

NEW YORK METROPOLITAN TRANSPORTATION COUNCIL



New York Metropolitan Transportation Council

Hudson River Valley Greenway Link

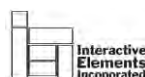
Technical Memorandum #2 Task #2 Literature Review

February 20, 2009

Submitted By:



with:



TECHNICAL MEMORANDUM #2

TASK 2: LITERATURE REVIEW

This technical memorandum distills the key conclusions and recommendations of existing, relevant studies and plans for sections of this project's study area, related to waterfront, greenway and bicycle/pedestrian facility development. It also includes a description of the key findings and recommendations of these studies and plans as they relate to the Hudson River Valley Greenway Link. Also provided in this document are Geographic Information System (GIS) maps of the existing and proposed facilities described herein (Figures 2-8) and a base map that includes roads, bodies of water, railroads, municipal and county boundaries, open space, existing on- and off-road bicycle facilities, and tax lots (available for New York City only), within the project study area (Figure 1).

BACKGROUND

The Hudson River Valley is seen as an opportunity to provide a contiguous trailway from upstate locations to New York City. Recognizing the importance of this, New York State created the Hudson River Valley Greenway (Greenway) in 1991 and the United States Congress designated the area a National Heritage Area in 1996. The Greenway enabling legislation calls for the development of an interconnected "Greenway Trail" from Battery Park in Waterford, in southern Saratoga County to The Battery at the southern tip of Manhattan in New York City. The National Heritage Area enabling legislation specifies the creation of an interconnected network of recreational and heritage trails. The Hudson River Valley Greenway Trail System is a corridor of trails that enable connections between communities, city or village main streets, open spaces, residential areas, historic sites, and recreation destinations. The objective of the Hudson River Valley Greenway Trail System is to provide a facility which links communities across the region and provides access to important trip generators and brings trail users closer to nature.

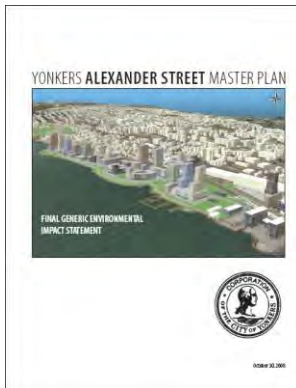
This study is being conducted using Federal SAFETEA-LU Transportation Improvement funding, which designates that the funds be used for: "Planning and Interim Improvements for the Manhattan, Bronx, Yonkers Hudson River Greenway Link."

EXISTING RELEVANT PLANNING STUDIES KEY CONCLUSIONS AND RECOMMENDATIONS

This section of the technical memorandum lists and summarizes in reverse chronological order, existing plans and documents relevant to this project.



Alexander Street Master Plan, Community Development Agency, City of Yonkers, 2008



The Alexander Street Master Plan is a conceptual land use plan that establishes a framework for redevelopment of an integral section of the Yonkers' waterfront. The Master Plan calls for redeveloping the industrial waterfront district into a mixed-use neighborhood featuring a public esplanade on the Hudson River.

Relevance to HRVGL Project:

- Provides valuable information on existing conditions of the Alexander Street study area and articulates a vision for redevelopment. Other initiatives that forward implementation of the Master Plan include an Urban Renewal Plan, A Brownfield Opportunity Area (BOA) Plan and a generic environmental impact statement (GEIS) for the Alexander Street study area.

Recommendations:

- A major goal of the master plan and associated initiatives is to provide for increased public access to the Hudson River waterfront.
- The plan requires the creation of a continuous public esplanade (walkway) along the Alexander Street waterfront to connect the existing walkway to the south with JFK Marina Park to the north.
- About 15 acres of the 53-acre redevelopment area is envisioned as park or open space accessible to the public.
- A new public marina is proposed, with additional marinas encouraged as elements of new commercial or residential development. Support facilities (docks, parking, etc.) for marinas may detract from enjoyment of the waterfront or interfere with pedestrian or cyclist access.
- Replace private access to the study area on Point Street with new auto and pedestrian bridge to provide access to the waterfront from adjacent neighborhoods to the east.
- Construct an "Alexander Street Causeway" to link the southern section of the study area with the northern section and provide for better traffic flow.
- Improve public access and install pedestrian amenities at JFK Marina Park. Create a pedestrian connection from JFK Marina Park north to Trevor Park, on the eastern side of the Metro-North tracks, as part of a continuous walkway along the Yonkers waterfront.

Implementation Status:

- Final Generic Environmental Impact Statement completed and Public Notice issued for the Alexander Street Master Plan, Alexander Street Urban Renewal Plan and Alexander Street Brownfield Opportunity Area Plan.

Resources / Relevant Data:

- Existing conditions data including information on zoning, land use and environmental constraints for the Alexander Street Urban Renewal Area and conceptual proposals for redevelopment.



Statement of Environmental Findings, Struever Fidelco Capelli (SFC) downtown redevelopment project, 2008



The findings statement provides the rationale for the Yonkers City Council, as the Lead SEQRA Agency, to approve redevelopment plans put forth by Struever Fidelco Capelli (SFC).

Relevance to HRVGL Project:

- Palisades Point, one of the four redevelopment sites, is located directly on the Hudson River waterfront. The site includes the area to the west of Prospect Street along the Hudson River.

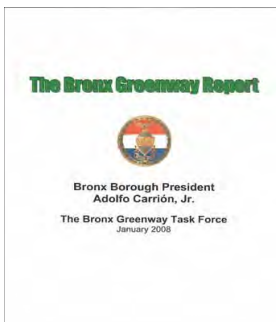
Recommendations:

- Proposal to create a mixed-use waterfront development. Development plans include two 25-story residential towers, two five-story parking structures, 136,000 square feet of publicly accessible open space and a continuous pedestrian esplanade along the Hudson River. The waterfront area currently belongs to the City of Yonkers Community Development Agency, and will remain under the ownership of the CDA.
- The waterfront esplanade will include amenities such as benches, overlooks, and plazas and will connect with the existing RiverWalk section to the north.

Implementation Status:

- Statement of Environmental Findings issued by the Yonkers City Council in November 2008. Final approval is expected in January of 2009.

The Bronx Greenway Report, Bronx Borough President Adolfo Carrion, Jr., The Bronx Greenway Taskforce, 2008



This report is an update to a greenway report done in 1993 by the Bronx Borough President's office. It recommends that future efforts seek to maximize opportunities for waterfront access along the Hudson River, and calls out the Henry Hudson Bridge as the crossing that carries the greenway between the Bronx and Manhattan. The report also mentions the Putnam Railroad corridor and the Old Croton Aqueduct as potential greenway alignments through the Bronx.

Relevance to HRVGL Project:

- This report recommends specific route alignments and recommends future implementation strategies.



- The sections of the report that discuss the Harlem / Hudson Waterfront, the abandoned Putnam Railroad, and Old Croton Aqueduct trails, and make specific alignment recommendations, are relevant to the HRVGL project.
- Other sections of the report discuss areas of the Bronx outside the HRVGL project limits.

Recommendations:

- Use the Henry Hudson Bridge as the Bronx/Manhattan crossing.
- Pedestrian Route: Kappock Street to Palisade Avenue, Riverdale Park, 254th Street, Riverdale Avenue
- Cyclist Route: Palisade Avenue, 261st Street, Riverdale Avenue
- Explore environmentally sensitive upgrade of trail in Riverdale Park.
- Reconstruct Palisade Avenue sidewalk to improve pedestrian safety.
- Reconstruct old Dodge Dock and access to it over railroad tracks south of 247th Street
- Improve bicycle and pedestrian access over the Henry Hudson Bridge.
- Install traffic calming streetscape improvements and route signage along Class 3 segments.

Implementation Status:

- Harlem / Hudson Waterfront – Aside from the crossings at the Henry Hudson and Broadway Bridges, the proposed alignments for the Hudson River waterfront are currently undeveloped.
- Old Croton Aqueduct – This alignment recommendation is developed as a combination of Class 1, 2 and 3 bicycle facilities from Van Cortlandt Park, mostly following University Avenue, to the Macombs Dam and Highbridge Bridges.
- Abandoned Putnam Railroad: This recommended alignment has not been developed through the Bronx. NYCDPR reports they are pursuing ROW acquisition.
- On-street portions have not been implemented.

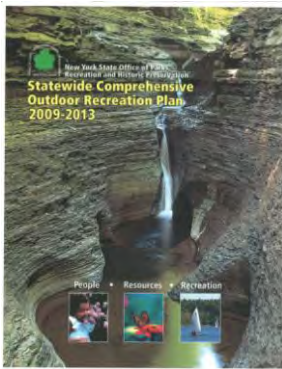
Resources/Relevant Data:

- No information about data collected for this report is included in this report. Taskforce relied on first-hand knowledge its members have of Bronx neighborhoods and existing and proposed routes.

