

April 15, 2011

Via email

The Honorable Anne Ferro
Administrator
Federal Motor Carrier Safety Administration
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Dear Administrator Ferro:

I am writing to alert you to a document ATA recently placed in the docket on the current Hours of Service rulemaking.

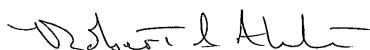
Through numerous hours of service rulemakings over the course of the past decade, FMCSA has made a series of definitive statements supporting the current hours of service regulations. A document citing a number of these statements is attached. As you will see, they reiterate several themes, including:

- The current regulations are not deleterious to driver health and that drivers' lifestyle choices (e.g., smoking, lack of exercise) by themselves have profound effects on driver health;
- Without a dose-response curve (hours worked and resulting health impact), FMCSA has no basis for estimating health impacts and costs;
- There is no indication that drivers are averaging more hours of work, as opponents of the rules had predicted when they were implemented in 2004;
- There is little or no difference in driver drowsiness or performance between the 10th and 11th hours of driving; and
- The costs of eliminating the 11th hour would far outweigh the benefits.

FMCSA made these conclusions after an exhaustive review of available research and data on hours of service. In order to now revise the hours of service regulations, the agency will need to explain why it is recanting all of these prior statements. Of course, our intent in sharing this document is to dissuade the agency from changing the regulations that it crafted after such an exhaustive review as we believe that the recently proposed changes are unjustified. Also, we felt we should share this summary with you since you did not assume leadership of the agency until after many of these statements had already been published in rulemakings.

If you have any questions or concerns, feel free to contact me at (703) 838-8852 or rabbott@trucking.org.

Regards,



Robert S. Abbott
Vice President
Safety Policy

PAST FMCSA STATEMENTS AND FINDINGS ON HOURS OF SERVICE

From the August 25, 2005 Final Rule (70 Fed. Reg. 4977)

- ...the physical condition of operators of commercial motor vehicles is adequate to enable them to operate the vehicles safely; and (4) the operation of commercial motor vehicles does not have a deleterious effect on the physical condition of the operators” [49 U.S.C. 31136(a)]. (Pg. 49979)
- The D.C. Circuit noted, however, that neither Public Citizen nor the court was “suggest[ing] that the statute requires the agency to protect driver health to the exclusion of those other factors [i.e., the costs and benefits of the rule], only that the agency must consider it.” *Id.* at 1217 emphasis in original). (Pg. 49979)
- This is enough time to enable drivers to get the 7–8 hours of sleep most people need to maintain alertness and prevent the onset of cumulative fatigue. (Pg. 49980)
- FMCSA has concluded that the operation of CMVs under this rule does not have a deleterious effect on the physical condition of drivers. (pg. 49981)
- The additional off-duty time provided by the rule, along with the 14-hour driving window, should have a particularly beneficial effect on drivers’ sleep opportunities, and indirectly on their health as well. (pg. 49981)
- In an indication of the fatigue-reducing benefits of the 2003 rule, preliminary information on sleep habits under that rule shows drivers are getting, on average, at least an additional hour of sleep compared to the pre-2003 rule. There is no indication that drivers are averaging more hours of work, as opponents of the 2003 rule had feared. (pg. 49981)
- According to the drivers who commented to the docket, the 11-hour limit in the 2003 rule enables them to get home more often, when the 10-hour limit would leave them stranded at roadside, out of hours. It also allows them to get home without pushing quite as hard as they might be tempted to do under a 10-hour limit. (pg. 49981)
- No parameters tested, either singly or in combination, produced a basis for either replacing the 11-hour driving limit with a 10-hour limit, or suggested that another option could be more cost-beneficial. (pg. 49981)
- Given the data from surveys and comments regarding work hours from motor carriers, it does not appear that CMV drivers are working on average significantly more hours as a result of the 2003 rule as compared to the pre 2003 regulation. (pg. 49984)
- The Agency has adopted the non-extendable 14-hour driving window and the 10-hour off-duty requirement; these provisions shorten the driving window allowed before 2003 by one hour (or more, in some cases) and lengthen the off-duty period by two hours. In short, based on current knowledge and the limited research that is available, in the Agency’s best judgment there is no evidence that the number of work hours allowed by the HOS regulation adopted today will have any negative impact on driver health. (pg. 49990)

