

Overview of FMCSA's Data Quality Improvement Program

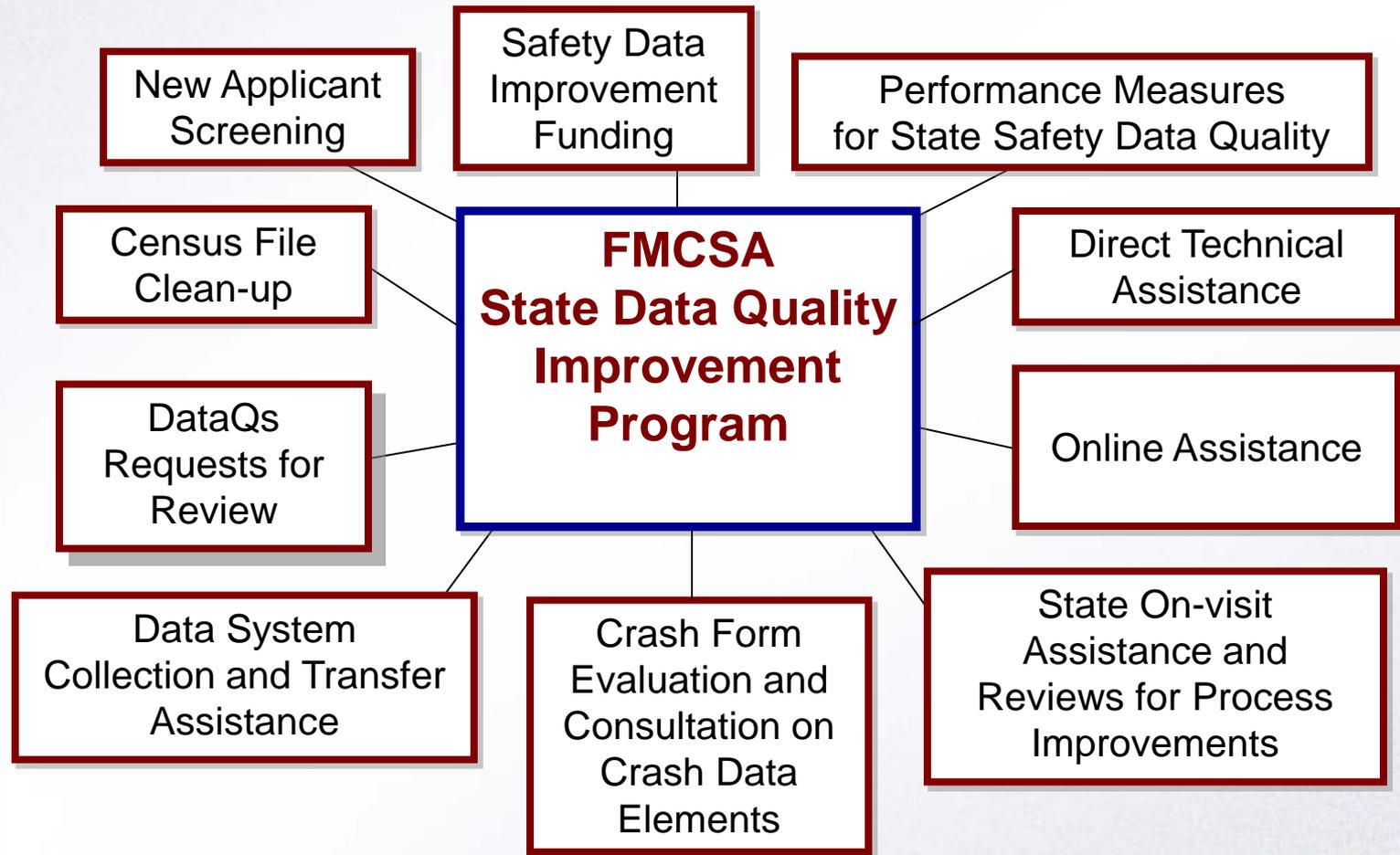
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FMCSA Tasked with Improving State-Reported Data

- FMCSA safety programs are data-driven
 - Crash and inspection data supplied by States for FMCSA safety programs
- GAO and OIG challenged FMCSA to improve the data quality
- Motor carrier industry wants better data



