



**SAFETY IS IN YOUR HANDS.
EVERY DIG. EVERY TIME.**



Pipeline and Hazardous Materials Safety Administration (PHMSA)

Office of Pipeline Safety (OPS)

Accident Investigation Division (AID)

2025 North/South Carolina Pipeline Safety Seminar



U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

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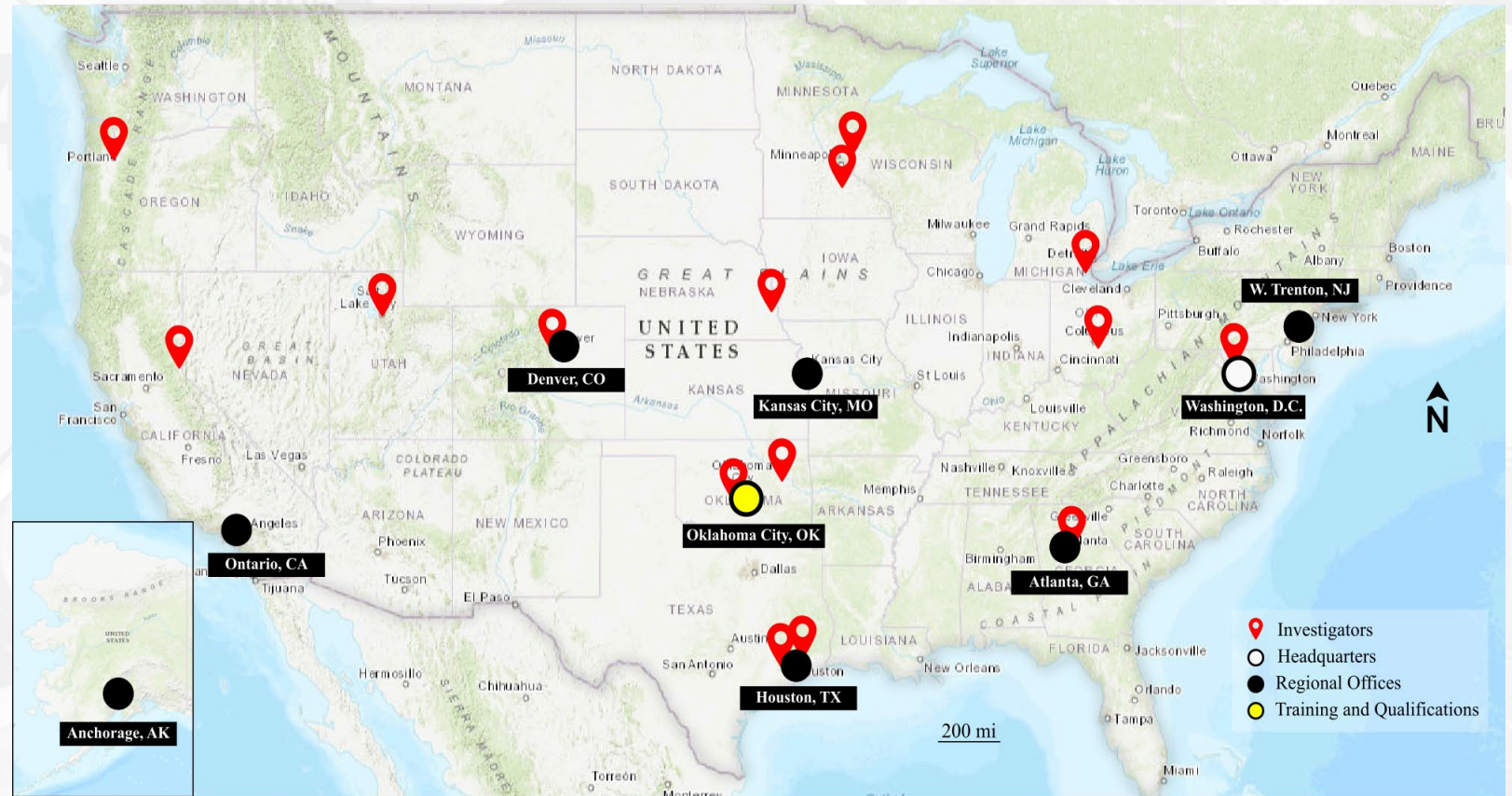
Discussion Outline

- AID Roles
- When to Deploy
- NC and SC Data Trends
- Case Study



AID Organization

- 14 Accident Investigators
- 1 Data Analyst
- Recent additions
 - Gas Distribution
 - Human Factors
 - ILI



What We Do

- AID was established on April 1, 2017
- Review, evaluate, and circulate NRC notifications
- Conduct on-site investigations
- Review operator 30-day reports
 - PHMSA's best failure data
 - Scrutinize to ensure information is current, accurate, and consistent
- Analyze and disseminate accident trend data to identify emerging trends and improve pipeline safety
- Capture and sharing of Lessons Learned



National Pipeline Incident Coordinator

- Monitors/Evaluates/Coordinates all ongoing incidents 24/7/365
- Single Point for Operators, State Partners and Agencies

NPIC Hotline (888) 719-9033

PHMSAAID@dot.gov

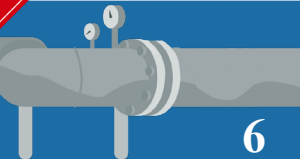


When does AID Deploy?



