Compliance, Safety, Accountability (CSA)

Small Business Administration
February 2012

CSA – Three Major Elements

1. **New Safety Management System (SMS)**
   - Better targets carriers for Agency interventions
   - Utilizes a relative threshold to identify carriers for interventions

2. **Broader array of interventions**
   - Includes warning letters, focused investigations, etc. to augment the Full Compliance Review

3. **Planned revisions to Safety Fitness Determination (SFD) Rule**
   - To incorporate on-road performance into SFD methodology

New Safety Measurement System

- Replaces the SafeStat system as the FMCSA tool to identify carriers for intervention

- Reviews regulatory compliance and identifies unsafe carrier and driver behaviors that lead to crashes

- Uses all safety-based roadside inspection violations
  - ~3.5 million inspections per year
    - ~33% are violation-free inspections

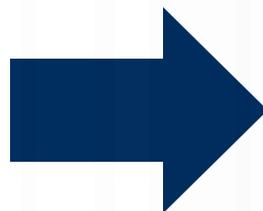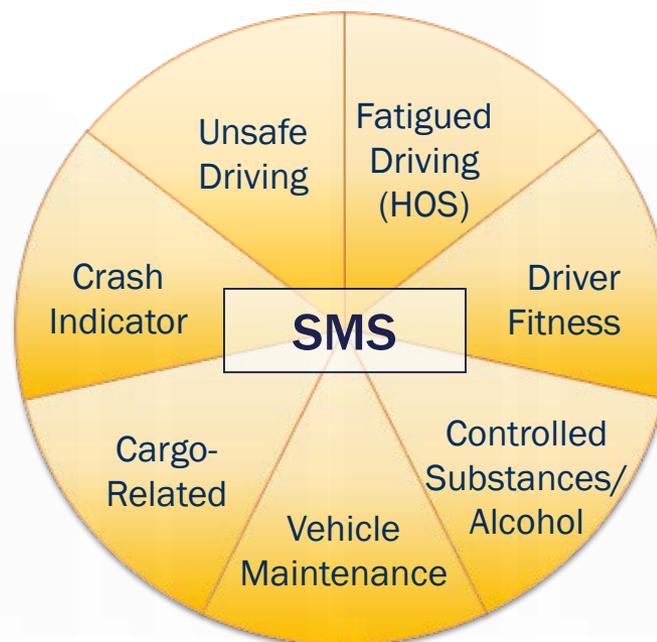- Measures carriers based on a relative threshold

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New Prioritization and Status System

OLD

Safety Evaluation Areas (SEAs)

SafeStat
- Driver
- Accident
- Safety Management
- Vehicle

NEW

Behavior Analysis and Safety Improvement Categories (BASICs)

SMS
- Unsafe Driving
- Fatigued Driving (HOS)
- Crash Indicator
- Driver Fitness
- Cargo-Related
- Controlled Substances/ Alcohol
- Vehicle Maintenance

SMS Implementation Status

- **Fully implemented in December 2010**

- **Used to prioritize enforcement resources**
  - Identifies "high-risk" carriers per Congressional mandate
  - Influences roadside Inspection Selection System (ISS)

- **Results are available on a public website**
  - 5 of 7 BASICs viewable

- **DataQs program available to challenge inspection, violation, and crash data**

DataQs

- More than **27 million** crash and inspection records have been submitted to FMCSA since 2004, less than **0.5%** of which received a Request for Data Review (RDR)

- **63%** of RDRs resulted in a modification of the record

- SMS rollout in December 2010 - increased number of RDRs

DataQs RDRs	2009	2010	2011
Crash	3,636	5,531	5,558
Inspection	11,909	27,144	34,082

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Efforts to Improve Data Quality

- Evaluate completeness, timeliness, accuracy, and consistency of State-reported data monthly

- Continuing work with Commercial Vehicle Safety Alliance (CVSA) to establish policies for consistency

- Modifying roadside inspection software (ASPEN) in line with CVSA recommendations

- Developed improved DataQs users guide in conjunction with States

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Carrier Measurement: SMS Results

ABC Trucking — DOT#: 000000 — SMS Methodology

Select a BASIC below to view details

BASICs Overview
(Based on a 24-month record ending March 25, 2011)

	On-Road	Investigation		BASICs Status
Unsafe Driving	Inconclusive		=	
Fatigued Driving (Hours-of-Service)	99%	⚠	=	⚠
Driver Fitness	97%	⚠	=	⚠
Controlled Substances and Alcohol	No Violations	⚠	=	⚠
Vehicle Maintenance	89.4%	⚠	=	⚠
Cargo-Related	Not Available	Not Available	=	Not Available
Crash Indicator	Not Available	Not Applicable	=	Not Available

PERFORMANCE

History

PRINT   DOWNLOAD

Public Use of SMS Data

- ## What are the limitations with SMS?

