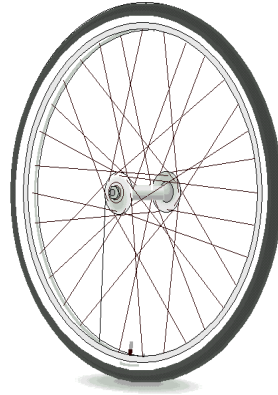


April 8, 2019

Joint Committee on Transportation  
Senator Joseph A. Boncore, Senate Chair  
Room 112  
William M. Straus, House Chair  
Room 134  
State House  
24 Beacon Street  
Boston, MA 02133



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Mr. Boncore, Mr. Straus, and members of the Committee

I am submitting this letter as comments on bills before the Joint Transportation Committee. I thank you for the opportunity to comment.

I attended the Joint Transportation Committee hearing on March 28, and spoke briefly. I am providing more extended comments here.

My credentials: I have been involved in bicycling advocacy since 1978. I am currently a member of the Board of Directors of the Charles River Wheelers bicycle club, a ride leader and the club's Safety Coordinator. I also am a member of the Bicycle Technical Committee of the National Committee on Uniform Traffic Control Devices, <https://ncutcd.org>, which meets twice a year to make recommendations to the Federal Highway Administration on specifications for traffic signs, signals and markings. The National Committee has also in recent years taken up the task of revising the Uniform Vehicle Code, the national model for traffic law. I represent the Bicycle Technical Committee in this work.

## **General Issues with Massachusetts traffic law**

A major revision of Massachusetts traffic law has been overdue for decades. It is the most disorganized and unreadable traffic law of any state. As it is amended, it becomes ever more a patchwork, lacking consistent organization. Example:

Chapter 90, Section 7B includes a paragraph 1523 words long – and this is a section which S7, the Governor's bill currently before the Joint Committee, would revise. The revision would be lost in a mass of text:

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIV/Chapter90/Section7B>

Here is an example – one of many -- regarding traffic signals, but which shows the way laws are split up between the Statutes, regulations and municipal ordinances:

There is no provision in Massachusetts General Laws indicating what a driver is to do at a red, yellow or green traffic signal other than rules for a legal right or left turn on red, see Chapter 89,

section 8 – <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIV/Chapter89/Section8>. If you search the entire body of statutes, you won't find any underlying rule. Clearly, the "turn on red" rule was added when it was mandated by the Federal Government, as a statute, in the simplest way possible.

There are explicit rules for drivers at traffic signals in Chapter 720 of the Code of Massachusetts Regulations, 9.06 (10) - <https://www.mass.gov/doc/720-cmr-9-driving-on-state-highways/download> but these apply only on state highways. And a numbered highway is not necessarily a state highway. Whether it is one depends on property ownership or easement rights. That is why we see signs, "state highway ends." Not only the jurisdiction changes where these signs are posted: also the rules.

CMR 350 includes traffic rules, including an abbreviated one for traffic signals, for DCR parkways: <https://www.mass.gov/doc/350-cmr-4-traffic-rules/download> . There are probably similar rules for authorities such as Massport.

Basic traffic rules are established with inconsistencies in ordinances that must be enacted separately by the governments of the 351 cities and towns. Ordinances for Waltham, where I live, include wording on traffic signals similar but not identical to that in CMR 9.09 (10).

[https://www.city.waltham.ma.us/sites/walthamma/files/pages/rules\\_-\\_regulations\\_2017.pdf](https://www.city.waltham.ma.us/sites/walthamma/files/pages/rules_-_regulations_2017.pdf) -

A driver or police officer should not have to review multiple documents for rules which apply to something as common and universal as traffic signals. Traffic laws should be uniform throughout the Commonwealth and addressed comprehensively in the General Laws. Municipal traffic ordinances should address only special exceptions and issues which are unique to a community, an authority or the DCR, such as parking locations and path usage. Micromobility devices raise new issues, and more are going to occur with the advent of automated crash avoidance and fully autonomous vehicles.

Directly relevant to the issues addressed by the bills before the Joint Committee: there is a very good definition of "bicycle" in CMR 720 9.01 There is no definition of "bicycle" whatever in the General Laws. There is a poor and different definition in the Waltham city ordinances.

