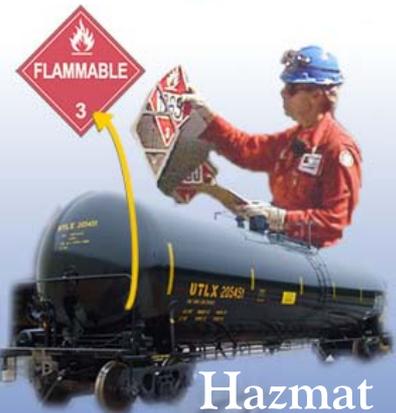




# Railroad Safety



# Enhancing Railroad Transportation Safety

**William S. Schoonover**

Staff Director, HM Division

Federal Railroad Administration

Presentation for the State Program Managers

August 24, 2010

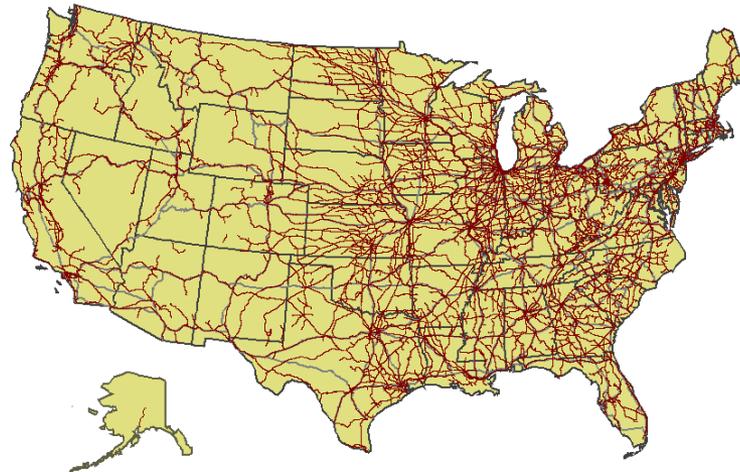


# Railroad Safety



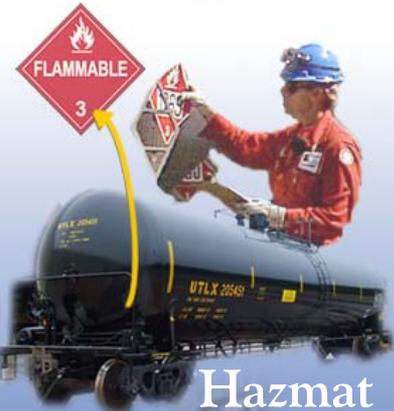
# The Impact of Rail HM Transport

- 18,800 of the 34,600 “places” in the continental US reside near rail lines
- All but 2 state capitals have rail lines operating in their boundaries
- 444 of the 448 continental US urbanized areas with populations greater than 50,000 intersect rail lines
- Railroads move more than 2 Million HM shipments annually





# Railroad Safety



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# Recent History of NARs and OTMAs

<i>Year</i>	<i>NAR</i>	<i>OTMA</i>
2004	673	333
2005	742	333
2006	660	354
2007	670	380
2008	701	444
2009	628*	600**



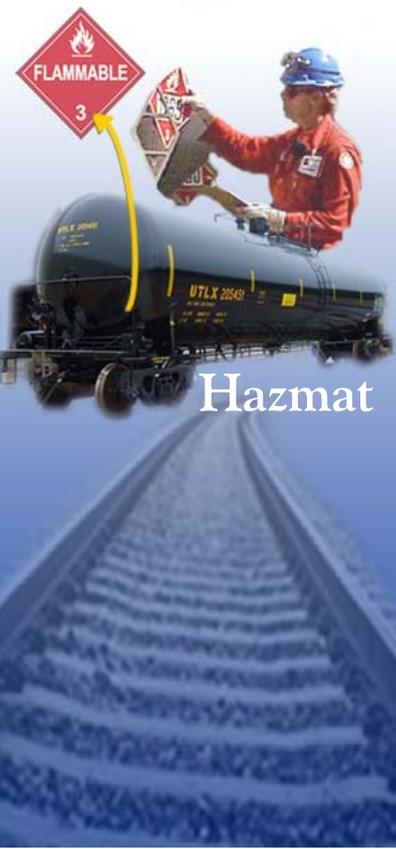
## NAR and OTMA reports from 2004-2009

\*Value extrapolated from the number of reported NARs after the first 6 months of 2009.

