

Chapter 8: Students and Bicycling



Bicyclists have unique characteristics. They operate as vehicles yet are as vulnerable as pedestrians when involved in crashes. Student bicyclists have varied levels of ability, depending on age and skill level. Some will feel comfortable riding in the street, while others prefer riding on sidewalks or paths. Bicycling can help students who live too far from school to walk comfortably to participate in active transportation.

The *Safe Routes to School Guide* maintained by the National Center for Safe Routes to School at saferoutesinfo.org recommends that schools encourage more bicycling by teaching bicycle safety, offering bicycle repair classes, and providing adequate bicycle parking facilities that shield bikes from inclement weather and discourage theft. This chapter discusses some ways that bicycling to school can be encouraged and made safer including providing:

- bicycling accommodations to and from school,
- bicycle storage at school,
- bicycle safety education, and
- programs and special events to encourage biking to school.

Bicycle Accommodations

Children often have minimal riding skills, little experience and limited physical capabilities. Children also often have an inappropriately high level of confidence, or at least fearlessness, in their riding skill and lack judgment regarding safe bicycling practices. To support bicycle use rather than auto travel for short local trips by students and others, enhanced bicycle accommodations must be provided. On-street facilities, such as bicycle lanes, are more appropriate for upper elementary school and older children who have sufficient bike-handling skills and knowledge of bicycle and traffic safety rules. Off-street or separated facilities such as trails and cycle tracks are more appropriate for younger elementary school children.

The benefits, drawbacks and typical use of the following bicycle accommodations are discussed in this section:

- On-Street Facilities
- Cycle Tracks
- Off-Street Facilities
- Intersection Treatments
- Signing and Striping
- Bicycle Boulevards

Design Guidelines

The American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities*, the Manual on Uniform Traffic Control Devices (MUTCD), the NJDOT *Pedestrian and Bicycle Compatible Design Guidelines*, the Federal Highway Administration (FHWA) *Designing Sidewalks and Trails for Access*, *Best Practices Design Guide*, and the National Association of City Transportation Officials (NACTO) *Urban Bikeway Design Guide* should be followed during planning, design, and construction projects to ensure that appropriate bicycle facilities are provided.

On-Street Bicycle Facilities

Conventional Bicycle Lane

Description: A portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Most common bicycle facility in use in the United States.

Benefits: Enables bicyclists to ride at their preferred speed without interference from motor vehicle traffic conditions; facilitates predictable behavior and movements between bicyclists and motorists; visually reminds motorists of bicyclists' right to the street.

Drawbacks: Not all users will be comfortable in a bike lane; when next to on-street parking there is a risk of bicyclists getting 'doored'; greater enforcement is required to prevent motorists from parking in the bike lane.

When to Use/Typical Application: Bike lanes are most helpful on streets with $\geq 3,000$ motor vehicle average daily traffic, a posted speed ≥ 25 mph, or high transit vehicle volume; they should typically be provided on both sides of two-way streets to prevent wrong-way riding; the preferred width for young cyclists is 5 feet.



A bike lane along Route 45 in Woodbury, NJ.
Image: NJDOT

Buffered Bicycle Lane

Description: A buffered bicycle lane is a conventional bike lane paired with a designated buffer space separating the bike lane from the adjacent motor vehicle travel lane and/or parking lane.

Benefits: Provides greater shy distance between motor vehicles and bicyclists; provides space for bicyclists to pass another bicyclist without encroaching into the adjacent motor vehicle travel lane; encourages bicyclists to ride outside of the door zone when buffer is between parked cars and bike lane; appeals to a wider cross-section of bicycle users.

Drawbacks: Reduces the natural "sweeping" effect of passing motor vehicles, potentially requiring more maintenance.

When to Use/Typical Application: Buffered bike lanes should be considered on streets with high traffic volume, regular truck traffic, high parking turnover and a speed limit > 35 mph.



