

The Insurance Federation of Pennsylvania
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To: Honorable Members of the House Transportation Committee

From: Samuel R. Marshall, Jonathan C. Greer, and Noah K. Karn

Re: HB 2398 - Establishing standards for allowing driverless HAVs to be tested on public roads

At the outset, we want to dispel any misconception that the insurance industry doesn't support the development of Highly Automated Vehicles. We do. While fully operational and commercially available HAVs are still years off, we recognize the development of them has reached a new stage where it is time for driverless HAVs to be tested on public roads.

Our concern is that any legislation allowing this testing of driverless HAVs also ensure that the testing is safely done. House Bill 2398 – as with its matching bill in the Senate, SB 965 – is to allow and establish standards for this new stage of testing. While the bills are clear on allowing driverless HAVs to be tested on public roads, we think they need to be stronger on the standards and oversight of that testing.

That's the balance that needs to be struck here. Those developing HAV technology benefit greatly by being able to use public roads as their living laboratory, and we will all benefit as this technology goes from testing to safe use.

- But let's acknowledge the obvious: Driverless HAVs are still a new and unproven technology which present real dangers to others on the roads, so allowing this testing needs to come with sufficient safety and oversight for the rest of us.

To that end, we recommend this bill be revised to better clarify who can test driverless HAVs, the safety and oversight of this testing, and the proper insurance for it.

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- As part of that, we recommend you look to the standards that were enacted for the development, testing and use of Personal Delivery Devices in Act 106 of 2020. That struck a fair balance in encouraging this new technology – there, the use of autonomous delivery devices for use on sidewalks and some roads – and making sure it is developed and authorized safely. It was enacted with the acceptance of all stakeholders.
- We also recommend you hear from the HAV Advisory Committee. That was established in 2018 precisely for this purpose – to review laws, regulations and policies governing HAVs, to evaluate best practices, to develop technical guidance and to ensure safe testing and deployment. It hasn't had the chance to do that.

We're attaching an outline of the amendments we recommend to meet these goals, and we're happy to discuss the specifics of them with you and other stakeholders. As to our major points:

- This needs a section on what those testing driverless HAVs should be reporting to PennDOT, as well as what PennDOT does with those reports. At a minimum, there should be real-time reporting to PennDOT of accidents, computer glitches and other warning signs, with PennDOT having the power to immediately suspend testing.
- While Section 8510.1 allows PennDOT to promulgate regulations or publish guidelines, it doesn't require that before driverless testing can begin. It should. Given the well-documented risks associated with HAVs, and the new stage of testing allowed here, a clear regulatory framework is needed at the outset, with conditions for getting licensed to conduct driverless testing both established and met before the testing begins.

Further, make sure PennDOT comes up with any regulations or guidelines not only after consultation with the HAV Advisory Committee, but also after consultation with its own Pedestrian and Pedalcycle Advisory Committee.

You should also make sure the public has the chance to comment and that local involvement is assured. Given the broad impact of this – testing driverless cars on public roads brings broad exposure to all of us – public input is essential.

All this was done in allowing the use of autonomous Personal Delivery Devices in Act 106 of 2020. Why have less oversight of driverless HAVs being tested on public roads than we have for driverless PDDs operating on sidewalks?

- Section 8509 talks about “owners” of HAVs having insurance of at least \$1 million. That sounds impressive, but let’s resolve its ambiguities: Is the insurance for damages arising out of one accident, or for each victim, or an annual requisite, etc.? What is the insurance to cover – just accidents caused by the owner, or accidents caused by the vehicle manufacturer, software developer, or others?

We also recommend a strict liability standard. That’s a fair requisite for the privilege of testing HAVs on public roads and assures that third parties get their claims quickly resolved.

There can be legitimate questions as to who might be ultimately liable when an HAV screws up – is it the software, the installation or some other part of what is more like a product liability claims than a standard auto claims? The HAV owner can work that out with the other parties involved with testing and developing the HAV. Let’s get third parties on our public roadways get paid first.

