Sleepy Hollow-Tarrytown Trails Strategy



5.25.16

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OUR VISION: A WALKABLE AND BIKEABLE COMMUNITY

Sleepy Hollow and Tarrytown residents love their small-town, family-friendly communities. To enjoy them to the full, it is crucial to be able to get around whenever practical without having to use a car, whether to enjoy trails, downtown streets and public parks at leisure, or to get to and from public transportation. A network of attractive and convenient routes adds value for pedestrians and bicyclists alike, reduces dependency on trips by car, and increases the appeal for visitors.

This trails strategy catalogs the extensive trail routes already available to users in both villages, notes additional routes planned, under consideration, or recommended. It views them as a whole system, a collective amenity, rather than as disconnected parts, such that they can be included readily in a broader, integrated way-finding approach for the local area.

The strategy lays out a sequence of projects to achieve the envisioned trails and marketing. Joint oversight by the two villages would ensure that the system serves all users well, and that it is adapted or grown to good effect for everyone as new opportunities arise.

Our Vision

INTRODUCTION

Pedestrian- and bike-friendly design is an essential ingredient to any successful community. National research confirms time and time again the benefits trails and strong pedestrian design offer public health, sense of community, residential property values, and commercial district vibrancy.

A bike and pedestrian system can include roadway features such as bike lanes, sidewalks, crosswalks, and other amenities for safety and comfort, as well as off-road accommodations like dedicated single- or shared-use trails. The villages of Sleepy Hollow and Tarrytown have all of these design components linking their respective downtowns, as well as numerous historic sites, natural preserves, and waterfront parks. This strategy contains recommendations for filling in the remaining missing pieces in the regional trails and strengthening internal bike and pedestrian connections to facilitate movement to and between the trails and other community destinations.

Building a Multi-Modal Transportation System

The two villages are fortunate to have access to three north-south trails that serve as anchors and attractions for cyclists, runners, and walkers. These include:

- RiverWalk: The planned 51-mile trail along the river throughout Westchester County, much of which has been implemented in the two villages.
- Old Croton Aqueduct (OCA): A popular linear state park established in the 1960s that links neighborhoods to Sleepy Hollow High School and Rockefeller State Park Preserve.
- North-South County Trailway: A popular bike route that links to NYC and other regional trails.



The presence of these north-south routes creates demand for enhanced east-west movement:

- 4. Route 117 (on-road)
- 5. Kensico-Tarrytown Trail: This trail traverses the scenic Tarrytown Reservoir and connects the Old Croton Aqueduct with the North-South County Trailway
- 6. Route 119 (sidewalks)

Each village has a compact downtown area with sidewalks and many civic destinations, shops, and restaurants. The Village of Tarrytown has been gradually implementing a number of pedestrian improvements, thanks in part to the work and input of its Environmental Advisory Committee, which has performed walkability audits to create detailed recommendations. This includes how commuters can access the Tarrytown train station, which the village is incorporating into its new station area plan.

RiverWalk and the Old Croton Aqueduct serve as recreational destinations but also connect many of the two communities' historic tourism destinations. These include Washington Irving's Sunnyside and Lyndhurst, both south of the New NY Bridge; Philipsburg Manor just north of Sleepy Hollow's downtown (also the start point to access Kykuit); Rockwood Hall in Rockefeller State Park Preserve; and the famed Sleepy Hollow Cemetery.

In addition to these many trails and destinations, the villages have a wealth of community groups interested in walkability and bikeability for a number of reasons: decreased traffic, community pride, improved air quality, personal health, and more equitable access to mobility for those without means to a car due to age – whether young or older – disability, or economic reasons. These groups have already been working on various projects. This planning process and resulting document help highlight the cumulative result of those separate efforts over time to gain a clearer perspective of the remaining needs and potential partnerships for making them happen.

A Blueprint for Community Action

This strategic plan grew out of a recognition that the two villages were in the thrust of two major development projects that would have a defining impact for years to come. Namely, the former GM site redevelopment on the waterfront in Sleepy Hollow and the Tappan Zee Bridge reconstruction project (New NY Bridge) in Tarrytown. Community members saw the planned waterfront park at the former GM site and the planned shared-use path over the New NY Bridge and desired the opportunity to think more broadly about how those projects would relate and connect to the villages and their existing bike, park, and trail infrastructure.

In late 2014, a trails strategy was initiated to take a comprehensive look at the non-motorized transportation system of the two-village area. The strategy was initiated by Scenic Hudson in collaboration with the two villages. Representatives from each village, as well as state or regional organizations with a role in parks, trails, and area tourism, participated on the steering committee that guided the process.

STEERING COMMITTEE

A Steering Committee of 20 dedicated people from 15 groups or organizations came to the table nine times over the year-long planning process to review content, provide policy direction, and organize for implementation.

Sleepy Hollow	Tarrytown
Sleepy Hollow Environmental Advisory Council	Tarrytown Environmental Advisory Council
Claire Davis	Rachel Tieger
	Lakis Polycarpou
Friends of Kingsland Point Park	Tarrytown Lakes Committee
David Bedell	Cathy Ruhland
Bruce Campbell	Planning Board
Sleepy Hollow Cemetery	David Aukland
Jim Logan	Lyndhurst
Village Board	Howard Zar
Dorothy Handelman	Krystyn Hastings-Silver
Regional	
Westchester County Planning	Old Croton Aqueduct State Park
Pat Natarelli	Steven Oakes
Metro-North Railroad	Jeff Litwinowicz
Kim A Smith	Friends of Old Croton Aqueduct SP
Friends of Westchester County Parks	Daniel Shure
Chris Cawley	NYS-OPRHP
Tarrytown Lakes Committee	Linda Cooper
Mark Fry	

STAKEHOLDER INTERVIEWS AND SMALL GROUP MEETINGS

In addition to interviews and meetings with representatives of the steering committee, stakeholder interviews were conducted with representatives from:

- Westchester County Parks
- Westchester County Planning
- Philipsburg Manor Neighborhood Association
- Sleepy Hollow Manor Neighborhood Association
- Westchester County Tourism
- Greater Sleepy Hollow-Tarrytown Chamber of Commerce
- New NY Bridge
- Rockefeller State Park Preserve

Small group meetings and site visits also were held to gather information and ensure consistency with contemporary efforts, including:

- Friends of Westchester County Parks: Attended a countywide meeting to understand a larger planning effort underway to map trails (real or planned) and share information on this study as it helps to inform that larger effort.
- Friends of Kingsland Point Park and GM Site Tour: A site tour was conducted with the friends group and GM site developer to discuss the conditions of the park and possible opportunity for a unified park design.
- Friends of Old Croton Aqueduct and Old Croton Aqueduct State Park Staff: A site visit was held to discuss planned improvements and see some of the access, design, and management problems.
- Lyndhurst: A site visit was made to see the connections of the OCA and RiverWalk through the property and understand planned trail improvements internal to the estate and a possible future Hudson River Valley Greenway Water Trail site landing.
- Walkability Audit: A walkability audit was conducted on specific geographies in and around the downtowns. See Appendix C for a detailed summary.
- **Tarrytown Station Area Plan:** Several conversations occurred between Scenic Hudson and the Tarrytown Planning Chair and consultant for the station area plan to share recommendations and promote consistency.

In all, 10 priorities were identified early in the planning process that would leverage investments in these major projects to complete desired connections and improve the ability of the communities to market their many assets to residents and visitors alike:

Greater Edge-on-Hudson Opportunity Area

Priority 1: Leverage the GM Site Redevelopment to Build a World-Class Waterfront Park Inclusive of Adjacent Park Areas

Priority 2: Ensure Site Design Integrates Well into Existing Community and Creates a Community Destination

New NY Bridge Opportunity Area

Priority 3: Extend RiverWalk Under the New NY Bridge **Priority 4:** Create Multiple Means for Bikes and Pedestrians to Get On/Off Bridge

Regional Trails

Priority 5: Complete RiverWalk
Priority 6: Make Old Croton Aqueduct More Visible and Accessible While Retaining Historic and Natural Character
Priority 7: Create Loops (via East-West Connections)

Local Linkages

Priority 8: Connect Local Places and Spaces to the Regional NetworkPriority 9: Wayfinding SystemPriority 10: Ensure Trails are Easy to Use

For a complete discussion of these priorities, see Appendix A.

VILLAGE BOARD PRESENTATIONS

In addition to early startup meetings with each Mayor and Village Administrator, the project team made presentations to each Village Board at three key stages of the process:

- 1. After the key priorities had been identified;
- 2. After recommendations had been drafted; and
- 3. After recommendations had been vetted by the community and an implementation strategy had been identified.

In each case, the presentations were made before sharing ideas with a broader audience at public events to enable inclusion of any Village Board comments.

COMMUNITY OUTREACH

Community Workshop: The first was held at Sleepy Hollow High School in late April 2015. The format included a presentation on the project, and key priorities identified to date, followed by interactive small group work at four stations, each with a specific focus topic.

Online Survey: In December 2015 an online community survey was distributed via the two villages' respective list serves. Strong response (232) to this survey showed support for the recommendations as a whole and helped define the implementation sequencing defined in this plan. A detailed survey summary is contained in Appendix D.

How is the strategy organized?

The recommendations of this trails strategy are grouped into sets of projects that achieve a larger outcome as identified by the public and stakeholders through the planning process. The grouping allows collaborative partnerships to form around each initiative area, working to prioritize grant writing, volunteer efforts, or public investment over time until the entire initiative is achieved.

PART 1: INITIATIVES TO IMPLEMENT

Ten initiatives areas were identified through the planning process:

- 1. Build a Trail-Friendly Community
- 2. Complete and Improve RiverWalk to Design Guide Standards
- 3. Support and Highlight Old Croton Aqueduct as Regional Linear Park Asset
- 4. Highlight and Expand the Presence of the Hudson River Greenway Water Trail
- 5. Walkable and Bikeable Downtowns
- 6. Link and Enjoy Rockefeller State Park Preserve
- 7. Kensico-Tarrytown Lakes Trail
- 8. Bridge Area Trail Connections
- 9. Making the Connection: Priority Local Trail Projects
- 10. Package and Promote Trails and Community Destinations for All to Enjoy

PART 2: STRATEGY FOR SUCCESSFUL IMPLEMENTATION

The second part of the document provides guidance on how to implement the plan recommendations by establishing priorities and sequencing of projects, and identifying possible coalition partners and potential funding sources. This guide should serve as a living document to inform annual work plans and track progress over time.

APPENDICES

APPENDIX A: STRATEGIC PRIORITIES SUMMARY APPENDIX B: PUBLIC WORKSHOP SUMMARY APPENDIX C: WALKABILITY AUDIT APPENDIX D: SURVEY RESULTS SUMMARY

PART 1: INITIATIVES TO IMPLEMENT

1. BUILD A TRAIL-FRIENDLY COMMUNITY



Trails add a great recreational resource, providing safe, smooth surfaces for strollers and seniors without concerns from traffic as well as connected routes for a morning run.

THE BENEFITS OF TRAILS

Trails add to the community's quality of life by providing opportunities for safe recreation, transportation, and social interaction. Beyond social benefits, trails also offer solid economic benefits. Numerous studies across the country have found a positive relationship between proximity to trails and property values. Trails also provide a destination amenity to attract visitors who can then visit local shops and restaurants.

Trails in the Sleepy Hollow - Tarrytown area serve a wide array of users, including a stroller-walking group, runners, kids getting safely to school, recreational and commuter cyclists, seniors strolling along the river at a waterfront park, and visitors to historic sites using trails to further explore the community.

Despite the high demand and tangible benefits trails have to offer, communities still struggle with staff capacity and community support as they work to build a well-connected and accessible trail system. The following section contains a number of strategies the two villages can employ to proactively advance trail projects in a way that maximizes benefits to residents and local businesses.

RECOMMENDATIONS

1. Form a Village Trails Committee

In a small community with limited staff to devote attention to trail projects on a day-to-day basis, trails can fall by the wayside. A formally-designated trail committee is a great vehicle to implement, improve, and promote trails within a community. This group can apply for grants to plan and implement trails in concert with village government, county government, and other partners like friends groups or area-specific associations. The committee also can work with other village boards, notably the Planning Board, to ensure that plans for trails are implemented in both letter and spirit as development projects occur or as capital improvements like street enhancement projects are implemented.

Case Study: Beacon Greenway Trails Committee

The City of Beacon is going through a renaissance, spurred by the addition of Dia: Beacon in 2003 and supported by good community planning decisions, including development of a network of water-focused parks and greenways. The Beacon waterfront, once an industrial zone, is now blanketed with public park spaces, including Pete and Toshi Seeger Riverfront Park, Scenic Hudson's Long Dock Park, Dennings Point and Madam Brett Park. Together, these parks cover the majority of the waterfront along the Hudson River and curve inland along Fishkill Creek.

In 2012, the City of Beacon created a Greenway Trails Committee to help develop a master plan for a trail along Fishkill Creek that could continue east from Madam Brett Park and ultimately connect to Fishkill and its trails - the start of a regional system. Funded by a Hudson River Valley Greenway grant, the committee contracted a consultant to assist with the technical analysis and supplied countless volunteer hours to more than meet the city's match commitment for the grant. The resulting document, completed in 2013, charts the course of the trail along the creek and has served as an important tool to see its implementation.



Zoning was amended to reflect the need to consider the greenway plan in development review, and the committee has worked tirelessly to advocate for the trail's incorporation into new developments that have sprung up along the creek in the past two years.

With this success, the committee has started to add to its project list. In 2014, it was awarded a second Greenway grant to develop a new trail linking the waterfront to I-84 and the Beacon-Newburgh Bridge. It also successfully leveraged work on the Hudson Highlands Fjord Trail to begin a comprehensive wayfinding plan for Beacon's trails and downtown in collaboration with the Mayor's office.

2. Organize and Promote Trail-Centered Community Events

Trails provide myriad community programming opportunities that can engage residents of all ages. Senior centers can organize group walks, early-childhood education providers can collaborate to implement story walks or other learning-focused outdoor experiences for young children, and tourism or community organizations can organize race events. All of these increase the connections between people and their built and natural environments, support healthy living, and foster a stronger sense of community.

3. Trail Safety and Maintenance Plan

A number of trail-adjacent neighborhoods have expressed concern over increased traffic – whether cars looking to park to access the trail or pedestrians and cyclists on the trail passing by their homes. Nationally, concerns typically include noise, privacy, litter, and loitering. Communities planning trails should work proactively with neighbors to identify their specific concerns and develop a trail safety and management plan. Some strategies include:

- 1. Litter collection and removal
- 2. Hours of operation
- 3. Parking management
- 4. Maintenance and surface repair
- 5. Police patrol (including by bike)
- 6. Trail ambassadors
- 7. Safety lighting
- 8. Good visibility and line of sight
- 9. Dog waste bags and disposal options
- 10. Landscaped screens or buffers
- 11. Emergency call boxes
- 12. Trail amenities like benches, bike racks, and signage

4. Trail Sharing Etiquette Education

Multi-use trails attract a variety of users, including cyclists, dog walkers, joggers, rollerbladers, and kids on their way to school. If people are not aware of how to appropriately share the space to ensure safe coexistence, a trail can become a dangerous or stressful place to visit. Simple steps - like bikes passing on the left and communicating their presence, pedestrians and joggers who know to stay to the right, owners who keep dogs on leash, and kids or other users who don't block the trail or move erratically - all do their part to keep traffic and fellow trail users safe and having a good time.

2. COMPLETE AND IMPROVE RIVERWALK TO DESIGN GUIDE STANDARDS



RiverWalk provides a signature community asset to residents of Westchester County and Hudson River communities in particular. This widely used trail offers opportunities for active and passive enjoyment.

ABOUT RIVERWALK

RiverWalk is a planned 51-mile trail running along the eastern shore of the Hudson River through Westchester County. It is the County's portion of the larger concept for a Hudson River Greenway Trail, a continuous waterfront trail envisioned to connect Albany and New York City. The county has planned and implemented sections of trail in partnership with local municipalities and property owners for over 15 years. In thinking through the location, design, and branding for RiverWalk, Westchester County has prepared a RiverWalk trail map and design guidelines for how the trail should be constructed in different development contexts.

There are nearly seven (6.78) miles of RiverWalk within Sleepy Hollow and Tarrytown, 4.81 miles of which (71 percent) is listed as complete in Westchester County map data. However, field verification shows that half of the trail length listed as "complete" is not constructed to the design standards set forth for the trail.

A FLEXIBLE DESIGN FOR DIFFERENT CONTEXTS

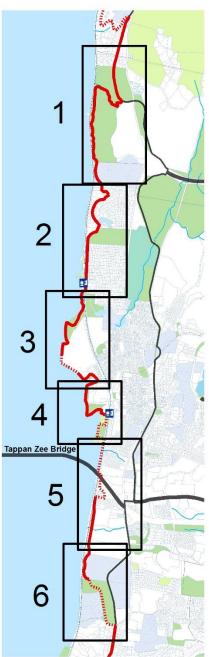
There are a range of options for designing the trail to fit within existing development contexts. In some cases, the trail can be constructed with few constraints other than a need to match the surrounding area:

Development Context	Trail Type	Widths		
Rural/natural area	Multi-use Trail (MUT)	8'-10'	Standard trail.	
	Pedestrian Trail in Natural Area (C2)	5' min	Natural walking path.	
Developed area	Multi-use Trail	10'-16'		
	Multi-use Trail on Road	10'-16'	On existing roadway.	
	Pedestrian Trail in Constrained Area	5' min	When trail is too narrow for	
	(C1)		MUT.	
	Bicycle Trail on Road	5' min	Narrower than 10'.	
	Trail with Limited Land Area	10'-16'	Built over water.	
	Trail Adjacent to Railroad		Limited by railroad.	
Urbanized waterfront area	Multi-use Trail	10'-16'	Standard trail.	
	Esplanade	16' min	Adjacent to commercial area.	

