I. Introduction

Chairman Lipinski, Ranking Member Crawford, members of the Subcommittee, thank you for inviting me to testify today on the U.S. Department of Transportation’s Pipeline and Hazardous Materials Safety Administration’s (PHMSA) pipeline safety program. I appreciate this Committee’s strong support for strengthening pipeline safety across our country.

Our nation’s infrastructure keeps this great nation moving and helps to raise the standard of living for all Americans. The natural gas and hazardous liquid pipelines PHMSA regulates are an essential component of our national infrastructure, safely transporting the energy products that are essential to our daily lives. Like all DOT modes, PHMSA is guided by Secretary Chao’s four strategic goals of safety, infrastructure enhancements, innovation, and accountability.

A. PHMSA’s Mission

The mission of PHMSA is to protect people and the environment by advancing the safe transportation of energy products and other hazardous materials that are essential to our daily lives. The need for safe and reliable energy infrastructure is growing. Our nation is experiencing an energy renaissance, propelled largely by innovative production technologies and global demand for U.S. energy.

PHMSA’s pipeline safety program is responsible for the regulation and oversight of over 2.7 million miles of energy pipeline systems. The vision of the pipeline safety program is straightforward: update or develop new regulations, policies, and guidance; improve our oversight to hold pipeline operators accountable; find innovative solutions to promote safety; and accommodate and encourage research into new and promising technologies. Each of these goals ensure that pipeline infrastructure can continue to provide safe and reliable energy to our communities, homes, and businesses.

After working for decades in the freight rail industry, a great deal of it leading efforts to
improve public safety and incident response, I have learned that safety is the result of effective, smart regulations that hold industry accountable, and reduce costs, when possible.

PHMSA’s safety goal is zero pipeline accidents and its oversight philosophy is based on three fundamental tenets:

1. Establish minimum safety standards and take enforcement actions against operators not in compliance with these standards.
2. Ensure operators understand and manage the risks associated with their pipelines, including taking actions to prevent pipeline accidents and minimizing the impact of any accidents that occur.
3. Continually encourage and expect pipeline operators to improve their performance beyond minimum compliance with the regulations and continuously build a strong safety culture.

II. Progress on Mandates

When I spoke to this Subcommittee last year, I heard clearly from its members that finalizing outstanding Congressional mandates must be a top priority. PHMSA recognizes the concerns of this Subcommittee and is continuing to make progress on critical safety mandates. Since June 2018, PHMSA completed and submitted reports to Congress on the Nationwide Integrated Pipeline Safety Regulatory Database, as well as a report on the Study on Propane Gas Pipeline Facilities. Both reports were mandated in the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011.

Over the past year, PHMSA prioritized the rules it thought it could move quickly such as those for lithium batteries, plastic pipelines, and oil spill response plans for trains carrying crude oil. These regulations are intended to advance public safety, while encouraging innovation and greater stakeholder awareness and collaboration. These key rulemakings are detailed below.

Of the mandates from the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, PHMSA has eight of 42 mandates remaining. Additionally, of the mandates from the Protecting Our Infrastructure of Pipelines and Enhancing Safety Act of 2016, PHMSA has four of 19 mandates remaining.

Together, of the 12 remaining mandates from the 2011 and 2016 Acts, four are tied to reports and other actions, and eight are tied to rulemaking efforts that PHMSA is continuing to make progress on under its established rulemaking process.

As Administrator, I am committed to doing everything I can to complete all the remaining rulemakings that address Congressional directives related to pipeline safety. I believe completing these mandates will result in significant positive impacts to pipeline safety.

Completing rulemakings takes time simply because it is an iterative process that is designed to encourage maximum participation by all stakeholders, thus ensuring comprehensive rules that
protect the public and stand up to cost/benefit scrutiny. PHMSA holds public meetings and workshops prior to rulemakings, using the information gathered to craft the most effective rules possible. Such collaboration, well in advance of the rulemaking process, allows PHMSA to identify concerns and potential solutions to allocate its scarce resources where they are needed most.

