	\$8,280	\$0	\$37,006	\$37,006		
D3	Millens Steel Building redevelopment-retail, restaurant mixed use	\$750,000	\$271,620	\$14,627	\$14,627	\$14,627	\$2,760	\$2,760	\$2,760	\$18,503	\$18,503	\$18,503		
D4	Cornell Steamboat Building redevelopment-retail, restaurant, artist space	\$1,500,000	\$543,240	\$29,253	\$29,253	\$29,253	\$5,520	\$5,520	\$5,520	\$37,006	\$37,006	\$37,006		
Total Actions		\$59,487,075	\$9,108,324	\$121,889	\$268,157	\$490,483	\$21,951	\$50,738	\$89,700	\$154,190	\$339,217	\$620,459		
Development Options for Heritage Oil Site														
O1	Condominiums	\$25,250,000	\$9,144,540	\$0	\$113,465	\$286,498	\$0	\$0	\$0	\$0	\$169,418	\$427,782		
O2	Yacht Club / Restaurant / Marina	\$6,095,000	\$2,207,365	\$11,604	\$60,360	\$118,867	\$674	\$3,504	\$6,900	\$14,679	\$76,355	\$150,366		
O3	Hotel / Conference Center	\$13,000,000	\$4,708,080	\$0	\$0	\$253,530	\$0	\$0	\$0	\$0	\$0	\$320,714		
Total Actions with Condominium option		\$84,737,075	\$18,252,864	\$121,889	\$381,622	\$776,982	\$21,951	\$50,738	\$89,700	\$154,190	\$508,636	\$1,048,241		
Total Actions with Yacht Club / Restaurant / Marina option		\$65,582,075	\$11,315,689	\$133,493	\$328,517	\$609,350	\$22,625	\$54,241	\$96,600	\$168,868	\$415,572	\$770,825		
Total Actions with Hotel / Conference Center option		\$72,487,075	\$13,816,404	\$121,889	\$268,157	\$744,013	\$21,951	\$50,738	\$89,700	\$154,190	\$339,217	\$941,173		
Total Actions with No Development on Heritage Oil Site		\$59,487,075	\$9,108,324	\$121,889	\$268,157	\$490,483	\$21,951	\$50,738	\$89,700	\$154,190	\$339,217	\$620,459		

Financial Impact Analysis Kingston Waterfront Redevelopment

C-4

Comparison of City Costs to City Tax Revenues

	Cumulative Impact - At Year 3			Cumulative Impact - At Year 7			Cumulative Impact - At Year 15		
	Total Action Cost	City Cost	Total City Revenue	City Cost	Total City Revenue	Year 7 Impact	City Cost	Total City Revenue	Year 15 Impact
Catalyst projects									
C1 Address odor from treatment plant and façade improvements	\$2,200,000	\$1,100,000	\$0	\$1,100,000	\$0	-\$1,100,000	\$1,100,000	\$0	-\$1,100,000
C2 Relocation of Auto and scrap recycling facilities	\$3,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3 Develop Waterfront Design Standards	\$20,000	\$10,000	\$0	\$10,000	\$0	-\$10,000	\$10,000	\$0	-\$10,000
Shoreline Infrastructure									
S1 Bulkhead reconstruction	\$4,816,075	\$196,218	\$0	\$196,218	\$0	-\$450,000	\$450,000	\$0	-\$450,000
S2 Transient marina and dock construction	\$225,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S3 Increase access to lighthouse	\$2,610,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recreation projects									
R1 Develop a waterfront trail along the entire study area	\$1,020,000	\$171,569	\$0	\$171,569	\$0	-\$350,000	\$350,000	\$0	-\$350,000
R2 Construct enhancements to West Strand Park	\$750,000	\$100,000	\$0	\$100,000	\$0	-\$250,000	\$250,000	\$0	-\$250,000
R3 Develop Island Dock Park	\$2,842,000	\$0	\$0	\$0	\$0	-\$942,000	\$942,000	\$0	-\$942,000
R4 Construct enhancements to Block Park	\$445,000	\$222,500	\$0	\$222,500	\$0	-\$222,500	\$222,500	\$0	-\$222,500
R5 Construct an Environmental Education Center	\$1,825,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
R6 Construct a waterfront park adjacent to the Ponckhockie neighborhood	\$500,000	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0	-\$150,000
R7 Construct a water feature/skating rink adjacent to former Cornell Steamship	\$250,000	\$0	\$0	\$0	\$0	-\$75,000	\$75,000	\$0	-\$75,000
R8 Implement improvements to Kingston Point Park	\$1,670,000	\$0	\$0	\$0	\$0	-\$179,641	\$600,000	\$0	-\$600,000
R9 Implement Kingston Beach improvements	\$425,000	\$36,765	\$0	\$36,765	\$0	-\$125,000	\$125,000	\$0	-\$125,000
R10 Connect Hasbrouck Park to the waterfront	\$750,000	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	-\$250,000
Transportation projects									
T1 Expand Trolley service to serve entire waterfront	\$2,530,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
T2 Reconstruct East Strand to support desired development	\$1,950,000	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	-\$400,000
T3 Expand waterfront parking to meet development needs	\$3,315,000	\$62,715	\$0	\$62,715	\$0	-\$261,810	\$660,000	\$0	-\$660,000
T4 Implement a comprehensive wayfinding signage program	\$20,000	\$10,000	\$0	\$10,000	\$0	-\$10,000	\$10,000	\$0	-\$10,000
Museums									
M1 Implement Trolley Museum façade and facility improvements	\$400,000	\$50,000	\$0	\$50,000	\$0	-\$50,000	\$50,000	\$0	-\$50,000
M2 Implement Maritime Museum façade and facility improvements	\$100,000	\$0	\$0	\$0	\$0	-\$25,000	\$25,000	\$0	-\$25,000
M3 Develop a land-based museum for tugboat exhibit	\$520,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land Use									
LU1 Ensure the preservation and reuse of historic waterfront structures	\$0	Staff time	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LU2 Conduct an Alternative analysis for the reuse of Kingston Point	\$50,000	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0	-\$25,000
LU3 Facilitate site remediation strategies to make land available for redevelopment	\$1,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LU4 Conduct market and feasibility analyses for improvements to Ponckhockie	\$4,000	Staff time	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Marketing Strategy									
MS1 Implement marketing strategy	\$100,000	\$15,000	\$0	\$15,000	\$0	-\$30,000	\$30,000	\$0	-\$30,000
Private Development									
D1 New retail (50%) and new office buildings (50%)	\$21,400,000	\$0	\$275,041	\$275,041	\$0	\$1,191,844	\$0	\$5,115,760	\$5,115,760
D2 New destination restaurant / entertainment	\$1,500,000	\$0	\$0	\$0	\$0	\$150,134	\$0	\$450,402	\$450,402
D3 Millens Steel Building redevelopment-retail, restaurant mixed use	\$750,000	\$0	\$52,160	\$52,160	\$0	\$121,707	\$0	\$260,801	\$260,801
D4 Cornell Steamboat Building redevelopment-retail, restaurant, artist space	\$1,500,000	\$0	\$104,320	\$104,320	\$0	\$243,414	\$0	\$521,602	\$521,602
Total Actions	\$59,487,075	\$1,974,766	\$431,522	-\$1,543,245	\$4,080,951	\$1,707,099	\$5,724,500	\$6,348,565	\$624,065
Development Options for Heritage Oil Site									
O1 Condominiums	\$25,250,000	\$0	\$0	\$0	\$0	\$453,859	\$0	\$2,745,846	\$2,745,846
O2 Yacht Club / Restaurant / Marina	\$6,095,000	\$0	\$36,832	\$36,832	\$0	\$276,250	\$0	\$1,298,419	\$1,298,419
O3 Hotel / Conference Center	\$13,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,028,241	\$2,028,241
Total Actions with Condominium option	\$84,737,075	\$1,974,766	\$431,522	-\$1,543,245	\$4,080,951	\$2,160,958	\$5,724,500	\$9,094,412	\$3,369,912
Total Actions with Yacht Club / Restaurant / Marina option	\$65,582,075	\$1,974,766	\$468,354	-\$1,506,412	\$4,080,951	\$1,983,349	\$5,724,500	\$7,646,984	\$1,922,484
Total Actions with Hotel / Conference Center option	\$72,487,075	\$1,974,766	\$431,522	-\$1,543,245	\$4,080,951	\$1,707,099	\$5,724,500	\$8,376,806	\$2,652,306
Total Actions with No Development on Heritage Oil Site	\$59,487,075	\$1,974,766	\$431,522	-\$1,543,245	\$4,080,951	\$1,707,099	\$5,724,500	\$6,348,565	\$624,065

Appendix D: Action Plan Matrix

Kingston Waterfront Development Implementation Plan



Kingston Waterfront Redevelopment Plan Action Plan Matrix

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Infrastructure Catalyst	Address odor from the wastewater treatment plant and make façade improvements	Short Term	City Kingston, Empire State Development Corporation, NYS Department of Environmental Conservation (DEC)	\$2.2 million	NYS Empire Opportunity Funds, municipal bonding, NYS Revolving Loan Fund
Economic Catalyst	Facilitate the relocation of auto and scrap recycling facilities	Short Term	City of Kingston, waterfront property owners, Mid-Hudson Valley Land Revitalization Partnership, Empire State Development Corporation, Kingston Local Development Corporation, Ulster County Development Corporation, private developers	\$4 million	NYS Empire Opportunity Funds, USEPA Brownfields Pilot Program and Revolving Loan Fund Initiative, USHUD Brownfields Economic Development Initiative, USHUD Section 108 loan funds, NYSDEC Brownfields Program, New Markets Tax Credits, private developers

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Land Management Catalyst	Develop waterfront design standards	Short Term	City of Kingston, NYS Department of State (DOS), current museum operators, historic preservation organizations, Scenic Hudson, and other local business/property owners	\$20,000	City of Kingston, NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program
Shoreline Infrastructure Shoreline 1	Bulkhead reconstruction	Short to Medium Term	City of Kingston, waterfront property owners, NYS DOS, NYSDEC, Scenic Hudson, U.S. Army Corps of Engineers	\$4.8 million	Private property owners, US Army Corps of Engineers, NYS Environmental Protection Funds, USDOT Transportation Enhancement Program, USHUD BEDI, NYS Governor's Office for Small Cities CDBG Program
Shoreline 2	Transient marina and dock construction	Short to Medium Term	Private marina developers and property owners, City of Kingston, Scenic Hudson, NYS DOS, NYSDEC, Hudson River Valley Greenway	\$225,000	Private developers, City of Kingston, NYS Environmental Protection Fund, Empire State Development Corporation

