

Upper Route 9G

Corridor Management Plan



PRESENTED BY

Mark Debald, PDCTC

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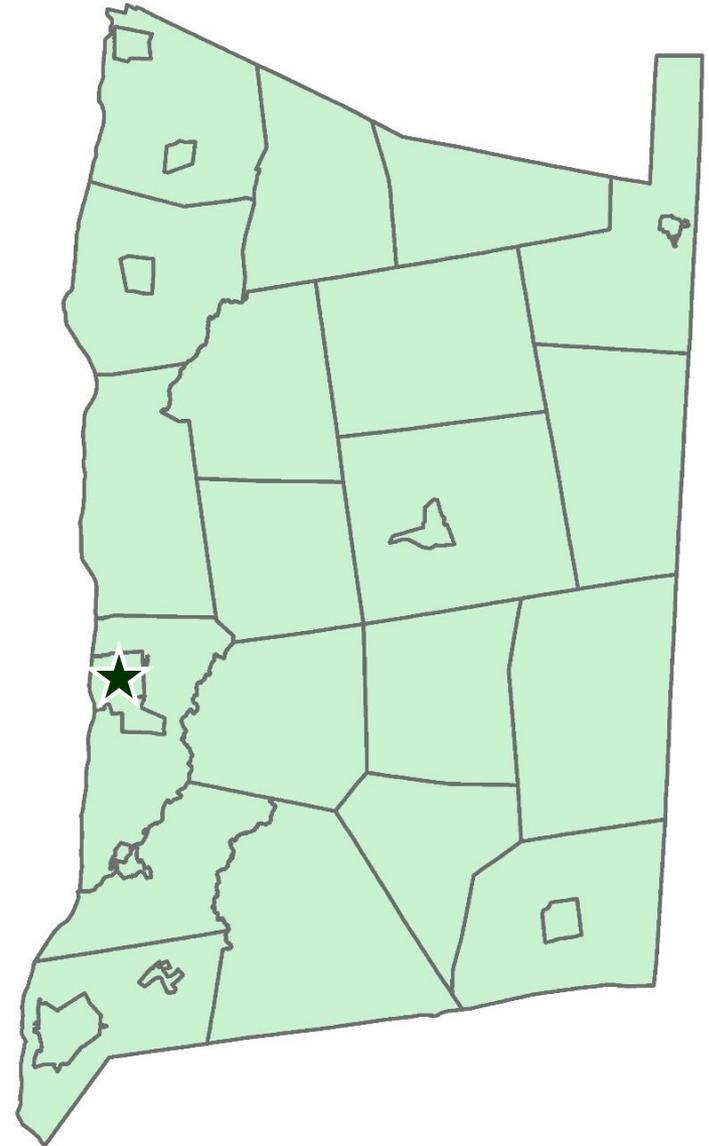
PDCTC Background

Upper Route 9G Corridor Management Plan

Poughkeepsie-Dutchess County Transportation Council

Who We Are:

- Designated Metropolitan Planning Organization (MPO) for Dutchess County (one of 14 in New York State)
- Required by the federal government for Urbanized Areas of 50,000+ population
- Forum for establishing transportation policies and priorities
- Programs federal highway and transit funding through a locally driven planning process
- *Assists communities with their local transportation planning needs*



Previous Planning Projects

- **Route 9 Land Use & Transportation Study (2009)**

 - ⇒ *Pedestrian underpass at Marist College*

- **Transit Development Plan (2009)**

 - ⇒ *New bus routes and schedules*

- **CR 93 Corridor Management Plan (2011)**

 - ⇒ *Traffic analysis and recommendations*

- **Dutchess County Bus Expansion Study (2013)**

 - ⇒ *Strategy to expand DCPT service in Poughkeepsie*

- **Sidewalk Studies (2011-ongoing)**

 - ⇒ *Rhinebeck, Hyde Park, Pine Plains, & Arlington*

 - ⇒ *Leverage for grant opportunities & funding*



PDCTC Voting Membership

Permanent Members

Dutchess County Executive, *Chairperson*

NYS DOT Commissioner, *Secretary*

Metropolitan Transportation Authority (MTA)

City of Beacon Mayor

City of Poughkeepsie Mayor

Town of Beekman Supervisor

Town of East Fishkill Supervisor

Town of Fishkill Supervisor

Town of Hyde Park Supervisor

Town of LaGrange Supervisor

Town of Poughkeepsie Supervisor

Town of Wappinger Supervisor

Partially Urbanized Towns (Rotating)

Town of Pawling Supervisor

Town of Pleasant Valley Supervisor*

Town of Union Vale Supervisor

Urbanized Villages (Rotating)

Village of Fishkill Mayor

Village of Pawling Mayor*

Village of Wappingers Falls Mayor

Non-Urban Towns (Nominated)

Town of Clinton Supervisor

Town of Pine Plains Supervisor

* Current voting member.

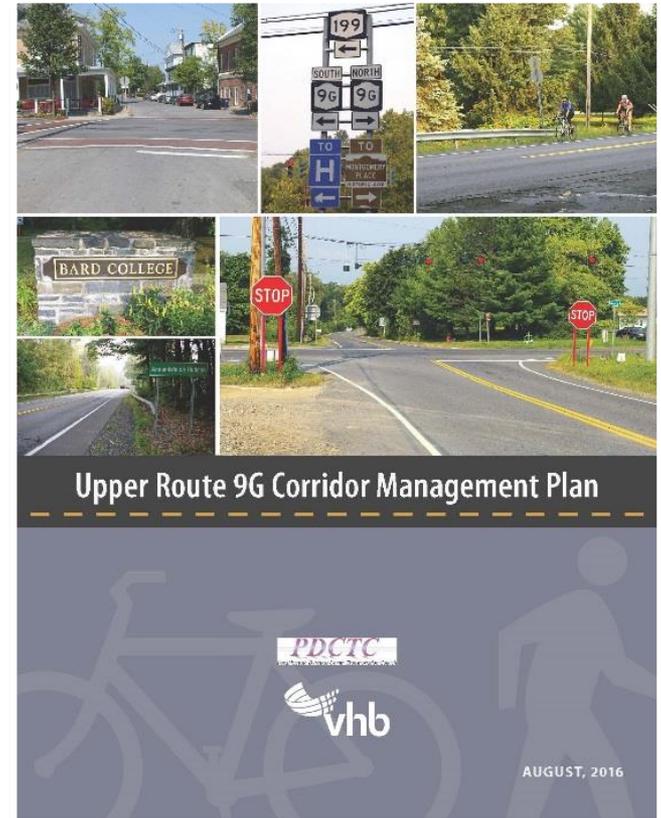
16 Voting Members

Project Introduction

Upper Route 9G Corridor Management Plan

Project Scope of Work

- ✓ **Task 1: Data Gathering**
 - *Peak Hour Turning Movement Counts*
 - *Ped/Bike volume counts*
 - *Ped/Bike Origin & Destination surveys*
- ✓ **Task 2: Analyze Existing Conditions**
 - *Crash Analysis (2009-2013 data)*
 - *Crash Diagrams*
- ✓ **Task 3: Road Safety Audit (RSA)**
- ✓ **Task 4: Assess Future Conditions**
 - *10-year planning horizon*
- ✓ **Task 5: Develop Improvement Strategies**
- **Task 6: Complete Final Plan**



Goal: identify short- and long-range recommendations to improve vehicular and non-vehicular safety and mobility in the study area.

