

API Pipeline Conference & Control Room Forum

April 25-27, 2017

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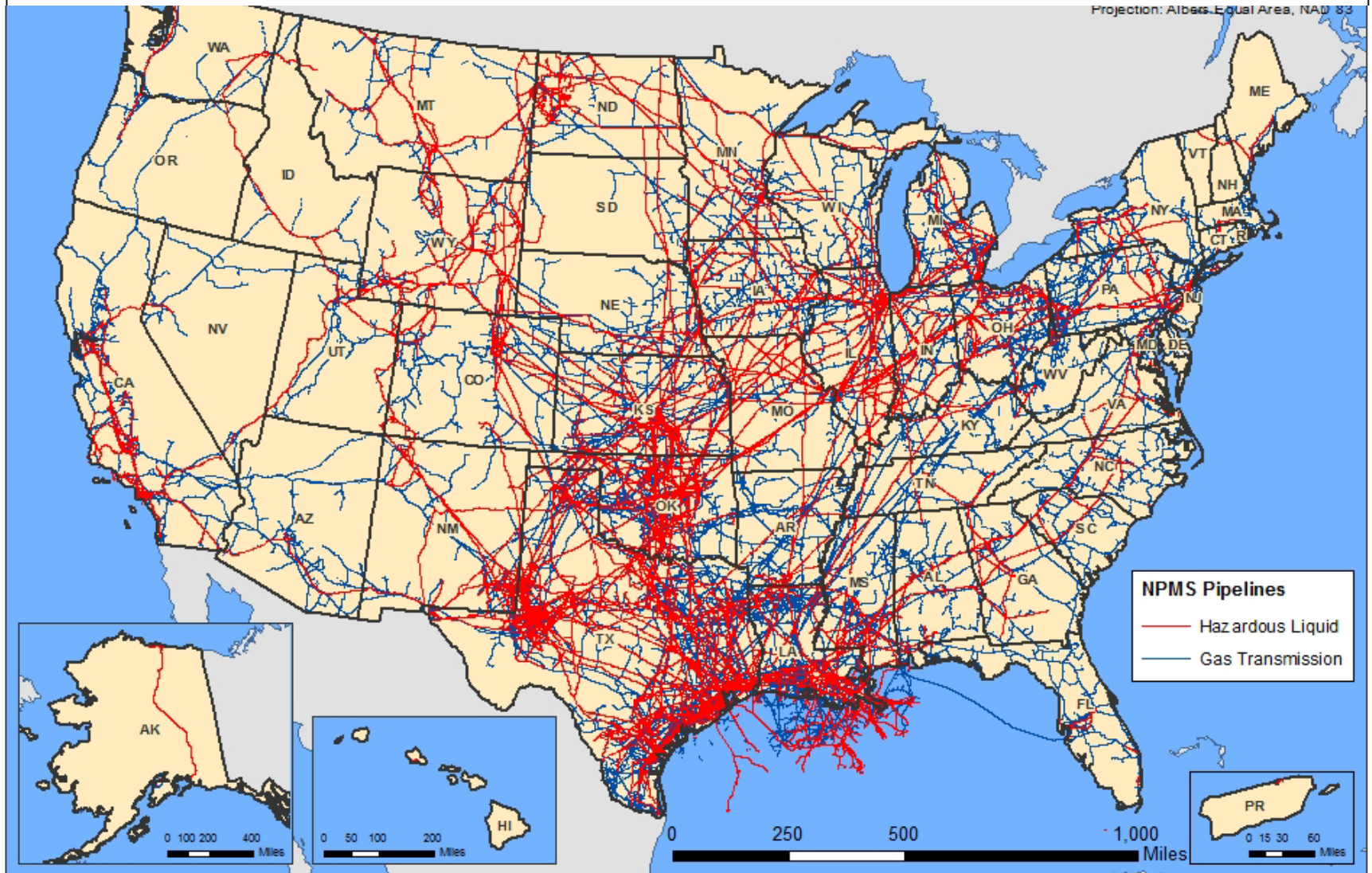
U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

