

# Comprehensive Safety Analysis (CSA) 2010

## Status Update

Motor Carrier Safety Advisory Committee

*June 2010*

# ★ Agenda

- The Challenge
- Current Enforcement Model
- Better Way – CSA 2010
- Nine-State Field Test and Result
- Outreach
- Rollout Timeline
- Summary

# ★ The Challenge

- Mandate: Motor carriers' safety fitness – *Motor Carrier Safety Act of 1984*
- Large & varied industry: 500K active bus & truck companies
- Limited Agency resources
- Result: We assess < 2 percent of industry/year

# ★ Current Enforcement Model

- Over 3 million roadside inspections annually
- Today, we use only a portion of this safety data in carrier assessments
  - SafeStat
- Major tool --- On-site compliance review
  - At a motor carrier's facility; very labor intensive
  - Compliance review is required to issue a safety rating
  - Result: Contact only small percentage of carriers each year

# ★ A Better Way – CSA 2010

- Major proactive FMCSA safety initiative
  - Increase our contact with industry through increased efficiencies (*Evidence: Contact by Government increases compliance*)
  - Maximize FMCSA and State partner resources
  - Assess safety fitness of greater segment of industry
  - Bring about greater reduction in large truck and bus crashes



# ★ Safety Profile of Truck and Bus Industry



# ★ CSA 2010 - Three Major Elements

- New Safety Measurement System (SMS)
  - More comprehensive than SafeStat and provides more detailed assessments
- Broader array of compliance interventions
  - To supplement the compliance review (CR)
- New safety fitness methodology
  - To decouple safety ratings from onsite reviews

## Today

- SafeStat is used to prioritize carriers
- Identified carriers receive onsite CRs
- Only CRs yield safety ratings



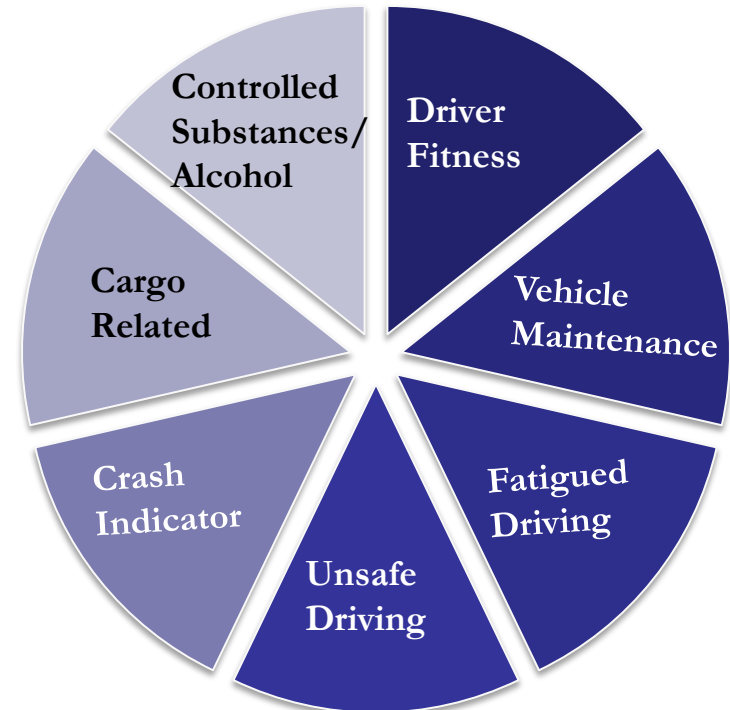
# 1<sup>st</sup> component: Current Measurement System vs. New

SafeStat Safety Evaluation Areas (SEAs)



- Out-of-Service Violations
- Certain Moving Violations
- Crash Reports

SMS Behavior Analysis Safety Improvement Categories (BASICS)



- All Safety Based Violations
- Weighted to Crash Risk
- Crash Reports



# ★ 2<sup>nd</sup> component: Broader Array of Interventions

- **Early Interventions**

- Warning Letters
- Targeted Roadside Inspections

- **Investigations**

- Offsite
- Onsite focused
- Onsite comprehensive

- **Follow-On Corrective Actions**

- Cooperative Safety Plan
- Notice of Violation
- Notice of Claim
- Out-of-Service Order

Going from “What” to “Why”