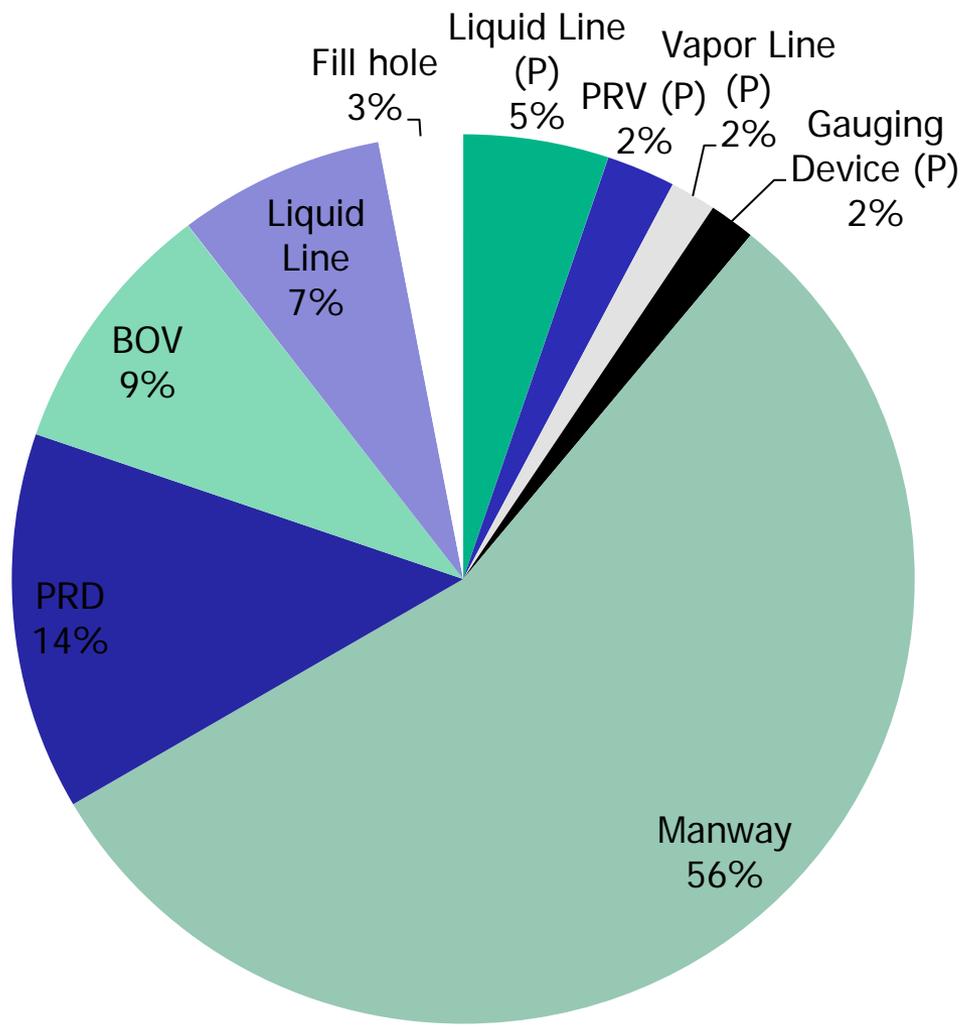
\*\*Number of reported OTMS as of 12/3/09.

Non-Accident Release (NAR)  
One Time Movement Approval (OTMA)

