

Village of Croton-on-Hudson Bicycle/Pedestrian Master Plan 2021-2025

Prepared by The Bicycle-Pedestrian Committee
for the Village of Croton Board of Trustees

APPROVED BY THE BOARD OF TRUSTEES

APRIL 5, 2021

BICYCLE-PEDESTRIAN COMMITTEE MISSION STATEMENT

The BPC’s mission is to advise and recommend strategies and actions to the Board of Trustees for the maintenance and improvement of access to the Village’s streets for bicyclists, pedestrians and other non-vehicular uses.

PURPOSE

The 2020 Master Plan (“the Plan”) recommends policies, practices, and projects for the Village to adopt and undertake in both the short-term and long run.

Committee composition

The Committee is made up of volunteers from the Village who are appointed by the Mayor. Its members meet monthly to discuss issues that impact the Village's bicyclists, pedestrians, and other travelers on our sidewalks and streets. For information on upcoming meetings, please consult the Village's online calendar.

Background context

The committee’s last [full master plan](#), based on a series of public forums, and adopted by the Village Board of Trustees in 2009, outlined a bold set of steps to make Croton-on-Hudson safer and more inviting for walking and bike riding. The largest of them was a realignment of the approach to the Croton Harmon Metro-North Station, now called the Croton Point Avenue Pedestrian, and Bicycle Improvement Project, which began construction in mid-2020 and which should make the interchange with Route 9/9A safer for motorists and non-motorists alike.

However, the 2009 plan also included a number of ideas that have advanced very little, among them marked bike routes, traffic calming measures, and safer crossings of busy streets. There were two other efforts to draw attention to bike-pedestrian infrastructure, a Safe Streets to School Guide in 2010 and a list of priorities submitted to the Village in 2014. In an effort to revive interest in these and other proposals, the Committee presented the Board of Trustees with another document in March 2018, the PIE Plan, to consolidate and set priorities for these proposals. [The PIE Plan](#) outlined a five-year schedule for implementing projects intended to “Protect, Improve, and Expand” the village’s pedestrian and cycling infrastructure between 2018 and 2022.

Shortly after the release of the PIE Plan, the Village Board adopted one of its prime recommendations, and lowered the speed limit to 25 miles an hour on portions of three major thoroughfares in the Upper Village (Grand Street, Old Post North and South, and Cleveland Drive). In addition, the Department of Public Works erected high visibility pedestrian crossing signs in a number of key locations. However, plenty of other recommendations remain unfulfilled and are incorporated in this Master Plan.

The following year, the Committee again sampled public opinion and conducted a large-scale community survey, the "[The Great Croton-on-Hudson Transportation Survey 2019](#)," which showed widespread support for improving and enhancing Village infrastructure for pedestrians and bicyclists. Among its key findings:

- Most residents are frequent walkers, but $\frac{1}{3}$ express despair at the condition of and gaps in the Village's sidewalks.
- The single largest deterrent to walking and cycling among residents is concern over safety, with dangerous driver behavior and speeding as the most common complaints.
- Most school children rarely or never walk to school - $\frac{1}{2}$ are driven by their parents every day - due primarily to the perceived danger posed by cars that are known to frequently disobey speed signs and ignore pedestrian right-of-way at crosswalks with little-to-no enforcement.
- Areas with a large number of complaints from residents include: Grand Street/Old Post Road (Dummy Light), Rt. 129 / Maple Street, Croton Point Avenue, South Riverside, Cleveland Drive, Benedict Boulevard, Municipal Place, Mt. Airy Road South.

The findings from the survey have significantly informed the creation of this revised Master Plan, leading the Committee to give greater focus to sidewalks and crosswalks, ease of access for pedestrians, safe routes to schools, and safety measures around specific intersections.

Alignment with regional initiatives

Also for this revision, the Committee has evaluated its recommendations to be sure that they align with other planning documents that have been adopted for the greater region. The Master Plan is consistent with New York Metropolitan Transportation Council's (NYMTC) [2045 Plan: Maintaining the Vision for a Sustainable Region](#) and its "[Appendix 2. Pedestrian and Bicycle Plan](#)" (Adopted June, 2017), and The Town of Cortlandt's [Envision Cortlandt – the 2016 Comprehensive Sustainable Master Plan](#) (April, 2016), which commits the town to a "Complete Streets" program of increasing safety for pedestrians and cyclists, improving the networks of sidewalks, and encouraging cycling.

This plan includes recommendations that would allow the village to catch up with neighboring areas, such as greater Cortlandt and other nearby municipalities, with regard to a commitment to pedestrian and bicycle safety.