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Shoreline 3	Increase access to the lighthouse	Short to Long Term	City of Kingston, Hudson River Maritime Museum, Hudson River Valley Greenway, NYS Office of Parks, Recreation and Historic Preservation (OPRHP), Scenic Hudson, US Army Corps of Engineers	\$2.7 million	US Army Corps of Engineers, NYS Environmental Protection Funds, Empire State Development Corporation, USDOT Transportation Enhancement Program, private foundations
Recreation 1	Develop a waterfront trail along the entire study area	Short to Medium Term	City of Kingston, waterfront property owners, NYS Office of Parks, Recreation and Historic Preservation (OPRHP), NYSDOS Scenic Hudson, Trolley Museum	\$1.2 million	City of Kingston, NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancement Program,
Recreation 2	Construct enhancements to West Strand Park	Short to Medium Term	City of Kingston, NYSDOS, NYSOPRHP, Scenic Hudson, Hudson River Valley Greenway	\$750,000	City of Kingston, NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancement Program, Hudson River Valley Greenway

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Recreation 3	Develop Island Dock Park	Short to Medium Term	City of Kingston, waterfront property owners, NYSDOS, NYSOPRHP, NYSDEC, Hudson River Valley Greenway, Scenic Hudson, local crew teams,	\$1.8 million	City of Kingston, NYS Environmental Protection Fund, Community Development Block Grant, USDOT Transportation Enhancements Program
Recreation 4	Construct enhancements to Block Park	Short Term	City of Kingston, Scenic Hudson, Hudson River Valley Greenway, NYSDOS, NYSOPRHP, NYS DEC	\$445,000	City of Kingston, NYS Environmental Protection Fund
Recreation 5	Construct an environmental education center	Long Term	City of Kingston, Scenic Hudson, Hudson River Valley Greenway, NYSDEC, NYSDOS	\$1.9 million	NYS Environmental Protection Fund, foundations, Hudson River Valley Greenway
Recreation 6	Construct a waterfront park adjacent to the Ponckhockie neighborhood	Long Term	City of Kingston, neighborhood residents, waterfront property owners, Scenic Hudson, NYSDOS, NYSOPRHP	\$500,000	NYS Environmental Protection Fund, Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancements Program, City of Kingston

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Recreation 7	Construct a water feature/ small skating rink adjacent to the former Cornell Steamship building	Medium Term	City of Kingston, waterfront property owners, Scenic Hudson, NYSOPRHP, NYSDOS	\$250,000	NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, US Department of the Interior Urban Parks Program, USDOT Transportation Enhancements Program, City of Kingston, private developers
Recreation 8	Implement improvements to Kingston Point Park	Medium to Long Term	City of Kingston, park users, Scenic Hudson, Hudson River Valley Greenway, NYSDOS, NYSOPRHP	\$1.7 million	NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancements Program, City of Kingston
Recreation 9	Implement Kingston Beach Improvements	Short to Medium Term	City of Kingston, Scenic Hudson, Hudson River Valley Greenway, NYS DEC, NYSDOS	\$425,000	NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program, USDOT Transportation Enhancements Program, City of Kingston, private developers

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Recreation 10	Connect Hasbrouck Park to the waterfront	Long Term	City of Kingston, Scenic Hudson, NYSOPRHP	\$750,000	NYS Environmental Protection Fund, Governor's Office for Small Cities CDBG Program, City of Kingston
Transportation 1	Expand trolley service to serve the entire waterfront	Short Term	City of Kingston, Trolley Museum, waterfront property owners	\$3 million	USDOT Transportation Enhancements Program, US Department of the Interior Urban Parks Program, NYS Environmental Protection Fund, foundation grants, private foundations, NYSERDA
Transportation 2	Reconstruct East Strand Street to support desired development	Short to Long Term	City of Kingston, NYS Department of Transportation, property and business owners, museums, NYSDOS	\$2.4 million	US Department of Transportation, City of Kingston, NYS Environmental Protection Fund
Transportation 3	Expand waterfront parking to meet development needs	Short to Long Term	City of Kingston, private developers, property and business owners	\$3,000 per space	City of Kingston, private developers, NYS Governor's Office for Small Cities CDBG Program, Empire State Development Corporation

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Transportation 4	Implement a comprehensive way finding signage program	Short Term	City of Kingston, NYS Department of Transportation, Ulster County	\$20,000	City of Kingston, Hudson River Valley Greenway: Greenway Construction Grants, private foundations
Museums					
Museum 1	Implement Trolley Museum façade and facility improvements	Short Term	City of Kingston, Trolley Museum	\$400,000+	Trolley Museum, City of Kingston, USDOT Transportation Enhancements, US Department of the Interior Urban Parks Program
Museum 2	Implement Maritime Museum façade and facility improvements	Medium Term	Maritime Museum, City of Kingston	\$100,000	Maritime Museum, City of Kingston, NYS Environmental Protection Fund, USDOT Transportation Enhancements Program
Museum 3	Assist the operators of the tugboat exhibit in finding technical and financial resources to develop a land-based museum	Medium Term	City of Kingston, tugboat exhibit operators, NYS Department of Transportation	\$620,000	Tugboat exhibit operators, US Department of the Interior Urban Parks Program, NYS Environmental Protection Funds, USDOT Transportation Enhancement Program

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Land Use 1	Ensure the preservation and reuse of historic waterfront structures	Short Term	City of Kingston, property owners, Kingston Historical Society	Staff time	City of Kingston
Land Use 2	Conduct an alternatives analysis for the reuse of Kingston Point	Medium to Long Term	Property owners, City of Kingston	\$50,000	City of Kingston, property owner
Land Use 3	Facilitate site remediation strategies to make land available for redevelopment	Short to Medium Term	City of Kingston, private property owners, NYSDEC, NYS Department of Health, Scenic Hudson	\$1.5 million	NYS Empire Opportunity Funds, USEPA Brownfields Pilot Program, USHUD Brownfields Economic Development Initiative, USHUD Section 108 loan funds, NYSDEC Brownfields Program
Land Use 4	Conduct market and feasibility analyses for improvements to the Ponckhockie neighborhood	Medium Term	City of Kingston, Ulster County Office for the Aging, senior housing providers	\$4,000 + staff time	City of Kingston, Ulster County, USHUD

Project	Activity	Time Frame	Potential Stakeholders/Partners	Budget Estimate	Potential Funding Sources
Economic Development 1	Develop or Designate Waterfront Development Agency	Short Term and ongoing	City of Kingston, City of Kingston Industrial Development Agency	\$50,000/year	NYS Environmental Protection Fund, USDOT Transportation Enhancement Program, HUD BEDI, US Department of Commerce EDA Loan Fund, USEPA Revolving Loan Program, , NYS Governor's Office for Small Cities CDBG Program
Economic Development 2	Develop Revolving Loan Fund	Short to Medium Term	City of Kingston, City of Kingston Industrial Development Agency and other economic development partners	\$5 million	USHUD BEDI, US Department of Commerce EDA Loan Fund, USEPA Revolving Loan Program, NYS Governor's Office for Small Cities CDBG Program
Economic Development 3	Implement Marketing Strategy	Short to Medium Term	City of Kingston, Industrial Development Agency, other economic development organizations, and preferred developer(s)	\$100,000	NYS Revolving loan funds, Empire State Development Corporation, NYS Environmental Protection Fund, NYS Governor's Office for Small Cities CDBG Program

Appendix E: Design Standards Recommendations

Kingston Waterfront Development Implementation Plan



November 20, 2002

To: Stephen Finkle
Suzanne Cahill

From: Marian Hull

Subject: Recommended Waterfront Design Standards

Introduction

The following memo outlines a set of recommended design standards for Kingston's Rondout waterfront. It recommends specific language that could be adopted in a final set of design standards and suggests graphics and other supporting materials that should be included.

Purpose for Design Standards

This draft set of recommended standards are based upon the themes and conceptual plans from the waterfront development planning process and are intended to ensure that the future development of the Kingston waterfront reflects the goals of the community. The text that appears in ***bold italics*** contains notes describing elements that should be incorporated into the final design standards. The standards are intended to meet the following purposes:

- Encourage mixed-use development at a scale and density compatible with existing surrounding uses. Create an extension of the urban waterfront feel and quality of West Strand and Broadway development eastward along East Strand and westward west of West Strand Park.
- Provide appropriate vehicular and pedestrian circulation that recognizes the unique historic and waterfront environment of the Rondout Creek corridor.
- Provide opportunities that encourage residents, visitors, and tourists to experience the entire Rondout Creek waterfront area as a recreational, cultural, and historic environment.
- Ensure orderly development of the waterfront that will enhance ongoing downtown revitalization and will augment the economic well-being of the City of Kingston.
- Conserve and enhance the natural environment through a strategy of protection, conservation, and appropriate land management.
- Promote the opportunity to interact with and interpret the natural environment.
- Provide a tool to developers to streamline the site design approval and construction permitting processes in the waterfront area.

Boundaries

These design standards shall apply to the waterfront area including East and West Strand, Broadway, and Abeel Street (***Map boundaries that these guidelines will apply to***).

Recommended Design Standards

Design Standards for Development

The development standards were organized into the five (5) following categories: land and water; bulk, scale, and form; façade composition, building materials and colors; environmental quality; circulation and access; and management of development.

§1. *Land and Water*

- 1.1 Facilitate water-based recreation -- such as fishing, sailing, kayaking, canoeing, boating, swimming, and nature appreciation -- that is consistent with local site conditions and the protection and enhancement of natural resources.
- 1.2 Relocate non-water-dependent land uses -- such as industrial facilities, bulk storage, public works, and parking -- away from the water's edge.
- 1.3 Promote a mix of uses to help revitalize existing neighborhoods and foster active, diversified, and sustainable waterfront development year-round.
- 1.4 Preserve, upgrade, expand, and adapt for re-use appropriate stock of existing residential and commercial buildings.
- 1.5 Facilitate land-based recreation and ensure that new development is compatible with adjacent recreation areas and green space. Provide opportunities for waterfront recreational activities such as a continuous public esplanade, marina, small-boat launch ramps, or outdoor public gathering place for cultural activities.
- 1.6 Encourage new development for the following types of uses or activities: year-round outdoor recreation, museum/cultural center, restaurant, professional offices, public amphitheater, destination marina or similar water-dependent use, housing, automobile parking, parks, continuous riverside esplanade, scenic vistas, or a combination of these uses.

