



Pipeline and Hazardous Materials Safety Administration Overview Briefing



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

PHMSA: Your Safety is Our Mission



PHMSA Mission

To protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives.



PHMSA's Two Safety Programs

- Pipeline Safety
- Hazardous Materials Safety



What We Do

Data and Risk Analysis

Analyze safety performance and continuously improve data quality and analytic capabilities to identify, assess and manage safety risks.

Outreach

Enhance safety and education through stakeholder outreach and engagement.

Research and Development

Conduct research and development to innovate and improve transportation safety policies, techniques, processes, and procedures.

Regulations and Standards

Establish and enforce regulations and standards to enable the safe transportation of energy products and hazardous materials.

Training

Provide safety and inspection training for federal and state inspectors through our joint training center.

Grants

Manage both pipeline safety grants and hazardous materials grants to support inspections, enforcement and outreach programs for states, territories, and non-profits.

Inspections and Enforcement

Inspect pipeline facilities and entities that offer hazardous materials for transportation including manufacturers and shippers.

Accident Investigations

Investigate pipeline failures/releases and hazardous materials accidents and incidents, share lessons learned to prevent future accidents and incidents.



What We Work to Prevent



PHMSA Organization and Regional Offices



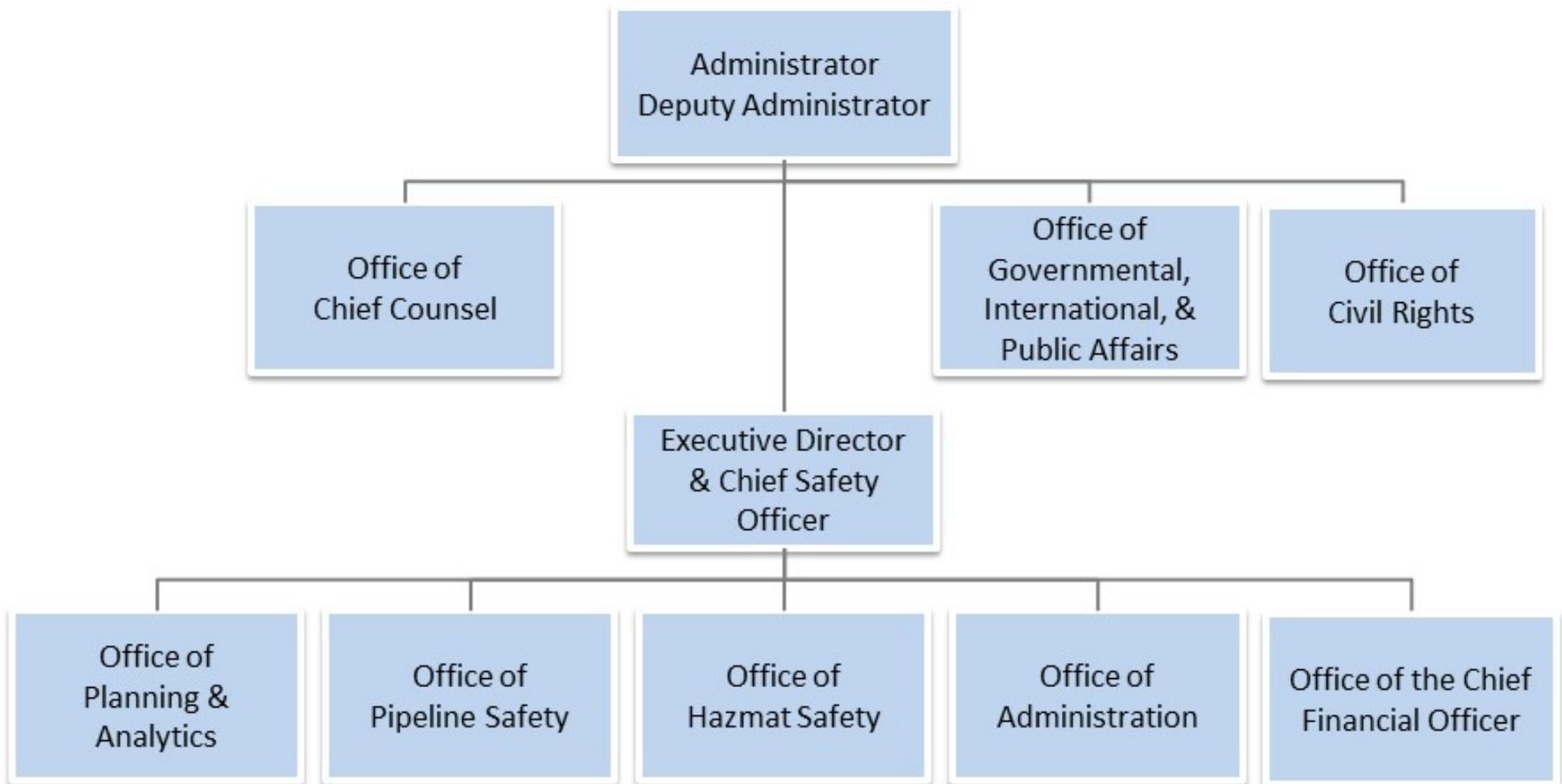
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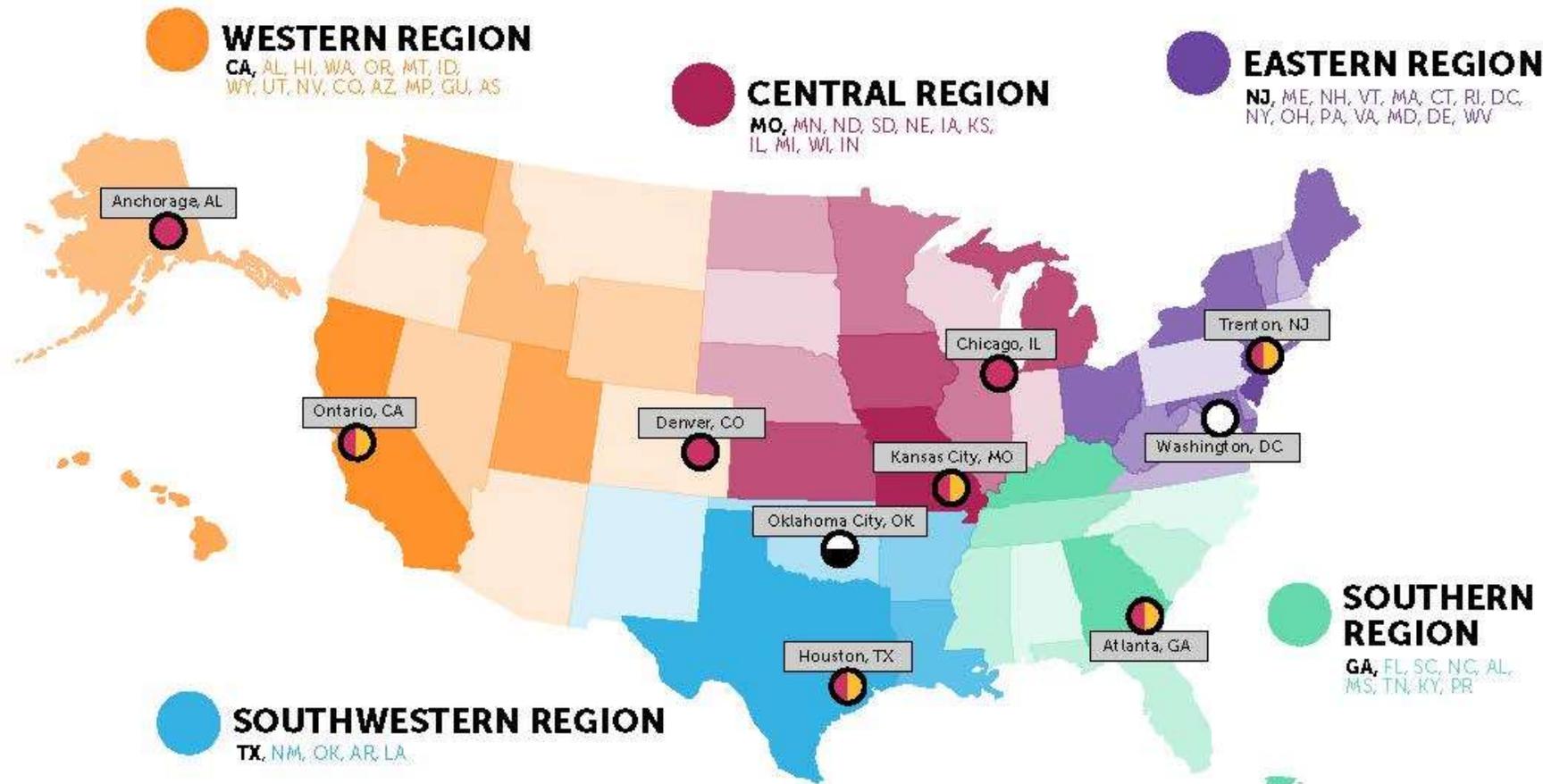
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PHMSA Organization



