

Chapter 6: County-Wide Recommendations

This chapter provides recommendations that can be implemented at a county-wide scale. They are organized by the ‘Five E’s’: Engineering, Education, Encouragement, Enforcement, and Evaluation & Planning, and also include recommendations related to Local Policies & Plans, and Personnel. Unless otherwise specified, recommendations are intended to be led by the PDCTC or appropriate County department.

A. Engineering

1. Create a County Road Maintenance Reporting System

- Work with the County Department of Public Works (DPW) to establish a website, smart phone app, or other user-friendly system for residents to report maintenance needs on County roads and shared-use paths, and for DPW to record, respond to, and track the status of requested maintenance. This system could apply to walking and bicycling-related conditions as well as other safety or maintenance concerns.
 - Incorporate a feature to enable issues related to Town or State roads to be directed to the appropriate entity.
 - Maintenance issues on County roads can also be reported by



Basic maintenance such as trimming vegetation and sweeping shoulders is critical to maintaining walking and bicycling access.

[emailing the County Department of Public Works](#) or calling 845-486-2900.

- Maintenance issues on State roads should be directed to the [Hudson Valley Transportation Management Center](#) (phone 914-864-5450). Bicycling and walking-related questions can be directed to the [Bicycle and Pedestrian Section staff](#).

2. Incorporate Walking and Bicycling Facilities in Road Improvement and Maintenance Projects & Create a Public Schedule/Notification System

- Encourage County DPW, New York State Department of Transportation (NYSDOT), and local municipalities to continue to incorporate walking and bicycling facilities into road improvement and maintenance projects where feasible. Prioritize streets in designated centers, those recommended for improvements in this Plan, and designated State Bike Routes.
 - Roadway reconstruction and rehabilitation projects: consider formal paved shoulders, sidewalks and crosswalks, and/or bicycle facilities, consistent with this Plan and in locations where the improvement can be accommodated within the existing right of way.
 - Bridge and culvert construction and rehabilitation projects: consider formal shoulders, sidewalks and crosswalks, consistent with this Plan.

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- Resurfacing projects: incorporate wider shoulders where desired and feasible. Pave the shoulder to the maximum extent practicable.
 - General maintenance: keep road shoulders as clear of vegetation and debris as possible to maximize accessibility and safety for people walking and bicycling.
- Work with DPW, NYSDOT, and local municipalities to provide a publicly-available and easily understood schedule of proposed road projects (such as on their website), so that residents can provide input and be aware of upcoming projects.
 - Encourage coordination between DPW and PDCTC/County Planning staff at an early stage of project development to discuss, consider, and incorporate bicycling and walking improvements into project designs.



Bridge projects provide opportunities to improve walking and bicycling access by installing wide shoulders or sidewalks.

3. Provide Facilities for Walking in Centers

- Work with municipalities, County DPW, and NYSDOT to provide facilities for walking in designated centers. Consider sidewalks, marked crosswalks, pedestrian signals, other design features, and maintenance practices based on the guidance in Chapter 3 (Design Guidelines).
 - Sidewalks on County roads may be installed by the municipality or property owner (with a permit from

County DPW), or by County DPW; however, the municipality is responsible for maintenance.

- Sidewalks on State roads may be installed by the municipality or property owner (with a permit from NYSDOT), or by NYSDOT as part of a capital project. Sidewalks on State roads are owned by NYSDOT but maintained by the municipality.

- On local streets, the municipality is responsible for improvements (including sidewalks) as well as maintenance. However, the municipality may require property owners to install sidewalks or other facilities as part of a land-use approval, and may require property owners to

maintain sidewalks.

