



# Calendar Year 2011 Roadside Inspections

## Additional Analyses with Roadside Inspection Data



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Office of Research and Information Technology

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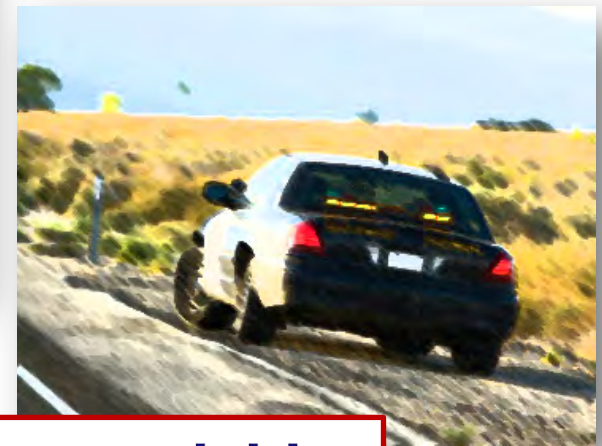
# Overview

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- Calendar Year (CY) 2011 Roadside Inspections
  - Overview of Data and Data Elements
  - Select Statistics
- Next Steps/Potential Further Uses of Roadside Data

# What is a Roadside Inspection?

- A roadside inspection is an examination of individual commercial motor vehicles (CMVs) and/or drivers by an authorized safety inspector



**In CY11, 3.6 million roadside inspections were carried out.**

# CY11 Inspections: High Level Statistics

## Roadside Inspection Records

### Inspector Stats

~12,500 Inspectors;  
~1,500 Local Enforcement

### Location Stats

Fixed: ~1,700 Unique Coded;  
~700 Weigh Stations

### Violation Stats

37.7 %  
No Violation Inspections

### Motor Carrier Stats

~377,000 Unique USDOT Numbers

### Driver Stats

1.1 Million Unique Drivers;  
23,000 Co-Drivers

### Vehicle Stats

1.7 Units per Inspection;  
69% Tractors  
27% Trucks  
3% Bus +

# Existing Analyses Resources

## Analysis and Information Resources Online

<http://ai.fmcsa.dot.gov/SafetyProgram/RoadsideInspections.aspx>

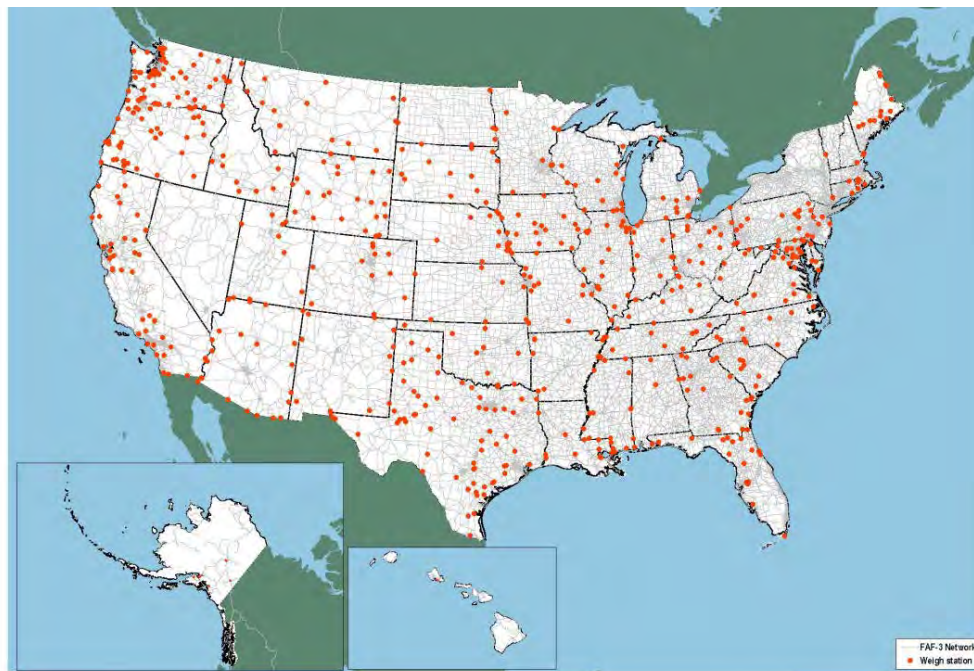
The screenshot shows the A&I online website interface. The main content area displays "Roadside Inspections by Inspection Level" with a data table. The table is filtered for "National" report focus and "Fiscal" time period (2009-2013). The table shows inspection counts for various levels (I, II, III) across five fiscal years (2009-2013), broken down by Federal and State inspections.