A buffered bike lane in Philadelphia, PA.
Image: The RBA Group

Contraflow Bicycle Lane

Description: A contraflow bicycle lane is a bike lane designed to allow bicyclists to ride in the opposite direction of motor vehicle traffic. It converts a one-way traffic street into a two-way street: one direction for motor vehicles and bikes and the other for bikes only. A contraflow lane is separated from opposing traffic with yellow center-line striping.

Benefits: Decreases trip distance, the number of intersections encountered, and travel times for bicyclists by eliminating out-of-direction travel; limits dangerous wrong-way riding by allowing cyclists to safely ride in the opposite direction of cars; reduces sidewalk riding.

Drawbacks: May introduce additional conflict points as motorists may not expect on-coming bicyclists.

When to Use/Typical Application: Where it would provide substantial savings in out-of-direction travel and/or direct access to high-use destinations; where there will be fewer conflicts when compared to a route on other streets; when there are few intersecting driveways, alleys, or streets on the side of the street with the contra-flow lane; where bicyclists can effectively and conveniently make transitions at the termini of the lane.



A contra-flow bicycle lane in Chicago, IL.
Image: NACTO

Advisory Bicycle Lane

Description: An advisory bike lane is similar to a conventional bike lane, but is used on low-volume streets that are narrow. An advisory bike lane is marked with a solid white line on the right (next to parked cars) and a dotted line to the left. These markings give bicyclists a space to ride, but are also available to motorists if space is needed to pass oncoming traffic. These are also known as “suggestion lanes.”

Benefits: Provides bicyclists a designated place to ride while also allowing motorists to use the space to pass oncoming traffic; reminds people that the road is a shared space; directs bicyclists where and how to ride; reduces motorist encroaching on bicyclists.

Drawbacks: Unfamiliarity with the treatment can lead to confusion.

When to Use/Typical Application: Roads that are too narrow for conventional bike lanes; roadways with low traffic volume; only used on roads without marked centerlines; used in both rural and urban areas.



Advisory bicycle lanes in Minneapolis, MN.
Image: BikeWalkTwinCities.org

Cycle Track

Description: A cycle track is a separated bicycle facility that runs alongside a roadway. Unlike bike lanes, cycle tracks are typically separated from automobile traffic by a physical barrier, such as parked cars, bollards, a landscaped buffer, or a curb. Raised cycle tracks are bicycle facilities that are vertically separated from motor vehicle traffic. Cycle tracks may be one-way running with traffic, one-way running against traffic, two-way on the same side of the road, or two-way on both sides of the road. Though much more prevalent in European countries, several US cities have recently incorporated cycle tracks as a component of their bicycle facilities. Cambridge, Massachusetts, New York City, Portland, Oregon, and Washington, DC, have all constructed cycle tracks.

Benefits: More attractive for bicyclists of all levels and ages; dedicates and protects space for bicyclists; eliminates risk and fear of collisions with over-taking vehicles; reduces risk of ‘dooring’ compared to a bike lane; prevents double parking; keeps motorists from easily entering the cycle track.

Drawbacks: Snow removal and street sweeping may require special equipment; requires considerations at crossings of driveways and intersections.

When to Use/Typical Application: Cycle tracks may be appropriate along roads that have high vehicle speeds and high traffic volume, but few intersections, driveways, and other junctions; along streets with high bicycle volumes; the desirable one-way cycle track width is 5 feet and a two-way cycle track width is 12 feet. Minimum width for a two-way cycle track in constrained locations is 8 feet.



Two-way cycle track buffered by on-street parking. Image: NYC.gov



A raised cycle track in Ocean City, NJ. Image: The RBA Group

Off-Street Bicycle Facilities

Shared Use Path or Multi-Use Path

Description: A shared use path is physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or an independent right-of-way. Shared use path facilities accommodate a variety of non-motorized users, most often bicycle and pedestrian traffic. Shared use paths are an addition, and complementary, to the roadway network.

