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BEFORE THE U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS
HEARING ON ENSURING SAFETY AND RELIABILITY: EXAMINING THE REAUTHORIZATION NEEDS OF THE PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

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Introduction

Good morning, Chairman Nehls, and members of the Subcommittee. Let me begin by expressing my sincere condolences to the Payne family, to those of you who were friends and colleagues of Ranking Member Payne, and to his office and staff members, who I know are all as saddened as I was to learn of his passing. It is a testament to his legacy that he worked across the aisle this past year to help advance legislation to improve pipeline safety and to keep his constituents and all Americans safe from hazardous materials transportation.

Thank you for inviting me to testify today on the U.S. Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration's (PHMSA) pipeline safety program As I testified last year before this Subcommittee—Safety is, and remains, the top priority for DOT and PHMSA. Specifically, PHMSA is responsible for overseeing the safe transport of hazardous materials—through pipelines and also via other modes of transportation—aviation, rail, motor carrier, and marine. PHMSA oversees the safe design, operation, and maintenance of the Nation's nearly 3.3 million miles of oil, gas, and other hazardous materials pipeline and storage facilities, including for hydrogen, carbon dioxide, and other emerging fuels. Additionally,

PHMSA's oversight of hazardous materials transport via other modes includes nearly 1 in 10 goods that are transported commercially in the U.S., everything from nuclear waste to lithium-ion batteries, to spacecraft being transported to spaceports around the world.

Nearly two-thirds of the energy we consume in the U.S. is transported via pipeline. Over the past few decades—and especially over the last few years in conjunction with America's red-hot economic growth—energy production in the United States has continued to increase to record levels. Concurrently, U.S. transportation of these products has necessarily increased, and exports of energy products have—according to the Energy Information Administration—also reached record levels. This means heightened demands on our pipeline and refined products storage infrastructure, as well as export facilities, such as liquefied natural gas (LNG) terminals, the safety and environmental risks over which PHMSA also oversees.

Put simply: the volume of work before PHMSA, and the challenges in carrying out our safety and environmental mission established by Congress, have never been greater. Aging infrastructure requires more maintenance, and, greater safety scrutiny. A significant portion of the cross-country pipeline infrastructure was built shortly after World War II—meaning many pipelines are over 80 years old. Furthermore, there are even a few gas distribution segments that were installed during the Civil War era, more than 150 years ago—which, thanks to the President's Bipartisan Infrastructure Law, we are finally modernizing through our first-of-its kind community natural gas modernization grant program.

With increasing challenges and broader demands on our agency, clear direction and resources from Congress are important, particularly as we close out the final few congressional mandates from the 2020 PIPES Act. PHMSA is grateful for the work that this Subcommittee has done in advancing bipartisan legislation—particularly increased authorization levels— and I look forward to providing additional feedback on the reauthorization needs of the agency during this hearing.

Bipartisan Infrastructure Law Grant Program

After enactment of the PIPES Act of 2020, Congress also enacted the 2021 Bipartisan Infrastructure Law. So as PHMSA has worked to implement the 2020 PIPES Act, PHMSA has also awarded three rounds of funding for our first-ever infrastructure grant program—a substantial undertaking for our agency. Congress created the Natural Gas Distribution Infrastructure Safety and Modernization (NGDISM) Grant Program, providing $1 billion over five years to improve the safety of high-risk, leak-prone, legacy natural gas distribution infrastructure with a specific emphasis on benefiting disadvantaged rural and urban communities. Municipality- or community-owned utilities are eligible, and funds are available to these entities seeking assistance in repairing, rehabilitating, or replacing high-risk, leak-prone natural gas distribution infrastructure, or acquiring equipment to assist in identifying and reducing natural gas incidents and fatalities. This grant funding is helping communities of all sizes make their infrastructure safer, creating good jobs, reducing heat-trapping methane from the atmosphere, and saving residents and businesses money on their energy bills. As previously mentioned, there is plenty of aging infrastructure across the country that can benefit from this program. For example, PHMSA awarded funding to multiple projects—in both Massachusetts and Nebraska—where the pipeline systems date back to the 1890s. Additionally, for the past two funding rounds, Congressman Burlison's district was awarded a total of over $30 million for the City Utilities of Springfield to acquire methane leak detection equipment, as well as to replace over 38 miles of legacy plastic natural gas lines and around 3,400 legacy plastic gas services and meter sets. Communities neighboring Congressman Burchett's district also received funds this year totaling over $4 million for pipe replacement and equipment needs. Congressman Troy Carter joined Senator Cassidy and me in his district to announce more than $27 million for community owned systems throughout Louisiana last year. We have been delighted to see the interest and excitement from grant applicants and recipients and are happy to say that the NGDISM program is working. During our first year of project solicitations, the program attracted nearly $1.8 billion worth of applications for $200 million in funding. We had similar interest when we announced the FY23 and FY24 round of funding. This year we were able to issue grants to Texas, North Carolina, Kentucky, and New York (among others) for the first time. Last year we issued first-time grants to Kansas, Tennessee, Georgia, Indiana, Massachusetts, and Florida (among many others). And this week, we are issuing another Notice