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



Gas Transmission And Hazardous Liquid Pipelines

Projection: Albers Equal Area, NAD 83

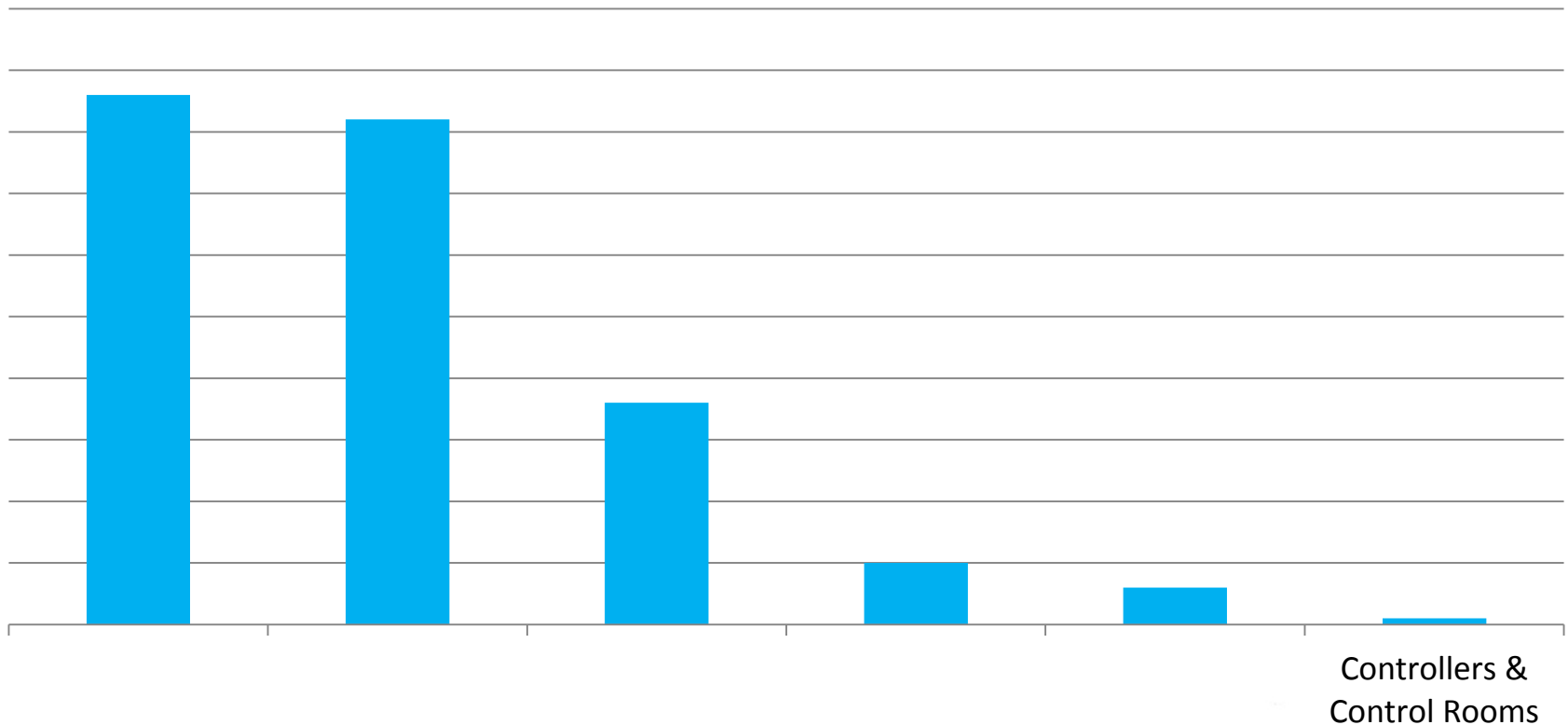


Control Room Regulations - Objective

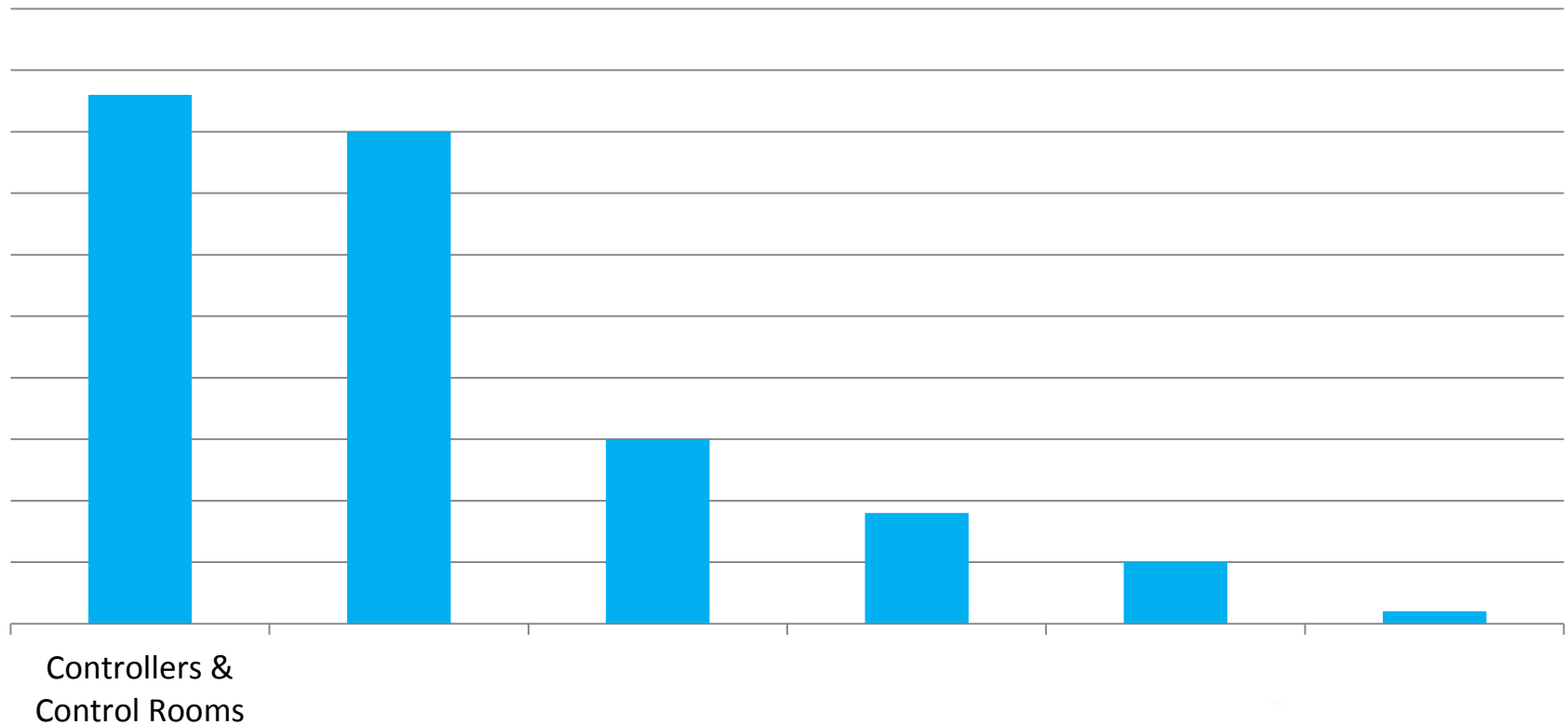
- Help assure controllers will continue to be successful in maintaining pipeline safety and integrity
 - Verify that procedures, systems and equipment are well thought out, and function as designed
 - Assure pipeline operators are addressing fatigue risks in the control room



