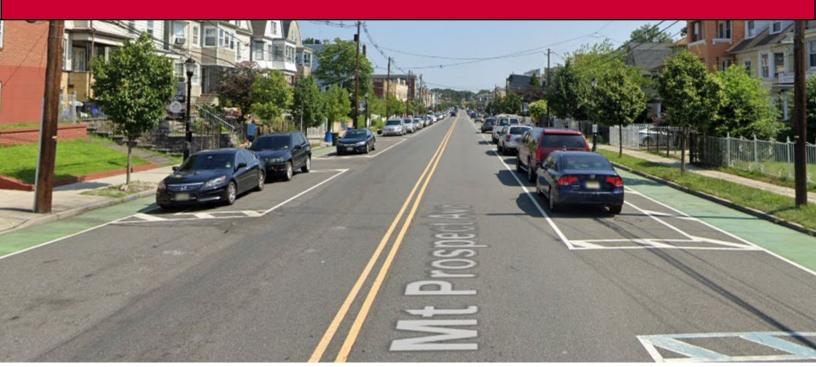


Title 39 & Parking Protected Bike Lanes









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Cover Photos

Top: Bicyclist riding on a parking-protected bike lane on Grand St in Jersey City, NJ, courtesy of Corey McDonald, Hudson County View, 2019; Bottom: Google Streetview image of parking protected bike lanes on Mt Prospect Avenue in Newark, NJ, 2019.

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1. Introduction

This paper discusses the basis for parking-protected bicycle lanes in New Jersey compared to neighboring states. It responds to concerns from New Jersey Department of Transportation (NJDOT) regarding the location of on-street parking by considering the purpose of current Title 39 (MVC code) language and comparing with similar laws in other states in the Northeast United States. This report provides research and recommendations that is not legal advice.

Summary

- Parking-protected bike lanes reduce crashes of all kinds and dramatically increase bicycle mode-share.
- Title 39 does not directly reference parking-protected bikes lanes nor any bike lanes, however current interpretation of the language around parking distance from curbs could represent a barrier to installation of parking protected bike lanes.
- According to Title 39, it appears that edge of the roadway is defined by the edge of the outer *motor vehicle lane*, as the bike lane is not considered "vehicular" travel.
- The language in NJ Title 39:4-135 is closer to New York's Article 32: S 1203, than Pennsylvania's Title 75 Pa. C.S.A. Vehicles § 3354 codes. While PennDOT requires proximity to the curb, NYSDOT does not appear to have the same issue. Connecticut explicitly legalizes parking protected bike lanes.
- Implementing a "vertical element" is a solution to allow for parking-protected bike lane implementation.

What is Title 39?

Title 39 of the New Jersey States Annotated (Title 39) contains statues for motor vehicle and traffic regulation laws in New Jersey. Most of the statutes within Title 39 pertain to motor vehicle laws and the Motor Vehicle Commission including the surcharge system for violations. They apply statewide, are issued by officers of the law, and are part of decision-making for legally allowed infrastructure and policy.

What are Parking-Protected and Curb-Protected Bike Lanes?

A parking-protected bike lane is a specific setup of protected bicycle lanes where bicyclists are protected from motor vehicle traffic by a line of parallel-parked vehicle spaces. On a conventional two-way street, parallel parking spaces have the vehicle travel lanes on the driver-side of the parking spaces and the bicycle lane or lanes on the passenger-side of the parking spaces. This configuration puts a physical barrier between bicyclists and vehicular traffic, offering an added layer of protection from collisions. Additionally, this configuration moves bicyclists out of the driver-side "door zone" of the parked vehicles, and the bicycle lanes are less likely to be obstructed by pulled-over or double-parked vehicles.

"Curb-protected" bike lanes protect vulnerable road users with the addition of a small curb between vehicular lanes and bike lanes. Curb-protected bike lanes may also have parallel parking where warranted; the parallel parking spaces would be on the motor vehicle side of the curb. They typically have gaps in the curb to allow for stormwater drainage and to reduce barriers for vehicle

users accessing their parked vehicles. Curb-protected bike lanes are preferable to typical parking-protected bike lanes because they physically discourage encroachment by vehicles into the bike lane. They can be found in many places including Toronto, Chicago and Washington, DC.

See examples below:



Figure 1: A one-way parking-protected bike lane in Kansas City, MO (BikeWalkKC, 2022)



Figure 4: A two-way parking-protected bike lane in New York City, NY (New York City DOT, 2022)



Figure 2: A curb-protected one-way bike lane in Toronto, ON (Cycle Toronto, n.d.)



