

Pipeline Safety Trust Annual Conference - 2015



Pipeline Performance Measures



Know what's below.
Call before you dig.

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New Orleans, Louisiana

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

To Protect People and the Environment From the Risks of
Hazardous Materials Transportation



Performance Measures Approach

- Measure Both Operator & Regulator
 - Operator Performance & Infrastructure
 - Regulator Oversight
- Use Currently Available Data
 - Identify Gaps for Future Information Collection
- Coordinate between Teams to Present Consistent Picture
- Post The Measures Publicly



Data Quality and Analysis Teams

- Representation from PHMSA & State Regulators, Pipeline Operators & Industry Associations, Pipeline Safety Advocates
- Liquid Team Identifying Measures based on the Big Questions (what people want to know)
- Gas Team Identified Measures that may be Evaluated using Data Currently Available from Annual & Incident Reports

Both teams worked through very similar measures.



Pipeline Performance Information Currently Available to the Public

- Types of Data Currently Available
 - Accidents/Incidents
 - Pipeline and Facility Characteristics
 - Enforcement and Inspection
 - Integrity Management: Assessment and Repair
- Different Data Breakdown Levels
 - Operator-Specific
 - National Aggregate
 - Safety Program



Performance Measures Corresponding to Key Objectives

- Protecting People and the Environment
- Maintain Pipeline Safety
- Special Protection for High Consequence Areas
- Smart Modernization of Infrastructure
- Effective Regulatory Oversight



Gas Distribution Performance Measures

<http://www.phmsa.dot.gov/pipeline/library/data-stats/performance-measures>

Serious Incident per Mile trend & cause pie

Significant Incident per Mile 3 trends

Leaks per Mile 3 trends & 2 cause pies

Excavation Damage 2 trends

Cast and Wrought Iron 2 trends

Steel Miles – Bare and Unprotected 3 trends

Miles by Decade Installed 6 trends



Gas Transmission Performance Measures

<http://www.phmsa.dot.gov/pipeline/library/data-stats/performance-measures>

Serious Incident per Mile trend & cause pie

Onshore Significant Incident per Mile 3 trends,
also ***HCA and non-HCA*** trends & cause pies

HCA Immediate Repair per Mile trend

HCA Leaks & ILI Detectability 2 trends & cause pies

Steel Miles – Bare and Unprotected 2 trends

Miles by Decade Installed 5 trends

Onshore Pipeline Significant Incident Rates per Decade rate chart and cause chart



DRAFT

Hazardous Liquid, excluding CO₂, Performance Measures

Serious Incident, Fatalities, Injuries 3 trends

Pipeline Right-of-Way Accidents Impacting People or Environment 2 trends

Integrity Inspection Targets for Pipeline Right-of-Way Accidents Impacting People or Environment 2 trends

Operations and Maintenance Targets for Pipeline Right-of-Way Accidents Impacting People or Environment 2 trends

Miles Inspected 7 trends



Pipeline Performance Measure Anatomy

Title & Date

Gas Transmission Onshore Significant Incidents per 1,000 Miles
 Time run: 11/12/2015 4:40:30 PM
 Data Source: US DOT Pipeline and Hazardous Materials Safety Administration
 Data as of 11/11/2015

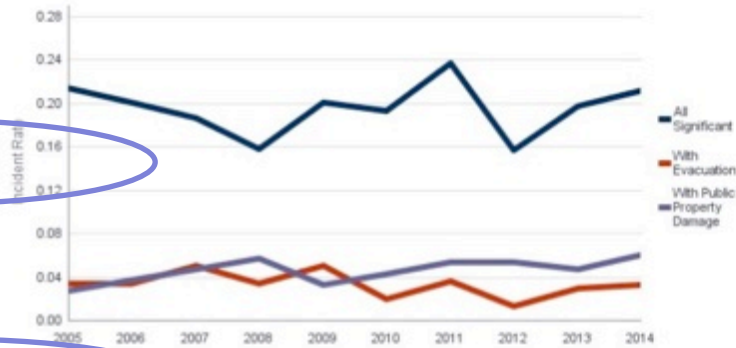
The gas transmission **Significant Incident** per 1,000 mile rate has fluctuated since 2005 and remained flat overall.

People have been evacuated from buildings near the incident in only 17% of the **Significant Incidents**. The rate of Significant Incidents with evacuation has remained flat since 2005.