Testing driverless cars on public roads is a sign of real promise in HAV technology. Plus, we appreciate the economic development aspect of this.

But this testing comes with a safety risk to other motorists and pedestrians. The amendments we recommend are meant to strike that balance – making Pennsylvania both attractive and safe for this new stage of testing.

Thank you for the opportunity to be here. We are happy to answer any questions, and we welcome the chance to work with you and all other stakeholders on this.

Insurance Federation's recommended amendments to HB 2398 and SB 965

We offer the following comments and suggested revisions to address that, largely adopting the standards for oversight of PDDs to apply with testing driverless HAVs on public roads.

Section 102 – the definition of “highly automated vehicle”: This limits ownership of HAVs to businesses and research institutions. This should clarify that these entities are **“engaged in the development and testing of such vehicles.”** Otherwise, it would apply to any business and would suggest HAVs can be owned and operated for commercial use, not limited to testing.

Also, this now defines – and therefore limits ownership of – HAVs as those with an ADS at a level 3 or higher. Is that more limiting than need be? What level does Tesla, for instance, claim?

Section 3317 – platooning: Subsection (e) changes – and in reality removes - the standards for operating platoons on highways. It requires that a person operating a platoon on a highway “file and review” its general plan of operation with PennDOT. But it removes any ability of PennDOT (or the state police or turnpike) to effectively object to the plan or require changes.

As insurers, we are often subject to filing requirements with agencies that don't require express approval; but we've never heard of a filing requirement where the agency is powerless to object. Why allow that with platooning? We recommend this be deleted or revised to expressly allow PennDOT to disapprove or take other action on a plan filed with it.

Section 3746 – notice of accidents: Subsection (a.1) requires “the owner or registrant” of an HAV to report an accident to the local police. As this covers testing of HAVs under PennDOT's regulation, it should also be notified of any accident as part of its ongoing monitoring of such testing: **“Further, the owner or registrant shall report the accident to the department, and the Department shall provide the HAV Advisory Committee with quarterly summaries of such reported accidents.”**

Also, this subsection (and others) refers to an “owner or registrant.” Aren't those entities the same?

Section 8503 – HAV Advisory Committee: Subsection (j) requires two special reports 18 months after this takes effect, but only for the impact of HAVs on the Commonwealth's workforce and on improvements for those with disabilities. This should also require a special report on the safety of HAV testing during this timeframe: **“(3) Evaluate the safety of any HAV testing on public roadways, and the monitoring of such testing by the department.”**

Further, this calls for only one set of reports, done 18 months after this takes effect. We question whether that is enough time for conclusive reports, given the embryonic stage of this level of testing. Requiring reports annually thereafter will be of more use.

Sections 8504 and 8506 – Operation of driverless HAVs; and Section 8507 - Operation of TNCs: These allow driverless HAVs to operate on public highways. We're not sure why this goes to three separate sections: What is the difference between Section 8504 and 8506, and why do TNCs need a special section?

These sections leave out any unique safety provisions or oversight. Whether kept separate or merged, they should apply only to the testing of these HAVs, not general operation, which would suggest these are ready for general deployment. And they should expressly allow operation of HAVs only if the owner has been vetted by PennDOT.

- Working off **Section 8504**, insert a new subsection (1): **“The owner of the highly automated vehicle has filed with and been authorized by the department pursuant to regulations or guidelines under Section 8510.1.”**
- The same could be added to **Sections 8506 and 8507**: **“Further, an HAV shall not operate on highways pursuant to this section until the owner of the HAV has filed with and been authorized by the department pursuant to regulations or guidelines under Section 8510.1.”**

Section 8508 – Licensing and registration: Subsection (1) says an ADS is the “driver” if it is engaged “for the purpose of assessing compliance under this article.” The challenge is recognized in the definition of “ADS,” which refers to the collective hardware and software – meaning there could be multiple drivers – and they wouldn't be the ones cited anyway, as that is left to the “owner or registrant” (again, not sure of the difference there). Subsection (2) provides that the HAV driver operating from a remote location is to be considered the “driver” for citations. That could be a person in another state or country, and possibly with no connection to the owner.

