

October 15, 2018

The Honorable Raymond Martinez
Administrator, Federal Motor Carrier Safety Administration
U.S. Department of Transportation
1200 New Jersey Avenue, S.E., Suite 600
Washington, D.C. 20590

Re: Request for Exemption for Livestock Haulers from Certain Provisions of the Hours of Service Regulation of the U.S. Department of Transportation, Federal Motor Carrier Safety Administration

Dear Administrator Martinez,

The National Cattlemen’s Beef Association, Livestock Marketing Association, American Farm Bureau Federation, American Beekeeping Federation, American Honey Producers Association, and National Aquaculture Association on behalf of the specialized subset of experienced drivers who handle and haul the nation’s livestock¹, insects, and aquatic animals (“livestock haulers”), request that the Federal Motor Carrier Safety Administration (FMCSA) grant needed flexibility from certain provisions of the Federal Motor Carrier Safety Regulations’ (FMCSRs) hours of service (HOS) rules (45 C.F.R. Part 395) to accommodate the unique interstate transportation challenges of the U.S. livestock industry.

Specifically, we hereby request an exemption, for a period of five years,² from the HOS requirements that: (1) limit the maximum driving hours for property-carrying drivers to 11 (45 C.F.R. § 395.3(a)(3)); and (2) limit the total consecutive on-duty hours for those drivers to 14 (45 C.F.R. § 395.3(a)(2)). We request approval to, after 10 consecutive hours off duty, (1) drive through the 16th consecutive hour after coming on duty, and (2) drive a total of 15 hours during that 16-hour period.

We are concerned that the 11- and 14-hour rules were not drafted with livestock haulers in mind and thus do not accommodate the unique character of their loads and nature of their trips. In certain circumstances, livestock haulers are required to carry live animals over significant distances. Those circumstances are dictated by factors primarily and properly related to: the health and welfare of the livestock; the lifecycle of

¹ In this petition, we use the definition of the term “livestock” at 49 C.F.R. § 395.2: “*Livestock* means cattle, elk, reindeer, bison, horses, deer, sheep, goats, swine, poultry (including egg-producing poultry), fish used for food, and other animals designated by the Secretary of Agriculture that are part of a foundation herd (including dairy producing cattle) or offspring; or are purchased as part of a normal operation and not to obtain additional benefits under the Emergency Livestock Feed Assistance Act of 1988, as amended.”

² In accordance with 49 C.F.R. § 381.300(b), we seek a five-year exemption, renewable for subsequent five-year periods upon request.

the livestock; and the locations of farms and ranches, viable grazing lands and feedlots, and final processing facilities. Therefore, the maximum driving and on-duty limits of the HOS rules as applied to livestock haulers' operations may place the well-being of livestock at risk during transport and impose significant burdens on livestock haulers, particularly in rural communities across the country.

Additionally, these HOS rules do not take advantage of modern fatigue management research and the experience of other countries showing that work and on-duty time limits alone are not optimal tools for managing operator fatigue in the livestock hauling industry. In conjunction with the proven fatigue management countermeasures proposed herein, this exemption would not only bring FMCSA's HOS rules up to date with current approaches to fatigue management, it would also align those rules with Secretary Chao's performance-based, data-driven approach for overseeing the safety of our nation's transportation systems and operators. Under this exemption, livestock haulers would be able to more appropriately manage their own rest and work schedules under fatigue management measures outlined below, to ensure both the well-being of their livestock and the safe operation of their commercial motor vehicles.

Thus, this proposal would enable livestock haulers to operate more efficiently and effectively than under the current prescriptive 11- and 14-hour rules while achieving a level of safety that is equivalent to, or greater than, the level that would be achieved absent the requested exemption.

I. Scope of Proposed Exemption

Congress has repeatedly recognized that the unique operational characteristics of transporting agricultural commodities require modifications to FMCSA's standard HOS rules. For example, livestock haulers are currently permitted to operate in "an exempt zone within a radius of 150 air miles"³ of the source of an agricultural commodity. FMCSA, in implementing this 150 air-mile provision, has stated that "time spent working within the 150 air-mile radius does not count toward the drivers daily and weekly [HOS] limits."⁴ Accordingly, the 15- and 16-hour limits requested here would begin after a livestock hauler travels outside the 150 air-mile radius. This approach is wholly consistent with FMCSA's guidance holding that the HOS regulations do not apply⁵ to transportation of agricultural commodities within the 150 air-mile radius and "therefore, work and driving hours are not limited"⁶ within that 150 air-mile range.

Further, this requested exemption should apply whether vehicle is laden or unladen, consistent with the published guidance of the agency for related HOS

³ Hours of Service of Drivers Of Commercial Motor Vehicles; Regulatory Guidance Concerning the Transportation of Agricultural Commodities, 83 Fed. Reg. 26374, 26375 (June 7, 2018).

⁴ U.S. DEPT. OF TRANS., FMCSA, ELECTRONIC LOGGING DEVICES: HOURS OF SERVICE (HOS), AND AGRICULTURAL EXEMPTIONS (August 2017).

⁵ *Id.*

⁶ *Id.*

exemptions for agricultural commodities. In the context of the 150 air-mile radius exemption, the agency has made clear that exemption “should apply to all portions of a round-trip involving agricultural commodities that occur within the 150 air-mile radius of the source, regardless of whether the CMV is loaded or empty and whether the destination is outside the 150 air-mile radius.”⁷

While seeking an exemption from the 11- and 14-hour rules, livestock haulers will remain fully compliant with all other applicable HOS limits, including the 60/70 hour limits and the 34-hour restart rule.⁸

II. FMCSA Authority to Grant This Exemption

The Secretary of Transportation is authorized under 49 USC § 31315(b) to grant an exemption to the HOS regulations if she finds the exemption “would likely achieve a level of safety that is equivalent to, or greater than, the level that would be achieved absent such exemption.” The Secretary has delegated this statutory authority to FMCSA, which has promulgated regulations governing petitions for such exemptions at 49 CFR Part 381.

