

Committee: Senate Judicial Proceedings Committee

Testimony on: Senate Bill 0077 - "Bicycles, Play Vehicles, and Unicycles – Authorizations and Requirements"

Position: Unfavorable Without Amendment

Hearing Date: January 31, 2024

Person Submitting: James G Titus, 6718 Glenn Dale Rd., Glenn Dale MD, 20769, jtitus@risingsea.net

Localities in only 31% of the state allow bikes on sidewalks, and this bill will increase that to 85%. But the bill also legalizes riding e-bikes and e-scooters on sidewalks for 98% of the state, compared with 2% today. These new devices are far more likely to injure a pedestrian. The bill should be amended to leave the law unchanged for e-bikes and e-scooters--or receive an unfavorable report. *(Suggested amendment text on last page.)*

Table 1: How SB 77 changes whether Bikes and E-bikes are allowed on sidewalks, by locality					
Applicable percent of state population in parentheses		Allowed on Sidewalks?			
		Regular Bikes		E-bikes	
		Today	SB77	Today	SB77
SB 77 legalizes bikes and e-bikes on sidewalks (55%)					
	Unincorporated portions and some towns in Allegheny, Baltimore, Calvert, Caroline, Carroll, Cecil, Charles, Dorchester, Frederick, Carrett, Harford, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, Washington, Wicomico, and Worcester counties	No	Yes	No	Yes
	Most of Prince George's County ¹ , Seat Pleasant ²	Admin ^c	Yes	No	Yes
	North Brentwood, New Carrollton ³ (under 15 ^d), Bowie (except city parks), Perryville ⁴ (under 16 and not B ^b) Westminster ⁵ (under 14 and not B ^b)	No	Yes	No	Yes
SB 77 legalizes e-bikes on sidewalks but regular bicycles still illegal (13%)					
<i>Baltimore-Washington Area (12%)</i>					
	Baltimore, ⁶ Ellicott City ⁷ , Fairmont Heights ⁸ , Hyattsville ⁹ , New Carrollton (above 15) ¹⁰ , Mount Ranier, ¹¹ University Park ¹² , Bowie city parks ¹³ , Cheverly city parks ¹⁴ , Takoma Park ¹⁵ (over 12)	No	No	No	Yes
	Berwyn Heights ¹⁶	Admin ^c	Admin ^c	No	Yes
<i>Outside of Baltimore-Washington Area (1.6%)</i>					
	Cambridge ¹⁷ (over 14 or B), Easton ¹⁸ , Chesterton ¹⁹ , Federalsburg ²⁰ (B), Pocomoke City ²¹ (B), Princess Anne ²² (over 11 and B), Rock Hall ²³ , Snow Hill ²⁴ , Aberdeen ²⁵ (B), Bel Air ²⁶ (B), Williamsport ²⁷ , Cumberland ²⁸	No	No	No	Yes
SB 77 legalizes e-bikes on sidewalks, regular bikes already allowed (20%)					
	Almost all of Howard County ²⁹ and Montgomery County ³⁰ , Takoma Park (under 12) ³¹	Yes	Yes	No	Yes
SB 77 has no effect (12%)					
<i>Baltimore-Washington Area (10.6%)</i>					
	Anne Arundel County ³² , Gaithersburg ³³	Yes	Yes	Yes	Yes
	Bladensburg ³⁴ , Brentwood (except child bikes) ³⁵ Capitol Heights ³⁶ , Colmar Manor ³⁷ , Edmonston ³⁸ , Laurel ³⁹	No	No	No	No
<i>Outside of Baltimore-Washington Area</i>					
	Berlin ⁴⁰ , Havre De Grace (B) ⁴¹ , Perryville (over 16 or B) ⁴² Westminster ⁴³ (over 14 or B)	No	No	No	No
Notes.					
a. See Table 2 for Details on Population					
b. (B) signifies that the ordinance applies in business and commercial districts.					
c. "Admin" signifies that the ordinance authorizes the executive to designate sidewalks where bikes are allowed.					
d. For example, "over 14" [or "under 14"] means cyclist is at least [or less than] 14 years old.					

Since the middle of the 20th century, it has been up to localities to decide whether to allow bicycles on sidewalks as an exception to the general prohibition against driving on a sidewalk. Jurisdictions with 30% of the population—mostly counties--have done so, while cities and towns with about 15% of the population have their own ordinances prohibiting bikes on sidewalks. But most counties, with 55% of the population, have not chosen to legalize bikes on sidewalks. Does that mean that they do not want bikes on sidewalks, or simply that the matter is not important enough to either enforce or remove the prohibition.