- In a driving simulator study, the schedule of 14 hours on duty/10 hours off duty for a 5-day week did not appear to produce significant cumulative fatigue over the three-week study period [O'Neill, T.R., et al. (1999), p. 2]. (pg. 49993)
- The research on the effects of fatigue in operational (on-road) and simulated/laboratory settings generally have found no statistically significant difference in driver drowsiness or performance between the 10th and 11th hours of driving. (pg. 49993)
- Four of these studies provide support for recovery periods of 34 hours or less while only one of these studies supports a recovery period longer than 34 hours. (pg. 49994)
- The number of fatigue related crashes that occurred in the 11th hour of driving or later is extremely small. Of the roughly 1,000 trucks involved in fatigue-related fatal crashes between 1991 and 2002, only nine were operating in the 11th hour of driving time. (pg. 49997)
- Data collection for the study, "A Field Operational Test of a Drowsy Driver Warning System," began in May 2004. All data collected through May 1, 2005 were used in this analysis. The researchers have found no statistically significant difference in the number of "critical" incidents in the 10th and 11th hours of driving [Hanowski, R. J., et al. (2005), p. 9]. (pg. 49997)
- The theoretical availability of many more driving and on-duty hours under the 2003 rule is largely irrelevant. Truckers drive to meet the demand for transportation, and VMT statistics show that demand increases (and occasionally decreases) in modest annual increments. (pg. 50005)
- The Agency has not found any data that suggests drivers are actually working significantly longer hours. Therefore, in the Agency's best judgment, drivers are not exposed to increased health risk as a result of the 2003 or today's rule. (pg. 50005)
- In the 2005 NPRM, FMCSA noted that lifestyle choices, including diet and exercise, may impact driver health and safety, but also concluded that "Realistically, such choices cannot be regulated by FMCSA." (pg. 50006)
- The percentage of smokers among truck drivers is nearly double that of the U.S. population. A 1993 study of 2,945 truck drivers reported 54 percent of the respondents smoke cigarettes or cigars [Roberts, S., & York, J. (1997), p. 1-2]. (pg. 50007)
- Despite the importance of regular exercise to disease prevention and health, 50 percent of the truck drivers in a 1993 study never participated in any type of aerobic exercise and only 8 percent of these drivers "regularly" participated in aerobic exercise. (pg. 50007)
- These lifestyle choices are bound to have profound effects on the health and wellness of CMV drivers, and in the Agency's best judgment may, by themselves, be predictive of higher rates of cancer, cardiovascular disease, diabetes, and back problems. (pg. 50007)
- Operational and laboratory studies have generally found little or no statistically significant difference in driver drowsiness or performance between the 10th and 11th hours of driving [O'Neill, T.R., et al. (1999), p. 48; Wylie, C.D., et al. (1996), pp. 5.13-5.14; Hanowski, R.J., et al. (2005), p. 9]. (pg. 50011)

- A 1996 operational study of 80 long haul drivers engaged in revenue generating runs in the U.S. (under the 10-hour driving limit) and Canada (under that country's 13-hour driving limit) reported that time-on-task was not a strong or consistent predictor of observed fatigue. (pg. 50011)
- The authors reported that a schedule of 14 hours on duty (with 12 hours of driving) and 10 hours off duty for 5 consecutive day periods did not appear to produce significant cumulative fatigue over the 2-week testing period [O'Neill, T.R., et al. (1999), p. 48]. (pg. 50011)
- The Agency considered a mandatory rest period (break) to mitigate any possible fatigue related to the 11th hour of driving. Scientific research suggests that rest breaks, including naps, while not reducing accumulated fatigue, refresh drivers and enhance their level of performance and alertness on a short term basis [Belenky, G. L., et al. (1987), p. 1–13 ; Wylie, D. (1998), p. 13]. The Agency concluded that such a break would be difficult for State and Federal enforcement personnel to verify and would significantly interfere with the operational flexibility motor carriers and drivers need to manage their schedules. (pg. 50011)
- To reach the maximum driving or driving and on-duty hours requires that nearly perfect logistics for picking up and delivering a load are routinely in place; in other words, total elimination of waiting time to load, mechanical and equipment problems, and traffic- and weather-related delays. Additionally, as explained in this rulemaking, FMCSA and other independent survey data collected since the 2003 rule was adopted indicate that drivers are not, in fact, maximizing their driving hours or total on-duty time, nor do they routinely take the minimum number of off-duty hours. (pg. 50022)
- According to commenters, the great advantage of the restart provision is not the increased work hours it allows, which are not regularly used, but the scheduling flexibility it gives motor carriers and the added time at home it gives drivers. (pg. 50022)
- However, the preliminary data reported and reviewed to date does suggest that fatigue related crashes have decreased as a result of the 2003 rulemaking. (pg. 50022)
- FMCSA is convinced that the combined impact of today's rule, including the 34-hour recovery period, increases the safety to CMV drivers and is not deleterious to their health. (pg. 50023)
- Under today's rule, most drivers have an adequate opportunity to limit the accumulation of fatigue. Ten hours off duty gives drivers enough time for 7–8 hours of sleep. In addition, adopting a non-extendable 14-hour duty tour (reduced by one or more hours from the pre-2003 rule) will also limit the accumulation of fatigue. (pg. 50023)
- These provisions, together with the 34-hour recovery period, are more than adequate to allow drivers to return to baseline alertness levels. (pg. 50023)
- Specifically, the 10 hours off duty coupled with the reduced, non-extendable 14-hour duty tour will provide drivers the opportunity for sufficient recuperative rest on a daily basis to drive and work the daily maximum limits allowed by today's rule. Therefore, the recovery period serves as an added safety net to protect drivers from instances when cumulative fatigue does occur over a 7- or 8-day period. (pg. 50023)
- The science supports the notion that drivers should be provided recovery periods after a sustained period of daily work to compensate for any build-up of cumulative fatigue or

