

# EVALUATION OF REGULATORY IMPACT ANALYSIS FOR FMCSA'S CARRIER SAFETY FITNESS DETERMINATION: PROPOSED RULE

## Executive Summary:

The Federal Motor Carrier Safety Administration (FMCSA) is responsible for regulating the safety of commercial motor vehicles on the nation's highways. As part of this responsibility, the FMCSA conducts compliance reviews of motor carriers and issues Safety Fitness Determinations (SFD). Those carriers which receive an unsatisfactory SFD are deemed unfit to operate on the nation's highways.

The FMCSA is proposing a new rule, entitled Carrier Safety Fitness Determination (CSFD), which would eliminate the current three-tiered rating system (satisfactory, conditional and unsatisfactory) in favor of a binary system (fit or unfit).<sup>1</sup>

Promulgation of the proposed rule would have a substantial impact on business, consumers and the economy, thus it is defined a "significant" regulation by the Office of Management and Budget (OMB), and must satisfy additional requirements.<sup>2</sup> One such requirement is preparation of an extensive Regulatory Impact Analysis (RIA), including a benefit-cost analysis, an analysis examining the effect of the proposed rule on small businesses, and an analysis of practical alternative solutions to the regulatory need for the rule.

What follows is an examination of the RIA document prepared by FMCSA to support its proposed rule, comparing the contents of the document with OMB requirements for agency RIAs. The resulting analysis illustrates that, using reasonable assumptions and available data, the anticipated benefits of the proposed rule do not outweigh the costs. Additionally, in preparing the document, FMCSA failed to perform 11 of the 16 tasks specifically outlined by OMB for inclusion in agency RIAs.

This analysis was prepared by John Dunham & Associates, a New York City based economic research and consulting firm. All of the work in this report, including data, assumptions and conclusions are those of John Dunham & Associates. Any errors, omissions, or misstatements of fact are the responsibility of John Dunham & Associates.

## Introduction and Background:

The Federal Motor Carrier Safety Administration (FMCSA) is responsible for regulating the safety of commercial motor vehicles on the nation's highways. As part of this responsibility, the FMCSA conducts compliance reviews of motor carriers and issues Safety Fitness Determinations (SFD). Those carriers which receive an unsatisfactory SFD are deemed unfit to operate on the nation's highways.

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<sup>1</sup> *Carrier Safety Fitness Determination*, US Department of Transportation, Federal Motor Carrier Safety Administration, Docket No. FMCSA-2015-0001, *Federal Register*, 81:13, January 21, 2016, page 3562.

<sup>2</sup> "Significant regulatory action" means among other things any regulatory action that is likely to result in a rule that may have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities. See: *Executive Order 12866 of September 30, 1993*, at: [www.reginfo.gov/public/jsp/Utilities/EO\\_12866.pdf](http://www.reginfo.gov/public/jsp/Utilities/EO_12866.pdf).

The FMCSA is proposing a new rule, entitled Carrier Safety Fitness Determination (CSFD) which would eliminate the current three-tiered rating system (satisfactory, conditional and unsatisfactory) in favor of a binary system (fit or unfit).

Promulgation of the proposed rule would have a substantial impact on business, consumers and the economy, thus it is defined by the Office of Management and Budget (OMB) as a “significant” regulation, and must satisfy additional requirements.<sup>3</sup> One such requirement is that FMCSA must perform a regulatory impact analysis (RIA) under the guidelines set out under Executive Order 12866,<sup>4</sup> Executive Order 13563,<sup>5</sup> the Regulatory Flexibility Act (5 U.S.C. 601-612),<sup>6</sup> and the Unfunded Mandates Reform Act of 1995 (Public Law 104-4).<sup>7</sup> Pursuant to these provisions, FMCSA must not only determine if the regulation is necessary but must also assess all costs and benefits of available regulatory alternatives to select approaches that maximize net benefits (including potential economic, environmental, public health and safety, distributive impacts; and equity). It also requires FMCSA to, among other things, analyze regulatory options that would minimize any significant impact of the rule on small entities.

