CSA - Compliance, Safety & Accountability

Training By
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Colorado Motor Carriers Association
CSA - What Is It?

- New, high-impact FMCSA safety program
- To improve large truck and bus safety
- Ultimately reduce crashes
- Contact a larger number of carriers
- Address safety problems before crashes occur
The way FMCSA assesses carrier safety
- Identifies unsafe carrier and driver behaviors that lead to crashes
- Uses all safety-based roadside inspection violations
- Evaluates/tracks driver performance individually

How FMCSA addresses carrier safety issues
- Reaches more carriers earlier and more frequently
- Improves efficiency of investigations
  - Focuses on specific unsafe behaviors
  - Identifies root causes
  - Defines and requires corrective actions

How FMCSA promotes safety
- Forces carriers/drivers to be accountable for their safety performance
  - Demands and enforces safe on-road performance
- Makes more complete safety performance assessments publicly available
Major Components of CSA

- Safety Measurement System
- Safety Fitness Determination (in process)
- Comprehensive Intervention Process
SMS - Safety Measurement System

- Uses crash records and ALL roadside inspection safety-based violations to determine carrier/driver safety
- Weights time and severity of violations based on relationship to crash risk
- Triggers the intervention process (eventually would feed the proposed Safety Fitness Determination)
- Calculates safety performance based on 7 Behavior Analysis and Safety Improvement Categories (BASICs)
Everything Counts!
Just Kidding!

- Data limited to:
  - Commercial Motor Vehicles
  - Violations in Personal Vehicles do NOT count
  - Data must be tied to Inspections
  - OOS as a result of a crash does NOT count
  - Violations must be written as FMCSR violations, not state codes
# SMS BASIC C Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsafe Driving</td>
<td>(Parts 392 &amp; 397)</td>
</tr>
<tr>
<td>Fatigued Driving</td>
<td>(Parts 392 &amp; 395)</td>
</tr>
<tr>
<td>Driver Fitness</td>
<td>(Parts 383 &amp; 391)</td>
</tr>
<tr>
<td>Drugs/Alcohol</td>
<td>(Part 392)</td>
</tr>
<tr>
<td>Vehicle Maintenance</td>
<td>(Parts 393 &amp; 396)</td>
</tr>
<tr>
<td>Improper Loading/Cargo Issues</td>
<td>(Parts 392, 393, 397 &amp; HM Violations)</td>
</tr>
<tr>
<td>Crash Indicator</td>
<td></td>
</tr>
</tbody>
</table>
Methodology Overview

1. Obtain on-road safety event data (e.g., inspections, crashes) and attribute to entity to create a safety event history
2. Place each entity’s violations/crashes into a BASIC
3. Convert BASIC data to quantifiable measure/rate (Safety Fitness Determination would be based on absolute performance)
4. Based on each entity’s BASIC measure, develop rank and percentile for each entity’s BASIC performance
Safety Events (Data)

- **Carriers**
  - Includes 24 months of carrier on road safety performance

- **Drivers**
  - Includes 36 months of driver on road performance
**BASIC Measures**

- **Time Weighting / Time Frame** - More recent events more relevant
- **Severity Weightings** - Increase weighting of violations that have been shown to create a greater risk of crash involvement
- **Normalizing** - Based on exposure: use of number of inspections and power units
- **Single Inspection Cap** – limit violation weight of single poor inspection
- **Violation Cap** – Cited section number only counts once per inspection
BASIC Measures

Unsafe Driving Basic and Crash Indicator use a combination of VMT and Power Units.