THE RIVERWALK IN SLEEPY HOLLOW AND TARRYTOWN

RiverWalk in the two villages is varied, and includes nearly every trail context included in the design guidelines. Generally, the variations in character and development context can be broken down into six zones:

- 1. **Kendal and Rockefeller:** Generally rural area with trail through woods north of neighborhood before crossing the Kendal campus into the Rockefeller State Park Preserve and Old Croton Aqueduct Trail. The section of trail in the preserve is walking-only.
- Manor Neighborhoods: This section of trail is on both road and sidewalks through the Sleepy Hollow Manor and Philipse Manor neighborhoods. It includes the connection to the Philipse Manor Metro-North train station.
- 3. **Kingsland Point:** This section of trail traverses public parkland, although the style of the park varies. Kingsland Point Park to the north is a more natural park with mature trees, whereas the park area to be created as part of the Edge-on-Hudson development will be more suburban and urban in character as it approaches Zone 4.
- 4. **Tarrytown Station Area:** This section of trail runs by relatively new high-density residential projects within close proximity to the Tarrytown Metro-North rail station. It includes several parks and a marina.
- 5. Ledge Trail: This section of trail must navigate a sharply sloping landscape as the elevation rises more steeply out of the water nearer the base of the Tappan Zee/New NY Bridge. On the constructed portion of trail in this zone development is generally set above the trail, which is accessed by ramps.
- 6. **Rural Historic**: This section of trail is once again rural, navigating the estate lands associated with the major historic properties of Lyndhurst and Sunnyside before linking into the Old Croton Aqueduct Trail, with its rural profile.



SEGMENT-BY SEGMENT ASSESSMENT (NORTH TO SOUTH)						
	Segment	Listed Status	Length	Context Type	RiverWalk Trail Type	Built to Standard?
Zone 1: Kendal and Rockefeller	OCA North	Complete	0.37 miles	Natural	Multi-Use Trail	Yes
	Rockwood Hall	Complete	1.15 miles	Natural	Pedestrian Trail C-2	Yes
	Kendal	Complete	0.18 miles	Developed	Pedestrian Trail C-1	No
	Nature Trail	Complete	0.11 miles	Natural	Pedestrian Trail C-2	No
Zone 2: Manor Neighborhoods	Sleepy Hollow Manor	Complete	0.45 miles	Developed	Pedestrian Trail C-1	No
					Bicycle Trail on Road	
	Peabody Field	Complete	0.21 miles	Natural	Pedestrian Trail C-1	No
					Bicycle Trail on Road	
	Philipse Manor	Complete	0.42 miles	Developed	Multi-Use Trail	No
Zone 3: Kingsland Point	Kingsland Entrance	Complete	0.15 miles	Developed	Multi-Use Trail on Road	No
	Kingsland Point Park	Complete	0.40 miles	Developed	Multi-Use Trail	No
	Edge-on- Hudson (Suburban)	Planned (2018?)	0.2 miles	Urban	Multi-Use Trail	NA
	Edge-on- Hudson (Urban)	Planned (2018?)	0.16 miles	Urban	Esplanade	NA
Zone 4: Tarrytown Station Area	Ichabod's Landing	Complete	0.14 miles	Urban	Multi-Use Trail	Yes
	(Contemporary Development)	Under Construction	0.02 miles	Urban	Esplanade	NA
	(New NY Bridge Staging Area)	Incomplete	0.04 miles	Urban	Multi-Use Trail	NA

	Scenic Hudson/ Pierson Park	Complete	0.46 miles	Urban	Multi-Use Trail	Yes
	Losee Park	Planned (2016)	0.46 miles	Urban	Multi-Use Trail	NA
Zone 5: Ledge Trail	New NY Bridge	Incomplete	0.45 miles	Developed	Trail with Limited Land Area	INC
	Lyndhurst	Complete	0.56 miles	Developed	Trail Adjacent to Railroad	Yes
Zone 6: Rural Historic	Sunnyside	Designed	0.64 miles	Natural	Multi-Use Trail	NA
	OCA (South)	Complete	0.46 miles	Natural	Multi-Use Trail	No

RECOMMENDATIONS

ZONE 1: KENDAL AND ROCKEFELLER

1. Work with Kendal to Improve Accessibility and Design of RiverWalk Through Its Property

The section of RiverWalk just south of the Rockefeller State Park Preserve traverses private property, the Kendal senior living development next to Phelps Memorial Hospital. Part of the development approval included an agreement to connect RiverWalk through the property. After nearly a decade, the trail connection was finally made in 2014. However, in its execution and access the trail must overcome a number of challenges to achieve functional standards desired for the entirety of RiverWalk in the project area.



The gate to the Kendal property is frequently locked. While the safety of residents is of critical importance, the gate should only be locked on an as-needed basis tied to a specific concern or incident rather than a matter of course.



The south trail through the woods has the feel of being still under construction. Also, given dense foliage and a remote setting, lighting and emergency call boxes might lend a better sense of safety, including to Kendal residents.



The northern section of trail through the Kendal development has a number of design and navigation challenges. First, there is a break where the dirt trail ends and the sidewalk begins, with no directional signs telling the trail user which way to go. Second, it is narrow and uninviting, with objects physically built into the sidewalk that decrease ADA accessibility.

ZONE 2: MANOR NEIGHBORHOODS

2. Improve Safety and Design of Trail Through Neighborhoods

Between Kendal and Kingsland Point Park, RiverWalk runs along local roads for about a mile through the Sleepy Hollow Manor and Philipse Manor neighborhoods. This portion of trail includes the parking lot of the Philipse Manor train station and a small waterfront green, Peabody Field. One area of particular concern to neighbors is Kelbourne Ave., which descends toward the train station at a steep slope and hard angle. The road also is narrow, with no margin for bikes and pedestrians to share the road safely. The trail through this area has great potential both as a neighborhood asset and a commuter route, but the current "trail" is simply a walk on the road with no signage, route delineation, or separation from other modes of travel. One off-street section in the Peabody Field area is a cement sidewalk in a general state of disrepair that dead-ends into shrubbery. Updating, ensuring continuity, and clearly delineating the trail in this area will help highlight the asset and increase its user-friendliness.



BEFORE

RiverWalk is an old and cracked cement sidewalk that dead-ends into shrubbery.



AFTER

RiverWalk is improved to standard, with a planted median creating separation between trail-users and higher-speed cyclists and cars on the road.

ZONE 3: KINGSLAND POINT

3. Advance Trail Through Unified Approach to Park Design and Implementation

The preferred implementation of RiverWalk through the park includes three distinct trail profile types, from a more rural path to an urban esplanade. Westchester County, the Edge-on-Hudson developer, the Village of Sleepy Hollow, and the Friends of Kingsland Point Park have been collaborating to develop a strategy for implementing a unified park design that would incorporate an upgraded Kingsland Point Park, stronger connections to Devries Park, and a seamless transition to the waterfront park to be created as part of the Edge-on-Hudson development. The vision is to have three contiguous parks that function as a single park, with complementary programming, common landscape elements, and strong connections and navigation. Project priorities at a very high level, as identified to date (and understanding they might evolve as discussions move ahead), include:

- Better use and programming at the RiverWalk Center, maximizing the presence of the historic beach and water access;
- Restore or replace the historic iron pedestrian bridge behind the RiverWalk Center crossing the railroad tracks to Devries Park;
- Updating and upgrading Kingsland Point Park;
- Repairing the sea wall;
- Upgrading RiverWalk to design standard throughout the entire area; and
- Habitat restoration in the Pocantico River corridor.

ZONE 4: TARRYTOWN STATION AREA

4. Ensure RiverWalk is Implemented in Remaining Two Parcels

The trail through this section of the two villages is in the area of Tarrytown train station, the subject of numerous high-density transit-oriented residential developments in recent years. Each is providing a section of RiverWalk, located between the buildings and river, designed to complement the development it fronts. The final two incomplete trail sections will be completed as the two major development projects advance. The former GM site redevelopment will relocate the Village of Sleepy Hollow DPW to the "east parcel," freeing up its location along the waterfront for uses that will include RiverWalk. Similarly, the New NY Bridge staging area will be cleared and RiverWalk installed after construction wraps, currently anticipated in 2018.

ZONE 5: LEDGE TRAIL

5. Implement RiverWalk under the New NY Bridge

The New NY Bridge project has reserved an easement that can help advance the location and construction of RiverWalk in the area of the new bridge. The area under and around the bridge is highly constrained with steep slopes, homeland security concerns, Metro-North tracks and buffers, and the river. The lack of flat land along the shore coupled with the steep grade will make the routing and construction of the trail more complicated and costly than in a flatter section like Kingsland Point Park. A working group has begun meeting to help identify and assess the feasibility of potential trail routes through this section. Once complete, this will close a long-standing gap in RiverWalk, greatly advancing the vision for a continuous trail throughout the county.

ZONE 6: RURAL HISTORIC

6. Implement Trail Connection from Lyndhurst to Sunnyside

Westchester County's planned trail projects will close a current gap between the notable historic properties of Sunnyside and Lyndhurst. The committee should work with the county to support the implementation of this project through grant applications in collaboration with Historic Hudson Valley.



Westchester County's planned reactivation of its parkland between Lyndhurst and Sunnyside will provide an important Riverwalk connection between Sunnyside and Lyndhurst.

3. SUPPORT AND HIGHLIGHT OLD CROTON AQUEDUCT AS REGIONAL LINEAR PARK ASSET



The Old Croton Aqueduct offers history and nature to its users, even in fairly dense village centers.

ABOUT THE OLD CROTON AQUEDUCT

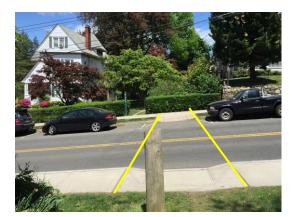
The Old Croton Aqueduct (OCA) is a trail running atop the aqueduct that once brought water to New York City. While the trail has existed for 165 years, the land and structures in the trail corridor between Croton Gorge Park and the Yonkers-New York City line (26.2 miles) was purchased by New York State in 1968 as Old Croton Aqueduct State Historic Park. This state park traverses 14 communities, passing through rural landscapes and village centers.

Approximately 6.5 miles of the Old Croton Aqueduct State Historic Park run through Tarrytown and Sleepy Hollow, including very rural areas such as Rockefeller State Park Preserve; downtown neighborhoods of the two villages; and across major roadways like the intersection of Route 119, Interstate 87, and Route 9/Broadway. This varied terrain poses a number of physical as well as management challenges. Some of those challenges, and the suggested recommendations for resolving them, are discussed below.

RECOMMENDATIONS

1. Implement Local Policies to Support Old Croton Aqueduct

While the Old Croton Aqueduct is a state park, the fact that it traverses such a long stretch, including through or near town and village centers, means there are opportunities for use and traffic conflicts. Local municipalities have a number of tools at their disposal that can help support and highlight the state park as an asset to their community and the larger region.





This

Not this!

a) Improve Trail's Road Crossings and Keep Route Clear

Through village areas, there are some side streets (left photo) where parking curb cuts allow people using the OCA to ride smoothly across the street. These curb cuts, with no parking allowed in front, make it clear where the trail is. In other areas, however, there are no curb cuts or parking limit, essentially blocking the trail and creating a disjointed experience for its users. These low-cost modifications can be implemented over time to help make the trail safer and easier to use. Communities also could consider adding crosswalks between the curb cuts to further highlight the route and make drivers more aware of increased pedestrian/bike traffic.



Dumping (yard waste and trash)



Encroachment

b) Enforce Rules on Dumping and Encroachment

There are consistent problems with dumping and encroachment in the state park. Homeowners adjacent to the trail route sometimes install gardens, shrubs, fencing, and even structures in the trail route. The state then must spend sparse assets to address these problem spots, diluting staff and project resources better invested elsewhere in the park. Local municipalities can help with this through code enforcement and site plan review processes of their Planning Boards.

In addition, dumping is a frequent issue. While typically yard waste, it again adds work and dilutes state resources for maintaining and improving the park. This is another enforcement issue that can be better integrated in local practice through an administrative policy and collaboration with village staff that provides state trail workers with a clear way to report problems to the municipality. With consistent enforcement, these types of infractions should diminish over time.

c) Integrate the OCA into Local Plans

Another way to advance public awareness and enjoyment of the OCA is by ensuring it is well linked to other developed and natural areas. This can be achieved in the long term by ensuring the OCA and its management priorities are appropriately reflected in local plans, such as a parks and open space plan or comprehensive master plan. This will set the foundation for a municipality to be an active partner with the state in highlighting and maintaining this great asset.

4. HIGHLIGHT THE HUDSON RIVER GREENWAY WATER TRAIL



Horan's Landing (center) is currently the only stop on the Hudson River Greenway Water Trail in the two-village area.

THE HUDSON RIVER GREENWAY WATER TRAIL

The Hudson River Valley Greenway began planning a small-boat water trail along portions of the lower Hudson River in 1994. On Earth Day 2001, a \$1 million grant enabled it to establish a Hudson River Greenway Water Trail. Today, the Water Trail has northern starts in the Town of Hadley (Saratoga County) in the Adirondack Park on the west side of the river and the Village of Whitehall in northern Washington County at the head of Lake Champlain. The southern end of the trail is Battery Park in Manhattan. All in all, the trail encompasses "256 miles of New York's famed waters, from the bucolic Champlain Canal to the turbulent white water of the upper Hudson River, and ending up in the majesty of the Hudson River Estuary." While open to all boaters, the Water Trail is particularly geared toward kayakers and canoeists who might make multi-day excursions and enjoy stops along the shore.

The only stop currently listed in the two-village area is Horan's Landing (pictured above) in Sleepy Hollow. It includes a small beach area and grassy park. Paddlers stopping here have no place to park their canoe or kayak and little guidance on nearby sites and attractions.

RECOMMENDATIONS

1. Increase the User-Friendliness of Horan's Landing for Canoes and Kayaks

Horan's Landing offers visitors a sandy beach and lawn area. However, with a primary audience of canoers and kayakers, there is currently no racks to store one's boat safely and go explore the community. Signage helping to promote nearby destinations also would enhance the visitor experience; if specifically addressing Water Trail users, they would simultaneously promote this trail as an activity. The signs can be incorporated into a comprehensive wayfinding program for the two villages (see Initiative 10: Package and Promote Trails and Community Destinations for All to Enjoy).

2. Identify and Improve New Landing Sites for the Water Trail in the Two Villages

As waterfront areas are developed or redeveloped, whether as mixed-use areas with active waterfront uses or community park spaces, consideration should be given to whether they can add new stops within the two villages. Additionally, Lyndhurst, with its long waterfront that includes land west of the tracks, could provide a direct link to its trails, historic buildings, and publicly accessible grounds.

5. WALKABLE AND BIKEABLE DOWNTOWNS



Active downtowns offer a variety of storefronts, indoor-outdoor spaces, and activities to make for a lively community economic, civic, and social center.

WHAT MAKES A PLACE WALKABLE AND BIKEABLE?

"Walkability" and "bikeability" are all about making an area friendly to pedestrians or cyclists. It is, in essence, bringing community and transportation design back to its roots by thinking about movement in modes other than cars. From the pedestrian's perspective, walk-friendly places offer a highly textured, visual, and engaging space. Active storefronts entice pedestrians, trees give them shelter, on-street parking protects them from moving vehicles, and street furniture lets them rest, while nearby offices or residences provide activity throughout the day. These and other elements combine to produce an enjoyable and attractive pedestrian environment that encourage people to come, linger, and return.

As such, walkability is the key to any successful, vibrant downtown or village center. We can make a community more walkable by leveling sidewalks, planting shade trees, and installing good lighting. But it is equally important to limit curb cuts, visible parking lots, and boarded-up storefronts—elements that discourage pedestrians from exploring an area. The name of the game is diversity, visual interest, and connection.

On top of that, we add bikability, which shifts the perspective to that of the cyclist. A focus here is on safety of the route and infrastructure to support biking, including ample bike racks, bike lanes, and share the road signs. Communities have been rapidly advancing the transportation accommodations to make it safer and easier to bike in congested areas as a primary mode of transportation.

WALKABILITY AUDIT

In September 2015, volunteers from both villages participated in a walkability audit of routes identified in a previous workshop as priority walk or bike routes. Using an audit tool and route map, teams walked each section of road and noted the quality and condition of pedestrian and bike routes and amenities. The methodology, findings, and recommendations of this audit effort are contained in Appendix III. This also incorporates findings of an earlier audit effort of the Tarrytown Environmental Advisory Council.

RECOMMENDATIONS

1. Pedestrian and Bike Enhancements in Core Business Districts

The two core business districts are important areas for community investment. A quality pedestrian and bike environment promotes and sustains activity and visitation to shops and businesses. In Tarrytown, a recent intersection improvement was the latest in a gradual program facilitating pedestrian movement. A few recommendations for completing the package to optimal standards is contained in Appendix III.

In Sleepy Hollow, the business district lacks the range and number of amenities of its Tarrytown counterpart. The Cortlandt-Valley corridors offer interesting ethnic options in an emerging district that could be very promising and unique in the two-village area and beyond. Making this area more interactive and comfortable for pedestrians will support the district's evolution. See Appendix III for detailed recommendations.

2. Prioritize Bike and Pedestrian Improvements to Downtown Civic Sites, Especially Schools

There are a number of schools, churches, and civic sites, such as Sleepy Hollow Village Hall and the library, located along or very near Route 9/Broadway. This busy road has seen recent improvements but a few trouble spots still exist. Of highest priority are improvements near schools, which generate daily traffic and safety concerns along Broadway south of Beekman. North of Beekman, a short business district connects downtown and major village destinations (Sleepy Hollow Cemetery and Philipsburg Manor), but the crossings between the two are challenging. A list of recommendations for these two districts is contained in Appendix III.

3. Incorporate Multi-Modal Improvements into Annual Village Budget and Work Plans

Appendix C contains the entire list of findings from the September 2015 walkability audit. It is advised, through the two recommendations above, that the two villages prioritize making improvements in their respective business districts and mixed civic zones before addressing concerns in the village core neighborhoods. All of the improvements should be gradually implemented within a five-year timeframe by using a combination of annual department budgets (e.g., DPW) for smaller items, special grant-based initiatives where possible to augment village budgets, and Capital Improvement Plans for any larger-scale needs. Annually, the list of projects should be clearly laid out and reported on to the community at the end of the year to ensure work is progressing according to schedule.

4. Complete Streets Policy

The Village of Tarrytown passed a local complete streets policy in 2014. The Sleepy Hollow Environmental Advisory Council has drafted a policy for the village, the adoption of which should be a near-term action item to lend support to development review negotiations, downtown walkability improvements, safe routes to school enhancements, as well as a general statement on the part of the village in support of multi-modal opportunities.

5. Conduct Additional Walkability Audits to Improve Conditions Community-Wide

At or near the end of five years, walkability audits could be conducted again in the same geographies to assess any changed conditions (e.g., trees that have died, sidewalks corroded by salt) that might be addressed or new best practices that could be incorporated in the following year(s) as funding allows. Also, while the walkability audit work of this planning effort focused in and around the downtown, other areas are also deserving of attention. Additional areas can be identified for survey and improvements; Appendix D provides valuable input on other areas of concern as a starting point.