Inspection Level	FY 2009			FY 2010			FY 2011			FY 2012			FY 2013		
	Fed	State	Total	Fed	State	Total	Fed	State	Total	Fed	State	Total	Fed	State	Total
I. Full	63,521	1,063,297	1,126,818	94,235	1,053,546	1,147,781	98,400	1,046,176	1,144,576	96,645	1,033,142	1,129,787	9,665	110,821	120,486
With OOS Viol (Level 1)	13,790	290,151	303,941	19,263	266,464	285,727	18,666	269,503	288,169	18,373	269,554	287,927	1,799	29,404	31,203
II. Walk-Around	30,852	1,103,674	1,134,526	30,571	1,147,379	1,177,950	23,630	1,150,343	1,173,973	19,644	1,180,120	1,199,764	2,318	134,958	137,276
With OOS Viol (Level 2)	6,964	262,568	269,532	5,363	255,210	260,573	4,041	258,691	262,732	2,993	258,873	261,866	307	29,713	30,020
III. Driver Only	21,841	1,139,681	1,161,522	13,124	1,129,330	1,142,454	17,441	1,146,609	1,164,050	20,146	1,107,168	1,127,314	1,672	120,069	121,741

# Inspection Resources

- Fixed Stations
  - 40% of inspections
  - ~700 weigh stations\*
- ~12,500 inspectors
  - 94% of inspections
- ~1,500 additional from local enforcement jurisdictions
- 12% of inspections carried out in conjunction with traffic enforcement

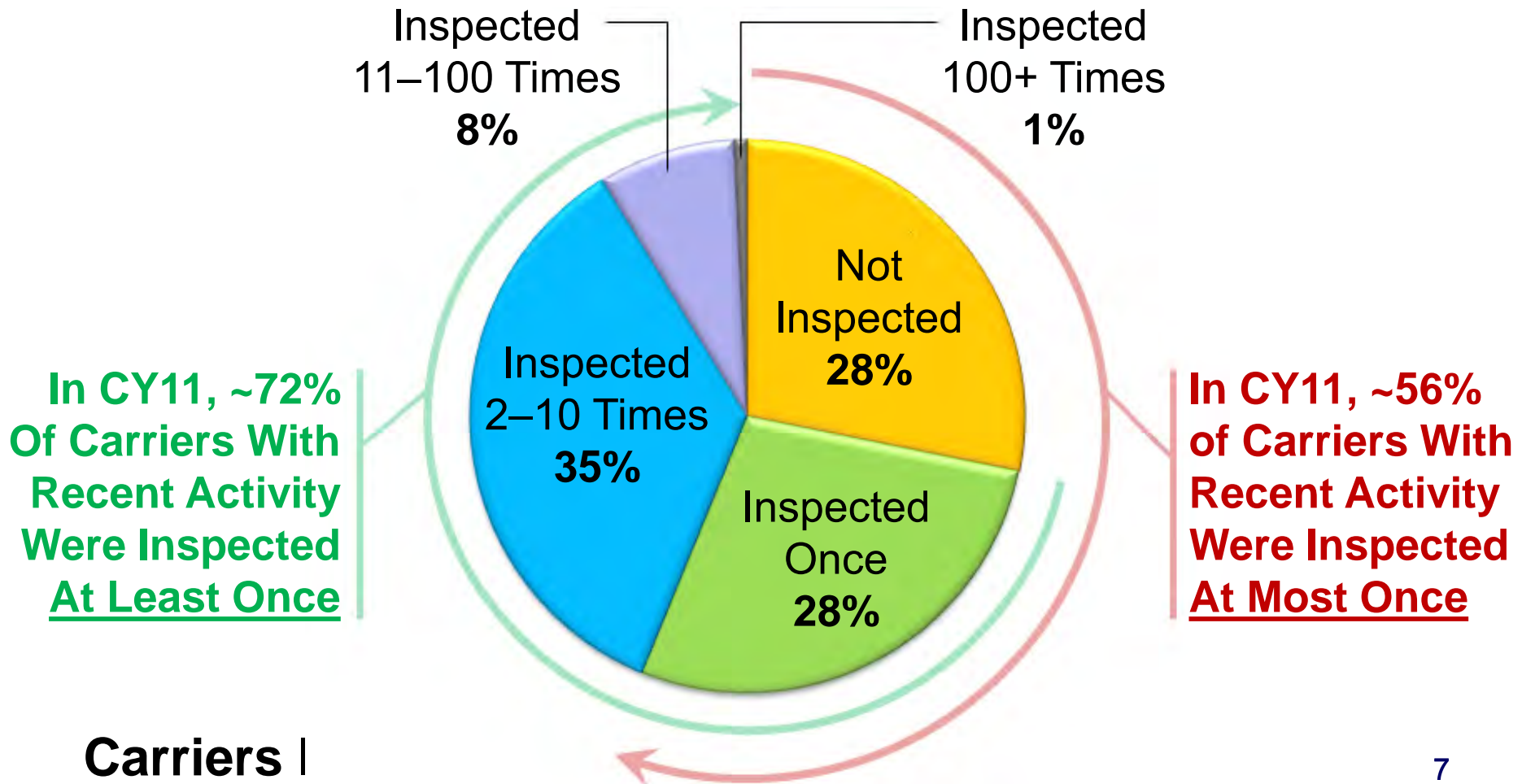
Weigh Stations\* along FAF<sup>3</sup> Highway Network