See Figure 2



The New York State Statewide Comprehensive Outdoor Recreation Plan (SCORP) and Generic Environmental Impact Statement 2009-2013, New York State Office of Parks, Recreation and Historic Preservation, 2008



This document is an update to the 2003 SCORP document that appears later in this report. Like the 2003 document, the update provides statewide policy direction and fulfills the agency's recreation and preservation mandate. The 2009 SCORP will also serve as a status report and as an overall guideline for recreation resource preservation, planning and development through the year 2013.

Relevance to HRVGL Project:

- This report is relevant to the HRVGL project as background information about general funding, the Greenways Communities Council, and an overall vision for developing the greenway network, providing process for evaluating future actions.

Recommendations:

- No alignment recommendations are made as part of this report.

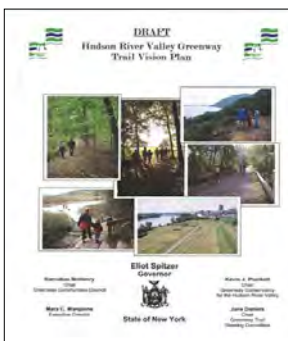
Implementation Status:

- There is no information about the implementation status of any aspect of this report.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

Hudson River Valley Greenway Trail Vision Plan, Hudson River Valley Greenway April 2007



This document provides a framework for the development of the Hudson River Valley Greenway Trail System. It includes a description of the trail categories, status of existing trail resources, identification of key gaps and opportunities within the trail network, future steps, and trail maps. It also provides technical and financial tools to assist communities with trail development. The plan mentions RiverWalk in Westchester County (discussed below) as a “work in progress”, and New York City’s greenway system, with the Bronx section as a proposed project. It does not provide detailed alignments of either of these segments.

Relevance to HRVGL Project:

- The document provides a framework for the development of the entire trail system. The HRVGL project will refer back to this document in order to remain consistent with this framework, and use it as a reference for greenway development tools.



Recommendations:

- Does not recommend routes, but documents existing and proposed routes recommended by others.

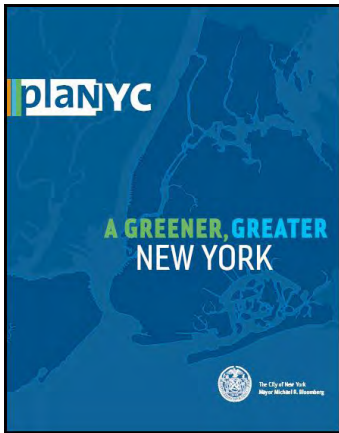
Implementation Status:

- Implementation status of the Vision Plan is borne out by local level planning, described elsewhere in this technical memorandum.

Resources / Relevant Data:

- No information about data collected for this report is included in this report. Information about the various trail segments was compiled.

PlaNYC Master Plan for Riverside Park North of 135th, Fort Washington Park and Inwood Hill Park West of the Amtrak Lines, 2007



Forty million dollars was allocated to fund enhancements to park infrastructure in Fort Washington Park. Proposed improvements include bike and pedestrian facilities, active and passive recreation areas, playgrounds, concessions and rehabilitation of historic structures.

Relevance to HRVGL Project: The master plan overlaps with a portion of the HRVGL project area north of Dyckman Street along the waterfront. Implementing a multi-use path along the Amtrak ROW in Fort Washington Park and Inwood Hill Park would set a precedent for building a similar path within the Bronx and Westchester County.

Recommendations:

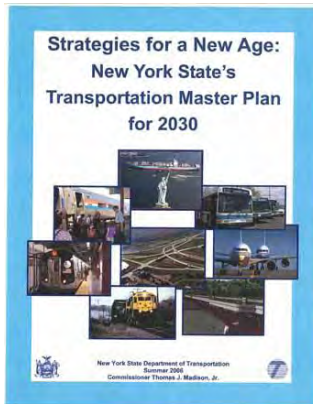
- Maintain continuous path along the waterfront from 135th street north to the Henry Hudson Bridge.
- Create park and waterfront access at 165th street with a new bridge across the Henry Hudson Parkway and Amtrak railroad.
- Reconstruct pedestrian bridge over Amtrak southwest of the 181st street and Riverside Drive.
- Pave existing waterfront path west of Fort Tryon Park
- Replace Jersey barriers and reconstruct pavement and markings on existing greenway in Fort Tryon Park along the northbound Henry Hudson Parkway.
- Implement a greenway with bike lanes and physically separated pedestrian path next to the Amtrak ROW in Fort Washington Park.
- Upgrade bridge crossing Amtrak railroad to comply with ADA standards.
- Fuide greenway from the Dyckman Ballfields across the bridge to the Bronx Greenway to reach the Henry Hudson Bridge.



Implementation Status: To be Determined

Resources/Relevant Data: No information about data collected for this report is included in this report.

Strategies for a New Age: New York State's Transportation Master Plan for 2030, New York State Department of Transportation, 2006



This document serves as the federally recognized, long-range transportation plan for the State of New York. It articulates a long-term, intermodal vision of the State's future transportation system and provides policy level guidance to achieve that vision. The document has a broad scope and makes no mention of the Hudson River Valley Greenway or proposed route alignments.

Relevance to HRVGL Project:

This document provides a long-term, intermodal vision for the State, but is not directly relevant or informative for HRVGL. The document may have some general policy level relevance.

Recommendations:

- There are no recommendations made related to the HRVGL project area.

Implementation Status:

- Implementation status is not relevant for this document

Resources / Relevant Data:

- No information about data collected for this report is included in this report. The document has demographic information but it is at a statewide level.

Westchester RiverWalk – A Greenway Trail, Design Guidelines, Westchester County Planning Department and Cherbuliez/Munz PLLC, 2005

This document provides consistent design standards to create a cohesive trail that is visually connected along Westchester County's RiverWalk. Toward that end, the document provides a set of design standards and a design palette including colors, logo, trailblazer, style, street/trail furniture design, pavers, etc.

Relevance to HRVGL Project:

- This document will be relevant for the sections of the Hudson River Valley Greenway that overlap with Westchester's RiverWalk. The manual provides a visually consistent look for the Riverwalk corridor that will inform design considerations for the HRVGL project.



Recommendations:

- Route alignment recommendations are not made in this document.

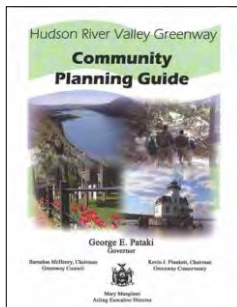
Implementation Status:

- Sections of RiverWalk have been implemented. Field visits to be conducted under future tasks will determine to what extent implementation has been consistent with the manual's design guidelines.

Resources / Relevant Data:

- No information about data collected for this report is included in this report. Design standards are provided.

Hudson River Valley Greenway Community Planning Guide, Hudson River Valley Greenway, 2005



A how-to guide, this document is intended to assist local communities in identifying opportunities and challenges, and developing strategies for developing and implementing greenway plans.

Relevance to HRVGL Project:

- At the implementation level this may be relevant to the HRVGL project as an implementation toolbox for issues such as environmental compliance, grant applications, community outreach.

Recommendations:

- No route alignment recommendations are made as part of this document.

Implementation Status:

- Implementation status is not relevant for this document.

Resources / Relevant Data:

- No information about data collected for this report is included in this report. However other resources as mentioned above, such as environmental compliance, grant applications and community outreach are available here.



Manhattan Waterfront Greenway Master Plan, New York City Department of City Planning, 2004



This report documents past plans for the greenway, recent improvements and current conditions on the greenway and waterfront, and future greenway developments. The plan references DPR's Hudson River Valley Greenway Master Plan (discussed below), and endorses the recommendations made in that report. It also states that eventually a bike route will be marked along the Hudson River in Inwood Hill Park beside the Amtrak line. It will connect to the Bronx via the Henry Hudson Bridge in compliance with the Hudson River Greenway Act of 1991, but the details of this path segment are yet unplanned.

Relevance to HRVGL Project:

- This document is relevant to the HRVGL project as it describes specific on-street routes and an off-street route through Inwood Hill Park.

Recommendations:

- Discusses existing on-street Class 2 and 3 routes along Dyckman Street.
- Recommends that cyclists use Class 2 routes along West 218th Street and Seaman Avenue. Also recommends that cyclists can use Inwood Hill Park instead of Seaman Avenue. This document discusses a future bicycle route in Inwood Hill Park to connect to the Henry Hudson Bridge, but describes the path segment as "unplanned".