of Funding Opportunity for the FY25 round of funding, which I know applicants are eager to apply for.

Although the program is funded through 2026, PHMSA anticipates the work in carrying out and overseeing the infrastructure projects from the NGDISM program won't be completed until 2033. In anticipation of this, and to address burdens on underserved community applicants, PHMSA has streamlined its National Environmental Policy Act review process—establishing a first-of-its-kind, tiered approach to conduct environmental assessments of these important projects. Utilizing the administrative funding granted to us by Congress in the Bipartisan Infrastructure Law, PHMSA took on the financial and administrative burden of conducting a tier 1 programmatic review of potential environmental impacts from this new grant program—instead of placing that burden on grant recipients. PHMSA, along with our partners at the Volpe National Transportation Systems Center in Massachusetts, as well as the White House Council on Environmental Quality, created a tier 2 template that community grant recipients can use to identify project-specific impacts for these pipe repair/replacement projects and streamline the project-specific environmental review process—saving months of time, as well as saving communities and taxpayer money that would otherwise need to be spent on these potentially lengthy reviews. PHMSA was honored to be asked by the White House Council on Environmental Quality to present our work last year as an example for other agencies to replicate to help get projects completed faster and more efficiently, without sacrificing important environmental values.

Rulemaking

As I noted in my March 2023 testimony before this Subcommittee, our regulatory agenda over the past several years has been extraordinarily full. In addition to closing out a record number of long-awaited rules related to National Transportation Safety Board (NTSB) and U.S. Government Accountability Office (GAO) recommendations, and older congressional mandates, we've also published two important new proposed rulemakings from the 2020 PIPES Act and issued a final rule for Periodic Updates of Regulatory References to Technical Standards and Miscellaneous Amendments.

The 2020 PIPES Act directed us to address the methane leak detection and repair rule, which covers both gas and hazardous liquid pipelines, in an effort to improve public safety and protect our environment. The broad bipartisan support in Congress for this new directive, as signed into law by President Trump, demonstrated that America is serious about addressing methane emissions. The private sector has shown, too, that America is the leading innovator when it comes to methane mitigation and we have a workforce of pipeline workers and skilled tradesmen who are the most skilled and efficient in the world at finding and fixing methane leaks—keeping Americans safe, reducing harmful and costly pollution, and ultimately saving consumers money when a valuable commodity is not leaked into the atmosphere.

The consequences of failing to address methane leaks can be tragic. Just a few weeks ago, I joined Congressman Bennie Thompson and NTSB Chair Jennifer Homendy for a community meeting in Jackson, MS, where the community is still recovering from a tragic pipeline leak on Atmos Energy Corporation's gas distribution system that led to the death of a beloved community member, Ms. Clara Barbour. PHMSA is a party to and supporting the NTSB's investigation into this matter. The NTSB's preliminary report indicated that "Before these explosions, Atmos identified and classified leaks on their distribution system near locations 1 and 2. The leak nearest to location 1 was discovered on November 11, 2023, and classified as a grade-2 leak, meaning that it was nonhazardous but would require repair in the future. The leak nearest to location 2 was discovered on December 1, 2023, and was classified as a grade-3 leak and therefore nonhazardous. Neither leak was repaired before the explosions." In addition to PHMSA being a party to the NTSB investigation, Atmos Energy recently, and voluntarily, agreed to an independent safety review by PHMSA of their processes and operations—which NTSB and our state partners are also participating in. We anticipate sharing the results of this review with the public.