sleep deprivation [Belenky, G., et al. (1998), p. 12]. There is, however, no scientific basis for concluding that every driver, or even every nighttime driver, is sleep deprived. (pg. 50024)

- The Agency considered implementing a restart period of 44 hours. This would give more drivers, specifically nighttime drivers, an opportunity to be off duty for two nighttime periods between midnight and 6 a.m. However, it would also encourage drivers to operate on a rotating shift, not to mention shifting more drivers to day time, thereby increasing traffic during the day. (pg. 50024)
- A forward-rotating schedule would result in a driving schedule that would cause a driver to begin working at a later time of day than the previously used weekly schedule. Therefore, toward the end of each work week, the driver would begin work later and later each day, ultimately shifting the driving and on-duty time into the nighttime hours. Consequently, the added recovery hours would have a negative impact on a driver's circadian cycle. (pg. 50024)
- There is no conclusive research showing that long hours alone are associated with poor health, especially when taking into account individual choice, compensation, and degree of control over one's work schedule. Also, given the results of FMCSA's 2005 survey of driver hours, it is unlikely that the current HOS rules increase the overall number of hours a driver actually works. (pg. 50026)
- Alertness Solutions agreed that driver health factors related to fatigue, such as total and partial sleep loss, extended wakefulness, and circadian disruption, have been associated with degraded physiological and health outcomes. However, Alertness Solutions pointed out that the studies generally have shown that total sleep loss or sleep restriction to 4 hours for 6 consecutive nights is required to trigger these associations. (pg. 50035)
- The interaction between these provisions enables the vast majority of drivers to work and drive to the maximum permissible limits per day (even if they chose not to do so), without developing a cumulative sleep debt. (pg. 50038)
- The Agency also concludes that the health impacts between the 11 and 10 hours of driving are inconsequential. (pg. 50041)
- However, following this review, the Agency concluded that neither the current data nor the peer-reviewed research findings published to date were sufficient to allow the Agency to quantify and monetize any marginal acute health impacts to commercial drivers from today's rule. (pg. 50051)

From the December 17, 2007 Interim Final Rule (72 Fed. Reg. 71247)

- We found that the 2005 rule has maintained highway safety outcomes while enhancing operational flexibility for the motor carrier industry. Every alternative, including immediate restoration of a 10-hour driving limit with no 34-hour restart, entails a risk of disrupting that achievement. (pg. 71248)
- Analysis of further data collected for the Virginia Tech Transportation Institute (VTTI) operational study supports the preliminary results described in the 2005 rule: There is no increase in "critical incidents" (a surrogate for crash risk) in the 11th hour of driving.

