Written Testimony of Professor Bryant Walker Smith for the U.S. Senate Commerce Committee's Hearing on Automated Driving (February 4, 2026)

Thank you for inviting my testimony. I would like to share seven points for your consideration.

First: We should *also* care about traffic safety when we're *not* discussing automated driving.

I think of a three-year-old in the hospital—hurt, scared, crying—who wants his mom to hold him and comfort him. But she's not there. She can't be. She died, while pregnant, because a drunk driver hit her.

This family is all too real, but they're not famous. After all, some 100 Americans will die in traffic today and every day. And even though these are deaths of violence—unexpected, often lonely, often painful—we don't really seem to care. Until it happens to us. Or until we start talking about something like automated driving.

I say this because we actually know how to prevent so much of the carnage on our roads. Other wealthy countries have *reduced* their traffic deaths in the 15 years we've been *increasing* ours. On a per-mile basis, driving in the United States is *twice* as dangerous as in Canada and Australia. As a South Carolinian, I'm ten times more likely to die in a crash than my friends in the United Kingdom. *Ten times*.

These countries are not hiding a vast secret fleet of automated vehicles. I can't yet hail a robotaxi in Toronto or Sydney or London. But I *can* cross the street.

I believe three things: Driving is dangerous. Automated driving could help, if we are careful about it. And people are dying today *not* because we are *careful* about automated driving but, rather, because we are *careless* about road safety generally.

Second: Arrogance is careless.

Believing that automated driving will be a panacea virtually guarantees it won't be, because that confidence blinds us to risks we don't expect and might even create.

The story of technology, and of policy, is about replacing an old set of problems with a new set of problems and hoping that, in aggregate, our new problems are less bad than our old problems.

An example: The first cars were hailed as environmentally friendly—because, unlike horses, cars don't poop. Except that it turns out they do. Even after the horrific smog and the mass lead poisoning of 20th Century America, here's a fact: A horse dumps about 25 pounds of manure a day, and a car dumps about 25 pounds of carbon dioxide a day.

I admire many of the mid-level engineers who are working on automated driving. Not just because they are doing incredible, important work. Also because, often, they show real humility. At least privately, they talk about what's hard, what went wrong, and what's uncertain. They want to listen to and learn from local officials. They engage with academic researchers, and they show their work.

I wish more automated driving companies demonstrated more of this humility in their public relations and in their lobbying.

Third: The best proxy for the safety of AVs is the trustworthiness of the companies developing and deploying them.

Automated driving currently encompasses a wide range of technologies, applications, business cases, and companies at various stages of maturity.

In my view, these companies "drive" and "operate" their AVs through a combination of their machine agents and their human agents. In other words, these vehicles are not "self-driving" or "driverless." They have drivers, and those drivers are the companies developing and deploying them.

It follows that an AV is only as safe as the companies responsible for it. This is important, because while it is possible to evaluate the performance of an AV after a crash (provided relevant data are available and credible), it is much more difficult to determine the safety of an AV in advance. But we *can* proactively assess the trustworthiness—that is, the integrity—of the company driving that AV.

A trustworthy company shares its safety philosophy by explaining what it is doing, why it believes that to be reasonably safe, and why we can believe it. It makes a promise to the public that it markets only what it believes to be safe, that it will be

candid about its limits and failures, and that when it fails it will make things right. And it keeps that promise by appropriately managing public expectations, by supervising the entire product lifecycle, and by mitigating harms promptly, fully, and publicly.

AVs will not be perfect. But in those moments of technological failure, a company can still do right. It can explain what went wrong, the steps it is taking to address the actual harm, the steps it is taking to reduce future risks, and—critically—what it has learned more broadly. One unforeseen risk points to many more foreseeable risks.

Doing right does not mean simply and repeatedly saying, in effect, "Of course our system is safe; there was an issue, but now we've fixed it." It does not mean forcing victims into arbitrations that are almost certain to disfavor them. And it does not mean buying their silence and thereby misleading the public. These are betrayals of trust.

Fourth: Safety is a marriage, not a wedding

Safety is a lifelong commitment that begins when an AV is being developed and continues as long as that vehicle is on the road. Safety cannot be reduced to just a one-time test, a one-time certification, or a one-time approval. A safety case must be a living document that is robustly interrogated and routinely updated.

The vehicles placed on our roads stay there for decades. They can outlast the federal safety standards to which they were certified (or from which they received an exemption) and even the companies that manufactured them.

NHTSA provides some oversight of these older vehicles through its authority over defects, but states primarily regulate operational safety on light-duty vehicles. And when these vehicles or their drivers—human or otherwise—are unsafe, it is states that can actually order them off our roads.

