About CTA and CES
Thank you for Chairman Thune and Ranking Member Nelson for the opportunity to testify about how over-regulation stifles innovation. I am Gary Shapiro, president and CEO of the Consumer Technology Association (CTA)™.

CTA represents more than 2,200 member companies who comprise the $292 billion U.S. consumer technology industry, which supports more than 15 million American jobs. We work to advance public policy that fosters innovation, advances competitiveness and promotes job and business creation. Our members touch every aspect of tech and innovation including traditional consumer technology companies, sharing economy and internet companies, and auto manufacturers and suppliers. Eighty percent of our member companies are small businesses and startups. For these businesses, the cost of over-regulation means the difference between survival and failure. In fact, CTA recently surveyed our member companies in November on public policy priorities and over-regulation was raised as one of their primary business challenges in growing jobs and continuing innovation in the United States.

CTA also owns and produces CES® – the world’s largest business event, held every January in Las Vegas. At CES 2017, less than one month ago, we celebrated 50 years as the largest global gathering of innovation and connectivity. With more than 3,800 exhibiting companies stretching across more than 2.6 million net square feet, this year’s CES showcased how our industry is bettering the world through connectivity and innovation, touching every facet of our lives – and the lives of those around the world.

I’ve been at the helm of CTA for more than 20 years, and from this vantage point, I have had the good fortune of having a front row seat each day as our members develop and introduce innovative and life-changing products and services, create jobs and grow our economy. But tech companies – startups and Fortune 500s alike – need flexibility to innovate.
Examples of Over-regulation
The simple fact is, over-regulation stifles growth and harms innovation. Since 2009, federal regulators have issued 20,642 regulations, increasing regulatory compliance costs by more than $100 billion annually. Independent estimates suggest total regulatory costs exceed $2 trillion annually, with small businesses shouldering a disproportionate share of the burden – 36 percent more than the regulatory cost facing large firms.

Overtime Rule: The Obama Administration’s overtime rule, which would have doubled the overtime floor from $23,660 to $47,476 per year – is a prime example of good policy intentions with harmful regulatory results. Increasing the minimum exemption eligibility for white-collar employees may seem beneficial to workers. However, the consequences would have been devastating for small businesses, startups and the people they want to hire.

The Department of Labor’s proposed rule disregarded the realities of running a small business or startup and ignored how the rule would choke U.S. innovation. Startups – especially tech firms – are a primary source of job creation in the U.S., but most of them cannot pay the higher salaries of more-established companies. The one-size-fits-all mandate left virtually no flexibility for startups – especially technology companies – that don't rely on a traditional timecard pay structure. Fortunately, a federal court judge granted a preliminary injunction of the entire rule prior to its December 1 effective date.

The overtime rule is not an exception. Over the last eight years we’ve seen regulatory overreach on everything from student loans to banning unpaid internships keeping useful work experiences from those seeking to learn. These new rules, combined with the rising costs of the Affordable Care Act, have contributed to bleak training and job prospects, particularly in the tech workforce.

Conflict Minerals: Another well-intended law with a tremendously adverse impact is the Conflict Minerals Provision of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. In an attempt to improve human rights in one African nation (the Democratic Republic of the Congo), the provision requires that any publicly listed company using a variety of raw materials comply with a series of onerous and costly certification and auditing mandates. Oversight of this major new obligation was delegated to the Securities and Exchange Commission, an already-overburdened agency with no experience overseeing manufacturing or import-exports. The National Association of Manufacturers reports compliance costs to the U.S. economy between $9 and $16 billion each year. Ironically, by incentivizing manufacturers to avoid minerals
from the Congo, the Conflict Minerals rule has apparently harmed the Congolese economy and worsened the humanitarian situation.

**CTA Regulatory Engagement with Departments and Agencies Under Jurisdiction of Senate Commerce, Space, and Transportation Committee**

CTA works closely with a number of departments and regulatory agencies under the jurisdiction of the Senate Commerce, Space, and Transportation Committee to advance pro-innovation policy and reduce regulatory barriers to entry. We also work with other departments and agencies not under the Committee’s jurisdiction which present regulatory burdens in need of attention. While we have worked successfully with many departments and agencies to advance innovation, I appreciate the opportunity to highlight particular instances of over-regulation and urge regulatory humility on others.