- Fleets will be identified as one of the following:
  - Combination trucks (fleet >70%), or
  - Straight trucks (fleet >30%)
- Utilization “credit” will be “given” based on mileage (VMT)

- UPDATE your mileage on your MCS-150!
## Safety Event Groups

<table>
<thead>
<tr>
<th>Safety Event Group</th>
<th>Combo Segment: # of Inspections with Unsafe Driving Violations</th>
<th>Straight Segment: # of Inspections with Unsafe Driving Violations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3-8</td>
<td>3-4</td>
</tr>
<tr>
<td>2</td>
<td>9-21</td>
<td>5-8</td>
</tr>
<tr>
<td>3</td>
<td>22-57</td>
<td>9-18</td>
</tr>
<tr>
<td>4</td>
<td>58-149</td>
<td>19-49</td>
</tr>
<tr>
<td>5</td>
<td>150+</td>
<td>50+</td>
</tr>
</tbody>
</table>
Data Sufficiency

- Minimum number of inspections with applicable violations required for percentile to be assigned
- Assists in identification of patterns of carrier behavior - note safety problems across multiple inspections

<table>
<thead>
<tr>
<th>BASIC</th>
<th>Number of Inspections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsafe Driving</td>
<td>3</td>
</tr>
<tr>
<td>Fatigued Driving (Hours-of-Service)</td>
<td>3</td>
</tr>
<tr>
<td>Driver Fitness</td>
<td>5</td>
</tr>
<tr>
<td>Controlled Substances / Alcohol</td>
<td>1</td>
</tr>
<tr>
<td>Vehicle Maintenance</td>
<td>5</td>
</tr>
<tr>
<td>Cargo Related</td>
<td>5</td>
</tr>
<tr>
<td>Crash Indicator</td>
<td>2 Crashes</td>
</tr>
</tbody>
</table>
### BASIC Thresholds

<table>
<thead>
<tr>
<th>BASIC</th>
<th>Other</th>
<th>HM</th>
<th>Passenger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsafe Driving</td>
<td>&gt;65%</td>
<td>&gt;60%</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>Fatigued Driving</td>
<td>65%</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>Driver Fitness</td>
<td>80%</td>
<td>75%</td>
<td>65%</td>
</tr>
<tr>
<td>Drugs / Alcohol</td>
<td>80%</td>
<td>75%</td>
<td>65%</td>
</tr>
<tr>
<td>Vehicle Maintenance</td>
<td>80%</td>
<td>75%</td>
<td>65%</td>
</tr>
<tr>
<td>Cargo Related</td>
<td>80%</td>
<td>75%</td>
<td>65%</td>
</tr>
<tr>
<td>Crash Indicator</td>
<td>65%</td>
<td>60%</td>
<td>50%</td>
</tr>
</tbody>
</table>
“Point System”

- All violations will be assigned points
  - NOT the same as points on an MVR
- Violations weighted by time and severity
- Points converted to percentages
- FMCSA will not limit total number of points per driver or company
- Points will follow drivers for 36 months
- Points will follow carriers for 24 months
  - Driver points do not transfer to future employers, but stay with carrier under which violation occurred
How the math works...

- **Time Weights**
  - 0-6 months old = 3
  - 6-12 months old = 2
  - 12-24 months old = 1

- **Out of Service**
  - Add 2 points to severity weight prior to multiplying

- **Violation Severity Weights**
  - Range from a low of 1 to a high of 10
Example 1: Current Level 1 Inspection

- Violations found:
  - 1 Brake out of Adjustment
  - False Log – put OOS for 10 hours
- Time Weight = 3
- OOS Weight = +2
- Severity Weights
  - Brake = 4
  - False Log = 7

- Brake Violation $3 \times 4 = 12$ Maint.
- HOS Violation/OOS $3 \times (7 + 2) = 27$ HOS
- Counts as a Clean Inspection for Unsafe Driving, Driver Fitness, Drug/Alcohol and Cargo BASICS
More Math

- Points in each category are converted into percentages based on Safety Event Groups.