III. FMCSA’s Prior Findings on Regulatory Relief for Livestock Hauling

We appreciate our ongoing partnership with FMCSA in our continued efforts to safeguard the well-being of the nation’s livestock during interstate transport. In providing certain regulatory relief to date, FMCSA has appropriately acknowledged some of the unique circumstances livestock haulers confront because of the operational demands of transporting live animals safely. For example, in granting a renewal of the exemption from the 30-minute rest break provision in June 2015, the agency expressly noted industry guidelines that describe 30-minute stops as potentially “problematic for many animals, even in favorable weather, and [that] encourage drivers of livestock to keep the CMV moving ‘if at all possible.’”⁹ Yet, even with the increased flexibility provided to date, livestock haulers still face an untenable choice between compliance with established animal welfare guidelines or compliance with FMCSA’s maximum driving and on-duty time limits.

The regulatory relief requested here, which would enable livestock haulers to make trips of longer duration in a single work period, is fully consistent with the agency’s findings in previous HOS exemption-granting decisions, which have recognized animal welfare concerns are heightened during loading and unloading for any rest stop and that “in many cases, it is impractical for drivers to offload livestock” en route, as

⁷ 83 Fed. Reg. at 26375.

⁸ Livestock haulers meeting the conditions proposed herein for the 15- and 16-hour limits would reach the 60-hour limit as early as at the end of the 90th hour and would then take 34 consecutive hours off duty. Livestock haulers could then resume duty at the start of the 125th hour. Attached as Appendix B is an HOS calendar illustrating the driving and on-duty time possible under this proposal.

⁹ Hours of Service of Drivers: Agriculture and Food Transporters Conference (AFTC); Granting of Renewal of Exemption, 80 Fed. Reg. 33584 (June 12, 2015).

appropriate facilities are rarely available.¹⁰ As explained in detail below, this requested exemption would effectively reconcile the fundamentally important aims of ensuring public safety, animal welfare, motor vehicle safety and the continued economic viability of the nation's livestock haulers.

IV. Estimate of the Drivers, CMVs, and Trips Under the Exemption

A. Estimate of Number of Drivers and CMVs.

FMCSA requires petitions for exemption to include an estimate of the total number of drivers and CMVs that would operate under the terms and conditions of the exemption.¹¹

In July 2018, FMCSA provided Motor Carrier Management Information System (MCMIS) data that identified 60,569 livestock motor carriers with 179,406 vehicles and 190,661 drivers.¹² FMCSA noted that 78,154 of those drivers operated within the 100 air-mile radius HOS exemption, finding that at most, 112,507 CMV drivers would likely be subject to the agency's HOS requirements.¹³

We note that this July 2018 MCMIS data from FMCSA, while unpublished, does not vary significantly from data FMCSA relied on in its March 2018 Federal Register notice granting a waiver of the electronic logging device (ELD) requirements.¹⁴ That notice cited 2013 data identifying 64,892 livestock motor carriers with 187,606 vehicles and 242,676 drivers.¹⁵ FMCSA noted that 126,471 of those drivers operated within the 100 air-mile radius HOS exemption, finding that fewer than 116,205 drivers would be likely to utilize the waiver.¹⁶

Additionally, the agency has recently identified the total population of CDL holders to be 4.0 million.¹⁷ Thus, this July 2018 112,507 estimate of livestock haulers would represent a small share – 2.8 percent – of that total population.

¹⁰ Hours of Service of Drivers: National Pork Producers Council; Granting of Application for Exemption, 79 Fed. Reg. 33634, 33636 (June 11, 2014).

¹¹ How Do I Apply For An Exemption?, 49 C.F.R. § 381.310(c)(3) (2017).

¹² Email from FED. MOTOR CARRIER SAFETY ADMIN., OFFICE OF CARRIER, DRIVER AND VEHICLES SAFETY STANDARDS; data on motor carriers with livestock as a cargo (July 30, 2018) (hereinafter Email from FMCSA, July 30, 2018).

¹³ *Id.*

¹⁴ Hours of Service; Electronic Logging Devices; Limited 90-Day Waiver for the Transportation of Agricultural Commodities, 83 Fed. Reg. 12685, 12686 (March 23, 2018) (citing Hours of Service; Limited 90-Day; Waiver From the 30-Minute Rest Break; Requirement for the Transportation of Livestock, 78 Fed. Reg. 41716 – 41718, at 41717 (July 11, 2013)).

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ U.S. DEPT. OF TRANS., FMCSA, 2017 POCKET GUIDE TO LARGE TRUCK AND BUS STATISTICS, 9 (June 2017).

B. While the Majority of Trips Fall Within the Current HOS Rules, Some Longer Trips Cannot be Completed Under the Current 11- and 14- Hour Rules.

A full understanding of the nature and length of livestock hauling trips explains why the requested exemption is necessary and appropriate. These trips are dictated by immutable factors like climate and weather, or by long-established and highly interdependent livestock production chains that have been in place for generations.

In the cattle industry, for example, the locations of cow-calf operations, grazing lands, feedlots, and processing facilities necessarily determine how far a livestock hauler must travel in a single trip. Livestock haulers transport animals from farms and ranches to auction markets, where the stock are sold. Once sold, the animals are often transported to grazing lands and feed yards, mostly located in the Central Plains and Southwest. After grazing and feeding, livestock are transported a final time to processing facilities, where they are transformed into consumable meat and sold across the United States and around the world.

Managed bee hauls necessary to pollinate numerous crops, tree nuts, fruits, and vegetables are some of the longest in the country, ranging from California to North Dakota, Louisiana and Mississippi to South Dakota, and Florida to California.

While the majority of these hauls can be concluded within the timeframes of the current HOS rules, we estimate that 25 to 30 percent of livestock hauling trips would be conducted under the requested exemption. Any segment of the trips described above – in any region of the country – could be a longer run for which a livestock hauler would utilize the requested exemption.