PHMSA Regional Offices



				
HAZMAT OFFICES	PIPELINE OFFICES	HAZMAT and PIPELINE OFFICES	HEADQUARTERS	TRAINING CENTER



PHMSA Personnel Staffing

Account	FTE Level		
	FY 2021	Onboard	Vacant
Pipeline Safety /1	308	307	1
Hazardous Materials Safety	203	188	15
Operational Expenses	70	69	1
Total	581	564	17

1/ FTE level at start of year based on the funding level. PHMSA planning on adding positions to increase regulatory staff and increase Underground Natural Gas Inspectors.

Personnel Staffing Count - as of February 19, 2021



PHMSA Grants



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Pipeline Grants

Grants	Description	FY 2020 Amounts
Technical Assistance	Grants to communities and groups for technical assistance such as engineering or other scientific analysis of pipeline safety issues and to help promote public participation in official proceedings regarding pipelines.	\$1,084,506
State Base	Grants to States supporting up to 80 percent of the cost of personnel, equipment and activities reasonably required to carryout inspection and enforcement activities of intrastate pipeline facilities.	\$52,170,831 NG \$8,765,139 HL
One Call	Grants to States for pipeline damage prevention, including promoting Call Before You Dig – 811.	\$1,058,001
Research and Development	Research and Development projects focused on providing solutions to improve pipeline safety, reduce the environmental impact of failures, and enhance the reliability of the nation’s pipeline transportation network.	\$20,811,260
Competitive Academic Agreement Program	Research and Development projects to universities to encourage the participation of student researchers to develop innovative approaches to research and problem-solving pipeline challenges.	\$1,999,912
State Damage Prevention Program	Grants to States to support pipeline safety damage prevention programs.	\$1,255,051
Underground Natural Gas Storage	Grants to participate in the oversight of underground natural gas storage facilities.	\$5,482,390



Hazardous Materials Grants

Grants	Description	FY 2020 Amounts
Hazardous Materials Emergency Preparedness	Grants to States, Territories, and Tribes to develop, improve, and carry out emergency response plans and train first responders.	\$20,105,663
Hazardous Materials Instructor Training	Grants to non-profit organizations that conduct train-the-trainer programs in preventing and responding to hazardous materials transportation incidents.	\$3,445,229
Hazardous Materials Supplemental Public Sector Training	Grants to train instructors conducting hazardous materials response training programs.	\$941,000
Community Safety Training	Grants to local communities for training and outreach programs preparing for response to transportation incidents involving hazardous materials, including crude oil and ethanol.	\$750,000
Hazardous Materials Research	Grants to provide new solutions to increase the safety, efficiency, and reliability of the nation's hazardous materials transportation network	\$6,385,992