FMCSA's very recent survey data show that, while the 11th hour and the 34-hour restart provisions are being used more often than in 2005, virtually no one attempts to use every minute of driving or on-duty time theoretically allowed by the regulations, just as the Agency predicted in the 2005 rule. (pg. 71249)

- Second, this section addresses the issue of cumulative fatigue and describes the Agency's conclusion, based on recent crash data and operational data, that there is no evidence that the 34-hour restart provision has led to harmful cumulative fatigue. (pg. 71252)
- In the analysis filed with the 2005 HOS rule, the researchers found no statistically significant difference in the number of critical incidents between the 10th and 11th hours of driving [Hanowski, R.J., et al. (2005), p. 9]. The study defined critical incidents as crashes, near crashes (where a rapid evasive maneuver is needed to avoid a crash), and crash-relevant conflicts (which require a crash-avoidance maneuver less severe than a near-crash, but more severe than normal driving). When the occurrence of critical incidents is used as a surrogate for driver performance decrements, there was no statistically significant difference between the 10th and 11th hour of driving. The VTTI study team meticulously examined video for each critical incident to detect driver drowsiness i.e., slow eyelid closure—a validated measure of drowsiness. (pg. 71260)
- While the data show a slightly elevated risk of critical incidents in the 1st hour of driving there was no discernable trend for driving hours two through eleven. (pg. 71261)
- These VTTI studies showed that time-on-task or the number of hours driven is not a good predictor of driving degradation. There was no increased risk of critical incidents (crashes, near-crashes, crash relevant conflicts) of driving in the 11th versus the 10th hour of driving. (pg. 71261)
- Compared with other estimates regarding use of the 11th driving hour, FMCSA finds the latest ATA results are generally consistent with earlier findings and reveal that the 11th hour is being used by commercial drivers for operational flexibility. (pg. 71265)

From the November 19, 2008 Final Rule (73 Fed. Reg. 69567)

- While there is valid evidence that drivers who get 8 consecutive hours of sleep every day should not develop cumulative fatigue at all, those who fail to follow a regular sleep schedule will be able to “zero out” their fatigue by taking 34 consecutive hours off duty. (pg. 69569)
- 8 days—requires an imaginary world with “nearly perfect logistics for picking up and delivering a load * * * in other words, total elimination of waiting time to load, mechanical and equipment problems, and traffic- and weather- related delays. (pg. 69570)
- All of the studies related to driver health and exposure lack a dose-response curve for the factor in question that would allow FMCSA to estimate reliably the effect of longer or shorter driving and on-duty time on driver health. (pg. 69570)
- The health effects of any particular change in the HOS regulations are unknown. (pg. 69570)
- The Agency also conducted sensitivity analyses involving elimination of the 11th daily driving hour, both in the 2005 and the 2008 final rules. In these analyses, the Agency

essentially doubled the likely percentage of fatigue-related large truck crashes, tripled the value of a statistical life, and increased by 40 percent the risk of a fatigue-related large truck crash in the 11th hour of driving; in all cases, however, the societal costs of eliminating the 11th driving hour exceeded the benefits. (pg. 69571)

- Driver health research simply is not mature enough to allow the conclusion that a number of extra hours of work would result in increased driver health problems. Also, there are many confounding factors that affect driver health, such as diet, smoking, and exercise. It remains very difficult to isolate the impact of exposure and longer working hours. (pg.69574)
- Without a dose-response curve, which would indicate the incremental effect of each hour of exposure to diesel exhaust, vibration or long working hours, FMCSA has no basis for estimating health impacts and costs. (pg.69574)
- FMCSA, along with many other Federal and private entities, is funding driver health research; however, it will be years before researchers are able to separate the impacts of daily work exposure versus driver lifestyle. (pg.69574)
- Increasingly, naturalistic driving data and studies are coming to the same conclusion—that time of day plays a greater role in driver alertness than the number of hours driven. (pg.69575)
- However, since the percent derived from recent empirical data indicates a much lower percent (2.2%), FMCSA analysts believe the original analysis regarding the 7 percent figure is accurate, even when recognizing that the coding of fatigue-related crashes may be underestimated. (pg.69578)
- “FMCSA has taken diligent and extraordinary steps to assure the comprehensiveness of the [cost-benefit] analysis and its parts.” NERA Economic Consulting, as a result of its technical review of the 2007 IFR RIA, remarked in its docket comments that “FMCSA has performed a thorough, well-documented analysis of the costs and benefits of the 11th-hour and restart provisions. In fact, we have rarely seen such an exhaustive and technically advanced analysis of a proposed rule from any government agency.” (pg. 69581)