## 2<sup>nd</sup> component: Broader Array of Interventions (Cont'd)

- Less time consuming and less resource intensive
- More carriers contacted; earlier
- Emphasis is on achieving compliance

## ★ 3<sup>rd</sup> component: New Safety Fitness Determination

- SFD rule would de-couple safety ratings from compliance reviews
- SFD would be determined by safety violations:
  - Found through on-road safety performance – roadside inspections
  - Found through CSA 2010 interventions
  - Including Essential Safety Management and Fundamental Unfit Violations
- Updated monthly
- Projected increase in annual proposed “Unfit” SFDs
  - Current rating process: ~1,400
  - New SFD methodology: ~7,000
    - Five-fold increase

# ★ Example Carrier – Proposed Unfit under SFD

FMCSA Review Date:	6/24/2009	FMCSA Review Type:	Compliance Review
Safety Rating:	SATISFACTORY	Date of Last MCS-150 Update:	05/14/2010
SafeStat Category:	B	HM 70 SafeStat Category:	
Accident SEA:	98.9	Vehicle SEA:	42.62
Driver SEA:	97.74	Safety Management SEA:	

CARRIER SAFETY MEASUREMENT					
BASIC		ON-ROAD PERFORMANCE *		INVESTIGATION DEFICIENT DATE*	SAFETY ASSESSMENT
<a href="#">Unsafe Driving</a>	?	100.0	AND/ OR	N/A	<b>DEFICIENT</b>
<a href="#">Fatigued Driving (Hours-of-Service)</a>	?	99.6		N/A	<b>DEFICIENT</b>
<a href="#">Driver Fitness</a>	?	93.9		6/24/2009	<b>DEFICIENT</b>
<a href="#">Controlled Substances and Alcohol</a>	?	89.4		N/A	<b>DEFICIENT</b>
<a href="#">Vehicle Maintenance</a>	?	55.5		N/A	<input checked="" type="checkbox"/>
<a href="#">Cargo Related</a>	?	40.7		N/A	<input checked="" type="checkbox"/>
<a href="#">Crash Indicator</a> †	?	99.8			<b>DEFICIENT</b>
<a href="#">Insurance/Other</a>				N/A	<input checked="" type="checkbox"/>



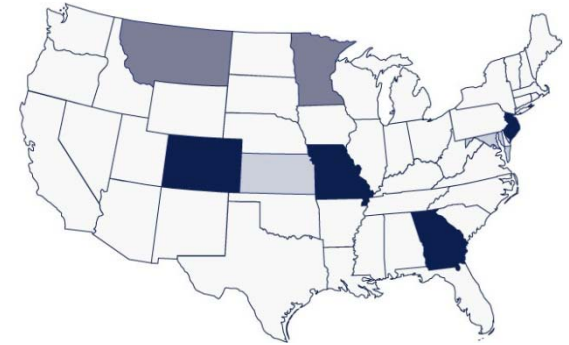
## 3<sup>rd</sup> component: Safety Fitness Methodology (Cont'd)

- Draft NPRM withdrawn from OST Mar-22-2010
  - Evaluating options based on feedback from partners, stakeholders, and field test
  - Exposure metric for Unsafe Driving and Crash BASICS – vehicle miles travelled vs. power units
  - To ensure most effective SMS for identifying high risk carriers.
- May DOT Report on Significant Rulemakings
  - To OMB Oct-4-2010
  - Publish Jan-18-2011

# ★ Field Test and Results

## Nine Test States:

- 30 month test initiated Jan-08
- Designed to test 2 of the 3 components
  - SMS
  - Interventions Process
- Original test states included 50% of CO, GA, MO, and NJ
- Added 100% states in spring and fall 2009  
MT, MN, KS, MD, and DE
- Test validity, efficiency and effectiveness
- Evaluation by University of Michigan (UMTRI)



# ★ Field Test and Results (Cont'd)

- **Warning letters are having a positive impact:**
  - Over **6,600** sent
  - Over **50%** of recipients logged in to view their data and safety assessments
  - Feedback from test states indicate that some carriers appreciate the early alert and are modifying safety practices