State Data Quality Improvement Program Serves Varying State Needs

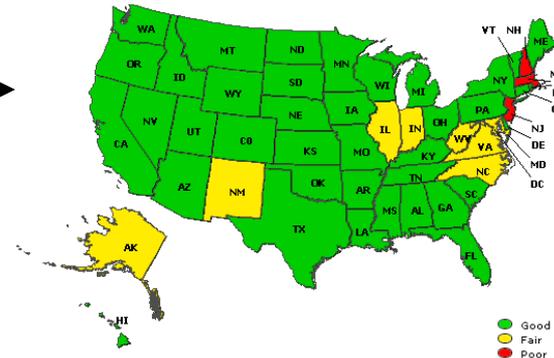


Incremental Approach Gives States Time to Improve

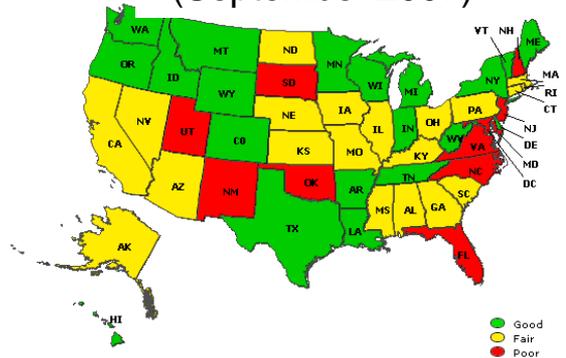
SSDQ Implemented
(March 2004)



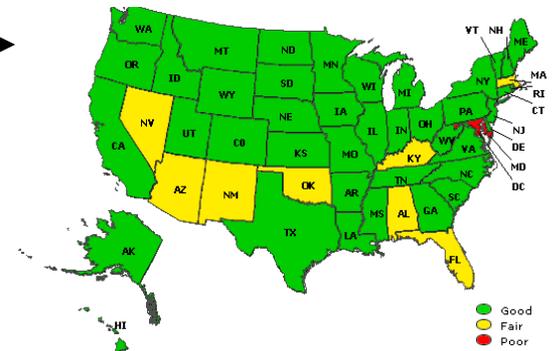
3-yr Improvement
(March 2007)



New Measures
(September 2007)



>2-yr Improvement
(April 2010)