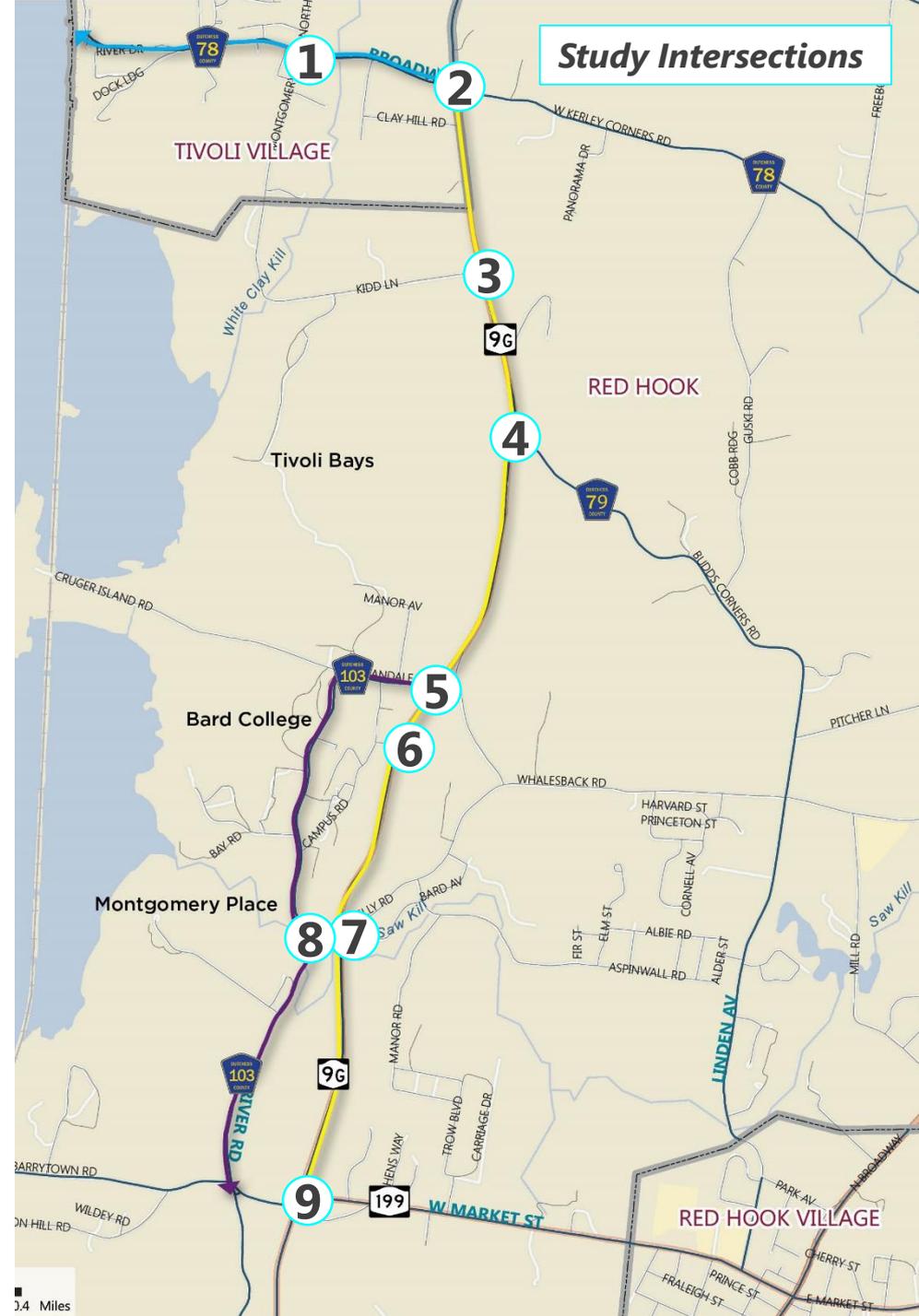
Project Study Area

Road Segments

1. Route 9G: Route 199-CR 78
2. CR 78 (Broadway) through Tivoli
3. CR 103 (Annandale Rd.) through Bard

Intersections

1. CR 78 (Broadway)/Montgomery St./North Rd.
2. Route 9G/CR 78 (W. Kerley Corners Rd.)
3. Route 9G/Kidd Ln.
4. Route 9G/CR 79 (Budds Corners Rd.)
5. Route 9G/CR 103 (Annandale Rd.)
6. Route 9G/Entrance Rd. (Bard College)
7. Route 9G/Kelly Rd./River Rd.
8. CR 103 (Annandale Rd.)/River Rd.
9. Route 9G/Route 199 (W. Market St.)



Project Milestones

- **Kick-off Meeting:** Feb. 2015
- **Turning Movement Counts:** Apr. 2015
- **Ped/Bike Counts/Surveys:** May 2015
- **Public Workshop #1:** May 2015
- **Stakeholder Interviews:** Jun. 2015
- **Road Safety Audit (RSA):** Sep. 2015
- **Preliminary Recommendations:** Apr. 2016
- **Public Workshop #2:** May 2016
- **Final Plan:** Aug. 2016



Recommendations

- 54 recommendations (not counting repairs to be addressed through maintenance activities)
- Grouped by location & jurisdiction:
 - Overall Study Area
 - Trails & Shared-use Paths
 - Corridors & Intersections (Route 9G, CR 78, & CR 103)
 - Transit
- Includes estimated costs
- Final Plan and Supporting Documents available online at <http://www.dutchessny.gov/pdctc.htm>

Project relied on the participation of an Advisory Committee to guide study and review interim work products.