# ★ Field Test and Results (Cont'd)

- **Reaching its goal of contacting more carriers**
  - Research shows more contacts equals improved safety performance
  - Up to 35% more carrier investigations
    - Test: **4.0** Investigations/Safety Investigator
    - Non-test: **2.5** Investigations/Safety Investigator
- **Employing the full array of investigations**
  - Investigations in test states have been done in the following proportions
    - Onsite Investigations – Comprehensive (~30%)
    - Onsite Investigations – Focused (~45%)
    - Offsite Investigations (~25%)

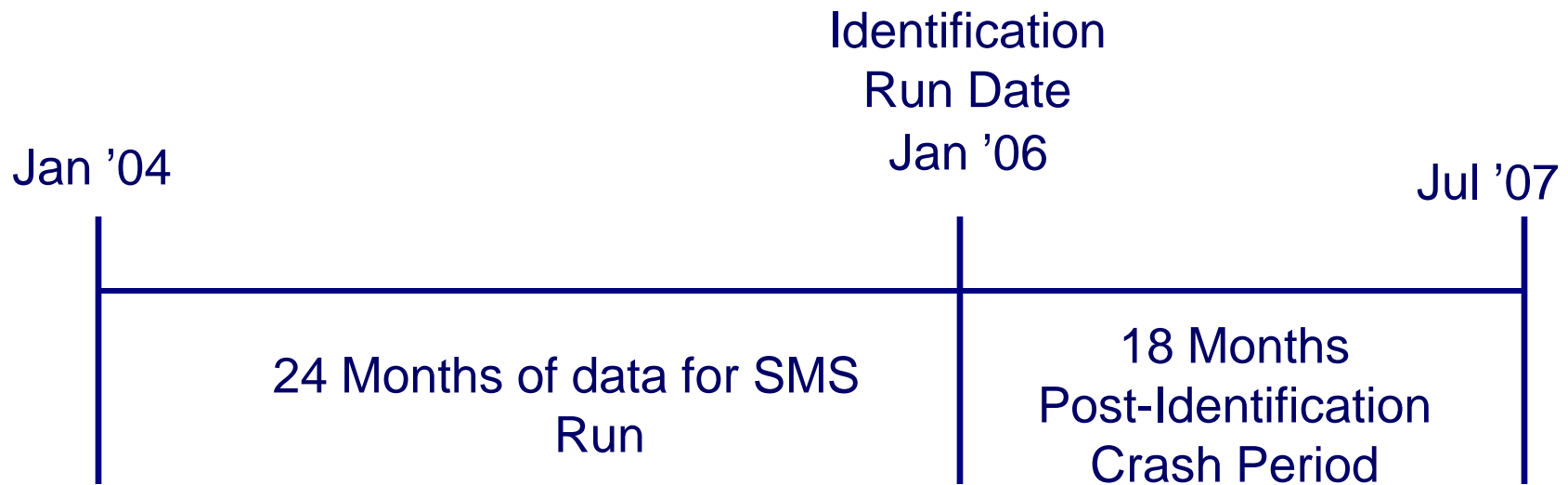


# ★ Field Test and Results (Cont'd)

- **Following up with carriers**
  - Nearly **50%** of investigations result in one of following: Notice of Claim or Violation, Cooperative Safety Plan
  - Increased enforcement targeting Fatigued Driving and Vehicle Maintenance BASICS
- **Increased driver enforcement**
  - Applying NOV's and NOC's
    - Test: **3.5** Driver Enforcement/Safety Investigator
    - Non-test: **3.2** Driver Enforcement/Safety Investigator