# Railroad Safety



# 2007 NAR Data Summary

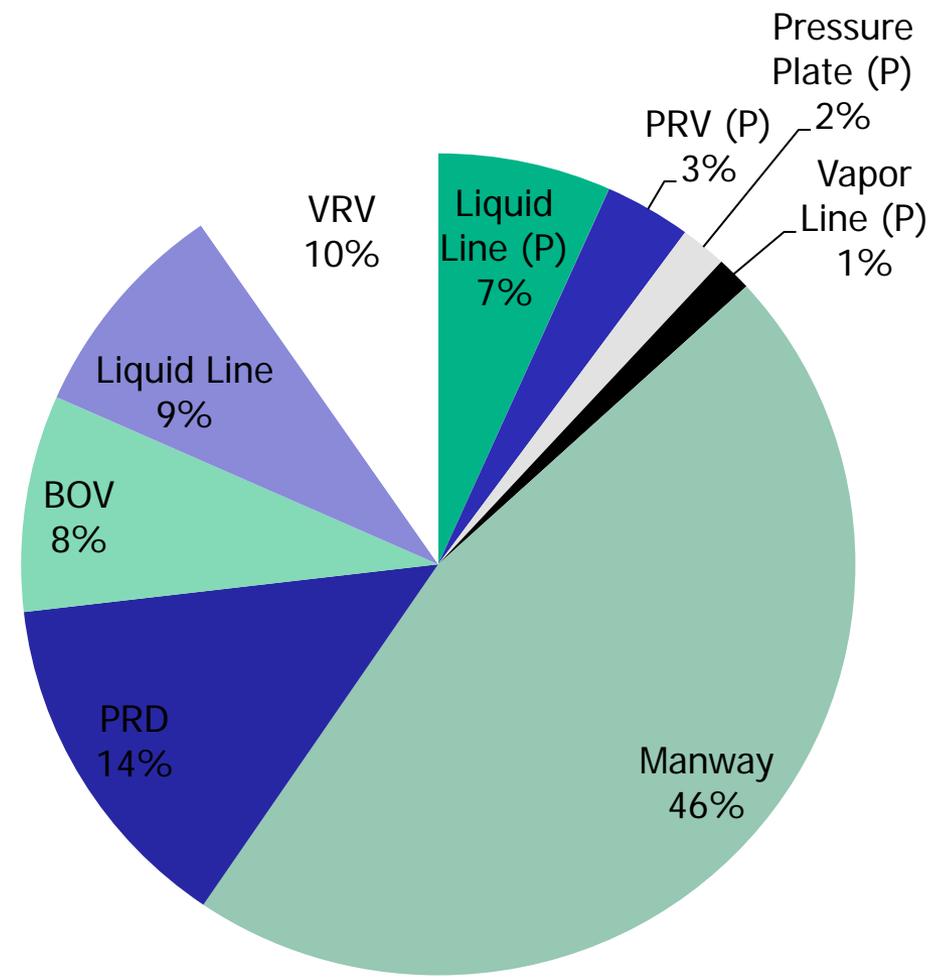


(P) Indicates a pressure car feature.

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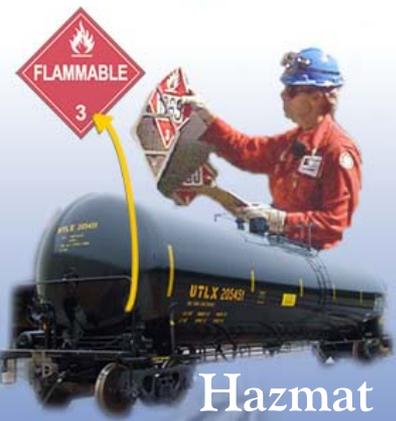