■ Release of product and one or more of the following:

- Fatality
- Injury
- Hazardous Liquid Spill > 500 barrels or spill reaches water
- Major Transportation Impact - highways, airports, rails
- Major Supply Impact
- Pipeline System/Operator of Interest
- Release of Toxic Chemicals – Ammonia, CO₂
- NTSB deploys
- Politically Sensitive/High Media Interest
- State Request

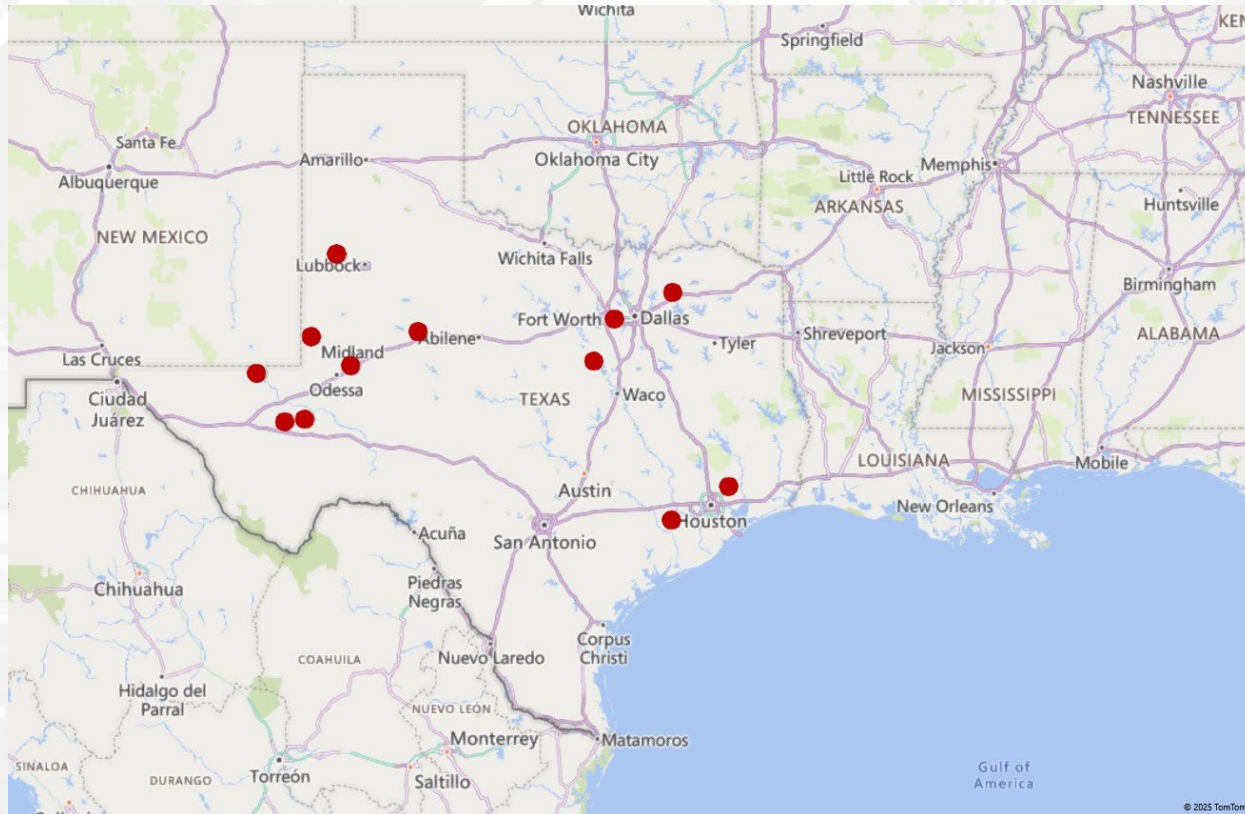


Metallurgical Examination Protocol

- Includes background information, evidence collection & preservation, chain of custody, material testing
- Revised March 2019 – Available on PHMSA AID's website
- www.phmsa.dot.gov/incident-reporting/accident-investigation-division/metallurgical-laboratory-failure-examination-protocol-pdf



Ongoing PHMSA Investigations



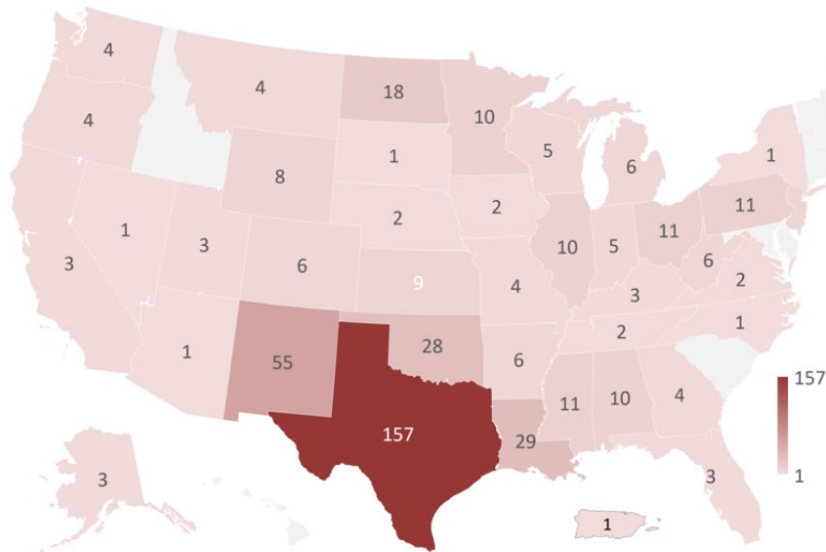
- AID has ongoing investigations.
- Investigation findings are documented in a Failure Investigation Report (FIR) and posted on PHMSA's public website.