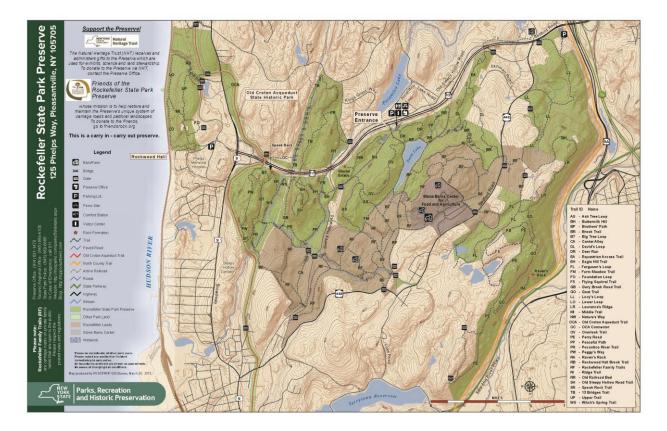
6. LINK AND ENJOY ROCKEFELLER STATE PARK PRESERVE



Rockefeller State Park Preserve, which includes the foundation of Rockwood Hall (far right) with its stunning views of the Hudson River, offers over 30 miles of carriage roads and a network of foot trails.

A HISTORIC LANDSCAPE

Rockefeller State Park Preserve was created by the Rockefeller family in 1983. Over the last 30 years, the family has donated more than 1,400 acres of its original 3,000-acre Pocantico Hills estate. Designed by John D. Rockefeller Jr. and based on the philosophy of Frederick Law Olmsted, the landscape features more than 55 miles of carriage trails, 33 bridges, and a 22-acre lake. The park wraps around the family's historic home of Kykuit, operated by Historic Hudson Valley, and the 94-acre farm surrounding the Stone Barns Center for Food and Agriculture.



Rockwood Hall, in the northwest corner of the preserve, is one of the country's premiere designed landscapes. Once the home of John D. Rockefeller's brother, William, the estate featured a 204-room mansion on an 88-acre landscape designed by Frederick Law Olmsted. After William's death, the property was turned into a golf course and country club. The Rockefeller family repurchased it in 1936 and tore down the mansion in the 1940s after a fire. The family began leasing the property to the state as a park in the 1970s, and added the estate to Rockefeller State Park Preserve in 1998. The former home's three-and-a-half foot-thick foundations are still visible; and the site provides a commanding view of the Hudson River.

Rockwood Hall is separated from the bulk of the preserve by Route 9, although a narrow connection of land with the Old Croton Aqueduct makes a pedestrian connection and Route 117 a driving connection that offers parking just before entry into the Phelps Memorial Hospital campus. Route 117 is a state highway along the northern edge of the preserve. This highway originally ran along New Bedford Road, currently NY 448, and carried a high volume of cars (more than 5,000 per day) past Kykuit. In 1965, Governor Nelson Rockefeller unveiled plans to move the highway to its current location north of the estate. Completed in 1971, the road was designed larger than necessary to accommodate future development and ensure traffic near the family home remained minimal. Planned or expected developments never materialized and the road maintains a light traffic load today relative to its size.

RECOMMENDATIONS

1. Route 9 Pedestrian Crossing Safety Improvements Near Old Dutch Church

Route 9, with its heavy traffic volume and width, serves as a barrier to pedestrian traffic from adjacent neighborhoods into the cemetery, a popular walking and jogging destination, and the access gate to the Old Croton Aqueduct and Rockefeller Park preserve at the eastern edge of the cemetery. Both the cemetery and preserve are open sunrise to sunset. This intersection by the Old Dutch Church, which involves the convergence of eight roads and drives including those to Philipsburg Manor and the Sleepy Hollow Cemetery, is locally notorious as a poor area for pedestrian safety. Its prominent location in the center of many of Sleepy Hollow's tourism destinations and resulting high pedestrian traffic raises the level of priority for safety improvements.

2. Route 9 Pedestrian Crossing Safety Improvements Near Phelps Hospital

The easiest access point from the Sleepy Hollow Manor neighborhood is via Hemlock Drive just south of Phelps Drive, which is signalized. There is currently no crosswalk across Route 9 in this area. A crossing at the light would be preferred from a safety perspective but would require a sidewalk connection on the side of Route 9. Once across, a very short new trail segment would connect residents and hospital staff to the Old Croton Aqueduct and other trails in Rockefeller Park Preserve.

3. Bicycle Improvements to Route 117

Route 117 is a major cycling connection between RiverWalk, Old Croton Aqueduct, and the North/South County Trailway. It also connects Sleepy Hollow and Rockwood Hall to Rockefeller State Park Preserve and the Pace University-Pleasantville Campus. In the preserve, an interconnected network of hiking trails and carriage routes provide complementary connections for pedestrians.

Route 117 should be modified to accommodate bicycle traffic more safely and formally. The width of the road and relatively gentle grade already make it a popular route for cyclists. Repaving and marking buffered shared-use lanes on the existing shoulders would make it even friendlier for commuters, students, and recreational riders. Paint and appropriate signage would clearly delineate the shared-use path and remind motorists to watch for cyclists, but would still allow drivers to use the lane as a pull-off in case of emergency.

<u>Before:</u> A wide parkway-style road with two lanes and underutilized shoulder area.



<u>After:</u> A painted shoulder creates a clear space for cyclists. Median plantings enhance the parkway concept.



4. Invasive Vegetation Management

Trails are especially vulnerable to invasive vegetation because they are often along boundary areas or cut through natural habitats, creating the "edge" condition in which invasives thrive. The Office of Parks, Recreation and Historic Preservation has noted particular concern along carriage trails within Rockefeller State Park Preserve, and the Friends of Kingsland Point Park have been actively trying to restore and maintain natural habitat along the Pocantico River in the face of aggressive invasive vegetation. This shared problem could yield collaborative solutions through co-sponsored community education events to reduce the use of invasives in home landscaping, special volunteer days to conduct plant removal in specific locations, and joint pursuit of grant funding to support remediation and maintenance campaigns.

7. KENSICO-TARRYTOWN LAKES TRAIL



ABOUT THE KENSICO-TARRYTOWN LAKES TRAIL

The Westchester County Department of Planning is developing the Tarrytown-Kensico Trailway/Bikeway (TKTB), a trail that would run from Old Croton Aqueduct in Sleepy Hollow east to the Bronx River Parkway Reservation Pathway in Valhalla. The TKTB would create an east-west link between the Old Croton Aqueduct Trailway, the North/South County Trailway, and the Bronx River Parkway Reservation Trailway. It also would provide pedestrian/bicycle access among major employment, educational, and recreational facilities, including Sleepy Hollow High School, Regeneron, Home Depot, the Valhalla Campus at Grasslands Reservation (home to a number of Westchester County government facilities, the Westchester Medical Center, and New York Medical College), Cross Westchester Executive Park, Westchester Community College, and Kensico Dam Plaza Park.

This connection could be made by connecting north from Neperan Road up Broadway to Beekman Avenue, the recommended continuation for pedestrians coming from the Tarrytown Lakes Trail at Sleepy Hollow High School. Once there, the trail ultimately could connect via local streets to RiverWalk and the waterfront.

RECOMMENDATION

1. Create an On-Road Bike Connection Down Neperan Road and McKeel Avenue

Within the two villages, this trail is effectively complete as the Kensico-Tarrytown Lakes Trail. However, due to the pedestrian-only section of trail from the lakes to the high school, a bike connection to Route 9 is needed to fully complete the proposed route for all intended users. Adding bike lanes along Neperan Road and McKeel Avenue would successfully bring cyclists east to the Old Croton Aqueduct and Route 9, completing implementation of this trail in the two villages.

8. BRIDGE AREA TRAIL CONNECTIONS



The New NY Bridge shared-use path (left) will having a parking area on Route 9 just north of I-287 from which it will be easy to link to the designated on-street bike routes of Routes 9 and 119 (center), the Old Croton Aqueduct (right), and Riverwalk.

BRIDGE SHARED-USE PATH

The new bridge will include a shared-use path with six belvederes (resting areas) across the northern face of its three-mile span. Parking areas are being planned on both sides of the river for people visiting the bridge as a cyclist or pedestrian. On the east side of the bridge, the trail landing is within close proximity of four other trails: bike Route 9, bike route 119, the Old Croton Aqueduct, and RiverWalk.

Bike Route 9

Route 9 is an important connection from the bridge area to the village downtowns. While a designated bike route, heavy traffic volumes combined with a narrow roadway make it less than optimal and anecdotal evidence suggests local cyclists prefer to stay on calmer parallel routes in the denser areas of the villages. From a pedestrian perspective, there are continuous sidewalks to make the connection, providing wayfinding helps people navigate to the business districts and other sites (see initiative area 10). For recommendations on general bike and pedestrian improvements in the village cores, see initiative area 5 of this strategy.

Bike Route 119

The Route 119 corridor provides a major connection between numerous commuter routes to White Plains and New York City, including intersections with I-287/Tappan Zee Bridge, Route 9/Broadway, Saw Mill River Parkway, Sprain Brook Parkway, and Taconic State Parkway. It is also a commuting destination, with several major employers and hotels located along the 3.5-mile stretch from Route 9/Broadway to the North-South County Trailways. Bike lanes on Route 119 would also complete a recreation cycling loop that includes the North-South County Trailway, Route 117, and RiverWalk/Old Croton Aqueduct/Route 9.

Old Croton Aqueduct

The Old Croton Aqueduct experiences a large break in this section where the route was barred in the construction of I-287. Travelers on the OCA must therefore navigate a go-around, which typically includes walking along Route 9 although the Friends of the Old Croton Aqueduct have worked to route people on side roads for a longer but quieter connection. Intersection improvements following the bridge completion could have a significant positive impact on pedestrian movement and OCA connectivity in this area.

RiverWalk

The long-term goal of having a continuous Westchester County RiverWalk includes the completion of the portion of that trail under the bridge to connect the current trail ends at Van Wart Avenue south of the bridge and Losee Park north of the bridge. A trail connection from the parking area of the bridge shareduse path to RiverWalk would improve the accessibility and options on both trails and enhance riverfront recreation in the two communities and larger region. Preliminary discussions with the Thruway Authority indicate there is a right-of-way that could potentially accommodate this connection but that idea needs to be advanced as part of bridge-related trail connections (this section) and planning and feasibility work related to RiverWalk (initiative area 1).

RECOMMENDATION

1. Ensure Trail Connections at Bridge Landing are Made Post-Construction

A post-construction phase of the New NY Bridge project includes the reorganization of the intersection area at the eastern landing of the bridge. The landing area includes the important junction between the new shared-use path over the bridge, RiverWalk under the bridge, Old Croton Aqueduct, Bike Route 9, and Bike Route 119. As this area is reconfigured, it will be important to advance better trail routing and signing, bike and pedestrian improvements, and add connections where they are missing, such as the connection from the shared-use path parking area to RiverWalk.

2. Implement Designated Bike Lanes Along Route 119

Route 119 provides a potentially important multi-modal connection between the new shared-use path over the New NY Bridge and the North-South County Trailway, as well as RiverWalk, Bike Route 9, and the Old Croton Aqueduct in between. The overall corridor environment is currently auto-focused, including a lack of bike lanes, sidewalks that are not detached, multiple curb cuts, unmaintained landscaping, and some poorly designed crossings. A number of complete-streets improvements and the addition of bike lanes would make the corridor more attractive to non-auto traffic. Landscaping and other aesthetic improvements also would provide an enhanced community gateway.

9. MAKING THE CONNECTION: PRIORITY LOCAL TRAIL PROJECTS



Local trails that link neighborhoods to parks, transit stops, schools, and downtowns are important components of a larger multi-modal system.

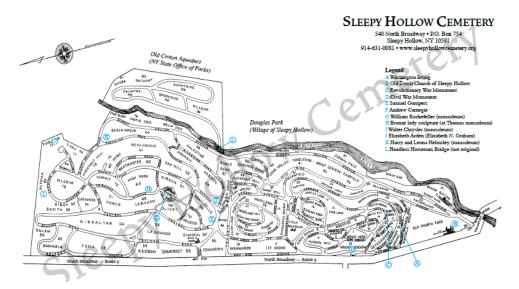
While regional trails represent major pedestrian-bike infrastructure assets, local connections between them and other community destinations are essential to a complete multi-modal transportation system. The following section introduces important local routes and walkable landscapes and makes recommendations for two new connections.

LOCAL PATHS ON HISTORIC GROUNDS

In addition to Rockefeller State Park Preserve, Rockwood Hall, and Old Croton Aqueduct, which are themselves historic landscapes with walking paths, there are a number of popular historic grounds that, while not publicly owned, are free and open to the public and serve as popular recreation destinations for residents.

SLEEPY HOLLOW CEMETERY

Listed on the National Register of Historic Places, Sleepy Hollow Cemetery is a major destination within the region for tourists who visit independently or come to enjoy one of the cemetery's many group walking tours. While privately owned and operated, general admission is free and the cemetery is open daily from 8:00-4:30 M-F and 8:30-4:30 on weekends. Given its many winding, low-traffic roads, the 90-acre cemetery is a popular destination for locals to walk or run - as well as to connect to the Old Croton Aqueduct and Rockefeller State Park Preserve through a shared gate on its eastern edge.



The cemetery produces a map to enable self-guided tours to 12 of its most prominent or popular features, including Washington Irving's grave and the Headless Horseman Bridge.

Concerns to Monitor:

The open access and popularity of the site within the community means the opportunity for "bad neighbor" behaviors is high. Frequent maintenance challenges for the cemetery include after-hours trespassing and vandalism, adjacent neighbors damaging fences to create personal access points from their yards, and dog walkers not cleaning up and disposing of waste.

LYNDHURST

This 67-acre estate was continuously occupied by private owners until 1961, when it was turned over to the National Trust for Historic Preservation. In addition to the Gothic Revival mansion, the grounds and associated lifestyle structures generate their own draw. The extensive greenhouse remains largely intact and serves as a special events venue. Adjacent gardens are maintained; they are a popular walking and picnic destination. The historic bowling alley nearer the river was recently restored and will soon be better connected to the main house as historic paths are restored according to original landscape plans. The property also creates a link between the RiverWalk and Old Croton Aqueduct. A short trip south on the OCA/Riverwalk where they coincide leads to another key historic site: Sunnyside, home of Washington Irving.



Lyndhurst mansion rests on a 67-acre waterfront parcel on the Hudson's eastern shore. The grounds offer spectacular views of the river, Tappan Zee Bridge, and Manhattan skyline.

TRAILS UNDER CONSTRUCTION

GRACEMERE TRAIL

The Gracemere Trail creates a pedestrian link to Taxter Ridge from either a small parking area on Route 9 or via the Old Croton Aqueduct. The trail is fully designed and funded. Once complete, it will create better access to Taxter Ridge Preserve, the 190-acre park jointly owned by New York State, Westchester County and the Town of Greenburgh. The preserve offers 2.3 miles of trails past old growth forest, streams, and wetlands.

RECOMMENDATIONS

1. Implement Tarrytown Station Commute Route

Tarrytown's new station area plan identifies a commuter route from the planned Edge-on-Hudson development in Sleepy Hollow and other recent waterfront residential and mixed-use developments to the Tarrytown train station. A comfortable and direct route that encourages commuters to walk or bike rather than drive is essential to long-term traffic, air quality, and parking considerations. For more information on this trail, the proposed route, and implementation recommendations, see the Tarrytown station area plan.



The figure above shows the conceptual course for the commute route that will channel bike and pedestrian commuters from waterfront developments (approximately 1,600 housing units in total) to the Tarrytown train station.

2. Formalize and Connect Headless Horseman Trail

The Headless Horseman Trail links Devries Park to downtown Sleepy Hollow and the neighborhoods west of Broadway. This trail has been blazed and reblazed over the years but has suffered from invasive species growth, flooding, and issues of property access that have rendered it unusable. The creation of a unified waterfront park in the area of the Edge-on-Hudson development and Kingsland Point Park combined with habitat improvement plans for the Pocantico River create opportunities for new collaboration to make this trail happen. Making this possible will require both improving the trail and reaching an agreement with Historic Hudson Valley to enable access through the gates of Philipsburg Manor. The village, Friends of Kingsland Point Park, and the Trail Committee should together initiate a discussion with Historic Hudson Valley on site access and collaboratively improving the trail for year-round access.



The Headless Horseman Trail will create a strong pedestrian link between Sleepy Hollow's commercial core and its major parks and waterfront.

10. PACKAGE AND PROMOTE TRAILS AND COMMUNITY DESTINATIONS FOR ALL TO ENJOY



A comprehensive wayfinding system, like that developed for RiverWalk (center), can help direct visitors and newcomers around the community – to its parks, cultural sites such as Kykuit (left) and Sunnyside (right), civic buildings, and downtown business districts.

TOURISM AND QUALITY OF LIFE

Many of the projects, initiatives, and recommendations in this document focus on increasing tourism and improving quality of life. Packaging and promoting trails and community destinations will leverage these improvements to support local businesses and cultural destinations. Comprehensive branding, wayfinding, and advertising will help to elevate the region as a destination for tourists, while making it a more attractive and enjoyable place to live for current and future residents.

RECOMMENDATIONS

1. Comprehensive Wayfinding System

The two villages should collaborate with their local Chamber of Commerce and Westchester County Tourism to develop a comprehensive, communitywide wayfinding system. Wayfinding is the term given to the system of maps, signs, and arrows that help someone entering a community - by car, foot, bike, or train - understand where they are, what districts or destinations are nearby, and the easiest route to get from their present location to where they want to go. A well-designed system places signs in locations that are highly visible and at the right intervals to enable someone to keep moving forward comfortably without concern about getting lost. A good wayfinding system makes it easy to navigate a community; in so doing, it makes a positive impression on visitors that the community is pleasant and enjoyable. This can either include or replace existing signs. Typically, a wayfinding system will work to connect destinations with their own internal wayfinding, such as getting someone to RiverWalk and letting the RiverWalk signs pick up the navigation guidance from there. Signs can be replaced or added in cases where there might be individual signs placed in a more haphazard manner and with no unified or systematic design or placement (aka, sign clutter).

2. Local Trail Guide

The two villages should produce a local trail guide as part of their comprehensive wayfinding initiative. Their dense urban form makes for a very walkable environment, but tourists often have little guidance on where to go once they arrive. Having a local trail guide that visitors can pick up at the train station or information kiosks will let them more easily find the best walking and bicycling routes for accessing local points of interest, such as downtown business districts and historic sites. The guide also can highlight how long each route will take, so visitors can fit the walk or ride into their schedules. These hand-held maps will complement the comprehensive wayfinding system and tie into the regional trail network. Various electronic platforms should also be made available.