- Percentages change based on action of peers, as well as company
  - Moving target!
How To Improve Scores

- “Good” Inspections
- “Get Well” Rules
  - Violation time weight diminishes
  - Unsafe Driving and Controlled Substances /Alcohol BASICs
    - No percentile assigned if no inspections with a violation in these BASICs in the last year
  - Crash Indicator
    - No percentile assigned if no crashes in last year
  - Fatigued Driving (HOS), Driver Fitness, Vehicle Maintenance and Cargo Related BASICs
    - No percentile assigned if:
      - No inspections with a violation in that BASIC within the past year; and
      - Most recent relevant inspection does not have a violation of that BASIC
Intervention Process

- Early Contact
  - Warning Letter
  - Carrier Access to Safety Data and Measurement

- Investigation
  - Off-site Investigation
  - On-site Focused Investigation
  - On-site Comprehensive Investigation
Intervention Process (Cont’d)

- Follow-On
  - Cooperative Safety Plan (CSP)
  - Notice of Violation (NOV)
  - Notice of Claim (NOC)
  - Settlement Agreement
Drivers

- The new Carrier Measurement System provides internal tools, including enhanced information on individual drivers, to investigators to more effectively and efficiently conduct carrier investigations
  - Tools allow for targeted sampling using enhanced driver information
  - Follow up on serious violations

- Under CSA, **individual drivers will NOT be assigned safety ratings or safety fitness determinations**
Drivers

Other Agency initiatives are underway, including the Pre-employment Screening Program (PSP)
- PSP was mandated by Congress and is not a part of CSA
- “Driver Profiles” from FMCSA’s Driver Information Resource (DIR) will be available to carriers through PSP
- Driver Profiles will only be released with driver authorization

http://psp.fmcsa.dot.gov
Safety Fitness Determination

SFD would:

- Incorporate on-road safety performance via new SMS which is updated on a monthly basis
- **Continue to include** major safety violations found as part of CSA investigations
- Produce a **Safety Fitness Determination (SFD)** of
  - Unfit *or*
  - Marginal *or*
  - Continue to Operate
CSA incorporates the existing safety rating process and will continue to do so until SFD would go into effect.

Drivers will not be rated.

Ratings are issued based on investigation findings:
- On-site comprehensive investigations can result in Satisfactory, Conditional or Unsatisfactory ratings
- Onsite focused investigations can result in Conditional or Unsatisfactory Ratings
- Offsite investigations do not result in a rating
- Carriers can request an administrative review of its safety rating(§385.17)
Carrier Measurement: SMS Results

Welcome to the Motor Carrier Safety Measurement System

Select a BASIC below to view details

PERFORMANCE

<table>
<thead>
<tr>
<th>BASICs Overview</th>
<th>On-Road</th>
<th>Investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unfit Driving</td>
<td>89.3%</td>
<td>ALERT</td>
</tr>
<tr>
<td>Fatigue Driving (Hours-of-Service)</td>
<td>66.8%</td>
<td>ALERT</td>
</tr>
<tr>
<td>Driver Fitness</td>
<td>54.1%</td>
<td></td>
</tr>
<tr>
<td>Controlled Substances and Alcohol</td>
<td>56.2%</td>
<td>ALERT</td>
</tr>
<tr>
<td>Vehicle Maintenance</td>
<td>54.1%</td>
<td>Not Available</td>
</tr>
<tr>
<td>Cargo Related</td>
<td>54.1%</td>
<td>Not Available</td>
</tr>
<tr>
<td>Crash Indicator</td>
<td>54.1%</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

SUMMARY OF ACTIVITIES

<table>
<thead>
<tr>
<th>Number</th>
<th>O/D Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Inspections: 444</td>
<td></td>
</tr>
<tr>
<td>Vehicle Inspections: 314</td>
<td>20.8%</td>
</tr>
<tr>
<td>Driver Inspections: 443</td>
<td>5.6%</td>
</tr>
<tr>
<td>Hazardous Materials Inspections: 0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number</th>
<th>O/D Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Crashes: 13</td>
<td></td>
</tr>
<tr>
<td>Toe-aways: 12</td>
<td></td>
</tr>
<tr>
<td>Injuries/Fatalities: 5</td>
<td></td>
</tr>
</tbody>
</table>