Implementation Status:

- Class 2 and 3 bicycle routes exist on 218th Street, Dyckman Street and Seaman Avenue.
- The route proposed within Inwood Hill Park, running parallel to Seaman Avenue has not been officially designated at this time. Walking paths from the Hudson River waterfront through the park to the Henry Hudson Bridge have been reconstructed but are prohibitively steep and accessible only via bridge over the Amtrak railroad tracks that can only be reached via stairs.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

See Figure 3



The Greenprint
For a Sustainable Future... the Westchester Way
The Westchester County Greenway Compact Plan
June 2004

William C. Cullen, William Cullen Planning Associates
William Cullen & Associates

COVER PHOTO: JEFF KAPLAN

Conceptual Area I – Fort Washington Park Area / 155th Street to Dyckman Street

1. Use the existing fort Washington Park paths and the existing sidewalk of the Henry Hudson Parkway. This path is for the most part straight and direct, except for the transition between the waterfront and Henry Hudson Parkway sidewalk at 181st Street, where there is a steep grade change.
2. Use the existing Fort Washington Park paths and construct a new waterfront link west of the railroad corridor. At 181st Street, instead of turning inland, the path would continue along the shore. A new boardwalk-type structure would be constructed along the waterfront, closing the gap between 181st and 183rd Streets caused by the Amtrak railroad corridor. The trail would continue on the park paths to Dyckman Street. This would be a straight and direct route with no steep grade changes, and a continuous waterfront connection. It must be taken on with cooperation from Amtrak and must comply with regulations for wetlands, tidal estuaries and river navigation.

Conceptual Area II – Inwood Hill Park Area / Dyckman Street to the Harlem River

1. Use the existing waterfront path in Dyckman Fields. Construct a trail link on the Spuyten Duyvil railroad bridge. A path extension would be constructed to continue the existing path, which ends in a cul de sac, up to the Harlem River shoreline and onto the Spuyten Duyvil railroad bridge. The bridge, owned by Amtrak, would have to be adapted to accommodate pedestrians and bicyclists. The safety of a shared use bridge is a serious concern that must be addressed through design and management. In addition, there would be ongoing operational issues to resolve, particularly the frequent opening of the bridge for boat traffic.
2. Use the existing park paths through Dyckman Fields and the interior path segments that lead to the Henry Hudson Bridge lower level walkway. The trail would use the existing Dyckman Fields waterfront path up to the pedestrian stair bridge at 210th Street. It would enter the interior of Inwood Hill Park and use the park path leading to the Henry Hudson Bridge lower level walkway. This alignment is currently available.
3. Use the Henry Hudson Parkway corridor from Staff Street to the Henry Hudson Bridge lower level walkway. This alternative would continue to use the Henry Hudson Parkway corridor north of Dyckman Street to the Henry Hudson Bridge. In order to do this either an automobile lane would have to be reallocated for trail use along the Henry Hudson Parkway, or a trail could be constructed along the western edge of the Henry Hudson Parkway, creating a separate route for greenway users. The trail would be cantilevered or supported by pilings.
4. & 5. Use existing streets: Seaman Avenue (4) or Broadway (5). Designate on-street bicycle routes; designate sidewalks for pedestrians. Seaman Avenue, with its distinctive old



residential buildings and Isham Park is the more attractive greenway route than commercial Broadway. Traffic volumes are lower on Seaman Avenue as well. The Harlem River would be crossed at the Broadway Bridge under these alternatives, which is fairly far inland. The walkways on the Broadway Bridge would be designated for this route.

Conceptual Area III – Riverdale Area / Harlem River to the County Line

There are two primary route options in Riverdale: to designate existing streets and park paths, or to construct a waterfront path either by creating land or obtaining an easement from the railroad. Alternatives 1 and 2 describe potential configurations of a street route; Alternative 3 describes a waterfront route.

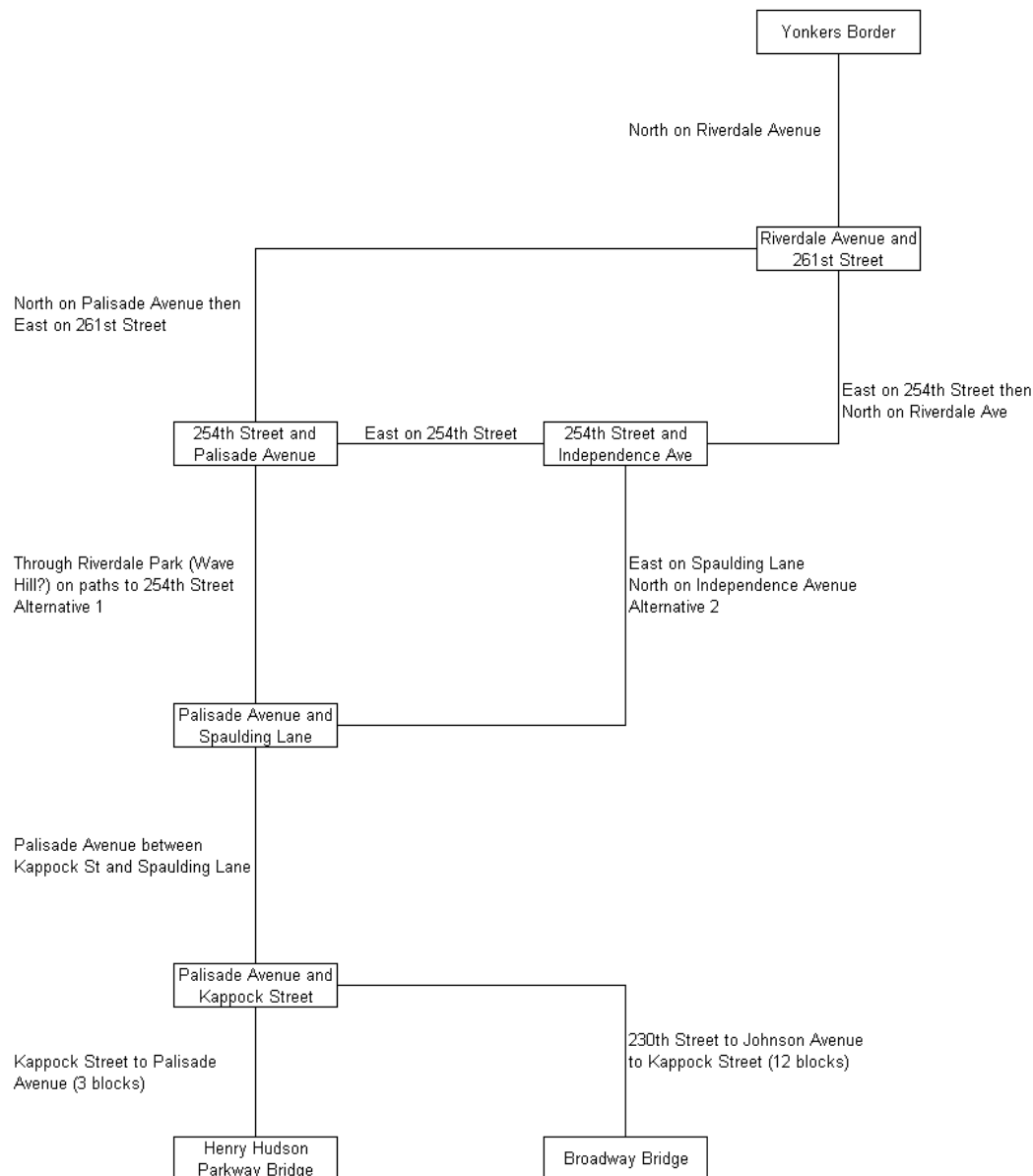
Both Alternatives 1 and 2 use Palisade Avenue between Kappock Street and Spaulding Lane. The route from the south to the intersection of Palisade Avenue and Kappock Lane depends upon which Harlem River crossing is used. If the Henry Hudson Parkway Bridge is used, trail users continue for three blocks on Kappock Street to Palisade Avenue. If the Broadway Bridge is used, trail users must travel 12 blocks using 230th Street to Johnson Avenue to Kappock Street. At the intersection of Palisade Avenue and Spaulding Lane, the two alternatives diverge.

1. Alternative 1 continues north through Riverdale Park (Wave Hill?) on park paths to 254th Street. From there it can either continue north on Palisade Avenue, turning east on 261st Street, or it can turn east on 254th Street and north on Riverdale Avenue. Once on Riverdale Avenue, both options take the trail user to the Yonkers border.
2. Alternative 2 continues its on-street path, turning east at Spaulding Lane, north on Independence, east on 254th Street and north on Riverdale Avenue to the Yonkers Border.