Benefits: Completely separated from motor vehicle traffic; can provide users with shortcuts; can provide an enjoyable recreational opportunity; have few intersections and as a result is safer for bicyclists than facilities located alongside or on roadways; appeals to users of all ages and abilities.

Drawbacks: Rarely the most direct means of transportation; shared use paths attract a variety of user groups who often have conflicting needs.

When to Use/Typical Application: 10 feet is the recommended minimum width for a two-way, shared use path on a separate right-of-way; 2 feet of graded area should be maintained adjacent to both sides of the path and 3 feet of clear distance should be maintained between the edge of the trail and lateral obstructions; shared use paths fall under the accessibility requirements of the Americans with Disabilities Act (ADA).



The Henry Hudson Trail in Monmouth County, NJ is an example of a shared use path. Image: The RBA Group

Sidepath

Description: A sidepath is a specific type of shared use path that runs adjacent to the roadway.

Benefits: Provides an element of separation from motor vehicles; appeals to a wide variety of users.

Drawbacks: A two-way sidepath on one side of the road may need additional road crossings; bicyclists using the roadway may be harassed by motorists who believe bicyclists should be on the sidepath; there are potential conflicts with motorists at driveways and intersections.

When to Use/Typical Application: Where right-of-way or other physical constraints prohibit path alignment in independent rights-of-way and there are no practical alternatives for improving the roadway or accommodating bicyclists on nearby parallel streets; when the sidepath can be built with few street and/or driveway crossings; when the adjacent roadway has relatively high-volume and high-speed traffic; the minimum recommended distance between a path and the roadway curb is 5 feet. When the separation is less than 5 feet, a physical barrier or railing should be provided; utilizing or providing a sidewalk as a shared use path is undesirable.



Example of a sidepath. Image: VTC

Intersection Treatments

Grade Separated Crossing

Description: A grade separated crossing provides continuity of a bicycle/ pedestrian facility over or under a barrier. There are two main types of grade-separated crossings: overpasses (bridges) and underpasses.

Benefits: A grade-separated crossing is a safe way for bicyclists and pedestrians to cross rivers, streets, and railroads.

Drawbacks: Many bicyclists and pedestrians will not use an overpass that is inconvenient. Instead, they may choose a time-saving, and sometimes more hazardous crossing. Fencing or other controls may be required to reinforce the safe crossing point.

When to Use/Typical Application: A grade separated crossing should be considered when a bicycle facility meets a barrier, such as an active railroad, stream, or freeway, and continuity of the route is desired. When a heavily utilized multi-use pathway intersects with a high volume multi-lane roadway, it is desirable to provide an overpass or an underpass to separate multi-use pathway users from conflicts with motor vehicle traffic.



A pedestrian bridge provides access from Immaculata High School in Somerville, NJ to the Bridgewater Commons Mall over Route 202/206. Images: Arterial

Crossbike

Description: A crossbike intersection treatment is a set of pavement markings adjacent to the crosswalk indicating space for bicycles to cross major intersections. They increase the visibility of bicycles at intersections and encourage motorists to yield right-of-way to bicyclists waiting to cross.

Benefits: Provides greater visibility for bicyclists at intersections; informs all roadway users of where bicyclists should cross; separates modes to reduce conflicts.

Drawbacks: Crossbike markings will have higher than normal wear based on the level of crossing auto traffic.

When to Use/Typical Application: Where main bicycle routes cross relatively minor collectors; where cross traffic has to yield right-of-way to crossing bicyclists; not appropriate where speeds exceed 30 mph unless signalized.



A crossbike in Berkeley, CA. Image: IBPI, Alta Planning

Signing and Striping

Shared Lane Marking or Sharrow

Description: A shared lane marking or “sharrow” is a road marking used to indicate a shared lane environment for bicycles and automobiles. It is not a facility type but is used to support a complete bicycle network. Shared lane markings are most appropriate for lower volume, lower speed streets.