Figure 5: A curb-protected two-way bike lane in Washington, DC (Photo: Stephen Hudson in Alpert, 2019)



Figure 3: A curb-protected one-way bike lane in Chicago, IL (Greenfield, 2016)



Figure 6: The buffered door-zone of a curb-protected oneway bike lane with parallel parking in Honolulu, HI (City & County of Honolulu, 2018)

What are the safety benefits of Parking-Protected or Curb-Protected Bike Lanes?

Parking-protected bike lanes have many interrelated safety benefits for all road users. The Federal Highway Administration (FHWA) designates bike lanes as one of its Proven Safety Countermeasures. The FHWA's Office of Proven Safety Countermeasures cites a disproportionately large number of bicyclist and vehicle crashes occurring during overtaking, due to the large size and speed differential (Thomas, Nordback, & Sanders, 2019). Providing bike lanes makes cycling safer by reducing the risk of fatality and serious injury to bicyclists in crashes with vehicles (Federal Highway Administration, 2021). Allocating separated space for bicyclists supports the premises of the Safe System Approach and make streets safer for all road users. including pedestrians, bicyclists, and motorists.

The FHWA also cites national and international experience with protected bike lanes to advocate additional physical separation from motorized traffic lanes where it is warranted by traffic volumes and speeds. A painted buffer offers additional protection to bicyclists by providing a lateral offset, creating a greater physical separation between bicyclists and motor vehicles. According to the Office of Proven Safety Countermeasures, "State and local agencies may also consider physical separation...through the use of vertical elements like posts, curbs, or vegetation" (Federal Highway Administration, 2015).

Background

NJDOT advises municipalities that "bike lanes should be driver's side of parked vehicles" and referred to NJ's Title 39:4-135 – "the operator of a vehicle shall not stop, stand or park the vehicle in a roadway other than parallel with the edge of the roadway headed in the direction of traffic, on the right-hand side of the road and with the curb side of the vehicle within six inches of the edge of the roadway" - as a reason for why they will not allow for the installation of the parking-protected bike lane.

This is the standard response from PennDOT as well, and the Pennsylvania state Senate is currently reviewing a popular bill (Senate Bill 565) to amend the legal language to explicitly allow protected bike lanes (LoBasso, 2020).

A presentation on this topic was given at the February 2022 meeting of the Policy and Legislative Subcommittee as part of the NJ Bicycle and Pedestrian Advisory Council (BPAC), hosted by the New Jersey Bicycle and Pedestrian Resource Center (BPRC) on behalf of the New Jersey Department of Transportation (NJDOT). During this meeting Asbury Park representatives mentioned an instance where NJDOT raised issues with the implementation of a parkingprotected bike lane based on the above interpretation of Title 39. They added that they were able to work with NJDOT to quickly resolve the issue and receive approval by incorporating a "vertical element" in the form of plastic flex-posts to delineate the edge of the roadway.

2. What is the purpose of a 6" to the curb law? Is it about keeping the travel lane clear from obstructions or something else?

It has been difficult to find discussions online regarding this specific issue (i.e., that parking protected bike lanes violate the legal requirement of proximity to the curb or edge of the road).

"Edge of the Roadway"

There is no publicly accessible database of parking violations, but a cursory internet search of attorney message boards and local police social media accounts discussing Title 39:4-135 "six inches to the curb" violations shows that they primarily focus on parking against the flow of traffic, or otherwise not parking in a designated parallel parking area (Haddon Township Police, 2014; Brigantine Police, 2015; Popovich, 2017; DiCroce, 2016). This seems to be the main reason the curb and "edge of roadway" are invoked. However, one thing to note regarding Title 39 are the following definitions:

- "Roadway" means that portion of a highway improved, designed, or ordinarily used for vehicular travel, exclusive of the berm or shoulder. In the event a highway includes two or more separate roadways, the term 'roadway' as used herein shall refer to any such roadway separately, but not to all such roadways, collectively. (N.J. Stat. § 39:1-1)
- "Vehicle" means every device in, upon or by which a person or property is or may be transported upon a highway, excepting devices moved by human power or used exclusively upon stationary rails or tracks or low-speed electric bicycles, low-speed electric scooters, or motorized bicycles. (N.J. Stat. § 39:1-1)
- A "bicycle" is considered to be any two wheeled vehicle having a rear drive which is solely human powered and having a seat height of 26 inches or greater when the seat is in the lowest adjustable position. (N.J. Stat. § 39:4-14.5)
- Every person riding a bicycle on a roadway has all the rights and responsibilities of a motor vehicle driver. (N.J. Stat. § 39:4-14.1)

In other words, it appears that the edge of the outer motor vehicle lane is the edge of the roadway, as the bike lane is not intended to be used for "vehicular" travel. The definition of "vehicle" even goes so far as to specifically exclude micromobility, including bicycles and scooters—both manual and low-speed electric. However, the definition of bicycle includes responsibilities of motor vehicle drivers. If the language must be further clarified, perhaps the definition of "roadway" could be amended to read "exclusive of the berm, shoulder or bikeways."