3. Designate and Promote Local History Trail

Sleepy Hollow and Tarrytown enjoy a plethora of historic sites, ranging in size and often located at key junctures in the regional trail network. While many of these sites have their own individual branding and sophisticated outreach efforts, the villages and these historic areas stand to benefit from an integrated branding, wayfinding, and marketing effort that highlights the region's historical significance as a whole, and clearly indicates how the trail network links notable sites together.

One approach would be to create a History Trail. This trail would utilize existing and planned routes such as RiverWalk and the Headless Horseman Trail - to link historic sites for cyclists and pedestrians. This trail would be clearly marked on community wayfinding signs for visitors, and would be a prominent feature in the village's tourism advertising. The operators of the historic sites could partner with regional organizations - such as Westchester County Tourism - to create a shared smart phone app that would give users information on each site and other points of interest as they travel along the trail. Part 1: Initiatives to Implement

PART 2: STRATEGY FOR SUCCESSFUL IMPLEMENTATION

Part 2 provides guidance on how the recommendations can be implemented over time. This includes notes on potential coalitions, funding sources, and timing. Priorities established in the plan were set by the steering committee and confirmed with the public in an online survey.

Who will implement the plan?

Implementation of the recommendations in this document will be achieved through active participation and leadership by a wide array of public, private, and non-profit entities in the region. Entities currently working to create, maintain, and promote park, trail, and recreational opportunities in the two villages are listed below. However, this is not an exhaustive list, and it should grow and change over time as need, interest, and opportunity dictate.

STATE

Office of Parks, Recreation and Historic Preservation (OPRHP)

OPRHP owns and operates the Old Croton Aqueduct State Park and Rockefeller State Park Preserve. Staff maintain and improve each park with annual operating budgets and partner on special initiatives as necessary.

NYS THRUWAY AUTHORITY

The NYS Thruway is overseeing construction of the New NY Bridge, which will feature a new, shared-use path across its three-mile span. The Thruway Authority has done considerable work on, and plans some investment in, parking and access improvements on either side of the bridge to help people access the new trail safely.

NYS DEPARTMENT OF TRANSPORTATION (DOT)

The DOT is in charge of maintenance and improvement of major roads in the project area, including Route 9/Broadway, Route 117, and Route 119. The DOT is an important partner in any improvements to streets, intersections, crossings, signage, or any other changes within their rights-of-way.

REGIONAL

WESTCHESTER COUNTY

Westchester County owns Kingsland Point Park and directs investment toward its maintenance through the Parks and Recreation Department. In addition, the county is a principal driver of RiverWalk implementation through its Department of Planning, which also is leading the charge on the Kensico-Tarrytown Trail.

FRIENDS OF WESTCHESTER COUNTY PARKS

This friends group brings resources to the table to help maintain and enhance parks and trails in the county. First, it helps fundraise for special projects as needed, which can be useful in gathering the match needed to pursue grant money. Second, it organizes volunteers for special projects such as trail maintenance on a limited-term (e.g., 1-2 day cleanup event) basis. Finally, it helps share information between municipalities and trail groups on what trails are available for use or in some stage of planning, as well as with the public via mobile apps and maps.

FRIENDS OF OLD CROTON AQUEDUCT

This friends group, one of the oldest in the state, was formed to preserve the Old Croton Aqueduct and secure resources to enable this historic greenway to remain unspoiled in perpetuity. The Friends have a successful track record partnering with State Parks, and providing maps and wayfinding, organizing volunteer trail maintenance and restoring the Keeper's House as a visitor center.

LOCAL

VILLAGES OF TARRYTOWN AND SLEEPY HOLLOW

Between staff, committees, and elected officials, there are several roles villages play as implementation partners. The mayors and village boards set policies, work programs, and department budgets; planning boards make decisions and craft policy to support the creation or completion of trail routes and strong pedestrian and bike environments in new developments; and the Environmental Advocacy Councils (EACs) work on various environmental issues, including transportation choice as a means of reducing energy use and climate emissions.

FRIENDS OF KINGSLAND POINT PARK

This friends group helps maintain Kingsland Point and DeVries parks and will be an active partner in any improvements, including the addition or enhancement of trails in the parks such as RiverWalk and the Headless Horseman Trail.

GREATER SLEEPY HOLLOW AND TARRYTOWN CHAMBER OF COMMERCE

This membership organization works to promote local businesses to residents and visitors through events and various marketing platforms.

NATIONAL TRUST FOR HISTORIC PRESERVATION (LYNDHURST)

Lyndhurst, a historic property of 67 acres, is also a point of connection for the Old Croton Aqueduct and RiverWalk, which cross the property and join as they head toward Sunnyside. In addition to these regional trails, the property has spectacular river views, a historic landscape with its own trails, and could provide a potential landing site for the Hudson River Greenway Water Trail.

OTHER INVOLVED PARTIES

There is unlimited potential for the types of groups and collaborations that can help implement the plan by organizing events, participating in public meetings, sitting on committees, fundraising and grant writing, volunteer days, or enabling access. This includes neighborhood groups like Philipsburg Manor and Sleepy Hollow Manor neighborhood associations, property owners like Historic Hudson Valley, Metro-North Railroad, Sleepy Hollow Cemetery Association, and Scenic Hudson, as well as a whole array of civic groups. VFW, Elks, senior centers, youth organizations, local schools and the like each have the potential to help champion an initiative. Private developers like those currently engaged in waterfront development or redevelopment projects are also potentially significant partners in achieving some of the recommendations. The final stakeholder group that should be involved early in any process are permitting agencies, which could involve DEC, DOS, and others, depending on the site. Understanding potential interested parties early in the process and having initial conversation before plans get too far along is strongly advised.

How will implementation be financed?

STATE GRANTS

CONSOLIDATED FUNDING APPLICATION

State grants are awarded on a competitive basis and generally require at least a 50% match in cash or inkind contributions, though this varies by program. The majority of grants in New York State are awarded through the annual Consolidated Funding Application (CFA) process. Some grants commonly used for trail planning and implementation of park and open space enhancements include:

- OPRHP Environmental Protection Fund (EPF)
- OPRHP Recreational Trails Program (RTP)
- DOS Local Waterfront Revitalization Program (LWRP)
- Empire State Development (ESD and Market NY)
- DEC Hudson River Estuary Program (HREP)

HUDSON RIVER VALLEY GREENWAY GRANTS

The Hudson River Valley Greenway works to advance projects consistent with the vision for the Hudson River Valley National Heritage Area, notably the creation of a continuous greenway trail from the federal dam in Troy to New York City. To support this, it offers small, 50/50 matching grants to municipalities and not-for-profit groups to plan and implement sections of Greenway Trail, interpretive signage, and other eligible projects. These have proven very useful seed capital to organize and plan trail projects to a point that they can be more competitive in applying for larger state grants.

OTHER AVENUES TO EXPLORE

While traditionally viewed as parks and recreation projects, planning and implementing trails have begun to align more closely with public health and safety. This opens up new opportunities for partnerships as well as funding sources. Numerous grants are now directed to preventive health measures and projects that promote healthy lifestyles. Initiatives like downtown walking loops, ADA improvements to existing parks or trails, or adding new equipment or features to parks and trails can often look to certain health grants rather than traditional recreation funding pools. Another strong partnership is the focus on safe routes to schools, which have their own designated funding streams

FEDERAL GRANTS

While more competitive than state grants, and typically with heavier administrative burdens, federal grants can be a great opportunity for funding larger projects of regional or statewide significance. Grant programs like Congestion Mitigation and Air Quality Improvement (CMAQ) and Transportation Investment Generating Economic Recovery (TIGER) have helped fund waterfront trails and bike paths elsewhere in the NY Metro area. One administrative benefit is that the federal transportation grant cycle is typically off-cycle with the timing of NYS grant deadlines for the Consolidated Funding Application, which helps disperse the grant-writing burden.

FOUNDATIONS

The Westchester Community Foundation is a local foundation that offers competitive grants to not-forprofit organizations. The parameters of its Environment program grants are consistent with several recommendations of this plan and could be a potential funding source.

PUBLIC SUPPORT FOR PROJECTS OR MATCH

Capital Funds/Annual Budget. In some cases, a municipality, county, or state agency might plan to invest in a project using annual capital budget line items or bonded funds that have been planned for and approved. Westchester County Parks, for example, has budgeted for and bonded money to make a series of improvements in Kingsland Point Park. Similarly, the two villages could identify projects in their budgets and capital plans, such as park improvements, sidewalk repair or expansion, and streetscape improvements. The important aspect of municipal budget money directed toward state grant-eligible projects is that it can be counted as a local match. Most state grants seek at least a 50/50 match share, so municipalities can use state monies to cover half of the total project cost if they successfully apply for a grant.

Community Development Block Grants. Neither village is an entitlement community under the federal CDBG program. Therefore they must compete to receive CDBG monies administered through the NYS Office of Community Renewal. Eligible projects must demonstrate benefit to low- and moderate-income populations (a minimum 70% of funds must go to this purpose). Trail and sidewalk improvements that better link low- and moderate-income neighborhoods to employment opportunities is one example of a potentially eligible activity.

PRIVATE SUPPORT FOR PROJECTS OR MATCH

Depending on the project, there may be individuals or family foundations interested in investing private dollars in an initiative. This may occur in the form of a charitable donation to a not-for-profit organization with terms of restricted use for the project. When possible, this can help leverage grant funds and in-kind contributions to make projects feasible. Public-private partnerships are another vehicle to explore; these will vary based on the project and geography. For example: a hospital may help support efforts that enhance or highlight healthy lifestyle options; major employers may partner on commuter improvements for their workers; or local businesses might donate tools or materials.

IMPLEMENTING THE STRATEGY

The trails strategy contains a number of recommendations, each of which will take time and resources to complete. A recommended approach to phasing out these projects over time was therefore developed through committee discussion, an online public survey, and dialogue with potential implementation partners. The following sections outline this approach in three phases.

Phase 1: Build a Strong Foundation - Leadership, Recognition, and Accountability

Years 1 and 2

This set of actions lays the framework for coordinated action, strengthens access to resources to support later implementation steps, and creates the dedicated leadership structure to oversee successful completion of this strategy's recommendations over time.

ADOPTION AND ENDORSEMENT

Adoption or endorsement of the trail strategy by the two villages is a fundamental step for implementing the plan's concepts. This helps ensure consistency at the policy level and strengthens support for grant writing and match contributions to make projects happen.

INTEGRATE TRAIL STRATEGY RECOMMENDATIONS INTO STRATEGIC PLANS

- **Villages:** Over time, the villages can integrate some of the concepts and recommendations of this strategy into other municipal documents, such as a transportation plan, comprehensive plan, and open space and recreation plan.
- **County:** While efforts were taken in this planning process to ensure recommendations are consistent with county efforts, the county may update its discussion of future planned trails to ensure it is consistent with the priority trails identified in this plan, particularly the regional-level connections.
- **Groups and Organizations:** There are a number of organizations with roles or potential roles in the successful implementation of this strategy. It is recommended that these groups integrate appropriate elements into their own strategic plans or annual goal-setting to institutionalize them into their work.
- **Concurrent Plans:** All efforts were made during the planning process to gather and be consistent with concurrent planning efforts or initiatives. This includes Tarrytown's station area plan, which was under development at the same time as this strategy.

FORM A VILLAGE TRAILS COMMITTEE (1.1)

A shared committee that would work together to advance projects is envisioned. Currently, neither village has a trails committee. As this group would be the primary entity to oversee the implementation of this strategy, its formation is a natural early step. This will require action by both village boards and mayors with the assistance of the village administrators to craft appropriate resolution language and formally name representatives to the committee.

TRAIL SAFETY AND MAINTENANCE PLAN (1.3)

Once the committee is up and running, an initial effort should involve creation of a trail safety and maintenance plan. This was selected as an early item as its intent is to proactively identify and address community concerns and priorities for how trails are created, managed, and maintained to ensure a safe and pleasant environment for all different users as well as adjacent property owners.

COMPLETE STREETS POLICY (5.4)

The Sleepy Hollow Environmental Advisory Committee has drafted a complete streets policy but it is yet to be adopted. It should work with the village administrator and mayor to determine the right policy language and timing for when the policy can be brought forward for action by the village board.

INCORPORATE MULTI-MODAL IMPROVEMENTS INTO ANNUAL VILLAGE BUDGET WORK PLANS (5.3)

The Trails Committee should generate a short list of improvements identified in this plan that could be implemented through annual work plans of village departments. This can then be shared with the village administrators, who can determine the best way to implement operational changes. It is strongly recommended that a means of tracking implementation progress be established and reviewed after the first year to discuss successes as well as unexpected problems to refine an approach for the second year.

Phase 2: Support Successful Completion of Current Projects or Initiatives Years 1-5

Once the Phase 1 actions have taken place to lay the institutional groundwork for initiatives, Phase 2 recommendations should be pursued. These include the completion of projects already underway and fall into three general categories:



- 1. **Support completion or enhancement of RiverWalk:** These three objectives should take little to no project activity from the Trails Committee aside from establishing communications with the project leads to understand the estimated schedule, any formal opportunities for involvement, and if there are ways the committee can support the successful and timely completion of the projects.
- 2. **Enhancing an existing resource**: These are smaller-scale projects that will require shorter implementation timeframes with relatively lower budgets. The Trails Committee might partner with one or more groups with a shared interest in completing a specific project.
- 3. **Initiate new trails/trail sections:** These are larger initiatives that will require multi-year effort to plan, design, and implement trails. As such, the Trails Committee will likely want to form project-specific coalitions to help plan, fund, and manage the work.

Objective	Status	Partners	Potential Funding Sources	Timing
Work with Kendal to Improve Accessibility and Design of RiverWalk Through its Property (2.1)	Trail exists, just needs some improvements to accessibility and user-friendliness	 Kendal Village of Sleepy Hollow Sleepy Hollow Manor Neighborhood Association 	Kendal	2016-2017
ENSURE RIVERWALK IS IMPLEMENTED IN REMAINING TWO PARCELS NEAR STATION AREA (2.4)	Scheduled to occur before construction formally ceases	 Westchester County TZB contractors Village of Tarrytown Waterfront developers 	Private developer Bridge contract?	2018-2019
IMPLEMENT TRAIL CONNECTION FROM LYNDHURST TO SUNNYSIDE (2.6)	Planned but needs to secure funding and continue discussions with HHV	 Westchester County Historic Hudson Valley (Sunnyside) National Trust for Historic Preservation (Lyndhurst) 	Westchester County	2016-2018

SUPPORT COMPLETION OR ENHANCEMENT OF RIVERWALK

ENHANCE AN EXISTING RESOURCE

IMPLEMENT LOCAL POLICIES TO SUPPORT OLD CROTON AQUEDUCT (3.1)

Village administrators should work with the planning boards and Trails Committee to craft policies to bring forward to the village boards for the three topics raised in this plan: local street crossing, encroachment, and illegal dumping.

INCREASE THE USER-FRIENDLINESS OF HORAN'S LANDING FOR CANOES AND KAYAKS (4.1)

The Greenway Water Trail landing site is currently fenced and lacks any boat-storage facility for people to store their vessels while they picnic or explore the shore. Picnic facilities, shade, and community info also would help enliven the space and make it more welcoming. The Trails Committee should work with the village to determine the right "package" of treatments, which could include an opportunity for community input, and then a means of funding the improvements (grant plus required match).

PEDESTRIAN AND BIKE ENHANCEMENTS IN CORE BUSINESS DISTRICTS (5.1)

The Trails Committee should work with the village administration and departments as well as business groups to prioritize the implementation of bike and pedestrian improvements in the core business districts. These areas were assessed as part of the walkability audit. See Appendix C for findings and recommendations. These improvements could be conducted as a special initiative or over time in the annual department budget cycle (see Phase 1 implementation actions, above).

PRIORITIZE MULTI-MODAL IMPROVEMENTS TO DOWNTOWN CIVIC SITES, ESPECIALLY SCHOOLS (5.2)

Improvements to civic sites and schools are a priority due to their community safety role for children and others. For this same reason, these improvements have a number of grant programs geared toward them, such as the Safe Routes to Schools program. Additionally, the Metropolitan Planning Organization (MPO), which oversees transportation funding for the area, or county planning may offer bike and pedestrian services like traffic and pedestrian counts and technical support to help build a case for a stronger grant application. They also may have pedestrian and bike programs that offer bike racks or other amenities free or at a reduced cost. Schools, library associations, and parent groups are potential partners for projects or campaigns, including possible match contributions.

INITIATE NEW TRAILS/TRAIL SECTIONS

Objective	Status	Partners	Potential Funding Sources
IMPLEMENT THE TARRYTOWN STATION COMMUTE ROUTE (9.1)	Trail planning as part of Tarrytown's station area plan, but needs coordination with Sleepy Hollow	 Adjacent property owners/developers Village of Sleepy Hollow Village of Tarrytown 	Developers DPW budget (painting)
Advance Trail Through Unified Approach to Park Design and Implementation (2.3)	Preliminary discussions have occurred between Scenic Hudson, developer, village, Westchester County, and Friends of Kingsland Point Park, with all parties behind the idea in concept. The county has money allocated to the site and agrees in concept to hold off on improvements in order to achieve a more coordinated design	 Village of Sleepy Hollow Edge-on-Hudson developer Westchester County Parks Friends of Kingsland Point Park Scenic Hudson 	Developer Westchester County State EPF grant (OPRHP)
IMPLEMENT RIVERWALK UNDER THE NEW NY BRIDGE (2.5)	Preliminary meetings were held to identify possible routes under the bridge. The possible routes were then run by Thruway Authority staff for homeland security and engineering review. A meeting was held to get MTA/MNR up to speed with the options under consideration. These options now need more engineering feasibility analysis and environmental review to narrow down to one preferred alternative	 Village of Tarrytown NYS Thruway Authority/New NY Bridge staff Westchester County Planning Scenic Hudson 	Westchester County Planning TIGER Grant/CMAQ Grant
CREATE AN ON-ROAD BIKE CONNECTION DOWN NEPERAN ROAD AND MCKEEL AVENUE (7.1)	Trail connection has been identified by Westchester County Planning and Tarrytown Lakes Committee as preferred route for bike connection	Tarrytown Lakes CommitteeVillage of Tarrytown	Village of Tarrytown Multi-modal grant

Phase 3: Organize New Initiatives and Campaigns

Years 3+

New initiatives or campaigns can be organized at any time based on interest and resources. The intent of staging them out is to create a roadmap for the Trails Committee to follow so as to not get overwhelmed by the number of recommendations. Phase 3 items are broken into earlier and later initiatives based on committee input, anticipated level of effort or resources, and how items sequence with work in Phases 1 and 2. In some cases, these items may require years of planning and momentum-building to make happen and so may begin earlier but not be visible for a year or more.