This bill is based on the assumption that inertia has prevented localities from allowing bikes on sidewalks, rather than the belief that bikes should be kept off sidewalks. *That is a reasonable assumption for ordinary bicycles:* The law is rarely enforced other than in localities that have their own ordinances; almost every bicyclist at least occasionally rides on a sidewalk; and outside cities; pedestrians rarely find bikes on sidewalks to be a problem. Legalizing bikes on sidewalks is unlikely to significantly change what most people do; it simply conforms the law to longstanding behavior.

But the situation is different for e-bikes and e-scooters:

- E-bikes are new, so unlike regular bikes, we do not have decades of experience to be confident that allowing them on sidewalks will be safe. So it makes more sense to let localities decide one at a time when to allow e-bikes on sidewalks.
- Because E-bikes and E-scooters are two to three times as fast as regular bikes, they are more likely to collide with a pedestrian.
 - A typical E-bike traveling at 18 mph is twice as fast as the typical sidewalk bike at 9 mph⁴⁴
 - Some E-bikes travel up to 28 mph.
 - One study estimates pedestrian injuries are three times more likely for e-bikes.⁴⁵
- Greater speed and weight also mean greater injury when a collision does occur.
 - At 18 mph with 30 pounds more weight, a typical collision would have more than twice the momentum and five times the kinetic energy imparted by a regular bike.⁴⁶
 - The fastest/heaviest e-bikes and e-scooters hit a pedestrian with three times the momentum and 10 times the kinetic energy.⁴⁷
- The benefits to a cyclist of riding on a sidewalk are less and the hazards greater as speeds increase.
 - At faster speeds, e-bikes are more likely to keep up with traffic than regular bikes, especially when going uphill.
 - Riding on sidewalks is hazardous to cyclists, especially at intersections, driveways, and on the left side of the road.⁴⁸ The accident rate on sidewalks is twice as great as on roads.⁴⁹ The faster one travels, the less likely a driver will notice the cyclist.
- Some e-bikes pose less of a risk, but the bill makes no distinction.⁵⁰
- E-bikes are new, so laws enacted today are more likely to set the gradually evolving norms. Therefore, it makes more sense to allow those norms to evolve organically as cities and counties with the greatest site-specific experience set the rules. *The time for the state to set a general rule of allowing e-bikes on sidewalks would be after we have more time for localities to do so as occurred with regular bikes.*

Despite these problems, this bill does more to legalize e-bikes on sidewalks than it does for ordinary bikes, for two reasons. First, it legalizes e-bikes in localities that have already legalized ordinary bikes. More oddly, the bill legalizes e-bikes on sidewalks in Baltimore, Cambridge, Cumberland, and other cities that have local ordinances banning regular bikes on sidewalks. So on October 1, 2024, people will be allowed to ride e-bikes at 25 mph on the sidewalks of Baltimore, but not a regular bike at 8 mph.

It is no answer to say that this bill is merely changing the default rule, and localities will still be allowed to set their own rules. Localities already have that authority, and the entire premise of this bill is that even after more than 50 years, most localities have not acted. The bill is making a sweeping change by allowing motorized vehicles on sidewalks, without a solid base of information to show that doing so is safe.

Table 2: Population of Various Jurisdictions Mentioned in Table 1

	City or Town ^a	County	2020 Population
Where The Bill legalizes bikes and e-bikes on sidewalks (55%)			
	Rest of	Allegany	49,690
	.	Baltimore Co	850,737
		Calvert	93,244
	Rest of	Caroline	30,496
	Rest of	Carroll	152,853
	Rest of	Cecil	99,451
		Charles	167,035
	Rest of	Dorchester	19,535
		Frederick	273,829
		Garrett	28,856
	Rest of	Harford	216,526
	Rest of	Kent	17,602
	Rest of	Queen Anne's	44,607
	Rest of	Somerset	21,214
		St. Mary's	113,814
	Rest of	Talbot	20,186
	Rest of	Washington	152,562
		Wicomico	103,815
	Rest of	Worcester	40,891
	Rest of	Prince George's	863,269
		Total	3,360,212
Where the Bill legalizes e-bikes on sidewalks but regular bicycles still illegal (13%)			
	<i>Baltimore-Washington Area (12%)</i>		
	Baltimore	n/a	584,548
	Ellicott City	Howard	68,635
	Fairmont Heights	Prince Georges	1,516
	Hyattsville	Prince Georges	18,209
	New Carrollton	Prince Georges	13,725
	Mount Ranier	Prince Georges	8,498
	University Park	Prince Georges	2,705
	Takoma Park	Montgomery	17,045
	Rock Hall	Kent	1,687
	Berwyn Heights	Prince Georges	3,184
		Total	719,752