Property not owned by the pipeline operator is damaged in about one quarter of the **Significant Incidents**. The rate of Significant Incidents with public property damage has doubled since 2005.

Analysis

Chart



Report Details

Report Details

Operator View

Operator View

Safety Program View

IM Safety Program View

Numerator & Denominator

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Significant Incidents	63	59	55	47	60	58	71	47	59	63
Onshore Miles	294,800	293,706	294,939	297,267	298,977	299,358	299,730	298,571	298,287	297,892
Significant Incidents with Evacuation	10	10	15	10	15	6	11	4	9	10
Significant Incidents with Public Property Damage	8	11	14	17	10	13	16	16	14	18

Significant Incidents include a fatality, or an injury requiring overnight, in-patient hospitalization, or \$50,000 or more in total costs, measured in 1984 dollars.

Terms & Definitions



Pipeline Performance Measure Anatomy

Title & Date

Data generally refreshed each business day

Gas Transmission Onshore Significant Incidents per 1,000 Miles

Time run: 11/12/2015 4:48:30 PM

Data Source: US DOT Pipeline and Hazardous Materials Safety Administration

Data as of **11/11/2015**



Pipeline Performance Measure Anatomy Analysis

The gas transmission **Significant Incident** per 1,000 mile rate has fluctuated since 2005 and remained flat overall.

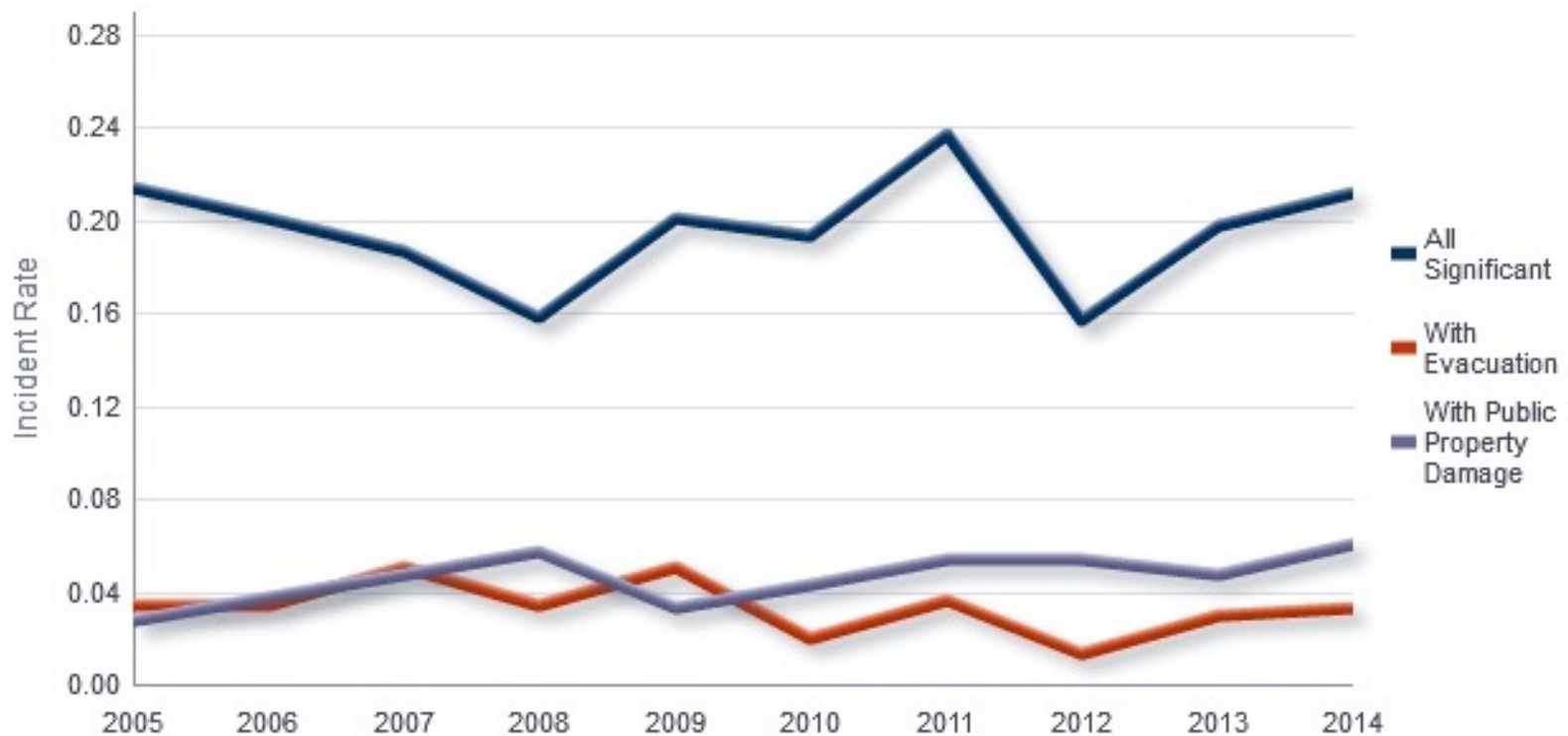
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Property not owned by the pipeline operator is damaged in about one quarter of the **Significant Incidents**. The rate of Significant Incidents with public property damage has doubled since 2005.