Last May, PHMSA proposed the Gas Pipeline Leak Detection and Repair Rule (LDAR Rule), which seeks to enhance public safety and lower methane emissions and other air pollution by significantly improving the requirements for the detection and repair of leaks from natural gas distribution, gas transmission, and gas gathering pipelines. The Notice of Proposed Rulemaking (NPRM) updates decades-old, Federal leak detection and repair standards in favor of new

requirements that add an additional layer of safety by deploying commercially available, advanced technologies to find and fix gas leaks that previously may have gone unrepaired in perpetuity. This rule would ensure that leaks—each of which involves a loss of pipeline integrity—are discovered and repaired before they can degrade into more serious ruptures or explosions and to limit the atmosphere's exposure to methane. This rule also encourages innovation in technologies that help keep natural gas in our pipes instead of leaking into the atmosphere, which can be unsafe, costly for consumers, and harm our environment.

PHMSA held a Gas Pipeline Advisory Committee (GPAC) meeting on the proposed LDAR Rule in November of 2023, and held a second public advisory committee meeting on the proposed rule in March 2024—after the initial meeting extended beyond the full scheduled week of day-long discussions. PHMSA is in the process of considering and addressing all GPAC recommendations, and will address comments received within the comment period, prior to finalizing this rule. In addition to discussing the LDAR NPRM at the November meeting, PHMSA also planned to address the proposed Class Location Change rule—of interest to many members of this Subcommittee. Due to the extended proceedings on the LDAR rule, the Class Location Rule was taken up at the March 2024 GPAC meeting and recommendations were completed and received from the GPAC. At the request of many stakeholders representing entities directly affected by the Class Location Rule, PHMSA has granted an extension of comments for that rule, which we will review upon submission to inform our final rulemaking.

The PIPES Act of 2020 also directed PHMSA to promptly complete the "Safety of Gas Distribution Pipelines and Other Pipeline Safety Initiatives" Rulemaking. This NPRM was published in September 2023, and received comments from over 200 commenters. The NPRM proposes to require operators of gas distribution pipelines to update their distribution integrity management programs, emergency response plans, operations and maintenance manuals, and other safety practices as envisioned in the Leonel Rondon Pipeline Safety Act, and which is informed by NTSB recommendations aimed at preventing catastrophic incidents resulting from overpressurization of low-pressure gas distribution systems similar to that which occurred on a gas distribution pipeline system in Merrimack Valley on September 13, 2018—tragically taking the life of young Leonel Rondon. In this rule, PHMSA has also proposed codifying use of its

State Inspection Calculation Tool, which is used to help our state pipeline inspection partners determine the base-level amount of time needed for inspections to maintain an adequate pipeline safety program. Further, PHMSA proposes other pipeline safety initiatives for all part 192-regulated pipelines in this NPRM, including gas transmission and gathering pipelines, such as updating emergency response plans and inspection requirements. We are currently preparing for a future GPAC meeting on that NPRM.

In addition to Congressionally mandated rules, many of PHMSA's rulemakings underway address important recommendations from NTSB, resulting from safety issues identified during investigations in the aftermath of some tragic accidents. PHMSA's rules also address recommendations from the GAO, the DOT Inspector General, and the agency's own safety findings. As a result, PHMSA continues to work on updates to the LNG facilities regulations, and we also recognize the need to address emerging issues, like the design and operation of pipelines transporting carbon dioxide in different physical states. We understand that these priorities are in line with this Committee's expectations, based on the Promoting Innovation in Pipeline Efficiency and Safety (PIPES) 2023 bill that was introduced and moved through Committee on a bipartisan basis by Chairman Graves, Ranking Member Larsen, Chairman Nehls, and the late-Ranking Member Payne.