Principle Cause of Pipeline Incidents and Accidents



Who initially detects Pipeline Leaks & Failures



PHMSA Inspections

Completed Thru 2016

Year	Gas Transmission (GT)	Hazardous Liquid (HL)	Combined GT & HL	Total
2011	10	6	1	17
2012	5	14	10	29
2013	15	10	7	32
2014	14	17		31
2015	1	2	2	5
2016	3	5	3	11
	48	54	23	125

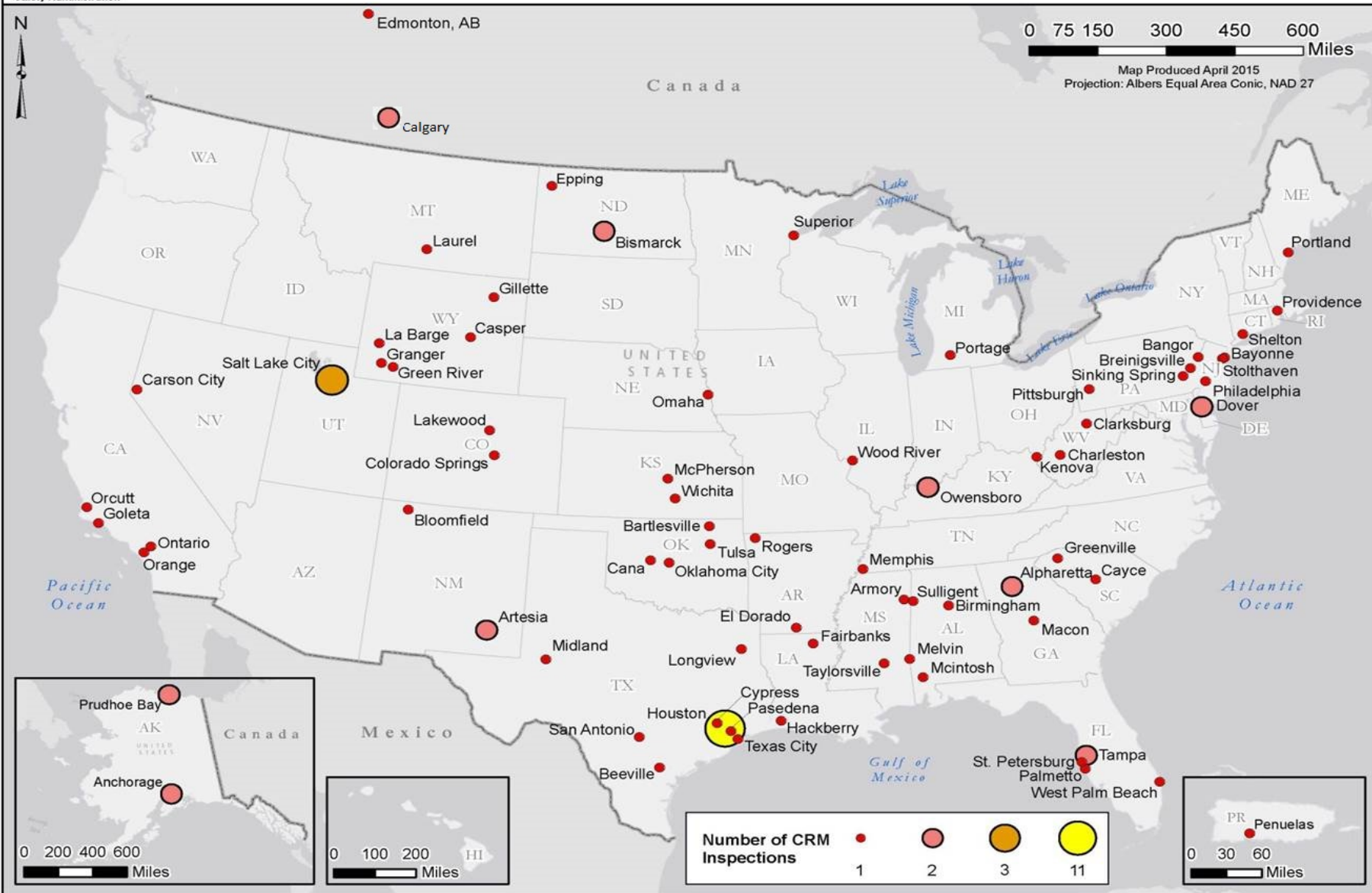
State Regulator Inspections not shown





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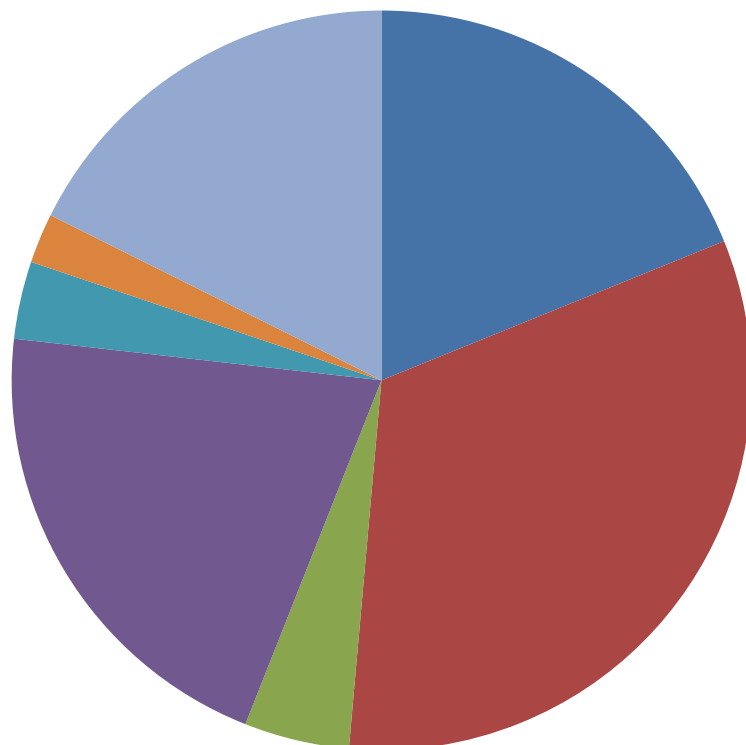
Completed PHMSA CRM Inspections (as of end of 2016)