The schematic layout below in Table 1 shows the differences in alignment of the two alternatives.



Table 1. Schematic Layout of Bronx Section Alternatives 1 and 2
Hudson River Valley Greenway Master Plan
155th Street, Manhattan to Bronx/Westchester Border
NYC Department of Parks and Recreation 2004



3. Construct waterfront trail west of the railroad corridor. The trail would most likely share the existing Metro-North maintenance road between Spuyten Duyvil and 254th Street. Where existing space is insufficient, a structure would be built along the rip-rap shoreline to widen the available area and accommodate the trail. Rail crossings could be constructed at the Metro-North stations, where the existing stairways currently provide partial crossings. The potential exists to extent the trail further north to a connection with Yonkers, however, there would be no upland access between 254th Street and Yonkers due to concerns voiced by the College of Mount Saint Vincent and the Sisters of Charity, owners of the private property in this location.



The Hudson River Valley Greenway Master Plan also mentions the abandoned Putnam railroad corridor and the Old Croton Aqueduct as additional, possible inland Greenway routes, and reviews their possible alignments through the Bronx.

Relevance to HRVGL Project:

This document has a high level of relevance to the HRVGL project. As it recommends specific route alignments, and identifies constraint and opportunities.

Recommendations:

- This plan recommends numerous routes, both on- and off-street, short and long term. The routes through Manhattan use Inwood Hill Park to access the Henry Hudson Bridge and Seaman Avenue and 218th Street to access the Broadway Bridge.
- In the Bronx, routes from both Bridges use Kappock Street to Palisade Avenue, a combination of on-and off-street routes to Riverdale Avenue to the Yonkers Border.
- This report also recommends an alignment along the waterfront along the Amtrak corridor and over the Spuyten Duyvil Bridge.
- The report evaluates alternatives but does not recommend a preferred alternative.

Implementation Status:

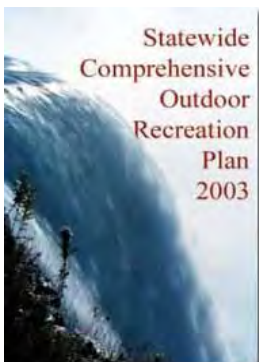
- On-street portions of the route in Manhattan are designated as Class 2 and 3 bicycle routes
- Off-street portions of the route through Inwood Hill Park, would be aligned along existing paths, however, though many of these paths have been recently reconstructed, they have yet to be signed or officially designated as Greenway routes.
- In the Bronx, recommended routes have not been implemented.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

See Figure 4

Final Statewide Comprehensive Outdoor Recreation Plan (SCORP) and Final Generic Environmental Impact Statement for New York State
New York State Office of Parks, Recreation and Historic Preservation, 2003



Part of a broad recreation facilities plan for New York State, the trails section of this plan outlines an overall vision to develop a statewide network of interconnecting shared and single-use trails that connect parks, open spaces, historic sites, communities, business districts, and residential areas. It also specifically mentions the Hudson River Valley Greenway and describes it in the following way.



The Hudson River Valley Greenway is an innovative, state-sponsored, voluntary program created to facilitate the development of a regional strategy for preserving scenic, natural, historic, cultural and recreational resources while encouraging compatible economic development and maintaining the tradition of home rule for land use decision-making. There are currently 491.7 miles of various types of trail that comprise the Greenway Trail System. This includes:

Riverside Community Trails 167.5

Bike Route 9 – all on-road (portion) 156.0

Country Side Corridors 12.2

Hudson River Valley Greenway Water Trail 156.0

GREENWAY TRAIL SYSTEM TOTAL 491.7

On April 21, 2001, Governor Pataki announced a \$1 million grant to the Hudson River Valley Greenway Communities Council to establish a Hudson River Valley Greenway Water Trail stretching from the Village of Waterford, Saratoga County to Battery Park in Manhattan (156 miles). The trail will provide access for kayaks, canoes and small boats along the 156-miles of the river. The Greenway Communities Council provides technical assistance and planning grants to municipalities for open space initiatives, trails, public access and other recreational opportunities that preserve and promote the resources of the Hudson River Valley.

Relevance to HRVGL Project:

- This report is relevant to the HRVGL project as background information about general funding, the Greenways Communities Council, and an overall vision for developing the greenway network, providing process for evaluating future actions.

Recommendations:

- No alignment recommendations are made as part of this report.

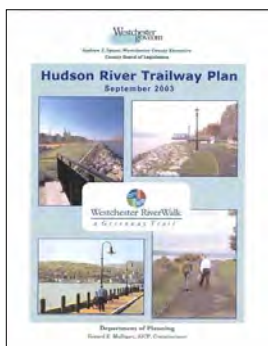
Implementation Status:

- There is no information about the implementation status of any aspect of this report.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

Hudson River Trailway Plan, Hudson RiverWalk, A Greenway Trail, Westchester County Department of Planning, 2003



Evaluates opportunities for creating a functionally linked Hudson River waterfront for pedestrians and bicyclists through the development, enhancement and linkage of trails, esplanades and boardwalks. The goal is to create a continuous trailway along the Hudson River shoreline in Westchester County. The entire RiverWalk route is over 46 miles in length, of which 5.5 is within this project's study area. The RiverWalk includes both on road and off road segments. The plan recommends an easement



Issues to be explored under this plan include:

- Potential connection to College of Mount Saint Vincent just over Bronx border via existing footbridge over Metro North tracks.
- Study the use of a cantilevered “walkway” on perimeter seawall at County Wastewater Treatment Plant.
- Potential alternate route, to avoid treatment plant, on Riverdale Avenue from Main Street at Yonkers Railroad Station to the Bronx to connect with the designated bike route along Riverdale Avenue in the Bronx.
- Saw Mill River Outlet crossing needed to connect the two esplanade projects between Dock Street and Nepperhan Avenue.
- Glenwood Railroad Station requires ramp or stairway from southbound platform to connect with road along Metro North lands.

This report recommends specific route alignments through Yonkers and is very relevant to the HRVGL project. It identifies routes alignments as well as constraints and issues that must be addressed in order to implement the plan.

- The RiverWalk includes both on road and off road segments.
- The plan recommends an easement /agreement with the College of Mount Saint Vincent to allow RiverWalk users to access the riverfront from either Riverdale Avenue or 261st Street. If this were not possible, then Valentine Lane would be the terminus at the Bronx County Line.
- The plan also points out that the County Wastewater Treatment Plant, in the southern portion of RiverWalk, is a major obstacle to waterfront access, and recommends an easement there.
- The route passes through the Yonkers Metro-North Railroad Station, continuing north following the Yonkers Esplanade.

- North of the railroad station and Esplanade Park the route is aligned along a proposed promenade segment that includes the Yonkers County Waterfront Park (former Habirshaw site), Beczak Center, North Yonkers Pump Station, Yonkers Contracting site, Proposed Marina, Saw Mill River outlet crossing.
- The proposed route continues on-road starting at Alexander Street to the Metro North Glenwood Railroad Station. At the Glenwood Station the plan proposes using a dirt road to the west of the tracks to continue north of the station to the JFK Marina.
- The route continues on road to Trevor Park, through the park and on road again along Warburton Avenue to Otis Park and Hudson Fulton Park, to the trailhead for the Old Croton Aqueduct State Trail at Odell Avenue.

Implementation Status:

Portions of RiverWalk have been implemented. Others are still in the planning stages.

Implemented portions include:

- The esplanade in downtown Yonkers, near the train station.
- The North Hudson Promenade along Warburton Avenue

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

See Figure 5

Report of the Bronx Waterfront Task Force, Borough President Adolfo Carrion, 2003

This report evaluates issues, identifies strategic objectives, recommends strategies to realize the objectives, and suggests implementation steps, for making improvements to the Bronx waterfront. The report does not include Riverdale in its recommendations, and includes recommendations for the Harlem River to approximately the Broadway Bridge, with its emphasis being on the section between 149th Street and Kingsbridge Road.

Relevance to HRVGL Project:

- This report is only tangentially relevant to the HRVGL project as the recommendations made in the report do not include the Riverdale section of the Bronx.

Recommendations:

- No recommendations made for the Riverdale section of the Bronx.

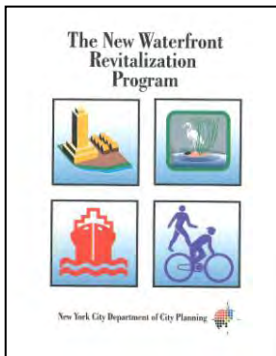
Implementation Status:

- Implementation status is not relevant to this report.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.



