Chairs Bilirakis and Rogers, Ranking Members Schakowsky and Pallone and members of the Subcommittee, thank you for the opportunity to testify today. I am Gary Shapiro, CEO of the Consumer Technology Association (CTA)®.

I appear before you today with one key message: the power to determine what entertainment technologies belong in their cars should rest with American consumers, not with radio broadcasters.

CTA represents the \$505 billion U.S. consumer technology industry, which supports more than 18 million U.S. jobs. Our association represents over 1300 American companies – 80% of which are small businesses and startups. We also own and produce CES®, the world's most powerful technology event and in 2024, attracted more than 145,000 people, including 50,000-plus international visitors.

CTA was established 100 years ago as the Radio Manufacturers Association with the singular goal of fostering the emergence of AM radio. CTA has remained steadfast in its mission to promote American innovation and the adoption of new technologies that address significant global challenges. Indeed, CTA partners with the United Nations to catalyze technologies that can meet fundamental human securities, including access to health care, food, and clear air and water.

On principle, we do not ask the U.S. or any other government to fund our industry, to mandate our products, or require consumers to spend extra money to buy them. We believe that marketplace competition, not dictates from the federal government, should determine which technologies thrive and grow. Absent a compelling reason for government to interfere in the marketplace, we believe that the appropriate government role is to let consumers decide what products and services they want.

CTA doesn't stand alone. The Wall Street Journal said, "this is a sop to AM broadcasters, which are struggling amid increased competition from satellite radio, podcasts and other audio media." The American Enterprise Institute said, "while AM radio has played a significant role in history, its future should be determined by market forces rather than legislative mandates." And not surprisingly, those focused on a green America and have a vision of an electric car future, including the League of Conservation Voters and the Zero Emission Transportation Association, came out against this legislation.

¹ Coming Soon: An AM Radio Mandate. Wall Street Journal.

² Why Saving AM Radio Is Redundant in the Age of Modern Technology. American Enterprise Institute.

In lieu of imposing an unwarranted and unjustified mandate, Congress should honor the nation's legacy of technological leadership. This legacy, rooted in the passion of successive generations of immigrants, a culture that celebrates disruptive ideas and seizes opportunities, and a legal framework that safeguards investments, underscores the importance of prioritizing innovation over the preservation of legacy industries.

Proposed legislation is especially inappropriate in service of the radio industry, which has historically sought government mandates to survive, rather than investing in technologies that would improve sound quality and reduce audible distortion. For many years, the consumer technology industry has urged broadcasters to embrace improvements in AM radio technology, including radio data systems, AM stereo, and digital radio. In fact, in the 1990s, I personally addressed the National Association of Broadcasters leadership at least twice, urging them to embrace new technologies or risk being left behind.

Our industry helped convince the U.S. Federal Communications Commission (FCC) to select an AM stereo standard. Sadly, after American companies invested in making these devices, they found few radio broadcasters had invested in the transmission standard and almost no promotion to listeners urging them to invest in this technology. While some AM radio broadcasters have recently shifted to a digital signal, the number remains paltry —a case of 'too little, too late.'

It is important to acknowledge the enduring value that AM radio holds for many Americans, particularly in the realms of sports, news, and talk radio. Consequently, CTA has refrained from advocating for the reclamation of the AM spectrum, recognizing its significance to the American public. We anticipate that, even in the absence of legislative mandates, most car models—especially those common among rural consumers and those that prefer gaspowered engines—will continue to offer analog AM radio, driven by market demand. If consumers desire AM radio in their vehicles, automakers will accommodate that preference: that's the market at work!

While I personally appreciate the utility of AM radio—as recently as just last week, I tuned in to coverage of the NFL draft—it is undeniable that consumer interest in AM radio as a broadcast medium has been on a downward trajectory for decades. For example, since 1993 when the radio alarm clock played a central role in my favorite movie, Groundhog Day, annual non-auto radio receiver sales have dropped almost 80 percent.³

³ U.S. International Trade Commission. Total clock, home and portable radio, shipments to U.S.

Instead, we are concerned by the imposition of an unnecessary, unjustified mandate, as well as its precedent and impact on innovation and electric cars. At various times, industries have lobbied for mandates that would require elevator operators and caboose conductors, and would restrict automobiles in favor of horses and buggies. However, I am unaware of any successful recent effort in Congress to mandate technology to protect a legacy industry, or any non-safety-focused consumer product mandates. I have never been more concerned about deviating from this record than I am today. As I count the co-sponsors of the AM Radio for Every Vehicle Act, I worry that our government's historical commitment to favoring innovation over protecting established industries may be fading. Should this legislation become law, a century-old technology may be locked into modern vehicles in perpetuity.

For centuries, American innovators have benefitted from our country's system of 'permissionless innovation,' with few unnecessary mandates. While I believe that every member of this Congress is committed to continued American technology leadership, that role is not preordained. If we want to see American companies continue to succeed, we must create a business environment that allows them to be globally competitive. Burdening the nascent electric vehicle market with unnecessary weight and costs— as this mandate would do—is like forcing American runners to compete in the Olympics while carrying ten-pound weights.

The stakes are particularly high for electric vehicle (EV) manufacturers, given the radio signal interference from EV drivetrains. Signal degradation is caused by electromagnetic interference with the drivetrain, electrical components, and other environmental factors outside of the vehicle, such as driving near high-voltage power lines. In independent studies, the National Association of Broadcasters and Xperi have confirmed this issue, noting that "[...]AM/FM reception is reasonably good in contemporary ICE [internal combustion engine] cars. This has not been the case, however, with EVs, whose electrical systems have proven to be much more disruptive to radio reception, for the AM band in particular." To mitigate electromagnetic interference, manufacturers implement burdensome techniques such as shielding and filtering, which adds manufacturing costs and weight to the vehicle. Compared to ICE development, EV powertrains are still in their infancies, and automakers will continue to develop new safety and efficiency solutions not yet imagined. Adding this cost and equipment will limit automakers' ability to innovate as the technology matures.