RECENT INVESTIGATIONS

The following are the top most recent investigations:

- Intervention Type: Compliance Reviewer
- Date: 9/2/10
- Compliance Reviewer: 5/2/10
- Compliance Reviewer: 6/9/2001
- Compliance Reviewer: 8/5/2000
- Compliance Reviewer: 6/7/1991

DATA DOWNLOADS

Scope: All BASICs
File Type: Excel
Violation Details Provided in SMS

Driver Fitness
Operation of CMVs by drivers who are unfit to operate a CMV due to lack of training, experience, or medical qualifications. (FMCSR Parts 391 and 392)

Alert
BASIC Overall Status
Exceeds the established Intervention Threshold to be prioritized for intervention and cited with a serious violation within the previous 12 months.
(Based on a 14-month record ending November 19, 2010)

Data Center
Scope: Driver Fitness - Data only
File Type: Excel
Download

On-road Performance Detail
Investigation Results Detail
Performance Tools

On-road Performance Overview
MEASURE: 8.22
PERCENTILE: 88.2%
(Threshold: 80%)

Relevant Inspections: 443
Total Inspections with Driver Fitness Violations: 21
Total Driver Violations: 22

Information Center
Select a topic below to view information:
- What is the Motor Carrier Safety Measurement System (SMS)?

View all possible Driver Fitness violations

Driver Fitness Violations

<table>
<thead>
<tr>
<th>Violation</th>
<th>Description</th>
<th># Total Violations</th>
<th># OOS Violations</th>
<th>Violation Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>393.21(02)</td>
<td>Operating a CMV without a CD</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>
## Carrier Measurement: SMS Results

### Select a BASIC below to view details

<table>
<thead>
<tr>
<th>BASICs Overview</th>
<th>PERFORMANCE</th>
<th>BASICS Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Based on a 24-month record ending November 19, 2010)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Unsafe Driving</td>
<td>On-Road: 89.3%</td>
<td>Investigation:</td>
</tr>
<tr>
<td>- Fatigued Driving (Hours of Service)</td>
<td>49.8%</td>
<td></td>
</tr>
<tr>
<td>- Driver Fitness</td>
<td>88.2%</td>
<td></td>
</tr>
<tr>
<td>- Controlled Substances and Alcohol</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>- Vehicle Maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Cargo Related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Crash Indicator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: This carrier exceeds the FMCSA-established threshold and is subject to special emphasis programming and has been cited with one or more driver violations within the past 12 months. Therefore, the carrier may be prioritized for on-site enforcement actions and random inspections.*
Further Drilldown in SMS

Driver Fitness
Operation of CMVs by drivers who are unfit to operate a CMV due to lack of training, experience, or medical qualifications. (FMCSR Parts 392 and 391)

Alert
BASIC Overall Status
Exceeds the established intervention threshold to be prioritized for intervention and cited with a serious violation within the previous 12 months.
(Based on a 24-month record ending November 19, 2010)

Data Center
Scope: Driver Fitness - Data only
File Type: Excel
Download

On-road Performance Detail
Investigation Results Detail
Performance Tools

Investigation Results Overview
Serious violation discovered
Certain violations found during investigations can trigger an alert in a BASIC. The violation will be displayed for one year.