The New Waterfront Revitalization Program, New York City Department of City Planning, 2002

The New York City Waterfront Revitalization Program (WRP) is the city's principal coastal zone management tool. As originally adopted in 1982 and revised in 1999, it establishes the city's policies for development and use of the waterfront and provides the framework for evaluating the consistency of all discretionary actions in the coastal zone with those policies. When a proposed project is located within the coastal zone and it requires a local, state, or federal discretionary action, a determination of the project's consistency with the policies and intent of the WRP must be made before the project can move forward. The new

WRP is presented in three parts. The first contains an explanation of the program, its regulatory and planning context, and the consistency determination process. The second presents the new WRP policies, and the last contains maps of the Significant Maritime and Industrial Areas and the Special Natural Waterfront Areas to which the policies refer. An appendix contains sectional maps delineating the boundaries of New York City's coastal zone.

Relevance to HRVGL Project:

- All policies associated with this document are relevant to this project, especially, Policy #8 which specifically calls for the provision of public access to the waterfront where possible.
- A significant portion of the HRVGL study area falls within the Coastal Zone Boundary.

Recommendations:

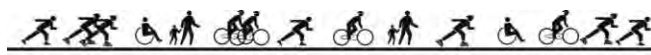
- As a policy statement, this document makes no recommendations specific to the HRVGL project

Implementation Status:

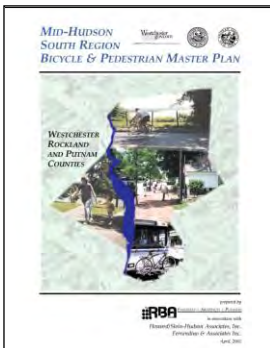
- Since adoption of the program, various waterfront developments have occurred consistent with the policies outlined therein.

Resources / Relevant Data:

- The Coastal Zone Boundary Map will be used to identify the parts of the HRVGL study area that fall within the Coastal Zone Boundary.



Mid-Hudson South Region Bicycle and Pedestrian Master Plan, Westchester County Department of Transportation, Rockland County Department of Planning, Putnam County Department of Planning and Development, 2001



The plan defines a vision for bicycling and walking in the tri-county region and builds on previous regional and local studies to identify needs, define strategies and recommend projects that improve conditions for bicyclists and pedestrians. This plan mentions the Old Croton Aqueduct Trail as an existing facility, and mentions RiverWalk, as a project currently under development that would follow the Hudson River shoreline from New York City to Putnam County. No detailed recommendations were made for either facility.

Relevance to HRVGL Project:

- This report provides background information and defines a general vision for bicycling and walking in the region.

Recommendations:

- No recommendations are made in this report specific to the HRVGL project.

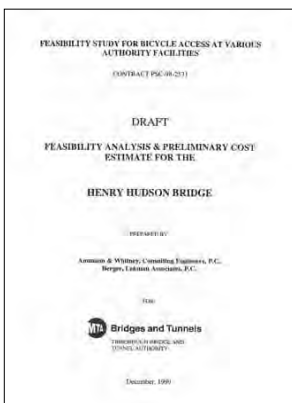
Implementation Status:

- Implementation status is not relevant to this report.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

Feasibility Study for Bicycle Access at Various Authority Facilities, Feasibility Analysis & Preliminary Cost Estimate for the Henry Hudson Bridge, For MTA Bridges and Tunnels, 1999



This report analyzed alternatives involving the construction of new paths and/or modification of existing paths on the Henry Hudson Bridge to allow bicyclists and pedestrians to safely cross the structure. At four feet wide, the existing lower level bridge sidewalk is not in compliance with AASHTO requirements for a two-way shared use bicycle and pedestrian path. Structural modifications to bring the path into compliance with AASHTO were not feasible, because the structural capacity of the bridges columns are not sufficient to support additional dead loads on the structure. Therefore, the preferred alternative involved the installation of signs and/or striping on the upper level path, which varies in width between four feet-nine inches and nine feet-three inches, to separate

pedestrians and bicyclists on the existing path. It also recommended the installation of signage to inform bicyclists that riding bicycles on the bridge span is prohibited where there is inadequate width. At the south approach to the upper level sidewalk it was recommended that a new ramp be



constructed connecting the existing bridge sidewalk to an area adjacent to the MTA parking lot at Inwood Hill Park. At the north approach to the upper level sidewalk, the existing four-foot-ten-inch wide path adjacent to the exit ramp from the Henry Hudson Parkway northbound to Kappock Street would be widened to ten feet and striped for two-way shared use pedestrian and bicycle access from the north abutment of the bridge to its intersection with Kappock Street.

Relevance to HRVGL Project:

- This report is relevant to the HRVGL project as it provides a structural analysis of the Henry Hudson Bridge and, recommends a preferred alignment for the walkway.

Recommendations:

- The preferred alternative involved the installation of signs and/or striping on the upper level path, which varies in width between four feet-nine inches and nine feet-three inches, to separate pedestrians and bicyclists on the existing path.
- This report recommended the installation of signage to inform bicyclists that riding bicycles on the bridge span is prohibited where there is inadequate width.
- At the south approach to the upper level sidewalk it was recommended that a new ramp be constructed connecting the existing bridge sidewalk to an area adjacent to the MTA parking lot at Inwood Hill Park.
- At the north approach to the upper level sidewalk, the existing four-foot-ten-inch wide path adjacent to the exit ramp from the Henry Hudson Parkway northbound to Kappock Street would be widened to ten feet and striped for two-way shared use pedestrian and bicycle access from the north abutment of the bridge to its intersection with Kappock Street.

Implementation Status:

- The recommendations made in this report have not been implemented. The lower level walkway is currently closed to facilitate repairs of the lower deck of the bridge, however the improvements will not bring the walkway to compliance with AASHTO or ADA standards.

Resources / Relevant Data:

- The recommendations contained in this report were based on visual field observations and engineering analysis of as-built drawings for the bridge.

See Figure 3



Hudson River Valley Greenway Trail Bronx Link, Bronx Advisory Committee to the Hudson River Valley Greenway, 1998



This document reports the work of the Bronx Advisory Committee to the Hudson River Valley Greenway. The committee considered potential routes for the Hudson River valley Greenway through the Bronx. Six possible routes were considered, including:

- An “all-river” route skirting the edge of the Hudson River
- Three on street routes
- The Putnam rail line
- The Old Croton Aqueduct Trail

The document includes recommendations from various participating community groups, and the Bronx Advisory Committee makes as its final recommendation, the all-river route.

Relevance to HRVGL Project:

- Though the study is ten years old, this report is directly relevant to this project. This report describes specific route alignments, and the issues relevant to each. Though some alignments may be dated, due to changes over the past ten years, many are relevant and are consistent with more current studies.
- The report is also relevant because it was written by the Bronx Advisory Committee to the Hudson River Valley Greenway, to allow for local control over the design of the greenway.

Recommendations:

This document outlines what, at the time, it defined as possible route alignments. They include:

- an all-river route,
- three on-street routes,
 - Riverdale Avenue, Palisade Avenue and Kappock Street
 - Riverdale Avenue, Henry Hudson Parkway Service Road, return to Riverdale Avenue
 - Broadway
- the Putnam rail line and
- the Old Croton Aqueduct Trail.

In its final recommendations, the Bronx Advisory Committee supports the all-river route along the railroad right of way, and crossing between Manhattan and the Bronx via the Spuyten Duyvil Bridge. It also recommends four river access points:

- Ludlow Street in Yonkers
- The Riverdale Station,
- Dodge Point,
- The Spuyten Duyvil Station

Implementation Status:

- The recommended route has not been implemented.



Resources / Relevant Data:

- Surveys of community residents and groups were taken as part of this study. Results and summaries of these surveys are included in the appendices of the report.

See Figure 6

New York City Bicycle Master Plan, New York City Departments of City Planning and Transportation, 1997



This report was the first phase of the Bicycle Network Development (BND) Project, a joint Department of City Planning, Department of Transportation effort, with the goal of articulating the City's action plan for increasing bicycle ridership by improving bicycle facilities and connections. The plan has a section on the greenway system, which very much mirrors the Greenway Plan for New York City, published in 1993 and described below. The report also mentions the Henry Hudson Bridge and states that access is currently limited to the narrow path on the lower span, though a wider, inaccessible path exists on the upper span. It states that the MTA should consider creating access to the upper path, as noted in the 1992 DCP study.