Overview of Corridor Management Plan

Upper Route 9G Corridor Management Plan

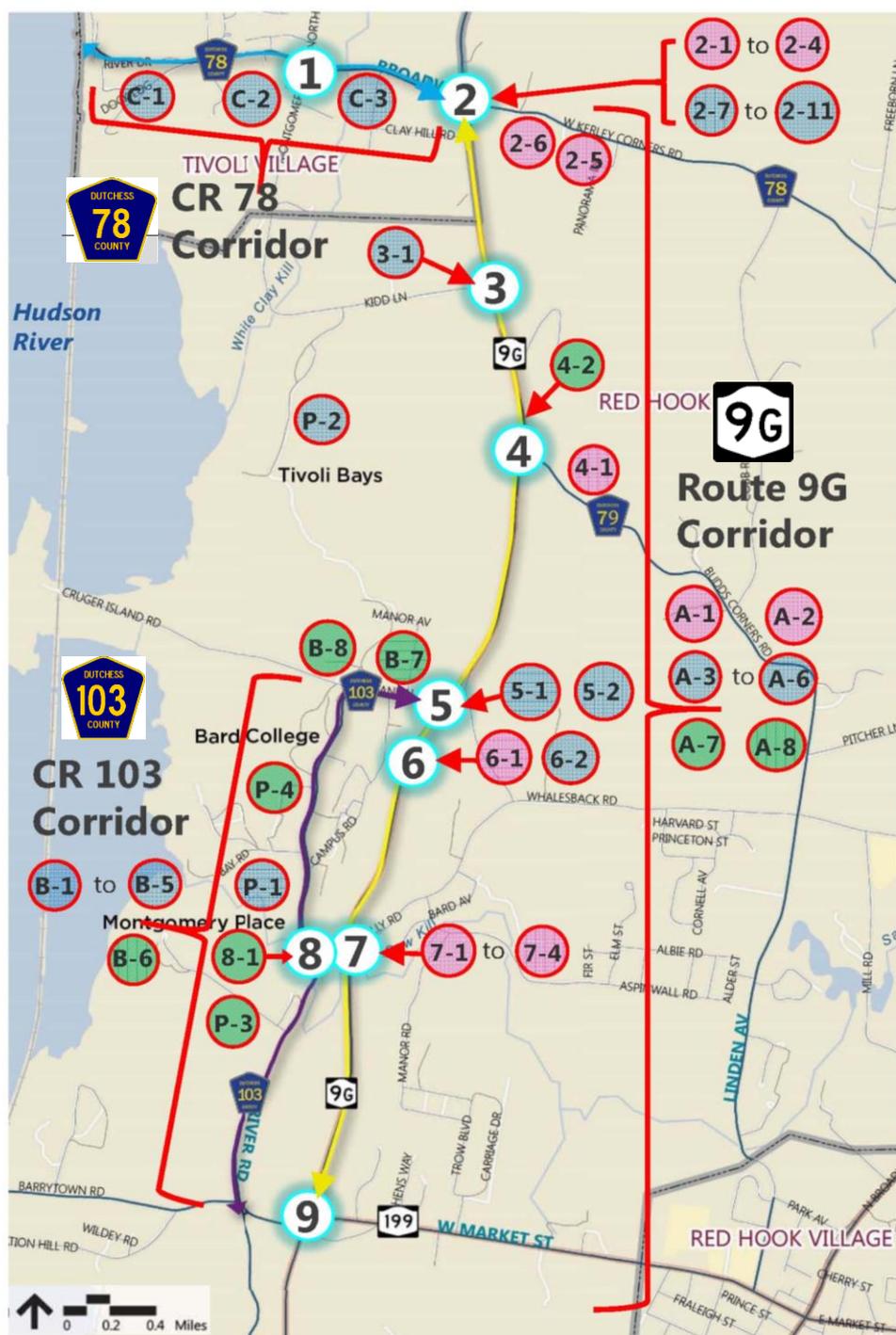
- **Provide public with an overview and status update on recommendations**

Implementation Schedule

-  Immediate (< 1 year)
-  Mid-term (1-5 years)
-  Longer-term (6-10 years)
-  Continuing/ Ongoing

Figure 2

Recommendations Key Map



Overall Study Area

-  OS-1
-  OS-2
-  OS-3
-  OS-4
-  OS-5

Transit

-  T-1
-  T-2
-  T-3



Implementation Schedule

-  Immediate (< 1 year)
-  Mid-term (1-5 years)
-  Longer-term (6-10 years)
-  Continuing/Ongoing

Area-wide

-  OS-1
-  OS-2
-  OS-3
-  OS-4
-  OS-5

Recommendations

Overall Study Area

Address user, land use, and design practices that will advance responsible corridor use and development, contributing to a safer travel environment.

Concerns:

- **Speeding**
- **Impaired Driving**
- **Visibility**
- **Minimizing conflicts**



(Bard sign near 9G)



Overall Study Area Recommendations

OS-1 Targeted Enforcement & Portable Speed Feedback Devices

OS-2 Annual Road Safety Awareness Campaign

OS-3 Consider Complete Street Design Principles

OS-4 Incorporate Dutchess County Planning Dept.'s Greenway Guides Principles:

- Building Placement
- Narrow streets in hamlet centers
- Development in existing centers
- Street trees
- Bicycle Plans
- Consolidated driveways
- Shared parking
- Rural feel for low volume roads



OS-5 Consider permanent driver-feedback speed signs



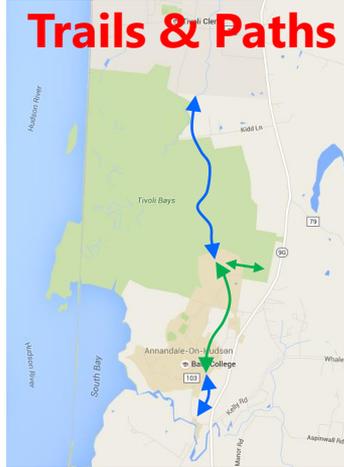
3-E's: Education, Enforcement & Engineering