### **Regulatory Impact Analysis Requirements:**

According to OMB, there are a total of 16 key elements or tasks every agency RIA must address.<sup>8</sup> To assist agencies in preparing RIAs, OMB has developed and provided a detailed Primer on how to properly conduct an RIA in accordance with its guidelines and the underlying Executive Orders.<sup>9</sup> As well, RIAs must take into account additional requirements from the various laws governing these documents, such as the Unfunded Mandates Reform Act and the Regulatory Flexibility Act.

The initial nine key elements or tasks OMB suggests each agency include in an RIA are:

1. A reasonably detailed description of the need for the regulatory action;
2. An explanation of how the proposed regulatory action will meet that need;
3. An appropriate baseline assessment of how the world would look in the absence of the proposed action;
4. An assessment of potentially effective and reasonably feasible alternatives to the proposed regulatory action;
5. An explanation of why the planned regulatory action is preferable to the potential alternatives;
6. An uncertainty analysis;

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<sup>3</sup> “Significant regulatory action” means among other things any regulatory action that is likely to result in a rule that may have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities. See: *Executive Order 12866 of September 30, 1993*, at: [www.reginfo.gov/public/jsp/Utilities/EO\\_12866.pdf](http://www.reginfo.gov/public/jsp/Utilities/EO_12866.pdf).

<sup>4</sup> *Executive Order 12866 of September 30, 1993*, at: [www.reginfo.gov/public/jsp/Utilities/EO\\_12866.pdf](http://www.reginfo.gov/public/jsp/Utilities/EO_12866.pdf).

<sup>5</sup> *Executive Order 13563 of January 18, 2011*, at: [www.gpo.gov/fdsys/pkg/FR-2011-01-21/pdf/2011-1385.pdf](http://www.gpo.gov/fdsys/pkg/FR-2011-01-21/pdf/2011-1385.pdf).

<sup>6</sup> *5 U.S. Code Chapter 6 - The Analysis Of Regulatory Functions*, at: <http://www.law.cornell.edu/uscode/text/5/part-I/chapter-6>.

<sup>7</sup> *Public Law 104 - 4 - Unfunded Mandates Reform Act Of 1995*, at: <http://www.gpo.gov/fdsys/pkg/PLAW-104pub14/content-detail.html>.

<sup>8</sup> Office of Management and Budget, *Agency Checklist: Regulatory Impact Analysis*, [www.whitehouse.gov/sites/default/files/omb/inforeg/regpol/RIA\\_Checklist.pdf](http://www.whitehouse.gov/sites/default/files/omb/inforeg/regpol/RIA_Checklist.pdf).

<sup>9</sup> Office of Management and Budget, *Regulatory Impact Analysis: A Primer*, at: [www.whitehouse.gov/sites/default/files/omb/inforeg/regpol/circular-a-4\\_regulatory-impact-analysis-a-primer.pdf](http://www.whitehouse.gov/sites/default/files/omb/inforeg/regpol/circular-a-4_regulatory-impact-analysis-a-primer.pdf).

7. A description and discussion of the distributive impacts of the potential alternatives;
8. A clear, plain-language executive summary including an accounting statement that summarizes the benefit and costs for the regulatory action;
9. A clear and transparent table presenting anticipated benefits and costs.

In addition to the above nine elements, OMB states that each regulatory impact analysis:

1. Use the best reasonably obtainable scientific, technical economic information and present it in a clear, complete and unbiased manner;
2. Provide the data, sources and methods used in the RIA to the public via the internet;
3. Quantify and monetize the anticipated benefits from the regulatory action to the extent feasible;
4. Quantify and monetize the anticipated costs from the regulatory action to the extent feasible;
5. Explain and support how the benefits of the intended regulation justify its costs;
6. Ensure that the preferred option has the highest net benefits unless the law requires a different approach;
7. Use appropriate discount rates for benefits and costs expected to occur in the future;

Along with these 16 key elements, according to OMB, a proper RIA must examine a number of additional impacts including international effects and the effects on small businesses.