Relevance to HRVGL Project:

- This report is relevant to the HRVGL project as a document that provides bicycle routes recommended by NYC Departments of City Planning and Transportation. Some of these are off-street greenway recommendations, but most recommendations for the City's bicycle network are for on-street Class 2 and 3 routes.

Recommendations:

Specific recommendations are included in the Bicycle Network maps that accompany the report.

- In Manhattan:
 - Recommends a waterfront route in Manhattan but recommends that the path turn inland and use the Henry Hudson Bridge to connect with the Bronx.
 - Also recommends the use of Broadway in Manhattan and the Broadway Bridge
- In the Bronx:
 - Proposed on-street routes include:
 - Broadway from the Broadway Bridge to Yonkers
 - The service road of the Henry Hudson Parkway from the Henry Hudson Bridge to 254th Street, where it then recommends Riverdale Avenue.
 - Palisade Avenue to Riverside Park where it recommends an off-street segment through the park to 254th Street.
 - East/west segments include 230th Street, Kappock Street, 246th Street, 254th Street, Manhattan College Parkway, Mosholu Parkway.



Implementation Status:

- The relevant off-street routes recommended in this report have not been implemented, and are currently “Planned/Proposed Routes” in the 2008 NYC Cycling Map.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

See Figure 7

Comprehensive Manhattan Waterfront Plan, Manhattan Borough President, 1995/1997

This document was first published in 1995 as a planning study, and published again in 1997 as an adopted 197-a plan. The content of the two plans is the same.

This plan states its support for furthering the goals of the Hudson River Greenway, but does not go into further detail of route alignment. It mentions current political and regulatory obstacles. At the time of publication, bicycling was prohibited in Inwood Hill Park. The report states that Community Board 12 and the Inwood-Heights Parks Alliance fear that large numbers of bicyclists, and especially mountain bikers, could damage the park's fragile ecosystem. On the other hand, Inwood Hill Park represents an important link in any continuous walkway and bikeway around Manhattan, and also provides a link to the Bronx over the Henry Hudson Bridge. This makes some bicycle access through the park desirable. The Inwood-Heights Parks Alliance has proposed using a fenced portion of the route of the Henry Hudson Parkway through the park for cyclists.

Relevance to HRVGL Project:

- This document has relevance to the HRVGL project as a policy statement, in support of furthering the goals of the greenway.

Recommendations:

- Mentions Inwood Hill Park and the Henry Hudson Bridge in general terms, but makes no specific route alignment recommendations.
- Mentions that the New York Metropolitan ISTE A Bikeway/Walkway Working Group has been allocated \$125,000 for a planning study of a bicycle/pedestrian pathway from Riverside Park at 158th Street to the county line in the Bronx.

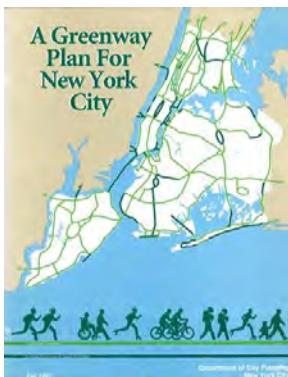
Implementation Status:

- The status of the funding mentioned above is unknown at this time.



Resources / Relevant Data:

- No information about data collected for this report is included in this report.

A Greenway Plan for New York City, Fall 1993

The Greenway Plan sought to illustrate the importance of Greenways in addressing the City's recreational and commuting needs, and outline the City's vision of a greenway system throughout all five boroughs. It proposed, in a general, schematic way, greenway routes throughout the City, with a special mention of the "Hudson River Greenway Trail". It identified the Hudson River Greenway Trail as a potential key north-south commuter route, and discussed connecting with what were, at the time, plans to create the now existing greenway along the length of the Hudson River waterfront in Manhattan. It further mentioned connections to the Bronx and the Hudson River Valley Greenway from Westchester to Albany, with a goal of also becoming part of the East Coast Greenway.

Relevance to HRVGL Project:

- This document is relevant to the HRVGL project as a policy statement providing support for the further development of the Hudson River Valley Greenway.

Recommendations:

- Maps in this document show the route of the Hudson River Greenway through upper Manhattan and the Bronx. However, it provides no specific alignment recommendations/
- It also proposes routes along the Putnam Railroad corridor and the old Croton Aqueduct.

Implementation Status:

The general recommendations of this plan, for the portions of upper Manhattan and the Bronx within the HRVGL project area, have not been implemented.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.



Plan for the Bronx Waterfront, New York City Comprehensive Waterfront Plan, NYC Department of City Planning, 1993



The Plan for the Bronx Waterfront is part of New York City's Comprehensive Waterfront Plan, providing more detailed recommendations. It describes the physical character, zoning and land use of the Spuyten Duyvil and Riverdale areas, and recommends various waterfront improvements including establishing a route for the Hudson River Valley Greenway. The route it recommended would begin at Riverdale Avenue and the city line, turn onto West 261st Street and follow Palisade Avenue along Riverdale Park, including a one-half mile, un-built section of the avenue. It would then turn onto Independence Avenue and Kappock Street down to the Henry Hudson

Bridge. The plan discusses the difficulty of crossing from Manhattan into the Bronx, with very narrow pedestrian sidewalks on the lower level of the bridge, and recommended that a ramp be built linking the upper level sidewalk with a new bicycle route adjoining the Henry Hudson Parkway in Manhattan.

Relevance to HRVGL Project:

- This plan is relevant to the HRVGL project as it recommends a specific route for the Hudson River Greenway through the Bronx.

Recommendations:

- The recommended route through the Bronx begins at Riverdale Avenue at the Yonkers Border, and continues south to 261st Street where it would turn west, then south along Palisade Avenue along Riverdale Park, then onto independence Avenue and Kappock Street to the Henry Hudson Bridge.
- This report also recommends use of the upper level walkway on the Henry Hudson Bridge, constructing a ramp linking the walkway to a new bicycle route adjoining the Henry Hudson Parkway in Manhattan.

Implementation Status:

- According to this report, the City has requested federal ISTEA funding to further explore the feasibility of the second recommendation summarized above, the ramp linking the walkway to the Henry Hudson Parkway. It is not known if this funding was ever secured.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

See Figure 8



Plan for the Manhattan Waterfront, New York City Comprehensive Waterfront Plan, NYC Department of City Planning, 1993



The Plan for the Manhattan Waterfront is part of New York City's Comprehensive Waterfront Plan, providing more detailed recommendations. It describes the physical character, zoning and land use of northern Manhattan, including Inwood Park. The plan makes recommendations to complete a continuous pedestrian/bicycle trail system at the water's edge or along inland routes where access to the shoreline is not possible, and recommends reasonably spaced crossings over the rail tracks to waterfront parks along the Hudson River. The plan also mentions the inadequacy of the pedestrian walkway over the Henry Hudson Bridge and the importance of correcting it in order to provide a continuation for the Hudson River Valley Greenway.

Relevance to HRVGL Project:

This document is relevant to the HRVGL project as both a policy document in support of recapturing the waterfront for public use, and as a document that makes both specific (ie. improvements to the Henry Hudson Bridge walkway) and general (connecting the existing waterfront path north of Dyckman Street to the Henry Hudson Bridge) recommendations.

Recommendations:

- Recommends use of the existing waterfront route north of Dyckman Street to the Henry Hudson Bridge, though it does not specify how the connection to the Henry Hudson Bridge will be made.
- Recommends making improvements to the Henry Hudson Bridge walkway.
- Recommends providing crossings over the rail tracks to waterfront parks, but makes no such recommendations in the HRVGL project area north of Dyckman Street.
- Recommends and on-street connection near the Harlem River from the Bronx via the Broadway Bridge, Broadway and 10th Avenue.
- Recommends improving drainage on the Henry Hudson Parkway to reduce erosion.

Implementation Status:

- The recommendations outlined above have not been implemented at this time

Resources / Relevant Data:

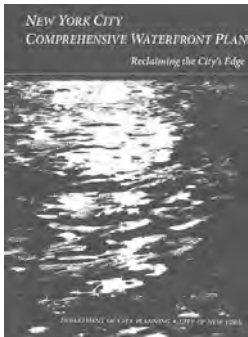
- No information about data collected for this report is included in this report.

See Figure 8



New York City Comprehensive Waterfront Plan – Reclaiming the City's Edge

New York City Department of City Planning, 1992



The Comprehensive Waterfront Plan provides a framework to guide land use along the city's entire 578-mile shoreline. The plan presents a long range vision that balances the needs of environmentally sensitive areas and the working port with opportunities for waterside public access, open space, housing and commercial activity. The plan mentions Riverdale Park as only offering visual access to the water because of railroad tracks along the shore. It also mentions steep slopes and railroad tracks as barriers to the waterfront in Manhattan. The plan mentions "The Hudson River Trail" as part of the "Hudson River Greenway" from New York to Albany. It also states that the trail would be part of the East Coast Greenway. The plan recommends an upland bicycle path in Riverdale, and a connection over the Henry Hudson Bridge as part of the Hudson River Greenway. The Spuyten Duyvil Shorefront Park would be expanded by the acquisition of the Penn Central Triangle at the mouth of the Hudson River.