Figure 7: A two-way protected bike-lane with flexible plastic bollards on Observer Highway in Hoboken, NJ (City of Hoboken, NJ, n.d.)

3. Are there other states that have a similar motor vehicle law, but have either found a way around it or removed the requirement?

New Jersey's Title 39 language is closer to New York (State)'s than Pennsylvania's. Connecticut's statue explicitly legalizes parking-protected bike lanes.

Pennsylvania's Curbside Parking Regulations

Pennsylvania's language is less specific than New Jersey's and does not mention bicycles in Title 75 Pa. C.S.A. Vehicles § 3354. Additional parking regulations:

- (a) Two-way highways. -- Except as otherwise provided in this section, every vehicle standing or parked upon a two-way highway shall be positioned parallel to and with the right-hand wheels within 12 inches of the right-hand curb or, in the absence of a curb, as close as practicable to the right edge of the right-hand shoulder.
- (b) One-way highways. -- Except as otherwise provided in this section, every vehicle standing or parked upon a one-way highway shall be positioned parallel to the curb or edge of the highway in the direction of authorized traffic movement with its right-hand wheels within 12 inches of the right-hand curb or, in the absence of a curb, as close as practicable to the right edge of the right-hand shoulder, or with its left-hand wheels within 12 inches of the left-hand curb or, in the absence of a curb, as close as practicable to the left edge of the left-hand shoulder.

Pennsylvania defines "highway" and "vehicle" with different language than New Jersey's, and contains no mention of bicycles:

Title 75 §102. Definitions -- "Highway." The entire width between the boundary lines of every way publicly maintained when any part thereof is open to the use of the public for purposes

- of vehicular travel. The term includes a roadway open to the use of the public for vehicular travel on grounds of a college or university or public or private school or public or historical park.
- Title 75 §102. Definitions -- "Vehicle." Every device in, upon or by which any person or property is or may be transported or drawn upon a highway, except devices used exclusively upon rails or tracks. The term does not include a self-propelled wheelchair or an electrical mobility device operated by and designed for the exclusive use of a person with a mobilityrelated disability.

New York's Curbside Parking Regulations

New York (State) has similar language to New Jersey's in NY Article 32: S 1203. Additional parking regulations:

- (a) Except where angle parking is authorized, every vehicle stopped, standing, or parked wholly upon a two-way roadway shall be so stopped, standing, or parked with the right-hand wheels of such vehicle parallel to and within twelve inches of the right-hand curb or edge of the roadway.
- (b) Except where angle parking is authorized, every vehicle stopped, standing, or parked wholly upon a one-way roadway shall be so stopped, standing, or parked parallel to the curb or edge of the roadway, in the direction of authorized traffic movement, with its right-hand wheels within twelve inches of the right-hand curb or edge of the roadway, or its left-hand wheels within twelve inches of the left-hand curb or edge of the roadway.

New York defines "roadway" and "vehicle" with similar language to New Jersey's:

- S 140. Roadway. That portion of a highway improved, designed, marked, or ordinarily used for vehicular travel, exclusive of the shoulder and slope. In the event a highway includes two or more separate roadways the term "roadway" as used herein shall refer to any such roadway separately but not to all such roadways collectively.
- S 159. Vehicle. Every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, except devices moved by human power or used exclusively upon stationary rails or tracks.

In fact, the New York State Department of Transportation (NYSDOT) has approved plans for corridor redesigns that include parking-protected bike lanes. For example, NYSDOT's plans include parking-protected bike lanes on streets in Queens which form a protected bike route over the Kosciuszko Bridge into Brooklyn (Parry, 2019).

Connecticut's Curbside Parking Regulations

Connecticut mentions bikeways specifically in CT Statute 14-251: Parking vehicles:

No vehicle shall be permitted to remain stationary within ten feet of any fire hydrant, or upon the traveled portion of any highway except upon the right-hand side of such highway in the direction in which such vehicle is headed; and, if such highway is curbed, such vehicle shall be so placed that its right-hand wheels, when stationary, shall, when safety will permit, be within a distance of twelve inches from the curb, except if a bikeway, as defined in § 13a-153f, or such bikeway's buffer area, as described in the federal Manual on Uniform Traffic Control Devices, is in place between the parking lane and the curb, such vehicle shall be so placed that its right-hand wheels, when stationary, shall, when safety will permit, be within a distance of twelve inches from the edge of such bikeway or buffer area.