We should also note that Croton's own [Comprehensive Plan, revised in December 2016](#), calls for "protecting, maintaining and enhancing Croton-on-Hudson's unique features to the greatest extent possible." Encouraging walking and biking, as this master plan aims to do, will help the village maintain its "low key, small-town quality," which is considered in that document to be one of Croton's unique features to be preserved.

PRIORITIES

The Committee suggests five priorities to the Board to guide its actions:

1. **Improve Safety** – *Reduce hazards facing pedestrians, bicyclists, wheelchair users, and others using the Village's streets and sidewalks.*
2. **Expand Croton's Network of Sidewalks and Bike Routes** – *Connect destinations like schools, the library, commerce, and services with sidewalks, pavement markings, traffic control devices and signage.*
3. **Enhance the Walkability And Bike-Ability of Village** – *Redesign streetscapes to make non-motorized transport safer and more appealing.*
4. **Promote Walking and Bicycling** – *Implement policies and programs to encourage Village residents and visitors to walk and cycle in the Village.*
5. **Integrate Biking And Walking Into Village's Environmental Sustainability Efforts** – *Recognize how non-motorized transport will reduce the carbon footprint, lessen noise and pollution, and mitigate negative impacts of further development, etc.*

The following sections outline these five priorities in detail.

1. IMPROVE SAFETY

Reduce hazards facing pedestrians, bicyclists, wheelchair users, and others using the Village's streets and sidewalks.

Walking and bicycling on Village thoroughfares should be and feel safe. By "safe," we mean that there are few opportunities for conflicts or collisions between various users of the Village's streets and sidewalks, and that any conflicts that take place do so at low speeds and with a clear indication of who has the right of way. In addition, we believe that residents and visitors should enjoy a level of comfort and ease while traveling on the Village's streets. Any assessment of safety must recognize individuals have a range

of physical capabilities and may walk or move at different speeds and also require different levels of accommodation (toddlers, people with walkers, etc.).

Address known problem areas. Several intersections, or parts of intersections, have sidewalks, but no crosswalks, presenting a puzzle for pedestrians, and muddying the requirement that motorists yield. In other locations, stop signs are placed far ahead of the stop line, potentially confusing drivers and endangering walkers. The village also has many intersections that, being based on paths that once carried horse-drawn wagons and ox carts, provide wide sweeping turns that modern-day vehicles can negotiate at much higher speeds than is safe for residential areas.

Enforce existing regulations. Existing traffic regulations need to be consistently enforced, regardless of the mode of travel. The Board of Trustees should encourage the Chief of Police to collect data about locations in the Village where traffic regulations are not being obeyed and to initiate new enforcement strategies to reduce the lack of compliance.

Educate Public Employees. The Village and School District should educate their employees to enhance awareness of “Complete Streets” and safe driving practices. The success of any initiative depends upon the people who implement it. For this reason, it is critical that Village employees and contractors involved in maintenance and repair of village streets and sidewalks receive training in multimodal street design and best practices. All operators of Village- and School District-owned vehicles must be made aware of pedestrian and cyclist safety concerns and must be required to drive safely and within existing regulations.

2. **EXPAND NETWORK OF SIDEWALKS AND BIKE ROUTES**

Connect destinations like schools, the library, commerce, and services with sidewalks, pavement markings, traffic control devices and signage.

While parts of Croton have sidewalks along one if not both sides of the street, there are numerous places where that is not the case, and other places where sidewalks crop off or disappear for no apparent reason. Wherever possible, existing sidewalks and crosswalks need to be tied together so that popular destinations are accessible to pedestrians. As for bicycling, the bike paths in the Village do not form much of a “network” at all. Car speeds also must be reduced around key village resources, such as the library, schools, and shopping areas to make cycling to these destinations safe.

Maintain and improve pedestrian infrastructure. The Committee's 2019 survey of Village residents found that gaps in the sidewalk network, and the poor condition of existing sidewalks, was one of the largest complaints. In 2020, Committee members created a map showing exactly where stretches of sidewalk are missing, and the exact

addresses where sidewalks are damaged and uneven. We delivered this map to Village officials to guide enforcement and improvement efforts. In addition, at various locations, the Village needs to add crosswalks and traffic control devices, especially in order to establish safe routes children can take to walk to school.

Establish safe biking routes to school and elsewhere. Bicycling is an important mode for navigating the Village and environs for children and adults. Bicycle routes, on protected or shared lanes, should be incorporated where possible to minimize conflicts between bikes and motor vehicles. In July 2020, the Committee proposed to the School District two possible routes that would connect the northern side of the Village with Pierre Van Cortlandt Middle School while avoiding Maple Street, a narrow and busy thoroughfare where children cannot safely ride. It looks forward to working with interested parties in implementing one or both options.