- County DPW should continue to work with municipalities to review speed limits on County roads in hamlets and evaluate potential reductions, in conjunction with traffic calming elements where appropriate.
- ### 4. Provide On-Street Bicycle Facilities
- Work with local municipalities, County DPW, and NYSDOT to provide and maintain on-street bicycle facilities on streets with significant bicycle use or potential use. The appropriate facility type and maintenance practices should be based on the guidelines in Chapter 3 (Design Guidelines). Demonstration

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projects should be considered to test and evaluate bicycle lanes, sharrows, bicycle boulevards, and other facility types.

- Work with NYSDOT to evaluate and develop State Bicycle Routes on Routes 22, 44, 52, 55, and 82. Incorporate paved shoulders (minimum four feet) and other treatments as applicable.

How Can a Speed Limit be Changed?

Outside of Village and City boundaries, lowering a speed limit on a Town or County road requires a Town Board resolution requesting the change. The resolution is forwarded to County DPW for a recommendation and then forwarded to NYSDOT, which conducts an investigation and makes a final determination. Speed limits on State highways are set by NYSDOT, except that Villages and Cities may establish speed limits on State highways with written permission by NYSDOT. Villages, cities, and certain towns can set their own speed limits on all roads except State highways.

5. Inventory Local Sidewalks, Crosswalks and Pedestrian Signals

- Local municipalities, in coordination with PDCTC and NYSDOT as needed, should inventory and review conditions at existing sidewalks and crosswalks on their streets. The review should consider needs for sidewalk repair, crosswalk markings, pedestrian signal and traffic signal upgrades, curb ramps and other ADA improvements, and other features.
- Municipalities that do not have an ADA Transition Plan for their streets and sidewalks should develop one, identifying improvements needed to make all streets accessible per ADA standards and a timeframe for implementing those improvements.

6. Upgrade Bicycle Detection at Traffic Signals

- County DPW and municipalities should inventory actuated traffic signals on streets with significant bicycle use or potential use to determine if the signal detects bicycles, and if not, if it can be adjusted. Where detection is possible, a bicycle symbol may be marked on the pavement to show bicyclists where to position themselves to be detected. Signals that cannot be adjusted should be noted and bicycle detection incorporated if feasible when the signal is replaced or upgraded.
- In addition, the signal timing should be reviewed to determine if changes to the timing could better accommodate bicycle travel (such as extending the minimum green time, extension time, or all-red time).



Bicycle symbols marked over the loop detector alert bicyclists to the best place to wait to be detected (source: LA-Bike.org).

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7. Provide Bicycle Parking

- Work with the County DPW-Buildings Division to install short-term and long-term bicycle parking at all county facilities, as appropriate, based on the guidelines in Chapter 3 (Design Guidelines).
- Work with Dutchess County Public Transit to provide bicycle racks, bus stop shelters, and other amenities to municipalities. In order to receive such amenities, a municipality must sign an agreement with County Transit agreeing to install, insure and maintain the amenities.
- Encourage municipalities to install bicycle parking at high-use locations. Provide technical assistance as needed.

B. Education

1. Educate Roadway Users on Sharing the Road

- Work with the County Traffic Safety Board, Health Department, and other partners to develop and distribute Share the Road materials to educate all roadway users about how to share the road safely. Information should include walking, bicycling, and driving laws, as well as safe walking, bicycling, and driving practices. Materials could include public



The Capital District's "Capital Coexist" campaign includes materials about sharing the road (source: CapitalCoexist.org).

other materials to more fully incorporate bicycle laws and safety issues.

service announcements, billboards, websites, educational brochures, posters, bumper stickers, as well as training programs. Use or adapt existing materials where possible.

- **Examples:** Capital District Transportation Committee's (CDTC) [Capital Coexist campaign](#); GTSC's [Share the Road guides](#) and [Sharing the Road Safely brochure](#); [Coexist NYS](#) video and print tools.