In addition to mandates, many of PHMSA’s rulemakings underway address important recommendations from the National Transportation Safety Board (NTSB), resulting from safety issues identified during accident investigations. PHMSA’s rules also address recommendations from the U.S. Government Accountability Office (GAO) and the DOT Inspector General (IG), and the agency’s own safety findings. PHMSA must make sure that its regulations account for known safety issues, technological feasibility, and cost effectiveness.

In short, a lot of work goes on behind the scenes to get a rule ready for publication, and PHMSA is making positive movement towards completing the safety critical mandates and addressing recommendations from Congress, the NTSB, GAO, and IG, as well as our own safety findings.

A. Hazardous Liquid Rule

PHMSA understands the importance of moving forward its long-awaited Safety of Hazardous Liquid Pipelines rulemaking, which was included in the 2011 Act. This rulemaking would amend the pipeline safety regulations to improve protection of the public, property, and the environment by closing regulatory gaps where appropriate. In addition, this rule is intended to ensure that operators are increasing the detection and remediation of unsafe conditions, and mitigating the adverse effects of hazardous liquid pipeline failures. This rule is one of PHMSA’s highest priorities and is on track to be completed and published in 2019.¹

B. Gas Transmission Rule

PHMSA is also making significant progress toward finalizing its gas transmission and gathering pipeline rulemaking efforts. This is intended to help close two very important open mandates related to the expansion of integrity management principles and requirements for operators to confirm the maximum allowable operating pressure of certain gas pipelines. These changes are expected to allow operators to assess more pipelines and better understand their systems’ conditions.

When finalizing the “Safety of Gas Transmission and Gathering Pipelines” notice of proposed rulemaking (NPRM), the proposed rule was under review for nearly 2 years. Delays were largely due to the proposed rule being too big and unwieldy to move through the administrative process. Accordingly, PHMSA made the strategic decision to split the initial proposed rule into smaller, more manageable rulemaking actions. The split will help PHMSA manage each individual rule more efficiently; and, most importantly, prioritize Congressional directives on

¹ Per the DOT February 2019 Significant Rulemaking Report, the projected publication date for the final rule is 5/27/19.
gas pipelines. Additionally, while working to complete the Congressional mandates this rulemaking will address, PHMSA is also using its resources to incorporate and advance several recommendations from the NTSB and GAO as part of the rule.

PHMSA’s goal is to publish the final rule addressing Congressional directives this year,\(^2\) and will continue working to ensure that the other rules follow closely behind.

C. **Valve and Rupture Detection Rule**

PHMSA is developing an NPRM to address leak and rupture detection.\(^3\) The Shutoff Valve and Rupture Detection rule will meet the goals of two Congressional directives. It proposes revisions to the pipeline safety regulations for newly constructed or entirely replaced natural gas transmission and hazardous liquid pipelines. In doing so, the rule is intended to improve rupture mitigation and shorten the time it takes to shut down a pipeline segment. The rule will also address recommendations from the NTSB and is expected to help reduce the serious consequences of large-volume releases of natural gas and hazardous liquids.

PHMSA is proposing standards for operators to utilize rupture detection metrics for valve placement to improve incident response in populated or environmentally sensitive areas. Rupture response metrics would focus on mitigating large release events that have a greater potential consequence. This rulemaking is currently under comprehensive review at the Department and we are working to move it forward as expeditiously as possible.

D. **Plastic Gas Pipe Rule**

This rule, published in November 2018, updated pipeline safety regulations to allow for the modernization of plastic pipe material, design, and construction standards. This final rule also responds to plastic pipe installation and operational safety concerns identified by federal and state field inspectors. With this rule, new or replaced local gas distribution systems will be built and maintained with the most advanced pipeline technology, which is expected to greatly improve public safety for local communities.