**U.S. Department of Transportation, NHTSA – Federal Automated Vehicles Policy**

CTA represents a broad cross-section of the vehicle technology ecosystem including mapping companies, suppliers, automakers, aftermarket suppliers and installers. As vehicle and self-driving technology continue to evolve, automakers, technology companies and startups are partnering on new approaches to vehicle and transportation network design. At CES® 2017, our members showcased the latest transportation technology that will increase safety and accessibility, positively disrupt legacy markets, create new employment opportunities, and revolutionize the way we do business and operate on-the-go. We are actively engaged with the Department of Transportation and the National Highway Traffic Safety Administration (NHTSA) on its Federal Automated Vehicles Policy and are encouraged by its recognition of the need for consistency for self-driving vehicles and the importance of flexibility for the industry to continue to innovate.

**U.S. Department of Transportation, NHTSA – Phase II Driver Distraction Guidelines**

Without question, distracted driving is unsafe and unacceptable. A driver’s highest priority must be maintaining safe control of the vehicle at all times. CTA has been engaged with NHTSA on its Phase II voluntary guidelines to address driver distraction. Our member companies have created driver-assist technologies and apps that reduce or eliminate distractions such as drowsiness, in-car adjustments or texting while driving. Other innovations like Bluetooth solutions and do-not-disturb apps assist in initiating corrective actions when drivers lose focus. In addition to innovations within the car environment, the technology industry has made considerable strides to raise awareness of the dangers of distracted driving through initiatives and campaigns such as “It Can Wait.” More, we are working to advance the ultimate solution to distracted driving – the rapid rollout of self-driving cars.
CTA shares NHTSA’s concerns about the hazards of distracted driving. However, we believe the Phase II Guidelines take the wrong approach to technology, both in substance and by impermissibly reaching beyond NHTSA’s statutory authority under the National Traffic and Motor Vehicle Safety Act (“Safety Act”). NHTSA does not have the authority to dictate the design of smartphone apps and other devices used in cars – its legal jurisdiction begins and ends with motor vehicle equipment. This regulatory overreach could thwart innovative safety solutions from ever coming to market.

NHTSA’s regulatory premise is dangerously expansive, representing the worst of government overreach. Under NHTSA’s vision, it could have the effect of influencing the design of technology products down to the fitness tracker worn on a driver. Such a vast and extreme expansion of NHTSA’s authority, if it were to happen, would have to be explicitly granted by Congress.

Further, NHTSA justifies this overreach by arguing that the proposed guidelines “are voluntary and nonbinding, they will not require action of any kind, and for that reason they will not confer benefits or impose costs.” This may be true in a technical sense; however, in practice the existence of federal guidelines creates tremendous pressure for industry to adhere to them. NHTSA’s intention to monitor compliance with the guidelines may create a particular kind of pressure for industry to adhere, rather than risk the appearance of disagreement with or disregard for the agency’s perspective. The bottom line is agency pronouncements have the power to induce or coerce industry action; if they did not, then there would be no point to the agency’s lengthy and involved process of developing the proposed guidelines.

**Federal Aviation Administration – Unmanned Aircraft Systems (Drones)**
I would like to highlight the positive example the Federal Aviation Administration has set in handling the emerging drone technology industry. FAA’s early and ongoing engagement with the drone industry and user community is to be commended, and I hope, replicated by other departments and agencies approaching new industries. FAA reached out to the emerging industry early, appointing staff to engage directly and keeping the path of communication open. They solicit feedback from industry and stakeholders regularly, even appointing an advisory committee (the Drone Advisory Committee) to assist the agency with key issues. However, even with this orientation and approach, regulatory flexibility for FAA is needed as they still must work through a regulatory regime established long before consumer and commercial drones took to the air.