§2. *Bulk, Scale, and Form*

- 2.1 Maintain a pedestrian scaled environment by designing street-side and waterfront building facades oriented to the pedestrian.
- 2.2 Ground floors of building shall be encouraged for such active uses as restaurants, retail and indoor recreation, especially when adjacent to public spaces.
- 2.3 Density pattern of new development shall complement current adjacent development and the unique historic waterfront environment.
- 2.4 To the maximum extent possible, incorporate the existing historic structures (Cornell Steamboat Building, Millens Steel Building etc...) within the new development.
- 2.5 Length of proposed contiguous structures shall be planned so as to establish and protect view corridors to the waterfront and to preserve access routes from upland areas to the waterfront. Coverage and building height requirements may be modified in specific instances so long as the overall development is consistent with goals and other design standards.
- 2.6 All site lighting shall be consistent with the style and height as installed along the existing harborfront in the Rondout area. ***(Include specific characteristics/types/illustrations/catalog, by City, of lights to be used along road, esplanade, and sidewalk.)***
- 2.7 All new development shall be integrated into the existing landscape so as to minimize its visual impact and maintain the natural beauty and environmentally

Recommended Design Standards

- sensitive shoreline areas through erosion control and the use of vegetative and structural screening, landscaping and grading.
- 2.8 Fences utilized within the site and along walkways shall be harmonious with those heights and styles found along the Rondout harbor area. ***(Include specific fence materials, design, type or a catalog of acceptable fence styles and materials)***
- 2.9 Provide a continuous public right-of-way along the Rondout Creek edge for a public waterfront esplanade.

Lot/building characteristics can be found in zoning code. The final standards will cite applicable sections. The zoning code will require some amendments, notably building setback requirements.

§3. Façade Composition, Building Materials and Colors

- 3.1 Development of new buildings should preserve the character of existing streets and buildings.
- 3.2 Provide appropriate architecture and urban design in keeping with the height, scale, density and character of adjoining neighborhoods, including continuous street networks and well-designed pedestrian and gathering spaces.
- 3.3 Preserve the existing historic character of existing buildings.
- 3.4 The relative spacing of windows and doors on facades (rhythm) shall complement the rhythm of adjacent or typical buildings. The amount of façade fenestration (the amount of depth in the openings on a façade) shall be consistent with the amount of fenestration in adjacent or typical buildings and employ the greatest use of depth on the façade, with the ground floor appearing open and inviting to the pedestrian.
- 3.4.1 Windows should be made up of an anodized aluminum frame, wood frame, or vinyl and not bare aluminum.
- 3.4.2 Glass should be clear, etched, stained or frosted and not tinted or mirrored.
- 3.5 The overall façade shall have a simple and complementary pattern to neighboring or typical buildings and shall be kept consistent across the building front, but may show deviation at important points to highlight the center of the building or the entry way(s) to the building.
- 3.6 Facades shall be designed as to appear inviting from both the street side and the waterfront side of the building without creating a "back door" appearance to either side.
- 3.7 Building materials and colors shall be complementary to adjacent buildings. The use of contrasts between the main color theme and an accent color are recommended.
- 3.8 A single material shall be used as the dominant theme in a façade, with secondary materials used only to highlight and accent the design.
- 3.9 Facades shall be scaled for view by people walking; natural materials shall be used around pedestrian areas.
- 3.10 Façade materials should employ masonry, natural stone, and wood. Materials such as imitation brick/stone, vinyl siding, asphalt siding, and metal/aluminum siding shall be discouraged.
- 3.11 Trim wood shall be a "select" grade, painted or stained and shall not be a lumber grade (i.e. plywood).
- 3.12 Designs of facades shall not limit/restrict access to the interior for disabled individuals.

Recommended Design Standards

- 3.13 *Identify bulkhead materials that are acceptable along the waterfront based on type of development, i.e. bulkhead for commercial uses vs. bulkhead/shoreline treatments for recreational uses)*

Urban Cultural Park Plan has established a set of design standards that should be considered in developing the final guidelines. Guidelines should be coordinated with the existing UCP tools.

Final guidelines should specifically identify/catalog types of tree grates/surrounds, benches, trash receptacles, and other street furniture.

§4. *Environmental Quality*

- 4.1 Protect views to, from, and along waterfronts.
- 4.2 Protect and interpret natural ecology, vegetation, and aquatic habitat.
- 4.3 Provide Shoreline treatment to prevent erosion, protect water quality, and enhance public access appropriate to Community and environmental needs.
- 4.4 Prevent non-point source pollution, particularly stormwater runoff.
- 4.4.1 New landscaping shall include surface/grading to intercept street drainage and trap runoff-borne contaminant for minor storms and first flush elements. This shall include strategic placement of shrubs and trees to ensure that new development maintains and enhances the visual quality of the shoreline and overall waterfront site.
- 4.4.2 *Planting shall include specific characteristics/types/illustrations/catalog of encouraged/allowed plantings***
- 4.4.3 Planting should aid in stormwater runoff and nutrient uptake.
- 4.4.4 Along shoreline, runoff shall be managed and diverted from directly discharging into the stream along a walkway and channeled into retention ditches, wetlands, or detention basins.
- 4.5 Employ environmentally sound land management practices during land development and long-term maintenance of the waterfront parcel.
- 4.6 Refuse storage and collection and recycling shall be screened from public view and shared areas shall be encouraged between buildings to decrease the number of refuse and recycling storage areas.

§5. *Circulation and Access*

- 5.1 Provide public access to and along the waterfront.
- 5.2 Link waterfront areas with parks, nature preserves, historic and cultural sites, commercial main streets, and adjoining communities.
- 5.3 Integrate multi-modal and inter-modal transportation including rail, land-based, and water-based mass transit, bicycles, and vehicular and pedestrian movement in accordance with the capacity of existing or upgraded systems.
- 5.4 Encourage tracked and trackless trolley service long the waterfront in conjunction with the existing Trolley Museum and its line along the entire waterfront.
- 5.5 Create a safe and user-friendly environment with the use of traffic calming techniques such as narrower 10 foot driving lanes, on-street parking, dedicated bike lanes, wider sidewalks (***determine appropriate minimum width***), street trees, crosswalks, ample lighting, and attractive street furniture.

Recommended Design Standards

- 5.6 Incorporate a waterfront esplanade along the waterfront for the full length of the shoreline. Where other uses, such as cafes or vending carts, may encroach upon this walkway, ensure provision of continuous pedestrian circulation along the waterfront.
- 5.7 Encourage interpretive signage at appropriate locations along the esplanade or in public spaces.
- 5.7.1** Ensure that commercial signage motif is compatible with that established in the Rondout Harbor area. *(Consider changes to existing zoning regarding lighting sources to only allow external, decorative lighting. Current zoning does not separate lighting sources.) (Refer to UCP signage standards.)*
- 5.7.2 Link waterfront environment with upland area by establishing signed pedestrian routes.
- 5.8 Internal roadways shall be designed in a fashion that takes advantage of existing topography and encourage low vehicle speeds.
- 5.8.1 Internal roadways shall not exceed 30' in paved width and shall maintain a parkway appearance.
- 5.9 Sidewalks are required and shall be continuous and consistent with existing sidewalks. Walkways shall be of brick with granite curbing in keeping with the surrounding downtown and waterfront walkways. *(Sidewalk standards in the zoning ordinance address only the historic district.)*
- 5.9.1 All pedestrian walkways shall be separated from roadways by street tree planting, where possible, or granite curbing, at a minimum.
- 5.9.2 The Waterfront Esplanade shall be built to City standards. *(Identify width and materials that are acceptable for the walkway.)*
- 5.10 Screen and landscape off street parking areas with capacity for three ore more vehicles.

§6. *Management of Development*

- 6.1 Promote consistency and continuity of new development with adjoining and/or surrounding neighborhoods.
- 6.2 Maximize public participation in planning and development processes. For purposes of reviewing any new development on the waterfront sites, the Heritage Area Commission shall review proposed development to determine that it is consistent with these standards and shall make a non-binding recommendation to the City Planning Board for approval, approval with conditions, or denial.
- 6.3 Any proposed development shall conform to existing City of Kingston site plan regulations for:
- drainage and stormwater management
 - grading and erosion control
 - flood plain development
 - noise, vibration, odors and similar concerns
 - natural resource protection
 - parking
 - lighting

Appendix F: Waterfront Infrastructure Analysis

Kingston Waterfront Development Implementation Plan



City of Kingston
Waterfront
Conditions Assessment

Prepared by:
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358 Broadway Suite 303
Saratoga Springs, NY 12866

This report was prepared for the City of Kingston and the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

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- VI. Kingston Point Causeway
- VII. Railroad Track Rehabilitation

- Appendix A Conditions Summary
- Appendix B Conditions Assessment

I. Introduction

This report includes the results of an evaluation of the presence and condition of the Rondout Creek bulkheads as well as the bulkheads along the west bank of the Hudson River adjacent to the brickyard and the Tilcon Materials properties. The conditions evaluation also addresses pedestrian access along the jetty leading to the Kingston Lighthouse and the existing railroad track within the City of Kingston. The following five items were identified for evaluation as part of this study:

1. **Rondout Creek Bulkheads:**
The condition of the Rondout Creek bulkheads were evaluated from the City docks to Kingston Landing to provide an overview of needed improvements and a preliminary range of cost estimates to complete the identified improvements.
2. **Pedestrian access along the wooden jetty to Light House Point:**
The existing condition of the wooden jetty extending from Kingston Landing to the Kingston Light House was evaluated to determine the improvements needed to provide pedestrian access to the light house. The United Sates Army Corps of Engineers recently constructed improvements to stabilize the jetty, however, they did not construct it high enough to provide pedestrian access along the jetty to the lighthouse.
3. **Rondout Creek and Hudson River Depths:**
Research was completed to assemble available data on Rondout Creek depths between the Island Dock causeway and the mouth of the creek at Kingston Landing and the Hudson River at the Brickyard property. Preliminary cost estimates were performed for dredging and the role of the Army Corps of Engineers and other relevant agencies was outlined.
4. **Kingston Point Causeway:**
The Kingston Point Causeway from Kingston Landing to its end in Kingston Point Park was evaluated to provide an overview of needed improvements and preliminary cost estimates to complete identified improvements.
5. **Rehabilitation of Railroad Tracks for Trolley Use:**
The condition of the existing railroad tracks and adjacent walking trail between the foot of Broadway and the end of the Kingston Point Causeway was evaluated and improvements were recommended to provide regular trolley service on the rail line and restore the adjacent pedestrian trail.