Percent of National Mileage

Accounted for in CRM Inspections

GT & HL



- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- Remaining

331,343 miles



GT Compliance Cases Thru 2016

Year	Notice of Amendment	Notice of Probable Violation	Warning Letter	Total
2012	3		1	4
2013	4			4
2014	3	1	2	6
2015	5	1	1	7
2016			2	2
Totals	15	2	6	23

\$ 17,300



HL Compliance Cases Thru 2016

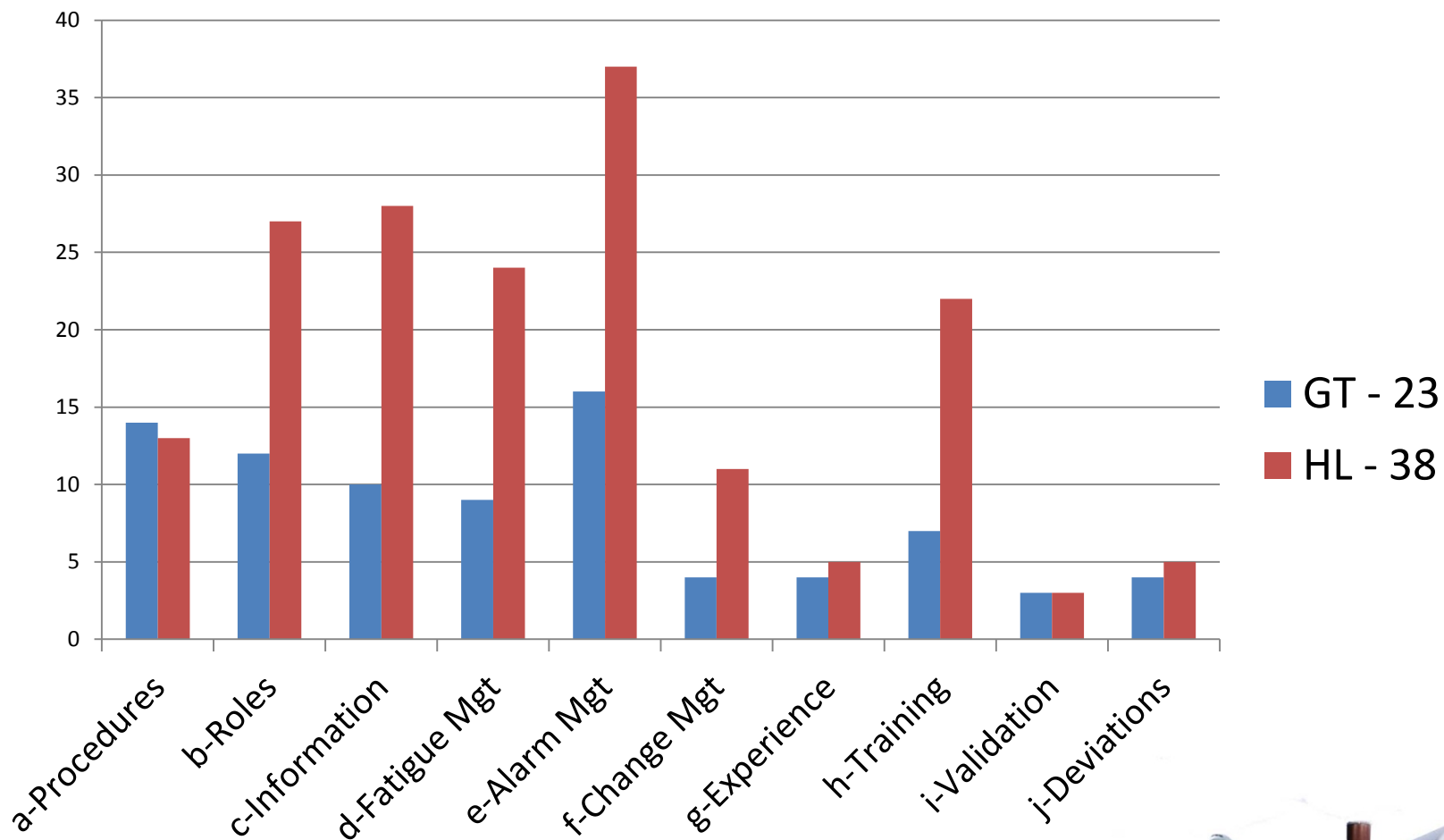
Year	Notice of Amendment	Notice of Probable Violation	Warning Letter	Total
2012	7			7
2013	4	2	1	7
2014	5	3	4	12
2015	4	1	2	7
2016	2	1	2	5
Totals	22	7	9	38