I do not have time to review the ordinances of the other 350 cities and towns.

About legal issues in general concerning bicycles, including electrically-assisted bicycles, see

<https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2573&context=ulj>

Revision of the traffic law to accommodate new developments will be much smoother if the laws are properly organized in the first place. The current crop of bills would add new patches to the existing patchwork and that is all that can perhaps happen for now, but I ask the Legislature to envision a more sweeping revision to avoid complications in the future. The process of revision begins, or at least could be seeded, by a provision in Section 31 of the Governor's bill, S7. S7 promises to generate a review

process – even though only temporarily and for a limited scope of review. I start my review of bills with the Governor’s.

### **S7:**

I wish especially to indicate my support for the *process* described in S7, section 31, to review issues and submit a report. Only a coordinated review of proposals can lead to a well-coordinated legislative proposal, and S7 offers this. Now for some comments on specific sections.

**Section 1:** Would improve mirror coverage, but should also address collision warning sensors at least as an item for review.

**Section 2:** I applaud the Governor’s introductory statement,

“[W]e are proposing to treat electric scooters as we do bicycles as a first step and to establish an advisory group to recommend more permanent policies,”

and this position as incorporated into Section 2. This would rectify the unfortunate provisions of the motorized scooter law (no passing on the left, no riding at night), at least as applied to electrically-powered scooters. I note, though, that this section does not address electrically-assisted bicycles –they could be addressed through the review process in section 31 of this bill.

**Sections 5 and 6** I note grammatical issues– punctuation and singular/plural change to conform to the existing wording in Chapter 90, section 1.

**Section 7** I support the concept of truck side guards, but I question the cited truck side guard specification DOT-VNTSC-OSTR38 16-05, because it does not require covering the rear wheels – see <https://www.volpe.dot.gov/our-work/truck-side-guards-resource-page>. Cyclist Dana Laird was killed in Cambridge in 2002, thrown from her bicycle when the end of her handlebar nicked an opening door of a parked car and she slid along the side and went under the wheels of an MBTA bus. I know of another fatality which similarly involved a school bus in Boston. The side of a bus is effectively a side guard except that it does not cover the rear wheel assembly. Side guards also should not have an open structure which can snag and drag bicycle handlebars. A side guard which has a smooth surface and covers the wheels also offers a greater aerodynamic advantage. I have addressed these issues in detail elsewhere: <https://john-s-allen.com/blog/?p=5448>

**Section 12** – restricts use of a mobile telephone or similar device by a person riding a bicycle, but as noted, the statutes include no definition of “bicycle” to support this provision, or many others already in the law. I suggest the adoption of the definition in CMR 720. Several other bills before the Joint Committee include provisions restricting the use of handheld communications devices. I support restrictions but I do not have time to comment on all of the bills.

**Section 31** This is the section proposing an advisory working group and which holds promise to create a consistent body of law, and as already stated, I strongly support this.

Now on to other bills:

**S2106 / H3008** – Promotes modern and sustainable solutions for transportation. I support this bill. (It doesn't appear to be among those reviewed by the Committee, though the intent is related.)

**S2097** – I generally support this bill, which requires a 3-foot clearance when passing bicycles, but it does not require a great enough clearance when motor vehicle speed is high. Other states have established a scale of clearances based on speed. S2042 / H 3118 provides the added clearance – see comments below. I also note that motorcyclists are vulnerable users but are not defined as such in the bill. Maybe that is because they look so tough? They have a far worse fatality rate than bicyclists.

**S2072** – proposes that motorized scooters be registered and operators be licensed. I have no objection to licensing and registration but I oppose this bill for two reasons: if electric scooters are removed from its scope, then it applies to almost no scooters actually in use; also, it retains the onerous provision of the present motorized scooter law prohibiting overtaking on the left.

**S2071** – Establishes three classes of electric bicycles. I support this bill. The categories are recognized nationally and the restrictions on use are reasonable and adjustable. The advisory group described in S7 should incorporate the provisions of this bill into its recommendations.

**S2058** – Requires a taillamp in addition to a rear retroreflector on a bicycle when ridden at night and increases the fine for bicyclist violations of traffic law. I support this bill except that I would like to see an incentive to buy a lamp rather than only a penalty for not using one, a phased introduction to the light requirement, and publicity. I note that the rear reflector and reflectivity in the pedal area required under current law are already quite effective in alerting overtaking drivers, and that current law also requires a headlamp and side-facing reflectivity.