Relevance to HRVGL Project:

- This document is relevant to the HRVGL project as a policy document in support of recapturing the waterfront for public use.

Recommendations:

- The recommendations of this plan are the same as the recommendations described in the Manhattan and Bronx Waterfront Plans described above.

Implementation Status:

- The recommendations outlined above have not been implemented at this time

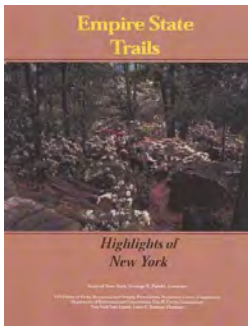
Resources / Relevant Data:

- No information about data collected for this report is included in this report.

See Figure 8



Empire State Trails, Highlights of New York, NYS Office of Parks, Recreation and Historic Preservation (No Date Found)



This document is intended as a guide, providing general information about a small sample of the numerous trail opportunities in New York State. It mentions the Hudson River Valley Greenway and provides a general description and a schematic map showing the greenway's termini in Waterford, Albany and Manhattan. It provides no details of existing or proposed routes. It also mentions the Old Croton Aqueduct Trail in a similar fashion.

Relevance to HRVGL Project:

- This guide has tangential relevance to the HRVGL project providing information to the public about the existence of the Hudson River Valley Greenway.

Recommendations:

- No specific recommendations are provided in this document.

Implementation Status:

- Implementation status is not relevant to this report.

Resources / Relevant Data:

- No information about data collected for this report is included in this report.

The East Coast Greenway in New York, East Coast Greenway Alliance



The East Coast Greenway (ECG) is a multi-use path that extends along the East Coast from Maine to Florida. Currently the greenway is complete with approximately 21 percent off-road and 79 percent on-road facilities. The ECG is ultimately envisioned as an “urban greenway”, an entirely off-road route linking cities throughout the East Coast.

Relevance to HRVGL Project:

- The East Coast Greenway utilizes the Hudson River Valley Greenway from Dyckman Street south to the World Financial Center in Manhattan.
- The HRVGL may utilize the same alignments as the ECG through portions of the Bronx and Westchester County.



Recommendations:

- Connects Westchester County and New York City via the Shore Road Greenway.
- To reach Manhattan the ECG continues south onto the Pelham Parkway Greenway to the Bronx River Greenway and then the Mosholu Greenway. The ECG then travels through Van Cortlandt Park and exits the park onto Broadway.
- The Greenway uses the Broadway Bridge to traverse the Harlem River.
- The ECG links to the Hudson River Greenway near Dyckman Street and continues to the World Financial Center in Downtown Manhattan.

Implementation Status:

- The current travel route in New York City is 90 percent complete as an off-road trail. The trail in Westchester County is currently all on-road.

Resources / Relevant Data:

- Status updates, next steps and contact information for ECG segments.
<http://www.greenway.org/>

ADDITIONAL PROJECT NOTE

NYC Department of Transportation is progressing a project to build a direct connection from the northern terminus of the current path adjacent to the northbound Henry Hudson Parkway straight down to Dyckman Street so as to eliminate the existing obstacle of the step-ramp at Riverside Drive due west of Staff Street.

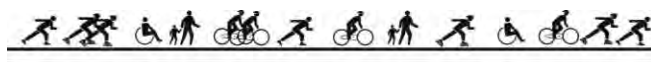


VISUAL REFERENCE OF RECOMMENDED ROUTES

As mentioned in the introduction to this technical memorandum, the accompanying maps include roads, bodies of water, railroads, railroad stations, municipal and county boundaries, open space, existing on- and off-road bicycle facilities, and tax lots (available for New York City only), within the project study area. Figure 1, shows this data for the entire project area at a scale of 1" = 3,000', as spelled out in the contract scope of work. Also shown on Figure 1 are the Old Croton Aqueduct Trail and the Putnam Railroad / South County Trailway routes, both of which may provide inland route alternatives for the Hudson River Valley Greenway Link. Figures 2 through 8 show the project area, and the contents of the base map at a greater level of detail, divided into two sections; one section covering the Bronx and Manhattan, and the other covering Yonkers. These maps highlight the proposed routes recommended from the reports summarized in this Technical Memorandum. The maps are organized and show recommended routes as follows:

- Figure 2: The Bronx Greenway Report, Bronx Borough President Adolfo Carrion, Jr., The Bronx Greenway Taskforce, 2008
- Figure 3: Manhattan Waterfront Greenway Master Plan, New York City Department of City Planning, 2004
- Figure 3: Feasibility Study for Bicycle Access at Various Authority Facilities, Feasibility Analysis & Preliminary Cost Estimate for the Henry Hudson Bridge, For MTA Bridges and Tunnels, 1999
- Figure 4: Hudson River Valley Greenway Plan – 155th Street, Manhattan to Bronx/Westchester County Line, NYC Department of Parks and Recreation, 2004
- Figure 5: Hudson River Trailway Plan, Hudson RiverWalk, A Greenway Trail, Westchester County Department of Planning, 2003
- Figure 6: Hudson River Valley Greenway Trail Bronx Link, Bronx Advisory Committee to the Hudson River Valley Greenway, 1998
- Figure 7: New York City Bicycle Master Plan, New York City Department of City Planning, 1997
- Figure 8: Plan for the Bronx Waterfront, New York City Comprehensive Waterfront Plan, NYC Department of City Planning, 1993
- Figure 8: Plan for the Manhattan Waterfront, New York City Comprehensive Waterfront Plan, NYC Department of City Planning, 1993
- Figure 8: New York City Comprehensive Waterfront Plan – Reclaiming the City's Edge New York City Department of City Planning, 1992

The map shown below is a section of the New York City Cycling Map, published by the New York City Department of Transportation. In addition to existing greenway and on-street routes, the red dotted lines show proposed/recommended on-street routes, while the green dotted lines show proposed/recommended greenway routes.

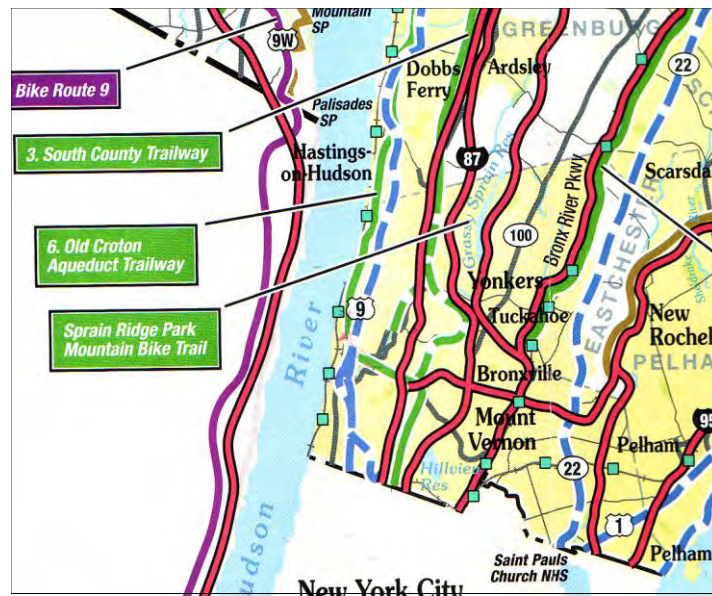




New York City Cycling Map
NYCDOT, NYCDP, NYCDPR, 2008

The map shown below is a section of the Hudson Valley Bikeways & Trailways Map. This map provides a schematic representation of existing and proposed bike- and trail-ways throughout the Hudson Valley. The portion of the map shown below illustrates the South County Trailway, the old Croton Aqueduct Trailway and the Sprain Ridge Park Mountain Bike Trail as they pass through or near the HRVGL project area. The red line represents a limited access highway, the solid green line represents a trailway, the dotted green line represents a proposed trailway and the dotted blue line represents a future bike route.