Enforcement and Compliance

While the number of PHMSA's administrative enforcement cases has remained relatively steady, continued diligence of PHMSA staff to hold responsible parties accountable has resulted in the agency setting records for our civil penalties in 2021, 2022, and 2023. In 2023, PHMSA issued over $12.5 million in proposed civil penalties against operators who violated safety regulations. Additionally, recognizing that timely enforcement is important to increase deterrence and shorten the time unsafe conditions are allowed to persist, PHMSA has substantially expedited its enforcement processes. From 2019 to 2023, for administrative enforcement cases involving civil penalties or proposed compliance actions, PHMSA reduced its average time to initiate and fully close an enforcement case by approximately 40 percent.

Additionally, as a mandate of the PIPES Act of 2020, PHMSA inspected implementation of the Act's self-executing mandate requiring operators to update their inspection and maintenance plans to address the elimination of hazardous leaks and minimizing releases of natural gas (including intentional venting during normal operations) from their pipeline facilities. In 2022, PHMSA conducted 380 inspections of operators' plans, covering 803 PHMSA-identified pipeline inspection systems, 39 Federally inspected gas distribution systems, 37 Federally inspected LNG units, and 178 Federally inspected underground natural gas storage facilities, to ensure they addressed the congressional directive to assess the need to replace or remediate pipeline facilities that are known to leak based on their material, design, or past operating and maintenance history. In addition to the number of PHMSA-performed inspections, PHMSA's state partners conducted an additional 4,724 inspections. This is the first time PHMSA completed inspections of each operator that it regulates within a calendar year—and was a tremendous undertaking by our dedicated field personnel across the country and the dedicated field personnel of our state partners.

Additionally, sections 205(a) and (b) of the PIPES Act of 2020 directed PHMSA to assess the implementation of Pipeline Safety Management Systems (PSMS) by gas distribution operators and provide guidance and recommendations to encourage voluntary implementation of PSMS by gas distribution pipeline operators. PHMSA conducted a voluntary information collection among gas distribution operators on the current state of PSMS implementation. To collect this data efficiently, PHMSA designed a new information collection form and online reporting portal. PHMSA and our state partners encouraged operators to submit their PSMS data and, though it took longer than anticipated, we received a statistically adequate number of responses to allow for reasonable inference to the entire gas distribution operator community. The accompanying report to Congress is expected to be completed and transmitted to you and shared publicly on our website in the coming months. In the meantime, PHMSA continues to work with regulated entities in promoting the use of PSMS, as also directed by section 205(c), and notes that further evaluation of PSMS frameworks will commence following issuance of the report. It's also worth noting that PSMS was included in a recent NTSB recommendation, so we look forward to working with NTSB to address the relevant aspects of their recommendation as well.

Research, Development, and Inter-Agency Efforts

While PHMSA continues to advance pipeline safety by strengthening its regulations and enhancing its inspector training, inspections, and enforcement programs, research and technological innovation is essential to aid in the design, construction, operation, and maintenance of pipelines and to address the root causes of incidents.

PHMSA's Pipeline Safety Research Program works with academia, the regulated community, private research consortiums and Federal partners to sponsor research and development (R&D) projects focused on providing near-term solutions for pipeline transportation infrastructure issues that will improve safety, reduce environmental impact, and enhance reliability. PHMSA periodically holds public R&D forums to help generate a national research agenda that identifies technical challenges and fosters solutions to improve pipeline safety and protect the environment. PHMSA's most recent forum was held in the fall of 2023, and included five working groups focusing on carbon dioxide, hydrogen, leak detection/monitoring, threat prevention, and anomaly detection and repair. The forum discussions regarding both carbon dioxide and hydrogen drew extended interest as more projects are being proposed for CCUS and hydrogen blending of natural gas pipelines. Both of these research areas are necessary and timely as we look towards transportation of gaseous carbon dioxide and varying hydrogen blending of natural gas pipelines, both of which may involve additional rulemaking efforts at PHMSA.