- Incorporate Share the Road training and materials into Defensive Driving courses given to County employees.
- Work with the County Auto Center to consider installing "Share the Road" bumper stickers, "Watch for Bicyclists" driver side-view mirror stickers, or other awareness messages on County vehicles.
- Coordinate with local DMV offices to distribute educational materials, and consider screening Share the Road safety videos at DMV offices.
- Work with DMV to update the driver's test, driver's manual, and

2. **Support Pedestrian Safety Training**

- Work with the County Traffic Safety Board, Health Department, and other partners to develop and/or support pedestrian safety programs at schools, colleges, and other venues. These programs should include information about walking laws and safe walking practices, such as wearing reflective clothing at night. Focus on key audiences (based on crash data), such as teens/young adults and older adults, as well as non-English speakers.
- In schools, incorporate pedestrian safety presentations into teacher training days or student assemblies, and provide teachers with materials to use in their classrooms. Use tools such as those on [FHWA's pedestrian and bicycle safety webpage](#) and [NYSDOT's Pedestrian Information and Education webpage](#).

3. **Support Bicycle Safety Training**

- Work with the County Traffic Safety Board, Health Department, and other partners to develop and/or support bicycle safety programs, such as [bicycle rodeos](#) and skills clinics. These programs should include information about bicycle laws and safe bicycling practices, as well as basic bicycle maintenance and repair. Focus on key audiences (based on crash data) such as children, teens, and young adults, as well as specific programs for Spanish speakers and women.
 - **Example:** In 2012, [Bikeable Beacon](#) held two free “Bike for Transportation” classes for cyclists of all levels covering traffic rules, how to share the road, bike repairs, and other riding tips.

- Develop a bicycle safety tips brochure to educate people about safe bicycling practices. Distribute to riders through bicycle shops and other bike retailers, bus drivers, rail trail heads, online, and at events. Use resources such as those from the [League of American Bicyclists](#) and others (see sample brochures on following pages).

4. **Develop Complete Streets Training**

- Develop training for municipal staff and local boards (such as Highway Superintendents, Town Boards, Planning Boards, and School Boards) on the concept and application of Complete Streets. The training could include discussion of the New York State Complete Streets Act, examples of local policies, and how to implement Complete Streets at the local level. Use or adapt existing materials where possible (such as those from the County Planning Department's [2013 short course on Complete Streets](#)).

5. **Encourage Community-Based Bicycle Education Programs**

- Encourage local bike shops, community organizations, or others to develop local bicycle education and maintenance programs such as youth earn-a-bike programs, bicycle drivers' education, and bicycle maintenance classes.
 - **Example:** [Recycle-A-Bicycle](#) (NYC); [Recycle-A-Bicycle](#) (GObike Buffalo)

Fitting Your Bicycle Helmet



Step 1- Position helmet on your head so that there are 2 fingers of space from your eyebrow to the edge of the helmet.



Step 2- Adjust straps so that the side of the "V" is just below your ears.



Step 3- Tighten strap to allow for just 2 fingers to slide between chin and clasp. Yawn-open your mouth wide! The helmet should pull down on your forehead.



Step 4- Final adjustment. Helmet should be snug, low and level.

Share The Road

Bicycling Laws



One Person Per Bike

Riding double is permitted only when carrying a child, age one or older, in an approved carrier or when riding on a tandem bicycle. Cyclists under age 14 must always wear a helmet.



Never Ride Against Traffic

Motorists are not looking for bicyclists riding on the wrong side of the street. Ride with traffic to avoid accidents.



Use Hand Signals

Use hand signals to indicate upcoming turns, lane changes, slowing, and stopping. New York law also requires each bicycle to be equipped with a bell or a horn.



Use Lights at Night

Always use a strong light-colored headlight and a red taillight at night or when visibility is poor. Use bike reflectors and reflective clothing. See and be seen!



Earphones are Dangerous

Using earphones while bicycling (or skating) on a public right-of-way (street or sidewalk) is illegal.



Obey Traffic Signs and Signals

Bicyclists must obey all local and state traffic rules. Bicyclists have the same rights, privileges and duties as operators of other vehicles. Remember, a bicycle is not a toy.