NEARER-TERM

Objective	Potential Partners	Potential Funding Sources
ORGANIZE AND PROMOTE TRAIL- CENTERED COMMUNITY EVENTS (1.2)	• TBD depending on the event. Could also dovetail with existing events like the Circus Latino, Sleepy Hollow Street Fair, summer jazz nights at Lyndhurst, etc.	TBD depending on event Public-private partnerships should be explored
TRAIL-SHARING ETIQUETTE EDUCATION (1.4)	 Bike and running clubs Schools Senior and youth recreation centers Police/traffic safety officer Phelps Memorial Hospital 	Phelps Memorial Hospital (event sponsorship) Public safety grants (refer to Police Departments)
COMPREHENSIVE WAYFINDING SYSTEM (10.1)	 Sleepy Hollow-Tarrytown Chamber Westchester County Tourism Village of Sleepy Hollow Village of Tarrytown Local business groups Historic Hudson Valley Lyndhurst 	ESD Market NYGreenway grant
DESIGNATE AND PROMOTE LOCAL HISTORY TRAIL (10.3)	 Sleepy Hollow-Tarrytown Chamber Westchester County Tourism Village of Sleepy Hollow Village of Tarrytown Local business groups Historic Hudson Valley Lyndhurst 	ESD Market NYGreenway grant
Local Trail Guide (10.2)	 Sleepy Hollow-Tarrytown Chamber Westchester County Tourism Village of Sleepy Hollow Village of Tarrytown Local business groups Historic Hudson Valley Lyndhurst Federated Conservationists of Westchester County 	 ESD Market NY Local business advertisement space on guide to cover cost
IDENTIFY AND IMPROVE NEW LANDING SITES FOR THE WATER TRAIL IN THE TWO VILLAGES (4.2)	 Hudson River Valley Greenway Village of Sleepy Hollow Village of Tarrytown Lyndhurst Edge-on-Hudson Friends of Kingsland Point Park 	Greenway grant
Route 9 Pedestrian Crossing Safety Improvements Near Phelps Hospital (6.2)	 NYS DOT and OPRHP Village of Sleepy Hollow Sleepy Hollow Manor Neighborhood Phelps Hospital 	NYS DOT

Objective	Potential Partners	Potential Funding Sources
Route 9 Pedestrian Safety Crossing Improvements Near Old Dutch Church (6.1)	 NYS DOT Village of Sleepy Hollow Phlipse Manor Neighborhood Association Sleepy Hollow Cemetery Historic Hudson Valley 	NYS DOT
BICYCLE IMPROVEMENTS TO ROUTE 117(6.3)	NYS DOTNYS OPRHPLocal bike groups	NYS DOT
IMPROVE SAFETY AND DESIGN OF THE (RIVERWALK) TRAIL THROUGH THE MANOR NEIGHBORHOODS (2.2)	 Phlipse Manor Neighborhood Association Sleepy Hollow Manor Neighborhood Association Village of Sleepy Hollow Westchester County Planning 	Westchester County Planning (trail) Village of Sleepy Hollow (park improvements) NYS PARKS grant
IMPLEMENT DESIGNATED BIKE LANES ALONG ROUTE 119 (8.1)	NYS DOT	NYS DOT
INVASIVE VEGETATION MANAGEMENT (6.4)	 NY-NJ Trails Conference (Lower Hudson PRISM) Rockefeller State Park Preserve Riverkeeper Pocantico River Watershed Association Pace 	WCF Environment Fund DEC
Formalize and Connect Headless Horseman Trail (9.2)	 Village of Sleepy Hollow Historic Hudson Valley Westchester County Parks East parcel developer 	Village of Sleepy Hollow Historic Hudson Valley EPF grant (OPRHP)
Conduct Additional Walkability Audits to Improve Conditions Community-Wide (5.5)	Trails CommitteeEACs	n/a time and volunteers
Ensure Trail Connections At Bridge Landing are Made Post- Construction (8.1)	 Village of Tarrytown Westchester County Planning NYS DOT NYS Thruway Authority Scenic Hudson NYS OPRHP Friends of Old Croton Aqueduct 	TIGER Grant/CMAQ Grant NYS

LONGER-TERM

Monitoring and Communicating Implementation Success

The Trails Committee should track implementation progress on an annual basis and prepare an annual performance report for each village board and mayor of progress made. This will help ensure the plan is serving its intended purpose as a guidebook for future projects and that items are steadily moving into the "completed" category.

- Select list of priority projects on an annual basis.
- Develop a funding strategy in concert with the villages and other identified partners.
- Develop project timelines for each effort.
- Track progress over time and adjust as necessary.
- Report out successes, challenges, monies raised, total budget.
- Actively look for ways to communicate the benefits of projects to show the compounding benefit. This could include trail counts to show use, and positive changes in value or reduced vacancy rates in adjacent properties.

APPENDIX A: TRAIL STRATEGY STRATEGIC PRIORITIES

Introduction

The villages of Sleepy Hollow and Tarrytown are blessed with three important north-south trending regional trails. Westchester RiverWalk follows the Hudson River shoreline, the Old Croton Aqueduct skirts the business districts of both villages, and the North-South County Trailways span the easternmost areas. Two of these trails, RiverWalk and Old Croton Aqueduct, are interrupted by gaps. Completing these trails and creating east-west connections between them would result in a unified system that could provide transportation, recreation, as well as health and economic development benefits for residents and visitors. The trails are envisioned to become part of the Hudson River Valley Greenway system of land and water trails ultimately connecting New York City and the Saratoga region. The Sleepy Hollow-Tarrytown Trails Strategy identifies needed connections and improvements for a high-quality and easy-to-use trail system in the greater two-village area.

As a first step in identifying connections and system amenity needs, a number of small-group meetings were held to gather information and on-the-ground perspective from a number of organizations, community groups, and public entities actively engaged in trails, mobility, tourism, and environmental interests in the two villages.

This appendix presents 10 strategic priorities identified by the steering committee and community stakeholders. This summary served as a grounding document against which goals and implementation priorities were established.

The 10 priorities summarized in this document are organized into four categories that reflect the scope of the project:

- 1. Greater Edge-on-Hudson Opportunity Area
- 2. New NY Bridge Opportunity Area
- 3. Regional Trails
- 4. Local Linkages

Each of these four categories also contains a map that graphically portrays the locations of problem spots and possible connections as gathered through the outreach process.

Greater Edge-on-Hudson Opportunity Area

PRIORITY 1: LEVERAGE THE GM SITE REDEVELOPMENT TO BUILD A WORLD-CLASS WATERFRONT PARK INCLUSIVE OF ADJACENT PARK AREAS

The redevelopment of the former GM site as Edge-on-Hudson will include the creation of a 10.6- acre waterfront park adjacent to the 23-acre Kingsland Point Park, which is across the railroad tracks from 18-acre Devries Park. The site plan also includes a 100-165 -foot vegetated open space area between the development and Kingsland Point Park. Early conversations with the developer indicate a willingness to engage in a collaborative approach to create a single park design that would include all of this acreage. The goal would be to create a world-class waterfront park offering a range of recreational activities, and coordinated programming, with RiverWalk connected through the entire site.

A park strategy will need to address future programming at key park destinations such as the Kathryn W. Davis RiverWalk Center, Kingsland Point Lighthouse, and the new waterfront interpretive center in the Edge-on-Hudson site plan. In addition, a number of planned or future priority capital projects will need to be accounted for, including replacement of the sea wall, addition of RiverWalk to design guide standards, repair or replacement of the old pedestrian bridge over the tracks to Devries Park, water main repair, and possible circulation improvements via parking and entrance additions or changes.

A working group including representatives from Westchester County Parks, Scenic Hudson, Village of Sleepy Hollow, Friends of Kingsland Point Park, and SunCal met several times to explore a coordinated effort. This conversation should continue to develop a solid path forward for how the park can be designed, implemented, and maintained over the long term to achieve the aspiration of an exceptional and seamless waterfront park.



The most current site plan for Edge-on-Hudson as presented in the Final Environmental Impact Statement is not anticipated to change significantly as the development project moves forward through local reviews and permitting.

PRIORITY 2: ENSURE SITE DESIGN INTEGRATES WELL INTO EXISTING COMMUNITY AND CREATES A COMMUNITY DESTINATION

Community members have expressed an interest in achieving a number of performance criteria as the site is redeveloped. They include retaining important viewsheds of the river, creating strong pedestrian connections within the development and to adjacent areas, and managing parking for both the development and potential visitors to the park and waterfront. The Village of Tarrytown is currently working with Metro-North on a station area plan that will include defining a direct pedestrian connection from Edge-on-Hudson to the train station for commuters, rather than a longer and more circuitous trip along the waterfront via RiverWalk.

Additional priorities focus on how the development relates to the natural features of the site. Located right on the Hudson River, there are natural water drainage and flooding functions of the land. The Pocantico River floods significant areas just north and east of the site. With a significant amount of development planned, stormwater drainage and storm and flood resiliency will be important considerations and will only become more important with projected sea level rise. In addition, past development, which included rerouting the Pocantico River course as well as pollution from the GM plant (which has since been remediated through a brownfield cleanup), impacted the aquatic and terrestrial ecological health and function of the site. Ideas to explore include how the new development, including the re-envisioned park area, can restore health and function or in other ways (e.g., landscaping, site design, and art) convey the Pocantico River's past course and other natural history of the site. While some of this will be beyond the scope of the trails and parks focus of this strategy, conversations and input gathered in this process will be captured and shared to inform future discussions as the village works through the development review and approval process with the developer. Ideas specifically related to the park can be integrated into the activities of Priority 1, above.

Lighthouse Landing Focus Area

Sleepy Hollow/Tarrytown Trails Strategy



RiverWalk

Opportunity

Connect Kingsland Point Park in the north to the existing trail in the south at Horan's Landing to complete RiverWalk through Sleepy Hollow.

Challenges

- 1 Trail not built to RiverWalk standards.
- 2 Seawall is structurally deficient.
- 3 Fence is structurally deficient.
- 4 Southwest corner of GM site floods regularly.

Headless Horseman Trail Opportunity

Create a more permanent trail connecting Kingsland Point Park to the Old Croton Aqueduct.

Challenges

1 Existing pedestrian bridge is structurally deficient.

Invasive wetland species quickly overgrow trail.

3 Negotiating access through historic property.

Beekman Avenue Opportunity

Improve pedestrian and bicycle connections from the Village center to the waterfront.

Challenges

- 1 Maintaining the viewshed as development occurs.
- 2 Accommodating bike/ped improvements as automotive traffic grows with GM site development.

Commuter Connections Opportunity

Create a direct bike/ped route between site and train station for commuters.

Challenges

1 Implementation will require coordination of the two Villages.

New NY Bridge Opportunity Area

PRIORITY 1: EXTEND RIVERWALK UNDER THE NEW NY BRIDGE

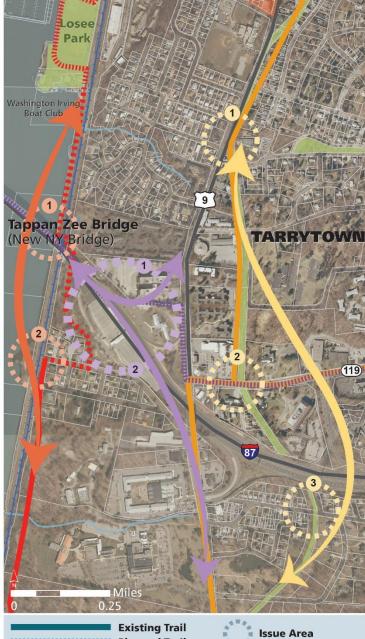
One of the last remaining gaps in RiverWalk in the two-village area is under the current Tappan Zee Bridge. The complexity of this trail segment will require a multi-year effort. The completion of the trail in this area is complicated by the presence of Metro-North rail lines and land ownership, need for a pedestrian bridge over the tracks, security concerns for the new bridge, a rocky ledge, and neighborhood concerns south of the bridge. The New NY Bridge contract takes the first step toward completing the trail by providing an easement under the new bridge on which the trail could potentially be constructed. However, the bridge construction contract does not include the trail. A working group headed by Westchester County Planning and involving the NYS Thruway Authority, Village of Tarrytown, and Scenic Hudson will look into options for constructing the trail. To accomplish this, the group must gain a clearer understanding of the easement location, assess the technical feasibility of different trail alignments, and have realistic conversations on permitting, funding, and timing.

This study helped foster the conversation that led to the working group. However, due to the complexity of this trail segment and the timeline needed to move it forward (which far exceeds this planning effort) the trail strategy will not go into great detail on this connection. Rather, the working group will advance the completion of this segment as soon and efficiently as possible.

PRIORITY 2: CREATE MULTIPLE MEANS FOR BIKES AND PEDESTRIANS TO GET ON/OFF BRIDGE

The New NY Bridge will include a shared-use path with six viewing platforms across its extent. Connections between the bridge and other trails, such as the Old Croton Aqueduct, RiverWalk, and North-South County Trailways, were raised as a high priority. The NYS Thruway Authority is currently working to identify how bike and pedestrian traffic will flow on and off of the bridge, including connections to existing regional trails and local roads. As this is a parallel planning effort, we want to avoid any duplication of effort as well as the risk of contradictory recommendations. Therefore, we will work with the Thruway Authority to coordinate ideas and public outreach on trail connections as they pertain to the bridge. This will include joint participation in at least one public meeting. The Village of Tarrytown is actively participating on both efforts to help ensure consistency. The goal of this trail strategy, during both the planning process and in the final document, will be to share pertinent public input with the Thruway Authority and reflect the authority's plans as accurately as possible so there is consistency between the two efforts as they relate to recommendations for the Route 119 trail.

New NY Bridge Focus Area Sleepy Hollow/Tarrytown Trails Strategy



RiverWalk

Opportunity

Complete RiverWalk in Tarrytown by connecting Losee Park in the north to the existing trail in the south under the New NY Bridge.

Challenges

- 1 Insufficient land between tracks and river, and need to cross the tracks.
- 2 Neighborhood concerns about additional trail traffic.

New NY Bridge

Opportunity

Connect the Shared Use Path over the bridge to existing trails, such as the Old Croton Aqueduct and RiverWalk.

Challenges

- 1 Crossing Route 9 to access regional trails.
- 2 Significant change in elevation between the bridge and trails.

Old Croton Aqueduct Opportunity

Overcome barriers to use of and access to a linear park and off-road trail.

Challenges

- 1 Encroachment along the trail.
- 2 Parking lots built on park land.
- 3 Trail is cut off by I-87 and runs into a sound wall.

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Planned Trail Desired Connection

6

Regional Trails

PRIORITY 1: COMPLETE RIVERWALK

RiverWalk is a continuous multi-use path along the Hudson River through Westchester County. County Planning has worked with shoreline communities to implement the trail over the past 15 years. Much of the trail is complete in the two-village area with only three significant breaks remaining. Two of these are within the opportunity areas (discussed above): the greater Edge-on-Hudson/Kingsland Point Park site and the land under and around the Tappan Zee Bridge/New NY Bridge. As these two major development projects move forward, there is opportunity and interest in RiverWalk segments being constructed in accordance with the design guidelines developed for the trail.

The third missing segment in RiverWalk is south of the bridge in the area between Lyndhurst and Sunnyside before it temporarily connects with the Old Croton Aqueduct Trail heading south. Ownership patterns, site access, and natural feature challenges have complicated completion of the trail in this area. Westchester County will work in the coming year to implement this segment.

PRIORITY 2: MAKE OLD CROTON AQUEDUCT MORE VISIBLE AND ACCESSIBLE WHILE RETAINING HISTORIC AND NATURAL CHARACTER

The Old Croton Aqueduct is a trail atop the aqueduct that once brought water to New York City. While the trail has existed for 165 years, the land and structures in the trail corridor between Croton Gorge Park and the Yonkers-New York City line (26.2 miles) was purchased by the state in 1968 as Old Croton Aqueduct State Historic Park. This state park traverses 14 communities, through rural landscapes and village centers. The varied landscape and length of the trail, as well as its long history, have resulted in encroachment and maintenance issues that pose challenges. In some spaces, homes have been built right against the trail, making it inaccessible for maintenance crew vehicles. Some neighbors treat it like their backyard, with toys and equipment left in the trail path. As a result, people walking the trail may get the impression that they are trespassing into someone's yard. Other neighbors use the corridor to dispose of yard waste, which state maintenance crews must contend with.

The varied context of the trail also results in different user expectations. Where the trail crosses near a downtown, some expect to find a fully groomed and paved trail whereas an unfinished path seems fully in keeping with expectations in a more rural setting. Advocates of the historic route would like to retain the current natural surface of a hiking trail, but changing expectations of linear parks have begun to place some pressure for a more groomed surface, at least in more populated areas.

Visibility is another challenge for the trail, due both to development encroachments which create physical breaks in the trail that users must circumvent and its natural appearance coupled with a general lack of signage. The most significant break is in the I-87/Route 119 area where the aqueduct goes under the highway and the trail dead-ends into a highway sound wall. The Friends of the Old Croton Aqueduct have created maps of recommended alternate routes in these spots to help people find their way around but it is not as user-friendly as desired. The alternate routes are not marked with signs, so they are clear only if one has the map in hand. Without the map, most people tend to walk along Route 9 instead of the local roads indicated on the map. The Friends of the Old Croton Aqueduct have been working with the state to think through wayfinding sign design and placement. Ideally, this will also include directing people on the trail to places where they may want to hop off to visit a downtown.