Automated driving, however, will dramatically expand the scope of NHTSA's oversight authority over these vehicles. An individual vehicle that is not properly maintained or whose occupants are not properly belted is not necessarily defective under federal law. But if such a vehicle should not be operated, then an automated driving system that nonetheless engages on it could be defective.

Both NHTSA and FMCSA are tiny agencies with mandates that, even now, are impossible. Effectively supervising the operational safety of automated vehicles will require significant new resources for these agencies. This includes experts in specific technologies. It also includes hackers in the broad and best sense of the term: People who can deconstruct a system, question assumptions, see what's missing, and ask whether conclusions necessarily follow from premises.

Fifth: AVs are an especially visible part of a much broader discussion of AI.

Almost everyone interacts with motor vehicles almost every day. Because this mode of transportation is so visible, as a society we're likely to disproportionately focus many of our hopes and fears about AI generally on AVs specifically.

In late 2024, the US DOT's Transforming Transportation Advisory Committee, which I vice-chaired, released recommendations about automated driving specifically and AI generally. We noted that the uncertain nature of both technology and regulation merits both clear policy goals and an iterative approach to achieving those goals.

We recognized the profound implications of AI. We also highlighted that many of these issues might fall outside the authority or capability of US DOT to address. In some cases, such as privacy vis-à-vis both governments and companies, the lines of responsibility among federal agencies are particularly unclear.

All of these topics, however, are within Congress's power to consider, if not fully to decide. Among many others, they include employment, social structures, access to justice, and power generally. And it is critical to consider the impacts of automated driving and other advanced technologies on communities as well as on individuals.

Sixth: Local government has essential expertise.

Very few people appreciate the extent to which local governments are currently subsidizing automated driving.

When AVs come to an area, local officials share maps of schools, information about special events and emergencies, and reports of incidents. Local first responders spot and solve all kinds of AV-related problems, from waking up people who are sleeping in the back of a robotaxi to literally moving AVs that are stuck. All of this amounts to a significant public investment.

These local officials who interact with AVs every day know more about them than almost anyone. They deserve our respect and our attention. They want to make sure that the remote assistants who play a critical role in automated driving are within the state and not on the other side of the world.

They want to know whether these automated driving companies have realistic disaster plans for the kind of disasters that could disable communications, render remote assistance impossible, and necessitate quick emergency response and evacuation. And they want to know how they can hold automated driving companies accountable for the kind of everyday moving violations that get regular drivers a ticket.

Fundamentally, they want to know that these companies are giving their communities the respect they deserve.

Finally: We must empower, not disempower, our communities.

Preempting state and local authority would be profoundly short-sighted—and I say this as someone who believes in the potential of automated driving.

Many states very much *want* the federal government to lead on AV policy. But great leaders *lead*. They actually do the work. They don't just order others to stop working. Telling US DOT what to do (and providing the resources needed to do it) would be far more helpful than telling states what not to do.

Preemption would not necessarily create certainty. Rather, it could lead to years of litigation over what the relevant statutory language means and therefore what states can still do and therefore what companies can actually do. Over the years, I have read many versions of potential preemption language. In every case, the preemptive effect and even the preemptive intent of that language have been unclear to me.

Preemption would not necessarily improve safety. Again: It is states that can order unsafe vehicles and unsafe drivers—human or otherwise—off the roads. And it is states whose juries tell manufacturers to keep up with new technologies when federal standards fall behind. Automakers don't like to be sued. But they know how to manage, and the best ones take seriously their responsibility to fairly compensate victims.

Preemption would not necessarily improve global competitiveness. Our AV industry is flourishing today because of the foundational research that the federal government supported decades ago. And while Brand America does have a serious credibility problem abroad, this has nothing to do with our commitment to federalism at home.

In fact, this federalism offers *choice* to US and foreign companies. Some companies have embraced California for the certainty they believe it offers, and some have embraced Texas for the flexibility they believe it offers. Waymo has done both, and now has activity in multiple states and even countries.

Finally, there is a fundamental issue that discussions about preemption often seem to overlook.

We find ourselves in a time of profound change. Change often involves a loss of control, whether actual or perceived. That can be scary and destabilizing both for individuals and for societies.

The ability of communities to set their own rules—and yes, even restrictions—on AVs acts as a steam release valve on a boiler. It keeps pressure from building up, and that in turn reduces the risk of catastrophic explosion.

Would I advise a community to ban AVs? Absolutely not. I would tell them that we should be concerned about automated driving but *terrified* about conventional driving. Nevertheless, preserving that option lets me have that conversation.

AVs will survive some location friction and a few modern-day Mackinac Islands—if we deploy them in a way that truly empowers communities and respects people.