Trails & Paths

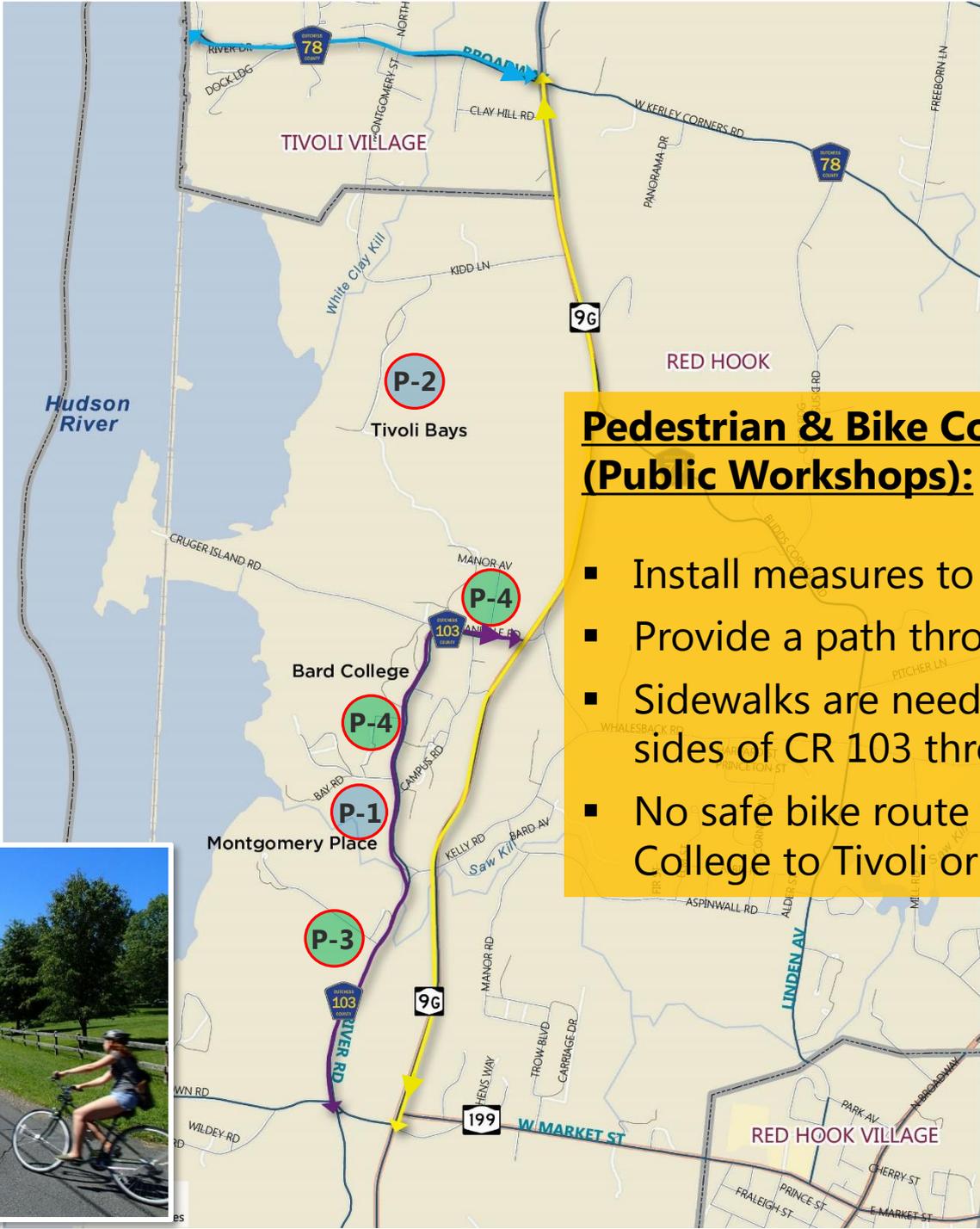
Upper Route 9G Corridor Management Plan

Implementation Schedule

- Immediate (< 1 year)
- Mid-term (1-5 years)
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Recommendations Key Map Trails & Paths



Pedestrian & Bike Comments (Public Workshops):

- Install measures to slow traffic
- Provide a path through Tivoli Bays
- Sidewalks are needed on both sides of CR 103 through Bard
- No safe bike route from Bard College to Tivoli or along CR 103



Bard bike ride

Trails & Paths

P-1 Pedestrian-bicycle connection between Bard Main Campus to Montgomery Place

P-2 Pedestrian-bicycle facility to connect Bard Main Campus to Village of Tivoli, through Tivoli Bays

P-3 Pedestrian-bicycle facility to connect Montgomery Place to CR 82 (Barrytown Rd.)/UTS

P-4 Widen existing shared-use path along CR 103 (Annandale Rd.) to a minimum of 10 feet.



CR 103 (River Rd.) looking south from Montgomery Pl.

NYS Route 9G



Upper Route 9G Corridor Management Plan

Route 9G Corridor-Wide Recommendations

A-1 Consider reducing speed limit to 45 mph corridor-wide

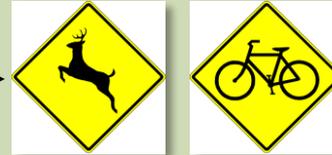
A-2 Repave and seal sections of Route 9G

A-3 Consider installing roadside delineators on curves

A-4 Consider consolidating signs on Route 9G to reduce clutter

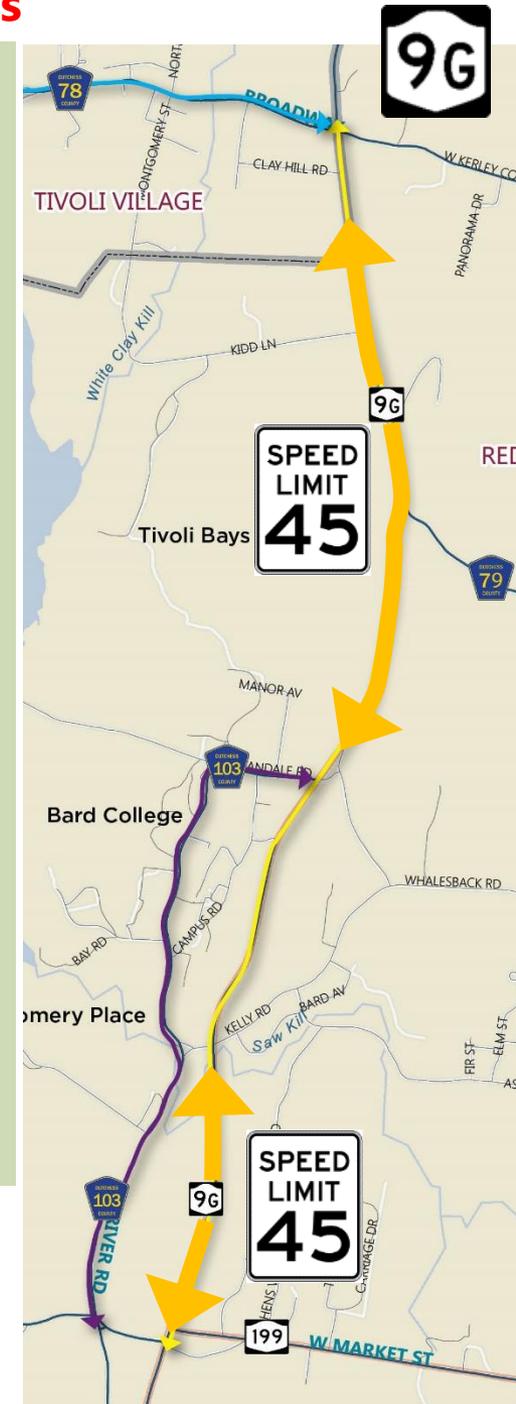
A-5 Evaluate the need to upgrade existing guiderail and end treatments to current standards or add new guiderail