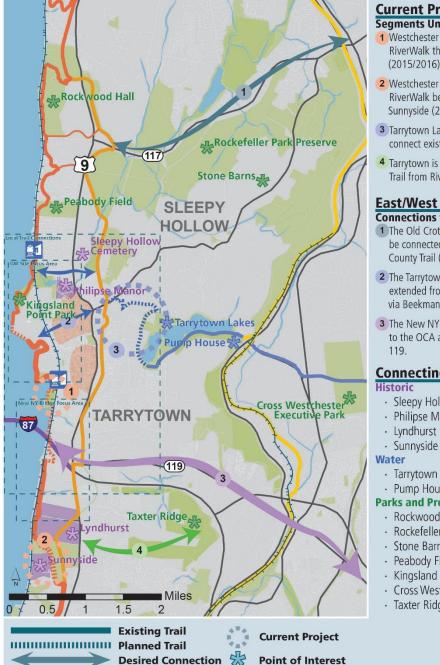
PRIORITY 3: CREATE LOOPS (VIA EAST-WEST CONNECTIONS)

As the three north-south trails near completion, with RiverWalk nearly complete and the North-South County Trailways and Old Croton Aqueduct trail fully complete, emphasis is shifting to forging east-west connections between the three trails. The New NY Bridge will help implement one of these connections through a planned shared use path over the bridge that may eventually connect along Route 119 to the North-South County Trailways. The Tarrytown Lakes Association has been working to complete their connection between the North-South County Trailways and the Old Croton Aqueduct. The final trail segment, parking, and trailhead improvements are slated for completion this year. This study can therefore focus on how to best create a link from the Old Croton Aqueduct near the high school through downtown to RiverWalk on local trails and sidewalks. A third regional east-west trail could be created along Route 117, a fairly wide and scenic road through the Rockefeller State Park Preserve. Bike and pedestrian design improvements could successfully connect the three north-south regional trails in the northern part of the study area and advance the regional trail grid.

Once east-west connections are made, it opens the possibility for cyclists, runners, and walkers to chart out looped routes of different distances rather than simply traversing the same stretch in opposite directions (out and back). A highly connected trail system allows for more route options for users, which translates into a more compelling recreational experience.

Regional Trail Connections

Sleepy Hollow/Tarrytown Trails Strategy



Current Projects

- Segments Underway 1 Westchester County to expand RiverWalk through Losee Park (2015/2016).
- 2 Westchester County to extend RiverWalk between Lyndhurst and Sunnyside (2016).
- 3 Tarrytown Lakes Association will connect existing trails in 2015.
- **4** Tarrytown is planning the Gracemere Trail from RiverWalk to Taxter Ridge.

East/West Trails

- **Connections to explore** 1 The Old Croton Aqueduct (OCA) can be connected to the North/South County Trail (NSCT) via Highway 117.
- 2 The Tarrytown Lakes Trail can be extended from the OCA to Riverwalk via Beekman Ave.
- 3 The New NY Bridge can be connected to the OCA and NSCT via Highway

Connecting to Attractions

- Sleepy Hollow Cemetery
- · Philipse Manor
- Tarrytown Lakes

Pump House

- **Parks and Preserves**
- Rockwood Hall
- Rockefeller Park Preserve
- Stone Barns
- Peabody Field
- · Kingsland Point Park
- Cross Westchester Executive Park
- Taxter Ridge

Local Linkages

PRIORITY 1: CONNECT LOCAL PLACES AND SPACES TO THE REGIONAL NETWORK

Local connections to and between the regional trail system are critical feeders that bring the system to life by providing routes for users, whether residents or visitors, to safely and easily take advantage of these recreational amenities. Topography between the shore and downtown areas was one widely noted constraint, along with limited access points to cross the railroad tracks. In Devries Park, some volunteers have been working to clear overgrowth and build momentum for formalizing the Headless Horseman Trail from Devries Park to the Sleepy Hollow village center through Philipsburg Manor. Additional discussions with impacted property owners will be needed to assess the possibility of this trail.

Many people have expressed the need for a second east-west connection between Taxter Ridge and the Old Croton Aqueduct. The Village of Tarrytown is currently working on the Gracemere Trail to make this connection.

Neighborhood concerns are also a potential issue. Residents expressed concerns that visitors parking and walking through their neighborhoods could be one of the largest barriers to cultivating a walkable community in the two-village area. This study should identify and understand these concerns and work with the community to identify solutions.

PRIORITY 2: WAYFINDING SYSTEM

As the trail system is implemented, wayfinding - the system of directional signs that help people navigate with ease - will need to be examined in a more comprehensive manner. RiverWalk has its own logo and design standards, but the county has delayed branding the sections of trail in the two-village area until it is more complete. The county will implement the RiverWalk signage as the three breaks are closed and longer continuous trail segments are completed. The Old Croton Aqueduct also has an emerging signage system. On the other hand, newer trails - including routes on existing roads that may be designated in this process - are not yet blazed in any way.

A comprehensive wayfinding system, one that integrates and accounts for the signs of other major trails and supporting amenities or destinations, would greatly advance the user-friendliness of the bike/ped network. Westchester County Tourism would ideally like to see the two villages serve as a pilot for a wayfinding system that could be expanded countywide.

PRIORITY 3: ENSURING TRAILS ARE EASY TO USE

A number of guides and maps exist to illustrate water trails, biking routes, and hiking trails in the region. However, some commonly requested routes, such as the best route to walk from the train station to the waterfront and downtowns, are not indicated in any existing guide and most area destinations urge Metro-North riders to take a cab rather than walk. The two villages should work to leverage the trail planning and wayfinding by syncing and enhancing tourism and place guides. This could include ensuring that common destinations like the historic estates are linked to each other and other historic assets into a packaged trail. Similarly, the two villages could link to other theme-based tourism, like agritourism, even if those destinations are just beyond village boundaries. Stone Barns Center for Food and Agriculture is a popular farm destination near the Rockefeller State Park Preserve, with additional farms just beyond. As trails such as the one proposed along Route 117 are improved, it will be easier to create loops that connect the villages with these farms. In the case of tourists arriving by train, additional "planning your trip" information is needed to help visitors understand how to bring bikes on Metro-North, as well as finding places to rent bikes, kayaks, and other outdoor gear such as snowshoes and cross-country skis. In addition to resources for tourists, groups like the Federated Conservationists of Westchester County are currently looking to identify and mark walking routes of different lengths and levels of difficulty to help promote active living. The location of these routes is still in the planning stages and can be coordinated with this effort.

Finally, the trail system should convey a sense of safety and security by providing lighting, bike racks, emergency call boxes, shade, benches, and trash receptacles throughout the system.

Local Trail Connections

Sleepy Hollow/Tarrytown Trails Strategy



Headless Horseman Trail Opportunity

Create a more permanent trail connecting Kingsland Point Park to the Old Croton Aqueduct.

Challenges

- 1 Existing pedestrian bridge is structurally deficient.
- Invasive wetland species quickly overgrow trail.
- 3 Negotiating access through historic property.

Local Bike/Ped Routes Opportunity

Improve pedestrian and bicycle connections from the Village centers to regional trails.

Challenges

- 1 Conncting Tarrytown Lakes Trail To Riverwalk.
- **2** Bike lanes difficult to accomodate on narrow roads.
- 3 Steep-slopes between the train station and Tarrytown's Main St.
- 4 Steep slope east of the village centers.

New NY Bridge Opportunity

Connect the Shared Use Path over the bridge to existing trails, such as the Old Croton Aqueduct and RiverWalk.

Challenges

- 1 Crossing Route 9 to access regional trails.
- ² Significant change in elevation between the bridge and trails.

APPENDIX B: PUBLIC WORKSHOP SUMMARY

On April 30, 2015, Scenic Hudson, in collaboration with the Steering Committee, hosted an open public workshop aimed at sharing information on the project and gathering ideas for building a strong multimodal system in the greater two-village area. Approximately 35 people attended the two hour event. The following summary conveys the content presented and feedback received in the workshop. This input was combined with that received through stakeholder interviews, village board presentations, site tours, small group meetings, and Steering Committee meetings to inform the specific recommendations contained in the plan for closing gaps and improving the function of trails and routes in the villages and beyond.

PRESENTATION

Amy Kacala, Senior Planner with Scenic Hudson, welcomed the group and reviewed the meeting agenda, which included a brief PowerPoint presentation before the attendees would break into small groups for the remainder of the meeting.

SMALL GROUP EXERCISES

The audience then broke into three small groups:

- 1. New NY Bridge Trail Connections
- 2. Waterfront Park (Edge-on-Hudson and Kingsland Point Park)
- 3. Bike and Walk/Run Routes

New NY BRIDGE TRAIL CONNECTIONS

George Paschalis, Outreach Deputy Director for the New NY Bridge project, led a breakout table focused on sharing information about the multi-use path over the bridge, and proposed parking area at the eastern landing of the bridge in Tarrytown, and to gather ideas for ways to connect the new shared-use path over the bridge to other local trails and the village downtowns.

Critical Connections

- RiverWalk under the bridge (Note: Thruway Authority/New NY Bridge Project, Westchester County, Village of Tarrytown, and Scenic Hudson staffs have begun meeting to assess possible routes)
- Clear and safe route from bridge shared-use path to RiverWalk
- Clear and safe connection from bridge shared-use path to Old Croton Aqueduct
- Overall need for wayfinding

Challenging Areas

- Broadway/Route 9 north of the bridge needs safe crossing by the planned shared-use path parking area
- Broadway bridge south of New NY Bridge needs to be widened to accommodate a shared-use path
- Intersection on South Broadway/Route 9 is dangerous better as a traffic circle?

WATERFRONT PARK

Peter Barnard, Urban Designer with Scenic Hudson, facilitated a breakout table to gather input on ideas for activities and design inspiration for the new waterfront park in Edge-on-Hudson and an improved Kingsland Point Park. The development team from Edge-on-Hudson was on hand to answer questions and listen to the community conversation on the waterfront area. While this Edge-on-Hudson is a private development whose design will be negotiated through the Sleepy Hollow Planning Board, the developer is interested in the community's aspiration for a seamless waterfront park from the new development through Kingsland Point Park and DeVries Park.

The Big Picture

Early discussion of the park with stakeholders and the developer broke the larger park area into four zones:

- 1. **Urban Waterfront:** The area on the southern portion of the new Edge-on-Hudson development has urban views of the current Tappan Zee Bridge and Manhattan skyline. This portion is envisioned as a more urban park profile, with active uses opening onto a public waterfront area maximizing the location.
- 2. **Suburban Waterfront:** This area on the western edge of the Edge-on-Hudson development will contain an interpretive center and access to the lighthouse. With a hotel at the southern end of the park area and residences lining the park's edge, this is envisioned as a more suburban-style development that reflects the residential setting but also creates points of interest for visitors to explore.
- 3. Kingsland Point Park A Pastoral Waterfront: With its many mature trees,

A Devries Park/ Devries Park/ Philipsburg Manor Vaterfront Vaterfront

the general sentiment is to keep the overall natural character of this park, while integrating it to the adjacent park areas through design, landscaping, RiverWalk, and activities or programming, including at the renovated, historic RiverWalk Center.

4. Devries Park and Philipsburg Manor – Community, Nature, and History: This park area includes the Pocantico River in addition to formal ball fields before transitioning to Philipsburg Manor, which is owned and managed by Historic Hudson Valley. The ball fields, while a formal use, are also designed to flood as the river is subject to both upland flooding and storm surge from the Hudson River. This park, which abuts the Philipse Manor neighborhood, is very much a community space, with children and families from surrounding homes using the fields and playground equipment.

	Zone 1	Zone 2	Zone 3	Zone 4
What we heard	 Active/urban waterfront with nightlife Need transient docks for heritage tourists 	 Rest rooms, history of the site and river, food vendors/ concessions 	 Pastoral Swimming Repaired pedestrian bridge Bucolic/passive 	 Natural/heritage focus Horseman's Trail to connect to village center Natural/historic Active recreation
Specific recommendations on programming or activities in each area	Urban Waterfront: • Seasonal marina • Art • Boat moorings for temporary stays (dock-n- dine)	Interpretive Center: • Highlight water issues, natural environment, history of site and brownfield • Cafe Lighthouse: • Attraction • B&B for private stay/rental • History center	Kathryn W. Davis RiverWalk Center: • Movies • Concerts • Family programs Existing uses: • Environmental education programs • Sailing/kayak club	• n/a

BIKE/PEDESTRIAN ROUTES

Jake Salt, Advocacy Associate with Scenic Hudson, facilitated a breakout table to gather local input on currently used or desired bike and walking routes in and around the two villages. Participants marked their desired routes on separate maps for pedestrians and bicyclists, and used stickers and annotation to identify specific problem areas for each mode of transportation.

THE BIG PICTURE: PEDESTRIANS

Community members identified a network of commonly used walking routes spanning the two villages.

Regional Routes and Trails

There are six regional trails in the project study area plus Route 9, which is a designated bike route. In discussion of pedestrian movement, three of these received the most attention: RiverWalk, Route 9, and the Old Croton Aqueduct. The North-South County Trailways was discussed more as a bike route than pedestrian connection (see next section).

 RiverWalk: This trail has been a work in progress for 20 years, and will eventually connect Peekskill to Yonkers. Currently, there are major sections missing and several older sections that are in disrepair, including through Kingsland Point Park. One issue raised during the conversation was the trail's route through the Philipse Manor neighborhood. Currently, the trail runs through the Metro-North parking lot on the eastern side of the tracks and along the western edge of Philipse Manor and Sleepy Hollow Manor. Much of this route does not have dedicated sidewalks. Those that do exist are generally in a state of disrepair. Some local community members expressed concern that improving the trail might encourage more traffic through the neighborhood.

- 2. Route 9: This road is a major local and regional thoroughfare that presents a significant barrier to pedestrians moving east and west. The road intersects the Philipse Manor Trail and Headless Horseman Trail at Pierson Avenue, Beekman Avenue, and Main Street /Neperan Road. It carries a high volume of auto traffic but does protect pedestrians with frequent street trees and on-street parking. The sidewalks only range between six and eight feet in width, and are less than ideal as a major pedestrian route.
- 3. Old Croton Aqueduct (OCA): This trail is one of the major existing north/south walking routes through the village. It suffers from encroachment in several areas and is forced to go around the high school due to a hallway connecting the two sections of the building. The trail is often hard to find due to a lack of signage, and the lack of improvements to the linear park makes is hard to identify as public space. Several sections of the trail need to be rebuilt, especially near Cobb Lane.

Community Connections

A number of other trails or corridors were identified as important additions to link key destinations to each other or to one of the regional trails:

- Main Street/Neperan Road: Main Street and Neperan Road connect the Tarrytown train station to Route 9 and the Tarrytown Lakes Trail. The street features wide sidewalks, street trees, onstreet parking, and a variety of shops - making it an attractive place to walk and shop. The route is gently sloped in its middle section, but is very steep at its western and eastern ends. The Neperan Road section is very steep and has relatively narrow sidewalks.
- Philipse Manor/Cemetery Trail: This route connects Kingsland Point Park to the OCA through Philipse Manor and the Sleepy Hollow Cemetery. It follows Palmer Avenue to Pierson Avenue, across Route 9, and through the Sleepy Hollow Cemetery to the OCA. Major issues include the five-pointed intersection of Pierson, Dell, Gordon, and Broadway, as well as opposition from the cemetery to high pedestrian traffic.
- 3. **Headless Horseman Trail:** This trail connects Kingsland Point Park to the Sleepy Hollow Cemetery through Devries Park and Philipsburg Manor. Major issues exist at both ends of the trail, and include an existing pedestrian bridge across the railroad tracks that is structurally deficient and not ADA accessible, and the five-pointed intersection of Pierson, Dell, Gordon, and Broadway. Another issue is that Historic Hudson Valley, owner of Philipsburg Manor, has gates at entry points to its property and restricts pedestrian access through the site.
- 4. Beekman Avenue: Beekman Avenue connects RiverWalk to the OCA and Tarrytown Lakes Trail, and is one of the easiest, most gently sloped routes to the waterfront. The street offers relatively wide sidewalks, continuous street trees, and on-street parking - making it an excellent walking route. The two biggest issues with Beekman Avenue are 1) its five-point intersection with Route 9, and 2) the section between Route 9 and the OCA, which is very steep.

Local Routes

A network of less travelled, or secondary, walking routes helps to round out the system. Streets suggested as good walking routes include:

- 1. Kelborn Ave.
- 2. Bellewood Ave.
- 3. Pocantico St.
- 4. New Broadway.
- 5. Cortland St.
- 6. Washington St.
- 7. Clinton St.
- 8. Cedar St/College Ave.
- 9. Wildey St.
- 10. Central Ave.
- 11. Riverview Ave/Glen St/ Miller St/Independence St.
- 12. Church St. (possible connection to RiverWalk)
- 13. Tappan Landing Rd/Riverview Ave.

	Bridges	Intersections	Crossings
What we heard	 Narrow/constrained Heavy traffic Few access points Need to be reconstructed 	 Busy Heavy traffic Barrier Limited visibility Few crosswalks 	 No signal buttons Limited visibility
Specific Recommendations on Programming or Activities in Each Area	 Widen Beekman Ave. Construct new multi- modal H-bridge at continental Add northern access point to Devries Paint lines on existing H-bridge 	 Add roundabouts Simplify traffic patterns Add crosswalks Add pedestrian signals 	 Ped-crossing signs Ped-signals Add crosswalks



DESIRED PEDESTRIAN ROUTES AND POTENTIAL ISSUE AREAS

THE BIG PICTURE: BICYCLISTS

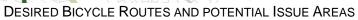
Community members identified several major bicycle corridors, including:

- Philipse Manor/OCA Trail: This route connects Kingsland Point Park to the OCA through Philipse Manor. It follows Palmer Avenue to Pierson Avenue, Gordon Avenue, Rice Avenue, and New Broadway to the OCA. Major issues include the five-pointed intersection of Pierson, Dell, Gordon, and Broadway.
- 2. **Neperan Road:** Neperan Road connects Main Street and the Tarrytown Lakes Trail. The street is relatively wide. The route is very steep, but could accommodate a bike lane.
- 3. **Route 9:** This road is a major local and regional thoroughfare that presents a significant barrier to pedestrians moving east and west. It carries a high volume of auto traffic and does not have any existing bicycle infrastructure.
- 4. Old Croton Aqueduct: This trail is one of the major existing north/south routes through the village. It suffers from encroachment in several areas, and is forced to go around the high school due to a hallway connecting the two sections of the building. The trail is often hard to find due to a lack of signage, and the lack of improvements to the linear park makes is hard to identify as public space. Several sections of the trail need to be rebuilt, especially near Cobb Lane. Students already use the trail to bicycle to school.

Community members did not identify several trails talked about earlier in stakeholder groups:

- 1. Beekman Avenue: Beekman Avenue was not identified by community members as a desired bicycle route, but it could be an excellent connecting route. The street connects the RiverWalk to the OCA and Tarrytown Lakes Trail, and is one of the easiest, and most gently sloped routes to the waterfront and provides access to local businesses, including a bike shop. The street is relatively wide, has continuous street trees, and on-street parking making it good candidate for a complete street. The biggest issues with Beekman Avenue are the five-point intersection with Route 9 and the section between Route 9 and the OCA, which is very steep. Another issue is the need to reconstruct the bridge over the Metro-North tracks, though this project does open opportunities for better bicycle and pedestrian amenities.
- 2. RiverWalk: RiverWalk was not identified y community members as a desired bicycle route, but could be an excellent connecting route. This trail has been under development for 20 years, and will eventually connect Peekskill to Yonkers. Currently, there are major sections missing and several older sections that are in disrepair, including through Kingsland Point Park. One issue raised during the conversation was the trail's route through the Philipse Manor neighborhood. Currently, the trail runs through the Metro-North parking lot on the eastern side of the tracks before cutting up into the neighborhood. Some local community members expressed concern about improving the trail, as it might encourage more traffic through the neighborhood.