### **Critique of FMCSA's RIA:**

Simply put, the RIA performed by FMCSA for the CSFD proposed rule does not meet OMB criteria for preparing agency RIAs.<sup>10</sup> Evaluating the specific provisions outlined by OMB, the RIA fails to properly perform 11 of the 16 checklist items. An evaluation of FMCSA's RIA, based on each OMB criterion, is provided below.

1. A reasonably detailed description of the need for the regulatory action: Although it is convoluted and riddled with non sequiturs, **the RIA does document an assumed need for regulatory action on the part of FMCSA.** The purpose of this rulemaking is to revise the SFD process to include the integration of on-road safety data in order to improve the evaluation of motor carriers and the identification of unfit motor carriers. The RIA claims this integration is a longstanding recommendation of the National Transportation Safety Board (NTSB).

The FMCSA also wishes to change the designation for unfit carriers in such a way as to increase the number of carriers deemed unfit to operate on the nation's roadways. The agency justifies proposal by claiming the action will result in a sizable reduction in the number of motor carrier accidents, particularly those involving a fatality.

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<sup>10</sup> *Proposed Rule Regulatory Evaluation Initial Regulatory Flexibility Analysis Carrier Safety Fitness Determination*, Regulatory Evaluation Division, Federal Motor Carrier Safety Administration, November 2015 at: [file://svr1/RF/karlmarx/Downloads/Proposed\\_Rule\\_Regulatory\\_Evaluation\\_for\\_Carrier\\_Safety\\_Fitness\\_Determination\\_FMCSA\\_November\\_2015.pdf](file://svr1/RF/karlmarx/Downloads/Proposed_Rule_Regulatory_Evaluation_for_Carrier_Safety_Fitness_Determination_FMCSA_November_2015.pdf)

In short, the FMCSA RIA suggests the proposed rule is needed to protect the safety of America's highway network by ensuring unfit motor carriers are identified and sanctioned.

2. An explanation of how the proposed regulatory action will meet that need: **The RIA relies almost exclusively on the determination the rule will reduce fatalities as a justification for the proposed rule.** Per the RIA, the requirements to ensure FMCSA has all of the available information on carrier safety to use in making determinations seems self-evident; however, the proposed rule change eliminating the conditional SFD category, does not appear to be justified in any way.

In short, while many of the components of the proposed rule may meet the regulatory goals set out by FMCSA, others appear to be intended to only marginally increase the number of carriers found to be deficient, simply as a regulatory exercise rather than support the safety goal of reducing accidents and fatalities.

3. An appropriate baseline assessment of how the world would look in the absence of the proposed action: **FMCSA does not provide a “null analysis” in its RIA.** There are no estimates of how safety might be increased without the proposed rule. This is extremely important, because other data presented by the agency documents that the number of accidents and accident rates have been falling for decades.<sup>11</sup> Without addressing this fact, FMCSA fails to establish a proper baseline for considering alternatives to the proposed rule. Rather, FMCSA's RIA simply ignores the OMB requirement altogether.
4. An assessment of potentially effective and reasonably feasible alternatives to the proposed regulatory action: **No actual alternatives analysis is presented in the RIA.** In fact, only two suggested alternatives are presented; however, they are simply minor modifications of the same rule proposal. The first alternative (Option 1) uses failure standards equivalent to the measures that would place a motor carrier at the 95th percentile for certain standards and at the 98th percentile for others in the unsafe category. The other suggested alternative (Option 2) would set these failure rates at marginally 96th and 99th percentiles, respectively. This is in no way, as suggested by OMB, a range of potentially effective and reasonably feasible regulatory alternatives. The FMCSA disregards the opportunity to consider obvious alternatives such as deferral to state or local regulation, the use of economic incentives to encourage the desired behavior, market-oriented approaches, different compliance dates or different requirements depending on firm size. The fundamental purpose of conducting an RIA is to examine alternatives, and weigh the costs and benefits of different approaches to achieving the same goal. The FMCSA's RIA completely fails on this important aspect.
5. An explanation of why the planned regulatory action is preferable to the potential alternatives: **Since no alternatives were presented there is no explanation of why the FMCSA's preferred regulatory action is preferable.** Therefore, again, the FMCSA RIA neglected to fulfill an OMB requirement.