\$ 151,200



61 Compliance Cases : Items Cited

Through 2016



Roles & Responsibilities

- Roles
 - Controllers Scope of Authority
 - Available (and accessible) Resources
 - Procedures & Documentation
- Responsibilities
 - Training & Experience
 - Accountable to Take (timely) Action
 - Pipeline Controls and/or Contacting Others



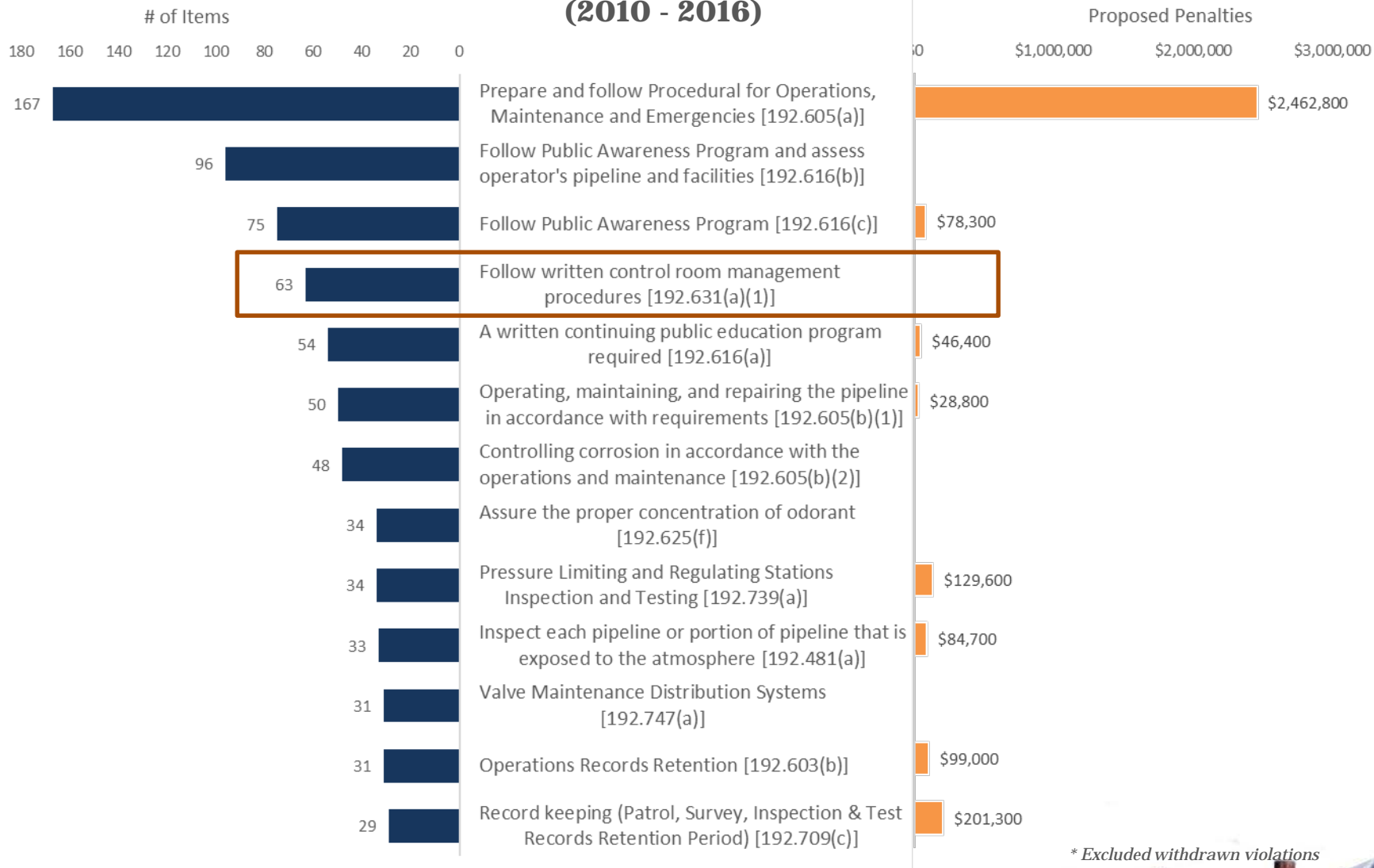
Notable Enforcement Items Cited Thru 2015

Code Part	Description	Count
(a)(1)	Procedures	25
(e)(5)	Monitor General Activity, Workload	14
(b)(4)	Recording Controller Shift Change	13
(c)(2)	Point-to-Point Verification	13
(d)(4)	Fatigue Mitigation, Max Hours	12
(e)(1)	Alarm Management Review	10
(f)(1)	Change Management, Coordination	9
(b)(1)	Controller Authority and Responsibility	8
(b)(3)	Controller's Role during Emergencies	7
(c)(1)	Criteria to Implement API RP 1165	7