Table 2: Population of Various Jurisdictions Mentioned in Table 1

<i>Outside of Baltimore-Washington Area (1.6%)</i>			
Easton	Talbot		17,477
Cambridge	Dorchester		13,022
Chestertown	Queen Anne's		5,709
Federalsburg	Caroline		2,824
Princess Anne	Somerset		3,458
Pocomoke City	Worcester		4,549
Snow Hill	Worcester		2,204
Cumberland	Allegany		18,471
Aberdeen	Harford		19,035
Bel Air	Harford		10,595
Williamsport	Washington		2,083
			99,427
Where the Bill legalizes e-bikes on sidewalks, regular bikes already allowed (20%)			
Rest of	Howard		263,376
Rest of	Montgomery		970,208
			1,233,584
Where to Bill has no Effect (12%)			
<i>Baltimore-Washington Area (10.6%)</i>			
	Anne Arundel		588,109
Gaithersburg	Montgomery		69,657
Bladensburg	Prince Georges		9,148
Brentwood	Prince Georges		3,046
Capitol Heights	Prince Georges		4,337
Colmar Manor	Prince Georges		1,404
Edmonston	Prince Georges		1,528
Laurel	Prince Georges		26,620
<i>Outside Baltimore-Washington Area</i>			
Berlin	Worcester		5,183
Havre De Grace	Harford		14,903
Westminster	Carroll		20,372
Perryville	Cecil		4,425
Total			748,732
Notes			
a. "Rest of" means the population of the entire county, minus the population of towns within that county specifically listed in this table.			

Notes

¹ Prince George's County Code §26-150. Applies except in those incorporated towns with a local ordinance.

² Seat Pleasant Code §150-58

³ New Carrollton Code §110-38(C)

⁴ Perryville Code §10.36.060

⁵ Westminster Code § 155-9

⁶ Baltimore Code 18-1, 18-8

⁷ Howard County Code §21-403.

⁸ Fairmont Heights Code §5-104 Bicycles (1988)

⁹ Hyattsville Charter §105-18 (1967).

¹⁰ New Carrollton Code §110-38(C)

¹¹ Mount Ranier §10-101 (2023)

¹² University Park §9-108

¹³ Bowie Code §17-2(u)

¹⁴ Cheverly Code §16-1.

¹⁵ Takoma Park §13.16.050

¹⁶ Berwyn Heights Code §2 and 103-3.

¹⁷ Cambridge Code §16-6.

¹⁸ Easton Code §5-4

¹⁹ Chesterton Code §160-8

²⁰ Federalsburg Code §197-9

²¹ Pocomoke City §201-13

²² Princess Anne §154-15 (2008)

²³ Rock Hall Code §§69-1, 69-3

²⁴ Snow Hill Code §162-1

²⁵ Aberdeen Code §505-9.

²⁶ Bel Air Code § 450-33

²⁷ Williamsport Code Chapter 30, §3.

²⁸ Cumberland Code §13-187

²⁹ Howard County Code §21-403.

³⁰ Montgomery County Code §31-5(b)

³¹ Takoma Park §13.16.050

³² Anne Arundel § 12-3-103.

³³ Gaithersburg Code §19-4.

³⁴ Bladensburg Code §103-5

³⁵ Brentwood Code §261-1

³⁶ Capital Heights Ordinances §8-302.

³⁷ Colmar Manor Code §10-110

³⁸ Edmonston Code §451-1

³⁹ Laurel Code §17-4

⁴⁰ Berlin Code §§32-68, 32-71

⁴¹ Harvre De Grace Code §190-44.

⁴² Perryville Code §10.36.060

⁴³ Westminster Code §155-9

⁴⁴ See [Average Bike Speed - How Do You Compare? - I Love Bicycling](https://ilovebicycling.com/average-bike-speed/), <https://ilovebicycling.com/average-bike-speed/>

⁴⁵ DiMaggio CJ, Bukur M, Wall SP, et al.(2020). Injuries associated with electric-powered bikes and scooters: analysis of US consumer product data. Injury Prevention 2020;26:524-528.

⁴⁶ Momentum is mass times velocity, while kinetic energy is mass times the square of velocity. Hence doubling the speed alone quadruples kinetic energy. The average e-bike weighs about 55 pounds.

⁴⁷ §11-117.2 allows electric low speed scooters to weigh as much as 100 pounds and travel up to 20 mph. §11-117.1 allows e-bikes to provide power up to 28 mph. Some class III e-bikes also weight 80 pounds or more. Triple the speed means that kinetic energy is nine times as great, and the extra 50 pounds can increase the total weight of a cyclist plus bike by about 20 percent.

⁴⁸ Bicyclists on sidewalks are 80 percent more likely to be injured at an intersection

⁴⁹ E.g. Wachtel, Alan, and Diana Lewiston. "Risk factors for bicycle-motor vehicle collisions at intersections." ITE Journal(Institute of Transportation Engineers) 64.9 (1994): 30-35.