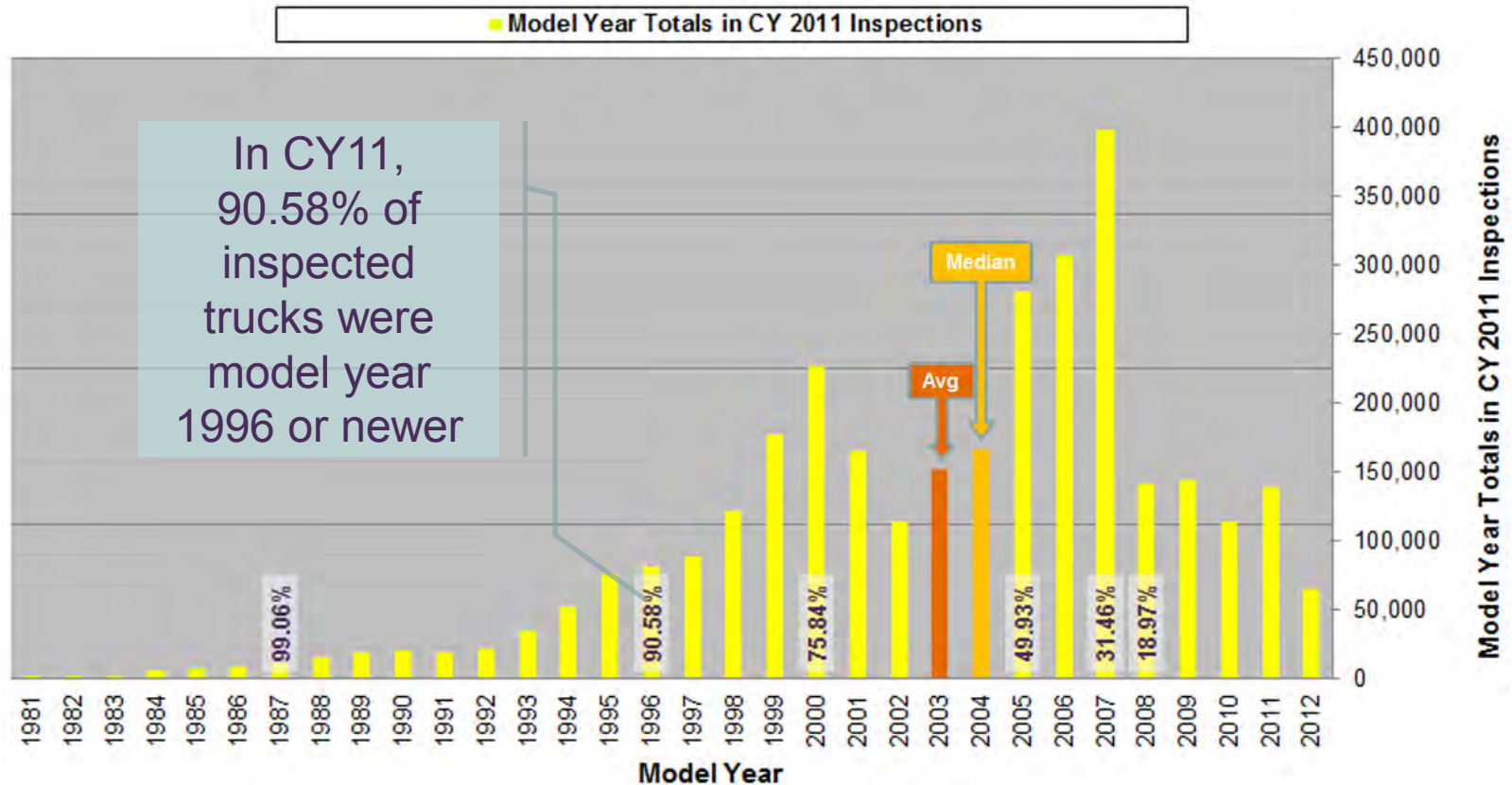
\* Source: USDOT, FHWA, Office of Freight Mgmt & Operations, Freight Analysis Framework v3.1, 2010.