> *USE OF SMS DATA/INFORMATION
>
> The data in the Safety Measurement System (SMS) is performance data used by the Agency and Enforcement Community. A ⚠ symbol, based on that data, indicates that FMCSA may prioritize a motor carrier for further monitoring.
>
> The ⚠ symbol is not intended to imply any federal safety rating of the carrier pursuant to 49 USC 31144. Readers should not draw conclusions about a carrier's overall safety condition simply based on the data displayed in this system. Unless a motor carrier in the SMS has received an UNSATISFACTORY safety rating pursuant to 49 CFR Part 385, or has otherwise been ordered to discontinue operations by the FMCSA, it is authorized to operate on the nation's roadways.
>
> Motor carrier safety ratings are available at http://safer.fmcsa.dot.gov and motor carrier licensing and insurance status are available at http://li-public.fmcsa.dot.gov/.

Public Use of SMS Data (cont.)

- SMS is not a safety rating

- Informed, current, and comprehensive picture of a motor carrier safety and compliance standing is provided by:
  - Official safety rating on Safety and Fitness Electronic Records (SAFER)
  - Authority and insurance status on Licensing and Insurance (L&I) website
  - Intervention and priority status on SMS

- Outreach and education with shippers and other stakeholders is underway

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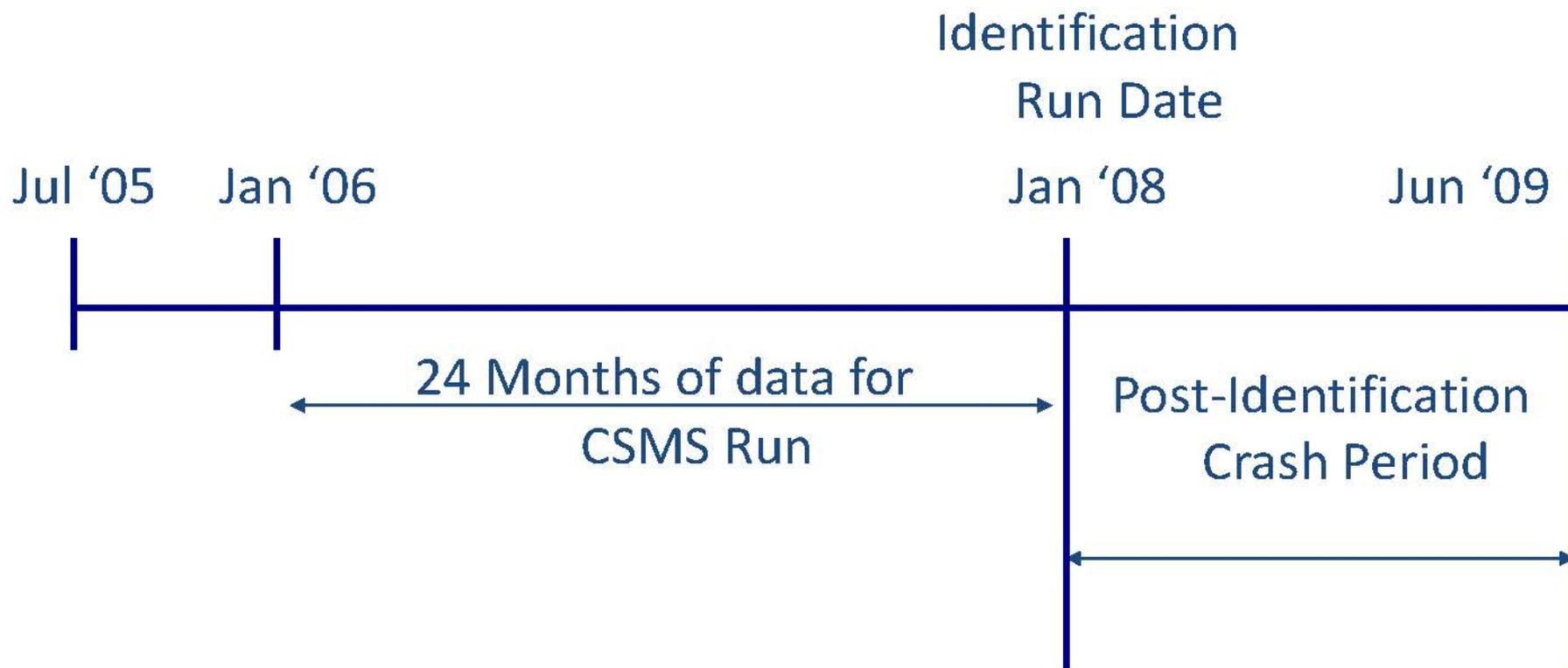**Federal Motor Carrier Safety Administration**

What Analysis Has Been Performed on SMS?