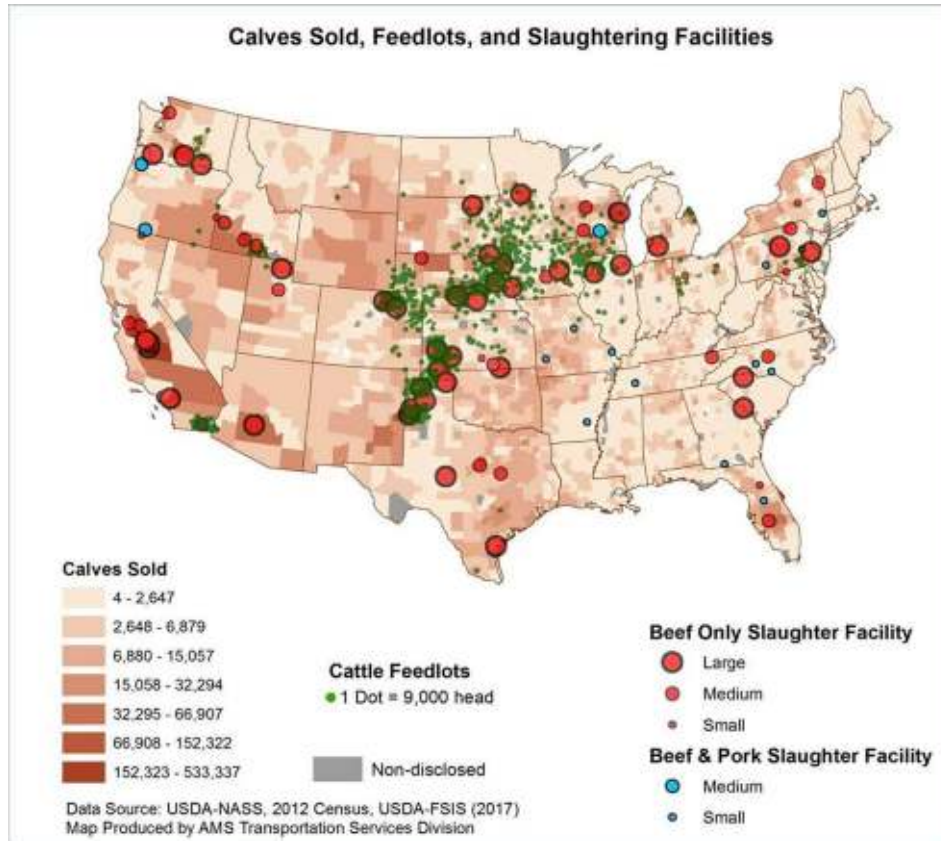


Figure 1. This map depicts the locations across the country at which calves are sold, the feedlots and grazing pastures at which those calves are raised and fed, and the processing facilities to which the cattle are finally harvested.

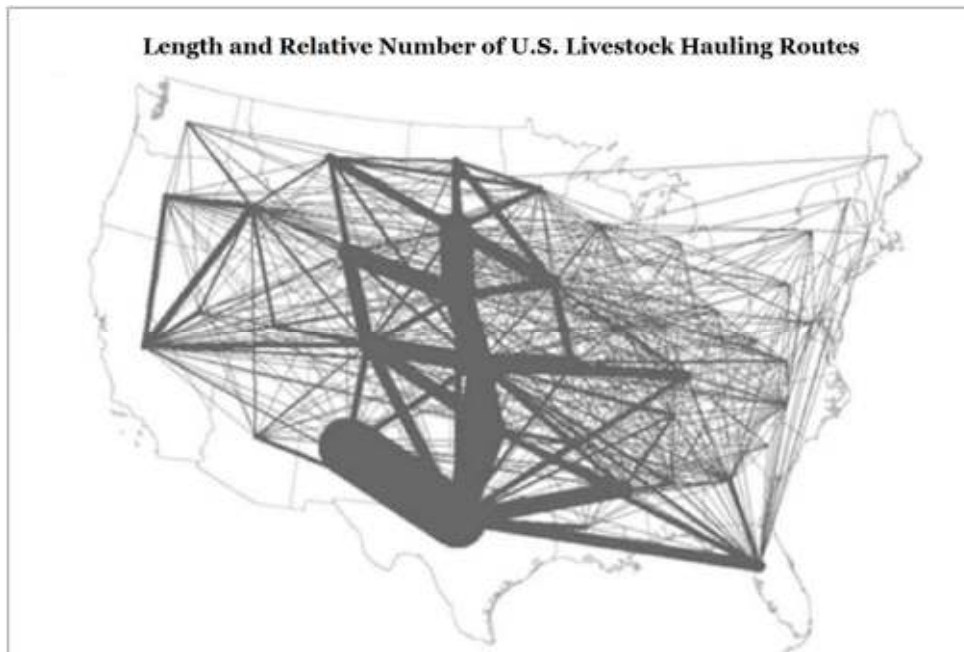


Figure 2. This map depicts the approximate length and relative number of cattle hauls across the United States. Because this map shows origin and destination points at a single location within each State, it does not identify what are often many different individual origin and destination points of such hauls within a State.

V. Assessment of Safety Impacts of the Exemption

A. Summary:

FMCSA requires petitions for exemption to assess the safety impacts the exemption may have.¹⁸ In this case, granting this exemption would not negatively impact motor vehicle safety because the exemption would likely be used by a limited number of commercial drivers who are experienced, plan their trips carefully, operate specialized equipment, and routinely undergo transportation training. Collectively, these measures have produced a documented record of safe driving that has been acknowledged by FMCSA.

Additionally, as explained in further detail in section VI. below, livestock haulers believe the exemption could be implemented in conjunction with a number of agreed-upon fatigue management countermeasures that would ensure an equivalent or greater level of safety than would be achieved absent such exemption. Fatigue countermeasures are supported by both sound research and real-world experience documenting that HOS limits are only one of several tools suitable for managing and mitigating driver fatigue. Specifically, workplace fatigue research has found that HOS limits, alone, may not achieve the objective of maximizing alertness and fitness for duty for safety-sensitive workers like CMV drivers.¹⁹

B. Analysis:

1. *Livestock Haulers are a Defined, Safe Subset of All CMV Drivers.*

Livestock haulers comprise a small subset of all CMV drivers. Livestock haulers boast a long record of transporting live animals across the country in a statistically safe manner, due to prudent route planning, specialized equipment, safe driving practices, and driver training addressing fatigue management.

In the context of granting a one-year exemption from the 30-minute rest break requirement for livestock haulers, FMCSA cited data showing carriers registered as transporting livestock were underrepresented in truck-involved fatal crashes. The agency relied directly on this data in approving the exemption, concluding that “given the low number of fatal crashes involving carriers transporting live animals . . . FMCSA believes there would be no decrease in safety for the traveling public associated with an exemption from the 30-minute rest break requirement.”²⁰

FMCSA’s full analysis of fatal crashes involving carriers transporting livestock is directly relevant to this petition and thus merits restating here:

¹⁸ 49 C.F.R. § 381.310(c)(4).