# Motor Carriers in Inspections

- Motor Carriers: **525k** with recent activity; **377k** insp. in CY11.



# Powered Units in Inspections by Model Year

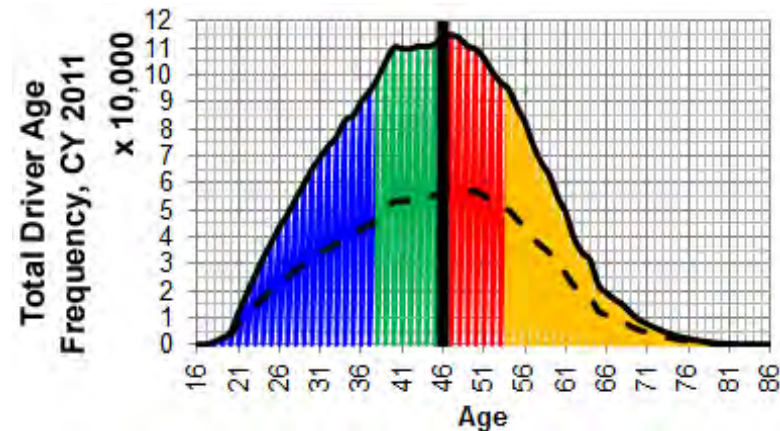


**Power units inspected in CY2011 are skewed towards newer vehicles in comparison to “all registered large trucks” [3-year difference].**



# Drivers in Vehicles

- Focusing on the Top 25 most inspected carriers (Each with a minimum of 3,500 inspections in CY11)
  - Run newer fleets
  - No statistical evidence of new vehicles distributed differently between age groups