Benefits: Reinforces the legitimacy of bicycle traffic on the street; assists bicyclists with lateral positioning away from the door zone and other hazards; may be configured to offer directional and wayfinding guidance; requires no additional street space; reduces the incidence of sidewalk riding and wrong-way riding.

Drawbacks: Does not dedicate exclusive use for bicyclists.

When to Use/Typical Application: When there is insufficient width to provide bike lanes; on a steep downgrade; shared lane markings are not a preferred treatment on streets with posted 35 mph speeds or faster and motor vehicle volumes higher than 3,000 AADT; sharrows shall not be used on shoulders or in designated bicycle lanes; they should be placed immediately after an intersection and spaced at intervals not greater than 250 feet thereafter.



Sharrows on a residential street in Maplewood, NJ. Image: Google Streetview



A student riding a bicycle over a sharrow in Maplewood, NJ. Image: The RBA Group

Wayfinding Signs and Markings

Description: A bicycle wayfinding system consists of comprehensive signing and/or pavement markings to: designate a system of routes; designate a continuous or preferred route; provide location specific guidance.

Benefits: Indicates to bicyclists and motorists that they are on a designated bikeway; identifies the best routes to destinations; pavement markings can be installed to help reinforce routes and directional signage and to provide bicyclist positioning and route branding benefits; under urban conditions, pavement markings may often be more visible than signs to users of the route.

Drawbacks: When used alone, bike route signs convey little meaning. They should include destinations and distances.

When to Use/Typical Application: Signs are typically placed at decision points along bike routes – typically at the intersection of two or more bikeways and at other key locations leading to and along bicycle routes; signs should be oriented so bicyclists have sufficient time to comprehend the sign and change their course, when needed.



Bike route signs in Philadelphia show distance to destination. Image: Bicycle Coalition of Greater Philadelphia



Bike Dots are pavement markings for signed bicycle routes. They are a tool to provide wayfinding. Image: TucsonVelo.com

BICYCLES MAY USE FULL LANE Sign (R4-11)

Description: The BICYCLES MAY USE FULL LANE sign may be used in locations where it is important to inform road users that bicyclists might occupy the travel lane.

Benefits: Reinforces the law to both motorists and bicyclists that bicyclists may occupy the travel lane.

Drawbacks: Fear that the sign could mislead inexperienced bicyclists into operating in situations that are beyond their ability.

When to Use/Typical Application: The BICYCLES MAY USE FULL LANE sign may be used on roadways where no bicycle lanes or adjacent shoulders usable by bicyclists are present and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side; the sign may be used in addition to or instead of the Shared Lane Marking.



R4-11

SHARE THE ROAD Sign (W11-1 & W16-1P)

Description: A SHARE THE ROAD sign assembly is intended to alert motorists that bicyclists may be encountered and that they should be mindful and respectful of bicyclists.

Benefits: Fast, inexpensive and effective way of educating bicyclists and motorists, leading ultimately to greater safety for all.

Drawbacks: The sign is not a substitute for design measures that can improve the quality of service for bicyclists; the sign says nothing about where on the road bicyclists are expected to ride.

When to Use/Typical Application: At the end of a bike lane, or where a shared use path ends; in work zones where bicyclists may need to share a narrower space than usual; the sign should not be used to address reported traffic operational issues, as the addition of this warning sign will not significantly improve bicycling conditions; the sign should not be used to indicate a bike route.



W11-1



W16-1P

WRONG WAY RIDING Sign (R5-1B)

Description: The bicycle WRONG WAY and RIDE WITH TRAFFIC signs are used to remind bicyclists that bicycles are vehicles and when operated on a roadway they should travel in the same direction as other roadway traffic.

Benefits: Reinforces the legal requirement of bicyclists to ride with traffic.

Drawbacks: Can contribute to sign clutter if not mounted back-to-back with other signs.

When to Use/Typical Application: For locations where wrong-way riding by bicyclists is frequently observed; this sign and plaque may be mounted back-to-back with other signs to minimize visibility to other traffic; The RIDE WITH TRAFFIC plaque should be used only in conjunction with the Bicycle WRONG WAY sign, and should be mounted directly below the Bicycle WRONG WAY sign.