## 2008 NAR Data Summary

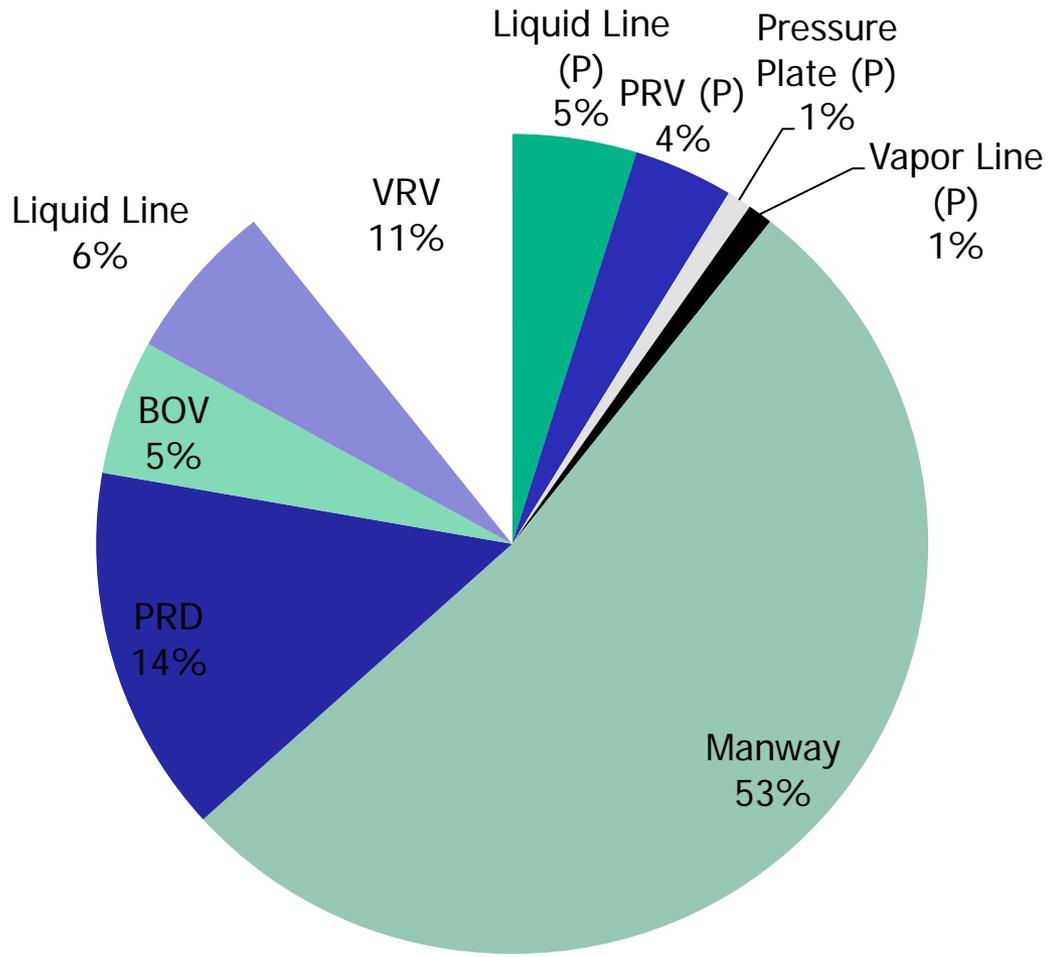


(P) Indicates a pressure car feature.

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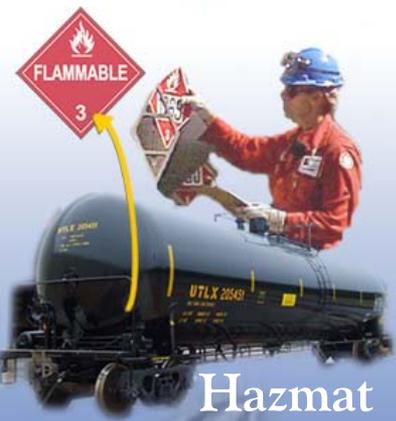