E. **Hazardous Materials Transportation Directives from Congress**

PHMSA also regulates the safety of hazardous materials by all modes of transportation, including by highway, railroad, vessel, and airways. Although PHMSA’s two program offices are authorized separately, we are one PHMSA. We share resources, knowledge, and most importantly, we share the same safety goals.

On February 28, 2019, PHMSA, in coordination with the Federal Railroad Administration, issued a final rule that amends the Hazardous Materials Regulations requirements for

\(^2\) Per the DOT February 2019 Significant Rulemaking Report, the projected publication date for the final rule is 7/2/19.

\(^3\) Per the DOT February 2019 Significant Rulemaking Report, the projected publication date for the NPRM is 8/7/19.
comprehensive oil spill response plans and information sharing. This rule was requested by Congress in the fiscal year 2016 Consolidated Appropriations Act. The rulemaking sets safety standards for rail operator response to incidents involving crude oil transported by rail.

Additionally, on March 6, 2019, PHMSA, in collaboration with the Federal Aviation Administration (FAA), published an interim final rule (IFR) for the safe transport of lithium batteries by aircraft. The IFR is first of PHMSA’s completed actions in addressing directives included in the FAA Reauthorization Act of 2018. This IFR prohibits the transport of lithium ion cells or batteries as cargo on passenger aircraft. In addition, the IFR requires lithium ion cells and batteries to be shipped at not more than a 30 percent state of charge aboard cargo-only aircraft. The IFR is intended to strengthen safety for the traveling public by addressing the unique challenges lithium batteries pose in transportation.

F. Regulatory Reform

While PHMSA works to complete its regulatory agenda, the agency is also committed to improving the effectiveness of our regulatory program by conducting a comprehensive evaluation of current, in-progress, and planned regulations.

PHMSA’s rulemaking efforts are driven by the belief, consistent with Executive Orders 13771, 13777, and 13783 and other legal authorities, that there should be no more regulations than necessary, and those regulations should be straightforward, clear, and designed to minimize burdens, consistent with safety. We also believe that public input is a critical part of the rulemaking process and have proactively sought public comments on our regulatory review and rulemaking efforts. PHMSA is using public input to decide on the best approach, consistent with our regulatory philosophy, to meeting the Department’s statutory obligations.

PHMSA’s review will help to ensure that its regulations are right-sized – which can allow operators to put additional resources where they will have the maximum safety impact, such as greater investment in safety research and development and technology-based safety enhancements.

As always, our focus is ultimately on safety performance. It is the responsibility of the oil and gas industry to understand and manage the risks of their systems. The current regulatory climate gives us all a unique opportunity to work together to optimize our regulations for safety. The pipeline industry should continue to invest in and accelerate their pipeline safety efforts and make substantive safety improvements best suited to their systems and without specific direction from regulations.

III. Other Actions

In addition to completing the important mandates given to it by the Congress, PHMSA continues to aggressively pursue its core safety mission through grants to states and communities, research and development initiatives, and additional safety programs.
A. Support for States

PHMSA’s state pipeline safety partners oversee more than 80 percent of the nation’s pipeline infrastructure – much of it gas distribution pipelines – through annual certification with PHMSA.

An important part of these partnerships is that PHMSA stands ready to support states in times of crisis. In the wake of hurricanes Harvey, Florence, Irma, Maria, and Michael, PHMSA worked with impacted states and pipeline operators to remove obstacles that could delay safe and rapid recovery efforts. PHMSA coordinated and provided periodic updates to Federal partners during the response and recovery phases of each natural disaster to assist with the movement of hazardous materials and energy products. For pipelines, PHMSA issued emergency stays of enforcement for affected operators, temporarily halting its enforcement of compliance with operator qualification and pre-employment and random drug testing requirements to allow affected interstate gas and hazardous liquid pipeline operators to use personnel for urgent response and recovery activities. PHMSA also notified impacted state pipeline safety partners that PHMSA would not object to them issuing similar temporary waivers for affected intrastate pipeline operators, in the interest of prompt and efficient pipeline safety activities related to response and recovery efforts. Expediting pipeline repairs and restoration of service to those areas was our top priority.