⁵⁰ The European e-bikes are light and only travel 15mph and require pedaling. At the other extreme, Class II e-bikes do not require pedaling and Class III e-bikes can travel 28 mph. The District of Columbia allows Class I and II e-bikes on sidewalks, but not the heaviest and fastest class III e-bikes.

SENATE BILL 77

R5

(PRE-FILED)

4r0700

CF HB 111

By: **Senator Waldstreicher**

Requested: September 25, 2023

Introduced and read first time: January 10, 2024

Assigned to: Judicial Proceedings

A BILL ENTITLED

1 AN ACT concerning

2 **Bicycles, Play Vehicles, and Unicycles – Authorizations and Requirements**

3 FOR the purpose of authorizing a person to ride a bicycle, play vehicle, or unicycle on a
4 sidewalk or sidewalk area unless prohibited by local ordinance; requiring a person
5 riding a bicycle, play vehicle, or unicycle on a sidewalk or sidewalk area or in or
6 through a crosswalk to yield the right-of-way to a pedestrian or a person riding on
7 an electric personal assistive mobility device; and generally relating to riding
8 bicycles, play vehicles, and unicycles.

9 BY repealing and reenacting, without amendments,
10 Article – Transportation
11 Section 21–1103(a)
12 Annotated Code of Maryland
13 (2020 Replacement Volume and 2023 Supplement)

14 BY repealing and reenacting, with amendments,
15 Article – Transportation
16 Section 21–1103(b) and 21–1202(b)
17 Annotated Code of Maryland
18 (2020 Replacement Volume and 2023 Supplement)

19 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND,
20 That the Laws of Maryland read as follows:

Article – Transportation

21 21–1103.

22 (a) Except as provided in subsection (b), (c), or (d) of this section, a person may
23 not drive any vehicle on a sidewalk or sidewalk area unless it is a permanent or authorized
24

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.
[Brackets] indicate matter deleted from existing law.

hb0111

1 temporary driveway.

2 (b) (1) For the purposes of this subsection, “bicycle” does not include “moped”,
3 **“ELECTRIC BICYCLE”, NOR “ELECTRIC LOW SPEED SCOOTER”,**
4 as defined in § 11–134[.1] of this article.

4 (2) [Where allowed] **UNLESS PROHIBITED** by local ordinance, a person
5 may ride a bicycle, play vehicle, or unicycle on a sidewalk or sidewalk area.

5 **(3) WHERE ALLOWED BY LOCAL ORDINANCE, A PERSON**
6 **MAY RIDE AN ELECTRIC BICYCLE OR ELECTRIC LOW SPEED SCOOTER ON A**
7 **SIDEWALK OR SIDEWALK AREA.**

6

7 ([3]4) In a place where a person may ride a bicycle on a sidewalk or sidewalk
8 area, a person may also ride a bicycle, **ELECTRIC BICYCLE, OR ELECTRIC LOW SPEED**
9 **SCOOTER** from the curb or edge of the roadway in or through a
10 crosswalk to the opposite curb or edge of the roadway.

10 21–1202.

11 (b) (1) Subject to paragraphs (2) [and], (3), **AND (4)** of this subsection, a
12 person has the rights and is subject to the restrictions applicable to pedestrians under this
13 title while the person is lawfully operating a bicycle, **ELECTRIC BICYCLE, ELECTRIC LOW**
14 **SPEED SCOOTER**, play vehicle, or unicycle:

14 (i) On a sidewalk or sidewalk area; or

15 (ii) In or through a crosswalk.

16 (2) At an intersection, a person operating a bicycle, **ELECTRIC BICYCLE,**
17 **ELECTRIC LOW SPEED SCOOTER**, play vehicle, or unicycle
18 is subject to all traffic control signals, as provided in §§ 21–202 and 21–203 of this title.

18 **(3) A PERSON OPERATING A BICYCLE, ELECTRIC BICYCLE, ELECTRIC**
19 **LOW SPEED SCOOTER, PLAY VEHICLE, OR UNICYCLE**
20 **ON A SIDEWALK OR SIDEWALK AREA OR IN OR THROUGH A CROSSWALK SHALL YIELD**
21 **THE RIGHT-OF-WAY TO A PEDESTRIAN OR A PERSON RIDING ON AN ELECTRIC**
22 **PERSONAL ASSISTIVE MOBILITY DEVICE.**

22 **([3]) (4)** Section 21–506 of this title does not apply to a person operating
23 a bicycle, **ELECTRIC BICYCLE, ELECTRIC LOW SPEED SCOOTER**, play vehicle, or unicycle.

24 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
24 October 1, 2024.