National Incident Trends

June 1, 2024 – June 1, 2025

OPS REGULATED
INCIDENTS BY STATE - 12 MONTHS



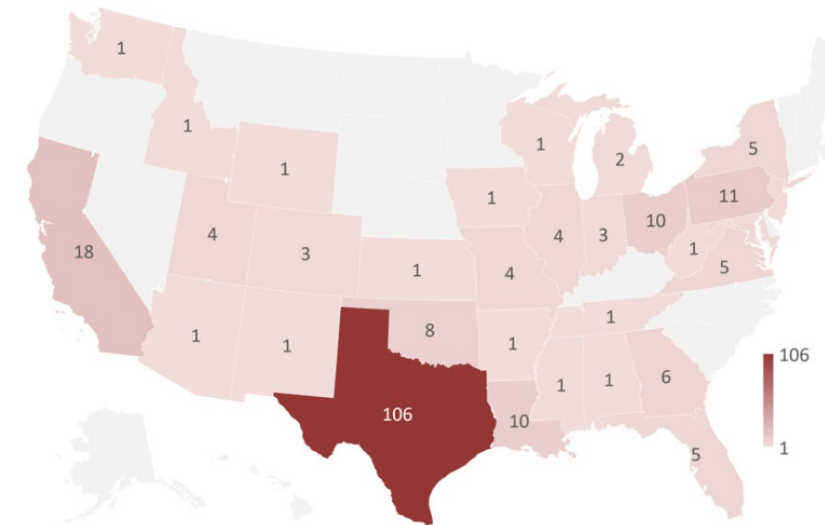
North Carolina

- 1 reportable incident
- 0 Fatalities
- 0 Injuries

South Carolina

- 0 reportable incident
- 0 Fatalities
- 0 Injuries

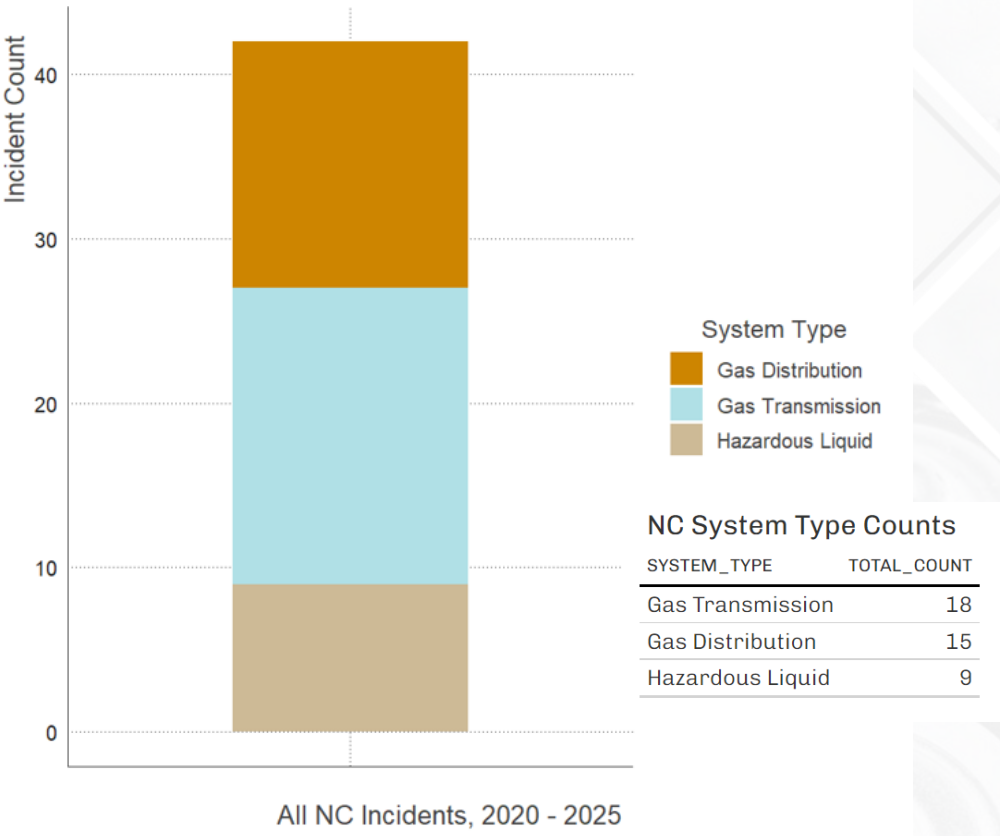
STATE REGULATED
INCIDENTS BY STATE - 12 MONTHS