A-6 Install Deer and Bicycle warning signs →

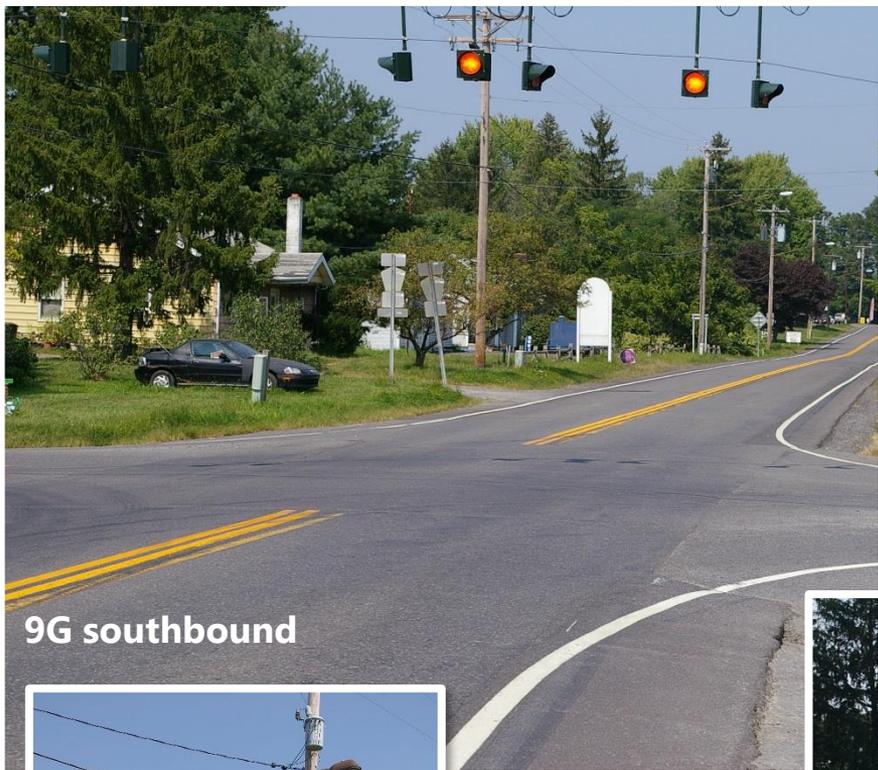


A-7 Install traffic calming measures to encourage lower speeds and serve as gateways to the corridor

A-8 Seek to provide 11' vehicle lanes and 4' shoulders



Route 9G Intersection Existing Conditions: CR 78/W. Kerley Corners Rd.



9G southbound



CR 78 westbound at 9G



Fixed objects



9G from Jaeger House driveway (looking south)

Route 9G at CR 78 (W. Kerley Corners Rd.) Intersection Recommendations

Immediate Term (within 1 year)

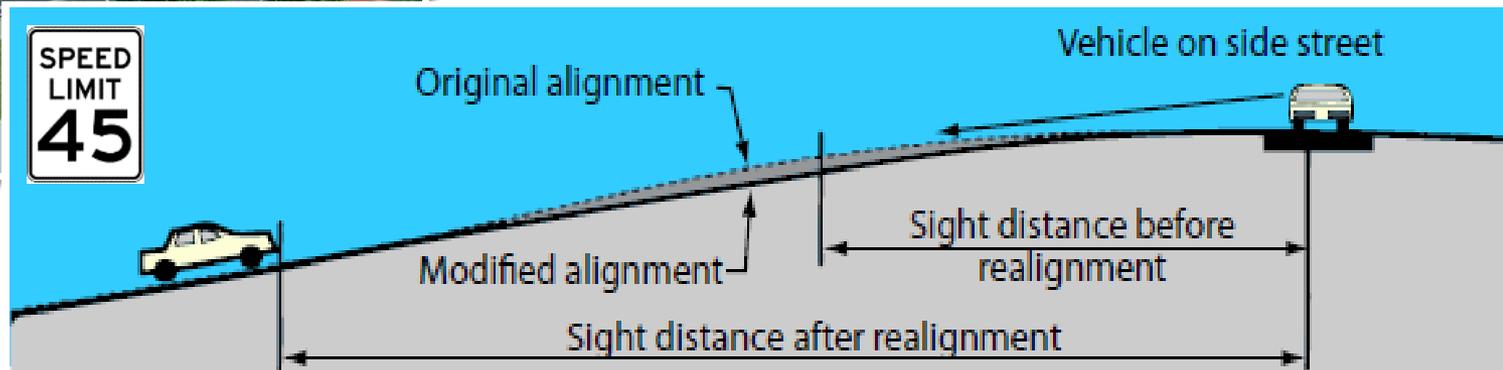
- 2-1 Improve profile and alignment of westbound CR 78 approaching Route 9G
- 2-2 Continue to monitor, on a regular basis, the effectiveness of the recently installed safety improvements (flashing light) at the intersection
- 2-3 Supplement intersection warning sign on Route 9G with flashing beacon
- 2-4 Add a sign plaque, "Cross Traffic Does Not Stop" (W4-4P) → 
- 2-5 Consider reducing the speed limit on CR 78 approaching Route 9G to 45 mph
- 2-6 Replace the static "Stop Ahead" sign on CR 78 westbound with a "Stop Ahead" sign with embedded and flashing LED lights.



Route 9G at CR 78 (W. Kerley Corners Rd.) Intersection Recommendations

Mid-Term (2-5 years)

- 2-7 Improve lighting at the intersection to provide better visibility
- 2-8 Assess effectiveness of flashing red signal and larger stop signs
- 2-9 Undertake an engineering study to determine whether a full traffic signal or roundabout can be installed on Route 9G at CR 78
- 2-10 Evaluate the feasibility of reducing the grade of Route 9G south of the CR 78 intersection (as may be required for signal installation)
- 2-11 Implement land-use planning regulations consistent with the improvements proposed for the intersection of Route 9G with CR 78



Route 9G at Kidd Ln. Intersection Recommendation

Mid-Term (2-5 years)

3-1 Evaluate the safe operation of the passing lane on Route 9G

Route 9G/Kidd Ln. looking south



Route 9G at CR 79 (Budds Corners Rd.) Intersection

Immediate Term (within 1 year)

4-1 Reduce the speed limit on CR 79 approaching Route 9G to 45 mph

Long-Term (6-10 years)

4-2 Study options to make CR 79 (Budds Corners Rd.) a “T” intersection



Route 9G at Annandale/Old Whalesback Rd. Intersection Recommendations

Mid-Term (2-5 years)

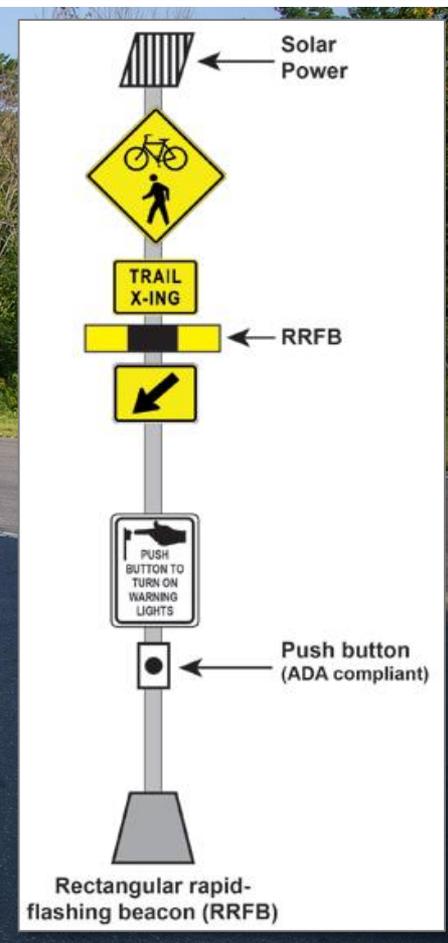
5-1 Perform traffic signal warrant analysis for three-way signal or Rapid Rectangular Flashing Beacon (RRFB), including high-visibility crosswalks

5-2 Install a sidewalk on Old Whalesback Rd. from Route 9G to Whalesback Rd.