- Agency and independent (University of Michigan Transportation Research Institute [UMTRI]) analyses show that the SMS is an effective tool for identifying high-risk motor carriers

- A particularly strong association exists between crashes and high scores in the Unsafe Driving and Fatigued Driving (Hours-of-Service) BASICs
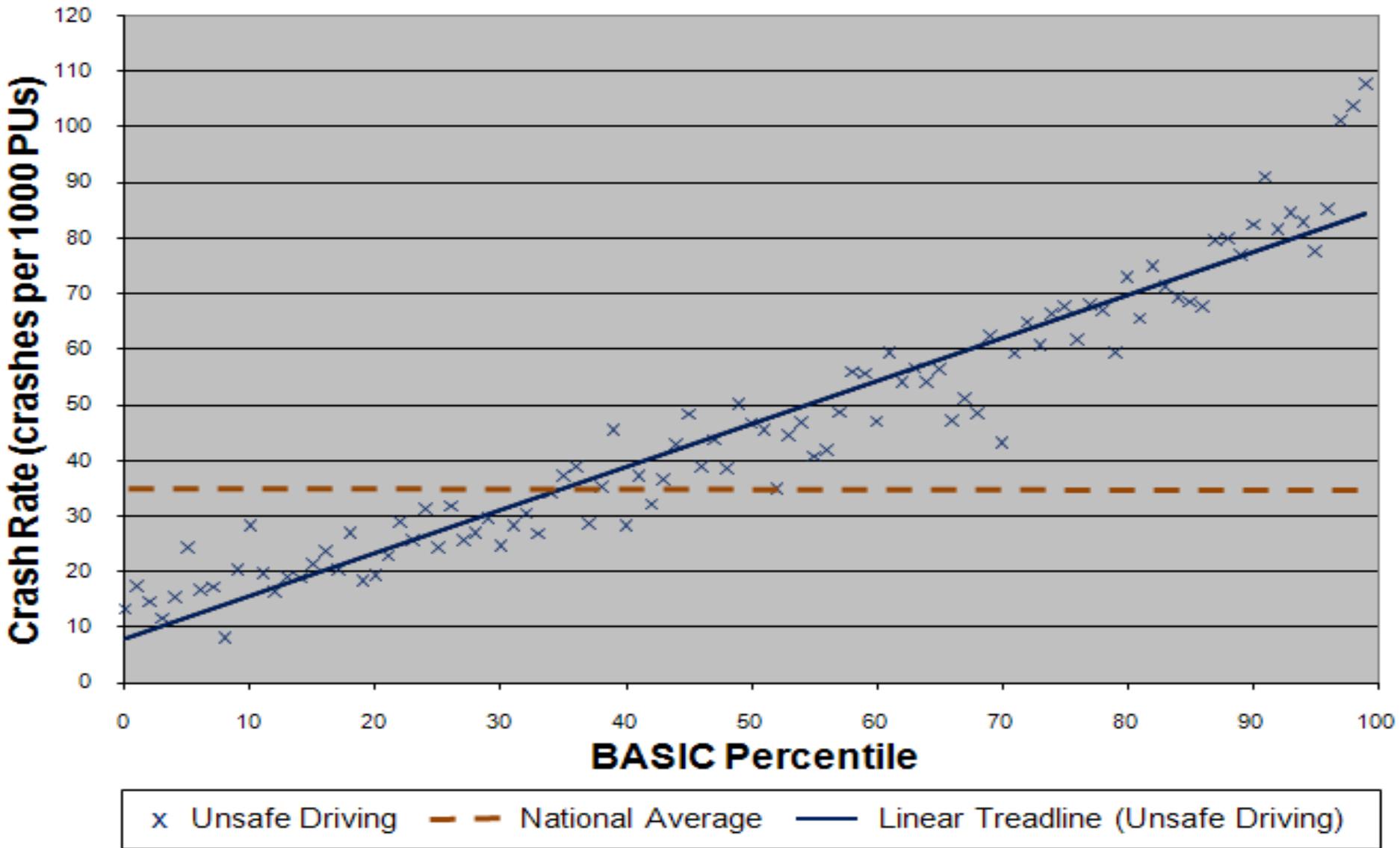 - Unsafe Driving BASIC consists of observed violations
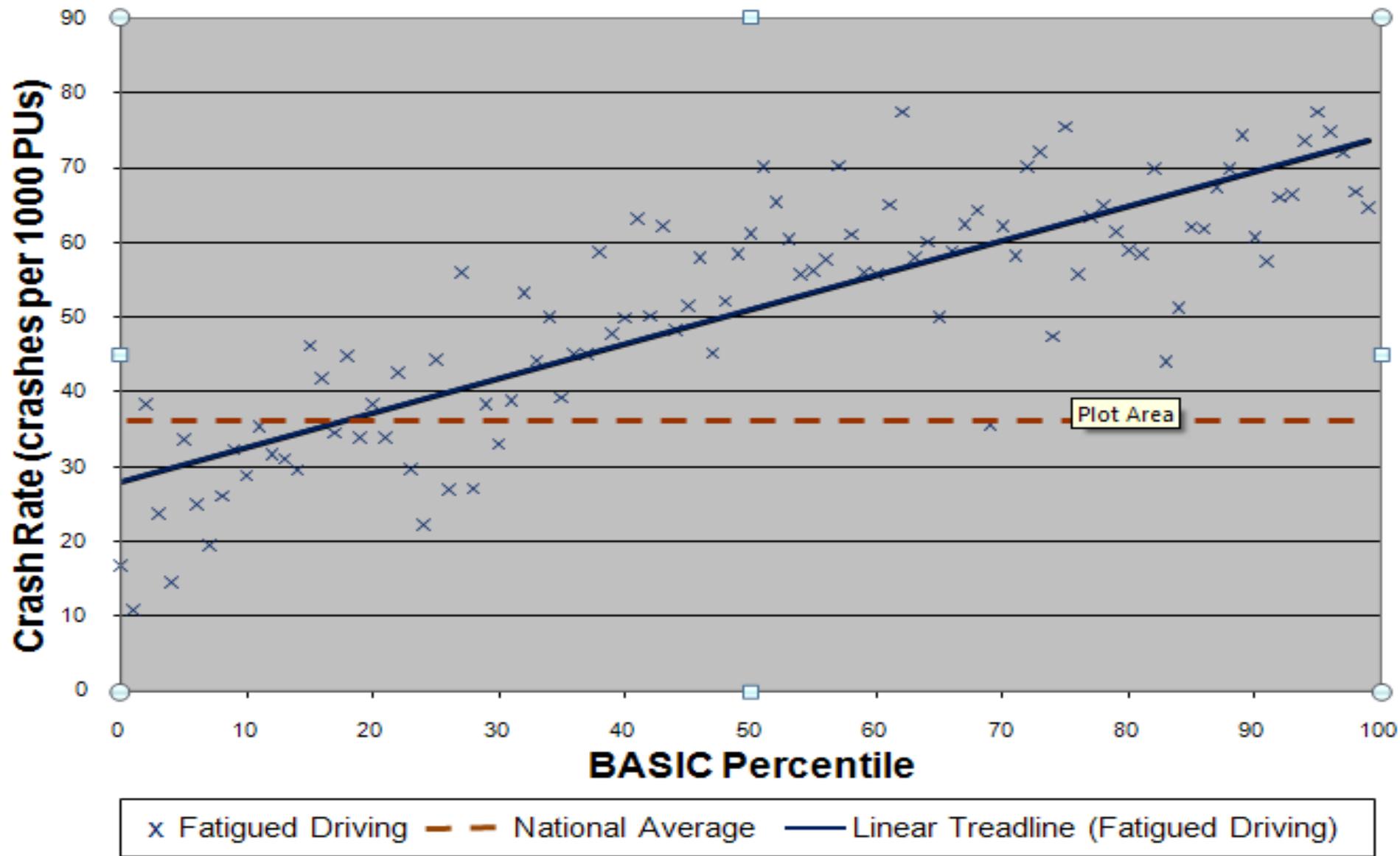
FMCSA Effectiveness Testing

Identification Run Date

Jul '05   Jan '06   Jan '08   Jun '09

24 Months of data for CSMS Run

Post-Identification Crash Period

Unsafe Driving BASIC

Fatigued Driving BASIC

A Look at Some Numbers

Category	Approximate Number	Percentage of Uploaded Crashes
Carriers listed as active	750K	100%
Carriers with recent activity "pulse" in last three years	525K	100%
Carriers with insufficient data	325K	8%
Carriers with sufficient data to be assessed in at least one BASIC	200K	92%
Carriers with sufficient negative information to have a percentile assigned	92K	83%
Carriers with at least one BASIC above FMCSA intervention threshold	50K	45%