Expand shared-use paths. While bicycles in general are not allowed on sidewalks in Croton (even for children), there are a few places where they have successfully, and legally shared paths with pedestrians (e.g., the RiverWalk in Croton Landing Park and south). The Committee encourages the Village to find additional opportunities for dual-purpose routes (e.g., the walking path in Vassallo Park, the yet-to-be-developed Katz property at Maple Street and Municipal Place). In addition, “sharrows” and signage can be added to a number of Village streets to designate more streets as shared roadways along the lines of Eliot Way.

Connect with regional bicycle routes. The Croton-Harmon Metro-North station is a common disembarkation point for cyclists who travel north from New York City. The Village is close to several biking paths and natural points of interest, such as the North County Trailway, the Croton Aqueduct Trail, the Westchester RiverWalk, and the Croton Dam. The Village should continue to partner with the State, County, neighboring municipalities and the New York Metropolitan Transportation Council in order to link these features through signage, pavement markings, and dedicated bike paths to attract visitors to Village businesses and to improve the safety of bicyclists, pedestrians, and motorists.

3. **ENHANCE WALKABILITY AND BIKE-ABILITY OF VILLAGE**

Recognize how well-designed streetscapes can make non-motorized transport more appealing and incorporate those elements in standards, requests for proposals, and construction plans.

Making streetscapes more inviting for bike and pedestrian use does not stop at sidewalks and bike paths. Urban planners have come to recognize that certain types of neighborhoods are more appealing for walking and bicycling than others. For example, tree-lined streets, short blocks, concrete sidewalks separated from curbs all make

walking pleasant and increase foot traffic, while busy streets with many curb cuts do the opposite. In addition to the input received from the Advisory Board on the Visual Environment, the Village should work with other entities to enhance pedestrian- and bicycle-friendly aspects of the built environment. In many cases, foot and bicycle traffic actually improves real estate values and the success of local businesses.

Modernize design and maintenance standards. The Village's design standards and maintenance must reflect today's road and sidewalk use by different modes, to the degree allowed by State and Federal standards. In the Town of Cortlandt's Plan, designs must "accommodate pedestrians and bicyclists in all road, bridge, and intersection improvement and construction projects." That plan goes on to say that street work should "coordinate and implement pedestrian and bicycle accommodations with maintenance projects, such as striping bike lanes as part of resurfacing projects." [Town Plan, p. 82] It's time that the Village made a similar commitment. (In fact the Committee recommended in August 2020 that trustees adopt a Complete Streets Policy that would require planning for all users of thoroughfares, including those on foot and bike, for all road repairs and new projects.)

Add Traffic Calming Measures. Low-cost traffic-calming features, such as curb extensions, should be added to the Village's toolbox to keep its streets consistent with contemporary norms. Signage and pavement markings should be applied logically and consistently throughout the Village.

Involve property owners and businesses. Many businesses and shopping centers have either agreed to or volunteered to host bike racks and sitting benches. The Village should continue to partner with property owners for such purposes.

4. **PROMOTE WALKING AND BIKING**

Implement policies and programs that will encourage Village residents and visitors to walk and cycle.

In addition to undertaking physical improvements to the streetscape, there are plenty of ways in which the Village, the Croton-Harmon Union Free School District, the Committee, and other entities can make biking and walking more commonly accepted modes of transportation.

Offer education programs. The Bike-Pedestrian Committee has been involved in bike and pedestrian safety courses at schools in the past and plans to continue to do so, with an annual "Safe Routes to School" program each fall and a bicycle "rodeo" in the spring to reinforce the wearing of helmets, use of hand signals, etc. The Committee, and other organizations, could offer additional programs to adults as well

as children, on topics such as the ease and benefits of walking and bicycling, and how to become a one-car family.

PVC has designed a map showing safe biking and scooter routes to and from the school; the Village and the School District could better publicize that map and develop additional ones for other audiences.

Put the Village on the Map. The Committee has discussed creating some sort of map, either online or on paper, that bicyclists can use to find the best and safest ways to reach certain destinations. Such a map, developed with the support of the Village and incorporating signage as well (such as the map of the RiverWalk at the southern end of Eliot Way), would help orient visiting bicyclists and make Croton a more welcome place to visit.

Host Regional Activities. The Committee, along with the Village, can reach out to local bicycling organizations to plan events where the Village is a destination or part of a larger route. The Village should reach out to Metro-North Railroad to market local attractions and events, such as Summerfest, as being accessible to pedestrians and bicyclists. The Village's presence on the internet and in local publications should emphasize that active transportation is a Village priority.