¹⁹ American College of Occupational and Environmental Medicine (ACOEM), Comprehensive Guidance Statement, *Fatigue Risk Management in the Workplace*, 54 J. OF OCCUPATIONAL AND ENVTL. MED. 231, 233 (Feb. 2012).

²⁰ 79 Fed. Reg. at 33637.

FMCSA reviewed “Trucks Involved in Fatal Accidents Factbook 2008” (UMTRI-2011-15, March 2011) published by the University of Michigan Transportation Research Institute’s Center for National Truck and Bus Statistics to determine the prevalence of crashes involving the transportation of livestock. In 2008, there were 4,352 trucks involved in fatal crashes and 20 of those vehicles were transporting live animals, with 13 of the vehicles reported as having a livestock cargo body. There were 13 other vehicles with an empty livestock cargo body involved in fatal crashes. Overall, trucks transporting live animals represent less than one half of one percent of the trucks involved in fatal crashes.

The Trucks Involved in Fatal Accidents (TIFA) report showed that 26 livestock cargo body vehicles, all of them tractor-semitrailer combinations, were involved in fatal crashes. Of that number, 13 livestock vehicles were transporting live animals at the time of the crash. Seven instances of vehicles transporting live animals being involved in a fatal crash involved CMVs with a body type reported as something other than a livestock body, based on the information above.

About one-third of the 2008 crashes involving livestock transporters occurred on trips sufficiently short that the driver probably was exempt from the HOS requirements. With the recent expansion of the HOS exemption from 100 air-miles to 150 air-miles, any crashes that occur in the future are even more likely to occur within the exempt zone.

Given the low number of fatal crashes involving carriers transporting live animals (e.g., 20 crashes for an industry sector that currently includes 66,316 active carriers), FMCSA believes there would be no decrease in safety for the traveling public associated with an exemption from the 30-minute rest break requirement.²¹

Our own analysis of more recent FMCSA commercial driver and crash data affirms FMCSA’s 2014 analysis showing livestock haulers are significantly underrepresented in truck-involved crashes. On an average annual basis over 2013 through 2015, livestock haulers accounted for 6.6 percent of all CDL holders, but were only involved in 0.796 percent of total crashes involving large trucks. See Figure 3, below.

²¹ *Id.* at 33636–33637.

Year	Total CDLs	Total CDL Crashes	Livestock CDLs	Livestock CDL %	Livestock Crashes	Livestock Crash %
2013	3,900,000 ²²	327,000 ²³	242,676 ²⁴	6.2%	2773 ²⁵	0.848%
2014	3,900,000 ²⁶	411,000 ²⁷	252,540 ²⁸	6.5%	3025 ²⁹	0.736%
2015	4,000,000 ³⁰	415,000 ³¹	277,782 ³²	6.9%	3376 ³³	0.813%
Annual Average	3,933,333	384,333	257,666	6.6%	3,058	0.796%

Figure 3. Comparison of the total number of CDL holders, the number of drivers working for motor carriers that identified livestock as a type of cargo they transport, the total crashes involving large trucks, and the number of crashes in which livestock carriers were involved.

a. Transporting Live Animals Requires Prudent Route Planning, Specialized Equipment, and Safe Driving Practices.

Livestock haulers comprise one of the safest sectors of the commercial motor vehicle industry due in part to the very nature of the only cargo they haul: live animals. While animal welfare guidelines are oftentimes not well-supported by prescriptive HOS limits, some of the same factors that ensure the health and well-being of livestock directly contribute to safe driving, which is the aim of the agency’s HOS rules.

When loaded into trailers, animals are vulnerable to changes in temperature, particularly temperature increases. Industry guidelines thus mandate drivers minimize stops while hauling livestock, especially in warmer weather, as the trailers are designed to cool the animals while moving.³⁴ As a result, livestock haulers extensively plan their trips to avoid potentially unsafe weather or traffic congestion that could delay the trip, drive up temperatures in trailers, and stress the animals. Drivers practice other prudent driving behaviors throughout each trip, such as avoiding rough-road conditions that could result in animal injury.

²² U.S. DEPT. OF TRANS., FMCSA, 2014 POCKET GUIDE TO LARGE TRUCK AND BUS STATISTICS, 9 (Oct. 2014).

²³ U.S. DEPT. OF TRANS., FMCSA, 2017 POCKET GUIDE TO LARGE TRUCK AND BUS STATISTICS, 34 (June 2017).

²⁴ 78 Fed. Reg. at 41717.

²⁵ Email from FMCSA, July 30, 2018.

²⁶ U.S. DEPT. OF TRANS., FMCSA, 2015 POCKET GUIDE TO LARGE TRUCK AND BUS STATISTICS, 9 (April 2015).

²⁷ U.S. DEPT. OF TRANS., FMCSA, 2017 POCKET GUIDE TO LARGE TRUCK AND BUS STATISTICS, 34 (June 2017).

²⁸ 79 Fed. Reg. at 33634 at 33635.

²⁹ Email from FMCSA, July 30, 2018.

³⁰ U.S. DEPT. OF TRANS., FMCSA, 2016 POCKET GUIDE TO LARGE TRUCK AND BUS STATISTICS, 9 (May 2016).

³¹ U.S. DEPT. OF TRANS., FMCSA, 2017 POCKET GUIDE TO LARGE TRUCK AND BUS STATISTICS, 34 (June 2017).

³² 80 Fed. Reg. 33584 at 33585.

³³ Email from FMCSA, July 30, 2018.

³⁴ See Letter from Michael Formica, Chief Envtl. Counsel, National Pork Producers Council, to Anthony Foxx, U.S. Secretary of Transportation, and Anne Ferro, Administrator, FMCSA (Nov. 21, 2013).

Livestock hauling requires specific trailers suitable only for hauling live animals. Livestock haulers only haul livestock and do not pick up other types of loads between routes. Drivers regularly have the opportunity to ensure the safe condition of their trailers, both through periodic monitoring while en route and in the course of trailer washings after hauls, as required under industry biosecurity standards. Additionally, the typical design of livestock trailers reduces the risk of side-impact underride crashes and attendant injuries and fatalities because many trailers include a “belly” compartment that extends below the level of a typical commercial vehicle trailer.³⁵

b. Many Livestock Haulers Undergo Specialized Training that Includes Fatigue Prevention, Recognition, and Management.