Most Cited Regulations – Natural Gas Pipelines

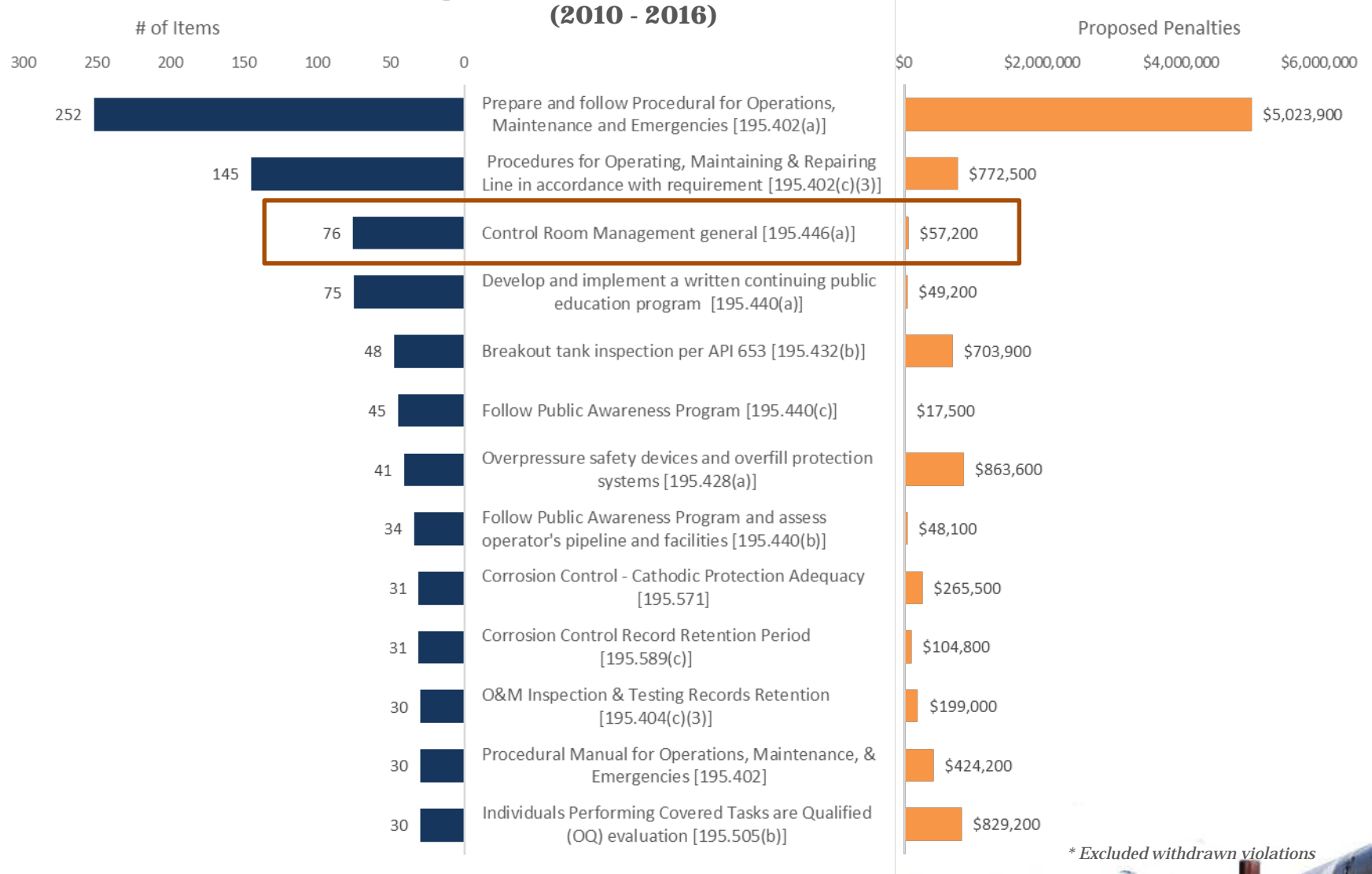
(2010 - 2016)