## 2009\* NAR Data Summary

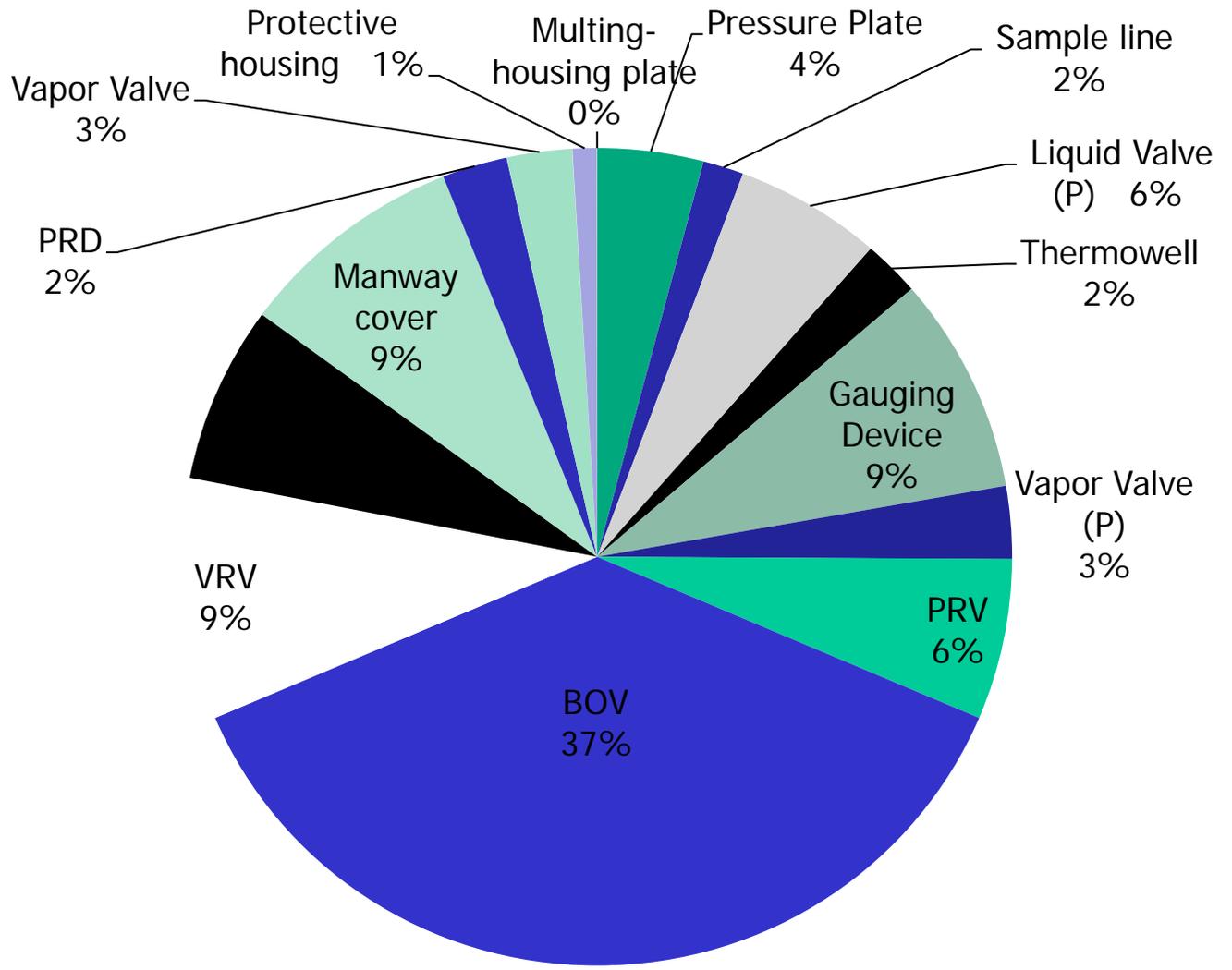


\*Full year data extrapolated from data from January through June.  
(P) Indicates a pressure car feature.