PHMSA issued its solicitations for its Cooperative Academic Agreement Program (CAAP) on March 18, 2024, and it Core Program on April 15, 2024. PHMSA's solicitation topics included Carbon Dioxide and Hydrogen Safety, Leak Detection, Liquefied Natural Gas, Threat Prevention, Anomaly Detection and Characterization, and Hazardous Liquids Tanks. Based on PHMSA's review of data and trends, there is a continued need to fund research activities intended to evaluate and mitigate threats to prevent damage to our Nation's infrastructure. The most present risks center around geohazard monitoring, data integration, and corrosion control, all of which are included in the research solicitations for 2024. Of note for the Subcommittee—PHMSA's 2023 appropriations bill directed PHMSA to utilize a significant portion of its existing research funding as part of the creation of a National Center of Excellence for Liquefied Natural Gas (LNG). PHMSA has been working to partner with other Federal agencies in the creation of

this National Center of Excellence—to leverage broader Federal resources to advance LNG safety.

Hydrogen/Carbon Dioxide (CO_2)

In FY 2023, PHMSA awarded approximately $4 million in research investments on hydrogen projects. Specifically, under the Core Program, PHMSA awarded two projects: 1) to Investigate Damage Mechanisms for Hydrogen and Hydrogen/Natural Gas Blends to Determine Inspection Intervals for In-Line Inspection Tools, and 2) to Investigate the Integrity Impacts of Hydrogen Gas on Composite/Multi-Layered Pipe. In addition, PHMSA entered into an Interagency Agreement with the Department of Energy (DOE) to "Establish the Technical Basis for Enabling Safe and Reliable Underground Hydrogen Storage Operations." PHMSA currently has twelve active hydrogen projects from FYs 2021, 2022, and 2023 awards, totaling approximately $11 million in research investments. These projects will research how to safely transport and store hydrogen and hydrogen blends by repurposing existing infrastructure used for natural gas transport and underground storage, improving hydrogen leak detection, and characterizing hydrogen specific pipeline integrity threats.

PHMSA also collaborates with the DOE's Office of Fossil Energy and Carbon Management to establish partnerships on R&D and safety associated with the transport of carbon dioxide via pipelines. Currently, PHMSA has four active projects involving the potential impact radius for carbon dioxide, innovative leak detection methods, and material testing and qualification for repurposing pipelines and underground storage facilities for carbon dioxide transport and storage. The results of these may help inform a current rulemaking related to carbon dioxide pipelines.

PHMSA's limited funding for its Pipeline Safety-related R&D program is divided between pipeline and LNG research. For 2023 and 2024, PHMSA was provided $12.5 million for research, and the 2025 President's Budget requests a total of $14 million for these important research activities.

In terms of PHMSA's efforts on carbon dioxide (CO_2) infrastructure, while PHMSA does not have siting authority, it is PHMSA's responsibility to help make sure that newly approved pipeline facilities are designed, constructed, operated, and maintained with a high level of safety. In an effort to further a one-Federal-government approach to the oversight of decarbonization infrastructure, PHMSA continues to seek ways to enhance its coordination with other Federal agencies in the overall carbon capture, utilization, and storage space to help track projects, anticipate safety and environmental risks, and provide more public-facing information. PHMSA is in the process of developing a specific CO_2-focused website that will provide cross-references to other agencies in an effort to help clarify the roles the various agencies play in oversight of CO2 transportation and storage. While most proposed CO_2 pipeline projects are dense phase pipelines, some proposals are considering converting existing natural gas transmission pipelines to transport gaseous CO_2. As noted in my response to your letter on the subject last year, Mr. Chairman, PHMSA is working to issue a proposed rule on CO_2 pipeline safety as soon as possible, as updated on a monthly basis in our public rulemaking chart.

Liquefied Natural Gas

Global fluctuations in natural gas supplies and its availability continue to spark investments in LNG. Currently, there are eight LNG export terminals with a total LNG production capacity of approximately 14 billion standard cubic feet per day (bcf/d) in the United States. There are also 17 new facilities expected to be built within the next five years and seven more currently seeking Federal approval, according to the Federal Energy Regulatory Commission (the agency which oversees approval and siting of these facilities)[1]. As the demand is expected to continue to increase, PHMSA continues to fund LNG safety-related research projects; with eleven completed/closed and five currently active projects, all totaling $5.7 million.