The field assessment of bulkhead conditions along the Rondout Creek and Hudson River waterfront, railroad tracks and pedestrian access to the lighthouse within the City of Kingston was performed to develop preliminary cost estimates for repairs and upgrades. This assessment is based on a visual field evaluation of the study area, performed on April 16, 2002. At the time of the visual conditions assessment, the tide was at approximately 0.2 ft. above the mean lower low water level (MLLW). Tidal data for Kingston Point was obtained from the National Oceanic and Atmospheric Administration (NOAA)/National Ocean Service (NOS) CO-OPS Database for 2002 water level predictions at Kingston Point. Conditions were only evaluated above the water level at the time of survey. Structures located below water surface were not evaluated as part of this conditions assessment.

II. Rondout Creek and Hudson River Bulkheads

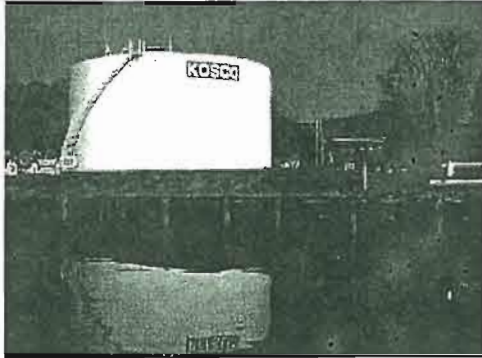


Figure 1 – Timber pile bulkhead in fair condition along Rondout Creek.

The visual assessment focused on the condition of the shoreline and bulkheads along Rondout Creek from Island Dock/Hideaway Marina to Kingston Landing as well as along the Hudson River at the Tilcon Materials and Brickyard properties. In the Spring of 2002, the City of Kingston contracted the repair of 88 feet of bulkhead. The bid results for this project and other similar projects were obtained from the City to develop a preliminary cost estimate for bulkhead repair throughout the entire study area.

In some locations bulkhead is in very poor condition and may not be salvageable. Some property owners have maintained the timber bulkhead and others have installed sheet piling. In other areas, however, the bulkhead is completely deteriorated and collapsed. There is no bulkhead in some locations, but the shoreline is in need of stabilization.

A conditions assessment of the Rondout Creek and Hudson River waterfront was conducted at low tide. The bulkheads were visually observed above the water line at low tide to determine the need for and extent of repair. Areas that do not contain bulkhead but are located within the project area were also noted.

The waterfront properties on Rondout Creek consists of marinas, industrial uses, vacant property and restaurants. The conditions assessment includes an analysis of each major parcel along the waterfront, the condition of the bulkhead at that location and the approximate linear footage in need of repair along the Rondout Creek waterfront and the Hudson River waterfront.

Cost estimates were developed to determine the overall project costs associated with completing bulkhead and shore stabilization repairs. Bulkhead repair cost information was obtained from the City of Kingston Construction Engineering Department. Data was assembled from bids submitted on similar bulkhead repair projects. According to City estimates, the average cost of the bulkhead repairs is \$925 per linear foot. Similarly, the average cost of closed row piling is \$1,000 per linear foot. For estimating purposes, \$925 per linear foot of bulkhead repair will be assumed, using the crib design typically employed by the City of Kingston.

In some locations, the shoreline is subject to scour and runoff. In these locations, an estimate for heavy stone fill has been prepared. Costs for heavy stone fill are based on the New York State Department of Transportation Weighted Average Bid Price Program. Average costs for Item 620.05 – heavy stone fill were used for Region 8.

III. Conditions Summary

The following Conditions Summary graphically illustrates the results of the conditions assessment performed for the bulkhead along Rondout Creek and the Hudson River. This summary lists the parcel identification number, bulkhead type, frontage, condition, proposed type of repair and estimated costs. A more detailed version of this conditions summary is located in Appendix A of this report. The Full Conditions Assessment is located in Appendix B of this report.

Table 1 – Conditions Summary

ROUNDOUT CREEK PROPERTIES																
PARCEL ID	FRONTAGE (lf)	BULKHEAD TYPE					BULKHEAD CONDITION				BULKHEAD WORK NEEDED				PRELIMINARY COST ESTIMATE	
		WOOD	STEEL	CONCRETE	STONE	NONE	EXCELLENT	GOOD	FAIR	POOR	NONE	REPAIR	REPLACE	NEW PILING		NEW STONE FILL
56.36-1-21	260			X	X				X						X	\$ 13,650.00
56.36-1-20	120				X				X						X	\$ 750.00
56.36-1-19	200				X				X						X	\$ 8,500.00
56.36-1-18	360	X							X			X				\$ 72,000.00
56.36-1-14 & 12	940	X							X			X				\$ 188,000.00
56.36-1-11 & 10	190	X								X			X			\$ 228,000.00
56.36-1-9			X				X				X					\$ -
56.36-1-8	800	X								X		X				\$ 740,000.00
56.43-6-6	150	X			X				X			X				\$ 15,000.00
56.43-6-5	360			X	X			X							X	\$ 7,500.00
56.43-6-4	125				X				X						X	\$ 2,250.00

Table 1 – Conditions Summary, Cont.

PARCEL ID	FRONTAGE (lf)	BULKHEAD TYPE					BULKHEAD CONDITION				BULKHEAD WORK NEEDED					PRELIMINARY COST ESTIMATE
		WOOD	STEEL	CONCRETE	STONE	NONE	EXCELLENT	GOOD	FAIR	POOR	NONE	REPAIR	REPLACE	NEW PILING	NEW STONE FILL	
56.43-6-3	175	X								X				X		\$ 161,875.00
56.43-6-2	190	X					X			X		X		X		\$ 98,000.00
56.43-6-1	410	X						X				X				\$ 10,000.00
56.43-5-42	220		X				X				X					\$ -
56.43-5-43	100		X				X				X					\$ -
56.43-5-10	1000	X			X				X			X		X		\$ 25,000.00
56.50-6-25	1350	X						X				X				\$ 20,000.00
SUBTOTAL															\$ 1,590,525.00	
HUDSON RIVER PROPERTIES																
PARCEL ID	FRONTAGE (lf)	BULKHEAD TYPE					BULKHEAD CONDITION				BULKHEAD WORK NEEDED					PRELIMINARY COST ESTIMATE
		WOOD	STEEL	CONCRETE	STONE	NONE	EXCELLENT	GOOD	FAIR	POOR	NONE	REPAIR	REPLACE	NEW PILING	NEW STONE FILL	
48.16-6-2	280		X		X			X							X	\$ 8,500.00
48.16-6-3	1120		X		X			X							X	\$ 42,000.00
48.16-6-4	4180				X				X		X		X	X		\$ 285,000.00

Table 1 – Conditions Summary, Cont.

PARCEL ID	FRONTAGE (lf)	BULKHEAD TYPE					BULKHEAD CONDITION				BULKHEAD WORK NEEDED				PRELIMINARY COST ESTIMATE	
		WOOD	STEEL	CONCRETE	STONE	NONE	EXCELLENT	GOOD	FAIR	POOR	NONE	REPAIR	REPLACE	NEW PILING		NEW STONE FILL
48.84-1-4	100	X			X	X				X				X	X	\$ 2,000,000.00
57.21-1-14	1600					X					X					\$ -
5.21-1-13	95					X					X					\$ -
57.21-1-8	485				X				X						X	\$ 740,000.00
57.21-1-7	725		X								X					
57.21-1-6	190		X		X				X						X	\$ 40,000.00
57.21-1-5	250				X				X						X	\$ 20,800.00
56.36-1-34	2140				X				X						X	\$ 89,250.00
SUBTOTAL															\$ 3,225,550.00	
TOTAL															\$ 4,816,075.00	

**** DOT Item No. 620.05 - Heavy stone fill used for unit cost purposes

*** Crib Bulkhead unit cost courtesy of City of Kingston Office of Construction Engineering.

Estimates based on recent bid price data for similar projects within City.

** Estimates do not include the cost of environmental remediation.

* All estimates for closed row piling assume subsurface conditions are conducive to pile driving.

IV. Kingston-Rondout Lighthouse

The current Kingston-Rondout Lighthouse was commissioned in 1915. During the late 19th and early 20th Centuries, coal was conveyed along the D&H Canal from Pennsylvania and loaded on barges at Kingston for transport to New York City. In the 20th Century, goods such as ice, stone and bricks were shipped from Kingston to New York City. Although barge shipments along the Hudson River have declined substantially since the early 20th Century, the Rondout Creek serves as a popular destination for recreational boating.



Figure 2 – Kingston-Rondout Lighthouse and Jetty

Presently, the Kingston-Rondout Lighthouse can only be accessed by boat from the Hudson River Maritime Museum or by walking the stone jetty during low tide. The United States Army Corps of Engineers recently rebuilt the Jetty extending from the area adjacent to the tidal flats to the Kingston Lighthouse. Improvements were limited to bulkhead repairs and riprap scour protection, however, and provisions were not made to provide pedestrian access to the lighthouse. The existing jetty is submerged during high tide.

The jetty is over 2,000 linear feet in length and 30 feet in width. It extends from the tidal flats to the Kingston Rondout Lighthouse. To be accessible by pedestrians during mean high water conditions, the jetty must be raised approximately four feet.

A visual site assessment was completed on April 16, 2002 to evaluate the condition of the jetty above the water level. The jetty is in excellent condition. At the time of the visual assessment the tide was at 0.2 ft. above mean lower low water (MLLW) as illustrated Figure 2 and Figure 3. According to NOAA/NOS CO-OPS database for 2002 Kingston Point Water Level Predictions, water levels can be upwards of 5 feet greater than the MLLW, leaving the jetty submerged. By raising the jetty four feet above its current level, pedestrians will be able to access the lighthouse during most conditions.

Two options have been evaluated to provide for pedestrian access to the lighthouse. Option I includes building a wooden boardwalk above the jetty at a height that will clear the mean high water level. The boardwalk will be constructed using pressure treated timber. Because the jetty extends a significant distance into the River, the wooden structure will be susceptible to ice flows during the spring. Ice and storm damage can be expected with this type of pedestrian access. The approximate cost of this alternative is \$1.5 million.