R5-1b



R9-3cP

Bicycle Boulevard

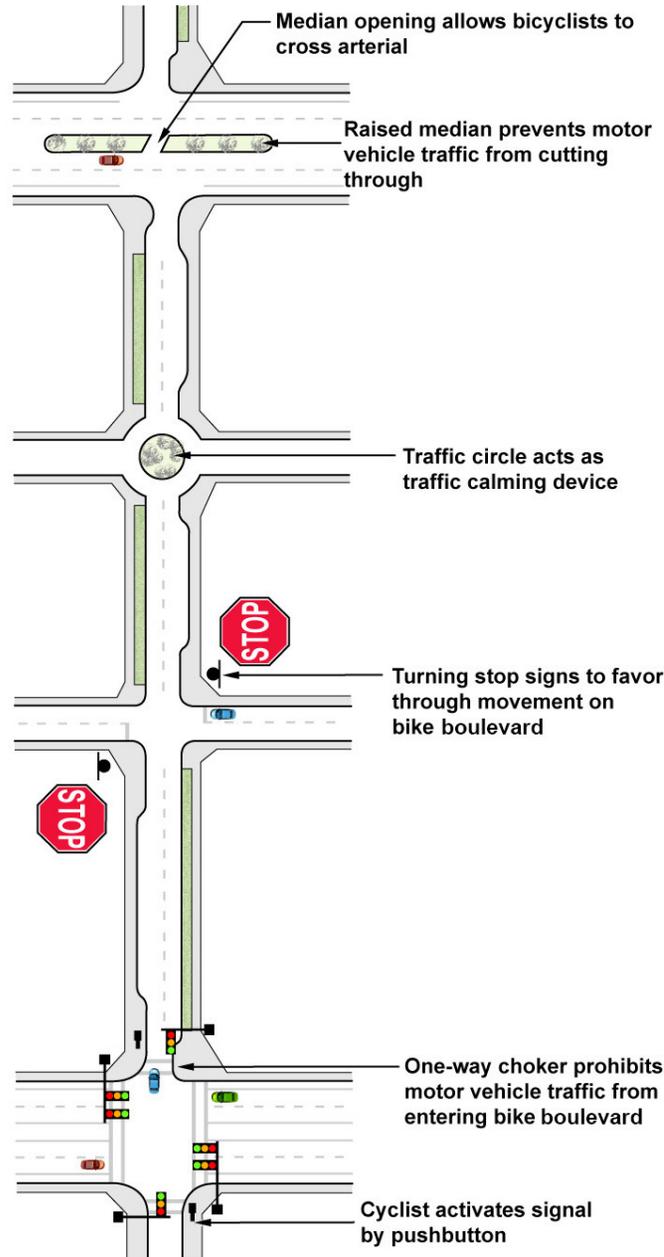
Description: A bicycle boulevard is a low-volume and low-speed street that has been optimized for bicycle travel through treatments such as traffic calming, signage and pavement markings, and intersection crossing treatments. These treatments allow through movements for cyclists while discouraging similar through trips by non-local motorized traffic. Motor vehicle access to properties along the route is maintained.

Benefits: Bicycle boulevards are effective at increasing cycling levels and perceptions of safety and can be accomplished with minor changes to street configuration; slower vehicle speeds accomplished with traffic-calming measures reduce risk of serious collisions; since they are shared facilities, no additional street width is needed; bicycle boulevards can be combined with neighborhood greening efforts to enhance street closures and traffic circles with trees and landscaping.

Drawbacks: Residents and officials often raise concerns related to traffic reduction and calming such as access to property, impact on traffic patterns, enforcement issues with motorcycles and mopeds, and emergency response.

When to Use/Typical Application: Bicycle boulevards are best suited for two-lane residential streets where vehicle traffic can be restricted to low volumes and slow speeds. Ideally they are parallel to major streets and provide an alternative without lengthy deviation.