Many livestock haulers learn proper animal handling and transport techniques by participating in programs such as the pork industry’s Transport Quality Assurance (TQA) Program³⁶ and the beef industry’s Beef Quality Assurance –Transportation (BQA) training.³⁷ Additionally, some receiving facilities require haulers to undergo TQA, BQA, or similar training to ensure the safety and well-being of the live animal cargo.

Beyond trip planning and safe animal handling, these training programs also emphasize driver safety, including basic driver fatigue prevention, recognition, and management techniques. The TQA program, for example, stresses the importance of adequate rest, the ideal cab conditions for alert drivers, a healthy diet, and how to recognize signs of fatigue.

Thus, several sectors of the livestock industry already understand the benefits of industry- and company-driven fatigue management practices and have made training available nationwide through trade associations and other venues. Accordingly, as explained in greater detail in section VI.B.3. below, livestock haulers propose to develop fundamental principles for industry-sponsored fatigue management systems and training that livestock haulers would voluntarily complete in order to operate under the requested exemption.

VI. Ensuring an Equivalent or Greater Level of Safety under the Exemption

A. Summary:

FMCSA requires petitions for exemption to explain how the petitioner would ensure a level of safety equivalent to or greater than the level of safety that would be

³⁵ Tractor-trailers are required under federal regulations to have underride guards on their rears, but not on their sides. According to data from the Insurance Institute for Highway Safety, of the 1,542 deaths of passenger vehicle occupants in crashes with tractor-trailers in 2015, 301 involved the passenger vehicle underriding the side of a tractor-trailer. See Insurance Institute for Highway Safety (IIHS), *Side guard on semitrailer prevents underride in 40 mph test*, IIHS NEWS (Aug. 29, 2017), <http://www.iihs.org/iihs/news/desktopnews/side-guard-on-semitrailer-prevents-underride-in-40-mph-test>.

³⁶ Transport Quality Assurance (TQA), *TQA Version 6 Handbook* (2017), <https://lms.pork.org/Tools/View/tqa/tqa-certification>.

³⁷ Beef Quality Assurance (BQA), *BQA Transportation Handbook*.

obtained without the exemption.³⁸ As described in detail below, livestock haulers propose a stronger focus on performance-based factors – which have been proven in both research and practice to effectively manage the causes of fatigue – will ensure livestock hauling operations under the requested exemption will provide a level of safety equivalent to or greater than that obtained under the current HOS regulations.

HOS requirements are intended to mitigate the risk of driver fatigue and its role in CMV crashes. However, research shows that the number of hours spent driving is only one aspect of fatigue management; many factors contribute to safe driving. Importantly, there are specific mitigation measures that can be implemented by motor carriers and individual drivers to address concerns that fatigue may be heightened with greater driving and on-duty time. Beyond government-mandated HOS limits, the National Transportation Safety Board (NTSB) notes that “fatigue is a manageable threat to transportation safety that can be mitigated through reasonable measures based on company practices and individual responsibility.”³⁹

Other nations, including Australia, recognize the benefits of implementing fatigue risk management systems as a meaningful component of their HOS programs for commercial motor vehicle drivers. Australia created a program specifically tailored to livestock haulers, enabling them to drive and remain on duty for additional hours upon agreement to implement certain proven fatigue mitigation countermeasures. The Australian scheme reflects a shift to regulations aimed at ensuring certain outcomes; in this case, those outcomes are effective management of driver fatigue and safe driving. This performance-focused safety oversight approach accords with U.S. DOT’s own recent public statements on how it will oversee transportation safety in several critical areas.

In line with this modern, outcome-based approach to mitigating fatigue and ensuring the safe operation of commercial motor vehicles, U.S. livestock haulers propose to craft industry-sponsored training programs that include appropriate fatigue management principles, building from: the fatigue management training in place in many sectors of the industry already; practices under the Australian HOS scheme; and the latest fatigue management research. Completion of such training would be required before operating under the requested exemption.

³⁸ 49 C.F.R. § 381.310(c)(5).

³⁹ U.S. NAT’L TRANSP. SAFETY BD., 2017-2018 MOST WANTED LIST OF TRANSPORTATION SAFETY IMPROVEMENTS: REDUCE FATIGUE-RELATED ACCIDENTS FACT SHEET (2016), <https://www.nts.gov/safety/mwl/Documents/2017-18/2017MWL-FctSht-Fatigue-H.pdf>.

B. *Analysis:*

1. *Modern Workplace Fatigue Approaches Look Beyond Prescriptive HOS Limits and Focus on Desired Outcomes: Management of Driver Fatigue and Safe Driving.*

Recent research on fatigue management notes that while HOS regulations are intended to address fatigue in the workplace, there are other factors beyond duty time that affect fatigue and alertness.⁴⁰ Accordingly, there are other means in addition to HOS limits to effectively counter operator fatigue.

A 2012 study by the American College of Occupational and Environmental Medicine (ACOEM) notes that while “hours-of-service guidelines were an early attempt to address fatigue,” increasingly “regulators are moving away from pure hours-of-service standards toward comprehensive [fatigue risk management systems (FRMS)] designed to promote alertness, minimize fatigue, identify evidence of excess fatigue, and mitigate either the fatigue itself or its potential consequences.”⁴¹

The benefits of relying on FRMSs in countering operator fatigue are several. First, because FRMSs are based on sound data,⁴² they have been proven to be effective in managing the risks associated with fatigue. Second, an FRMS-reliant approach is focused on safety outcomes rather than prescriptive limits. Third, FRMSs can be tailored to appropriately address the nature of specific workplace operations and the corresponding level of risk exposure.