**S2049 / H3073** – Establishes a new class of device, "lightweight electric scooter." I oppose this bill. In particular, it includes the onerous prohibition against overtaking on the left, carried over from the current motorized scooter law. By placing the promulgation of rules for micromobility devices with MassDOT, this bill may restrict the application of these rules to state highways. This bill requires lights and turn signals on scooters, and that provision is reasonable. It should be incorporated in the proposal resulting from the review process of S7.

**S2047** – I oppose this bill. What it seeks to accomplish should be folded into the review process proposed in S7. Essentially, this bill attempts to amend the current wording in Chapter 90 on motorized scooters to apply to ones with electric power. This bill would allow riding at night, with which I agree, but states no requirement for lighting. It retains the onerous and hazardous prohibition against passing on the left. The helmet requirement for a person under age 16 is inconsistent with the one for bicyclists, (under age 17) and does not establish a specific standard, as do the laws for motorcyclists and bicyclists.

**S2042/ H 3118** – I generally support the provisions of this bill. Many repeat those in S7. I repeat my concerns about a design standard for truck side guards ("lateral protective devices") and that motorcyclists are not included in the category of vulnerable users. The safe passing distance provision (section 9) is better than that of S7, because it requires a greater distance at higher speeds. Section 14 is

excellent, improving crash reporting, but importantly, should include car-door collisions. Many motor vehicle crash-reporting rules exclude motor vehicles which are not in motion, and so fail to report dooring collisions.

**S2034 / H3116** – attempts another change in definitions to include electrically-powered scooters, but does not include a requirement for lighting, and retains the onerous prohibition against passing on the left. I oppose this bill. The change in definitions should be addressed in the review process proposed in S7.

**HD 4084** – In the early 1980s, I spearheaded the restoration of the requirement for bicyclists to use a headlamp at night, but this bill goes too far. It not only requires bicyclists to have a headlight and taillight, but requires all new bicycles to be equipped with them. Many bicycles are ridden only during daylight hours; bicyclists who are concerned with performance do not wish to carry the extra weight; this bill would also impose a burden on bicycle retailers. I support S2058, adding the requirement for a taillamp to current law.

**HD 4030** – is substantially identical to HD 4084 and the same comments apply.

**H3626** – Addresses the same issues and has the same problems as H3092 regarding bicyclists in crosswalks. See comments on that bill.

**H3120** – requires crosswalk markings to conform to national standards. I support this bill.

**H3135** – Requires registration of motorized scooters but makes no changes to the existing confused definition. Whether motorized scooters should be registered depends on how they are defined, and that is taken up in other bills. Registration should be addressed only after establishing classes of vehicles and rules for them. Again, the review process in S7 is intended to address these issues in a coordinated way. This bill also requires a slow-moving vehicle emblem on the back of a motorized scooter. That provision is unworkable; equipment needs to be addressed through national standards to avoid chaos in the industry. The bill has only two sections but the text refers to a Section 6 and Section 7.

**H3092** – I support the provisions of this bill, but some need amending. The bill includes provisions for truck side guards and mirrors similar to those in S7 and for a standard analysis tool as in S2034 / H3118. Please refer to my comments on those bills.

This bill also extends the requirement for motorists to yield to pedestrians in crosswalks so they also apply to bicyclists. I strongly support this, while noting that no such rule can properly apply to either a bicyclist or a pedestrian who darts out into the street too fast to avoid. MGL Chapter 89, Section 11 lacks this proscription, it is not included either in Chapter 90, section 14, Precautions for the Safety of Other Travelers, and it appears to be a sticking point with the legislation. Questions were asked about this at the hearing.

MGL 720 9.09 4(a) includes the wording: "[n]o pedestrian shall suddenly leave a sidewalk or safety island and walk or run into the path of a vehicle which is so close that it is impossible for the driver to

yield the right of way.” In Waltham ordinances, the same provision is in Article 8, section 5 - [https://www.city.waltham.ma.us/sites/walthamma/files/pages/rules\\_-\\_regulations\\_2017.pdf](https://www.city.waltham.ma.us/sites/walthamma/files/pages/rules_-_regulations_2017.pdf). The law needs to include this provision or else, CMR 720, CMR 350 and the ordinances of all 351 cities and towns have to be amended. This is a prime example why the traffic laws need to be addressed at the state level.