Background Information



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Regulated Infrastructure

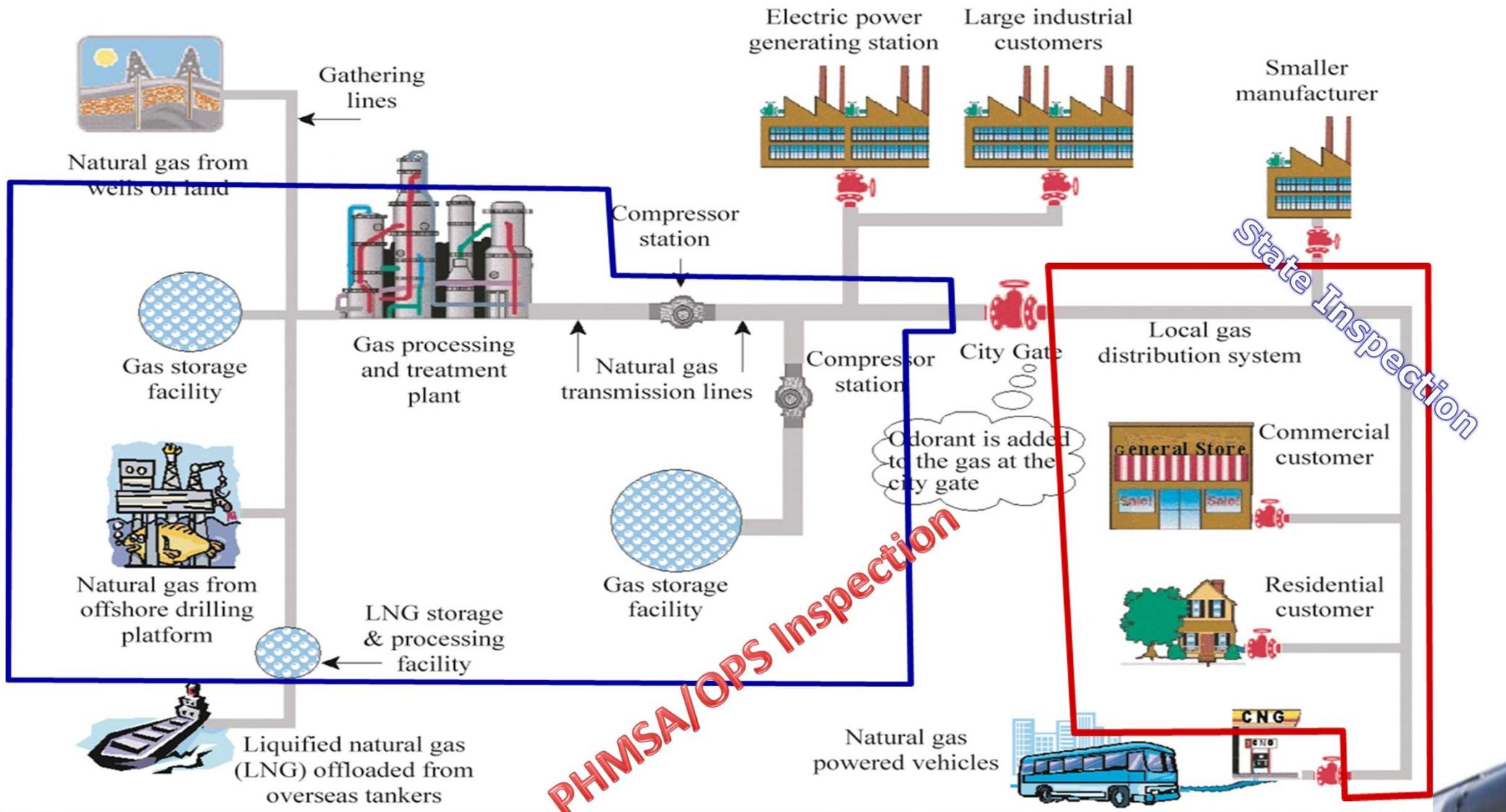
Pipeline Facilities by System Type

System Type	Miles	% of Miles	# of Operators
Hazardous Liquid	224,991 8,412 Tanks	8%	549
Gas Transmission (Interstate + Intrastate)	302,321	11%	1,109
Gas Gathering	17,756	1%	394
Gas Distribution (Mains + Services)	2,262,571	80%	1,360
TOTAL	2,807,639	100%	Some Operators have multiple system types
Liquefied Natural Gas	163 Plants	235 Tanks	90