Use Caution if Bicycling on Sidewalks

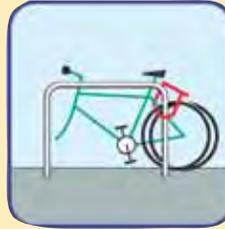
Bikes are permitted on sidewalks except where local laws prohibiting bicycling on sidewalks have been established. Bicyclists on sidewalks must yield to pedestrians and all vehicular traffic (including at driveways). Remember, motorists do not anticipate vehicles traveling quickly on the sidewalk from either direction.

Bicycling Tips



Scan the Road Behind

Look over your shoulder regularly or use a mirror to monitor traffic. Although bicyclists have equal right to the road, be prepared to maneuver for safety.



Lock Your Bike

Lock the frame and rear wheel to a fixed object. If you have quick release wheels, lock the front wheel also.



Ride in a Straight Line

Avoid dodging between parked cars. Ride in a straight line at least three feet away from parked cars. Watch for a car pulling out of a parking space.



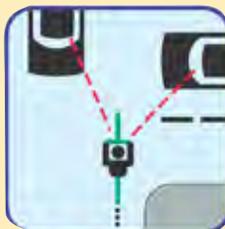
Use Appropriate Lane

Avoid being in a right turn only lane if you want to go straight through an intersection. Move into the through lane early.



Beware of Car Doors

Be wary of parked cars. Motorists can unexpectedly open doors. Be particularly careful if you see a motorist in the car.



Be Careful at Intersections

Proceed with care at intersections and be alert for vehicles. Establish eye contact with motorists to ensure that they know you are on the roadway. Confirm that you are seen.



Turning Left - 2 Options

1. AS A VEHICLE: Signal your intentions in advance. Move to the left turning lane and complete the turn when it is safe.
2. AS A PEDESTRIAN: Ride to the far crosswalk, dismount & walk across.

Share The Trail

Multi-Use Trails



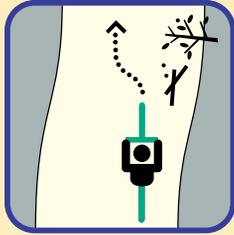
Keep to the Right

All trail users should keep to the right except when passing or turning left. Move off the trail to the right when stopping. Never block a trail.



Signal to Others

Cyclists: when approaching others, sound your bell or call out a warning, then pass safely on the left.
Pedestrians: move to the right when someone is overtaking.



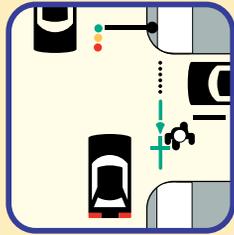
Be Alert

Watch for hazardous conditions, such as poor pavement, fallen tree branches and other debris. Beware of slippery conditions caused by water, ice, loose gravel or sand.



Skaters Use Caution

In-line skaters: know how to use your equipment safely. Follow travel, passing, and speed rules as per bicyclists. Do not perform trick skating maneuvers on trails.



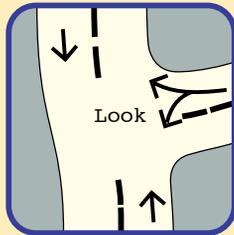
Dismount as Posted

Dismount and walk across roadways or other posted locations. When choosing a 'pedestrian style' crossing across the flow of traffic, cross only when it is safe to do so.



Stay on the Trail

Keep on designated trails to protect parks, natural areas and yourself. Riding off the trail is dangerous.



Be Careful at Crossings

Look both ways. Cyclists: yield to through traffic at intersections, pedestrians have the right of way. Pedestrians: exercise caution. Be aware of stopping limitations of bicyclists and skaters.



Be Visible

Ensure your visibility at night by wearing light-colored clothing with reflective material. Outfit your bicycle with lights as you would for riding on the roads.