Evaluate for traffic signal or RRFB

Annandale Rd. looking east



Looking towards 9G south from Old Whalesback Rd.

Route 9G at Entrance Rd. Intersection Recommendations

Immediate Term (within 1 year)

6-1 Add directional guide sign advising motorists that they are approaching the entrance to Bard College

Mid-Term (2-5 years)

6-2 Study installation of a full signal, an RRFB or HAWK, and high-visibility crosswalks and appropriate reuse of Bard building



Route 9G north at Entrance Rd.

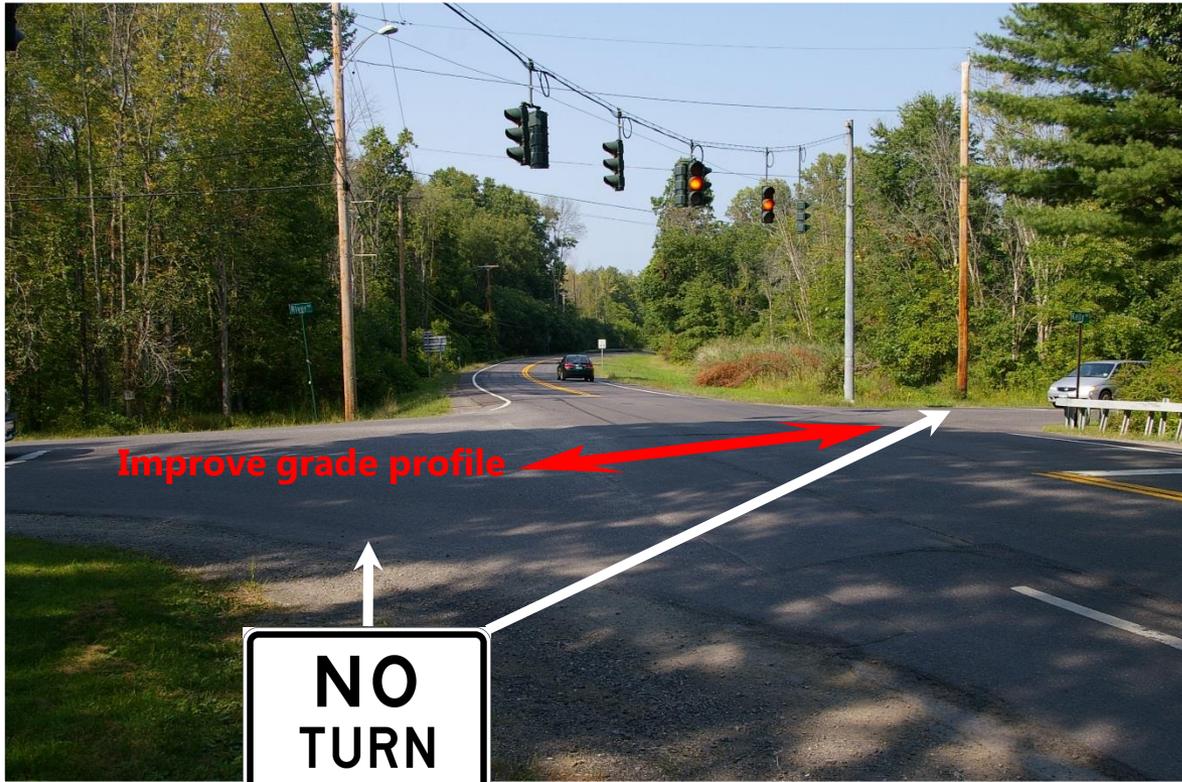


Route 9G looking south from Bard building

Route 9G at River/Kelly Rd. Intersection Recommendations

Immediate Term (within 1 year)

- 7-1 Install 'No Turn on Red' signs facing River and Kelly Rd.
- 7-2 Evaluate skid resistance of pavement for Route 9G northbound; repair as necessary
- 7-3 Evaluate grade change and signal clearance timings when crossing Route 9G
- 7-4 Enhance lighting at the intersection



CR 103 (Annandale Rd.)

Upper Route 9G Corridor Management Plan

CR 103 (Annandale Rd.) Corridor-Wide Recommendations

Mid-Term (2-5 years)

- B-1** Request that CR 103 be reclassified as a lower-volume, lower-speed Urban Minor Collector roadway
- B-2** Develop improved wayfinding signing for Bard College
- B-3** Assess pedestrian crosswalk locations/design to improve pedestrian operations & safety
- B-4** Consider installing RRFBs between south and north Campus Road
- B-5** Evaluate reducing speed limit to 35 mph between River Rd. and CR 82 (Barrytown Rd.)



CR 103 (Annandale Rd.) Corridor-Wide Recommendations

Long-Term (6-10 years)

B-6 As part of the Bard Master Plan, incorporate such traffic calming elements as:

- Gateway treatments
- Raised pavement surfaces
- Curb bump-outs
- Narrower pavement width