**Federal Communications Commission – Broadband Privacy Rules**
Late last year and over many objections, the Federal Communications Commission (FCC) adopted privacy rules for broadband and telecommunications services related to
its broader Open Internet Order. Unfortunately, in adopting new broadband privacy rules the FCC took actions that threaten the current and future viability of and the innovations that have come from a vibrant internet. While the rules only apply to internet service providers, it may establishes a dangerous precedent for the entire internet ecosystem. CTA, along with internet and telecommunications entities, petitioned the FCC to reconsider its rules given they substantially differ from the time-tested and successful Federal Trade Commission (FTC) framework and fail to ensure a coherent and consistent approach to privacy. As an example, the FCC broadband privacy rules classify Web-browsing and application (app) usage information that carriers currently collect as sensitive and thus subject to opt-in consent for most usage and disclosures. This threatens to undermine the innovation and competition within the vibrant internet ecosystem which has greatly benefited consumers and the U.S. economy. Even more, the FTC – the primary government agency responsible for privacy – provided expert recommendations urging a sensitivity-based approach to information consistent with the FTC’s current and successful privacy regime that the FCC failed to adopt. The FCC also disregarded the FTC’s concerns about “notice fatigue” of receiving too many notices resulting in consumers ignoring important notices. The result is broad regulatory overreach over the internet by the FCC that creates legal uncertainty compared to the more studied consultative approach of the FTC which looks at real harm to real Americans.

CTA has joined with a number of telecommunications, technology and internet companies and organizations in support of congressional efforts to use the congressional review act to vitiate the FCC’s broadband privacy rules.

CTA continues to believe that an “actual harm”-based approach toward regulation is more effective in protecting consumers, rather than the ex ante regulations that the FCC has more recently favored. Further, in the words of Acting FTC Chairman Maureen Ohlhausen, it is imperative that regulators practice “regulatory humility” when doing their jobs. As Commissioner Ohlhausen has so aptly stated: “First, approach issues with regulatory humility, recognizing the fundamental limits of regulation. Second, prioritize action to resolve areas of real consumer harm. Third, use the appropriate tools.” I agree with Acting FTC Chairman Ohlhausen’s view that “these principles apply to regulation generally, but that they are particularly critical for technology or other fast-moving industries.”

*Federal Communications Commission – Communications Act Rewrite*
Chairman Thune has indicated the importance of updating our communications laws, and we look forward to working closely with the Senate Commerce Committee to
advance communications policy that advances innovation and doesn’t stifle the next wave of technology and internet company founders and application developers. Twenty years after it became law, the 1996 Telecom Act still helps encourage new technology and innovation. As I said at the time, the Act would aid our successful transition to HDTV, move in the right direction on spectrum and enable flexibility in product offering and consumer choice. In the last two decades, the Act has not hindered companies from creating new products and services, and thanks to the internet, new services and business models have benefitted the American people.

As we seek to improve upon the 1996 Telecom Act, we welcome the opportunity to ensure that any updates continue to enable regulatory flexibility. We also look forward to working with FCC Chairman Ajit Pai to ensure that the commission is focused on regulations that promote innovation and flexibility.

Department of Commerce, NTIA, and NIST – The Internet of Things (IoT)

This year’s CES showcased the power of innovation and connectivity, and how it’s changing our lives for the better. Whether it’s called the Internet of Things, the Connected World, or the Internet of Everything, this rapidly expanding connectivity among our everyday devices is improving our efficiency, our sustainability and the way we interact with people. This connectivity will save consumers time and money, drive economic growth and enhance the United States’ role as a global leader in technology if we continue to exercise regulatory humility and not curb current and future innovations.

CTA recently released a White Paper, “Internet of Things: A Framework for the Next Administration” in which we addressed both the opportunities and challenges of IoT consumer applications, and address ways policymakers can encourage and support their growth.

The opportunities and benefits of the IoT are clear. In modernizing our homes, we’ll be able to monitor systems to alert us to intruders, or if the family pet has wandered off. An app – designed with veterans in mind – can track the symptoms of post-traumatic stress disorder (PTSD) during sleep in order to wake PTSD sufferers out of their night terrors. Remote health monitoring devices can reduce the need for doctor’s visits and allow us to care for our loved ones even if we’re not there. Connected blood glucose meters can upload readings in real time to the cloud and provide diabetes patients with instant feedback. The IoT implemented in self-driving vehicles can expand mobility and independence for seniors and the visually-impaired, while improving safety for all. And connected cars with vehicle-to-vehicle sensors will improve real-time information on hazards ahead, enhancing safety.
A significant challenge presented by the IoT is the fragmented approach of federal government agencies toward its development. A 2015 POLITICO investigation revealed that “new networked-object technologies are covered by at least two dozen separate federal agencies – from the Food and Drug Administration (FDA) to the NHTSA, from aviation to agriculture – and more than 30 different congressional committees.”