As I noted, the Consolidated Appropriations Act of 2023 provided up to $8.4 million to PHMSA for the creation of a National Center of Excellence for LNG Safety (the Center), as authorized in Section 111 of the PIPES Act of 2020. The Center aims to ensure United States remains the leader and foremost expert in LNG operations, globally—including safety and environmental performance, and to improve collaboration across Federal agencies and with relevant

[1] See https://www.ferc.gov/media/us-lng-export-terminals-existing-approved-not-yet-built-and-proposed.

stakeholders. For the last few months, PHMSA has been working to engage other relevant Federal agencies with the goal of establishing a center that leverages agencies' expertise to address the most pressing issues and ensure we continue to raise the bar for the global LNG sector when it comes to safety and environmental performance. We have thus far received broad interest from other relevant agencies.

Increased Engagement with the Public

PHMSA is committed to enhancing all stakeholder engagement and has increased the number of public meetings and information briefings it hosts—holding three major public meetings and information briefings in 2023, as well as the week-long November GPAC meeting that was open to public participation. As mentioned before, in March 2024, PHMSA held another week-long GPAC meeting that was open to public participation. Personally, I have visited community members and victims, on-site, where pipeline facilities have failed (e.g., Marshall, MI; Bellingham, WA; Satartia, MS; Freeport, TX, and Jackson, MS). In March 2024, I met with stakeholders in Bent Mountain, Virginia, near Roanoke, to listen to concerns about the impact that the Mountain Valley Pipeline construction project has had on their community.

PHMSA has also increased its engagement with public interest groups, in addition to the Pipeline Safety Trust, to include pipeline worker labor unions, and environmental groups, as well as relevant trade associations actively participating in conferences and meetings to hold a two-way dialogue on important pipeline safety issues, emphasizing that pipeline safety is a shared responsibility.

In 2023, PHMSA's Community Liaisons participated in nearly 195 public meetings, events, and conferences to educate our stakeholders on pipeline safety and damage prevention initiatives and to address questions about the Federal pipeline safety regulations or concerns about pipeline-related matters. Of the 195 events, 56 events were held in transportation disadvantaged and underserved communities which included Tribal Nations, and 16 were engagements with individual landowners and local community representatives. In addition to engaging with Tribal Nations to exchange information and address questions, PHMSA continues to perform advanced communications with Tribes prior to performing inspection activities that may take inspectors

through Tribal lands. PHMSA continues to promote the Call 811 Program through participation in events as well as through social media and digital campaigns encouraging safe digging practices.

With increased production and transportation of energy products, we have also seen an increase in engagement from the public in both the work our agency performs as well as the operations of the facilities that we oversee. Currently, there are no requirements in PHMSA's governing statutes for operators to engage the public with information after a major incident occurs. This has often meant that PHMSA personnel have had to fill the gap by explaining what our agency is doing to address safety risks but leaving the public eager to better understand what operators are doing to mitigate risk in the wake of an incident. PHMSA has worked with representatives from the regulated community, public interest organizations like the Pipeline Safety Trust, and industry representatives from the American Petroleum Institute to advance a recommended practice for pipeline public engagement (RP 1185)—which was recently adopted. But more work is necessary to ensure the public receives information about safety and environmental risks—especially in the aftermath of a major incident.

Efficiencies in Oversight, Taxpayer Stewardship, and Focus on Employees

From 2020 to 2022, the number of PHMSA safety regulated miles for gas distribution, gas transmission, hazardous liquids, and carbon dioxide pipeline systems increased by 36,000 miles, and an estimated 400,000 miles of gas gathering lines are newly regulated. PHMSA also has increasing responsibility for LNG facilities, as new facilities are proposed and come online, and underground natural gas storage. Consequently, PHMSA continues to strive to operate effectively and efficiently to our expanded universe of regulated facilities. We are grateful for the congressional authorities given in the PIPES Act of 2020 to improve efforts to attract and retain a talented pool of professionals. PHMSA has undertaken new recruitment and retention efforts—in coordination with the Office of Personnel Management—including, developing new tuition reimbursement efforts and utilizing new online recruitment methods, expanding the pool of colleges and universities from which we recruit, engaging alma maters of our existing team members, and broadening the public outreach of our agency. New special pay rates for pipeline inspectors were approved in 2023 and PHMSA continues to implement programs to take

advantage of all available hiring flexibilities, to continue to try to meet Congress' hiring directives.