B-7 Extend the sidewalk along CR 103 from Campus Rd. to Route 9G

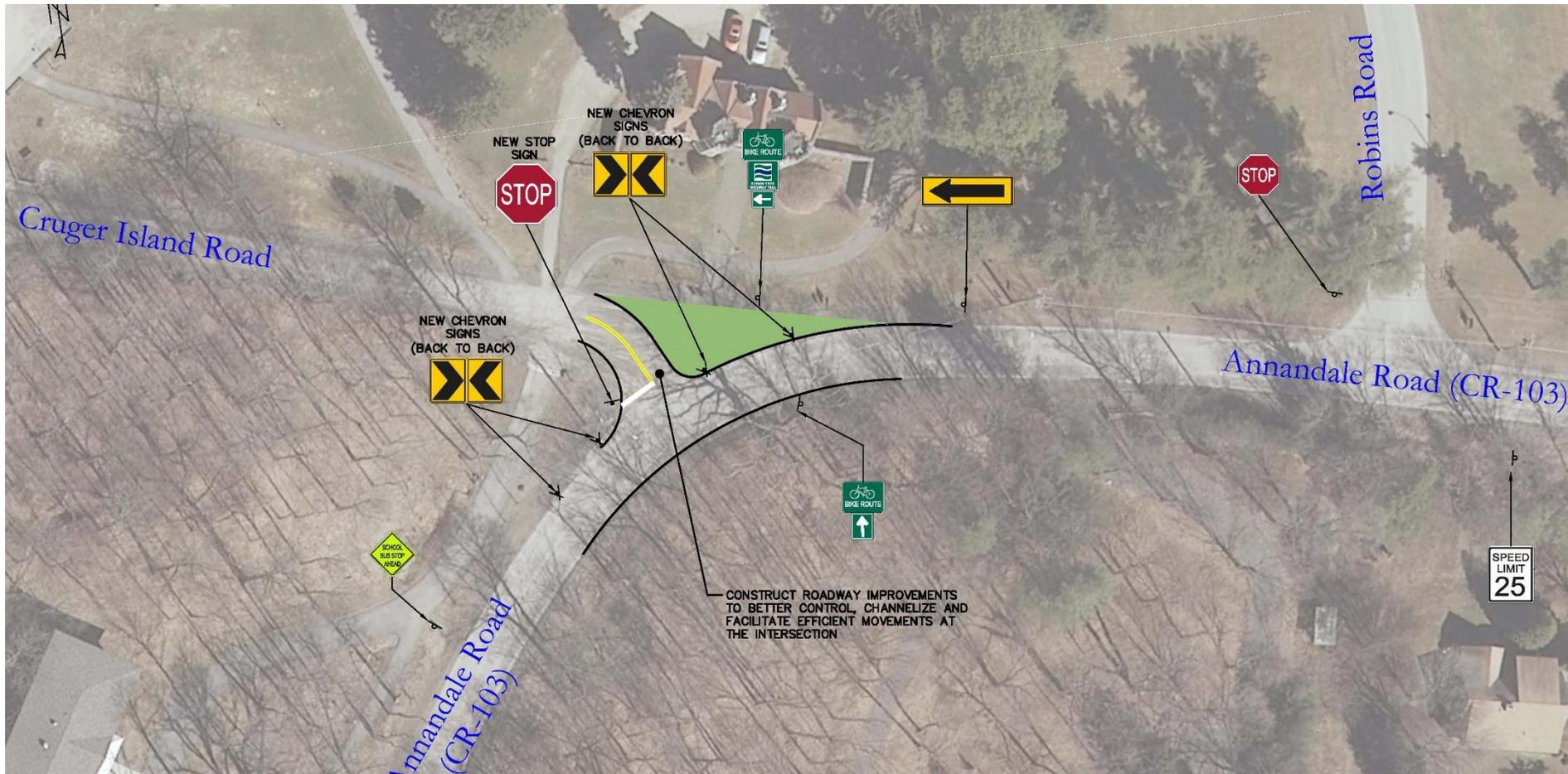
B-8 At the CR 103 intersection with Cruger Island Rd., evaluate options for reconstructing the intersection as a perpendicular T-intersection to better channelize traffic



CR 103 at Cruger Island Rd. Intersection Recommendation

Long-Term (6-10 years)

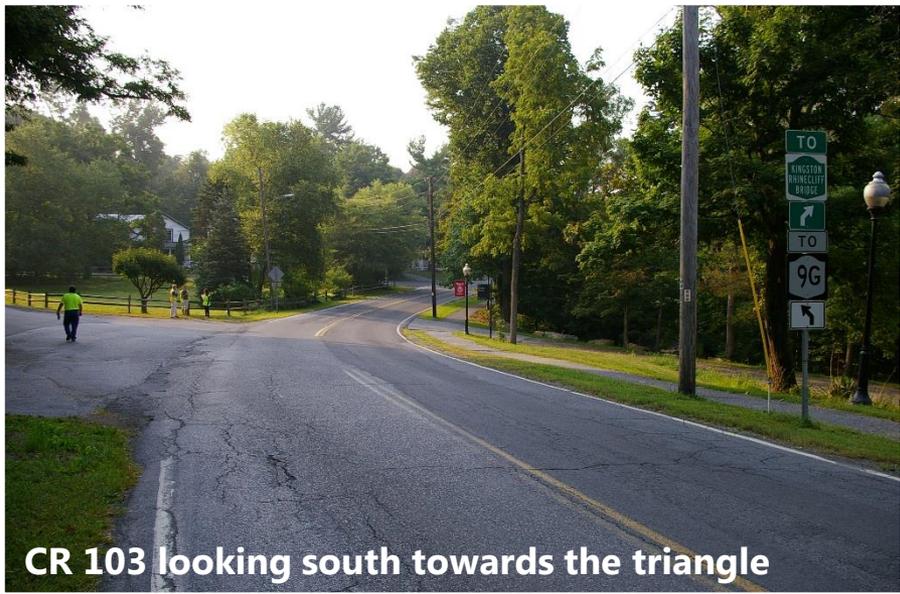
B-8 At the CR 103 intersection with Cruger Island Rd., evaluate options for reconstructing the intersection as a perpendicular T-intersection to better channelize traffic



CR 103 (Annandale Rd.) at River Rd. Intersection Recommendation

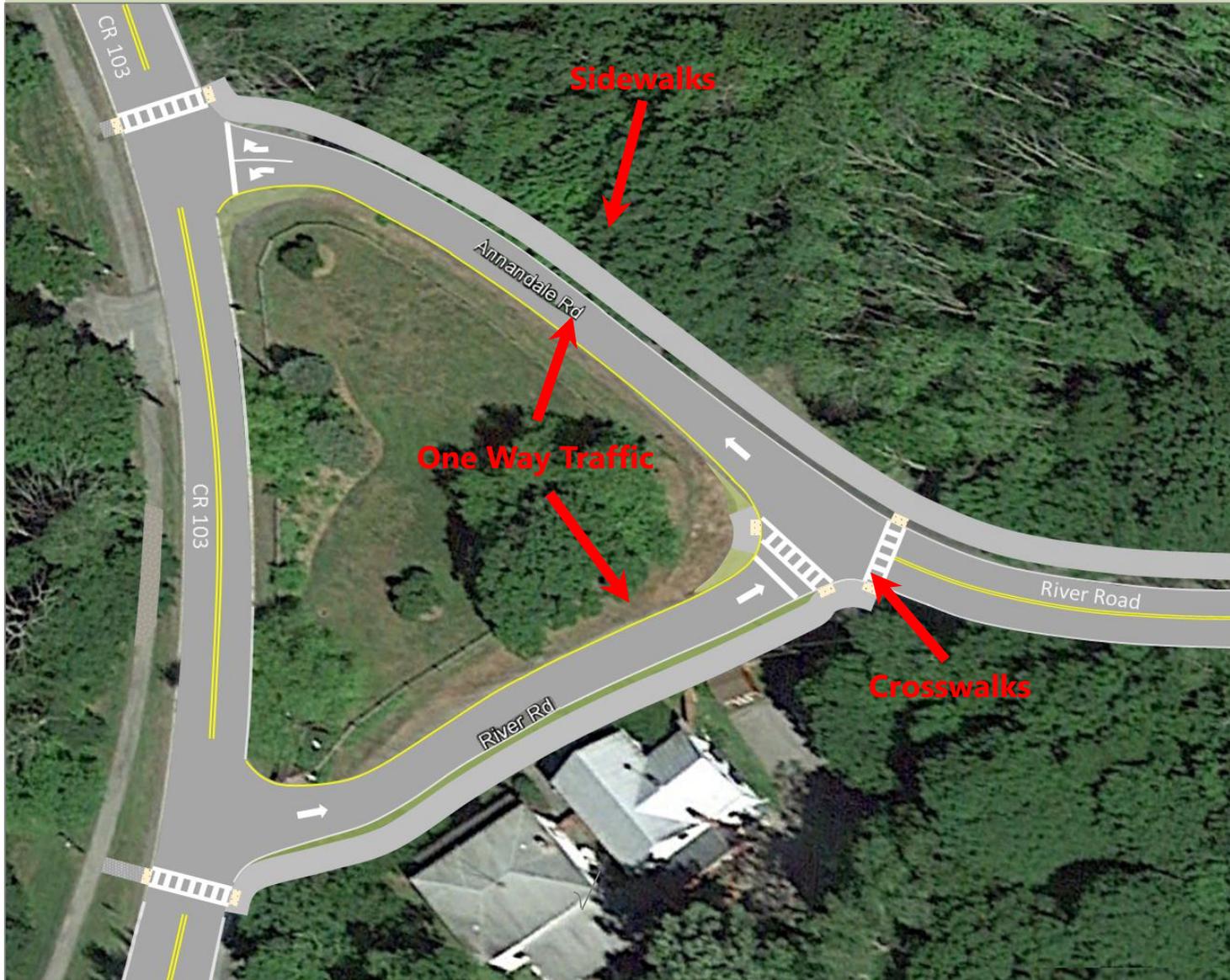
Long-Term (6-10 years)