Option II involves raising the jetty approximately four feet above the existing jetty height. Pressure treated timbers will be used to raise the jetty, thus giving the new construction a similar look to the existing jetty. Ties between the faces of the jetty will be installed at appropriate intervals for stability. A 10-foot wide concrete sidewalk would then be poured on top of the extended riprap to



Figure 3 – Jetty at Approximately 0.2 ft. above MLLW on April 16, 2002

create a level surface for pedestrians. Ten feet of riprap will be located on each side of the concrete sidewalk. This alternative is preferred, since it is less susceptible to ice and storm damage and would have a lower maintenance cost. The approximate cost of this alternative is \$2.0 million.

Due to the anticipated high maintenance cost and potential safety concerns involved with Option I, Option II is the preferred alternative.

V. Rondout Creek and Hudson River Depths

Historically, Rondout Creek and the Hudson River at Kingston Point were used to haul goods such as coal and produce to New York City by barge. In the latter half of the 19th Century, Kingston became well known for building materials such as cement, bricks and bluestone slate that was used in much of the infrastructure in New York City. Presently, Rondout Creek is primarily used for recreational boating, although barges do carry goods along the Hudson to New York City.

Silt deposits from stormwater runoff and barge activities are prevalent along the bottom of the Hudson River and Rondout Creek, making travel by large vessels difficult in many locations. Existing mapping of the Hudson River at Rondout Creek is available via a series of preliminary maps. The New York State Department of Environmental Conservation is entering the final stages of developing topographical maps of the Hudson River bottom at Kingston as part of a large-scale mapping project performed in conjunction with Columbia University. This mapping provides river bottom characteristics, such as silt deposits and soil conditions of the Hudson River at the mouth of the Rondout Creek and at the brickyard property. This mapping, now entering its final stages of development, will be the first river bottom mapping of the Hudson River since the 1930's. This mapping, however, is currently unavailable.

Dredging at the mouth of the Rondout Creek and at the Brickyard properties will likely require a full Environmental Impact Statement. Several environmental factors will determine the significance of the dredging project. First, the dredging project must be performed in a manner that minimizes impacts to sensitive plant and animal species. Sensitive plant and animal species are located within the tidal flats. In addition, there have been several sunken barges identified within the project area. These barges have historical value that is significant to the City of Kingston. The State Historic Preservation Office will likely require a mitigation plan to ensure the barges are not damaged or destroyed.

As part of the Environmental Impact Statement, a hazardous materials assessment will be necessary to determine a suitable sediment disposal method. If contamination is found, the dredged material must be disposed of as a special or hazardous waste, significantly impacting the cost of the proposed project.

The Army Corps of Engineers is the regulatory agency for all dredging projects along Waters of the United States. All projects of this nature must be in compliance with the Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899 and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972. Prior to beginning work, the applicant must complete the Joint Application for Permit. The permit must include technically accurate project plans and the Environmental Questionnaire. The Environmental Questionnaire must be submitted with the Joint Application to provide a synopsis of the project. The Army Corps of Engineers will make a decision on the permit. Following permit approval, construction may

commence. The United States Army Corps of Engineers will be involved throughout the duration of the project to ensure the project is being progressed in compliance with the terms set forth in the Joint Application.

The Army Corps of Engineers will review each application and will determine if the selected disposal location is suitable by reviewing public comments and laboratory test results. The Army Corps of Engineers will progress the project in compliance with all regulations and statutes adopted by the United States Environmental Protection Agency involving the disposal of dredged material.

The cost estimates provided below incorporate several assumptions. The actual costs may vary depending on actual site conditions encountered. This cost estimate assumes that dredged material will be disposed of upland and there is no contamination present. This estimate also assumes that an environmental impact statement will be necessary to complete the dredging project. This project will include dredging for recreational vessels only given the current redevelopment efforts along the waterfront. This preliminary estimate does not include the costs to raise any sunken barges found within the dredging area. Costs per cubic yard for extracting dredged material were obtained from the United States Army Corps of Engineers Fiscal Year 2002 Contract Dredging Program.

Environmental Impact Statement & Permitting, Feasibility Assessment & Design,	\$200,000.00
Material Dredging Costs	\$10.00 per CY

VI. Kingston Point Causeway



Figure 4 – Exposed tree roots along Kingston Point Causeway

The shoreline along the Kingston Point Causeway from the tidal flats adjacent to the City of Kingston boat launch and extends to the Kingston Point Park. Eight-hundred feet of railroad track along the end of the causeway has recently been rebuilt and has completed a critical link in a Trolley line that connects Kingston's downtown to the Kingston Point Park. A portion of the trolley line is located on the causeway between the tidal flats and the Hudson River.

The shoreline along the Kingston Point Causeway has been stabilized by heavy stone fill. In most locations, the shoreline is in excellent condition. In several locations, however, scour along the roots of large trees is evident. Additional heavy stone fill should be placed to prevent further damage to the shoreline and protect the trolley tracks that set nearby. Left unchecked, the tracks could become undermined.

VII. Railroad Track Rehabilitation



Figure 5 - Trolley to Kingston Point Park. Photo Courtesy of New York Trolley Museum.

The City of Kingston, in conjunction with the New York State Trolley Museum have rebuilt a portion of rail line to provide trolley access along the Kingston Point Causeway from the Trolley Museum to Kingston Point Park.

The City of Kingston hopes to improve trolley service from the Downtown to Kingston Point Park. Track rehabilitation will include replacing existing ties, adding ballast, and clearing trees and shrubs. The cost estimate located on the Conditions Assessment in Appendix B includes costs for electrification, catenary, switches and a DC substation.

To complete the trolley line from the Trolley Museum to the Downtown, Approximately 2000 linear feet of track must be rehabilitated. Not including the construction of trolley stations or stops, completing this project would require an additional \$3,800,000 in funding.

Appendix A
Conditions Summary

CITY OF KINGSTON
WATERFRONT
CONDITIONS ASSESSMENT

November 2002

Prepared by:
Edwards and Kelcey
358 Broadway Suite 303
Saratoga Springs, NY 12866



KINGSTON WATERFRONT
CONDITIONS SUMMARY

ROUNDOUT CREEK PROPERTIES																
PARCEL ID	FRONTAGE (lf)	BULKHEAD TYPE					BULKHEAD CONDITION				BULKHEAD WORK NEEDED				PRELIMINARY COST ESTIMATE	
		WOOD	STEEL	CONCRETE	STONE	NONE	EXCELLENT	GOOD	FAIR	POOR	NONE	REPAIR	REPLACE	NEW PILING		NEW STONE FILL
56.36-1-21	260			X	X					X					X	\$ 13,650.00
56.36-1-20	120				X					X					X	\$ 750.00
56.36-1-19	200				X					X					X	\$ 8,500.00
56.36-1-18	360	X								X		X				\$ 72,000.00
56.36-1-14 & 12	940	X								X		X				\$ 188,000.00
56.36-1-11 & 10	190	X									X			X		\$ 228,000.00
56.36-1-9			X				X				X					\$ -
56.36-1-8	800	X									X	X				\$ 740,000.00
56.43-6-6	150	X			X					X		X				\$ 15,000.00
56.43-6-5	360			X	X			X							X	\$ 7,500.00
56.43-6-4	125				X					X					X	\$ 2,250.00

PARCEL ID	FRONTAGE (lf)	BULKHEAD TYPE					BULKHEAD CONDITION				BULKHEAD WORK NEEDED				PRELIMINARY COST ESTIMATE
		WOOD	STEEL	CONCRETE	STONE	NONE	EXCELLENT	GOOD	FAIR	POOR	NONE	REPAIR	REPLACE	NEW PILING	
56.43-6-3	175	X							X				X		\$ 161,875.00
56.43-6-2	190	X					X		X		X		X		\$ 98,000.00
56.43-6-1	410	X						X			X				\$ 10,000.00
56.43-5-42	220		X				X				X				\$ -
56.43-5-43	100		X				X				X				\$ -
56.43-5-10	1000	X			X			X			X			X	\$ 25,000.00
56.50-6-25	1350	X						X			X				\$ 20,000.00
SUBTOTAL														\$ 1,590,525.00	

HUDSON RIVER PROPERTIES															
PARCEL ID	FRONTAGE (lf)	BULKHEAD TYPE					BULKHEAD CONDITION				BULKHEAD WORK NEEDED				PRELIMINARY COST ESTIMATE
		WOOD	STEEL	CONCRETE	STONE	NONE	EXCELLENT	GOOD	FAIR	POOR	NONE	REPAIR	REPLACE	NEW PILING	
48.16-6-2	280		X		X			X						X	\$ 8,500.00
48.16-6-3	1120		X		X			X						X	\$ 42,000.00
48.16-6-4	4180				X			X		X			X	X	\$ 285,000.00

PARCEL ID	FRONTAGE (lf)	BULKHEAD TYPE					BULKHEAD CONDITION				BULKHEAD WORK NEEDED					PRELIMINARY COST ESTIMATE
		WOOD	STEEL	CONCRETE	STONE	NONE	EXCELLENT	GOOD	FAIR	POOR	NONE	REPAIR	REPLACE	NEW PILING	NEW STONE FILL	
48.84-1-4	2000	X			X	X			X		X			X	X	\$ 2,000,000.00
57.21-1-14	1600					X					X					\$ -
5.21-1-13	95					X					X					\$ -
57.21-1-8	485				X			X						X		\$ 740,000.00
57.21-1-7	725		X							X						
57.21-1-6	190		X		X			X						X		\$ 40,000.00
57.21-1-5	250				X			X						X		\$ 20,800.00
56.36-1-34	2140				X			X						X		\$ 89,250.00
SUBTOTAL															\$ 3,225,550.00	
TOTAL															\$ 4,816,075.00	

**** DOT Item No. 620.05 - Heavy stone fill used for unit cost purposes

*** Crib Bulkhead unit cost courtesy of City of Kingston Office of Construction Engineering.

Estimates based on recent bid price data for similar projects within City.

** Estimates do not include the cost of environmental remediation.

* All estimates for closed row piling assume subsurface conditions are conducive to pile driving.