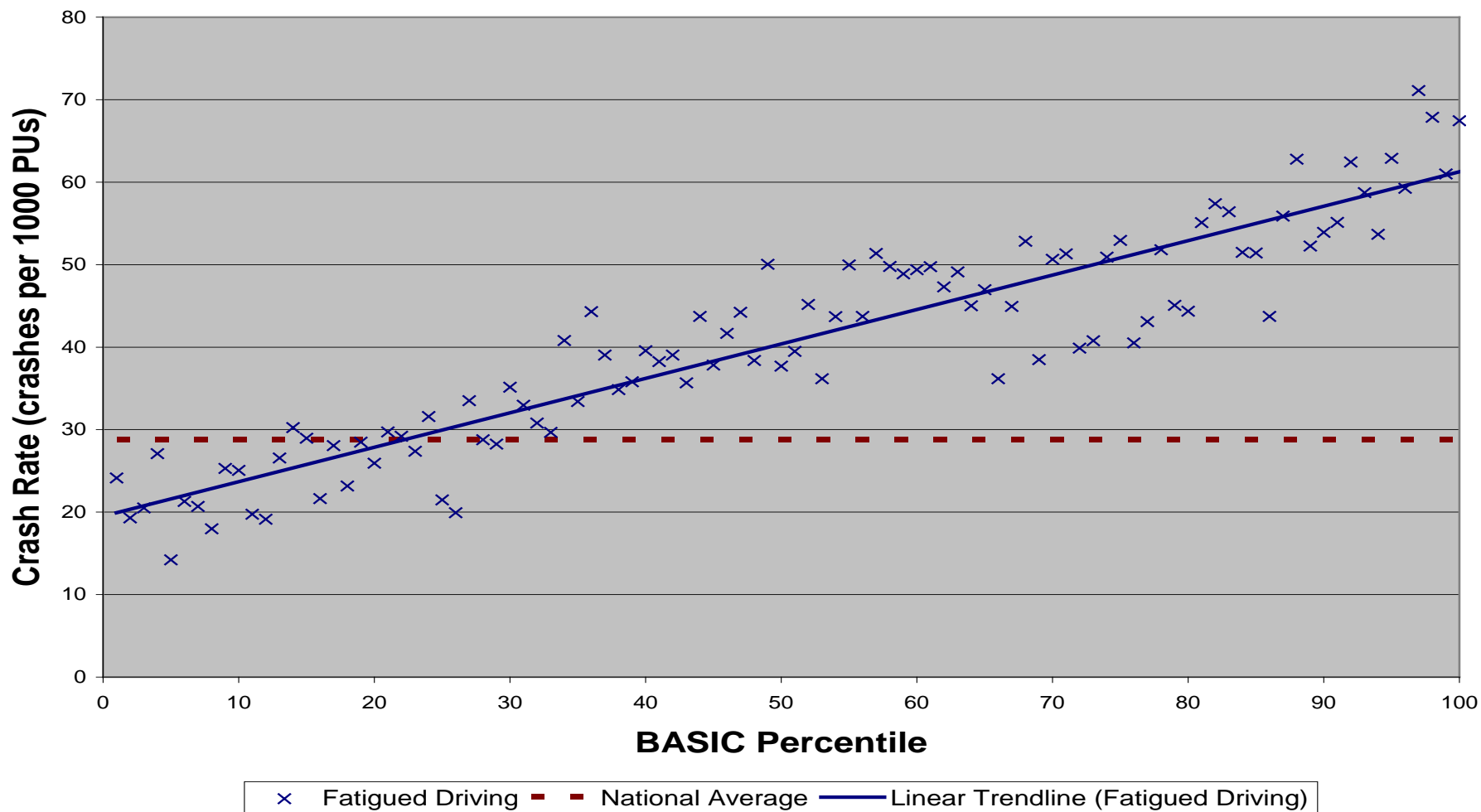
# SMS Effectiveness Testing: Timeline





# Field Test: SMS Effectiveness Results

## Fatigue BASIC and high risk carriers



# ★ Field Test Next Steps

- Formal test data collection in the four 50/50 States concludes June 2010
  - Remaining personnel fully trained in July
- Evaluation and metrics to date
  - Focused on efficiency
  - Designed to ensure uniform processes in test states, and
  - Overall management of the Field Test

# ★ Field Test Evaluation

- Independent 3<sup>rd</sup> party evaluator to analyze Field Test Results
  - Limited to evaluating SMS and Interventions process
    - Field test results exclude SFD impact from full model
- Evaluation will include:
  - How effective are interventions in improving the crash rates of carriers: CSA 2010 vs. SafeStat/CR model?
  - How effective are various interventions in getting carriers into compliance?
  - Are particular intervention types more effective with particular BASICS?