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C. Encouragement

1. **Participate in National Bike Month/Bike to School Day/Bike to Work Day**

- Work with Dutchess County Government (including the Health Department, Traffic Safety Board, and other partners) to develop a program for the annual National Bike to Work Day (in May). This program could serve as a model for other employers and jurisdictions.



County Planning staff organized a Bike to Work Day event in 2014.

- Work with schools to develop and support programs for the annual National [Bike to School Day](#) in May.
- Use the resources available from the [League of American Bicyclists](#) and others to promote National Bike Month (May).
- Consider organizing or assisting with a Bicycle Expo to celebrate National Bike Month. The expo could include family-friendly rides; information from advocacy organizations, bicycle

clubs, and safety groups; vendors; demonstrations; skills clinics, and other events.

- Consider organizing a Dutchess County Government team to participate in the [National Bike Challenge](#) (May to September), to encourage County employees to bicycle for transportation and recreation.

2. **Support National Walk to School Day**

- Work with schools to develop and support events and programs for the annual National Walk to School Day in October. Use resources available from the [National Center for Safe Routes to School](#) and [Safe Routes to School National Partnership](#) to promote walking events.

3. **Encourage Local Open Streets Projects**

- Encourage municipalities to consider implementing an Open Street project on a local street in the summer. These projects encourage public use of streets by closing the street to motorized traffic on a specific day and programming activities, such as dance, bicycle repair workshops, food, and group exercise classes. More information is available on the [Open Streets Project website](#).

D. Enforcement

1. **Support Police Officer Training**

- In coordination with the County Sheriff's Office and local police departments, provide information and training to officers on walking and bicycling laws.
 - **Example:** CDTC's [Continuum of Training for Pedestrian and Bicycle Safety for Law Enforcement](#) program.

Walk Bike Dutchess

2. Encourage Targeted Enforcement Campaigns

- Encourage the County Sheriff's Office and local police departments to promote targeted enforcement of key pedestrian and bicycle safety laws, such as people on foot and on bicycles obeying traffic signals, bicyclists riding in the same direction as traffic, and drivers yielding to people in crosswalks, as well as speed limits and cell phone/electronic device laws. Prioritize high-crash corridors or intersections based on crash data.

3. Encourage Bicycle Patrols

- Encourage the County Sheriff's Office and local police departments to use bicycle patrols in villages and other centers, on rail trails, and for special events. These patrols should be trained to model safe bicycling practices and educate roadway users on how to share the road safely by talking with people on the street and assisting at bicycle rodeos and other events.

E. Evaluation & Planning

1. Conduct Annual Pedestrian and Bicycle Counts

- Work with volunteers and local organizations to conduct annual counts of people walking and bicycling in accordance with the [National Bicycle and Pedestrian Documentation Project](#) guidelines. Prioritize high-crash locations, locations with new facilities



Walkway Ambassadors count people walking and bicycling (source: Susanne O'Neil, Walkway Over the Hudson).

(for pre/post data), and high-use areas. Use data to prioritize improvements and track walking and bicycling patterns across locations and over time.

- Work with the PDCTC's traffic count contractor to incorporate automated bicycle counts at select locations into the PDCTC's annual traffic count program, if feasible. Use data to prioritize improvements and identify patterns in bicycling across locations and over time.

2. Continue PDCTC Pedestrian and Bicycle Planning

- Continue to conduct local sidewalk inventories/improvement strategies in coordination with municipalities, similar to the [Village of Rhinebeck Sidewalk Study](#) and [Hyde Park Town Center Pedestrian Study](#).
- Continue to assist municipalities with planning and technical guidance to create on- and off-street bicycle facilities.
 - Develop a pilot Safe Routes to School (SRTS) study, working with a local municipality and school district. If successful, offer SRTS studies to other municipalities/schools. A first step could include developing a series of maps showing walking infrastructure within two miles of all elementary and middle schools (grades K-8).
 - Develop a pilot Safe Routes to Transit study, working with a local municipality and Dutchess County Public Transit. If successful, offer similar studies to other municipalities.