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<sup>11</sup> *Large Truck and Bus Crash Facts 2012*, Federal Motor Carrier Safety Administration, at: <https://www.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts-2012#Trends-Tables and Figures>

6. An uncertainty analysis: While the RIA is filled with uncertainty, and nearly the entire benefit is based on the reduction of just 41 traffic fatalities, **no uncertainty analysis, as required by OMB Circular A-4, is included.**<sup>12</sup>
7. A description and discussion of the distributive impacts of the potential alternatives: While the RIA contains a section labeled *Distributional Effects*, it only examines a very narrow number of entities that may be impacted, and even this is only done in a very cursory manner. The OMB states the analysis of the distributional effects should examine the impact of the proposed action across the population and economy, divided up by a range of demographic and economic categories.<sup>13</sup> **Alternatively, the FMCSA RIA only examines the effects on small entities and only in a cursory manner. This is not an analysis of the distributional impacts of the proposed rule, as required by OMB Circular A-4.**
8. A clear, plain-language executive summary including an accounting statement that summarizes the benefit and costs for the regulatory action: **Compared to most RIA documents, FMCSA's RIA summary is clearly written, and provides and clearly lists the benefits and costs examined.**
9. A clear and transparent table presenting anticipated benefits and costs: **In FMCSA's RIA a table of benefits and costs is clearly presented.**

In addition, the OMB states that each regulatory impact analysis:

10. Use the best reasonably obtainable scientific, technical economic information and present it in a clear, complete and unbiased manner: **The analysis relies almost exclusively on an internal examination of just one year's inspection data. Proper statistical techniques are not used, and the analysis tends to be biased toward calculating net benefits of the action. However, it is written clearly and in a non-biased manner.**
11. Provide the data, sources and methods used in the RIA to the public via the internet: The FMCSA RIA is not extensively cited and much of the source material used to conduct the analysis (though readily available on FMCSA's website) is not properly sourced.
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<sup>12</sup> Specifically Circular A-4 States: *You should provide expected-value estimates as well as distributions about the estimates, where such information exists. When you provide only upper and lower bounds (in addition to best estimates), you should, if possible, use the 95 and 5 percent confidence bounds. Although we encourage you to develop estimates that capture the 5 of plausible outcomes for a particular alternative, detailed reporting of such distributions is not required, but should be available upon request.* See: Office of Management and Budget, *Circular A-4*, September 17, 2003, at: [www.whitehouse.gov/omb/circulars\\_a004\\_a-4#f](http://www.whitehouse.gov/omb/circulars_a004_a-4#f)

<sup>13</sup> Specifically Circular A-4 States: *Those who bear the costs of a regulation and those who enjoy its benefits often are not the same people. The term "distributional effect" refers to the impact of a regulatory action across the population and economy, divided up in various ways (e.g., income groups, race, sex, industrial sector, geography). Benefits and costs of a regulation may also be distributed unevenly over time, perhaps spanning several generations. Distributional effects may arise through "transfer payments" that stem from a regulatory action as well. For example, the revenue collected through a fee, surcharge in excess of the cost of services provided, or tax is a transfer payment.*

*Your regulatory analysis should provide a separate description of distributional effects (i.e., how both benefits and costs are distributed among sub-populations of particular concern) so that decision makers can properly consider them along with the effects on economic efficiency.* See: Office of Management and Budget, *Circular A-4*, September 17, 2003, at: [www.whitehouse.gov/omb/circulars\\_a004\\_a-4#f](http://www.whitehouse.gov/omb/circulars_a004_a-4#f).