Although PHMSA faces fierce hiring competition from the private sector and other Federal agencies who are also competing with the same limited talent pools, PHMSA is focused on increasing the number of vacancies filled in inspection and enforcement roles. PHMSA continues to explore ways to continue to improve the agency's hiring and recruitment to make it both more efficient and effective in recruiting and retaining talented applicants, including obtaining approval from the Office of Personnel Management (OPM) in April 2023 of a new Special Rate Table covering PHMSA 0801 Engineering series employees in various locations; using Direct-Hire Authority to quickly employ qualified candidates; and promoting the use of student loan repayment benefits, as appropriate. Just last year, PHMSA onboarded a new Human Resources director who has implemented several changes to attract the best qualified candidates. PHMSA has actively used recruitment, relocation, and retention incentives for the most qualified employees. PHMSA's Student Loan Repayment Plan has been created and will be ready for implementation in the next 60-days and employees have also taken advantage of the generous student loan forgiveness program. PHMSA employees has sent over 200 letters to their alma maters inviting their engineering students and alumni to apply for open positions. In the last several months, our team has engaged with the Department of Veterans Affairs and OPM to continue to staff our positions with veterans and their spouses. Moreover, the team has implemented a multi-channel marketing plan that includes LinkedIn, Handshake, X (Twitter), and email to engage with schools of engineering and college career centers. Additionally, in the past few months, the team has visited approximately 25 schools designated as Minority Serving Institutions and Historically Black Colleges and Universities, and participated in the Federal government's Workforce Recruitment Program, and other Federal events dedicated to hiring staff with disabilities—all to expand our pool of potential hires beyond where we've recruited historically.

Looking Forward: Promoting Innovation in Pipeline Efficiency and Safety Act of 2023

PHMSA has followed with interest the efforts of all of its congressional oversight committees as they craft reauthorization language for our pipeline safety program, and particularly the Promoting Innovation in Pipeline Efficiency and Safety (PIPES) Act of 2023. I applaud the work of the Committee and Subcommittee leadership and staff in working to reach a bipartisan consensus on important safety topics that move pipeline safety, accountability, and information sharing efforts forward.

State Oversight

As previously mentioned, our universe of pipelines that are subject to state and Federal jurisdiction continues to expand. To accomplish an ever-expanding mission, PHMSA relies heavily on its extremely important partnership with state pipeline safety programs. New pipeline safety regulations and new—or newly regulated—infrastructure (such as certain gas gathering lines) have required state pipeline safety programs to increase staff to handle the additional infrastructure oversight responsibilities—or in many cases simply expanded the obligations of existing state pipeline inspection teams, which are already lean. These state pipeline safety programs employ approximately 450 inspectors who are responsible for inspecting over 85 percent of the Nation's pipeline infrastructure through certification with PHMSA. State programs experience nearly all of the same challenges PHMSA has experienced in terms of hiring inspectors—but they usually have fewer resources to deal with such challenges.

Therefore, as reflected in the President's Budget, we very much appreciate the efforts of this Subcommittee to increase the vital funding that goes to PHMSA to support state pipeline inspection programs. While statute allows PHMSA to reimburse up to 80 percent of the total cost of the personnel, equipment, and activities reasonably required by the state agency for the conduct of its pipeline safety program during a given calendar year, for fiscal years 2021 to 2023 State Base Grant Federal funding covered less than 70 percent of the actual total state program costs. The 2023 Federal funding is estimated to be only 56 percent of the total state program costs—due, in part, to the increasing workload placed on states because of the increase in regulated pipelines and expansion of pipeline safety regulations. The 2024 appropriation,

consistent with the 2024 President's budget, included an additional $21.50 million for State Pipeline Safety Grants to increase the reimbursement rate to states to nearly 80 percent of their pipeline safety program cost, in order to address this need and more robustly support States' vital role in implementing many of the new regulations previously discussed—representing a bipartisan consensus for this need. The 2025 President's Budget once again requests a total of $82 million for State Pipeline Safety Grants, which would continue to reimburse state pipeline inspection programs at the authorized level. We are very much supportive of this Subcommittee's, and the President's, effort to increase funding to the states commensurate with the increase in their and our oversight responsibilities.