The ACOEM study identifies regulators in Australia and New Zealand as pioneering practitioners of fatigue management. “[R]egulators in Australia and New Zealand have begun to move away from prescriptive hours of work (HoW) limitations toward FRMS Rather than complying with prescriptive rules, companies are required to focus on outcome, in other words, the management of fatigue.”⁴³

This performance-based approach to regulatory oversight – here, in the context of CMV operator fatigue – aligns closely with several of the U.S. Department of Transportation’s recent announcements about how it intends to oversee transportation safety in a number of high-profile areas. For example, in listing the principles that will govern the Department’s oversight of autonomous vehicle testing and deployment, Secretary Chao recently stated, “when regulations are needed, they will be as non-prescriptive and performance-based as possible.”⁴⁴ In the context of aviation safety, Secretary Chao’s recent Congressional testimony touted the FAA’s “new performance-based rules for small aircraft certification”⁴⁵ She noted, “instead of prescribing

⁴⁰ ACOEM, *supra* note 11, at 253–54.

⁴¹ *Id.* at 233.

⁴² *Id.* at 234.

⁴³ *Id.*

⁴⁴ Statement of Transportation Secretary Elaine L. Chao, *US DOT AV 3.0 Summit* (Mar. 1, 2018).

⁴⁵ Statement of Transportation Secretary Elaine L. Chao, *FAA Reauthorization: Hearing Before the H. Comm. on Transp. & Infrastructure* (June 8, 2017).

certain technologies and designs, the new rules define performance objectives and give industry the flexibility to determine the best and safest way to meet them.”⁴⁶ Secretary Chao has even brought this same performance-driven safety philosophy to her oversight of spending decisions on highway infrastructure projects, testifying before a Senate committee that the Department “encourages a data-driven, performance-based approach to save lives on all public roads.”⁴⁷ Under the Department’s Highway Safety Improvement Program, “beginning this [past] summer, States and metropolitan planning organizations will set data-driven annual safety performance targets for the first time, which will help guide their investment decision-making.”⁴⁸

The current science on the effective role fatigue management measures can play in addressing operator fatigue supports FMCSA’s adoption of this same performance-based approach to its oversight of the safe operation of commercial motor vehicles. Consistent with that approach, livestock haulers believe adoption of fatigue management countermeasures as a condition to use the requested exemption will ensure an equivalent or greater level of safety than under the current prescriptive HOS rules.

2. *Performance-Based Australian Fatigue Management/HOS System Tailored to Livestock Haulers can be a Model for FMCSA in Granting this Exemption.*

Backed by research, Australia adopted the Heavy Vehicle National Law⁴⁹ and associated Heavy Vehicle (Fatigue Management) National Regulation⁵⁰ in 2012 and 2013 which offer greater flexibility under its HOS rules for commercial drivers who implement specified fatigue risk-management standards. Provisions were later crafted to permit livestock haulers to work for extended time periods upon compliance with specific fatigue management countermeasures.⁵¹ Australia’s fatigue management regulations are based on proven fatigue management principles, and commercial drivers – including livestock haulers – in Australia have operated under this flexible regime successfully and safely. These regulations recognize that CMV safety, and driver fatigue in particular, are influenced by more than just the number of hours spent driving. We urge FMCSA to follow Australia’s performance-based approach to regulating driver fatigue by implementing fatigue risk-management countermeasures for U.S. livestock haulers operating under the requested HOS exemption.

⁴⁶ *Id.*

⁴⁷ Statement of Transportation Secretary Elaine L. Chao, *Highway and Bridge Infrastructure: Hearing Before the S. Comm. on Env’t. & Public Works* (May 17, 2017).

⁴⁸ *Id.*

⁴⁹ Heavy Vehicle National Law Act 2012, as amended (Queensland, Austl.), Chapter 6, Part 6.3, <https://www.legislation.qld.gov.au/view/whole/pdf/inforce/2018-06-22/act-2012-hvnlq>.

⁵⁰ Heavy Vehicle (Fatigue Management) National Regulation (2013) (Queensland, Austl.), <https://www.legislation.qld.gov.au/view/whole/pdf/inforce/current/sl-2013-0078>.

⁵¹ NHVR, LIVESTOCK TRANSPORT FATIGUE MANAGEMENT SCHEME: IMPLEMENTATION GUIDE (July 2015) (Austl.).

In the 2000s, Australia recognized the need to move from a purely prescriptive rule-based approach in regulating commercial driving to a performance-based methodology after studies showed jurisdictions in Australia without HOS regulations were no less safe than those with prescriptive HOS requirements. In a 2006 review of Australian commercial driving safety studies,⁵² the National Transport Commission⁵³ highlighted a 1996 study on fatigue in the Western Australia transport industry,⁵⁴ which found that while Western Australia at the time did not regulate commercial driving hours, “the safety record for Western Australia was comparable to the other States including those with driving and related working hours regulations.” Specifically, the study showed that “on no single indicator does Western Australia stand out as having a worse fatigue related crash problem than other States.”⁵⁵

The review also examined a series of studies published in 2000 looking at model work-rest schedules for managing long-distance driver fatigue,⁵⁶ which found that “work periods of up to 16 hours (17¼ hour shift length) can be undertaken without compromising the safe performance provided that drivers are sufficiently rested before they begin.”⁵⁷ More recently, while acknowledging that “[f]atigue is an inexact science,” Australian heavy truck regulators noted that available “research provides a sound basis on which to assess the likelihood of fatigue risk and it is this research which has driven the development of the Risk Classification System” that underpins their current three-tier fatigue risk-management scheme for heavy truck drivers.⁵⁸

Based on such fatigue research, the needs of the commercial trucking industry, and truck safety data spanning many years, Australia adopted the Heavy Vehicle (Fatigue Management) National Regulation in 2013. Six states and territories in Australia have adopted this fatigue management proposal as binding regulation. The

⁵² NAT’L TRANSPORT COMM’N, ISBN 1 921168 20 X, HEAVY VEHICLE DRIVER FATIGUE ADVANCED FATIGUE MANAGEMENT – SUMMARY OF FATIGUE MANAGEMENT PROGRAMS AND RESEARCH PROGRAMS AND RESEARCH UNDERTAKEN IN AUSTRALIA (July 2006) (hereinafter “Austl. NTC Report”).

⁵³ The National Transport Commission is an independent research and advisory body charged with improving the productivity, safety, and environmental performance of Australia’s road, rail, and intermodal transport systems. The Commission advises Commonwealth, state, and territory ministers responsible for transport and infrastructure.

⁵⁴ Austl. NTC Report (citing Hartley, L.R., Arnold, P.K., Penna, F., Hochstadt, D., Corry, A. and Feyer, A.M. (1996)).