KINGSTON WATERFRONT
IMPACTED PROPERTY OWNERS

RONDOUT CREEK:

PARCEL ID#	APPROXIMATE WATER FRONTAGE	OWNER
56.50-2-21	1440	CITY OF KINGSTON 420 BROADWAY KINGSTON, NY 12401
56.50-6-11	560	CONCRETE BLOCKS, INC. PO BOX 1598 KINGSTON, NY 12402
56.50-6-25	1350	HIDEAWAY MARINA, INC 170 ABEEL ST KINGSTON, NY 12401
56.50-6-10	50	340 ABREL INC PO BOX 522 KERHONKSON, NY 12446
56.50-6-9	50	340 ABREL INC PO BOX 522 KERHONKSON, NY 12446
56.50-6-8	215	340 ABREL INC PO BOX 522 KERHONKSON, NY 12446
56.50-6-7	740	KINGSTON POWER BOAT ASSOCIATION CPO BOX 2684 KINGSTON, NY 12401
56.50-6-5	120	EDMUND BERG 3177 SPILLWAY RD W. HURLEY, NY 12491
56.50-6-3.1.	102.2	ULSTER BOATS, INC 440 ABEEL STREET KINGSTON, NY 12401
56.50-6-3.2	121.1	VINCENT AND GLORIA GREGORY 118 E. STOUT AVENUE PORT EWEN, NY 12466
56.50-6-2	57.00	ULSTER BOATS, INC 440 ABEEL STREET KINGSTON, NY 12401
56.50-6-1	250	ULSTER BOATS, INC 440 ABEEL STREET KINGSTON, NY 12401
56.43-6-6	145.5	GERHORN AUTO PARTS 222 E. STRAND KINGSTON, NY 12401

KINGSTON WATERFRONT
IMPACTED PROPERTY OWNERS

56.43-6-5		360.3	ALAN COTE & JOHN WALKER 108 E. STRAND KINGSTON, NY 12401
56.43-6-4		121.2	MARVIN MILLENS 75 THE HILLS PORT EWEN, NY 12466
56.43-6-3		171	MARVIN MILLENS 75 THE HILLS PORT EWEN, NY 12466
56.43-6-2		190.2	MELKE LAND CO. INC 220 CLIFTON AVENUE KINGSTON, NY 12401
56.43-6-1		407.7	HUDSON RIVER MARITIME ONE RONDOUT LANDING KINGSTON, NY 12401
56.43-5-42		219.6	CITY OF KINGSTON 420 BROADWAY KINGSTON, NY 12401
56.43-5-43		100	CITY OF KINGSTON 420 BROADWAY KINGSTON, NY 12401
56.43-5-10		998	CITY OF KINGSTON 420 BROADWAY KINGSTON, NY 12401
56.43-5-44		1490	ISLAND DOCK LUMBER, INC PO BOX 1598 KINGSTON, NY 12402
56.43-7-37	N/A		JAF PARTNERS INC 30 BROADWAY SUITE 203 KINGSTON, NY 12401
56.43-6-8	N/A		CITY OF KINGSTON 420 BROADWAY KINGSTON, NY 12401
56.36-1-34		510	CITY OF KINGSTON 420 BROADWAY KINGSTON, NY 12401
56.36-1-22	N/A		MILLENS BARNEY CPO BOX 1940 KINGSTON, NY 12401
56.36-1-21		260	KINGSTON LANDING CORP C/O WARD INGALSBE PO BOX 3040 KINGSTON, NY 12402
56.36-1-20		120	KINGSTON LANDING CORP C/O WARD INGALSBE PO BOX 3040 KINGSTON, NY 12402

KINGSTON WATERFRONT
IMPACTED PROPERTY OWNERS

56.36-1-19		200	KINGSTON LANDING CORP C/O WARD INGALSBE PO BOX 3040 KINGSTON, NY 12402
56.36-1-18		360	CENTRAL HUDSON CORP 284 SOUTH ROAD POUGHKEEPSIE, NY 12601
56.36-1-14		380	MORTAL REALTY GROUP PO BOX 760 PORT EWEN, NY 12466
56.36-1-12		560	MORTAL REALTY CORP PO BOX 760 PORT EWEN, NY 12466
56.36-1-11		75	GERHORN AUTO PARTS 222 E. STRAND KINGSTON, NY 12401
56.36-1-10		115	GERHORN AUTO PARTS 222 EAST STRAND KINGSTON, NY 12401
56.36-1-9		100	MORTAL REALTY GROUP PO BOX 760 PORT EWEN, NY 12466
56.36-1-8		800	GERHORN AUTO PARTS 222 E. STRAND KINGSTON, NY 12401
56.36-1-6	N/A		MORTAL REALTY CORP PO BOX 760 PORT EWEN, NY 12466
56.36-1-7	N/A		B MILLENS & SON INC CPO BOX 1940 KINGSTON, NY 12401

KINGSTON WATERFRONT
IMPACTED PROPERTY OWNERS

HUDSON RIVER:

48.84-1-4	2120	HUDSON-RONDOUT CORP 200 NORTH ST KINGSTON, NY 12401
48.16-6-2	285	TILCON MINERALS INC 162 OLD MILL RD WEST NYACK, NY 10994
48.16-6-3	555	TILCON MINERALS INC 162 OLD MILL RD WEST NYACK, NY 10994
48.16-6-4	1470	TILCON MINERALS INC 162 OLD MILL RD WEST NYACK, NY 10994

Appendix B
Conditions Assessment



Lighthouse and Jetty

The United States Army Corps of Engineers recently made improvements to the Jetty extending from the area adjacent to the tidal flats to the Kingston Lighthouse. Improvements were limited to bulkhead repairs and riprap scour protection, however, provisions were not made to provide pedestrian access to the lighthouse. The existing jetty is submerged in water during high tide. Two options have been evaluated that will ultimately raise the jetty substantially above existing conditions to provide adequate access to the lighthouse by pedestrians during high tide conditions.

Property Parcel ID	Land Use	Waterfront Footage	Condition
N/A	N/A	N/A	<ul style="list-style-type: none"> - The Army Corps of Engineers stabilized and reconstructed portions of the jetty, however, during high tide it is completely submerged in water. Pedestrian access is infeasible due to the water levels and the loose stone surface. - The jetty begins along Rondout Creek adjacent to The Kingston Point Lagoon tidal flats and extends to the Kingston Lighthouse. - The bulkhead along the jetty appears to be in excellent condition. - The riprap placed along the top of the jetty has remained in place and has not been subject to movement. - It does not appear that any structural rehabilitation to the jetty will be necessary as part of this project. - The jetty must be raised at least 4 feet to provide pedestrian access to the lighthouse during low and high tide. - A plan must be developed to close the jetty and lighthouse during poor weather conditions and during spring flooding.



Figure 1 - Kingston Point Lighthouse and Jetty

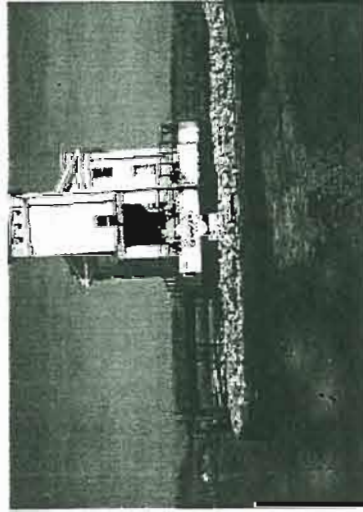


Figure 2 - Kingston Point Lighthouse

OPTION I:

- Construct boardwalk above the jetty with foundations anchored into the existing jetty.
- Option I subject to ice damage when Hudson River and Rondout Creek exhibit ice flows.
- Approximate cost of Option I, including labor and materials: \$1,500,000

OPTION II:

- Raise jetty using construction methods similar to those used when rebuilding or extending bulkheads.
- Provide pedestrian access with 10' concrete walkway.
- May need to mobilize barge for applying large stone fill along the interior of the raised
- Approximate cost of Option II, \$2,000,000

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**

III. Rondout Creek

Property Parcel ID	Land Use	Waterfront Footage	Condition
56.036-1-21, 20 & 19	Marina & Vacant	580'	<ul style="list-style-type: none"> - Portions of property serve as a public boat launch and emergency watercraft storage for the City of Kingston Fire and Police Departments. - No timber bulkhead present along these properties. Stone fill is generally used for shoreline protection in many areas. - Riprap appears to be in fair condition in most locations and in poor condition in some locations. Generally inadequate size and quantity. - Several trees along the shoreline with exposed roots due to scour associated with the tidal changes and/or wave action. - Two pile and displaced concrete blocks appear to be remains of an abandoned dock for barges. - May be necessary to supplement the existing stone fill with larger stone fill to protect the existing vegetation as well as prevent any potential scour along the trolley tracks during high tide. - Stone fill necessary for shoreline stabilization with a total cost of \$22,900 for the three properties.



Figure 3 - Concrete blocks possibly associated with an abandoned dock for barges.



Figure 4 - Boat Launch area and land owned by Kingston Landing Corp.

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**



Property Parcel ID
56.036-1-18

Land Use
Petroleum Storage

Waterfront Footage
360'

Condition

- Petroleum Bulk Storage facility owned by KOSCO
- Bulkhead in fair to good condition
- Split and rotting timbers near top of bulkhead should be replaced.
- Approximately 360' of bulkhead must have minor repairs made. The approximate cost of repairs is estimated to be \$72,000.

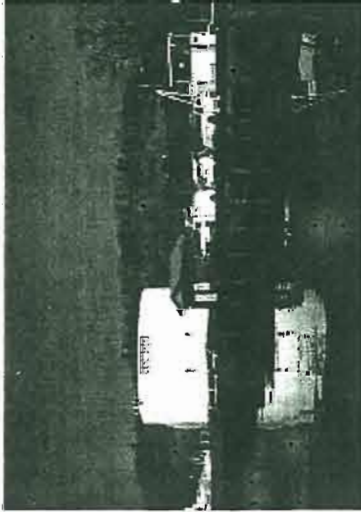


Figure 5 - Petroleum Bulk Storage Facility owned by Central Hudson Corp.

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**

Property Parcel ID	Land Use	Waterfront Footage	Condition
56.036-1-14&12	Petroleum Storage	940'	<ul style="list-style-type: none"> - Petroleum Bulk Storage facility - Bulkhead in fair to good condition. - Several timbers near the top of the bulkhead are split and should be repaired or replaced. - Damage to the timbers is being accelerated by the roots of vegetation penetrating the timbers. - Timber piles appear to be sound and in good condition. - Minor repairs necessary - See next property condition description. - In possession of a commercial realty management firm - Pipeline owned by Central Hudson Gas and Electric Corporation. - The bulkhead in this location appears to be in fair condition. - Vertical steel bars indicate that the bulkhead was pinned during construction. - Approximately 940 linear feet of bulkhead must have minor repairs on property 56.036-1-14 and 56.036-1-12. Total cost is anticipated to be approximately \$188,000.