4. Are there other options available?

If Title 39 revisions are required but are not immediately feasible, an alternative option may be to use a "vertical element" to delineate the roadway edge. Asbury Park was able to work with NJDOT to gain approval by adding plastic flex-posts as their "vertical element". A more robust option is solid infrastructure, such as planters or a curb.

Requiring a vertical element adds an additional engineering requirement for the implementation of protected bike lanes instead of a simple restriping of a roadway with the parallel parking spaces on the inside of a marked bike lane. Such requirements inflate the costs of expanding a protected bike lane network, which could restrict municipalities' ability and/or will to do so. Nonetheless, the resulting protected bike lane has two layers of protection buffering bicyclists from moving vehicles: parallel-parked cars and the vertical element. Not only does the FHWA recommend the implementation of bike lanes as a Proven Safety Countermeasure that saves lives, but additional horizontal buffer distance and/or a vertical element is also appropriate depending on the roadway characteristics, such as the motor vehicle volumes and speed.

5. Concerns

Wheelchair Accessibility



Figure 8: A person using a powered wheelchair exits into a protected bike lane (Madeiros, 2018)

In 2017, the City of Los Angeles, California was sued (and lost) because a parkingprotected bike lane caused a wheelchair user to exit his vehicle directly into the bike lane with no immediate way to access the sidewalk (Goodell, 2020). This ruling sets a legal precedent with implications for all parking-protected bike lanes. In 2022. disability rights advocates sued the District of Columbia in federal court over the installation parking-protected bike lanes. complaint argues that the new bike lanes force people with disabilities to cross bike

lanes, creating barriers to safe, ADA-accessible, on-street parking (DC Center for Independent Living; Dupoint East Civic Action Assn, Dana Bolles, Theodosia Robinson vs. District of Columbia; and Muriel Bowser, in her official capacity, 2022). This ruling sets a legal precedent with implications for all parking-protected bike lanes.

In 2022, disability rights advocates submitted a legal complaint against the District of Columbia in federal court over the installation of parking-protected bike lanes. The complaint argues that the new bike lanes force people with disabilities to cross bike lanes, creating barriers to safe, ADA-

accessible, on-street parking. This case is in process. No legal decision has been made. (DC Center for Independent Living; Dupoint East Civic Action Assn, Dana Bolles, Theodosia Robinson vs. District of Columbia; and Muriel Bowser, in her official capacity, 2022).

Accessibility issues can potentially be avoided by ensuring accessibility is part of the street redesign process. An option may be a raised bike lane (e.g., level with the sidewalk or with a lowgrade slope up to the sidewalk) at accessible on-street parking spots. Alternatively, engineers may ensure that curb cuts are consistently compliant with the Americans with Disabilities Act and that accessible on-street parking spaces are placed within a reasonable distance to them to ensure that wheelchair users are not forced "to roll in the bike lane and avoid cyclists for a significant period of time in order to reach a sidewalk." Properly planned implementation of any protected bicycle lanes need not obstruct or inhibit accessible on-street parking.

6. Next Steps

Street safety is an ongoing issue in New Jersey. There is conclusive evidence that protected bike lanes reduce crashes of all kinds and save lives. They are also shown to dramatically increase bicycle mode-share, bringing significant public health benefits and reductions to per-capita greenhouse gas (GHG) emissions. Parking-protected bike lanes are a lower-cost way to rapidly roll out new protected bike lanes. NJDOT is working with municipalities to find workarounds with regards to the current interpretation of Title 39 language. Advocates can help by working with New Jersey legislators to address ambiguities in the language.

There are multiple potential approaches for moving this issue forward. One approach is for experts and legislators to clarify the existing language in Title 39. Legal experts should confirm the legal meaning of the term "edge of the roadway" as used in the New Jersey statute. It may take legislative action to formally establish whether the edge of the roadway may be defined independently of the curb or shoulder.

Another approach is to revise the language in Title 39. If the favorable legal definition of "edge of the roadway" is not acceptable, the language of Title 39 could be revised to explicitly permit parking-protected bike lanes. New legislation may reference CT Statute 14-251, or PA Senate Bill 565. In the meantime, transportation departments can consider vertical elements such as plastic flex-posts as a compromise which both satisfies safety needs and concerns over legal impropriety, as was done in Asbury Park. Alternatively, departments can consider curb-protected bike lanes which offer bicyclists and pedestrians better protection from vehicle incursions than painted lanes without a curb or barrier.

Nonetheless, accessibility for people with disabilities remains a concern. Transportation experts must conform to the regulations of the Americans with Disabilities Act and account for the needs of persons with physical disabilities.

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