Elements of a Bicycle Boulevard



Graphic: The RBA Group

Examples of Bicycle Boulevards



Example of a raised median along a bike boulevard. Image: NACTO



Mini traffic circles may be used to lower motor vehicle speeds near intersections with bike boulevards. Image: NACTO



The signal at this crossing is actuated from an in-pavement loop detector. Image: NACTO

Bicycle Storage at Schools

Students must have a secure place to park their bikes once they reach school. Not having a well-planned bicycle parking option can lead to several undesirable outcomes such as theft, damage, and locked bikes becoming an obstacle to critical safety infrastructure (like emergency exits, hand rails, and fire hydrants) or damaging fragile trees or landscaping. In terms of bike racks and bicycle storage, the *Safe Routes to School Guide* maintained by the National Center for Safe Routes to School at saferoutesinfo.org uses the *Bicycle Parking Guidelines* from the Association of Pedestrian and Bicycling Professionals (APBP):

- **The Rack Element** is the part of the bike rack that supports one bicycle. A good bike rack element holds the bike frame without bending the wheel and should have no moving parts. Rack elements are typically constructed of metal in an inverted u-shape, which allows for a variety of bicycle sizes and locks.
- **The Rack** is one or more rack elements joined on any common base or arranged in a regular array and fastened to a common mounting surface. It should be anchored so that it cannot be stolen with the bikes attached and so that it provides easy, independent bike access. Inverted u-shaped rack elements mounted in a row should be placed on 30-foot centers, allowing two bicycles to be secured to each rack element (one per side).
- **The Rack Area** is a bicycle parking lot where racks are separated by aisles. It may

contain one or more racks. If possible, the rack area should be protected from the elements using any combination of structures, like a wall and awning. Avoid locating a bike rack area on grass or dirt as a rainy day can turn the bicycle parking lot into a mess. A preferred solution would be to locate the bike rack area on a concrete pad.

- **The Rack Area Site** is the relationship of the rack area to a building entrance and approach. Locate the bike rack area within visibility of the building entrance it serves and consider the route bicyclists' use to approach that entrance. Bike rack areas should be sited in a space that discourages vandalism and maximizes use, while avoiding conflicts with driveways, buses, and large numbers of pedestrians.

Ideally, rack areas should be sited as close, or closer, than the nearest car parking space and provided near all high traffic building entrances. It is preferable to choose multiple locations that are more convenient to users than one large rack area.



Bicycle parking at Somerville School in Ridgewood, NJ is located on a concrete pad which is visible from within the building. Image: The RBA Group



Covered bicycle parking at Egg Harbor's Spragg Elementary School. Image: NJDOT

The ribbon rack on the left is preferred because unlike the comb rack on the right, it allows both the frame and wheels of the bike to be locked. Image: The RBA Group

Bicycle Safety Education

A comprehensive, on-bike program can be an ideal method for teaching bicycle skills and safety, but finding time to conduct the program can be a challenge. With the busy schedules of today's families, holding classes after school and on the weekends may not lead to high levels of participation. To reach the greatest amount of children, bicycle education can be incorporated into the regular school day. Fitting bicycle education within the curriculum of physical education (PE) classes is a cost-efficient way to teach bike safety to a large cross section of area youth. The following are examples of on-going programs:

- At Seaview Elementary School in Linwood (Atlantic County), class time is devoted to bicycle education each year. During school hours, a teacher runs the annual 4th Grade Bicycle Rodeo. During the rodeo, children receive detailed instruction on how to ride their bikes properly and then take a bicycle safety test.
- Class time is also devoted to bicycle education in Medford Lakes (Burlington County) where pupils receive instruction as part of the school's physical education program.
- In Wharton (Morris County), bicycling to school is encouraged through annual bike rodeos. The rodeos offer bicycle inspections and helmet giveaways to children that do not have access to a proper bike helmet.
- A police-sponsored bike rodeo is also an important part of the bicycle program in Fair Haven (Monmouth County). School staff regularly remind children about bike safety during their lunch periods. In addition, Fair Haven police hand out "tickets for good behavior." Under this program, when an officer spots a child who is bicycling correctly, the rider is issued a prize.