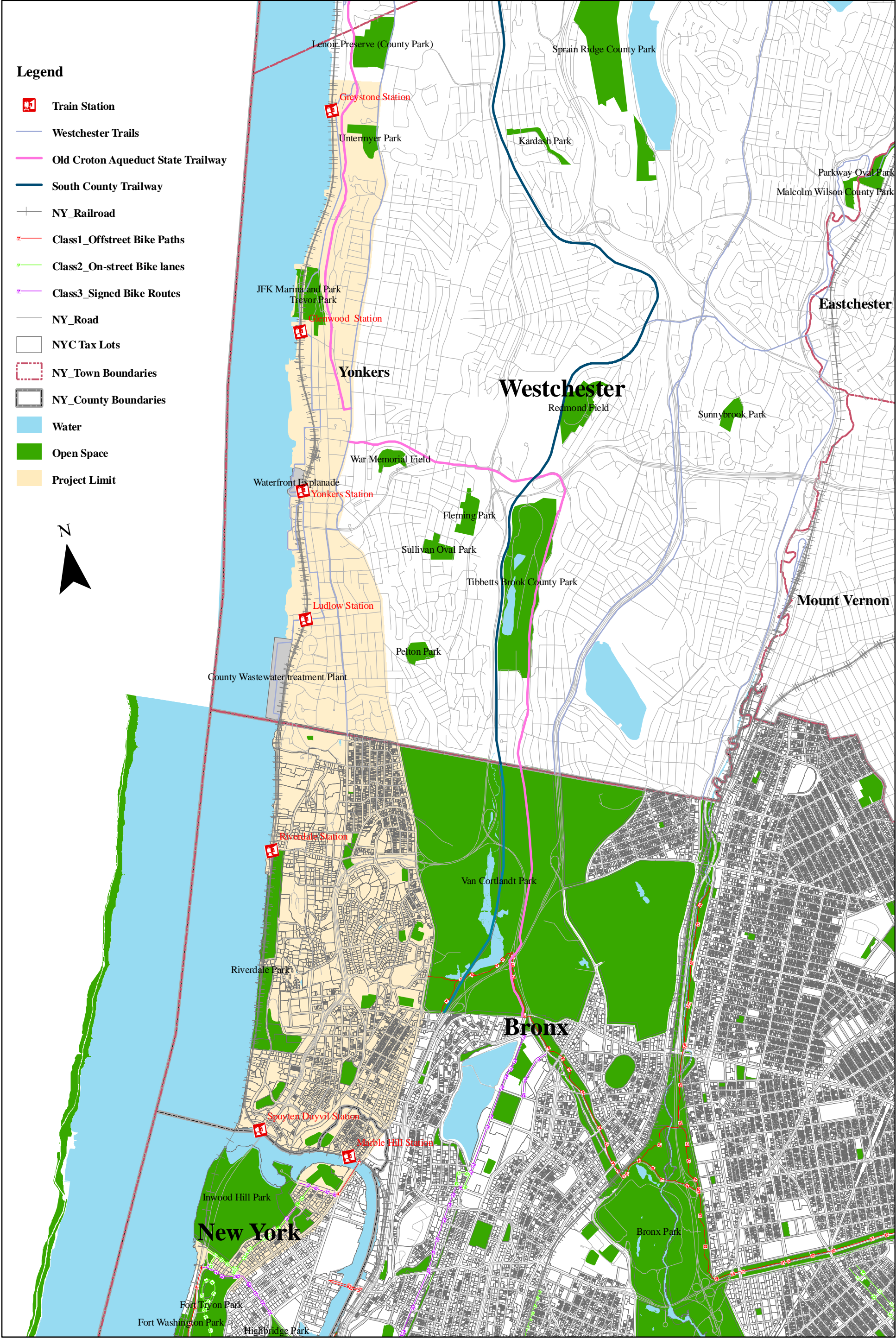




Hudson Valley Bikeways & Trailways

New York State Department of Transportation Region 8 and MetroPool, 2nd Edition





Hudson River Valley Greenway Link
Figure 1





• Manhattan Waterfront Greenway Master Plan, NYCDP, 2004
















• Feasibility Study For Bicycle Access At Various Authority Facilities MTA Bridges And Tunnels, 1999

**Hudson River Valley Greenway Link
Bronx and Manhattan Section
Figure 3**

1 inch = 1,800 feet



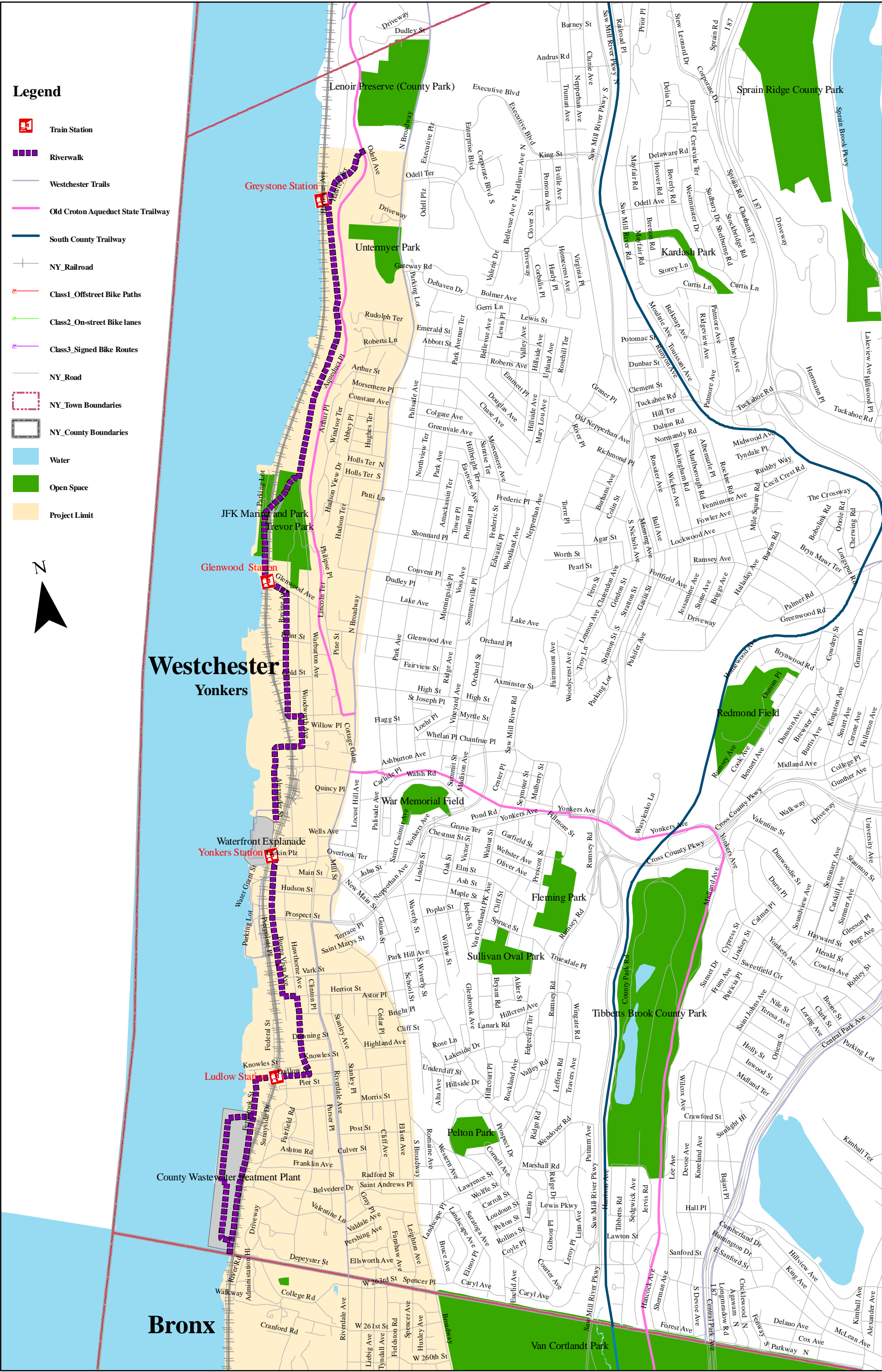
Legend

-  Train Station
-  Riverwalk
-  Westchester Trails
-  Old Croton Aqueduct State Trailway
-  South County Trailway
-  NY_Railroad
-  Class1_Offstreet Bike Paths
-  Class2_On-street Bike lanes
-  Class3_Signed Bike Routes
-  NY_Road
-  NY_Town Boundaries
-  NY_County Boundaries
-  Water
-  Open Space
-  Project Limit



Westchester
Yonkers

Bronx









Plan For The Bronx Waterfront, 1993
Plan For The Manhattan Waterfront, 1993
New York City Comprehensive Waterfront Plan, 1992
DCP

Hudson River Valley Greenway Link
Bronx and Manhattan Section
Figure 8

1 inch = 1,800 feet