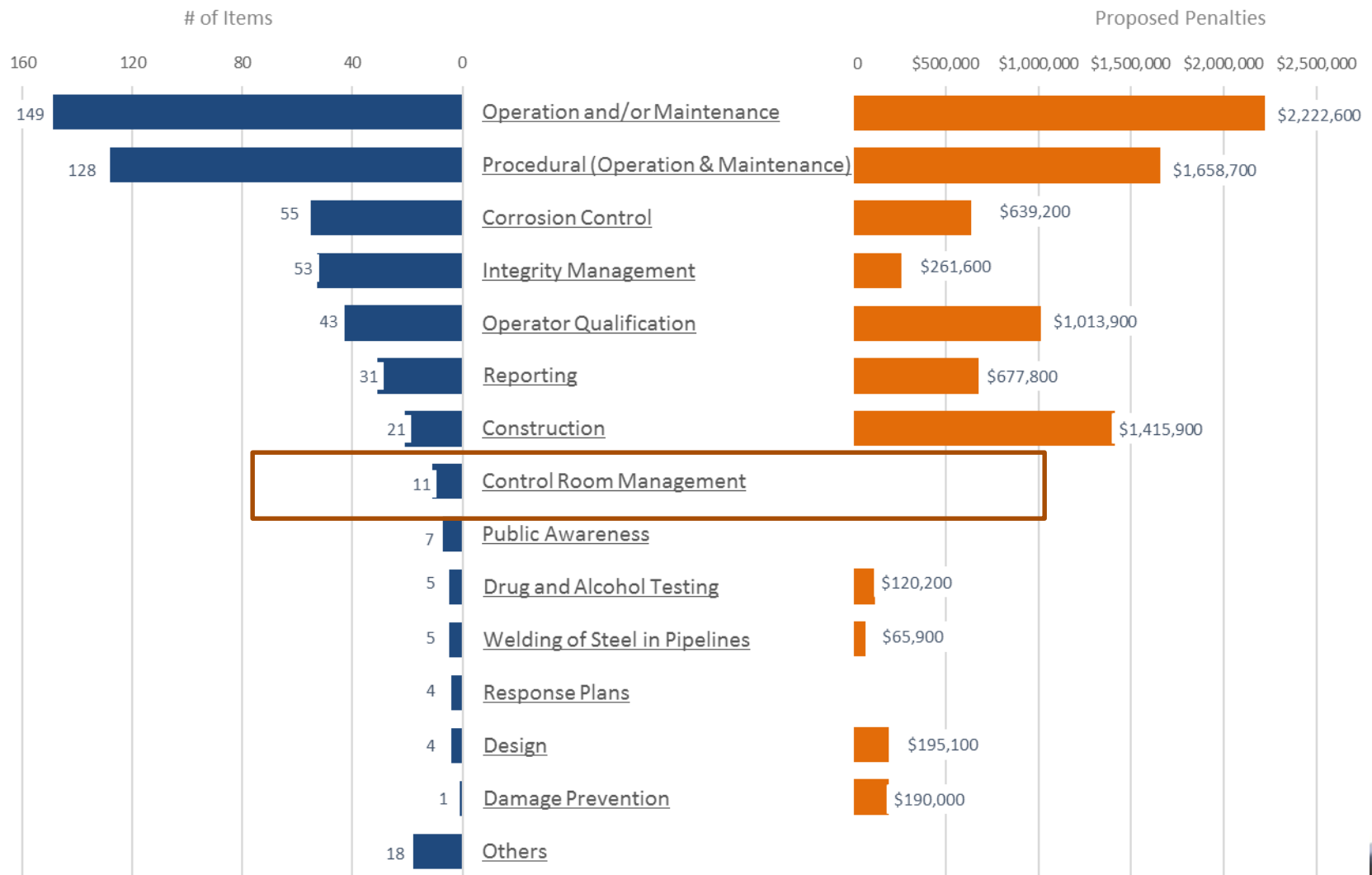
* Excluded withdrawn violations



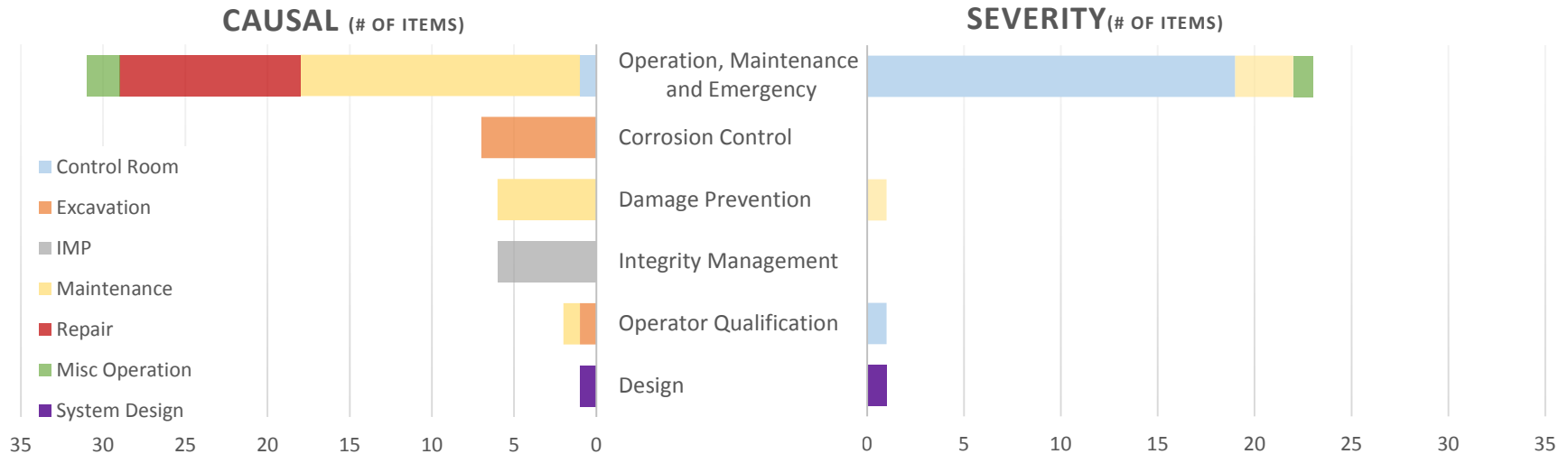
Most Cited Regulations – Hazardous Liquids



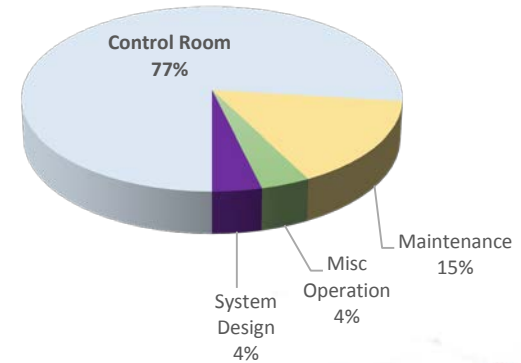
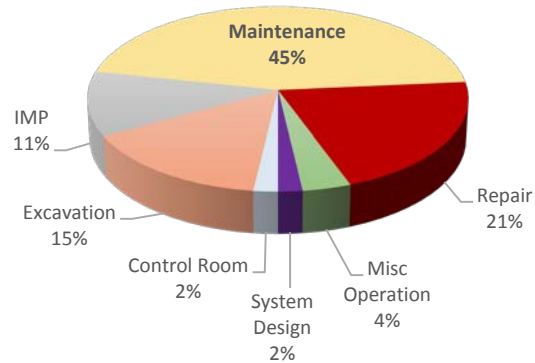
Cited Regulation Types (2016)