Spotlight: NJ BIKESChOOL Program

NJBIKESChOOL is an on-bike, on-road bicycle safety program aimed at youth in grades 4-6 to create knowledgeable cyclists who confidently ride to school and elsewhere. In the summer of 2009, staff at the NJ SRTS Resource Center held NJ BIKESChOOL classes through the Camden Summer Recreation Program. The program was funded by FHWA through the NJDOT and the Division of Highway Traffic Safety. As part of the program, 25 youth bicycles were acquired and transported to summer camps for on-bike skills drills and a short ride through the neighborhoods. Through the help of partners such as the NJ Alliance for Health, Physical Education, Recreation, and Dance (NJASPERD), the NJ BIKE-SChOOL program was also taught in Hanover and Pemberton and during PE classes in Ocean and Hudson Counties.

The program is currently being managed by Hudson TMA. This program can become part of a school's physical education program at no cost to the school district. Staff from the Hudson TMA will train physical education teachers and provide the curriculum. A fleet of bikes will also be loaned to the school for a period of three weeks for the children to use as part of their gym class. Many school districts in Hudson County have been participating in the NJ BIKESChOOL program and reports indicate that the children love it. To learn more about this program or request that it be presented at your school, contact Hudson TMA at (201) 792-2825 or info@hudsontma.org



NJBIKESChOOL in Camden, NJ.
Image: VTC

Bike-to-School Programs and Special Events

There are several activities or events that could be held to focus attention on biking to school:

- Participate in National Bike to School Day in May in coordination with the League of American Bicyclists' National Bike Month.
- Make Earth Day a “Bike-to-School Day”; this could also be used to help encourage walking to school. After Earth Day, each Wednesday for the rest of the school year celebrate walk- or bike-to-school Wednesday. In Linwood, for example, school officials take part by meeting children at a local park one half hour before classes begin and walking with them to school.
- At Montclair’s Edgemont Elementary School, the “Boltage at Edgemont” Program was introduced in 2011 to encourage more biking and walking to school. Each participant receives a Boltage radio frequency identification (RFID) tag to attach to her or her backpack, which parents register online at Boltage.org. Each time the student bikes or walks to school and passes by the solar-powered Boltage machine located near the entrance to the school, it flashes a green light and beeps signifying that the student tag has been “zapped” or recorded. Parents and students can then log into individual accounts to see how many trips have been logged and track progress. Students are able to track their number of trips, miles traveled, number of calories burned and pounds of CO2 saved by replacing a car or bus trip with walking or biking. Edgemont further publishes overall school progress in the PTA newsletter to parents and recognizes exceptional student achievement. While this is a not a mandatory program, all students have been encouraged to register – even if they typically take cars and buses to school. Each student who registers receives a wristband and as they clock more trips, they are eligible for further prizes.
- Another example of a special event is “Transition Day” in Fair Haven. On the last day of classes, school officials and graduating 3rd graders, take a ceremonial ride from Viola L. Sickles Elementary School to the Knollwood Middle School to mark the transition to 4th grade. Parents, police, and the school superintendent all take part in this annual event. Along the route, parents hold up signs to celebrate their child’s completion of the 3rd grade and at Knollwood School 4th graders welcome the arriving group.



