OVERVIEW OF THE NON-FATAL CRASH COMPLETENESS (NFCC) MEASURE MODIFICATION

THIS OVERVIEW introduces the modification to the Non-Fatal Crash Completeness (NFCC) measure as part of the Federal Motor Carrier Safety Administration's (FMCSA's) continuous data quality improvement effort. While important to FMCSA's Data Quality Improvement Program, the NFCC measure is not always well understood. This overview is the first in an evolving series of information pieces to clarify the NFCC purpose, methodology and results, and to point States to improvement actions.

What does data quality have to do with safety?

Better and more comprehensive crash data will result in more effective use of enforcement resources — and safer roads. FMCSA's goal is to make the Nation's highways safe by identifying and addressing motor carriers with records of unsafe performance. In order to identify unsafe carriers and focus limited resources where they will have the greatest impact on safety, FMCSA needs effective and complete data on eligible crashes and inspections in the Motor Carrier Management Information System (MCMIS).

With increased reliance on data-driven safety programs — including the Compliance, Safety, Accountability (CSA) program — data quality improvement is more important than ever. Missing or inaccurate crash information can allow a carrier with an unsafe performance record to operate under the radar of FMCSA.
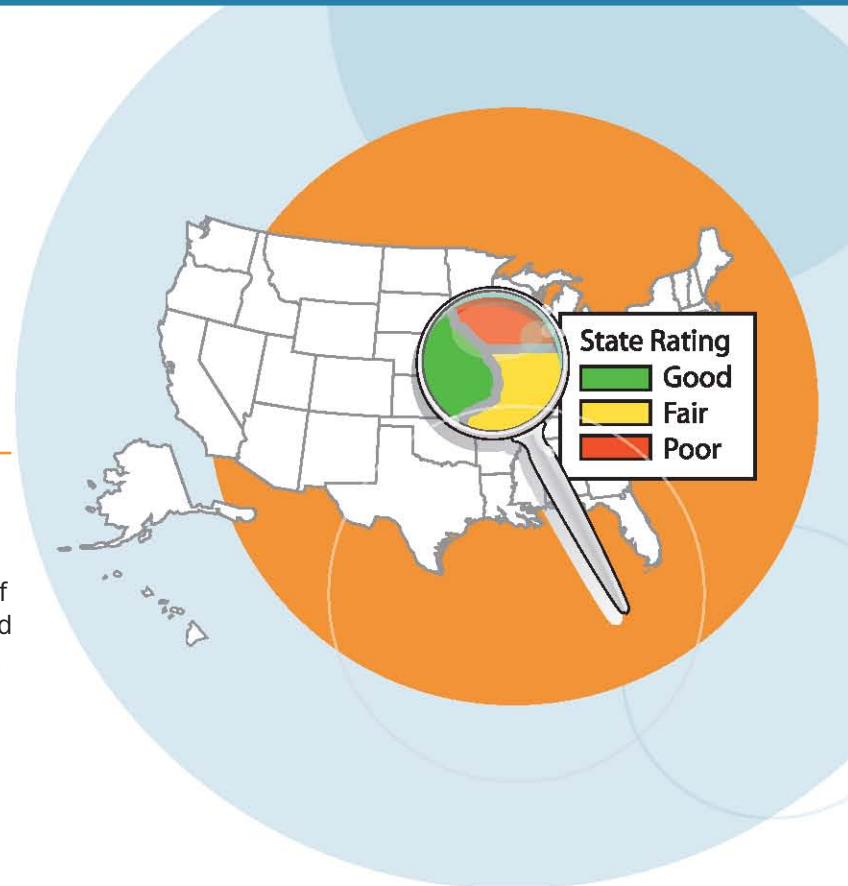
How does FMCSA evaluate State data quality?

The FMCSA's Data Quality Improvement Program aims to improve the quality of data in MCMIS. The comprehensive approach to improving the quality of crash and inspection data submitted by States to FMCSA includes:

· Evaluating individual State data
· Applying improvement tools
· Identifying data collection process improvements.

To evaluate individual State data, the State Safety Data Quality (SSDQ) methodology uses nine data quality performance measures, resulting in one overall rating per State, available online at:

http://ai.fmcsa.dot.gov/dataquality/dataquality.asp

State Rating
- Good (green)
- Fair (yellow)
- Poor (red)

Data quality performance measures have undergone continuous development since the program began, with new measures added and existing ones refined as part of an ongoing effort to improve State data quality. The latest change applies to the NFCC measure. The modification responds to State requests to make the measure more tailored to individual State characteristics.

What is the NFCC measure?

The NFCC measure estimates the number of non-fatal crashes a State should report based on the demonstrated relationship between the numbers of fatal and non-fatal crash records in MCMIS. A State can be expected to report an approximate number of non-fatal crashes given a number of fatal crashes.

Complete data from the States on all eligible vehicles involved in crashes is essential to effectively target poorly

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http://ai.fmcsa.dot.gov/DataQuality

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performing carriers. The NFCC measure serves as a guideline as to how many non-fatal crash records a State should be submitting, and analysis of State crash files has shown that a number of eligible non-fatal crash records have not been reported by States.

Both the current and the modified NFCC methodology assess a single State's non-fatal crash reporting using four main steps:

1. Input the current number of fatal crash records
2. Apply a statistical model to the number of fatal crash records
3. Output an expected number (or range) of non-fatal crash records from the model
4. Evaluate the reported number of non-fatal crash records against the anticipated range and assign an NFCC rating based on how closely they match.

How is the NFCC measure changing?

This summer a modification will be introduced to increase the accuracy and usefulness of the NFCC measure results. This modified approach was developed through a collaborative process with the States, whose continued involvement is essential to improve non-fatal crash reporting and increase safety. The modified measure will include:

· More States' data in the model
· Adjustments based on the amount of rural to urban traffic
· The use of more recent crash data
· Results that point to under- or over-reporting non-fatal crashes.

What's next?

In the coming weeks, information will be distributed to help States understand the NFCC methodology, the modification, and the results. Changes to the NFCC measure will be described in more detail and the methodology will be made available.

A tipsheet will be provided with recommended actions to increase the accuracy and completeness of non-fatal

crash data to improve a State's NFCC rating. Finally, States will have an opportunity to preview their NFCC results in early summer, giving them time to formulate improvement strategies before results are made available to the public.

Continue visiting this website for information on the upcoming NFCC modification. Involvement by you and your State partners is essential to improve the quality of data and to increase safety.

http://ai.fmcsa.dot.gov/dataquality/improve

Feedback/Questions
Send us your questions or comments on the modified NFCC measure by using the A&I Online Feedback form at:
http://ai.fmcsa.dot.gov/Feedback/AIFeedback.asp
Federal and State users may contact their Technical Assistant (TA) directly.

Learn More

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