NEXT STEPS

Ms. Kacala wrapped up the meeting by thanking the group for their attendance and active participation, and letting them know the workshop input would be summarized and distributed. The next steps for the trail planning project will be to conduct field assessments of areas that have been identified to date in various outreach meetings and to begin crafting specific strategies and recommendations for how to build or support a multi-modal system in the two villages and beyond.

Appendix B

APPENDIX C: WALKABILITY AUDIT FINDINGS

Over the past 20 years, walkability has played an increasing role in community design discussions - a back-to-basics approach after decades of auto-focused development and infrastructure investment. Demographic trends clearly illustrate that both baby boomers and millennials are looking to reduce time spent in a car, opting instead to move to more urban, compact settings where they can easily walk or bike to a variety of destinations. Additionally, shifting perspectives on energy consumption, physical activity, and long-term maintenance costs of a more sprawling development pattern has given rise to the concept of "complete streets" - modifying what we've built to better accommodate bikes and pedestrians.

Historic villages, such as Sleepy Hollow and Tarrytown, benefit from having much of the infrastructure needed for a walkable community. This includes short blocks, a mix of denser development oriented to the streets versus fronted with large parking lots, street trees, sidewalks, benches, and other amenities. However, older communities often need to step back and take stock of their infrastructure to see what enhancements and expansions would improve safety and mobility. A walkability audit is a good tool for this. It methodically assesses the pedestrian environment and recommends and prioritizes improvements. Surveyors can simultaneously assess "bikeability" by also focusing on the bike environment, such as bike parking, bike lanes or sharrows, and signs emphasizing the presence of bikes on roadways. The following appendix highlights audit work performed as part of the trails strategy planning process and presents a summary of recommendations by survey geography. This appendix augments the general recommendation contained in priority five of the plan.

METHODOLOGY

On September 11th, 2015 Scenic Hudson staff and local community volunteers conducted walkability audits in five areas of the two villages' downtowns. These locations were selected based on community workshop input regarding priority walking and biking routes.

Working in pairs, volunteers walked and scored a set route using a map and survey scorecard to assess existing bicycle and pedestrian infrastructure. The walkability scorecard consisted of 26 assessment questions broken into five categories (sidewalks, crosswalks, signage, aesthetics/amenities, and other) and used a five-point Likert scale to quantify observations. A notes column next to each question allowed participants to comment on their scores, enabling a mix of quantitative and qualitative data results. It also included a blank intersection diagram on which participants could draw "problem" areas in greater detail. Each participant completed both a map and scorecard, providing two sets of observations for each route. These were then averaged to create a final assessment score for each area.

Useful Guides and Resources

The following resources provide helpful information on improving walkability and bikeability within local communities.

Tarrytown Walkability Audit

Walkscore.com

National Association of City Transportation Officials (NACTO) Urban Street Design Guide

United States Department of Transportation (US DOT) A Resident's Guide for Creating Safe and Walkable Communities Walkable City: How Downtown Can Save America, One Step at a Time, by Jeff Speck (2013)



- 1. Sleepy Hollow Business District
- 2. Tarrytown Business District
- 3. Station Area and Waterfront
- 4. North Broadway
- 5. South Broadway

BIKE AND PEDESTRIAN-FRIENDLY COMMUNITY DESIGN

Bicycle- and pedestrian-friendly communities share certain design traits that make for engaging communities. Sidewalks, streetlights, trees, and benches help to form a space that feels inviting, while active storefronts and café seating help create activity. Some design features, either in their original design or condition changes over time, can present obstacles and need to be adjusted. The following images show some of the design elements necessary for walkable communities.





Sidewalk Conditions

Sidewalks should be smooth, level, and uninterrupted to make for a clear and safe pedestrian walkway. Sidewalks in residential areas should be at least five feet wide, and at least eight feet wide in commercial areas. Buckled pavement and trees with large surface roots should be replaced to remove trip hazards and ensure sidewalks are ADA-compliant.





Sidewalk Obstructions

Obstructions like telephone poles, street signs, light fixtures, and temporary store signs disrupt the flow of pedestrian traffic and can force people into walking in the street. Existing obstructions should be moved to the side in order to provide a path at least five-feet wide on all sidewalks.





Pedestrian Crosswalks

Pedestrian crosswalks should be clearly marked and painted with light-reflective paint to indicate their existence to drivers. Degraded crosswalks are easy to miss and should be replaced or repaired promptly.



Pedestrian Curb Cuts

All curb cuts should feature broad ADA-compliant ramps. Midblock curb cuts should be discouraged, and stepped curb cuts should be replaced (even if they are in good condition). Stormwater drains should be moved away from curb cuts when possible to prevent crosswalks from flooding.



Street Trees

Good pedestrian streets feature continuous, mature street trees with good shade coverage. Streets should feature a mix of native, salt-tolerant trees with deep roots, and should be placed between 20 and 40 feet on-center. Shorter trees should be selected when overhead cables cannot be moved or buried, but should not have branches less than eight-feet off the ground to ensure pedestrians can easily walk under them.

Street Lighting

Pedestrian-scale lighting helps create an outdoor room. Light fixtures should be short enough so they stand below street trees' lower branches so that they light the sidewalk and not the leaves. These lights should be no more than 40 feet on-center, and alternate from one side of the street to the other.

Street Furniture

Street furniture is an important part of a pedestrian-friendly street. Benches allow people to rest, trash and recycling cans help collect waste, and planters create a buffer from moving traffic. These elements combine to make a street both more inviting and accessible for people of all age groups.





Bicycle Infrastructure

Bicycle infrastructure is important to creating bike-friendly communities. Sharrows (shared-use arrows) and dedicated bicycle lanes draw attention to where drivers can expect cyclists to be, significantly increasing safety for both groups. It is important to make sure bicycle racks are plentiful and located in convenient locations to encourage cycling within a community. Well-designed and placed racks ensure safe storage and discourage cyclists from using fences or railings where they may be in the way of pedestrians. Stand-alone, u-shaped, or lollypop bike racks are more efficient at storing bicycles than s-shaped racks, and can be used in groups when more bicycle storage is needed.

GENERAL RECOMMENDATIONS

While the five areas each have characteristics that require specific recommendations, the audit revealed several overarching recommendations all should pursue:

Pedestrian Crossings

- ✓ Install pedestrian bump-outs at intersections to reduce pedestrian crossing times, help calm traffic, and improve visibility for pedestrians, bicyclists, and drivers by bringing pedestrians out from behind cars. This can be done by either using paint and oversized planters as a short-term, low-cost alterntative, or by reconstructing intersections with extended curbs.
- ✓ Repaint faded crosswalks and add pedestrian signs in the street to draw attention to pedestrian crossings.
- ✓ Ensure sloped entrances at all crosswalks to improve accessibility.

Bike Improvements

- ✓ Add sharrows (shared-use-arrows) to travel lanes to accommodate cyclists and calm traffic. Sharrows are painted in the travel lane to remind drivers that cyclists may be present.
- ✓ Add bicycle racks in front of businesses and local destinations to encourage cycling.

Street Trees

✓ Create a replacement plan for existing street trees. Most of the current street trees are honey locusts, which have a life expectancy of approximately 40 years. The villages should conduct a tree inventory to determine the age and health of existing street trees, and craft a plan for selective replacement as trees reach the end of their useful lives. The NYSDEC Urban and Community Forestry program and Cornell Urban Street Tree Manual provide useful advice.

FINDINGS AND RECOMMENDATIONS BY AREA

1. SLEEPY HOLLOW BUSINESS DISTRICT



The Sleepy Hollow Business District offers a highquality pedestrian experience characterized by wide sidewalks, continuous street trees, pedestrian-scale lighting, and active storefronts. While the concentration of shops is not as high as in the Tarrytown Business District, a variety of shops and cafes make it a strong destination for students after school and families in the evening and on weekends. Varied architecture and a high concentration of pedestrian amenities along Beekman Avenue—such as painted crosswalks and public benches—make it a pleasant place to walk.

However, the area is starting to show signs of wear. Sidewalks along Beekman Avenue are uneven, curbs are eroded, and crosswalks faded. Many businesses place signs or planters in the middle of the sidewalks, creating obstacles for pedestrians, and many street trees are too young to provide shade or are too old and need to be replaced. The side streets of Valley and Cortlandt have a high concentration of blind intersections, faded pedestrian crosswalks, mid-block curb cuts, and narrower sidewalks—leaving significant room for improvement within the district.

Recommendations

Beekman Avenue

Beekman Avenue is a high-quality pedestrian street that is in the best condition of the three streets within the Business District. Several improvements, however, should be made to improve pedestrian visibility, access and comfort. Other improvements should be made to improve bikeability within the corridor and to support local businesses.

✓ Remove parking spaces within 30 feet of intersections to improve visibility for pedestrians, cyclists, and drivers.

PROBLEM AREA: INTERSECTION OF CORTLANDT AND BEEKMAN

The intersection of Beekman Avenue and Cortlandt Street features a planted median meant to calm traffic at a wide intersection. However, its placement and design create problems for both drivers and pedestrians. The short, ornamental trees planted in the median create blind spots for pedestrians and drivers and the median's curb poses issues for left-turning drivers—evidenced by erosion of the curb from vehicles frequently driving over it.

The median should be removed and the intersection reconstructed to create a T in place of the existing Y. This change will improve visibility for all users and make it easier for drivers turning onto Beekman Avenue. Reconstructing the intersection also will add useable sidewalk space in front of existing storefronts, while the resulting "kink" in Cortland Street will help to calm traffic and ensure drivers come to a complete stop before turning onto Beekman Avenue.

Valley Street

Valley Street has a high concentration of restaurants and businesses but features narrow sidewalks and limited tree coverage. A wide, one-way travel lane also encourages drivers to speed down the street toward the Tarrytown Station Area.

- Narrow travel and parking lanes to accommodate a dedicated bicycle lane and calm traffic. Narrow travel lane to 11 feet and parking to seven feet on both sides, and add a five-foot-wide dedicated bicycle lane.
- ✓ Add pedestrian bump-outs at Deeply Street and College Avenue because the irregular intersections and curvature of the street makes it harder for pedestrians to see oncoming traffic, and for drivers to see pedestrians in the crosswalk.
- ✓ Repaint all crosswalks and add pedestrian signs in the street to draw attention to pedestrian crossings.
- Plant street trees in empty tree pits. NYSDEC Urban and Community Forestry program and Cornell Urban Street Tree Manual provide useful advice on street tree selection.
- ✓ Work with local businesses to remove obstacles, such as café tables and signage, from the pedestrian right-of-way.

PROBLEM AREA: CHESTNUT AND VALLEY

Chestnut Street, Washington Street, and Valley Street form a complex, triangular intersection one block south of Beekman Avenue. This intersection creates problems for both pedestrians and drivers. The village should consider closing off Valley Street as it passes west of the triangular pocket park. Traffic would then travel to the intersection of Washington Street and Chestnut Street, make a right on Chestnut, and then a left on Valley. This change would discourage speeding and reduce conflict points for pedestrians and drivers. The closed-off street could be added to the small park, making it a more inviting space for residents.

PROBLEM AREA: COLLEGE AND VALLEY

College Street and Valley Street meet at an odd angle that makes it difficult for pedestrians and drivers to see each other. Pedestrian bump-outs should be added to bring pedestrians out from behind parked vehicles, so drivers can better see pedestrians waiting to cross and pedestrians can see drivers before stepping into the intersection. Using oversized planters also would help "soften" the intersection, making for a more inviting approach to the small grocery store on the corner.

Cortlandt Street

Cortlandt Street features many shops and restaurants that predominantly serve the Latino community. The street has wide sidewalks and consistent tree cover, but nearly all are mature honey locusts nearing the end of their life span. Also, many of the crosswalks are missing and curbs are not ADA-compliant. A wide, one-way travel lane also encourages drivers to speed up the street toward Beekman Avenue.

- Narrow travel and parking lanes to accommodate a dedicated bicycle lane and calm traffic. Narrow travel lane to 11 feet and parking to 7 feet on both sides, and add a 5-foot-wide dedicated bicycle lane.
- ✓ Add pedestrian bump-outs at Depeyster Street and Cortlandt Street because the irregular intersections and curvature of the street makes it harder for pedestrians to see oncoming traffic, and for drivers to see pedestrians in the crosswalk.

- ✓ Repaint all crosswalks and add pedestrian signs in the street to draw attention to pedestrian crossings.
- ✓ Reconstruct curb cuts at intersections to make them ADA-compliant.
- Plan for the phased replacement of existing street trees to maintain tree coverage. NYSDEC Urban and Community Forestry program and Cornell Urban Street Tree Manual provide useful advice on street tree selection.

PROBLEM AREA: DEPEYSTER AND CORTLANDT

Depeyster Street and Cortlandt Street meet at an odd angle in front of Saint Teresa's School that makes the intersection unnecessarily wide. Pedestrian bump-outs should be added to narrow the intersection and reduce crossing times for children, and make them more visible to drivers on both streets. Narrow bollards should be considered in place of planters, as they will not interfere with drivers' ability to see small children.

2. TARRYTOWN BUSINESS DISTRICT



The Tarrytown Business District offers a highquality walkable environment with active storefronts and multiple destinations. Level sidewalks and a relatively gentle slope are complemented by off-street parking tucked behind buildings and a mix of uses that ensure activity around the clock.

This area was a focus of the recent Tarrytown Walkability Audit, conducted as a partnership between the village and the Tri-State Transportation Campaign. Their study highlighted several issues that could further

improve the district, including replacing missing crosswalks, adding pedestrian walk signals, narrowing wide intersections, and widening sidewalks at key locations.

Recommendations

Main Street

Main Street is a high-quality pedestrian street that offers shops, activity, and strong visual interest to visitors and residents. However, several improvements should be made to improve pedestrian visibility, access, and comfort. Other improvements should be made to improve bikeability within the corridor and to support local businesses.

- ✓ Adjust timing at signalized intersections to make crossing streets easier.
- ✓ Consider removing parking spaces within 30 feet of intersections to improve visibility for pedestrians, cyclists, and drivers. However, balance must be struck between parking supply, which is already very limited in the village.
- Consider widening sidewalks if street is redesigned to better accommodate pedestrians. Alternatively, the village could consider starting a parklet program to allow restaurants and shops to use parking spaces for outdoor seating. Moving seating and displays away from storefronts would widen the pedestrian right-of-way without reconstructing the existing sidewalks.

See the Tarrytown Walkability Audit for more information.

Broadway

Broadway is a walkable street, but the high volume and speed of traffic, combined with narrow sidewalks, make the pedestrian experience unpleasant. Changes to the existing infrastructure can improve this area and help support local businesses in the corridor.

- ✓ Add planters and bollards along Broadway to create a physical barrier between pedestrians and traffic. These barriers will increase a sense of safety.
- ✓ Discourage signage in pedestrian right-of-way.
- ✓ Encourage overhead signage. Existing storefront signs are difficult for passing pedestrians to read.
- ✓ Encourage broad storefront awnings to create a sense of enclosure for pedestrians.

3. STATION AREA AND WATERFRONT



The waterfront of the two villages is undergoing a significant transformation. Industrial brownfield sites are becoming new neighborhoods with waterfront parks and amenities. As this area develops, it is important to ensure high-quality bicycle and pedestrian infrastructure is constructed to connect existing and future commuters to the Metro-North stations without increasing automotive traffic in the station areas. Wide sidewalks, shadeproviding street trees, pedestrian-scale lighting,

and dedicated bike lanes will be essential tools to making this vision a reality.

Recommendations

Commuter Bike-Ped Route

A commuter route is envisioned between waterfront developments and the Tarrytown station. Having a safe and attractive route for pedestrians and cyclists will help reduce driving, which will lessen demand on parking and existing road infrastructure.

- ✓ Sidewalks along the commuter route should be at least eight feet wide south of Beekman Avenue and six feet wide north of Beekman Avenue. Wide sidewalks will accommodate spikes in pedestrian traffic in the morning and evening.
- ✓ Sidewalks should be buffered from traffic by bollards, on-street parking, bicycle lanes and/or street trees in a (minimum) five-foot-wide planting strip.
- ✓ Dedicated bicycle lanes should be incorporated into the Commuter Trail to ensure cyclists have easy access to the train stations.
- ✓ Planning for the commuter route should specifically target pinch points along River Street and the H-bridge. Existing building footprints and narrow public right-of-way create several problems along the corridor that will need to be resolved.
- ✓ Install continuous pedestrian-scale lighting. Pedestrian-scale lighting is generally 8 to 12 feet tall, and placed 30 feet on-center on alternating sides of the street.
- Plant continuous street trees. Honey locusts only have a life expectancy of approximately 40 years. Conduct a tree inventory to determine age and health of existing street trees, and craft a plan for selective replacement as trees reach the end of their useful lives. NYSDEC Urban and Community Forestry program and Cornell Urban Street Tree Manual provide useful advice.

4. NORTH BROADWAY



North Broadway is an important connection between the business district, regional trails, and important historic destinations. The Old Croton Aqueduct, Headless Horseman Trail, and Tarrytown Lakes Trail converge just north of Beekman Avenue. These trails also provide access to Philipsburg Manor and Sleepy Hollow Cemetery.

North Broadway, however, is missing the highquality pedestrian infrastructure these destinations need. High traffic speed and

volume create issues for pedestrians looking to cross the street and sidewalks frequently have no physical barrier from the highway.

Recommendations

New Broadway and Gordon Avenue

New Broadway and Gordon Avenue connect the Old Croton Aqueduct (OCA) to Beekman Avenue, the Headless Horseman Trail, and Philipsburg Manor. Where this route cuts through a residential neighborhood, several enhancements would better accommodate pedestrians and cyclists using OCA:

- ✓ Pedestrian-scale lighting.
- ✓ Trash and recycling cans at park or neighborhood entrances.
- ✓ Painted crosswalks at key intersections.
- ✓ Sidewalk addition along Van Ripper Avenue and/or Rice Avenue.