Pipeline Performance Measure Anatomy Chart

Line, bar, or pie



Pipeline Performance Measure Anatomy

Numerator & Denominator

When the measure includes a rate per mile, the numerator and denominator are displayed below the chart

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Significant Incidents	63	59	55	47	60	58	71	47	59	63
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Pipeline Performance Measure Anatomy

Terms & Definitions

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Pipeline Performance Measure Anatomy

“Report Details” Link

When the measure includes incidents, this link load a report with incident details and link to Pdf of the entire report

Gas Transmission Onshore Significant Incidents 2005 - 2014

Time run: 11/12/2015 5:51:09 PM

Data Source: US DOT Pipeline and Hazardous Materials Safety Administration

Data as of **11/11/2015**

Notes:

IM is Integrity Management

Pdf	Operator ID	Operator Name	Incident Year	Incident Date 	Incident County	Incident State	Report ID	Serious?	Significant?	In In
Pdf	22655	WBI ENERGY TRANSMISSION, INC.	2014	12/30/2014	GOLDEN VALLEY	NORTH DAKOTA	20150011	No	Yes	IN
Pdf	15007	PACIFIC GAS & ELECTRIC CO	2014	12/23/2014	BUTTE	CALIFORNIA	20150010	No	Yes	IN



Pipeline Performance Measure Anatomy

“Operator View” Link

Loads a report of the measure ranking individual operators

Gas Transmission Onshore Significant Incidents per 1,000 Miles – Operators with 100 or more onshore miles

Time run: 11/12/2015 5:47:40 PM

Data Source: US DOT Pipeline and Hazardous Materials Safety Administration

Data as of: 11/11/2015

Operator ID	Operator Name	10 Year Average (incidents per 1,000 miles)	5 Year Average (incidents per 1,000 miles)	△▽	10 Year Significant Incident Count	5 Year Significant Incident Count	2014 Miles
32262	PAA NATURAL GAS STORAGE, LLC	1.15	2.30		2	2	174
12350	CENTERPOINT ENERGY RESOURCES CORP., DBA CENTERPOINT ENERGY MINNESOTA GAS	1.15	2.29		2	2	157
2596	COLUMBIA GAS OF OHIO INC	0.77	1.54		1	1	130
32113	ENLINK NORTH TEXAS PIPELINE, LP	0.74	1.47		1	1	136



Pipeline Performance Measure Anatomy

“Safety Program View” Link


Loads a report of the measure ranking safety programs

Gas Transmission Onshore Significant Incidents per 1,000 Miles – IM Safety Program with 100 or more onshore miles

Time run: 11/12/2015 5:49:49 PM

Data Source: US DOT Pipeline and Hazardous Materials Safety Administration

Data as of: 11/11/2015

IM Safety Program Name	2012 and Forward (incidents per 1,000 miles) 	2012 and Forward Significant Incident Count	2014 Onshore Miles
PLAINS	3.83	2	174
COLUMBIA GAS OF OHIO INC	2.57	1	130
CENTERPOINT ENERGY RESOURCES CORP., DBA CENTERPOINT ENERGY MINNESOTA GAS	2.12	1	157
VIRGINIA NATURAL GAS	1.74	1	191
LACLEDE GAS CO	1.44	1	231
TARGA	1.08	1	219



Performance Measures Next Steps

- Reconvene the team
- Develop summary report with thumbs-up or thumbs-down for each measure
- Discuss improvements to measures or additional measures, including new data needed for additional measures
- Address enforcement related metrics



Thank you



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