Resource Levels

For this same reason, PHMSA appreciates the action of this Subcommittee in allowing an increase in personnel for the Office of Pipeline Safety to support development and implementation of pipeline safety policies and regulations, and to fulfill existing congressional rulemaking mandates. As I have testified previously, it takes a broad group of personnel to complete our rulemaking efforts, including engineering subject matter experts but also economists, attorneys, and environmental staff to ensure compliance with governing laws. To this point, we have provided technical assistance asking the Subcommittee to consider clarifying this allowance for an increase in personnel to ensure the 30 positions specified can include the variety of experts required to carry out our program who work at PHMSA, although they may not be within the Office of Pipeline Safety. This is to ensure we are authorized to hire the personnel needed to focus on the directive to develop pipeline safety policies and regulations, and to fulfill existing congressional rulemaking mandates.

Emerging fuels and opportunities.

As has been mentioned throughout this testimony, the anticipated expansion of pipeline infrastructure to transport CO_2 has made PHMSA's update of current CO_2 pipeline regulations a top priority for the agency. PHMSA's proposed rule on Carbon Dioxide and Hazardous Liquid Pipeline Safety will aim to cover operational and maintenance safety issues relevant to different phases (e.g., supercritical, gaseous, etc.) of CO_2 transportation via pipeline—and to address each

of the issues identified by PHMSA in its investigation and enforcement activities involving its investigation of the 2020 pipeline failure in Satartia, Mississippi.

Additionally, PHMSA is appreciative of this Subcommittee's efforts to understand more about the pipeline industry's use of hydrogen and natural gas blending and the safety impact to existing gas pipeline infrastructure. As previously noted, PHMSA has been studying this topic, and other hydrogen blending related safety impacts for several years, spending approximately $4 million in research investments on hydrogen projects in 2023. Importantly, PHMSA recently published in the Federal Register a draft information collection to allow PHMSA to collect and identify trends related to the blending of hydrogen gas and natural gas within gas pipelines from operator-reported data.

PHMSA understands the Committee's interest in the implementation of a voluntary information-sharing system (VIS) comprised of PHMSA, other Federal and state agencies, the regulated industry (i.e., pipeline and facility owners and operators), and general public safety or environmental advocacy organizations. The VIS concept is one that is used successfully in other industries, particularly in the aviation field. PHMSA has worked for years on developing a VIS concept for the pipeline sector since the initial congressional mandate in the PIPES Act of 2016 to study the feasibility of such a system. PHMSA looks forward to Congress's guidance for implementing a program that seeks to encourage collaborative efforts to improve information sharing with the purpose of improving natural gas, hazardous liquid, and carbon dioxide pipeline facility integrity and safety.

Conclusion: Continued Exceptional American Leadership in Pipeline Safety

In closing, I would like to thank you again for the opportunity to discuss with you the critical issues facing PHMSA, our state partners, and the largest, most sophisticated hazardous materials transportation system in the world. Each of the areas I outlined above are areas in which the rest of the world looks to America for leadership: leadership in the marketplace of products for which we are the most efficient in the world; leadership for establishing safety rules, that countries around the world have told me they often adopt in whole to improve their own pipeline safety and environmental protection and harm mitigation; leadership in the rule of law when it comes to

disputes and compliance; leadership in research, innovation, and new technologies to improve safety and environmental performance that are sold domestically and exported around the world; leadership in transparency and engagement with affected communities, which other countries also look to as a new standard; and leadership in efficiencies, for all the work that we do.

This work is the result of our collaboration with the congressional committees that authorize our agency and fund our agency, but the kudos for all of the achievement of our agency go to the nearly 650 full-time Federal employees and nearly 200 contractors that make up what I always say is the most unsung agency in the Federal Government.

Thank you again for your efforts to advance bipartisan reauthorization legislation. I look forward to working with you and your colleagues as Congress considers a pipeline safety reauthorization bill that honors the efforts of your colleague, Mr. Payne.