Information Center
Select a topic below to view information:
- What is the Motor Carrier Safety Measurement System (SMS)?
- View all possible Driver Fitness violations
Request a data correction review

SERIOUS VIOLATIONS FROM INVESTIGATIONS

<table>
<thead>
<tr>
<th>Investigation</th>
<th>Violation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance Review</td>
<td>391.45(b)(1)</td>
</tr>
</tbody>
</table>

Investigation Date
9/9/2010
Displaying 1 of 1 Serious Violations

29
# Reasons for Interventions
(Provided by Vigillo)

<table>
<thead>
<tr>
<th></th>
<th>Prior to CSA</th>
<th>After CSA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unsafe Driving</strong></td>
<td>30%</td>
<td>15%</td>
</tr>
<tr>
<td>Crash</td>
<td>22%</td>
<td>16%</td>
</tr>
<tr>
<td>Fatigue Driving</td>
<td>15%</td>
<td><strong>31%</strong></td>
</tr>
<tr>
<td>Cargo</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Veh. Maintenance</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>Driver Fitness</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Drug/Alcohol</td>
<td>3%</td>
<td>0%</td>
</tr>
</tbody>
</table>
## Top Violations in 2010

make up 81% of all violations
(provided by Vigillo)

<table>
<thead>
<tr>
<th>CFR Code</th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>395.8</td>
<td>Logs - Form &amp; Manner</td>
<td>17.44%</td>
</tr>
<tr>
<td>392.2S</td>
<td>Speeding</td>
<td>12.17%</td>
</tr>
<tr>
<td>395.8</td>
<td>Logs Not Current</td>
<td>12.09%</td>
</tr>
<tr>
<td>391.41A</td>
<td>No Med Card in Possession</td>
<td>9.84%</td>
</tr>
<tr>
<td>391.11</td>
<td>Non-English Speaker</td>
<td>6.7%</td>
</tr>
<tr>
<td>395.3</td>
<td>Logs - Over 14 Hours</td>
<td>6.56%</td>
</tr>
<tr>
<td>392.16</td>
<td>Not Using Seatbelt</td>
<td>5.55%</td>
</tr>
<tr>
<td>395.3</td>
<td>Logs – Over 11 Hours</td>
<td>3.68%</td>
</tr>
<tr>
<td>395.8</td>
<td>False Logs</td>
<td>3.53%</td>
</tr>
<tr>
<td>391.45</td>
<td>Expired Medical Card</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

43.38% of violations are HOS-related - FOCUS your energies
Avoid Foolish Inspections

- Unsafe Driving
  - Speeding
- Fatigued Driving
  - Form & Manner / RODS Not Current
- Driver Fitness
  - Med. Certificate in Possession / Not Current
- Drug / Alcohol
  - Terminate Problem
- Vehicle Maintenance
  - Pre-Trip Inspections / Drivers Leaving when Repair is Needed / Lights!
- Cargo
  - Shipper Loaded / Driver Needs to Double Check!
- Crash
  - 12 months to clear BASIC
CSA Success

- Maintain Good Compliance
- View your CSI / Data Regularly
- Involve Your Drivers
- Keep Data Current / Update MCS-150
- Check and Challenge Data
- Respond to Warnings
- Clean Inspections / Reviews
- FOCUS on Most Common / Most Severe Violations First
The DataQs system is an electronic means for filing concerns about Federal and State data released to the public by the Federal Motor Carrier Safety Administration (FMCSA). Through this system, data concerns are automatically forwarded to the appropriate office for resolution. The system also allows filers to monitor the status of each filing.

https://dataqs.fmcsa.dot.gov
Challenging Data

- Improper Challenges:
  - Driver fired, please remove all these violations
  - Crash not our fault, please remove
  - Driver caused the violation, please remove
  - Owner operator (leased to company), please remove

- Helpful Suggestions:
  - Attach documents that support the challenge
  - Be specific and detailed in your narrative
  - Owner operator (leased to company): attach lease agreement
  - Ensure contact information is accurate and updated
  - Check the status frequently, (additional information may be requested)
Summary

- 7 BASICS vs. 4 SEAs
- New Intervention Process
- Every Roadside Violation Counts
- “Get Well” Rules
- Education & Preparation are Key
- Public Data will Still be Shielded
Conclusion

- What is the largest ROI in trucking?
- NOT having an accident and
- NOT being fined for non-compliance
Contact Information

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- Director of Safety
- Colorado Motor Carriers Association
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- patti@cmca.com