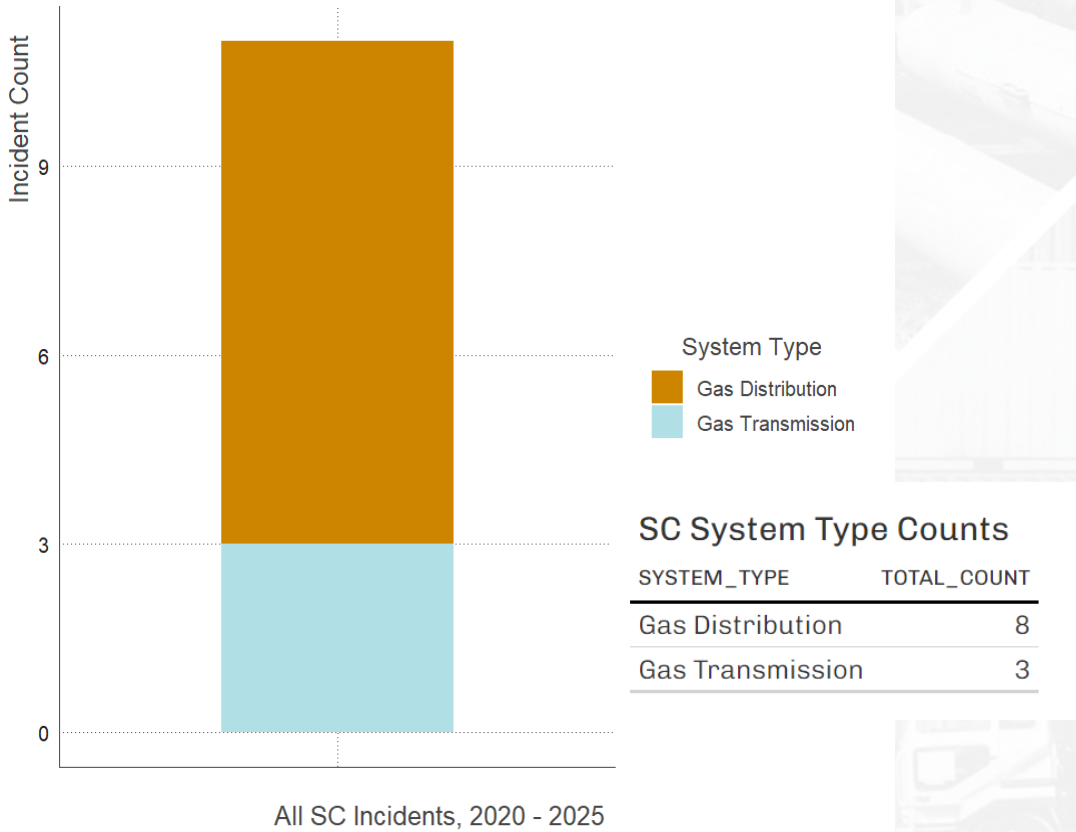
PHMSA Reportable Events

North Carolina & South Carolina - 2020 through 2025

Accidents & Incidents By System Type