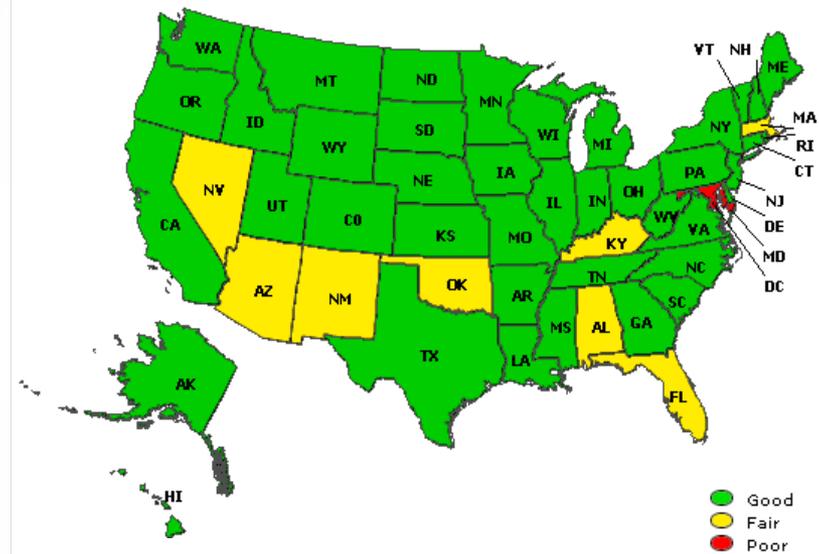


State Data Quality Has Improved

March 2004 Evaluation Results

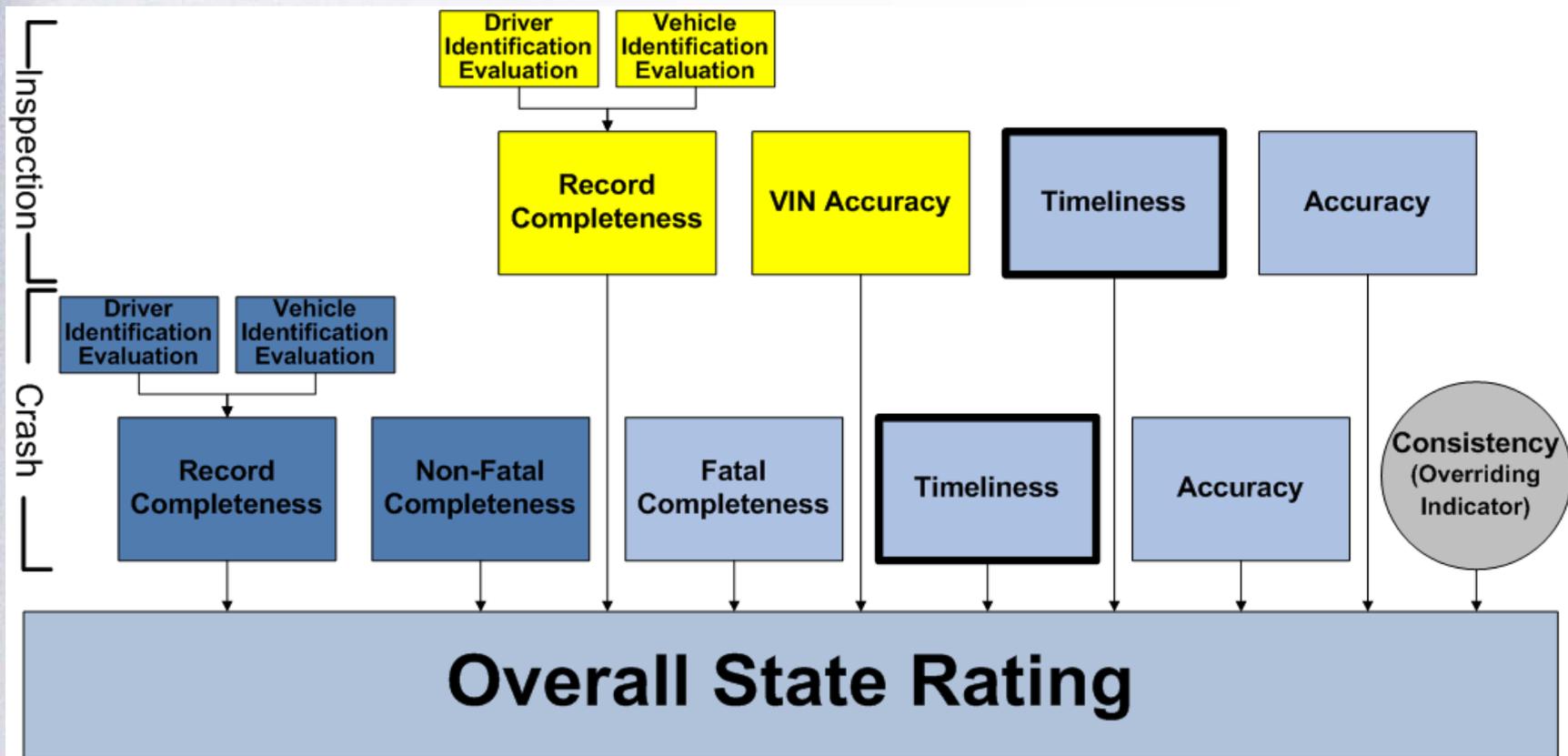


April 2010 Evaluation Results



- Evaluates completeness, timeliness, accuracy and consistency
- Monthly updates
- Historical State perspective

Evolution of the SSDQ Methodology



Data Quality Improvement Over Time

State Safety Data Quality Improvement

March 2004 – April 2010

Overall State Rating	3 Year Improvement		New Crash Measures	Current Results	* 2 New Inspection Measures Added
	Mar-04	Mar-07	Sept-07	Apr-10	TBD
Good	24	40	21	41	35
Fair	13	8	20	8	13
Poor	14	3	10	2	3

* Record Completeness and VIN Accuracy

Direct Technical Assistance: Focusing on the Varying State Needs

- 4 staff cover the nation and “triage” to support organizations
- Assistance reflects the need
 - Low - Monitor data quality
 - Medium - Assistance with a specific issue
 - High – In-depth review of State processes, systems and data

Online Assistance: Focusing on Data Quality to Help States Help Themselves

- A&I Online, Data Quality Module
 - <http://ai.fmcsa.dot.gov/>
 - SSDQ Performance Measure Results
 - State Data Analysis Reports
 - Educational and training materials
 - FARS/MCMIS Matching



The screenshot shows the FMCSA Home page. At the top, it says "FMCSA Home" and "U.S. Department of Transportation". Below that is a banner for "Analysis & Information Online" with the text "Federal Motor Carrier Safety Administration". A navigation bar contains links for "Home", "SafeStat", "FMCSA Tools", "Crash Statistics", and "Data Quality". The "Data Quality" link is circled in yellow. Below the navigation bar, there is a "FEATURE OF THE MONTH" section for February 2010, titled "Traffic Enforcement Out Of Service Report". To the right of this is a section for "A&I Online" titled "Motor Carrier Analysis and Information Resources" with a note to "Hover or pause your mouse over any of the links below for more information about that resource."