This bill requires bicycles to have taillights. See my comments on S2058.

This bill defines “vulnerable user”, excluding motorcyclists, and requires a safe passing distance scaled for speed. See my comments on S2074 / H 3073. This bill also requires overtaking in the next lane if needed, which is good but it does not allow a motorist to cross a double yellow line to pass a bicyclist, as is universal practice, is now law in four states including Maine and on its way to acceptance in other states.

**H3058** – Requires convex mirrors and truck side guards. See my comments on S7 regarding them.

**H3050** – Prohibits use of headphones by bicyclists. I oppose this because it is unenforceable – many headphones are not visible from any distance or when covered by hair or a helmet -- and inequitable. There is no law prohibiting loud sound systems inside motor vehicles, which already isolate their drivers from outside sounds. Some types of headphones do not exclude outside sounds. There is no liability exclusion in this bill, and so wearing headphones can lose an insurance claim for a bicyclist when another party in a collision committed a violation of the rules of the road and the cyclist committed none. I have more extended comments on this issue here: <http://bikexpert.com/bicycle/hearing.htm>.

**H3019** – This requires all bicyclists to wear helmets and fluorescent clothing. I oppose this because helmet promotion is more effective than a helmet law; helmet laws have been shown to discourage bicycle use and result in an overall decrease in public health; and the clothing requirement is unreasonable and not imposed on other vulnerable users. Should we also require all pedestrians to wear fluorescent clothing? I note also that there is no exclusion from presumption of negligence for bicyclists who are not wearing fluorescent clothing. The main effect of this law will be to let motorists who collide with bicyclists off the hook for civil damages. Let it be known that I personally wear a helmet and bright-colored (though not necessarily fluorescent) clothing and recommend it to other bicyclists. I do not however suggest that this be required by law.

**H3040** – Establishes a class, “electric kick scooter” and requirements for its use. It is one of several bills establishing such a class, a useful concept in and of itself, but the bill includes these poison pills:

an electric kick scooter operator shall keep in a bicycle lane when a bicycle lane is present, shall keep to the right side of the road at all times when no bicycle lane is present, including when passing a motor vehicle which is moving in the travel lane of the way.

The largest single cause of reported bicycle crashes in the Boston area is dooring, and most bicycle lanes in the Boston area are in the door zone. The largest single cause of bicyclist fatalities in the Boston area is overtaking on the right side of right-turning trucks, as demonstrated by Paul Schimek’s research based

on police reports, see <http://bicycledriving.org/law/boston-bicyclist-injury-report> . That report also shows that rear-end collisions, the only kind which could be prevented by staying in the bike lane, are rare. There is no reason to expect that the effect would be any different for users of electric scooters.

**H3014** – Except for a poison pill, this bill is substantially the same as S2071, establishing three classes of electric bicycles.

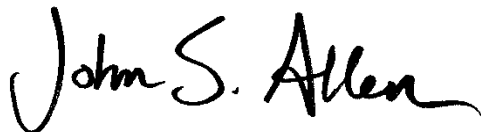
With a top speed of 28 mph, class 3 electric bicycles have substantially the same operating characteristics as gasoline-powered motorized bicycles -- except that electric bicycles do not pollute the air. We allow bicycles including gasoline-powered motorized ones to use all public ways except limited-access and express highways where signs have been posted, but we should allow a municipality or local authority to ban electric bicycles from the same public ways? The provision is beyond absurd:

SECTION 6 (5) (iv) A municipality or local authority having jurisdiction over streets, roads, or ways may prohibit the operation of class 3 electric bicycles on those streets, roads, or ways.

## Conclusion

I have addressed only bills which involve bicycles, electric bicycles and electric scooters. As mentioned earlier, several additional bills penalize texting and use of cell phones while driving, and I also support those bills. I thank you for your attention.

Very truly yours,

A handwritten signature in black ink that reads "John S. Allen". The signature is written in a cursive, flowing style.

John S. Allen

Cc: Gov. Charles Baker  
Jackie Douglas, MassDOT  
Galen Mook, Massbike