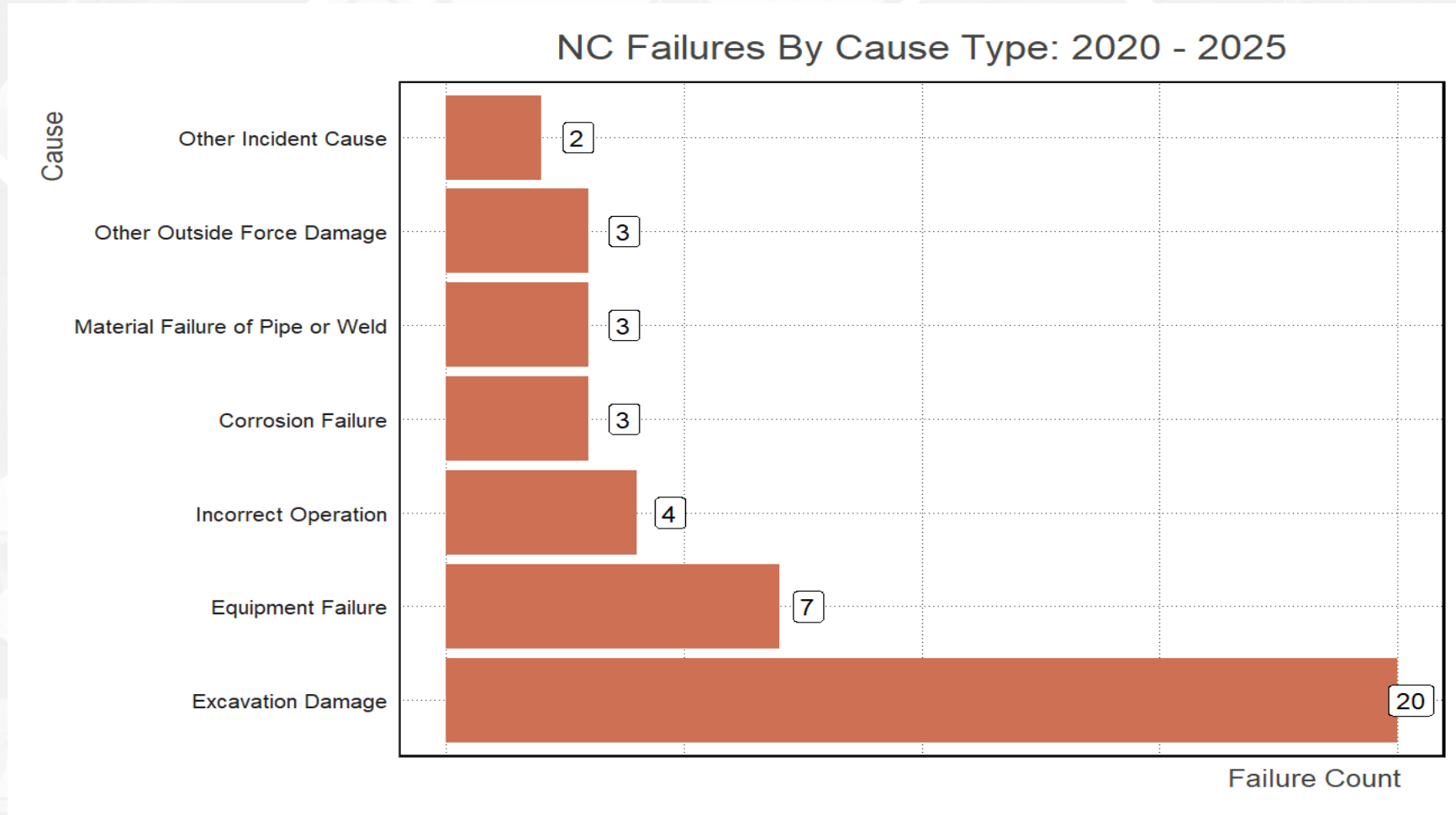


Accidents & Incidents By System Type



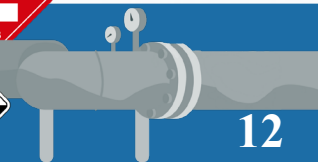
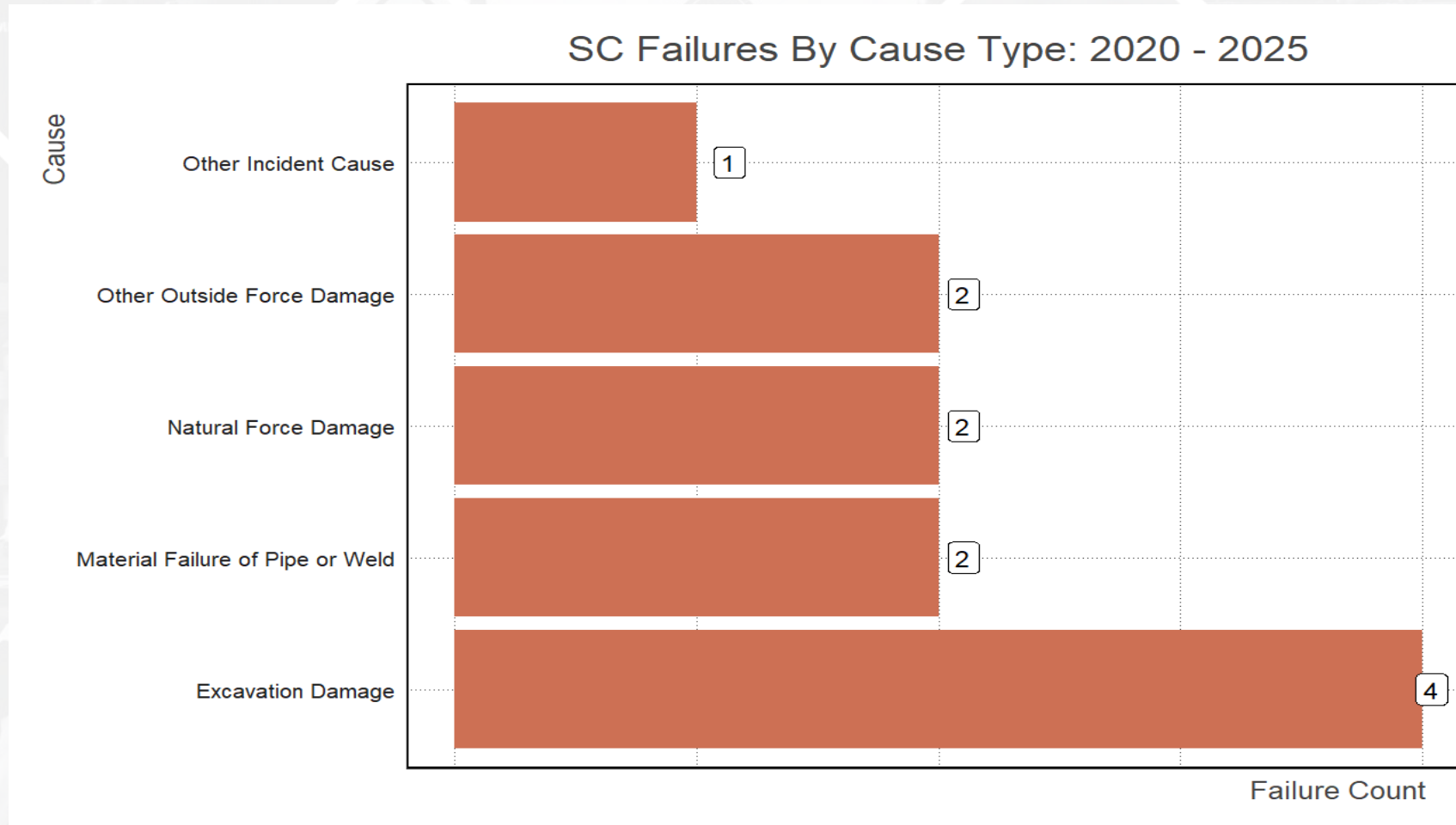
PHMSA Reportable Events