We welcome the efforts of Senator Deb Fischer (R-NE), Senator Cory Booker (D-NJ), and Senator Brian Schatz (D-HI) on S.88, the Developing Innovation and Growing the Internet of Things (DIGIT Act) that seeks to create greater coordination within the U.S. Government. This bill would create a working group that would address challenges facing IoT, such as ensuring federal agencies are prepared to adopt the IoT and identifying spectrum needs.

Government must allow consumers and the market to decide IoT winners and losers, rather than dictating outcomes itself. In this way, regulation is on its own a challenge spurred by rapid IoT developments. Government can serve as either an enabler or an inhibitor to achieving the IoT’s promise. And it can be an unintentional inhibitor, chilling innovation, when it sends mixed messages through various government agencies engaging in uncoordinated oversight activities.

**Regulation and the Jobs of the Future**

As has happened since the industrial revolution, innovation is changing the structure and skills required for employment. For example, more Americans are now opting for independent and flexible work arrangements. This choice is made possible by online platforms that allow individuals to be entrepreneurs using resources they own. These new employment options should be embraced by Congress, and we must ensure that our health care and employment benefits policies reflect the realities of the new employment marketplace. What we should not do is attempt via regulation to shoehorn these new models into regulations designed for employment structures of the past.

Disruption by its very nature is unsettling to the status quo and incumbent players. At CTA we embrace disruption and support disruptive companies through our Disruptive Innovation Council. The Council includes companies that were not household names five years ago, but are now dominating their respective industries and creating new economic opportunities and solutions to a variety of challenges across the country.

Regulation can often be used by incumbent players to protect their business models. We’ve seen this activity in states and municipalities, where policymakers have gone after ridesharing and home-sharing companies in an attempt to protect incumbent competitors, but instead have artificially limited consumer choice and closed off new job
prospects for sharing economy workers. Innovation will continue to create new economic possibilities, and inevitably will create some challenges.

More, many of these new technologies allow users and providers to rate each other. For example, a potential ride-service user can see how previous riders have rated the driver, and the driver can see a similar rating for the passenger. Based on this information, both participants can decide whether they wish to continue the transaction or not. This obviates one of the key “consumer protection” rationales for regulation, where the government was required to guarantee the quality and integrity of market participants.

Rather than reacting to any challenges with restrictive regulation, government should exercise regulatory humility to work with industry to make sure Americans across the country are best able to take advantage of the opportunities created by new technologies.

**Conclusion**
Tech is a major driver of U.S. jobs and economic activity. Our industry directly and indirectly accounts for 10 percent of our country’s gross domestic product. In 2015 alone, the tech sector generated $413 billion in taxes, created $3.5 trillion in economic output and supported 15.3 million U.S. jobs.

More, technology is improving lives and transforming our society in a positive way. Self-driving cars will soon drastically reduce the number of Americans who perish tragically every year on our nation’s highways. Sensors will enable our cities to efficiently manage energy usage, reducing carbon emissions and making our environment cleaner. New medical advances promise to revolutionize the detection and treatment of cancer and other diseases.

Americans like, trust and eagerly adopt our industry’s products and services. Indeed, our members are at or near the top of virtually every list of America’s most trusted companies. The technology business is uniquely dynamic and fiercely competitive. Companies rise to the top only to be quickly displaced. If users judge that a company fails to meet expectations – by, for example, failing to adequately safeguard consumer data – the consumer response is swift and severe. The powerful incentive that ensures our members meet consumer needs isn’t regulation, but the nature of the innovation marketplace itself.

Regulation is a blunt and static instrument. Unnecessary mandates not only waste taxpayer money – they impose burdens that slow innovation, stifle creativity, reduce
consumers’ choices and ultimately threaten jobs and the economy. By addressing new technologies with a smart, flexible and light-touch regulatory approach, Congress and the administration can allow businesses leaders to invest time and resources into growing their companies and creating high paying new jobs.

Our industry does what it does best – empower entrepreneurs, grow companies and improve lives – when people with big dreams have the flexibility to innovate. We look forward to working with you to ensure that the United States remains the world’s technology leader.