The “zap” machine tracks participants as they arrive at Montclair’s Edgemont School as part of the Boltage Program. Image: Joy Glenn Photography



Students bicycling from elementary to middle school on “Transition Day” in Fair Haven, NJ. Image: NJDOT

Model Bicycling to School Policy

The NJ SRTS Resource Center at the Alan M. Voorhees Transportation Center (VTC) at Rutgers University - with NJDOT and the National Policy and Legal Analysis Network to Prevent Childhood Obesity (NPLAN) - developed a model bicycling to school policy that can be adopted by school districts around the state to encourage bicycle safety and bicycling to school. The model policy, along with a model walking to school policy, is available from the SRTS Toolbox on the NJ SRTS Resource Center website (<http://policy.rutgers.edu/vtc/srts/toolbox/>). The model bicycling policy includes the following safety guidelines:

For children in 3rd grade and below:

- Students should be accompanied by an adult when bicycling to or from school, as well as complying with the other conditions below.
- Parents are strongly cautioned to exercise great care and supervise carefully since children in 3rd grade and below are unlikely to have the developmental and judgment skills for unsupervised bicycling.

For children in 4th grade and above:

- The District should provide bicycle education to teach traffic skills and rules as well as improved judgment in individual and group bicycling. Every child should take this training or a similar bicycle safety course before riding in traffic.
- Students who ride bicycles to and from school should have written consent from a parent or legal guardian and agree to the conditions listed below.

Students should follow state law and safety guidelines for bicyclists:

1. According to N.J. state law, anyone under 17 that rides a bicycle or is a passenger on a bicycle must wear a helmet (N.J.S.A. 39:4-10.1). Any student without a helmet will have their bicycle confiscated by the Building Administrator until a parent or guardian picks it up. Noncompliance with this rule will result in disciplinary action.
2. In New Jersey, bicycles are defined as vehicles under the state motor vehicle code contained in N.J.S.A. 39:4-10, et.seq. Parents and students should be aware of these state bicycling laws and follow them at all times. Riders should follow the rules of the road including but not limited to:
 - a. Obeying all traffic lights and signals (N.J.S.A. 39:4-14.1),
 - b. Using hand signals before making turns,
 - c. Only one rider per seat – never let a friend ride on the handlebars or wheel pegs (N.J.S.A. 39:4-12),

Model Bicycling to School Policy (cont'd)

- d. Stopping and looking left, right, then left again before leaving driveways or entering any street,
 - e. Riding with traffic (N.J.S.A. 39:4-14.2) and not too close to parked cars – doors can open suddenly,
 - f. Riding where drivers can see you and not swerving between cars,
 - g. Equipping the bicycle with a bell or other audible device that can be heard at least 100 feet away, but not a siren or whistle (N.J.S.A. 39:4-11), and
 - h. Using headlights and tail lights visible at 500 feet – white in the front and red in back - if you must ride at dawn, dusk or after dark (N.J.S.A. 39:4-10).
3. Bicycles ridden to school should be roadworthy and regularly maintained. Students should test tires for air before riding. Additionally, the brakes must be functional (N.J.S.A. 39:4-11.1).

While at school, all students must comply with these rules:

- Bicycles may not be ridden on school grounds during arrival and dismissal; they must be walked.
- Bicycles must be parked in the racks provided. Students must bring and use bicycle locks.
- Helmets must be stored in locker, backpack, or attached to bicycle.
- Students are not to interfere with any bikes, helmets, or other equipment (steal, unlock quick releases, bounce helmets, etc.).

Resources

Design Guidance

- National Center for Safe Routes to School Guide, *On-street Bicycle Facilities*, guide.saferoutesinfo.org/engineering/on-street_bicycle_facilities.cfm
- MUTCD 2009 Edition Part 9. Traffic Control for Bicycle Facilities, mutcd.fhwa.dot.gov/htm/2009r1r2/part9/part9_toc.htm
- NACTO Urban Bikeway Design Guide, nacto.org/cities-for-cycling/design-guide/
- APBP Bicycle Parking Guidelines, www.apbp.org/resource/resmgr/publications/bicycle_parking_guidelines.pdf

Education

- NJ SRTS Resource Center has links to lesson plans and bike assembly program information, www.saferoutesnj.org/resources/education/

Encouragement

- Bike to School Day, www.walkbiketoschool.org/
- League of American Bicyclists, National Bike Month, bikeleague.org/bikemonth