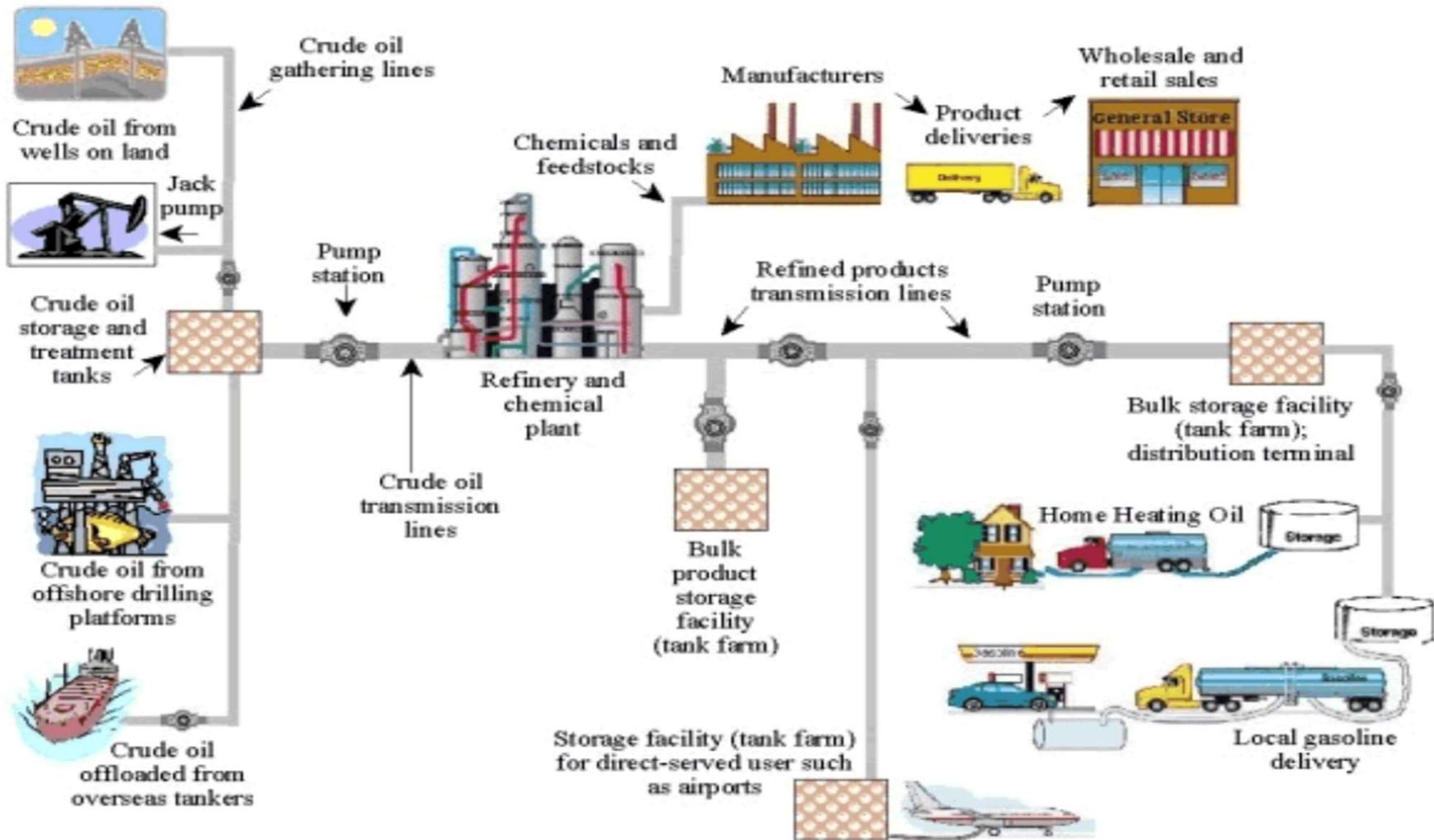
Figures as of February 19, 2021



Natural Gas – Wells to Customers



Hazardous Liquid – Wells to Customers



Safety Products and Outreach

Check the Box: Seeks to prevent serious accidents by increasing the public's awareness of everyday items which are considered hazardous materials and require specific classification, packaging, marking, and labeling to ship safely. Certain items like batteries and hairspray may seem harmless, but they can be toxic, corrosive, and even explosive, if handled inappropriately.