**The FMCSA does not provide a library of the materials or data used in its analysis that is available to the public.**

13. Quantify and monetize the anticipated benefits from the regulatory action to the extent feasible: **The benefits analysis performed by FMCSA and included in the RIA greatly overestimates the benefits of the proposed rule.** The analysis suggests the proposed rule will generate over \$1.6 billion in benefits discounted over a 10 year period, with virtually all of these benefits will result from fewer lives lost in accidents involving motor carriers. However, the benefit calculation is based on an inaccurate statistical analysis, and does not take into account documented reductions in accident fatalities already occurring in the industry. A more reasonable analysis, would identify the potential (undiscounted) benefits of the proposed rule at about \$161 million, as outlined below:

The RIA concludes that a change in the regulatory compliance system will result in 41 fewer fatalities in the first year, with that figure rising in each subsequent year. While reducing traffic fatalities is a noble cause, the analysis presented by the FMCSA does not demonstrate how the proposed rule change would have any impact. Rather, the agency bases its analysis on an extremely small subset of motor carrier firms, representing at most 0.4 percent of all of the carriers on the road. Based on the RIA analysis, the additional firms taken off of the road under the new rule experienced a total of 1,862 crashes in the base year, or just 0.5 percent of all crashes. Under the current rule, carriers removed from the road experienced a total of 0.1 percent of all crashes. Based on these numbers, the proposed rule would reduce the overall number of crashes by just 0.37 percent, or 3.7 fewer crashes out of every 1,000 currently occurring.

In effect, the rule is designed to take marginal carriers off of the road. Currently, the most accident prone carriers are already being removed from the highways, and this rule will remove those with “conditional” safety determinations. If the SFD process is at all effective, one would conclude that “conditional” operators would be marginally safer than those that fail the SFD inspections. However, based on the figures presented in the RIA, this is not the case. The overall crash rate for the conditional carriers in this sample is actually slightly higher than those currently deemed unsatisfactory. The reason behind this outcome is that the data used in the analysis are highly variable. The FMCSA concedes this point by suggesting in its analysis the potential for “regression to the mean.” Further, the agency admits this phenomenon is a possible statistical consequence of the rarity of crashes, and can occur when an individual carrier experiences a period of high crash rate followed by a period of low crash rate, regardless of interventions or changes in safety practices. This outcome is precisely illustrated in the data used to calculate benefits in the RIA and is the likely reason why more marginally safe carriers appear to have higher crash rates – there are simply more of them and one or two unlucky carriers can significantly bias the data.

Even assuming a highly skewed sample, based on this one year of data, there is no evidence presented to show proposed rule will save any life years. In fact, this analysis is so poorly constructed that it is impossible to disregard the possibility that the proposal

could actually lead to more accidents. A difference of just 41 fatal accidents is only 1.1 percent of the total number of fatal crashes in the base year and just 0.01 percent of all crashes in the base year. In a skewed 80/20 distribution, where 80 percent of all crashes are from just 20 percent of carriers, a standard measure of deviation would suggest there is a high statistical probability of a 13 percent difference in the mean value. In this case, however, the mean value of 0.04387 crashes per vehicle under the new regime is not statistically different than the 0.04385 upper bound of the current crash rate. Only in the case of “tow-away” crashes, is the difference between the two techniques at all statistically different.

Based on this evaluation, if the differences between injury and fatal crashes reported in the RIA are removed, the initial benefit of the rule would be lower, or \$16.3 million, accepting all of FMCSA’s other assumptions.