Partner with Westchester County Traffic Safety Board. The Village is encouraged to partner with the Westchester County Traffic Safety Board, which manages a Community Traffic Safety Program. It provides traffic safety events and campaigns including: offering educational traffic safety programs in schools, at libraries and senior citizen meetings; teaming up with the county's Bicycle Advocates Committee for annual events; and donating traffic safety materials at health fairs.

Partner in local and national events. The Village should partner with local businesses to participate in events like the national "Dump the Pump", Earth Day, and more.

Run pilot projects. The Village can test interest in new bicycle or pedestrian services through low- or no-cost pilot projects. In the fall 2020, for example, the Committee in partnership with Mothers Out Front seeded a number of "Walking School Bus" routes, which paired children with other children from their neighborhood interested in walking to school with one another. Additional pilot ideas include providing secure bicycle storage or valet bicycle parking at the Croton-Harmon Station.

5. INTEGRATE BIKING & WALKING INTO VILLAGE'S SUSTAINABILITY EFFORTS

Consider the environmental impact of project proposals and look for positive impacts or mitigations to reduce negative impacts.

The Village's efforts to increase walking and bicycling will reduce vehicular traffic and will also shrink our collective carbon emissions. This is similar to the Town of Cortlandt's Plan goal to "Support mass transit, pedestrians, and bicyclists, while improving public health by reducing carbon emissions and encouraging the use of clean, energy-efficient power." [Town Plan, p. 80]

Make Non-Motorized Transportation Central To Carbon Reduction Efforts.

Wherever the Village undertakes initiatives to reduce the carbon footprints of its residents, such plans need to reflect the benefits of reducing reliance on fossil fuel. Transitions to low-emissions vehicles, whether by the Board of Education or the Village, should include a commensurate investment in pedestrian or bicycle infrastructure.

Incorporate Improvements Into Planned Public Works. Insofar as the Village needs to tear up streets, it should try to incorporate the construction of pedestrian and bicycle street improvements at the same time (i.e., when repairing or replacing storm water pipes, use bike-friendly sewer grates and consider adding raised or textured crosswalks).

Require New Developments To Include Bike-Pedestrian Accommodations. New Village solicitations for proposals, contract awards, and sales of Village land should include stipulations that guarantee access and accommodations for pedestrians and cyclists. Existing agreements with property developments that give Village residents pedestrian or cycling rights-of-way, such as with Half Moon Bay's walking path and mixed-use cycling/walking trail, must be monitored and there must be repercussions if these agreements are not met. Toothless agreements give the impression that the Village is not serious about supporting pedestrians and cyclists.

RECOMMENDATIONS

The projects in the Appendix are recommended to the Board. This section is in priority order, and was informed by the Committee's findings based on the community survey completed in 2019.

The first item is a demonstration project along the Cleveland Drive corridor from its southern end at Piney Point Avenue to the northern end at the trailhead for the Croton Gorge Trail.

Following are other near-term actions, and then long-term proposals. Some of these recommendations have carried over from the PIE that was presented from the board in 2018.

APPENDIX

PROJECT NAME: Complete Streets Policy

PRIORITIES: Safety, Network, Walkability and Bikeability, Sustainability

ACTION: The Bike-Pedestrian Committee in July 2020 proposed that the Village Board of Trustees adopt a “Complete Streets Policy” that would require Croton-on-Hudson from now on to approach street design and improvements from the point of view of all users (bicyclists, pedestrians, wheelchair users, and other forms of non-motorized transportation as well as motorized vehicles). Over 40 other municipalities in New York State (including the Town of Cortlandt), 15 New York counties (including Westchester County), 27 other States (as well as Puerto Rico and the District of Columbia) and at least 495 regional and local jurisdictions have already implemented Complete Streets policies.

Some key elements of a successful Complete Streets Policy include:

- The Village shall approach every relevant project, program, and practice as an opportunity to improve streets and the transportation network for all categories of users, including pavement resurfacing, curb repairs, signalization operations or modifications, and reconfiguration or redesign of streets.
- Among the design features to create complete streets are sidewalks, bicycle lanes, landscaping, planting strips, wheelchair accessible curb ramps, crosswalks, pedestrian refuge islands, pedestrian signals, traffic calming devices, curb bulb outs, etc.
- In planning and implementing street projects, the Village shall work with residents, merchants, and other stakeholders to ensure that a strong sense of place ensues.
- The Village shall identify one or more staff members to serve as Complete Streets Policy Coordinator(s) to oversee implementation of the policy.
- Maintenance, planning, and design of projects shall be consistent with complete Streets Goals except where such consistency cannot be achieved without negative consequences.

LOCATIONS: Village-wide.

METRIC: Approval by the Village Board of Trustees and implementation by Village departments.