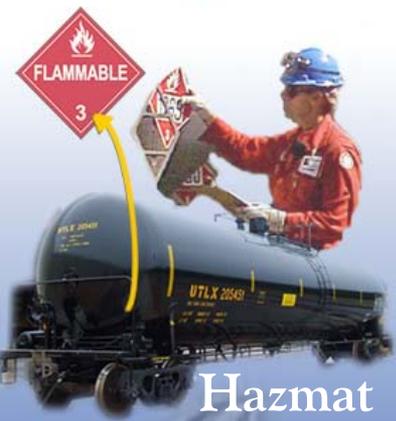
# Railroad Safety



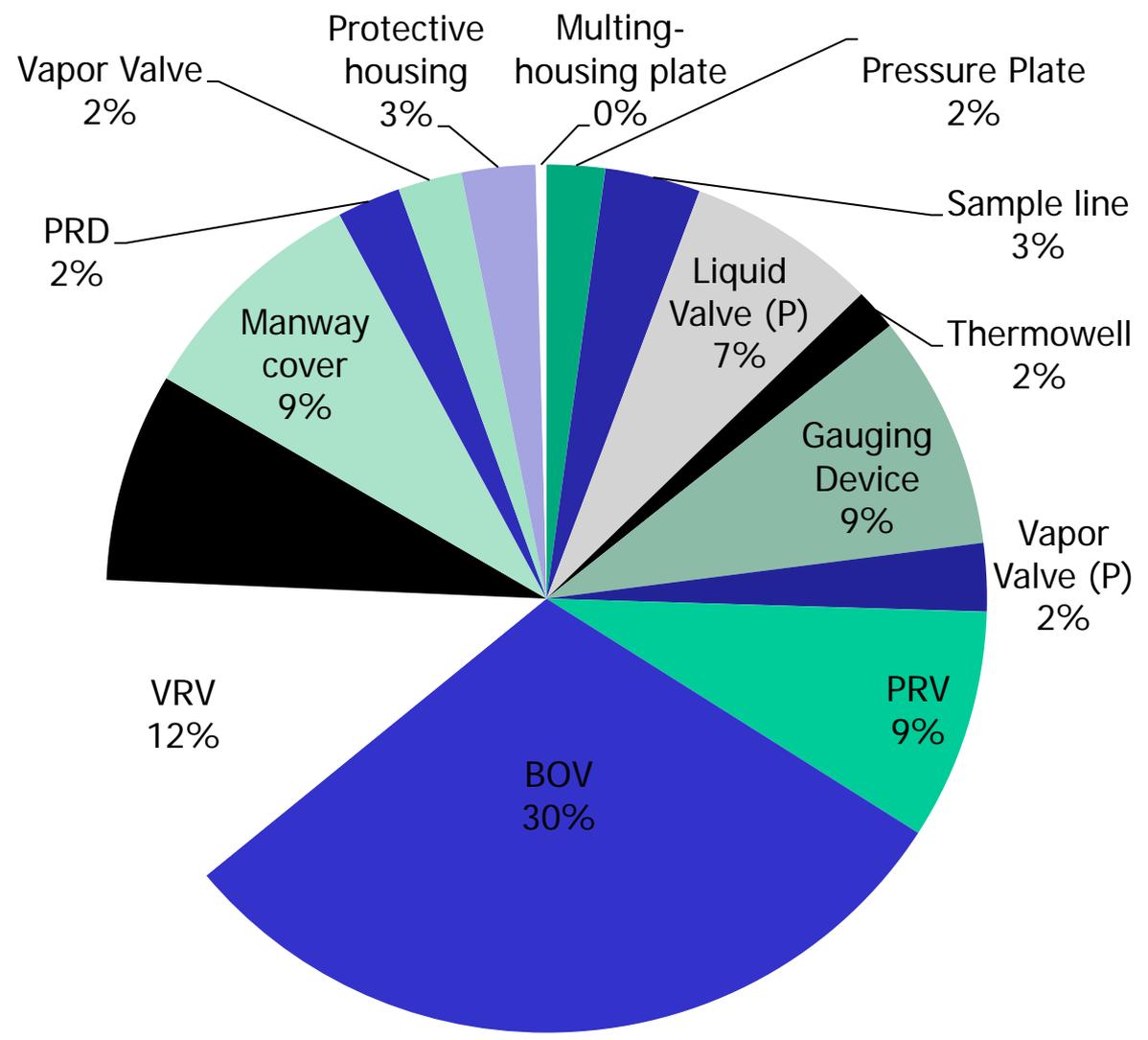
# Summary of 2008 OTMA Data Regarding Service Equipment



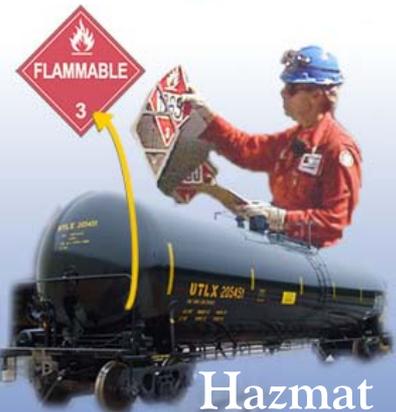
# Railroad Safety



# Summary of 2009 OTMA Data Regarding Service Equipment



# Railroad Safety

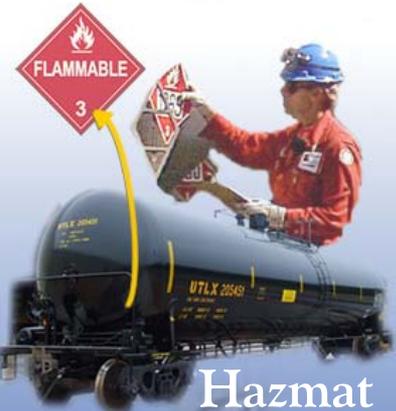


## Normalizing the Data

	2008	2009
NAR Data		
<i>Pressure Tank Car</i>	0.00094	0.00070
<i>Non-Pressure Tank Car</i>	0.00148	0.00141
OTMA Data		
Pressure Tank Car	0.00158	0.00257
Non-Pressure Tank Car	0.00082	0.00118

Defect rates are determined by normalizing data against AAR fleet information.