811-Call Before You Dig: Promotes the leading way to prevent damage to pipelines by calling 811 prior to conducting any underground excavation activity. Nearly one-third of all major pipeline accidents are caused by excavation damage and not calling state One-Call centers in advance.

Emergency Response Guidebook: Provides first responders with a go-to reference to help deal with hazardous materials accidents during the critical first 30 minutes.



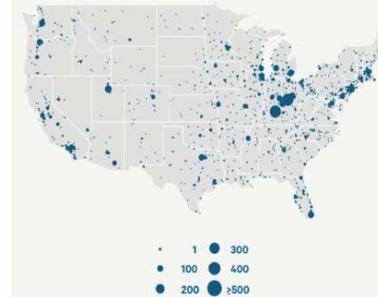
Hazardous Materials Shipments - USA

- Up to 1.2 million shipments daily
- 1.6 billion tons shipped annually by all modes
- Over 34 million containers enter U.S. ports annually
- Over 12% of all freight tonnage shipped annually
- PHMSA provides oversight of more than 40,000 registered entities and another 50,000 entities, which are not required to register
- This includes shippers, carriers, package manufacturers, third party logistic companies, and a myriad of other support entities

Each year, approximately 1,500 transportation incidents occur when **undeclared hazardous materials** are shipped.

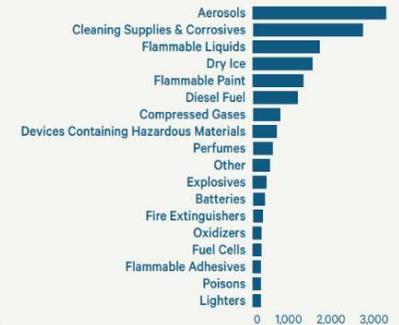
These incidents involve diverse types of hazardous materials and cause serious safety consequences for transportation workers, emergency responders, and the general public.

Incidents with Undeclared Hazmat by Location



Source: <https://hazmatonline.phmsa.dot.gov/IncidentReportsSearch/Welcome.aspx>

Incidents with Undeclared Hazmat by Commodity



Hazardous Materials “HazMat” (1)



- HazMat may be shipped in all physical forms including solids, liquids, gases, or a combination of all three (such as absorbed gases in liquid).
- They can also include hazards from dust, fumes, gas, vapor, mist, and smoke.
- HazMat includes such substances as toxic chemicals, fuels, nuclear waste products, and biological, chemical, and radiological agents.
- We are also familiar with large shipments of HazMat in bulk packages like cargo tanks and railroad tank cars.



Hazardous Materials “HazMat” (2)

- Numerous products used daily or others stored in our homes and offices are HazMat.
- Shipments of HazMat from manufacturers to consumers requires a coordinated system including more than 90,000 regulated entities across all modes of transportation.
- Increasing eCommerce usage is shifting the HazMat supply chain in new ways.
- Ensuring the safety of the transportation supply chain is the responsibility of the Office of Hazardous Materials Safety.
- We accomplish this with our DOT modal partners and 12,000+ state roadside inspectors.

Alternative Fuels



Portable Fuel Cells



Lithium Batteries



Cylinder Testing





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Hazardous Materials Information Center

1-800-HMR-4922

(1-800-467-4922)

E-mail: infocntr@dot.gov

<https://www.phmsa.dot.gov>

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202.366.7342 (Fax)



24-Hour Support



PHMSA and DOT 24-Hour Support

- National Hazmat Incident Coordinator:
405-686-4308
- National Pipeline Incident Coordinator:
888-719-9033

Other DOT Related Emergencies

- US DOT Transportation Operations Center:
202-366-1863



Questions • Comments

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Thank You