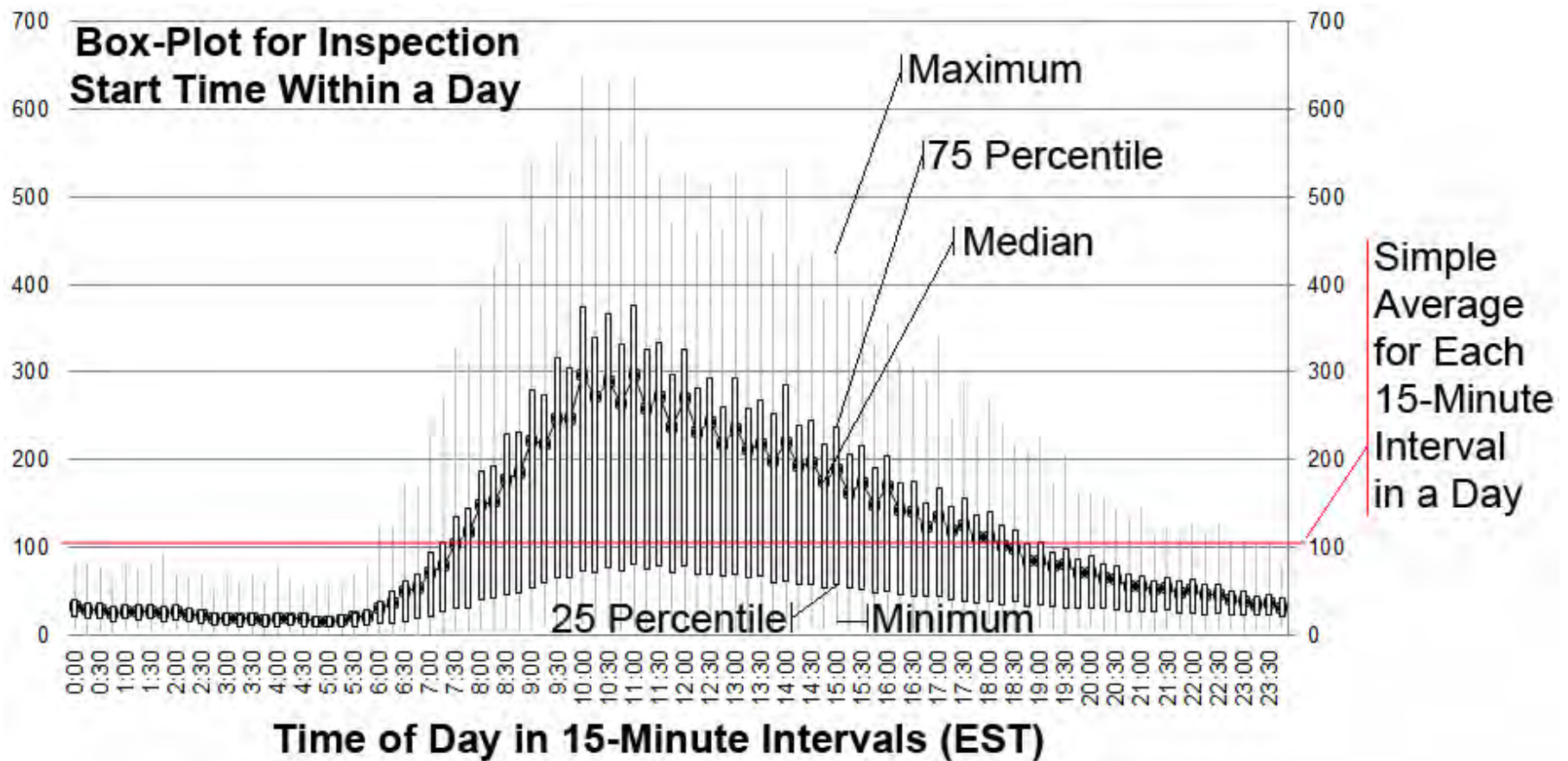


Driver Age	→				Grand Total
Vehicle Age	≤ 37yrs	38–45yrs	46–53yrs	≥ 54yrs	
0–2 yrs	13.0%	11.0%	13.5%	12.2%	49.8%
3–5 yrs	7.3%	6.5%	8.0%	7.7%	29.5%
6–10 yrs	3.2%	3.1%	3.0%	2.8%	12.2%
>10 yrs	2.9%	2.3%	1.7%	1.6%	8.5%
<b>Grand Total</b>	<b>26.5%</b>	<b>23.0%</b>	<b>26.2%</b>	<b>24.3%</b>	<b>100.0%</b>

**Newer Fleets Than Typical**

**Avg ~ 4 yrs  
Median ~3 yrs**

# Inspection Start Time Distribution



Adjusted for time zones and daylight savings time changes throughout year.

# Conclusions

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- Roadside inspection dataset has the potential to answer various in-service questions.
- FMCSA is analyzing this dataset in new ways to guide policy decisions and research prioritization.

# Contact Information

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