⁴ Reception of All-Digital AM Radio in Electric Vehicles (behind paywall)

As one solution, some electric vehicle manufacturers have chosen to provide access to AM radio using modern technology, rather than via the traditional tuner that this legislation would require. These newer technologies support streaming services and satellite radio, which offer access to many AM and FM stations free of charge and avoid issues with interference. In part, EV manufacturers implemented this change to respond to customer complaints regarding degradation of audio quality of AM radio programming.

The Energy & Commerce Committee and this subcommittee are uniquely positioned to determine how the U.S. leads the world in technological advancement. This committee has championed the expansion of high-speed rural broadband and is playing a leading role in the effort to establish a federal privacy law and advance testing and deployment of autonomous vehicles. Advancing this legislation would signal to other countries—adversaries and allies alike—that the U.S. has turned its back on progress. We do not want to follow the path of our allies in Europe, where a burdensome system of regulations has kneecapped the growth of promising technology companies. Tellingly, of the 50 largest tech companies in the world, only three are European. Europe hasn't produced a single \$100 billion tech company in the past 30 years, and all of Europe's tech companies combined are worth 30% of just one of the U.S.' largest four tech companies.

The AM Radio for Every Vehicle Act will inhibit innovation. U.S. automakers must compete for market share globally and focus on innovations that provide improved quality and desired features for both current and future customers. Every new mandate adds a competitive burden. With technology innovation accelerating and global competition for dominance in the automotive sector growing, a mandate that locks in one of the oldest communications technologies still available would put American automakers at a strategic disadvantage.

Beyond strategic considerations, this Committee should also critically assess the arguments made by AM radio mandate advocates. One argument focuses on dissemination of information during emergencies. Proponents of this legislation claim that AM radio is the "backbone" of the emergency alert system. This is inaccurate and intentionally alarmist. Federal officials now share emergency alerts via the Integrated Public Alert & Warning System (IPAWS), which provides emergency information to the public through multiple channels including digital and analog AM radio, digital and analog FM radio, internet-based radio, satellite radio and over cellular networks. This system has

evolved to include new technologies, such as internet-based notifications and smartphone alerts, which enhance public safety by offering broader reach and greater effectiveness.⁵

The U.S. Government Accountability Office (GAO) has acknowledged the importance of leveraging modern technologies for emergency alerts and investing in innovative solutions that provide broader reach and increased accuracy. The Federal Emergency Management Agency itself has acknowledged that "the public is moving away from radio and broadcast/cable television as the primary channels for news and information." In fact, a CTA study following an October 2023 test of the emergency alert system found that just 1% of American adults received the alert through AM radio. Unsurprisingly, 95% received/heard the emergency alert via mobile phone.

The justification for AM radio as a sole source of emergency information hinges on a highly improbable set of circumstances, all of which would need to be present simultaneously:

- 1. There is a local or regional emergency that is of immediate threat to safety; AND
- 2. A driver is in a car with no telephone or is out of range; AND
- 3. The driver's car has no functional FM radio; AND
- 4. The driver has no working satellite radio; AND
- 5. The driver has no working CB radio; AND
- 6. The driver has functional AM radio and the radio is turned on, is actively listening at the time of alert dissemination; AND
- 7. The local AM radio personnel is aware of the emergency and successfully broadcasts to listeners.

For AM radio to be the sole source of emergency information, all seven of these factors must occur in unison – an extremely rare scenario.

Effective policymaking is informed by accurate and relevant data. Since the AM for Every Vehicle Act was introduced, CTA has advocated for a comprehensive government study on the effectiveness and limitations of the emergency alert system. It is nonsensical for this bill to issue a mandate and study simultaneously. Why waste government dollars on a study if we're going to mandate a century old technology in perpetuity regardless?

More, this legislation stretches the traditional approach to safety by incorporating AM radio as a Federal Motor Vehicle Safety Standard (FMVSS). These standards ensure the safety

⁵ IPAWS Process Map Playbook

⁶ GAO Report on Emergency Alerts

⁷ FEMA IPAWS Strategic Plan FY 22-26

⁸ CTA U.S. Adult Emergency Alert Survey 2023

and structural integrity of motor vehicles including tires, brakes, seatbelts, and airbags. Each of these examples has been studied and offer demonstrable benefits to public safety. It would take a unique and exceedingly rare combination of circumstances for analog AM radio to improve roadway safety.

I am dismayed by claims that automakers are seeking to stifle religious and talk radio, diversity of thought, and multilingual programming. As automakers seek to remain competitive, it is in their interest to provide features that their customers demand. Automakers are agnostic about whether their customers listen to Sean Hannity or Taylor Swift, they just want to sell innovative and safe vehicles. If analog AM radio is desired by consumers, automakers will respond to customer demand and supply it.

Over many decades, broadcasters have unsuccessfully pushed Congress for laws to preserve their struggling business model. First it was an attempt to mandate FM chips in mobile phones. Now, broadcasters are using the same playbook for AM radio. What is next? A mandate that every new home, retailer, schoolroom, motorcycle come equipped with a built-in AM radio? Congress should allow Americans to exercise their market power as consumers and allow them to make purchase decisions that align with their preferences. An undue and unnecessary intervention in this sector will stifle innovation in the broadcast, automotive, and emergency sectors.

The market is working as intended. Consumers have a choice today and will have a choice in the future. America is great because we prize innovation and consumer choice, and do not use government power to preserve antique technologies. On behalf of CTA, I appreciate the opportunity to testify before the Subcommittee. Thank you.