North Carolina – Cause of Failure



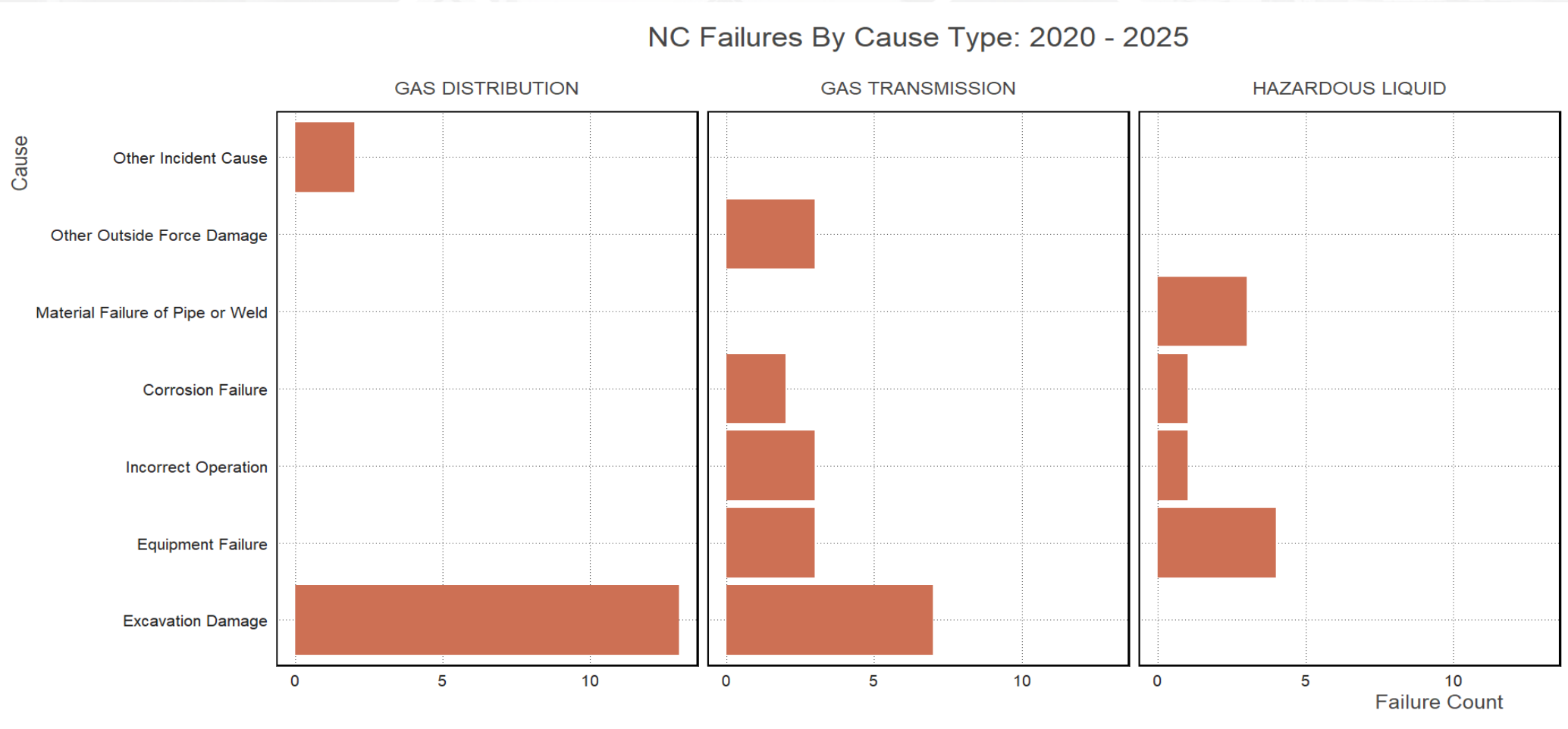
PHMSA Reportable Events

South Carolina – Cause of Failure



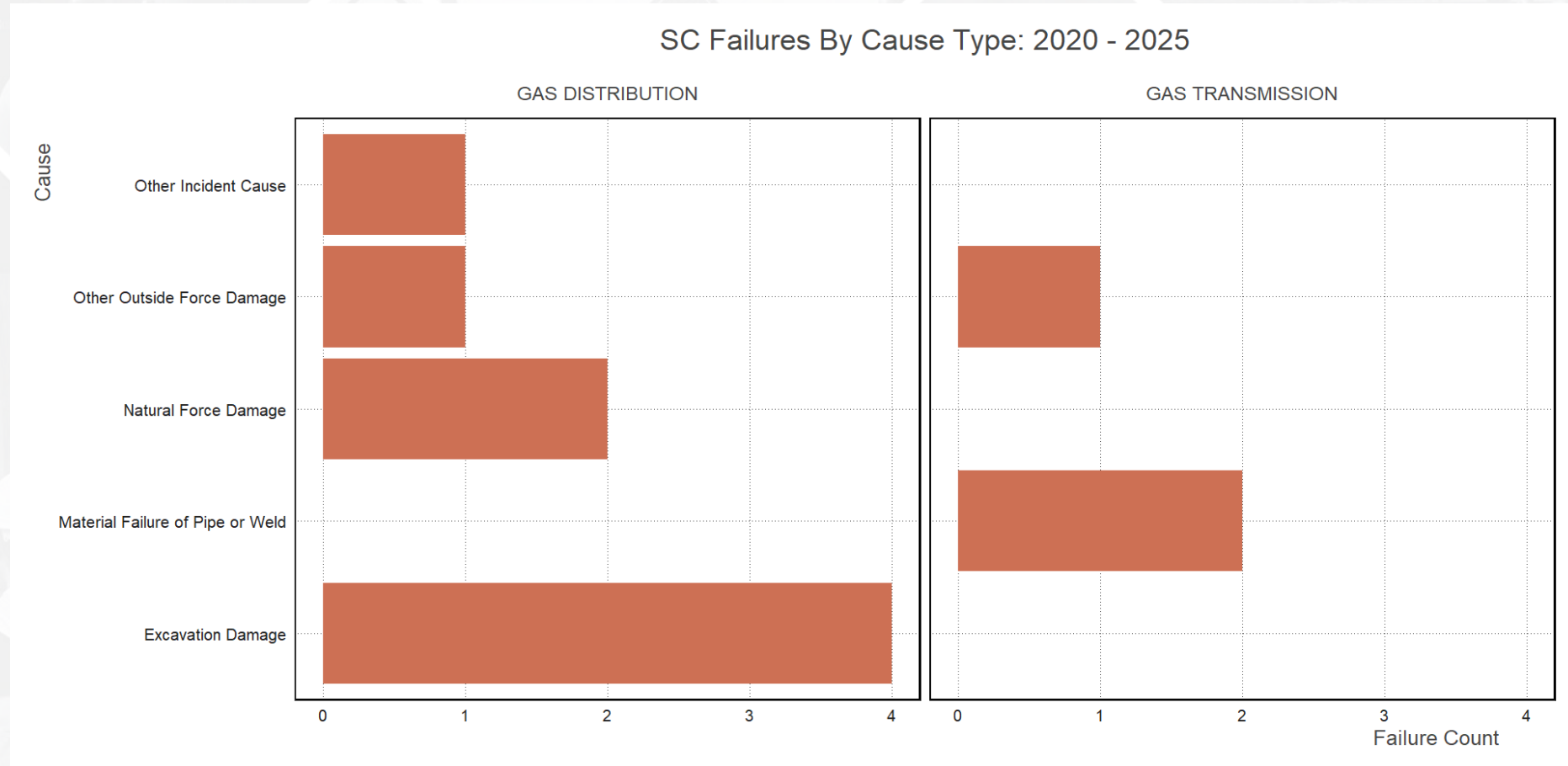
PHMSA Reportable Events

North Carolina – Cause of Failure by System



