Rebuttal of Edgeworth Economics Review of FMCSA's Regulatory Impact Analysis

On behalf of the American Trucking Association (ATA), Edgeworth Economics reviewed the Federal Motor Carrier Safety Administration's (FMCSA) Regulatory Impact Analysis for the 2010-2011 Hours of Service proposed rule (RIA). Edgeworth Economics produced a report (Edgeworth report) that raises several issues regarding the estimates of costs and especially benefits of the policy choices presented in the notice of proposed rulemaking (NPRM). On several major issues raised in the report, however, Edgeworth promotes its own flawed assumptions and relies on overly optimistic or unjustified views of the FMCSA's RIA in order to limit the benefits estimated by the agency.

The Edgeworth report reduces the benefits found by FMCSA in three significant ways, challenging the quantification of driver health benefits, crash costs and fatigue risk.

Inaccurate Approach to Driver Health Benefits:
The Edgeworth report challenges the agency's analysis of the claimed health benefits by claiming that *all* health benefits should be excluded and then, in the alternative, asserts that the claimed health benefits should be reduced by $390 million (or more than 50 percent), without providing any support or discussion as to how this figure was derived.

- Medical and sleep research studies on truck drivers document that truck drivers, as a group, have a high rate of medical conditions associated with work-induced behavior including sedentary activities (while driving and when not working), over-the-road lifestyles (including rest in sleeper berths or motels, eating in diners and restaurants), long hours (some drivers work twice as long as employees with 40-hour work weeks), cumulative fatigue (accumulated sleep debt), etc., and have lower mortality than other worker populations.
- The Edgeworth report raises only general distinctions and nit-picking claims regarding this body of research that could apply to any body of research studies, but the report does not make a strong case that the research relied on by the agency is wrong. In light of the compelling evidence that extending driver work and driving hours subjects commercial drivers to greater exposure and harm, it is neither reasonable nor acceptable to assert that there are no costs associated with longer driving and working hours, especially regarding that portion of truck drivers, estimated at 15 percent of the over 3 million commercial driver work force, that the agency characterizes as having "very high" and "extreme" intensity work schedules.
- Moreover, in 1984 Congress mandated that the agency must take the health of drivers into consideration when proposing new regulations. Since the agency did not do this in the 2003 final rule, the federal Court of Appeals held that the agency had violated the law and sent the rule back to the agency. In the next two iterations of the HOS rule, while the agency confirmed that the increase in driving and working hours does have an impact on driver health and medical status, the agency irrationally refused to quantify the costs associated with the longer driving and working hours allowed by the current HOS rule. This was done despite the

fact that Congress also required the agency perform a comprehensive cost-benefit analysis of new regulations. Thus, by excluding all quantification of the health benefits to be derived from reducing total driving and working hours, as Edgeworth argues, the agency would again open itself to legal challenge for violating the law and result in the agency losing yet a third case in federal court.

- Since the Edgewater report does not explain how it arrived at its alternative option of reducing the agency quantification of health benefits of $690 million by $390 million, to only $300 million, this assertion has no substance to back up the claim.

Unreasonable Claims Regarding Reduced Overall Crash Cost:
The Edgeworth report analysis asserts that by using a figure for overall truck crash costs based on 434,000 annual crashes, FMCSA overestimates its resulting benefit in crash risk that would result if the NPRM were adopted.

- The agency explanation for using the 434,000 annual crash figure appears reasonable, certainly far more reasonable than the alternative figure proffered by the Edgeworth report. The agency makes a number of assumptions all of which the Edgeworth report agrees are reasonable except for the use of the 434,000 annual crash figure. The agency asserts that this figure is representative of the average number of annual truck crashes that took place prior to the beginning of the recent recessionary period that commenced in 2007. The agency's explanation is that using a lower figure would be unrealistic because as the economy recovers from the recession, and freight volume and vehicle miles of travel increase with economic growth, annual truck crash totals will likely return to pre-recessionary levels. This is a credible basis for formulating an estimate. Moreover, the past ten years of truck crash data (including 2009), shows that the *average* annual count of large truck crashes was 393,000; a value that is 90% of the estimated total used by the FMCSA.