## Railroad Safety

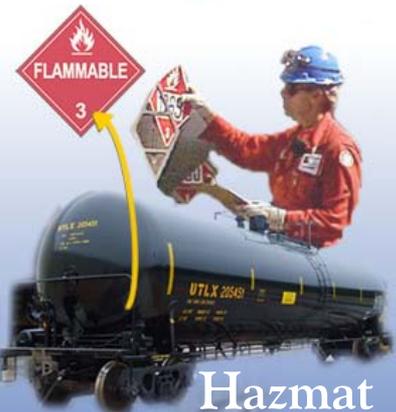


# An Example of How Data is Used

In 2008 and 2009 the OTMA data indicated there were 15 reported defects in rubber linings. Eight defects were reported in 2008. These defects represent 0.123% of the population of rubber lined cars. This is similar to the normalized defect rate of service equipment in all cars of 0.120% (of the population) in 2008.

We are also looking into the 27 OTMAs for fractured tanks in 2008 (16) and 2009 (11).

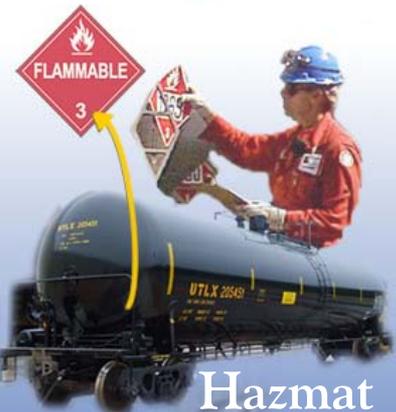
## Railroad Safety



# Private Track Confusion

- Confusion over jurisdiction
- Recent cases involve shortline railroads
- If private track, shipment is no longer in commerce and OSHA (PSM) and EPA (RMP) requirements apply
- Two Types of Private track:
  - Located outside of a carrier's right-of-way, yard, or terminals where the carrier does not own the rails, etc, or
  - Leased by a railroad to a lessee, where the lease provides for exclusive use and where the lessor has no control or responsibility for the trackage or cars



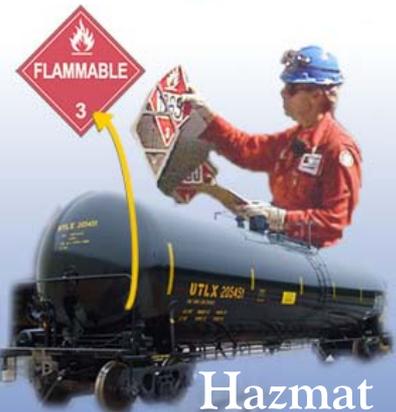


## Interim Tank Car Rule (HM-246)

- Pressure Tank Car Interim Final Rule enhanced performance standard for poison inhalation hazard (PIH) tank cars and imposed 50-mph speed restriction for trains transporting loaded PIH tank cars.
- Final rule 1/13/09
- Follow-on actions upon completion of further R&D
- May have future implications on other tank cars
- Evaluating our first special permit



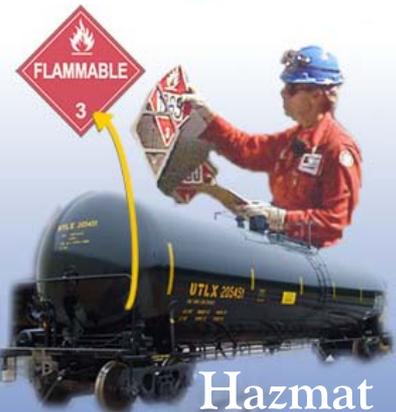
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# Route Analysis Rule (HM-232E)

- Need for National Approach
  - At least 14 cities and 1 state considered routing legislation
  - Potential Impact on National Transportation System
- Rulemaking Process
  - ANPRM - December 21, 2006
  - IFR - April 16, 2008
    - *Effective June 1, 2008*
  - Final Rule - November 26, 2008

# Railroad Safety



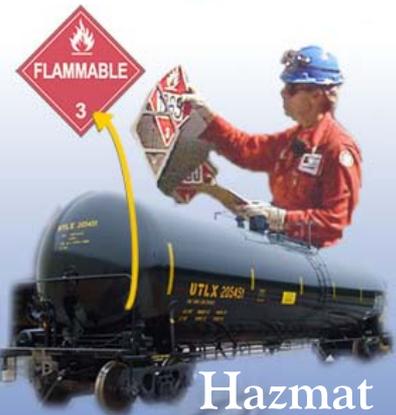
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# Rule Requirements