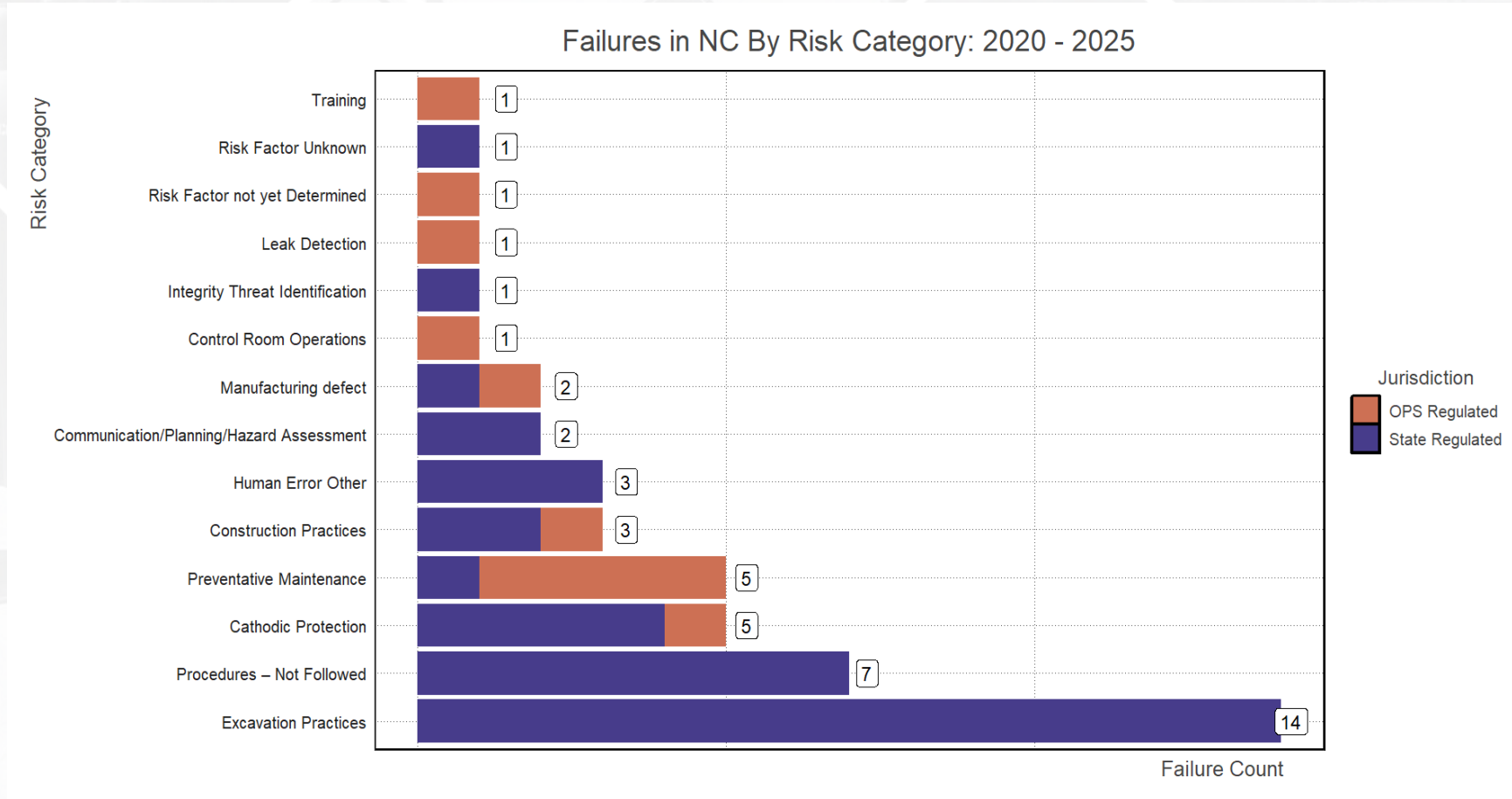
PHMSA Reportable Events

South Carolina – Cause of Failure by System



PHMSA Reportable Events

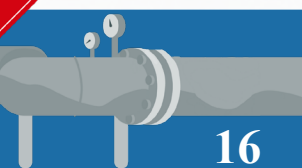
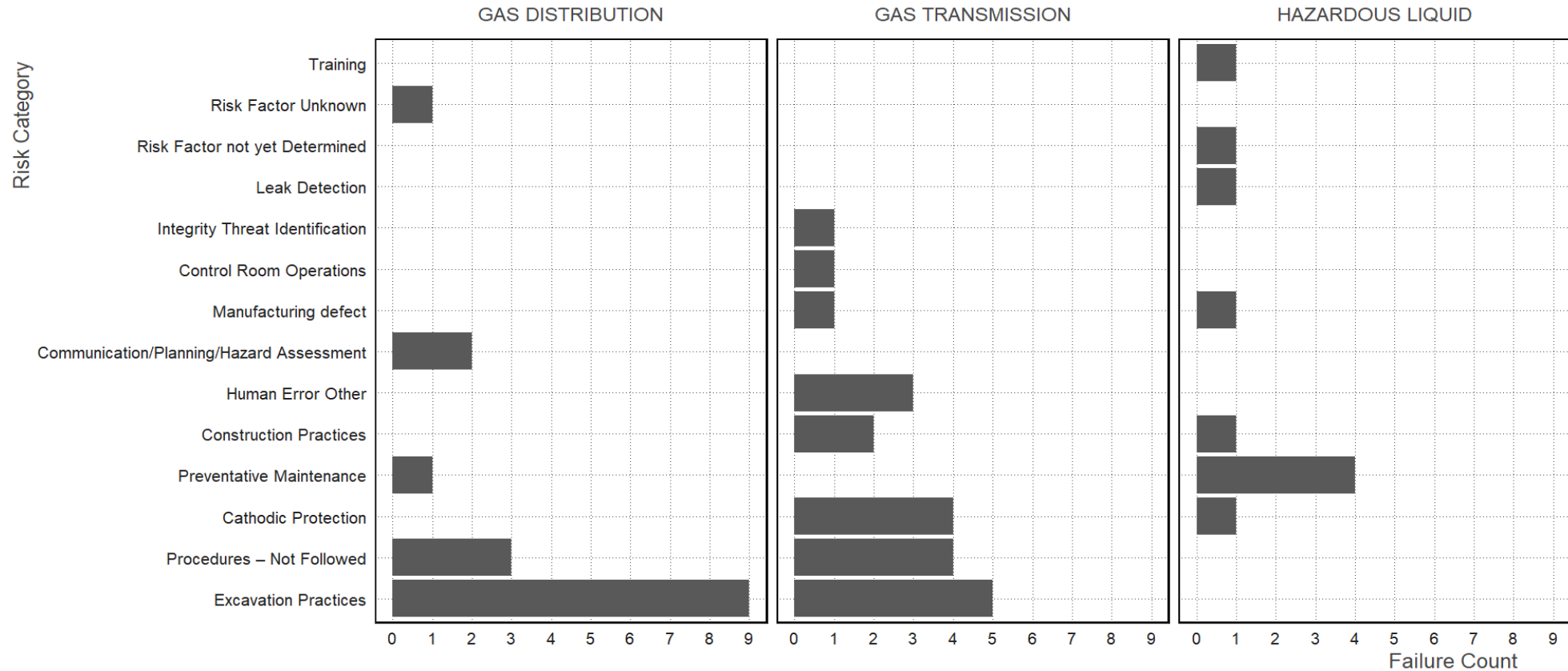
North Carolina – Risk Category