In addition, PHMSA provides help to facilitate investigation and recovery following major incidents. In the wake of the tragic September 13, 2018 natural gas accident involving Columbia Gas of Massachusetts, PHMSA quickly dispatched a team of inspectors to Massachusetts to provide technical assistance to the Massachusetts Department of Public Utilities (MA DPU) and the NTSB.

PHMSA’s pipeline inspectors played an instrumental role in the investigation, helping to determine the cause of the incident, and explaining the mechanics of how such an accident could occur. The Governor of Massachusetts, the mayors of the three affected towns, the NTSB, the incident commander, our state partners in the MA DPU, and members of the Massachusetts Emergency Management Agency all expressed their appreciation of the help provided by PHMSA’s pipeline safety team and cited their professionalism, experience, and knowledge as being crucial to the success of the overall response to the incident.

PHMSA also supports state programs by providing essential technical training. Our state-of-the-art Training and Qualifications (T&Q) program has full accreditation from the International Association for Continuing Education and Training (IACET). The T&Q Center trains an average of 900 state and federal inspectors annually, ensuring that all are current on updated regulations, technology, and best practices.

PHMSA’s T&Q Center is committed to developing innovative ways to be more accessible and effective, including the exploration of long-distance proctored classes, curriculum improvements, and more efficient delivery to ensure relevancy. The T&Q Center is also working to develop an effective and efficient distance delivery system that does not sacrifice
the high quality of PHMSA’s training curricula. PHMSA’s goal is to make it easier for state and federal inspectors to access the courses they need quickly and at a lower cost.

B.  Grants

The financial support PHMSA provides to its state partners through grants is another vital part of its partnerships. In total, PHMSA provided over $63 million in grant funding in fiscal year 2018 for pipeline inspection, enforcement, and safety awareness activities.

PHMSA’s State Base Grant program\(^4\) reimburses a portion of each partner state’s program expenses. The grants partially cover the cost of any personnel, equipment, and activities reasonably required for the conduct of the pipeline safety program. Most importantly, PHMSA’s grants provide state programs a consistent source of funding to hire and maintain adequate pipeline safety inspectors. For fiscal year 2018, PHMSA awarded $56 million to participating state programs.\(^5\) As the number of miles of pipeline infrastructure continues to grow and as the older pipes age, this grant program is critical to the oversight of the nation’s distribution pipeline systems.

PHMSA’s Technical Assistance Grants (TAGs) provide funding for technical assistance related to pipeline safety issues to local communities and non-profit organizations, where they make direct impacts to pipeline safety at the grassroots level. The TAGs can be used for engineering or other scientific analysis of pipeline safety issues and are also used to promote public participation in official proceedings. Since the program’s inception in 2009, PHMSA has awarded over $10 million for 200 individual technical assistance projects. PHMSA issued a Notice of Funding Opportunity for its fiscal year 2019 TAG grants in March and expects to award $1.5 million in grant funds to several recipients (up to $100,000 each) by September 2019.

PHMSA’s 811 One Call Grant Program provides funding to state agencies for promoting damage prevention awareness, including changes with their state underground damage prevention laws, related compliance activities, training and public education. This grant program is for states that have a certification or agreement with PHMSA to perform pipeline safety inspections. Last year, PHMSA awarded $1.1 million across 31 state agencies to assist in these efforts.

Finally, I am pleased to say that in 2018 PHMSA awarded its first ever round of Underground Natural Gas Storage Grants – first authorized in 2016 – in support of states’ inspection and enforcement of underground natural gas storage facilities. The grants are used to reimburse up to 80 percent of the costs a state incurs for inspectors, equipment, and safety activities for the oversight of underground storage facilities.