- Collect data
  - Certain high hazard materials
  - By route
- Use data to analyze route safety and security
- Analyze alternate routes
- Consult with state, local, & tribal Officials
- Choose safest/most secure route
- Restrict disclosure of information
- Reduce storage/delays in transit
- Perform security inspections
- Separate appeal process



# Railroad Safety



## Applicability

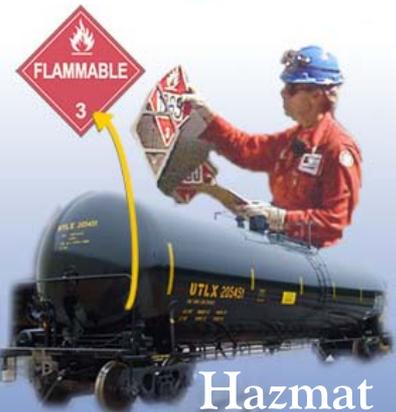
Applies to Carriers transporting:

- Security Sensitive Materials
  - Designated by DHS
- Includes:
  - >5,000 lbs Division 1.1, 1.2, or 1.3 (single carload)
  - A bulk quantity of PIH (includes  $NH_3$ )
  - A Class 7 material in HRCQ Quantity





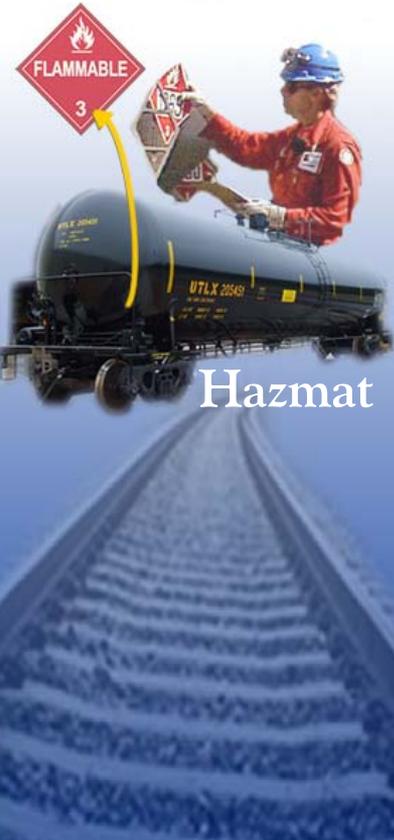
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# National Routing Tool

- Tool developed to enable national approach
  - DHS funded
  - Production version online June 1, 2009
  - Has a "Light" version for shortlines
  - Current route analysis must be done even if alternative route is not available

# Railroad Safety



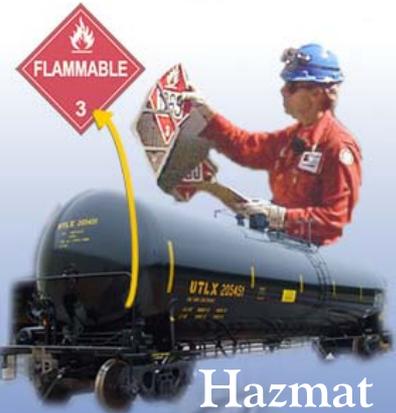
## Coupling Speed Program

- The project gathers data to gain a better understanding of forces induced into rail tank cars in yard operations (classification and handling).
  - As of the third quarter of 2010, the audit team has collected almost 2000 recorded events.
  - The national average coupling speed has increased slightly to approximately 5.73 mph.
  - The average number of cars in each cut-of-cars is 1.57.
- Over-speed impacts are addressed with car owner and railroad.





# Railroad Safety



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# Thank You



## Still have Question?

- Contact me at 202.493.6229
- Visit FRA's web page at [www.fra.dot.gov](http://www.fra.dot.gov)
- Visit PHMSA's web page at <http://hazmat.dot.gov>
- E-mail me at [william.schoonover@dot.gov](mailto:william.schoonover@dot.gov)
- E-mail hmassist at [hmassist@dot.gov](mailto:hmassist@dot.gov)