3. Incorporate Walking and Bicycling Elements in Road Safety Assessments

- Incorporate walking and bicycling safety elements, including [FHWA's Proven Safety Countermeasures](#), into the PDCTC's Road Safety Assessments. Refer to FHWA's [Pedestrian Road Safety Audit Guidelines](#) and [Bicycle Road Safety Audit Guidelines](#).
- Consider conducting Bicycle Road Safety Audits and/or Pedestrian Road Safety Audits on high-crash corridors (see maps in Chapter 4), in coordination with local municipalities, enforcement, and other stakeholders.

4. Analyze Pedestrian and Bicycle Crash Data

- Analyze pedestrian and bicycle crash patterns using tools such as the ALIS database developed by NYSDOT, NYSDMV, and the NYS Office of Information Technology Services, the [PEDSAFE](#) Countermeasure Selection System and the [BIKESAFE](#) Countermeasure Selection System. Use at least five years of data to identify high-crash corridors and intersections. Where possible, use pedestrian and bicycle count data to develop crash rates (crashes per the number of people walking or bicycling).

5. Encourage Local Bicycle Friendly Community Assessments

- Encourage municipalities that have made substantial progress in supporting bicycling to pursue recognition through the League of American Bicyclists' [Bicycle Friendly America](#) program. The program incorporates a self-assessment and outside review with detailed suggestions for improvement.
- Encourage all municipalities to use the application as a self-assessment tool.

6. Encourage Local Walk Friendly Community Assessments

- Encourage municipalities that have made substantial progress in supporting walking to pursue recognition through the Pedestrian and Bicycle Information [Center's Walk Friendly Communities](#) program. The program incorporates a self-assessment and outside review with detailed suggestions for improvement.
- Encourage all municipalities to use the application as a self-assessment tool.

7. Track Progress with Performance Measures

- Monitor progress towards walking- and bicycling-related goals through the use of performance measures (see the end of this chapter). Review and track the performance measures as part of every update to the PDCTC's long-range transportation plan, and revise as needed.

F. Local Policies & Plans

1. Adopt a County Complete Streets Policy

- Work with the County Planning Board, DPW and other County departments, and the County Legislature to develop and adopt a Complete Streets policy for County roads.
- Encourage municipalities to adopt local [Complete Streets](#) policies, either as a stand-alone policy or as part of their Comprehensive Plan.

2. Promote Local Sidewalk and Bicycle Plans

- Work with municipalities to incorporate local sidewalk plans into their Comprehensive Plan and/or an [Official Map](#). Sidewalk plans show priority locations for future sidewalks, to

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be implemented in coordination with future development, road work, or as stand-alone projects.

- Work with municipalities to incorporate local bicycle plans into their Comprehensive Plan and/or an [Official Map](#). Bicycle plans show priority locations for bicycle facilities, such as bike lanes, shared-lane use markings, bicycle boulevards, wide paved shoulders, shared-use paths, and bicycle parking, to be implemented in coordination with future development, road work, or as stand-alone projects.
- Encourage municipalities to consider designating certain sub-areas as School Zones, Senior Zones, or Slow Zones, as appropriate. Streets within these areas would receive traffic calming, lower speed limits, signage, and other treatments to increase safety for people walking and bicycling.
 - **Example:** [New York City's Neighborhood Slow Zones](#) program.

3. Encourage Local Code Review

- Encourage municipalities to review and revise their zoning codes, subdivision ordinances, and other local codes to incorporate best practices relating to sidewalk construction, maintenance, and snow removal, as well as provision of bicycle parking.