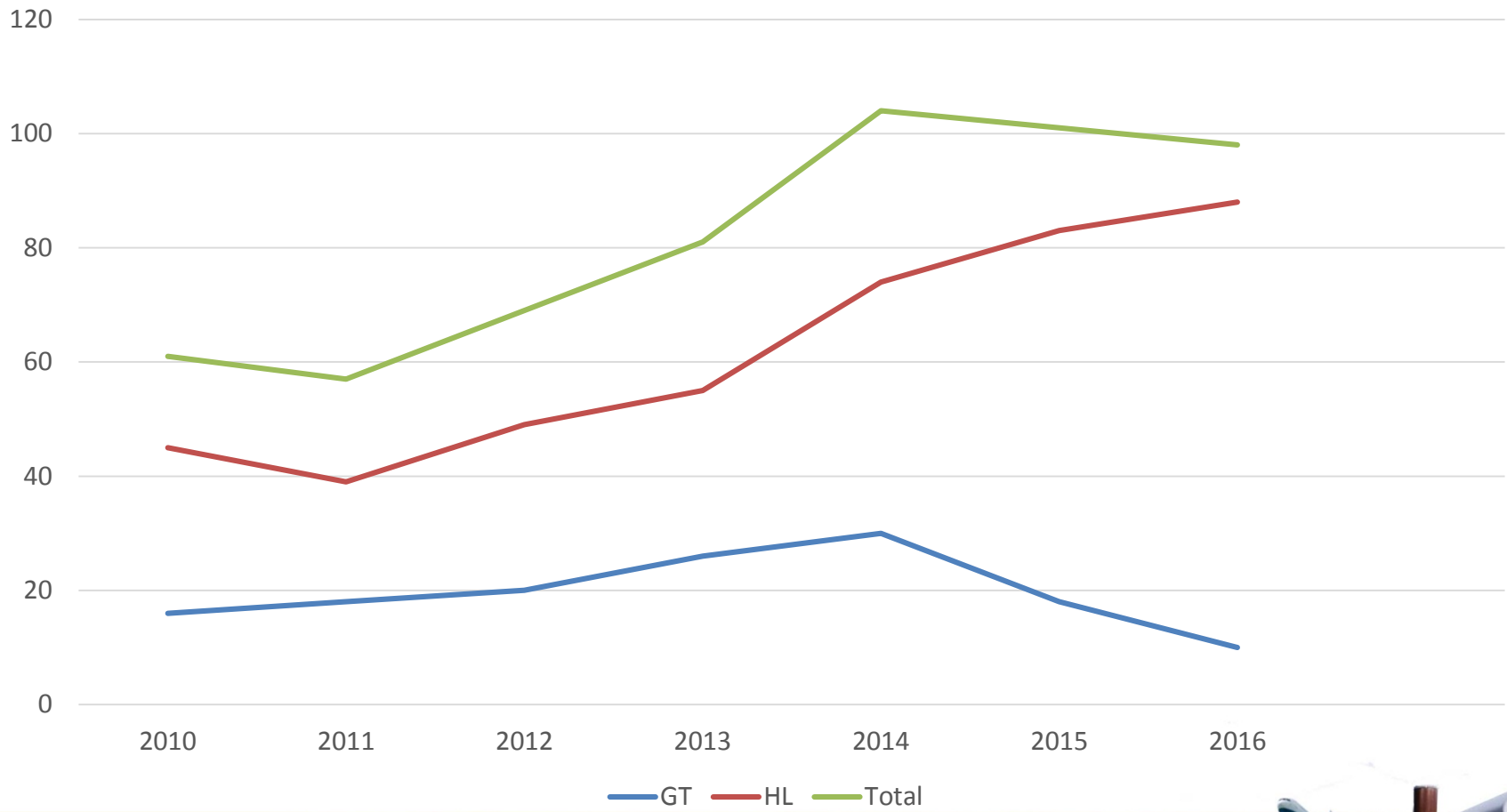
Violations Alleged or Found to be Causal to Incidents or that Increased the Severity of Incidents (2010 - 2016)



** Excluded withdrawn violations*



Control Room Checked on Incident / Accident Report Forms



NTSB

Safety Recommendations

- Report PAR 12-01
- July 25, 2012
- P-12-007
 - Develop Regulations for Team Training
- P-12-008
 - OQ for certain Control Center Staff



CRM Regulation Additions

- Effective Date : March 24, 2017
- Section (b)
 - The Roles, Responsibilities and Qualifications of Others
- Section (h)
 - Control Room Team Training



Roles and Responsibilities : (b)(5)

- The roles, responsibilities and qualifications of others
- Who have the authority to direct or supersede the specific technical actions of a controller



Training : (h)(6)

- Control room team training and exercises that include both controllers and other individuals, who would reasonably be expected to operationally collaborate with controllers during normal, abnormal or emergency situations.
- No later than January 23, 2018



Program Information

- **Inspection Criteria & Guidance**
 - **<http://primis.phmsa.dot.gov/crm/index.htm>**
- **Case Details**
 - **PHMSA Stakeholder Communications**
 - **<http://primis.phmsa.dot.gov/comm>**
 - **Web Search “cpf 192.631”**
 - **Web Search “cpf 195.446”**



Control Room Management



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