8-1 Consider reconfiguring the River Rd. triangle with a one-way circulation system on 2 of the 3 "triangle legs" and add sidewalks and crosswalks connecting to the existing sidewalk along CR 103



CR 103 at River Rd. Intersection Recommendation

8-1 Consider reconfiguring the River Rd. triangle with a one-way circulation system on 2 of the 3 "triangle legs" and add sidewalks and crosswalks connecting to the existing sidewalk along CR 103.



CR 78 (Broadway)

Upper Route 9G Corridor Management Plan

CR 78 (Broadway) Corridor-Wide Recommendations

C-1 Add a guide rail on the south side of Broadway west of Dock Rd.

C-2 Extend a sidewalk on one side of Broadway from Pine St. to the Hudson River

C-3 Change functional classification to Urban Minor Collector



CR 78 (Broadway) looking east from Kaatsbaan



CR 78 (Broadway) looking east

Maintenance Recommendations (Examples)

M-1 Trim vegetation and/or relocate signs to avoid sign obstructions

M-2 Replace damaged guiderail along Route 9G

M-3 Restripe pavement markings

M-6 Install additional Deer Crossing warning signs

M-8 Evaluate location of the existing intersection warning signs along Route 9G approaches to Kidd Ln.

M-12 Improve visibility from CR 79 onto Route 9G by cutting back vegetation to improve sight lines

M-13 Repaint stop bars on Old Whalesback Rd.

M-15 Check mounting height of signs



Sponsor Review of Recommendations

Upper Route 9G Corridor Management Plan

NYSDOT-Region 8

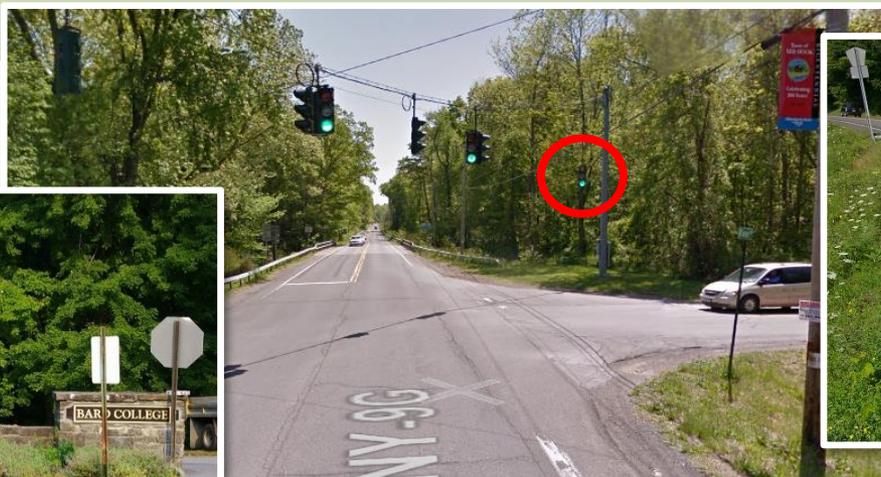
Upper Route 9G Corridor Management Plan

Maintenance Improvements

- Evaluate need/location for deer warning signs, driveway warning signs & removal of “No Stopping Any Time” sign at Bard College entrance
- ***All other recommendations completed***

Recommendations

- ***Repave Route 9G from Route 199 to County line (fall of 2016)***
- Guiderail replacement project (fall 2016/spring 2017)
- Add louver on the westernmost signal head facing Route 9G at Kelly Rd. approach



Recommendations

- Assess need/benefit of speed limit reduction to 45 MPH (ongoing)
- Assess effectiveness of flashing signal at Rt. 9G & CR 78 (West Kerley Corners Rd.), determine if full traffic signal is warranted
- Assess need/benefit of sign “Cross Traffic Does Not Stop” on CR 78 approach to Route 9G
- Evaluate safety of existing passing lane on Route 9G at Kidd Ln., potentially eliminate
- Assess need/benefit of sign “No Turn on Red” at River Rd. & Kelly Rd. approach to Route 9G



Dutchess County DPW

Upper Route 9G Corridor Management Plan



Dutchess County DPW

Completed Improvements

- Installed flashing warning signs at each end of CR 103 (Annandale Rd.)
- Reduced speed limit on CR 103 (Annandale Rd.) to 25 MPH
- Completed shoulder maintenance on CR 79 (Budds Corners Rd.) at Route 9G to improve safety & drainage



Recommendations

- Designing improvement project at Route 9G/CR 78 (W. Kerley's Corners Rd) intersection to lower road elevation and improve visibility of the new flashing traffic signal. Construction planned for spring/summer 2017.
- Assisting Town of Red Hook with Greenway Trails Grant application to design and build trails in northern section of Town
- Assisting Bard College with master plan update



Bard College

Upper Route 9G Corridor Management Plan

Bard College Update

Ongoing Activities

- Continue driver education/orientation programs for new students
- Continue to collaborate with local law enforcement agencies for targeted speed enforcement on CR 103 (Annandale Rd.)



Recommendations

- Begin Master Plan Update
- Look at ways to better connect Montgomery Place with main campus

Bard College Campus Plan

Campus Framework

SMWM
with SCAPE
23 May 2008



Questions?



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(click on 'Community Planning Initiatives; Upper Route 9G)