- The Edgeworth report suggests that a far lower figure of 286,000 annual crashes, which represents only 67 percent of the overall figure of 434,000 used by FMCSA, is the appropriate number. The 286,000 figure is the most recent annual data point for 2009, and represents the historic low point for annual number of crashes, but a total that occurred in the immediate aftermath of an economic recession when economic activity and truck traffic was at a recent low point. As between the two, the 434,000 figure appears far more reasonable and accurate since it represents an average of annual truck crashes drawn from recent historic trends. The use of the lower 286,000 figure, by contrast, is obviously inappropriate because it is confounded by the reduced national economic activity and documented reduction in freight tonnage and VMT that immediately preceded and included 2009. Not only is the 286,000 figure a single year and point in time, rather than an average as FMCSA developed, but it is a certainty (or at least a high probability) that this minimum level of truck crash occurrence will represent the lowest or near lowest point for annual truck crash data as the economy rebounds and increased demand leads to increases in truck VMT and truck crashes.

Unduly Underestimating Fatigue as a Factor in Truck Crash Risk:
The Edgeworth report insists that the FMCSA's use of the 13% estimate of overall fatigue involvement in truck crashes is incorrect because it is predicated on findings in the Large Truck Crash Causation Study (LTCCS) database, and because it varies from the previous 7% figure used by FMCSA in the previous 2008 HOS rule analysis.

- The Edgeworth report's bias for the previous agency gross underestimate of fatigue involvement in truck crashes is transparent and overlooks the fact that not only has the agency previously relied on higher estimates of fatigue involvement in truck crashes but so have other federal safety agencies.
- The FMCSA has acknowledged that driver fatigue is grossly underreported for various reasons. Advocates and others have pointed out in public comments to the 2008 proposed rule as well as prior HOS rules that the agency has, in recent years, repeatedly grossly underestimated fatigue as a factor in truck crashes. This was purposely done in prior analyses to limit the benefits calculation of lower maximum HOS limits in agency benefits / cost analyses.
- FMCSA acknowledged in the 2000 NPRM that "The agency tentatively estimates that 15 percent of all truck-involved fatal crashes are ''fatigue-relevant,'' that is, fatigue is either a primary or secondary factor. This includes the 4.5 percent of fatal crashes where fatigue is directly cited, and another 10.5 percent where it contributes to other mental lapses, which then result in a crash." 65 FR 25545-25546 (May 2, 2000).
- Other estimates of fatigue involvement in truck crashes are higher. The National Transportation Safety Board (NTSB) estimated that driver fatigue is a factor in 31% of all fatal-to-driver heavy truck crashes, and found fatigue to be a factor in even a higher percentage of all truck crashes investigated by NTSB.
- The National Highway Traffic Safety Administration (NHTSA) has estimated driver fatigue to be a factor in over 30% of all heavy truck crashes. Thus, the LTCCS estimate of 13% average fatigue involvement in truck crashes may still be low by comparison to data from other agency studies.

Finally, the Edgeworth report asserts that FMCSA misuses data from the 2005 and 2007 Field Surveys and overstates the extent to which drivers exceed 9 hours of driving or 13 hours of work per shift.

- The Edgeworth report is contradicted by an earlier ATA study. The Edgeworth report characterizes FMCSA's finding that 21% of drivers, fleetwide, make use the 10^{th} and 11^{th} consecutive hours of driving an "overestimate." The report implies that FMCSA is driving up the benefit of the proposed HOS reform rule by overstating the percentage of drivers taking advantage of the 11^{th} hour of driving under the current HOS rule. Yet, an analysis by the ATA research arm, the American Transportation Research Institute (ATRI), estimates that 66% of drivers use at least part of the 10^{th} hour of driving, 61% use at least part of the 11^{th} hour, and 52% use the entire 11^{th} driving hour. ("Hours-of-Service Rules Safety Impact Analysis Report," p.7, May, 2011).