PROJECT NAME: **Cleveland Drive Corridor Demonstration Project**

PRIORITIES: Safety, Network, Walkability and Bikeability, Sustainability

ACTION: The Committee's 2019 Survey found that walking and biking is particularly popular in the Harmon section of Croton. But focusing efforts on that area, the Village will find a public that is ready to take advantage of improvements, and its investments will prove the most worthwhile. The Committee also believes that if the Board of Trustees cultivates a culture of walking and biking in one area, that culture will soon spread to other areas of the village.

The following recommendations aim to improve the corridor's sidewalks, intersection alignments, signage and street striping between Gotwald Circle on the southern end and Gerstein Street on the north.

- More than one-third of the respondents to the Committee's 2019 survey expressed frustration with the condition of Croton's sidewalks. Broken or uprooted slabs make it difficult particularly for parents with strollers and elderly people to navigate our streets. Through a combination of enforcement and the existing matching grant program, the Village can encourage homeowners along this segment to level or replace their sidewalks, remove frost and root heaves, and eliminate other obstacles for pedestrians. Please see [the Committee's map of sidewalk hazards for details](#).
- At Five Corners (Old Post South, Cleveland and Radnor), align the crosswalk and the stop sign at the pedestrian crossing on the western section of Old Post South to the far (eastern) side of the stop sign. That way vehicles driving east on Old Post will come to the stop sign before the crosswalk, the way most intersections are configured. It is proposed that the crosswalk's angle be altered to move the northeast end closer to the intersection. Doing so will also make those pedestrians more visible to westbound cars turning from Radnor and Cleveland. (The Village may also need to adjust the sidewalk section on the cemetery side of Old Post South.) The Committee also suggests adding flashing beacons on the stop signs and in-pavement lighting to alert drivers that pedestrians may be crossing the street.
- Fill in gaps in the sidewalk network when feasible (such as on the west side of Cleveland between Old Post South and the Croton Free Library).
- At the library, raise or texturize the crosswalk to slow cars and increase visibility. A safe crosswalk is essential to getting people to walk to the library. Study the impact of eliminating parking along western side of the road in front of the library. (Few people park there, but when they do, it makes the road too narrow for cars to safely pass each other when traveling in opposite directions, and leaving no room for bikes. There is

also no sidewalk on this side of Cleveland Drive from which to access the library entrance.) Extra width created by eliminating parking could be better used as a painted-on bike lane on both sides of the road.

- Reconfigure Gottwald Circle in order to make it safer to navigate by foot or bike. [One possibility](#) would be to enlarge the small parklet in the middle of the circle, make the driving lane narrower, and add crosswalks and bulb extensions at the surrounding streets in order to calm traffic and make it clear exactly where cars are supposed to drive.
- Add curb cuts to make the sidewalks and crosswalks ADA compliant.
- Add curb extensions at intersections to shorten distance for pedestrians to safely cross streets. The intersection at Park Avenue and Cleveland Drive in particular needs this type of treatment because of its width.
- Consider additional calming measures such as speed humps, raised crosswalks, or textured pavements elsewhere as warranted.
- Level storm sewer gratings, manhole, water, gas, and electric utility access covers with the pavement. In particular, the following sewer gratings are hazards for cyclists and should be replaced or repaired:
 - 190 Cleveland Dr.: Severe drop to drainage gratings (both sides of the road)
 - 188 Cleveland Dr.: Severe drop to drainage grating (across from Kuney St.)
 - NW corner of Cleveland Dr. and Loconto St.: Severe grating drop
 - SW corner of Loconto St.: Severe grating drop (183 Cleveland Dr.)
 - East side of Cleveland Dr. across from cemetery; approximately 100' north of Five Corners; grating drop
 - West side of Cleveland Dr. at Five Corners: Grating protrusion near Veterans Corner sign
 - Across from 146 Cleveland Dr., NW corner of Melrose: Severe grating drop; manhole cover too deep
 - 133 Cleveland Dr.: Dangerous slotted grating cover (needs to be replaced); drop near NW corner of Irving
 - 128 Cleveland Dr.: Dangerous slotted grating cover (needs to be replaced); manhole cover too deep; across from Irving
 - Cleveland Dr. near Thompson St.: Manhole cover too deep
 - 104 Cleveland Dr.: Manhole cover too deep (in front of Thompson St.)
 - 100 Cleveland Dr.: Large rough patch of asphalt in road
 - 97 Cleveland Dr.: Severe grating drop
 - NW corner of Cleveland Dr. and Oneida: Drain grating drop
 - 78 Cleveland Dr.: Dangerous slotted grating cover (needs to be replaced with design less hazardous to bikes)
 - 54 Cleveland Dr.: Severe drop to drainage gratings on both sides of the road.
- Designate Cleveland as a Bike Route, as it is commonly used to get to the Croton-Harmon Metro-North station, and there can be fewer traffic

conflicts than on Maple Street), paint sharrows and bicycle icons on the roadway and add Share the Road signage.