As this is limited to testing of HAVs, we recommend **the responsibility – and any citations – in both subsections go to the owner of the HAV.**

Section 8509 – Insurance: While this sounds good - \$1 million – it is ambiguous, as with whether that is to cover each claim, or all claims in an individual accident, or all claims in the aggregate, or all claims against not just the owner of the HAV but also, for instance, claims against the software and hardware developers of the ADS.

We recommend going with the strict liability standard proposed in 2018 by Senator Vulokovich in a draft amendment to SB 427. That went to both liability and insurance and should be continued here. As a rough form:

- **(a) Liability.** An owner of an HAV shall be strictly liable for any and all damages awarded as a result of claims brought against the owner by third parties on account of accidents arising out of the maintenance or use of the HAV. This shall not preclude the owner of an HAV from bringing a claim against other parties involved with the design, manufacture or testing of the HAV, provided

that such claims shall not delay resolution of any claim involving third parties arising out of an accident arising out of the maintenance or testing of the HAV.

- **(b) Insurance.**

- (1) An owner of an HAV shall maintain the ability to respond to third parties in damages for liability determined pursuant to subsection (a) on account of accidents arising out of the maintenance or testing of the HAV, and in the amount of \$1 million for death, bodily injury and property damage to any such third party. This financial responsibility shall be evidenced by insurance placed with either an insurer that has obtained a certificate of authority pursuant to section 208 of the Act of May 17, 1921 (P.L. 789, No. 285), known as the Insurance Department Act of 1921, or a surplus lines insurer eligible pursuant to Section 1605 of the act of May 17, 1921 (P.L. 682, No. 284), known as the Insurance Company Law of 1921, or through any other form acceptable to and approved by the department.
- (2) Financial responsibility satisfying the requirements of this section shall be deemed to satisfy the financial responsibility requirements for a motor vehicle pursuant to 75 Pa.S.C. Ch. 17 (relating to financial responsibility).

In 2018, that generated some opposition from the HAV side. We're not sure if they would still object, but we reiterate the reasoning for this: This is a fair requisite for the privilege of testing the developing but so-far unproven technology of driverless HAVs on public highways. It would only be for the testing period, not for the time when the technology has been approved for full deployment as with any other technology in any other vehicle. It assures swift resolution of these claims.

In 2018, we also considered protecting confidentiality of certain documents of HAV owners, recognizing they have concerns beyond assessing liability in a particular accidents. That may be appropriate here, too.

Section 8510 – Control: This seems to preclude local involvement. That's in contrast to what is allowed for Personal Delivery Devices under "Section 8517 – Local regulation" in Act 106 of 2020. We recommend staying with the standard in Section 8517, or otherwise explaining the difference.

Section 8510.1 – Regulations: While this is titled "regulations," it contemplates – and will probably mean at most – guidelines to set the standards for PennDOT's approval of driverless HAVs to be tested on public highways. Our concern is that this is allowing PennDOT exclusive control over these standards, with the only professed objective being prompt implementation – not even a mention of public safety?

- We recommend this at least be a requirement, not an option: **On p. 13, line 24, the "may" should be "shall."**
- We recommend **any regulations or guidelines be subject to public comment and a public hearing before taking effect**, specifically including input from the Senate and House Transportation Committees.

- We recommend any regulations or guidelines be developed in consultation with both the HAV Advisory Committee and PennDOT's Pedestrian and Pedalcycle Advisory Committee. It may also be appropriate to expressly provide input from localities.

As to language for this: **We recommend incorporating the requirements established for Personal Delivery Devices under Act 106 of 2020, which are also in Chapter 85.** When you look at the two side-by-side, it is glaring how much more accountability and safety is applied to PPDs than to the testing driverless HAVs. That's not only true for local regulation but generally. We're not sure why.

- The language for the regulation and development PDDs was arrived at through considerable collaboration of all impacted parties and is proving to be a workable framework. The testing of HAVs is at least an equally dangerous activity, given the speed and size of the vehicles; it should be subject to at least as comprehensive a framework.