The other concern with the analysis of benefits is FMCSA’s assumption that crash rates will continue to be constant over time. The RIA assumes the number of carriers increases at 2.17 percent per year, and while this differs slightly from other reported data it is relatively close.<sup>14</sup> However, even though the number of carriers is increasing, crash rates are falling. This is true of fatal, injury and property damage crashes, alike. In the case of property damage only crashes (chosen because it is the only category with a statistically significant difference between the rules), crash rates are falling by 2.8 percent per year.<sup>15</sup> This should result in the overall number of crashes falling each year, no matter what SFD rule is in effect. Even using the FMCSA’s figures, the 10 year un-discounted benefit would fall from \$2.291 billion to \$2.047 billion, simply by taking the decline in accident rates into account.

Taking into account the decline in accident rates, as should be done, coupled with the fact the injury and fatality accident differences are not statistically different under the base and the proposed rule, the undiscounted benefits of the rule proposal fall to just \$161.0 million dollars.

14. Quantify and monetize the anticipated costs from the regulatory action to the extent feasible: In the RIA, **the FMCSA grossly underestimates the costs associated with the regulatory action**. While there may be differences in opinion as to how these costs should be calculated, and the assumptions to be used in the RIA, FMCSA deliberately underestimated the costs to the private sector because it only included in the calculations the cost of lost wages to drivers and its own costs of implementing the regulations. This narrow view of costs leads to an extremely low discounted costs figure of just \$92.2 million.

The Agency did note that carriers would face additional compliance costs in order to meet higher safety standards, but it did not attempt to quantify these costs. To begin, at a

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<sup>14</sup> See: *Trends Table 3. Large Truck and Bus Property Damage Only (PDO) Crash Statistics, 1992-2012*, Federal Motor Carrier Safety Administration, Analysis Division, *Large Truck and Bus Crash Facts 2012*, June 2014, at: <https://www.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts-2012>.

<sup>15</sup> Crashes with an injury are falling at a rate of 3.4 percent per year, and crashes involving a fatality are falling at a rate of about 2 percent per year.

minimum, FMCSA should have attempted to calculate the overall costs to carriers for being shut down as a result of the rule change. Drivers represent just one small part of carrier costs. According to the most recent models of the US economy, labor costs in total (including drivers) represent 26.6 percent of overall trucking company sales and 35.4 percent of motorcoach company sales.. Taking the arithmetic average of these two (or 31 percent) and assuming for the benefit of the doubt that the driver costs identified in the RIA represent 100 percent of all labor costs, the total undiscounted cost to operators would be \$287.5 million, not the \$89.2 presented in the analysis. Adding in the estimated undiscounted \$30 million of government costs, the total would be \$317.5 million, nearly double the undiscounted benefits of the proposed rule.

This does not take into account the cost of lost capital utilization that would occur if companies had to unnecessarily take vehicles off of the market, costs to company goodwill that could result from the visibility of an unsatisfactory SFD, or even costs to suppliers (such as fuel suppliers) who would lose sales due to the result of an unnecessary and overly aggressive rule.

15. Explain and support how the benefits of the intended regulation justify its costs: **The RIA does provide a summary of the net benefits of the proposal.** However, since neither the benefits nor the costs were appropriately calculated, the justification is not appropriate.
16. Ensure that the preferred option has the highest net benefits unless the law requires a different approach: As noted previously, the RIA does not provide true alternatives, and therefore this requirement is met in a cursory manner only. **FMCSA also selects the alternative with the lowest net benefit and justifies this by stating it does not have the resources necessary to enforce the other option.**
17. Use appropriate discount rates for benefits and costs expected to occur in the future: The FMCSA discounts its cost estimates using discount rates of three percent and seven percent; however, these are applied individually as separate analyses, and not used appropriately to discount effects on private capital (7 percent) and effects on private consumption (3 percent) as suggested by the OMB. **The discounting performed in the RIA is, therefore, not properly conducted.**

### **Conclusion:**

In sum, although FMCSA did address a number of OMB requirements in preparing its RIA for the CSFD rule proposal, it neglected to address all of the requirements and conducted most of the analysis in a cursory manner. Based on this evaluation, the cost of the proposed alternative does not outweigh the benefits.