# ★ Outreach - Transparency

- Foundation laid for systematic CSA 2010 rollout
  - Implemented national outreach program
  - 11 public listening sessions; Federal Register notices
  - Website (660,000+) and email subscribers (9,785)
  - Radio and print media
  - Partner and stakeholder briefings nationwide
  - Field workforce readiness initiatives
- Listened carefully to partners, stakeholders, and field staff feedback
- Rollout schedule designed so “we do it right”

# ★ Rollout Timeline

- Revised rollout timeline from summer to fall 2010
  - In response to stakeholder input and field test “lessons learned”
- Apr-Nov 2010 --- Motor carrier Data Preview
  - Opportunity to correct unsafe behavior
  - Submit requests for data review
- July-2010 --- Train remaining personnel in four 50-50 test States
  - Nine States fully operating w/SMS and CSA 2010 interventions

# ★ Rollout Timeline

- Nov-Dec 2010 ---
  - Replace SafeStat with new SMS; available to public
  - Begin sending warning letters nationwide
  - Update roadside inspection selection system nationwide
  - Begin to phase-in four new elements into CR process in 41 States
    - **Focused compliance reviews** to reach more carriers
    - **Direct Notices of Violation (NOV)** to carriers with deficient Driver Fitness BASIC
    - **Red Flag Driver** process to increase driver focus
    - **New DSMS sampling** procedures to increase driver focus and improve carrier investigations



# ★ Rollout Timeline (Cont'd)

- Jan-2011 --- Publish NPRM
- Jan-Nov 2011 ---
  - Continue comprehensive partner/stakeholder outreach
  - Continue field workforce preparation
  - Complete interventions training & implementation – 41 States

# ★ Summary

- A fully implemented CSA 2010 ---
  - Better achieves our safety mandate
  - Achieves greater efficiency for FMCSA/States
  - Enables us to take more unsafe motor carriers off the road
  - Requires greater on-road safety accountability
  - Expect greater reduction in CMV crashes, fatalities, and injuries



# Frequently Asked Questions

- **Will FMCSA or the CSA 2010 initiative assign safety ratings to individual CMV drivers?**
  - No
- **What is the Driver Safety Measurement System (DSMS)?**
  - Internal enforcement tool used during motor carrier investigations
  - Results not available to employing motor carriers or public

- **What is the Pre-Employment Screening Program (PSP)?**
  - Mandated by Congress irrespective of CSA 2010 effort
  - Screening tool that allows motor carriers and drivers to purchase inspection and crash history
    - 5 years Crashes, 3 years inspections
    - No rating or DOT assessment
  - Requires driver consent
  - <http://www.psp.fmcsa.dot.gov>
- **Does a driver's violation history at a previous employer impact a carriers Safety Measurement System (SMS) evaluation?**
  - No

# ★ FAQs

- Do tickets or warnings that drivers receive while operating their **personal vehicles** impact the new Safety Measurement System (SMS)?
  - No
- Will the Safety Measurement System (SMS) data related to **carriers** be available to the public?
  - Yes, beginning in late November or early December
  - Crash evaluation restricted from public view

# ★ FAQs

- **Is there a way to request a review of potentially erroneous or improper violations on carrier and/or driver records**
  - **Yes, DataQs**
  - <https://dataqs.FMCSA.dot.gov/login.asp>.
- **Do “clean inspections” count in the SMS?**
  - **Yes, they have a positive influence on results**
  - **FY 2009: One third of the over 3.5 million inspections had no violations**



# FAQs

- **Why doesn't the current CSA 2010 Data Review Website provide motor carriers with a good or bad "assessment" in the Safety Measurement System (SMS)BASICs?**
  - SMS is still being refined based on the Operational Model Test
  - SMS results may differ based on these refinements





# SMS Refinements Currently Under Consideration

- Effective and equitable measure of exposure for the Crash and Unsafe Driving BASICS
  - Power Units and Vehicle Miles Travelled (VMT)
- Safety Event Grouping
- Violation Severity Weights
- Other



# In Summary:

## CSA 2010 Roll-out Schedule – One More Time

### **April to August 2010: National Data Review**

- Carrier review of violations by BASIC and crash data (April)
- Carrier preview of SMS results and safety assessment in BASICs (August)

### **Late November thru December 2010: SMS Replaces SafeStat**

- FMCSA/States prioritize enforcement with SMS
- SMS results are available to industry/public
- Warning Letters are issued to carriers with deficient BASICs
- Roadside inspectors use SMS results to identify carriers for inspection
- Apply some key on-site investigation concepts from the operational model

### **2011: Interventions Implemented State-by-State and SFD NPRM**

- SFD NPRM published
- Systematic introduction of new investigation types (e.g. off-site) and
- National training program to support new interventions process