PHMSA Reportable Events

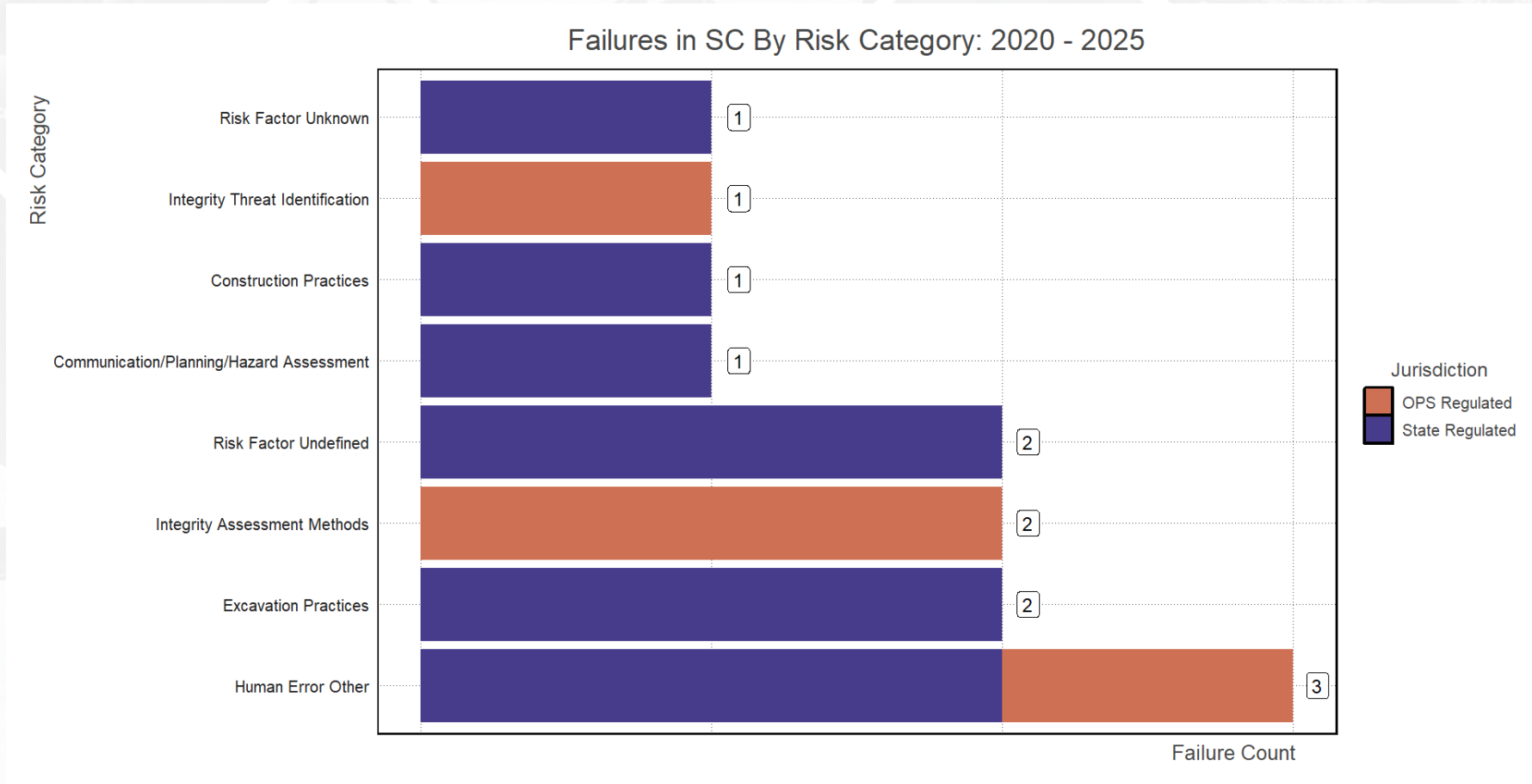
North Carolina – Risk Category by System

Failures in NC By Risk Category: 2020 - 2025



PHMSA Reportable Events

South Carolina – Risk Category



12/2/24 Natural Gas Distribution with Fatality

Avondale, Louisiana

- NTSB Investigating
 - LA DNR and PHMSA are Party to investigation
- Incident overview
 - Cement truck ran over a NG junction box
 - Junction box damaged 2" coated steel main operation at 80 psig
 - Natural gas entered sewer system
 - A house approximately 340 feet away exploded
 - 2-inch coated steel main operation at 80 psig
- 1 fatality, 5 injuries
- NTSB preliminary report available on NTSB website

AID Lead Investigator – Alvaro Rodriguez



3/12/25 Natural Gas Distribution Plantersville, Mississippi

- MS PSC investigated
 - PHMSA working with MS-PSC
- Incident overview
 - Hot tapping of 12-inch Distribution Main
 - 3 contractors performing work injured
 - 17,500 customers without gas service for extended period

AID Lead Investigator – Jake Jorgensen



4/9/25 Natural Gas Distribution Explosion Lexington, Missouri

- NTSB investigating
 - MO PSC and PHMSA working with NTSB
 - NTSB preliminary report available on NTSB website
- 1 Fatality, 2 injuries
- 5,000 customers impacted
- 3rd Party HDD excavation damage of unmarked line

AID Lead Investigator – Blesson Mathew



Picture Liberty Utilities

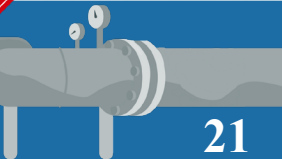
Rigging tool
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5/21/25 CO2 Release Beaver County, Oklahoma

- 4" and 6" pipelines transporting CO₂ from ethanol plant in Kansas to Oklahoma and Texas for enhanced oil recovery
- No injuries or evacuations
 - Each release was in remote area
- Small leaks forming ice balls
- Two (2) additional CO₂ releases within 3 weeks

AID Lead Investigator – Wes Mathews



1/24/2024 House explosion Jackson, Mississippi

NTSB investigating

MS PSC and PHMSA working with NTSB

NTSB preliminary report available on NTSB website

1 Fatality

- Two home explosions .7 miles from each other.
- Weather conditions rainy.
- Grade 2 leak at fatality location. Grade 3 leak on other location.
- Leaks identified on mechanical couplings and previously identified.

AID Lead Investigator – Blesson Mathew



Questions