- Correct street pavement deficiencies.

The section from Gerstein Street to the Croton Gorge Trailhead:

- The intersection at Gerstein Street should be evaluated for additional traffic control measures, such as a four-way stop.
- This intersection should have curb extensions to shorten the pedestrian paths across Cleveland Drive and Gerstein Street.
- The stop signs and pavement markings should be aligned to avoid confusion.
- Traffic calming should be implemented with the possibility of speed humps, raised crosswalks, or textured pavement.

Streets adjoining the Corridor should be considered as part of the project:

- New signage and crosswalk striping at intersections that are difficult for pedestrians. For example, there should be a stop sign for traffic on Morningside Drive as it approaches the intersection with Truesdale Drive replacing the yield sign, pavement markings on Morningside, and curb extensions to “right” the angle of the intersection and reduce the distance pedestrians must walk to cross safely
- Pedestrian routes from Gotwald Circle and Cleveland Drive to Sunset Park, a popular destination, need improved sidewalk surfaces and elimination of unfinished sidewalks.
- Designate Radnor Avenue and the blocks between Radnor and PVC Middle School along Thompson and Emerson Avenues as Bike Routes to enhance safety for middle school children to reach school; paint sharrows on the roadway and add Share the Road signage.
- The Corridor should be one of the locations for the Village wide traffic regulation enforcement effort.

LOCATIONS:

Gotwald Circle to the Croton Gorge Trailhead, and other streets adjoining Cleveland Drive

METRIC: The Village should keep track of the linear feet of sidewalks replaced and repaired each year, the number of curb extensions installed, number of crosswalks painted and repainted, type and number of signs installed, and number of traffic calming measures (by type and location). Enforcement efforts should be documented with citations written by type, location, and full date information.

PROJECT NAME: Reconfigure Dummy Light Intersection and Other Upper Village Intersections

PRIORITIES: Safety, Encouraging Walking and Bicycling, and Attractiveness

ACTION: The Village Board of Trustees has already begun to consider how to improve the dummy light intersection to reduce conflicts between automobiles and pedestrians. In 2019, a consulting firm hired to study traffic patterns at the intersection determined that a three-way stop would cause less of a delay for automobile traffic than the existing stop light. It would also be far less expensive than installing pedestrian signals while providing much of the same protection. Before the project was tabled indefinitely because of the coronavirus pandemic, the Committee recommended that the Board, in keeping with the consultant's preferred alternative, convert the dummy light to a flashing red light. The Committee has also asked the Board to consider adding these other improvements:

- Warning signs to alert drivers approaching the intersection;
- Oversized stop signs at each corner to alert motorists of new traffic flow;
- Curb extensions at each crosswalk to reduce the distance pedestrians must walk to safely cross;
- Flashing beacons on the stop signs and in pavement lighting to alert drivers that pedestrians are crossing the street;
- Pavement enhancements, including differentiated materials and raised elements to increase visibility of the pedestrian crossings;
- Remove one or two parking spaces adjacent to the intersection and crosswalks if needed to improve visibility;
- Include this intersection in traffic regulation enforcement efforts.

Two other intersections in the Upper Village also require attention:

- Grand Street and Old Post Road North. Currently, the opening on the southern extension of Grand Street is extremely wide, and there is no sanctioned way to cross from the north side of Old Post Road to the southern side. The curvature of the roads encourages drivers to turn at high speeds if coming from the dummy light, or to roll the stop when

turning right from Grand Street. Adding bulb outs at the corners of Grand, raising or texturing the sidewalk crossing and adding an island of refuge, adding a zebra walk across Old Post North, etc., are all possible calming measures. This is a common route along which children walk to school.

- Mt. Airy Road South at Grand Street. The curved nature of this intersection encourages drivers to make the turn from northbound Grand left onto Mt. Airy very fast, even though there are several businesses nearby to which people walk. Mt. Airy South is also very wide at this point. One solution would be to add a textured or raised crosswalk, which should interfere minimally with speeds as there is a stop sign for southbound traffic, and northbound cars will be turning left and should be moving slowly. In addition, the village should consider reducing the length of the crosswalk by squaring the corners, either with a raised curb, or by painting on a yellow restricted zone.

LOCATIONS: Intersections of Grand Street and Mt. Airy Road, Old Post Road South, and Old Post North.

METRIC: Completion of the recommended scope of work.