G. Personnel

1. Establish a Permanent Bicycle-Pedestrian Advisory Committee

- Establish a Bicycle-Pedestrian Advisory Committee (BPAC) as a regular committee of the PDCTC. The BPAC would serve as a forum for sharing information related to walking and bicycling, such as current projects and funding opportunities, and

providing input on projects, programs and policies. It would not be an advocacy organization. Members could be officially appointed by elected officials, agencies, and stakeholder organizations, and/or selected via an application process. The BPAC should meet at least quarterly.

National Complete Streets Coalition

Policy Atlas

GET INVOLVED

COMPLETE STREETS: A TO Z

FUNDAMENTALS

CHANGING POLICY

- Policy Elements
- Model Language
- Policy Atlas
- Local Advocacy

IMPLEMENTATION

FEDERAL POLICY

GET HELP

BLOG

NEWSLETTER

WHO WE ARE

ESPAÑOL

Across the country and on Capitol Hill, Complete Streets policies have been gaining traction as more places realize the benefits of having safe, accessible, and healthy streets in their communities. In 2013 alone, more than 90 jurisdictions adopted a policy. In total, over 600 regional and local jurisdictions, 27 states, the Commonwealth of Puerto Rico, and the District of Columbia have adopted policies or have made written commitment to do so. This Atlas notes places that have adopted some form of a Complete Streets policy. In many cases, [full policy implementation](#) requires changes and updates to plans, guides, and processes so that they are aligned with the high-level direction of the policy.

Interactive Map of Regional and Local Policies

Canada

México

Cuba

BS

DO

© Mapbox | OpenStreetMap | Improve this map

Key: **Blue:** Laws & Ordinances | **Red:** Resolutions | **Yellow:** Tax Ordinances | **Purple:** Internal Policies or Executive Orders | **Magenta:** Plans | **Green:** Design Manuals or Guides | **Cyan:** Policies Adopted by Elected Boards

As of 2013, over 600 local governments and 27 states have Complete Streets policies (source: [CompleteStreets.org](#)).

2. **Convene an Inter-Departmental Complete Streets Committee**

- Create a committee with representatives from the County Departments of Planning and Development, Public Works (including Parks), and Health; Office for the Aging, Division of Public Transit; Traffic Safety Board; and others as needed to coordinate walking and bicycling-related initiatives in County government.
- Encourage the County to designate a staff person as the Complete Streets Coordinator, and when appropriate, create a dedicated position. This person would coordinate the Complete Streets Committee and serve as a liaison between County departments and with local municipalities, NYSDOT, and others to promote walking and bicycling in the county. Municipalities could also consider designating a person to serve as a local Complete Streets Coordinator.

3. **Create a Dutchess Rail Trail Ambassador or Advocacy Program**

- County DPW-Parks should develop a Trail Ambassador or Advocacy program for the WRS Dutchess Rail Trail, similar to existing programs for the Walkway Over the Hudson and the Harlem Valley Rail Trail. This program could educate users about the trail and proper trail use/etiquette, note maintenance issues or other concerns requiring follow-up, and provide this information to County DPW-Parks or the appropriate entity.
- Similar programs could be instituted for local trails by municipalities and other trail owners.
 - **Example:** The [Hudson Valley Rail Trail Association](#) in Ulster County implemented a Trail Courtesy program to encourage safe sharing of the trail. On designated

weekends, Trail Courtesy ‘info stops’ are set up, where volunteers stop trail users, give them cards with safety tips for walking and bicycling, and explain the trail rules. In addition, signs with safety rules were installed at all trailheads and along the trail.

H. Performance Measures

[Moving Dutchess](#) includes objectives and performance measures to support goals of increasing walking and bicycling and improving pedestrian and bicycle safety. These measures were expanded upon to create a fuller set of goals for walking and bicycling addressing engineering, education and encouragement, and enforcement, as well as local policies. For each performance measure, the existing status is listed, as well as a short-term and longer-term goal. These measures will be incorporated into the PDCTC’s next metropolitan transportation plan.