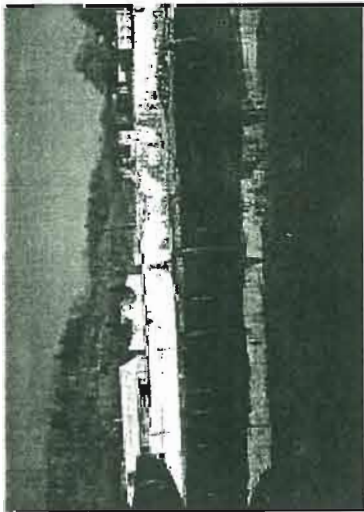


Figure 6 - Petroleum Bulk Storage Facility currently owned by Mortal Realty Group



Figure 7 - Central Hudson Gas & Electric Pipeline. Property currently owned by Mortal Realty Group.

Property Parcel ID	Land Use	Waterfront Footage	Condition
56.036-1-10 & 11	Junk	190'	<ul style="list-style-type: none">- Bulkhead completely collapsed throughout property.- Some piles are still visible but it does not appear that any remnants of the bulkhead are still salvageable.- Bulkhead must be completely rebuilt.- Woody debris entering waterway on the shore.- The vehicles are located in close proximity to the Rondout Creek.- Environmental concerns associated with present use could affect shoreline work.- Total cost anticipated to be approximately \$228,000 to replace bulkhead.



Figure 8 - Gerhorn Auto Parts

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**

Property Parcel ID 56.036-1-9	Land Use Gas facility	Waterfront Footage	Condition
			<ul style="list-style-type: none"> - Contains natural gas line and small structures. - Property is well maintained with sheet piling along entire waterfront. - Sheet piling in good condition and not in need of maintenance.



Figure 9 - Property owned by Mortal Realty Group

Property Parcel ID 56.036-1-8	Land Use Auto Salvage	Waterfront Footage 800'	Condition
			<ul style="list-style-type: none"> - Auto salvage yard and scrap metal facility. - Bulkhead severely deteriorated and collapsed in most locations. - Overgrown trees and brush are penetrating the remains of the bulkhead and the roots of several large trees are visible. - A section of bulkhead approximately 50 feet in length may be salvageable, however further analysis of the structure at this location may be necessary to determine the functional life of this section of bulkhead. It may not be justifiable to repair this section. - Approximately 750 linear feet of bulkhead must be replaced and approximately 50' of bulkhead is in need of major repair. - The estimated cost is \$740,000.



Figure 10 - Gerhorn Auto Parts

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**

Property Parcel ID
56.043-6-6

Land Use
Auto Salvage

Waterfront Footage
150'

- Condition**
- Auto salvage yard.
 - City of Kingston recently installed 3 new 8 inch sewer outfall lines and associated wall on this property. The wall has been stabilized with medium stone fill to prevent scour.
 - Timber bulkhead appears to have been removed near outfall lines.
 - Adjacent to the outfall lines, the timber bulkhead is in fair condition.
 - Timbers must be repaired in several locations.
 - Estimated cost is \$15,000.



Figure 11 - Property owned by Gerhorn Auto Parts. Sewer outfall lines shown.

Property Parcel ID
56.043-6-5

Land Use
Warehouse

Waterfront Footage
360'

- Condition**
- Large brick warehouse facility.
 - Shoreline is protected primarily by concrete blocks and riprap.
 - Shoreline protection appears to be in good condition throughout the property.
 - Riprap should be added in some locations to maintain adequate scour protection and overgrown vegetation should be removed
 - Estimated cost is \$7,500.



Figure 12 - Warehouse facility owned by Alan Kote & John Walker.

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**

Property Parcel ID	Land Use	Waterfront Footage	Condition
56.043-6-4	Warehouse	125'	<ul style="list-style-type: none"> - Former location of Millens Steel Fabricators and Erectors. - Shoreline protected by riprap. - Riprap appears to be in good condition throughout shoreline, however, approximately 75 cubic yards of material should be added to further stabilize the shoreline and protect against scour. - Approximated cost is \$2,250.



Figure 13 - Warehouse owned by Marvin Millens

Property Parcel ID	Land Use	Waterfront Footage	Condition
56.043-6-3	Vacant	175'	<ul style="list-style-type: none"> - Bulkhead along entire parcel must be replaced. - The timbers are fully collapsed in some locations and partially collapsed in other locations. - Approximately 75' of bulkhead is in need of major repair and approximately 75' of - Approximated cost is \$161,875.



Figure 14 - Collapsed bulkhead.

Property Parcel ID 56.043-6-2
Land Use Bar/Restaurant

Waterfront Footage 190'

Condition

- Bulkhead condition varies along this property from poor to good.
- Pedestrian railing is located along a portion of the bulkhead.
- Severe scour along the east side of the parking lot and pavement is undermined with no protection from scour.
- It appears that stone fill has been added in several locations to mitigate the scour problem, however, damage to the pavement treatment is evident.
- 75' of bulkhead must be rebuilt and 115' must be repaired.
- Approximate cost is \$98,000.



Figure 15 - Scour and undermined pavement.

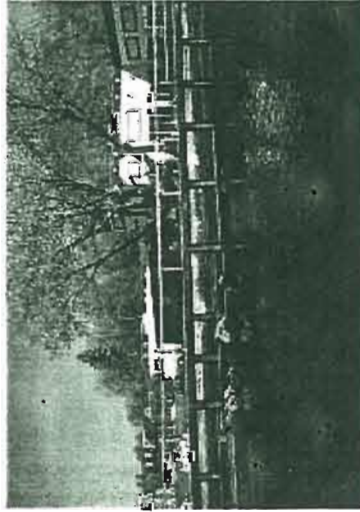


Figure 16 - Rosita's Restaurant, owned by Melke Land Co., Inc.

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**

Property Parcel ID Land Use
56.043-6-1



Waterfront Footage
408'

Condition

- Appears that most of the bulkhead has been recently rehabilitated and that steel reinforcement has been added. Additional work is necessary on the east end.
- The bulkhead along the Hudson River Maritime Museum frontage is well maintained and appears to be in good or excellent condition.
- Approximate cost for repairs is \$10,000.

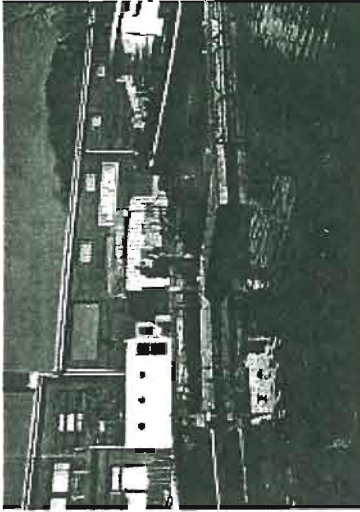


Figure 17 - Hudson River Maritime Museum

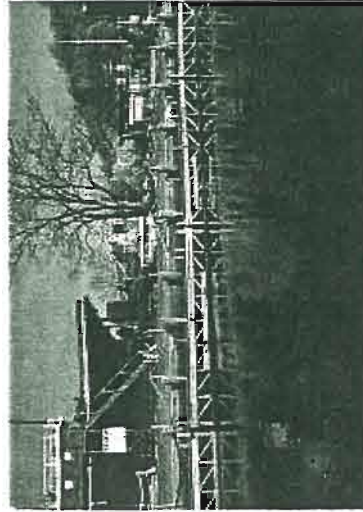


Figure 18 - Hudson River Maritime Museum

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**



Property Parcel ID
56.043-5-42 & 43

Land Use
Public Park

Waterfront Footage
320'

Condition

- Sheet piling has replaced timber bulkhead and appears to be in excellent condition.

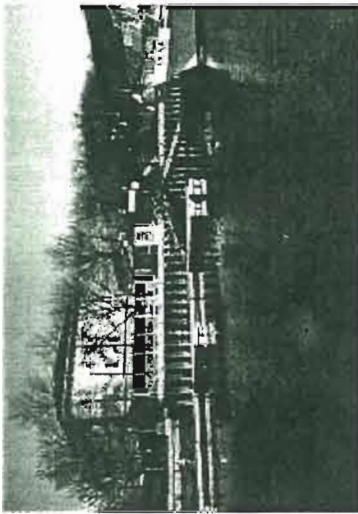


Figure 19 - Properties owned by the City of Kingston

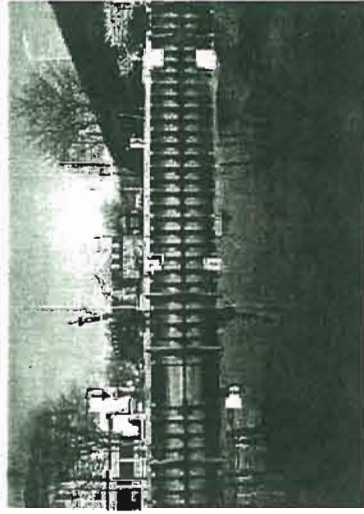


Figure 20 - Sheet piling along waterfront near Historic District.

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**



Property Parcel ID	Land Use	Waterfront Footage	Condition
56.043-5-10	Vacant	1,000'	<ul style="list-style-type: none"> - Property located adjacent to the Kingston-Connelly Bridge - Bulkhead appears to be in excellent condition on the northwest side of the boat launch. - The timbers are collapsed and the tree roots are penetrating the top timbers. - Approximately 100 feet of bulkhead must be repaired along this parcel. - Riprap needed for shoreline protection. - Estimated cost is \$25,000.

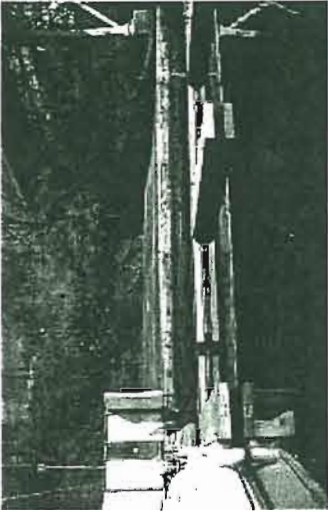


Figure 21 - Dock space on properties owned by the City of Kingston

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**

Property Parcel ID 56.050-6-25
Land Use Marina
Waterfront Footage 1,350'



Figure 22 - Hideaway Marina

Condition

- The bulkhead in this area appears to be in fair to good condition with several horizontal timbers in need of replacement.
- Estimated cost is \$20,000.