\(^4\) The State Base Grant is a formula grant that authorizes awards to state pipeline safety programs under the authority of 49 U.S.C. § 60107 - State Pipeline Safety Grants.

\(^5\) All states except Alaska and Hawaii participate in PHMSA’s pipeline safety program.
C. Damage Prevention

Excavation damage continues to be a leading cause of pipeline incidents. This year, PHMSA began issuing enforcement actions against excavators who damage pipelines in states that do not adequately enforce their own excavation damage prevention laws. PHMSA continues to support states with efforts to improve their own enforcement programs. PHMSA has seen marked improvements since 2016 in 14 states that have changed from inadequate to adequate programs per the PIPES Act of 2006 and our regulatory criteria. PHMSA continues to work with the 13 remaining states with inadequate programs to bring all programs up to an adequate level.

I would also like to thank all PHMSA stakeholders – especially the public – for the continued success of the national Call-Before-You-Dig number, 811. Over the past 10 years, since 811 was established, pipeline incidents caused by excavation damage have fallen 40 percent. This decline would not have been possible without strong collaboration from all stakeholders.

D. Advancing Domestic Energy

In August 2018, PHMSA established a new Memorandum of Understanding (MOU) with the Federal Energy Regulatory Commission (FERC) that eliminates unnecessary and duplicative regulatory reviews by both agencies when permitting new Liquefied Natural Gas (LNG) export facilities. Going forward, PHMSA will operate as the Federal Government’s LNG safety expert for Federal regulations covering the safety of LNG facilities and will be solely responsible for conducting the necessary safety analysis for new LNG facilities that may be permitted by FERC.

PHMSA assesses each LNG facility application for FERC on a case-by-case basis to determine whether the application meets the minimum Federal Pipeline Safety Standards for the location of a new LNG facility. So far, PHMSA has issued eight Letters of Determination to FERC under the MOU.6 This agreement may help reduce the time it takes to obtain a new LNG export permit by as much as one year.

E. Integrity Management

PHMSA continues to require integrity management programs that ensure operators are adequately identifying and addressing the greatest risks. Under integrity management, operators are required to conduct integrity assessments of gas transmission and hazardous liquid pipeline systems in high consequence areas and apply lessons learned across their entire system. Thanks to integrity management, gas transmission and hazardous liquid pipeline operators have identified and conducted over 90,700 repairs in high consequence areas between 2004 and 2017.

F. Research and Development

PHMSA’s Research and Development (R&D) program supports new technology to further

6 As of March 28, 2019.
improve pipeline safety. The R&D program sponsors research on projects that can provide near-term solutions to improve safety, reduce environmental impacts, and enhance the reliability of the Nation’s pipeline transportation system.

Since 2002, PHMSA has invested nearly $125 million dollars in 304 R&D projects and, in the past six months, two new technologies for methane leak detection and one to prevent excavation damage threats have been commercialized. Since the program’s inception, 31 patent applications and 31 new pipeline technologies have hit the market, including above-ground, radar-based pipeline mapping and a robotic nondestructive testing method for pipelines that cannot accommodate traditional in-line inspection tools.

PHMSA’s pipeline safety program also takes a far-reaching view with its Competitive Academic Agreement Program (CAAP), which funds academic research to provide tomorrow’s pipeline safety workforce with an early opportunity to contribute safety solutions. The CAAP program, launched in 2013, helps validate proof of concept for theories and theses that can be developed and further investigated. The program also serves to expose the next generation of engineers to pipeline challenges and solutions. In September 2018, PHMSA awarded more than $3.8 million to 11 universities via the CAAP.

IV. Conclusion

Safety remains the highest priority for the U.S. Department of Transportation and for PHMSA. The agency is continuing to work hard to publish the rules and reports that will close Congressional mandates, and is also committed to addressing safety matters on all fronts.

As pipeline mileage across our country continues to grow, the need for strong pipeline safety standards and programs is ever more important.

Thank you again for inviting me to today’s hearing. I look forward to your questions.