PROJECT NAME: Enforcement of Existing Traffic Rules and Regulation

PRIORITIES: Safety, Walkability and Bikeability

ACTION: The Croton Police Department needs to continue and expand its activities to enforce speed limits and other safety laws. The Committee would be happy to partner with the CPD to identify critical areas highlighted in the 2019 survey. In addition, all new traffic safety improvements, such as a reconfigured dummy light intersection, will need support from the police department following their implementation. The Village should also consider using speed cameras to the extent permitted by state law if traffic behavior is not rectified.

LOCATIONS: Committee members have observed excess speeds in the following areas:

- Intersection of Grand Street and Maple Street, where drivers often do not obey the stop sign or the 25 mph speed limit on Grand Street
- Intersection of Mount Airy and Grand Street, where drivers often do not obey the stop sign or the 25 mph speed limit on Grand Street
- Mount Airy South
- Intersection of Gerstein Street and Wood Road, where drivers often do not obey the stop sign or the 15 mph school speed limit on Gerstein Street
- Cleveland Drive, where drivers often exceed the 25 mph limit
- Intersection of Old Post Road South, Truesdale Road and Nordica Drive, where drivers often do not obey the stop signs or the speed limit
- Intersection of Oneida Avenue and Hastings Avenue, where drivers often do not obey the stop sign
- Route 129 from Old Post Road to the Village limits, where drivers often exceed the 30 mph speed limit, fail to yield to pedestrians at the Wood Road crosswalk, and put cyclists at risk
- North Riverside Avenue and intersections of: Grand, Brook, Bank, Farrington and High Streets. All these feeder streets need better visibility for safer egress.

METRIC: Decline in number of vehicles exceeding speed limit as measured by radar before and after improvement.

PROJECT NAME: **Add Crosswalks To Intersections**

PRIORITIES: Safety, Walkability and Bikeability, Sustainability

ACTION: Numerous intersections in Croton, particularly in the Harmon section, have sidewalks on both sides of the street, curb cuts, and even stop signs—but no crosswalks. The Department of Public Works should work with the Committee to identify intersections that need markings, particularly at locations near schools and other common pedestrian destinations. At some crossings that currently lack stop signs, the Committee encourages the DPW to paint crosswalks and mark them with PED XING signs (as it recently did along South Riverside Avenue near Brook and Bank Streets).

LOCATIONS:

- East and west sides of Benedict Boulevard across Young Avenue, Hastings Avenue, Penfield Avenue;
- Across [Benedict Boulevard at Young, Hastings, Penfield and Whelan Avenue](#) (Gottwald Circle) (no stop signs; PED XING signs needed);
- Oneida Avenue, east and west sides, across Young Avenue, Hastings Avenue, Penfield Avenue, Whelan Avenue, Elmore Avenue (west side only);
- Elmore Avenue, north and south sides, across Darby Avenue;
- Bungalow Road east and west sides, across Elmore Avenue;
- Cleveland Drive, south side, across Olcott Avenue;
- Olcott Avenue, south side, across Darby Avenue;
- South Riverside Avenue, north side, across Oneida Avenue.
- Sunset Drive and Lexington Drive, adjacent to Sunset Park
- Across Oneida Avenue at South Riverside Avenue
- Across Bungalow Road at South Riverside Avenue
- Across Hudson Street at South Riverside Avenue
- Across Route 9/9A southbound exit ramp at Municipal Place leading to RiverWalk tunnel
- Old Post Road South and entrance to drive to Bethel Chapel and Cemetery (frequent cross point for CHHS students)
- Across Old Post Road North at Brook Street and Lower Highland
- Across Lounsbury Road at Old Road North
- Across Brook Street at South Riverside Avenue
- Across Bank Street at South Riverside Avenue
- Across Farrington Road at South Riverside Avenue
- Across High Street at South Riverside Avenue

METRIC: Number of new crosswalks added.

PROJECT NAME: **Eliminate Gaps in Sidewalk Network**

PRIORITIES: Safety, Encouraging Walking and Bicycling, Attractiveness of the Village, Environmental, Economic Growth, Health and Quality of Life Benefits

ACTION: The Department of Public Works (DPW) should work with the BPC to map gaps in the existing sidewalk network. This is related to the goal of restoring existing sidewalks. Priority should be given to key spots in the Village, such as near schools. Other locations would include deficiencies in routes to key destinations in the Village and connections with public transit. This may require coordination with property owners, the New York State Department of Transportation and Westchester County.

LOCATIONS:

- One or both sides of Olcott Avenue from Van Cortlandt to Maple Street
- West side of Maple Street from Olcott Avenue to Municipal Place
- North side of Municipal Place from Maple to Riverside
- Old Post Road South, from Truesdale Drive to Morningside Drive
- Truesdale Drive, from Old Post Road to Silver Lake
- See the Committee's [map for more locations of missing links in Croton's sidewalk network](#).