State Crash Forms and Data Systems: An Important Source of the Problem

- Standardized State Crash Form Evaluations
- On-site review of data systems and transfer of qualifying federal records
- Consultation on crash form revision and electronic collection review

Continual evaluation of 50 State crash forms for FMCSA crash data elements (paper and electronic)

Assisted 20 states with crash form revisions

Evaluated 10 states in more detail for MMUCC Compliance

Reviewed 15 states data extraction process

Reviewed 10 states data collection to data entry process

Crash Data Collection Training: Custom Tailored to State Crash Forms

- On-site (custom) and On-line (Generic)

The screenshot shows the FMCSA Crash Data Collection Resource website. At the top right, there is a "HOME PAGE" link and the text "FMCSA Crash Data Collection Resource". Below this, there are five lesson tabs: "Lesson 1", "Lesson 2", "Lesson 3", "Lesson 4", and "Lesson 5". The main content area is divided into two columns. The left column contains introductory text: "These web-based materials are intended to be an educational resource for law enforcement officers, CMV inspection authorities, accident investigation trainers, and State department of transportation accident records developers and users. This resource defines and provides examples for FMCSA related crash data collected and reported to SAFETYNET. To return to this page to enter another selection at anytime, use the 'Home Page' bar at the top right of each page." Below this text is a red note: "NOTE: The companies and carriers shown in any photographs on this site are included for illustrative purposes only. These images in NO WAY indicate or imply unsafe or improper operating practices by those pictured." The right column lists the lessons: "Lesson 1: Selection Criteria", "Lesson 2: Motor Carrier Identification", "Lesson 3: Vehicle Configuration / Cargo Body Type", "Lesson 4: Crash Events", and "Lesson 5: Hazardous Materials". Below the text is a row of five photographs showing various truck accidents: a blue truck overturned, a white truck with a trailer involved in a collision, a white truck with a trailer involved in a collision, a white truck with a trailer involved in a collision, and a white truck with a trailer involved in a collision. Below the photographs is a section titled "Links to Hot Topics" with five links: "Carrier Identification" (with a blue box labeled "IMPORTANT"), "PAR Guidance", "GCWR Details", "Government Vehicles", and "Rental Vehicles".

States Trained: 26

Classes Delivered: 61

Law Enforcement Reached: 15,123

State Crash Form Evaluations: Standardized Reviews to Improve Data Collection

- NISR Website

<http://www.nisrinc.com/>

- State Crash Report Evaluations
- VIN Decoding

The screenshot displays the NISR website interface. At the top left is the NISR logo (National Institute for Safety Research). Below it is a 'Training' menu with links for 'Training Program Overview' and 'Training Class Brochure'. The main content area is divided into two columns. The left column contains a 'Documents' section with links for 'Shared Documents' and 'FMCSAUpload', and a 'Tools, Resources & Guidance' section with links for '2010 SAFETYNET Coding & Validation Manual', 'CMV VIN Translations', 'Enclosure 3 - Carrier Identification Guidance', 'Enclosure 3 Training', and 'Law Enforcement Visor Cards'. Below that is a 'SAFETYNET Discussions' section. The right column features a red header for 'State Resources' and a link for 'View State PAR Evaluations' which is circled in orange. To its right are links for 'State Analytical Crash Data, Crash Data Training Materials'. Below the 'View State PAR Evaluations' link are two steps: 'Step 1: Select a state' with a dropdown menu showing states from AL to DE, and 'Step 2: Select a document' with a large empty text area.

Comparison of State and MCMIS Crash Data: Shines a Flashlight into a Black Hole

- University of Michigan Transportation Research Institute (UMTRI) assesses whether individual States are reporting all FMCSA crashes.



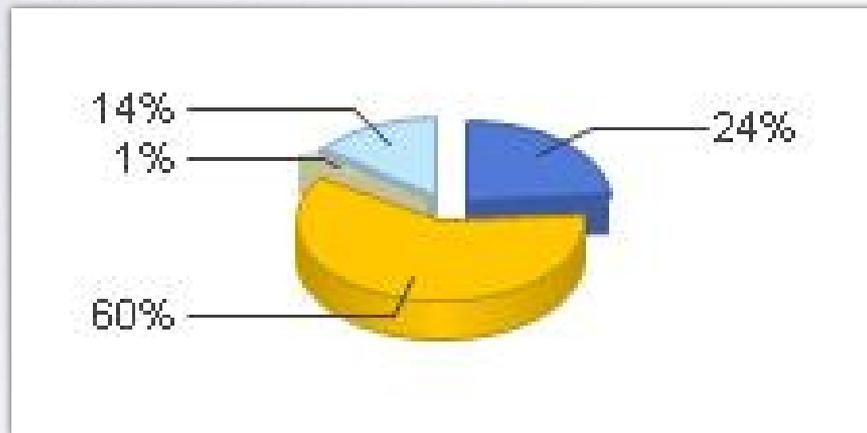
- 36 State Reports available online:

<http://umtri.umich.edu/divisionPage.php?pageID=308>

DataQs: Anyone Can Challenge Data Online



DataQs Data Challenges Feb 2004 – May 2010



~80,000 data challenges filed (66% resulting in data updates)

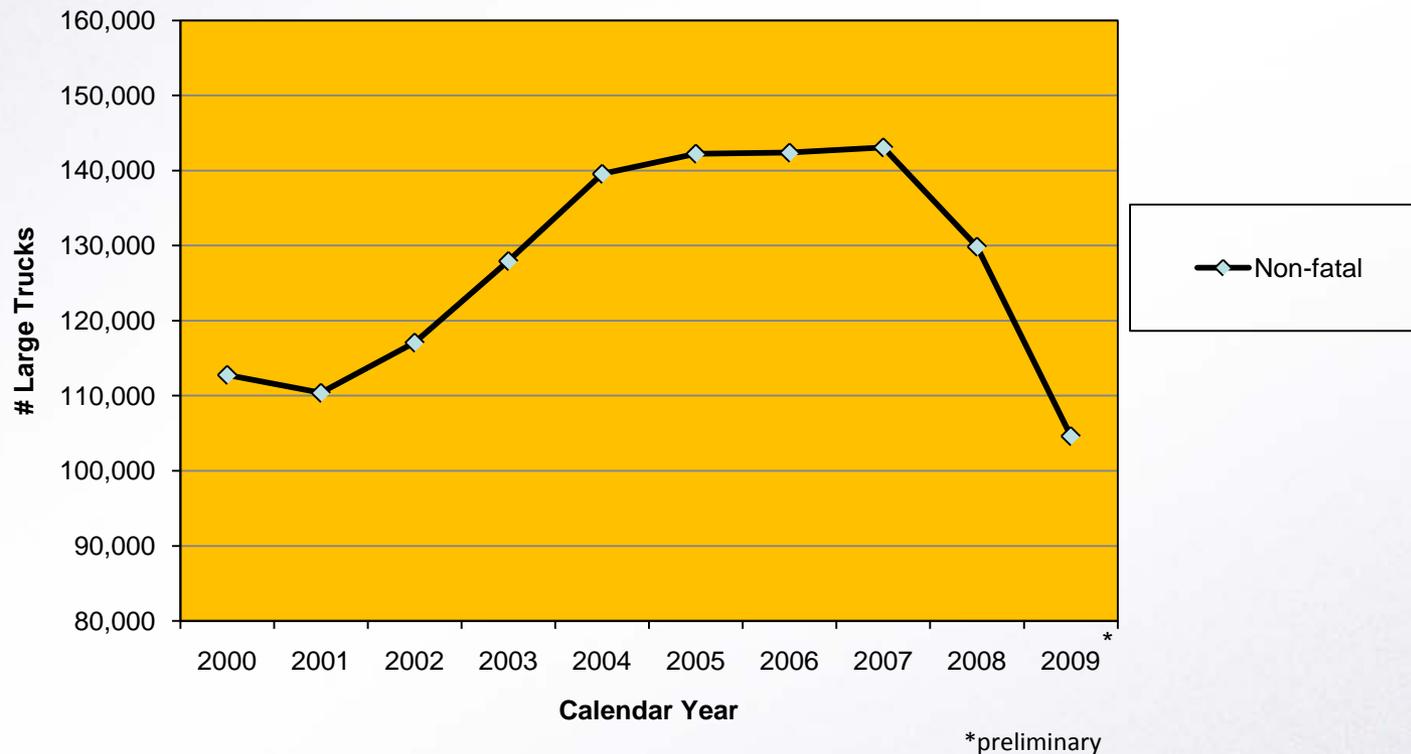
~2,100 new challenges per month

~34,000 general public/motor carrier registrations

~900 new general public/motor carrier registrations per month

Data Reporting Improvements

Number of Large Trucks Involved in Non-fatal Crashes



Summary of Key Program Components

- Meaningful State data quality performance measures are monitored over time
- States understand the DQ performance requirements
- Multifaceted assistance to States for problem identification and resolution are provided.

Future Direction

- New/Enhanced Measures that reflect FMCSA program priorities
- Growth of online assistance
- Continued targeted technical assistance
- Multifaceted & multidimensional assistance to States for problem identification and resolution.

State Safety Data Quality (SSDQ)

Supporting Organizations