North Broadway and Old Broadway

North Broadway has a lower concentration of businesses than the section of the street between the two business districts and broadens to four lanes of traffic. The lack of on-street parking leaves pedestrians exposed and encourages speeding on a steep hill with a blind curve. This section of the village also includes two complex intersections. All of these features make for a challenging environment for pedestrians and cyclists. The village and Trails Committee should work with NYS DOT to evaluate options for this area, which could include:

- ✓ Closing Old Broadway to automotive traffic to simplify complex intersections.
- ✓ Adding bollards to the eastern side of Broadway to protect pedestrians. Adding bollards will place a physical barrier between moving cars and pedestrians trying to access local businesses. This is most crucial where the sidewalk has no physical separation from moving traffic on Route 9.
- ✓ Removing electric poles from the sidewalk.
- ✓ Converting the street to two lanes with a central turn lane could calm traffic and would be consistent with the traffic pattern found on Broadway north of Pierson Avenue and south of Beekman Avenue.
- ✓ Adding pedestrian-only timing to lights at Beekman Avenue. Pedestrian-only walk signals would reduce conflicts between turning vehicles and pedestrians wanting to cross the intersection.

5. SOUTH BROADWAY



South Broadway is populated with a large number of civic and religious institutions and small businesses. The area generally has wide sidewalks protected from traffic by wide planting strips and sections of on-street parking that make it inviting for pedestrians. Crosswalks are also generally in good condition, though broken sidewalks need to be replaced in some sections.

While existing conditions largely meet the current needs of the corridor, South Broadway is slated to

become a major pedestrian and bicycle gateway into the two villages with the completion of the New NY Bridge. Changes in street lighting, tree coverage and sidewalk conditions are needed to better link pedestrians visiting the bridge and the villages' business districts.

Recommendations

South Broadway/Route 9

South Broadway will be a new gateway to the villages' business districts for visitors to the New NY Bridge. The following improvements are needed to make it more inviting to pedestrians and cyclists.

- ✓ Replace existing streetlights with pedestrian-scale lighting.
- ✓ Plant continuous street trees to protect pedestrians from moving vehicles and shade sidewalks.
- ✓ Upgrade signalized intersections with pedestrian walkway signs.

ISSUE AREA: IN FRONT OF MIDDLE SCHOOL

School drop-off and pick-up traffic creates congestion times in front of the school along Route 9, where parents park on the sidewalks as they wait. This has resulted in crumbling sidewalks over time from the sustained behavior despite the presence of "no parking" and "no idling over 3 min" signs posted in front of the building. Beyond the impact on infrastructure, this also generates higher user conflict with cars dropping off children by driving onto the sidewalk and children who need to walk on it to get through the school gates. Additionally, a no left turn limit for East Franklin Street results in cars dropping off children before they reach the school property, necessitating crossing Route 9 on foot. A coordinated effort with the school district and parent groups to brainstorm solutions and carve out a strategy for improving flow and reducing risk should be undertaken. There are numerous examples available online, including *Improve Your School Arrival and Departure Procedures: A Toolkit for School Safety Committees*, developed by Feet First for the City of Seattle.

Washington Street

Washington Street features continuous sidewalks, on-street parking, and bi-directional traffic with crosswalks in decent condition. All of these features make for a good pedestrian route one block west of Broadway. Several improvements to the existing infrastructure can make it a preferred, low-traffic alternative that provides are residents with a safe connection between schools, neighborhoods, and business districts.

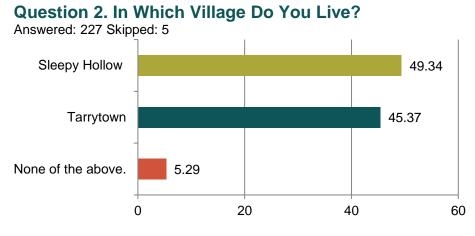
- ✓ Replace existing streetlights with pedestrian-scale lighting.
- ✓ Plant continuous street trees to protect pedestrians from moving vehicles and shade sidewalks.
- ✓ Upgrade signalized intersections with pedestrian walkway signs.

APPENDIX D: COMMUNITY SURVEY SUMMARY

An online survey was issued to solicit resident input on the recommendations contained in the draft Sleepy Hollow-Tarrytown Trails Strategy. A link to the 16-question survey, available for completion from November 30, 2015 to January, 11 2016, was distributed via the LISTERVs of both villages. It gathered input on residents' bike-pedestrian activities as well as perceptions of current and proposed trail and park infrastructure. A total of 232 people completed the survey. An analyses of the survey results is presented below. In short, the survey showed support for all of the plan recommendations. However, varying degrees of support help convey a sense of priority as to the order in which recommendations should be implemented.

Demographics

SURVEY REPRESENTED BOTH VILLAGES WELL

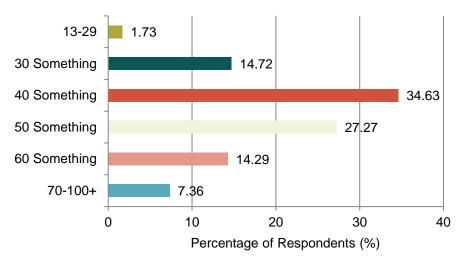


Sleepy Hollow (49%) and Tarrytown (45%) were each well-represented in the survey. (Question 2).

Percentage of Respondents (%)

BALANCED AGE DISTRIBUTION

All age categories, with the exception of the 13-29 years of age group, were well-represented. Residents in their 40s were the largest group (35%) followed by people in their 50s (27%), 30s (15%), and 60s (14%) were also well represented. (Question 4).

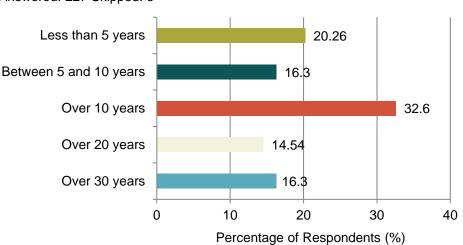


Question 4. In Which Age Group Do You Fall?

Answered: 231 Skipped: 1

RESPONSES RECEIVED FROM BOTH NEW AND LONG-TERM RESIDENTS

Both new and long-term residents participated in the survey. Approximately 20 percent of respondents indicated they've lived in the community for less than five years. Over 30 percent resided in their respective village between 10 and 20 years, another 16 percent for over 30 years. Due to these results, it appears that the survey reflects the input of both new and established residents (Question 5).



Question 5. How long have you lived in your village? Answered: 227 Skipped: 5

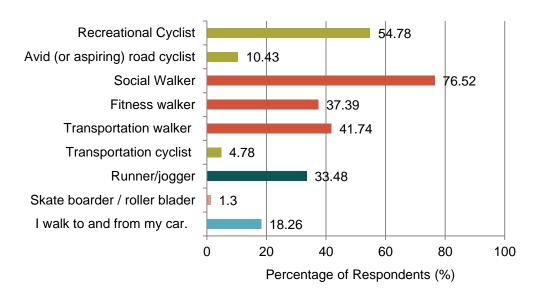
Types of Activities Present in the Community

WALKING AND RECREATIONAL CYCLING ARE MOST POPULAR TRAIL-BASED ACTIVITIES

Results suggest the majority of residents use local trails and parks for walking. Respondents noted that they not only walk for social interaction, but also for fitness and travel to destinations like work, school, restaurants, shops, or public transportation. A large number of participants also expressed their interest in cycling for recreation. Smaller numbers said that they prefer road cycling or biking as means of transportation.

Around 33 percent of respondents identified as runners or joggers. This population may be a significant user of future trails in addition to those who walk and bike (Question 2).

Question 3. What types of bike and pedestrian activities do you do? Select all that apply.



Answered: 230 Skipped: 2

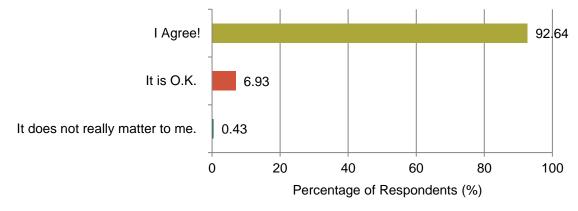
Existing Trails and Parks:

ACCESS TO RIVERWALK AND TRAILS: ONE OF THE BEST PARTS OF LIVING HERE

A majority of respondents (93%) agreed "having trails like RiverWalk and the Old Croton Aqueduct, and connections to great spots like Lyndhurst and Rockefeller Park Preserve is one of the best parts of living [in the Sleepy Hollow-Tarrytown area]" (Question 6). Only one person expressed that the listed community trails and parks did not matter to them.

Question 6. Having trails like RiverWalk and the Old Croton Aqueduct, and connections to Lyndhurst and Rockefeller Park Preserve, is one of the best parts of living here.

Answered: 231 Skipped: 1

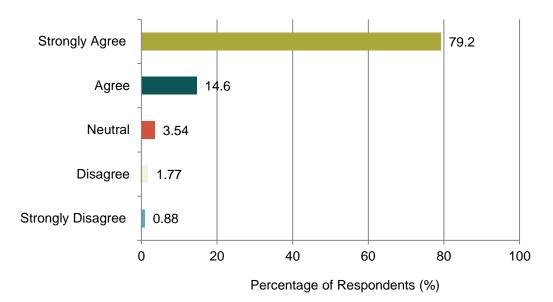


Perception of Project Ideas

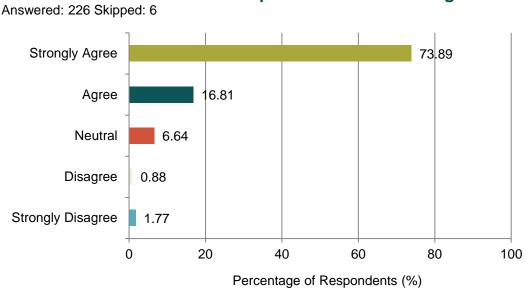
STRONG SUPPORT FOR A UNIFIED WATERFRONT PARK

A vast majority of respondents (94%) agreed with the concept of completing RiverWalk and making Kingsland Point Park and the new park space in the Edge on Hudson into a unified waterfront park. A small number (2.5%) disagreed with this concept (Question 7). Support was also strong (91%) for completing RiverWalk under the New NY Bridge and a connection to the new bridge's shared use path (Question 8).

Question 7. Complete RiverWalk through Edge on Hudson/ Kingsland Point Park- and create a unified waterfront park.



Answered: 227 Skipped: 5



Question 8. Complete RiverWalk Under the New NY Bridge-And connect to the shared use path over the new bridge.

IMPROVE FORM AND FUNCTION OF RIVERWALK

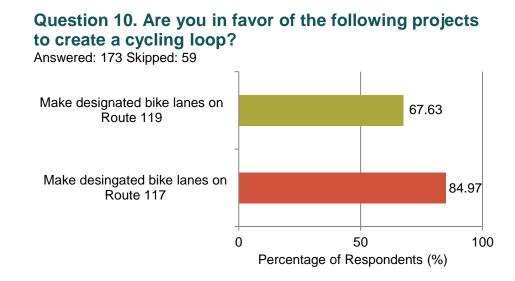
In Question 9 of the survey, respondents were asked about their support for the improved form and function of certain sections of the RiverWalk. An error in the electronic survey format did not allow respondents to select more than one answer. Therefore, results do not accurately indicate total support for each. However, many people used the comments box to express their support for both. In that case, the one selected gives a rough approximation of which of the two is most preferred.

Improvements to the section near Philipsburg Manor, the train station, and waterfront parks received more votes (66%) than improvements to the stretch of trail from Rockwood Hall through the Kendal property (34%). However, it should be noted that numerous people wrote in their support for both in the comment box.

SOLID SUPPORT FOR A CYCLING LOOP AND BIKE LANE DESIGNATION

Survey participants were presented with the idea of creating a cycling loop from Route 9 to 117, to the North-South County Trailways, to Route 119, and back to Route 9.

Bike lane designations on both Route 117 and Route 119 are needed to complete the loop. Respondents were allowed to select one or both projects to support. Respondents expressed solid support for the cycling loop concept (Question 10) with the Route 117 improvements slightly more popular (85%) than Route 119 (68%). That preference can be factored into the phasing of implementation projects.

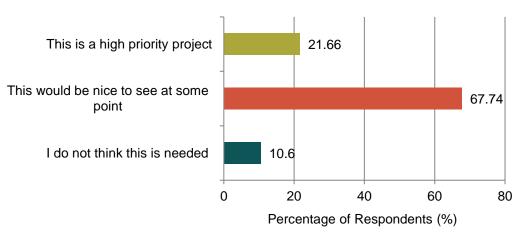


Making Connections:

FORMALIZE THE HEADLESS HORSEMAN TRAIL

The Headless Horseman Trail is an existing but overgrown foot trail from Devries Park to Continental Street along the edge of Philipsburg Manor. If maintained and formalized, the trail could provide a connection between the downtown area and Devries and Kingsland Point Parks. A majority (68%) of respondents expressed that this connection" would be nice to see at some point". Around 22 percent think the project should be a high priority, whereas 11 percent do not think the trail is necessary (Question 11).

Question 11. What do you think of formalizing the trail from Devries Park to Continental Street (downtown area)?

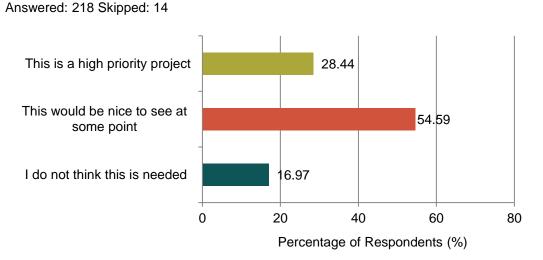


Answered: 217 Skipped: 15

COMMUTER ROUTE

There are several residential developments (constructed and planned) along the Hudson River north of the Tarrytown train station. A designated route for bike and pedestrian commuters would create a safe connection between new developments and the train station.

Overall, over 80% of respondents support the idea. Over half (55%) thought it would be nice to see at some point in the future, whereas 28 percent of respondents thought it was a more immediate need. It is interesting to note that 17 percent of people do not think this connection is necessary. Only 11 percent responded in this way towards the Devries Park-Downtown trail (Questions 11 and 12).



Question 12. What do you think of a commuter route from new riverfront developments to the Tarrytown train station?

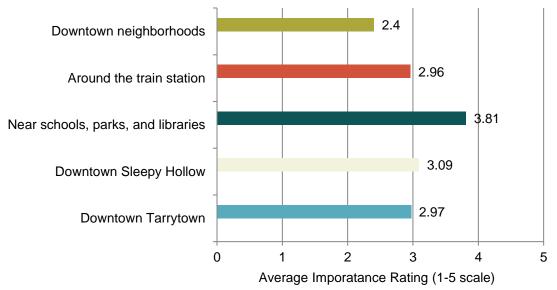
IMPROVE BIKE/PEDESTRIAN SAFETY, ESPECIALLY NEAR PLACES KIDS FREQUENT

Respondents were asked to rate, on a scale from one to five with one being most important, how important it is to make biking and walking safer and more comfortable in certain areas of the community. The purpose of this question was to determine in which of the five areas assessed in the trails strategy people would most like to see improvements. Responses for each area were averaged to create an importance rating.

Improvements to places children tend to frequent, such as libraries, schools, and parks, were deemed most important. Little difference was observed between the importance ratings, which averaged around three, for Downtown Tarrytown, Downtown Sleepy Hollow, and the train station area. This indicates relatively strong support for improvements in those areas (Question 13). Respondents expressed the least support for improvements in "downtown neighborhoods", the predominantly residential areas surrounding the core downtowns of Sleepy Hollow and Tarrytown.

Question 13. Which areas do you think should be improved (cycling and walking made safer in) earlier rather than later?

Answered: 206 Skipped: 26



Q 14: ARE THERE OTHER CONNECTIONS NEEDED THAT WE'VE NOT MENTIONED?

Due to the survey format, which limited the amount details it conveyed about the recommendations for walkability contained in initiative area 5 and other sections, some comments addressed things already recommended in the plan, including:

- Tarrytown lakes trail completion, pedestrian trail and bike connection to Broadway.
- Downtown Sleepy Hollow, including Broadway and Beekman intersection, crosswalks throughout, and traffic calming.
- South Broadway near the middle school enhanced safety and crossing measures for school kids all around the school.
- Tarrytown Station Area and H-bridge emphasis on strong routes for bike-ped commuters and a recognition of the design challenges of the current H-bridge.
- North Broadway while the walkability audit looked as far as the cemetery, public comments urge a look as far north as the hospital. Two new recommendations were added to the Rockefeller Park Preserve access section in response to this, but a comprehensive look, including pedestrian traffic along Route 9 should be reviewed in collaboration with NYS DOT Region 8.
- Old Croton Aqueduct crossings and route fragmentation.
- Bike environment of Route 9, a designated Bike Route.

The fact that public comments aligned with recommendations is a good sign that the content of the strategy is on target with community walk and bike demands.

Two new areas were identified for future walkability audits and recommendations:

- 1. Bedford Road/Rte 448 this connection from the village center, to the High School/OCA crossing and Stone Barns for pedestrians, and beyond for cyclists was raised by multiple respondents.
- Benedict-Altamont-Crest this area east of Route 9, which lacks sidewalks, featured prominently in comments and should be prioritized for future walkability assessment. This includes potential of adding sidewalks and traffic calming at intersections perceived as dangerous such as Gunpowder and Crest.

SLEEPY HOLLOW-TARRYTOWN WAYFINDING SYSTEM IS IMPORTANT

In a similar fashion to Question 13, respondents were asked to rate on a scale from 1 to 3, with one being most important, how important it is to create a Sleepy Hollow-Tarrytown wayfinding system, trails guide, and a local history trail (Question 15).

A wayfinding system is comprised of signs, maps, kiosks, or other directional aides that help people navigate to trails and destinations in a clear, consistent and visually appealing way. This concept was strongly supported by survey participants (77%) with 47 percent rating the concept with a "1" for most important and another 30 percent rating it with a "2".

While also supported, the creation of a trails guide – a handout with maps and information about trails in a given area - was rated with a "3" for least important by 35 percent of respondents and with a "2" by 37 percent compared to 28 percent who rated the guide as "important." Although these responses are more mixed than those for the wayfinding system, they still show an overall level or; when averaged, the importance ratings given for this concept was "2".

The level of support given for a local history trail was similar to that of the trails guide concept. A history trail in the Sleepy Hollow-Tarrytown area would package and promote major historic destinations along RiverWalk and the Old Croton Aqueduct. Only 28 percent rated the idea as important, 32 percent with a "2" as moderately important, and 40 percent of respondents rated this project with a "3" as least important.

Q16: ADDITIONAL IDEAS?

Additional ideas tended to highly mirror responses to Question 14.