METRIC: Linear feet of sidewalk installed, and identify the portion done by property owners and portion by Village.

PROJECT NAME: Improve Alignment of Stop Signs, Stop Lines, and Crosswalks

PRIORITIES: Safety, Encouraging Walking and Bicycling

ACTION: At a number of intersections in the Village, stop signs and stop lines are awkwardly placed, often far from the corner and sometimes not in line with one another. The Department of Public Works should add crosswalks where possible, along with the requisite curb cuts. It should also correct the misalignment of stop signs, lines and corners to better protect crossing pedestrians. If an intersection has a stop sign and sidewalks on both sides, it should also have a marked crosswalk. The Committee may also with time recommend additional locations for new stop signs and crosswalks.

LOCATIONS:

- Gerstein Street and Cleveland Drive:
 - The northeast corner is extremely rounded, which forces the stop sign to be placed well east of the intersection and stop line. We recommend squaring the intersection and repositioning the stop sign.
 - On the northwest corner, align stop sign with stop line for vehicles driving south along Cleveland.

- Gerstein Street and Wood Road:
 - For vehicles traveling west along Gerstein, the stop sign is placed far ahead of the stop line and corner.
- Lounsbury Road and Old Post Road North:
 - Stop sign for southbound vehicles on Lounsbury is placed so far to the north of the intersection that vehicles cannot see oncoming traffic. This would also be an excellent place for a small traffic island where the striped paint currently stands, as well as a painted crosswalk.
- South Riverside and Benedict Boulevard
 - This is one of the busiest intersections in the village for pedestrians, bicyclists, and motorists alike. Due to the current position of the stop line, northbound motorists in the right lane stopped next to another car at Benedict cannot see pedestrians on the crosswalk crossing from the west side of Riverside. This is especially dangerous because these cars can make a right on red and many habitually do so without coming to a full stop. Move the stop line further back to allow full view of the crosswalk for motorists in the right lane.

METRIC: Survey intersections with stop signs and identify those where the signs are not properly placed. Determine if pavement markings for stop signs are needed, and if so, are they properly placed. DPW to report to the Board and the BPC on its efforts to meet this goal.

PROJECT NAME: Restore Street Pavement and Replace Storm Basin Covers

PRIORITIES: Safety, Encouraging Walking and Bicycling

ACTION: The Department of Public Works (DPW) should correct pavement imperfections that could cause pedestrian or bicycle falls. Any storm basin covers that can trap bicycle tires should be replaced with a bicycle-friendly design. Any water or gas line access covers that are not even with the street surface must be leveled.

LOCATIONS: The Committee will provide the Department of Public works with a survey of the locations in the Village.

METRIC: Number of deficiencies removed, quantity of patch/pavement used, and number of units of storm covers replaced.

PROJECT NAME: Information and Educational Programs

PRIORITIES: Safety, Encouraging Walking and Bicycling, Attractiveness of the Village, Environmental Benefits

ACTION: The BPC and the Village should partner with other government entities, the CHUFSD, the Croton Free Library, and not-for-profit organizations to provide public information and educational programs to encourage walking, bicycling, and safe driving. The Village and School District should include programs for employees. For example:

- Bike rodeo. Every spring, a member of the Bike-Pedestrian Committee has been teaming up with PVC to hold a “bike rodeo,” during which she provides safety tips to students, and also leads them in a group bike ride to school one morning. PVC has reinforced those safety lessons by demanding that students who bike to school always wear helmets.
- Safe Routes to School. In 2016, the Committee teamed up with the Village, CPD, and School District to teach CET children some of the basic rules of walking along Village streets, such as stopping at corners, seeking out crosswalks, and looking both ways. The Committee plans to repeat this program when school returns in full swing.
- Walking Bus. In collaboration with the local chapter of Mothers Out Front, the Committee in the fall of 2020 launched several “walking bus routes,” by soliciting contact information of parents who wanted their children to walk to and from CET or PVC in the company of other children. The Committee and MOF plan to repeat this experiment next fall.

METRIC: The number of events held in a year and the number of attendees. Follow up surveys of attendees to determine if the events effectively encouraged walking and bicycling.

PROJECT NAME: Bicycle and Pedestrian Incentives

PRIORITIES: Safety, Encouraging Walking and Bicycling, Attractiveness of the Village, Environmental Benefits

ACTION: The Village should experiment with incentives to convert car trips to walking and bicycling. This might include providing more secure and protected bicycle storage at the train station than is currently available. (The current bike rack location, while underneath an outdoor staircase, does not keep bikes dry during heavy or windy rainstorms.)

METRIC: Number of events and participants.