How Thresholds Were Identified

- Analysis and effectiveness studies

- Using improved SMS, goal to identify carriers with both:
  - Crash rate higher than the population average; and
  - Known on-road compliance issues

- Thresholds identify comparable number of carriers as (~50k) compared to SafeStat (~51k)

BASIC	General	HM	Passenger
Unsafe Driving, Fatigued Driving (HOS), Crash Indicator	65%	60%	50%
Driver Fitness, Vehicle Maintenance, Controlled Substances/Alcohol, Cargo-Related	80%	75%	65%

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18-Month Crash Rates for Carriers: February 2008–July 2009

(Excludes carriers categorized as "test" carriers in CSA Op Model Test)

BASIC Threshold Exceeded	Carriers	Crash Rate per 100 PU	Ratio to Not Identified
Unsafe Driving	9,245	7.44	3.56
Fatigued Driving	17,959	6.24	2.99
Driver Fitness	3,981	3.04	1.46
Controlled Substances/Alcohol	1,013	6.55	3.14
Vehicle Maintenance	18,700	4.87	2.33
Improper Loading/Cargo Securement	9,409	3.97	1.9
Crash Indicator	5,077	7.32	3.51
Exceeded Any BASIC	44,881	4.94	2.37
Exceeded No BASICs	428,966	2.09	1
All Carriers	473,847	3.15	1.51

Small Business Impacts Compared to Prior System

Power Unit Group	SAFESTAT: % of Carriers with 1 or more SEAs "deficient" (Aug 2010)	SMS: % of Carriers with 1 or more BASICs above threshold (Jan 2012)
0< PU<=5	7.10%	7.40%
5<PU<=15	22.20%	20.90%
15<PU<=50	29.40%	27.00%
Total % of carriers w/deficient SEA or BASIC above threshold	10.10%	10.20%

Drivers – CSA /PSP

- SMS incorporates driver behaviors into BASICs

- FMCSA does not formally "rate" drivers

- Investigators address driver violations during carrier investigations

- SMS data feeds into drivers' Pre-Employment Screening Program (PSP) records. PSP:

  – Is a Congressionally-mandated program

  – Provides perspective motor carriers with driver inspection, crash, and violation history upon driver release

SMS Spring/Summer Enhancements

SMS Package #1 – Carrier Preview will be available

- Hazardous Materials (HM) BASIC

- Vehicle Maintenance
  - Moving cargo-related violations into vehicle

- Intermodal Equipment Providers (IEP)
  - Aligning SMS with IEP regulation

- Elimination of vehicle violations from Level 3 (driver-only) inspections

- Redefining which carriers are subject to HM and Passenger Carrier intervention thresholds

ISS Modifications

- Meaningful safety-based red-lights

- Reprioritization of BASICs

CSA – Intervention Tools

Broader array of interventions to augment the Full Compliance Review

- Reaches more carriers

- Improves efficiency of investigations

- Identifies root causes and corrective actions

CSA - Intervention Tools

OLD

- Full Compliance Review is single tool despite specific type or scope of problem

NEW

- Efficient and effective intervention tools reach more carriers and influence safety compliance earlier

- Automated Warning Letters

- Broader investigation types
  - Offsite Investigations
  - Focused Onsite Investigations
  - Comprehensive Onsite Investigations

- Use of Safety Management Cycle
  - Investigators determine "why" violations are occurring

New Intervention Tools Implementation Status

- **Focused and comprehensive investigations now implemented in all states**
  - Includes application of safety management cycle
    - UMTRI test evaluation: 20% fewer carriers had safety problems after Focused Onsite Investigations compared to Compliance Reviews

- **Offsite investigations implemented in 10 states**
  - Further deployment will occur with IT enhancements

- **Automated warning letters implemented in all states**
  - 51k letters sent to date
    - UMTRI test evaluation: 83% carriers improved within 12 months of receiving a Warning Letter

CURRENT

- One of three safety ratings issued following a Compliance Review
  - Satisfactory, Conditional, Unsatisfactory

- Rating is snapshot based on date of most recent Compliance Review

NEW SAFETY FITNESS REGULATIONS TO BE PROPOSED WOULD

- Incorporate on-road safety performance
  - Allow for proposed downgrade in formal SFD based on monthly update of measurement system

- Continue to include major safety violations found as part of investigations

- Notice of Proposed Rulemaking scheduled for 2012

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