⁵⁵ *Id.* at 5.

⁵⁶ *Id.* (citing Williamson, A., Feyer, A.-M., Friswell, R. and Finlay-Brown, S., Demonstration project for Fatigue Management Programs in the Road Transport Industry, report CR 192, Australian Transport Safety Bureau, Canberra, ACT 2000).

⁵⁷ *Id.* at 7. This research found that the appropriate duration of work periods cannot be determined independently of rest periods, and concluded that a six-hour rest opportunity after 16 work hours was “not sufficient to manage fatigue” over a three-day work/rest regime. Ultimately, the HVNR recommended a continuous rest period of 7 hours (and 10 hours of rest after every second day) after 15 ½ hours working during a 17 hour work opportunity period under its Long Runs template (*see* footnote 62). Even more robust than the NHVR work/rest regime, our own HOS proposal would maintain the 10-hour continuous rest opportunity provided under the FMCSA’s current HOS rules, to ensure the opportunity for restorative sleep is not compromised.

⁵⁸ NATIONAL HEAVY VEHICLE REGULATOR (NHVR), RISK CLASSIFICATION SYSTEM FOR ADVANCED FATIGUE MANAGEMENT POLICY, VERSION 2.0 (June 2013) (Austl.).

regulations established three tiers of fatigue risk-management for commercial truck drivers. This system is not limited to livestock haulers. The three tiers are as follows: (1) Standard Hours; (2) Basic Fatigue Management (BFM); and (3) Advanced Fatigue Management (AFM). CMV operators meeting the second- and third-level tiers are permitted to work for periods longer than permitted under the Standard Hours tier.⁵⁹ Standard Hours sets out work and rest limits that are available to all heavy vehicle operators and is limited to 12 hours of work time (including driving time) before at least 7 hours of continuous rest. BFM provides for longer work hours (up to 14 hours of work) with specific controls required to mitigate risk, while Advanced Fatigue Management (AFM) provides drivers even more flexibility, allowing drivers to work up to 16 hours in a 24-hour period.

Australia's National Heavy Vehicle Regulator (NHVR) established an independent panel of fatigue experts in 2014 to advise the agency on decisions it makes under tier 3, the Advanced Fatigue Management tier. This advisory group, called the Fatigue Expert Reference Group, also counsels the agency on applicants' proposed AFM systems as well as the broader fatigue risk classification system supporting the NHVR's fatigue management regulations.⁶⁰

Then in 2015, within the AFM tier, Australia developed a fatigue management system specifically for livestock haulers, called the Livestock Transport Fatigue Management Scheme (LTFMS).⁶¹

Recognizing the unique demands of hauling live animals, the LTFMS provides livestock haulers needed flexibility while focusing on performance outcomes rather than prescriptive hours-of-work limitations. This scheme, or system, initially established a streamlined approval process allowing, on a fortnightly schedule, longer continuous work hours (up to 14 hours) for livestock haulers that implement specific fatigue mitigation measures.⁶²

Public statements by Australia's NHVR agency, and related statements from Australia's livestock industry associations, provide insights into the research-driven

⁵⁹ See NHVR, *supra* note 50, at 17-18 (Austl.).

⁶⁰ NHVR, ONE REGULATOR, ONE RULEBOOK: ONE AFM DECISION (May 11, 2014) (Austl.), <https://www.nhvr.gov.au/news/2014/11/05/one-regulator-one-rulebook-one-afm-decision>.

⁶¹ NHVR, LIVESTOCK TRANSPORT FATIGUE MANAGEMENT SCHEME: IMPLEMENTATION GUIDE (July 2015) (Austl.). Specific fatigue risk management systems (FRMS) elements included in the Australian Livestock Transport Fatigue Management Scheme are: (1) a safe driving plan; (2) a fitness for duty assessment; (3) employee fatigue training; (4) incident report forms; (5) internal audits and reviews; (6) quarterly compliance statements; and (7) non-conformance corrective action reports.

⁶² *Id.*

process that created the livestock hauler system,⁶³ its importance to livestock haulers,⁶⁴ and how the agency struck the appropriate balance between ensuring animal welfare while in transport and mitigating the risks of driver fatigue.⁶⁵

Due to the success of the LTFMS fortnightly approach to performance-based fatigue management, the NHVR in August 2016 released a second livestock fatigue “template” to provide even more flexibility to operate for “Long Runs . . . [of] up to 15 ½ hours of work time.”⁶⁶ This Long Runs template outlines the elements of a model fatigue mitigation system a carrier should have in place to take advantage of additional work hours (up to 15 ½ hours of work time over a 17 hour work opportunity in a 24-hour period, which includes 1.5 hours of rest during the work opportunity).⁶⁷ Additionally, NHVR is currently developing a third livestock fatigue template for Journey Flexibility to allow up to 15 ½ hours of work time “across multiple, consecutive work opportunities in a 72 hour period.”⁶⁸

The diagram below shows the three levels of LTFMS templates. They are depicted as stair steps to represent the differing levels of hours of service flexibility provided and fatigue countermeasures required to operate under each.

⁶³ *NHVR Stands By Livestock Transport Fatigue Scheme*, OWNERDRIVER, (Feb. 2, 2016) (hereinafter “*NHVR Stands By LTFMS*”), <https://www.ownerdriver.com.au/industry-news/1601/nhvr-stands-by-livestock-transport-fatigue-scheme>. In 2016, NVHR executive director of productivity and safety, Geoff Casey, said NVHR created the LTFMS scheme “after a lengthy and robust discussion with industry and fatigue experts.” *Id.*

⁶⁴ *First Operator Accredited under NHVR Livestock Fatigue Management Scheme*, CORAUSTRALIA, (September 22, 2015) (Austl.), <https://www.coraustralia.com/blog/first-operator-accredited-under-nhvr-livestock-fatigue-management-scheme/>. The industry has welcomed the flexibility the LTFMS provides, with the Australian Livestock and Rural Transporters Association (ALRTA) and the Livestock and Rural Transporters Associations of Queensland (LRTAQ) voicing support for the scheme. *Id.*

⁶⁵ *NVHR Stands By LTFMS*, *supra* note 55. Geoff Casey, NHVR executive director, also said that NVHR worked to provide livestock haulers with the “flexibility to respond to the complex and unique nature of the livestock transport task,” while balancing those needs with “additional controls that would manage the fatigue risk.” *Id.*

⁶⁶ NHVR, *AFM Policy and Procedures: Based on the Livestock Transport Fatigue Management Scheme (Template)*, at 25 (Austl.), <https://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/work-and-rest-requirements/livestock-transport-fatigue-management-scheme>.