Walk Bike Dutchess: Performance Measures		Data Source	2013 Status	2020 Goal	2040 Goal
BP1	<i>Build Infrastructure for Walking and Bicycling</i>				
	~ Miles of major paved shared-use paths	County GIS	25	33	50
	~ Miles of sidewalk	County GIS	435	440	486
	* Miles of on-street bicycle facilities (bike lanes, sharrows, bicycle boulevards)	Google Earth	1	10	20
	* Number of bicycle parking rack locations	County GIS database	100	200	600
BP2	<i>Increase Trips Made by Walking and Bicycling</i>				
	~ Percentage of all trips made by walking (most recent year)	NHTS/NYS DOT ¹	8.5% (2009)	10%	15%
	~ Percentage of all work trips made by walking (most recent 5-year estimate)	Census ACS ²	4% (2007-2011 data)	5%	8%
	~ Percentage of all trips made by bicycle (most recent year)	NHTS/NYS DOT ¹	0.7% (2009)	1.5%	5%
	~ Percentage of all work trips made by bicycle (most recent 5-year estimate)	Census ACS ²	0.4% (2007-2011 data)	0.8%	3%
	* Increase in pedestrian volumes at key count locations (since 2013)	PDCTC count data ³	0%	25%	50%
	* Increase in bicycle volumes at key count locations (since 2013)	PDCTC count data ³	0%	50%	100%
BP3	<i>Increase Accessibility of Walking and Bicycling Infrastructure</i>				
	~ Number of non-ADA compliant sidewalk segments on State highways	NYS DOT ⁴	39	30	0
	~ Number of non-ADA compliant intersections on State highways	NYS DOT ⁴	39	30	0
	~ Percentage of LOOP bus fleet with bicycle racks	Dutchess County Transit	100%	100%	100%
	~ Percentage of City of Poughkeepsie bus fleet with bicycle racks	City of Poughkeepsie	75%	85%	100%
	* Number of municipalities with an ADA Transition Plan	Municipal information	1	5	30
S1	<i>Improve Safety for People Walking and Bicycling</i>				
	~ Average annual pedestrian-vehicle crashes (most recent five years)	ITSMR/GTSC ⁵	87 (2007-11 data)	75	55
	~ Average annual bicycle-vehicle crashes (most recent five years)	ITSMR/GTSC ⁵	38 (2007-11 data)	35	25
P1	<i>Pass Complete Streets Policies</i>				
	* Number of municipalities with Complete Streets Policies	Municipal information	1	5	30
ED1	<i>Educate and Encourage People to Walk and Bicycle</i>				
	* Annual number of bicycle and pedestrian safety training events	DC Traffic Safety Board	12	15	20
	* Annual number of Walk to School Day and Bike to School Day events (or similar)	walkbiketoschool.org registry	4	8	20
ENF1	<i>Enforce Pedestrian, Bicycle, and Vehicle Laws</i>				
	* Number of police agencies conducting targeted enforcement of pedestrian and/or bicycle safety laws	Local police agencies	0	5	13

~ Adapted from a performance measure in *Moving Dutchess* (the PDCTC's long-range transportation plan).

* New performance measure (not included in *Moving Dutchess*).

¹ NHTS is the National Household Travel Survey. NYSDOT summarizes and publishes key tables from the NHTS data on their website (<https://www.nysdot.gov/divisions/policy-and-strategy/darb/dai-unit/tts/nhts/key-tables>).

² The 5-year Census American Community Survey (ACS) estimates have a margin of error; the percentage stated is the midpoint of the estimate.

³ Future calculations could average the most recent 3 years of data, or be based on a linear trendline.

⁴ Goals are based on NYSDOT's stated goal to repair all non-ADA compliant locations in Dutchess County by 2018.

⁵ The Institute for Traffic Safety Management and Research (ITSMR), based at SUNY-Albany, prepares annual summaries of crash data for New York counties. Short-term goals incorporate goals from NYSDOT's Strategic Highway Safety