Hudson River

Property Parcel ID 48.16-6-2, 3 &4
Land Use Vacant/Industrial
Waterfront Footage 5580'

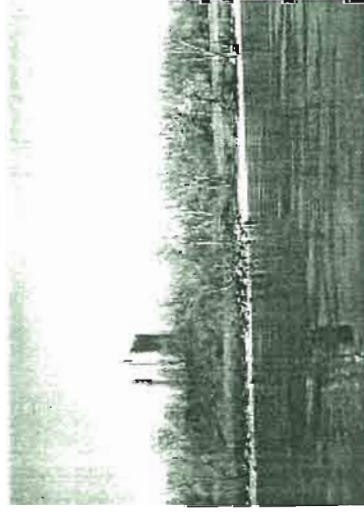


Figure 23 - Properties owned by Tilcon Materials, Inc.

Condition

- Properties owned by Tilcon Materials.
- Rip rap located along the shoreline of the northern parcel appears to be in good condition.
- On the southern portion of the parcel, the raiprap appears to vary from poor condition to good condition
- Section of sheet piling has been driven around a sunken barge and is in good condition.
- Other visible steel bulkheads present are generally in good condition.
- Beyond the bulkhead a non-reinforced shoreline is visible.
- Heavy stone fill will be necessary to stabilize the shoreline.
- There is not any bulkhead that is in apparent need for repair.
- The estimated cost is \$335,500.

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**



Property Parcel ID	Land Use	Waterfront Footage	Condition
48.84-1-4	Restaurant	2120'	<ul style="list-style-type: none"> - Formerly, property was a brickyard and more recently a restaurant. - The bulkhead near the kiln house is apparently in poor condition. - Approximately 1,000 linear feet of bulkhead must be repaired on this property and approximately 300 cubic yards of rip rap can be used to stabilize the shoreline. - The estimated cost is \$947,500.



Figure 24 - Former brickyard property, currently owned by Hudson-Rondout Corporation.

Property Parcel ID	Land Use	Waterfront Footage	Condition
57.21-1-14	City Public Park	1600'	<ul style="list-style-type: none"> - Shoreline appears to be in good condition and is not in need of repair.

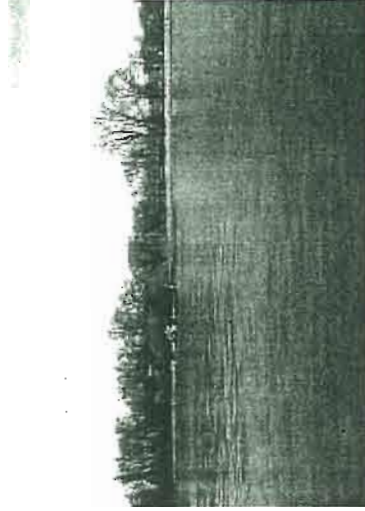


Figure 25 - City Public Park

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT
Kingston Point Causeway**

Property Parcel ID 57.21-1-13 & 8	Land Use Vacant/Commercial	Waterfront Footage 580'	Condition - Rip rap should be used for shore stabilization. - The estimated cost is \$740,000
Property Parcel ID 57.21-1-7 & 6	Land Use Petroleum storage	Waterfront Footage 915'	Condition - Riprap at this location appears to be in good condition in some locations, however rip rap is needed in other locations for bank protection and to prevent erosion. - The bulkhead appears to be in good condition in most locations. Reinforcement of the bulkhead is visible. - Stone fill should be used for shore stabilization. - Total estimated cost is \$40,000.00.

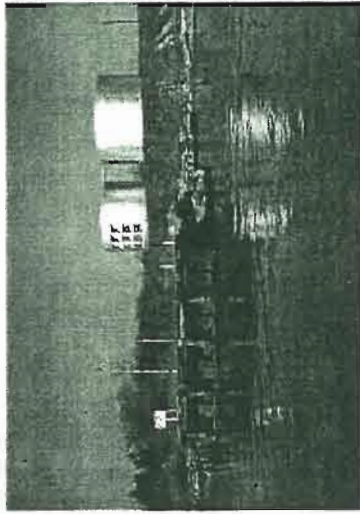


Figure 26 - Petroleum Bulk Storage Facility

Property Parcel ID 57.21-1-5	Land Use Vacant/Commercial	Waterfront Footage 250'	Condition - Rip rap should be used for shore stabilization. - The estimated cost is \$20,800.00.
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**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT**



Property Parcel ID	Land Use	Waterfront Footage	Condition
56.36-1-34	City Public Park	2140'	<ul style="list-style-type: none">- Riprap is visible along the shoreline. The public park appears to be well maintained and not in need of any repairs.- Riprap needed for shore stabilization along trolley tracks. Scour visible under roots of some trees.

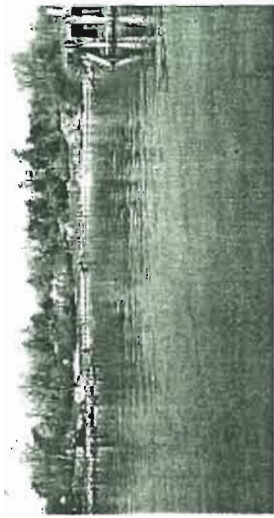


Figure 27 - Kingston Point Park

**KINGSTON WATERFRONT
CONDITIONS ASSESSMENT
Trolley Line Improvements**

Timber Ties & Ballast	\$	100.00	per linear foot - ties and ballast
Switches		100,000.00	per switch - 1 switch
DC Substation		1,000,000.00	Each
Catenary		1,000,000.00	per mile of track
AC Electrification		1,000,000.00	Each
Grade Crossings		15,000.00	Each - 2 Crossings
		3,808,485.00	



Figure 28 - Existing trolley tracks

Appendix G: Scenic Hudson Sound Principles of Waterfront Development



Scenic Hudson's Principles of Sound Waterfront Development

Incorporation of the following principles into waterfront development plans is consistent with Scenic Hudson's mission, New York State's Local waterfront Revitalization Program policies, Hudson River Greenway objectives, most local waterfront zoning codes, and Smart Growth and New Urban philosophies.

Scenic Hudson recommends that riverfront communities adapt these principles on a case-by-case basis in accordance with local and site-specific conditions.



Sound waterfront development plans:

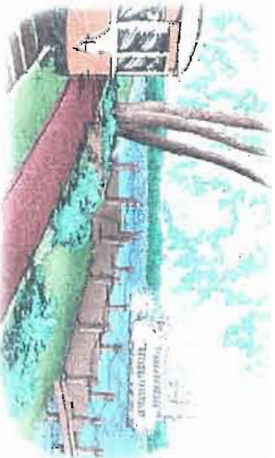
- ✓ **Provide public access and open space** to and along the waterfront.
- ✓ **Link waterfront areas** with parks, nature preserves, historic and cultural sites, commercial main streets, and adjoining communities.
- ✓ **Protect views** to, from, and along waterfronts.
- ✓ **Protect natural ecology**, vegetation, and aquatic habitat.
- ✓ **Facilitate water-based recreation** -- such as fishing, sailing, kayaking, canoeing and boating, swimming, and nature appreciation -- that is consistent with local site conditions and the protection and enhancement of natural resources.
- ✓ **Relocate non water-dependent land uses** -such as industrial facilities, bulk storage, public works, and parking- away from the water's edge.
- ✓ **Promote a mix of uses** to help revitalize existing communities and foster active, diversified, and sustainable waterfront development.
- ✓ **Provide Shoreline treatment** to prevent erosion, protect water quality, and enhance public access appropriate to Community and environmental needs.

(over.....)

- ✓ **Prevent non-point source pollution**, particularly stormwater runoff.
- ✓ **Promote consistency and continuity of new development** with adjoining and/or surrounding neighborhoods.
- ✓ **Provide appropriate architecture and urban design** in keeping with the height, scale, density and character of adjoining neighborhoods, including continuous street networks and well-designed pedestrian and gathering spaces.
- ✓ **Integrate multi-modal and inter-modal transportation** including rail, land-based, and water-based mass transit, bicycles, and vehicular and pedestrian movement in accordance with the capacity of existing or upgraded systems.
- ✓ **Create a safe and user-friendly environment** with the use of traffic calming techniques such as narrower driving lanes, on-street parking, wide sidewalks, street trees, crosswalks, ample lighting, and attractive street furniture.
- ✓ **Preserve, upgrade, expand, and adapt for re-use** appropriate stock of existing residential commercial buildings.
- ✓ **Maximize public participation** in planning and development processes.

For more information, contact:

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RESTORED DAY LINER DOCK AT KINGSTON POINT



WATERFRONT PARK CHARACTER SKETCH



STREETSCAPE ENHANCEMENTS ALONG SEWAGE TREATMENT PLANT



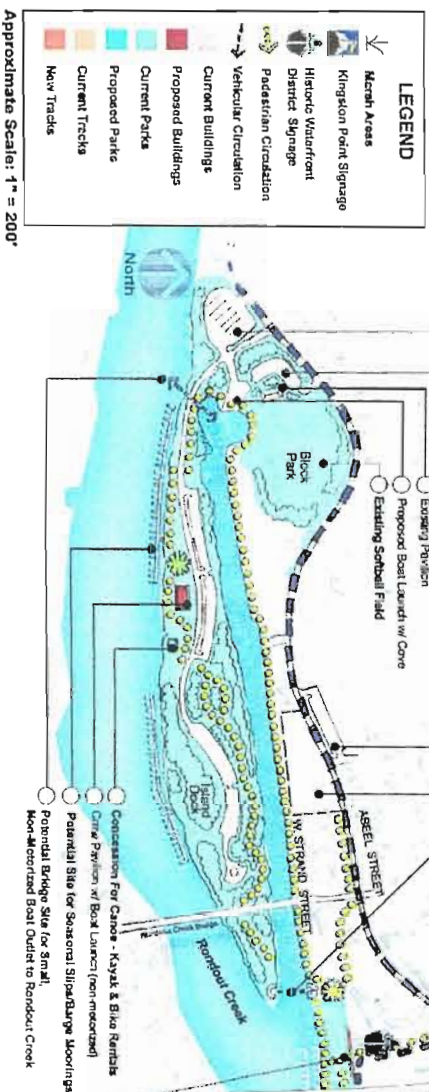
SKETCH LOOKING NORTHWEST TOWARDS BROADWAY/ EAST STRAND STREET INTERSECTION



SKETCH LOOKING EAST ALONG EAST STRAND STREET AT MARITIME MUSEUM



WATERFRONT PARK RECONFIGURATION CONCEPT



Approximate Scale: 1" = 200'



LEGEND

- ↘ Match Areas
- Kingston Point Storage
- Historic Waterfront District Signage
- Pedestrian Circulation
- Current Buildings
- Proposed Buildings
- Current Parks
- Proposed Parks
- Current Tracks
- New Tracks