⁶⁷ *Id.* at 25-32.

⁶⁸ *Id.* at 33.

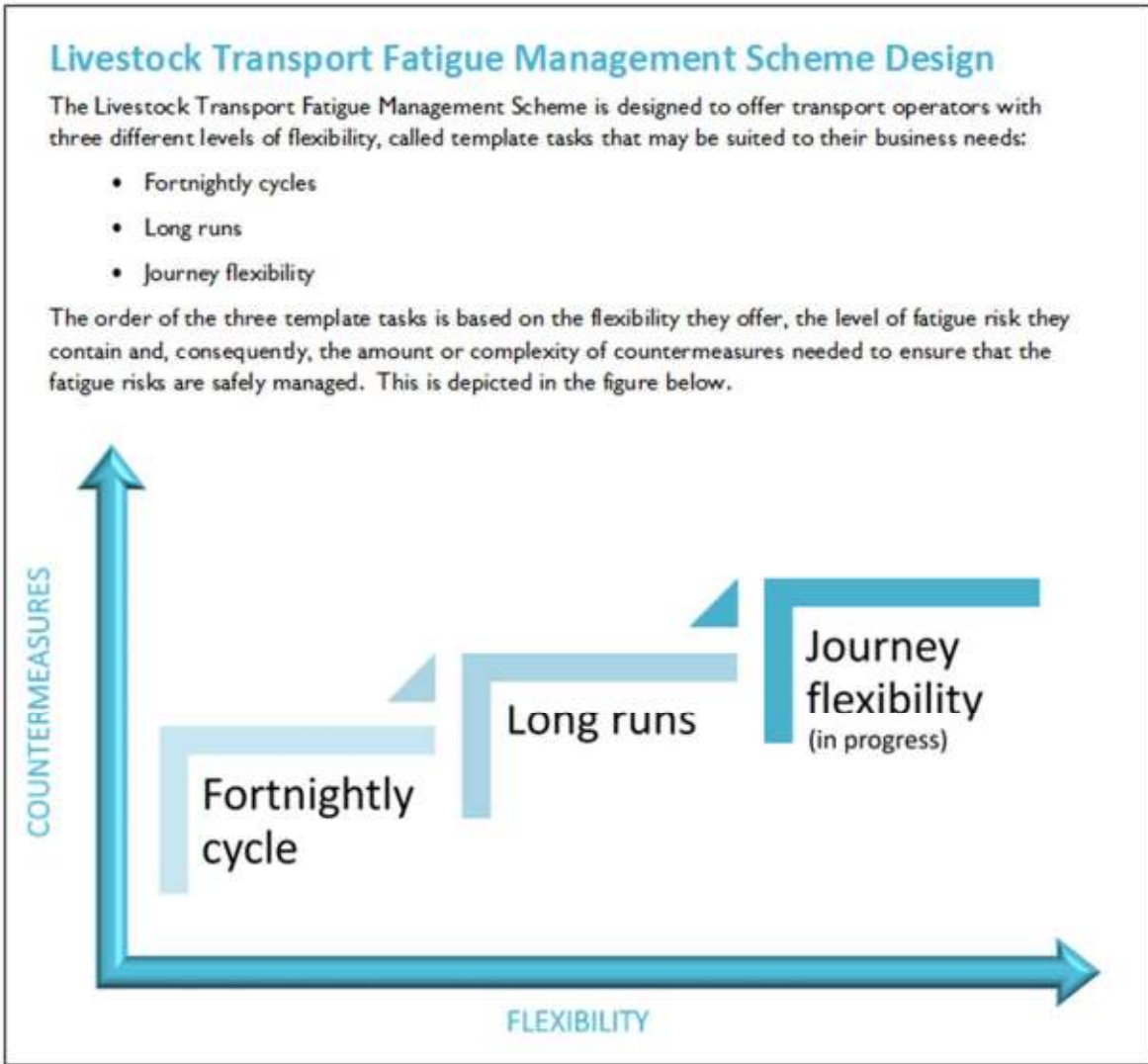


Figure 4. Diagram of the Livestock Transport Fatigue Management Scheme developed by Australia’s National Heavy Vehicle Regulator.

This data-driven, outcome-based regulatory approach Australia has successfully implemented for heavy truck drivers generally and livestock haulers specifically provides a sound structure on which U.S. livestock haulers can model industry-supported fatigue-mitigating countermeasures in conjunction with the requested HOS exemption. This approach will ensure a level of safety equivalent to or greater than the level achieved under the FMCSA’s current prescriptive HOS regulations alone.

3. *Specific Mitigating Countermeasures Under the Exemption.*

FMCSA routinely imposes certain terms and conditions on the use of the regulatory exemptions and waivers it grants. To ensure an equivalent or greater level of safety, livestock haulers propose the following mitigating countermeasures as terms and conditions on the use of the requested exemption.

a. *Fatigue Mitigation Countermeasures.*

i. *Current Industry Countermeasures.*

As transporters of live animals, livestock haulers are acutely aware of the risks associated with driving while fatigued, and as a result, industry practices already in place are designed to prevent driver fatigue and promote safe driving by incorporating techniques like careful pre-trip planning and regular equipment and livestock inspection in transit. As explained in section V.B. above, these practices often encompass industry-sponsored training on how to prevent, recognize and mitigate fatigue. As a result, livestock haulers comprise one of the safest populations of commercial motor vehicle drivers in the country.⁶⁹

ii. *Proposed Countermeasures.*

Based on above-described research findings that workplace fatigue is best managed by tools beyond just HOS limits, and consistent with the performance-based scheme in place for livestock haulers in Australia, we propose that, as a condition to operate under the requested exemption, a livestock hauler would be required participate in an industry-generated fatigue management system that augments the current industry training programs like TQA and BQA outlined above.

That fatigue management system would look to data-based fatigue mitigation research, proven fatigue risk mitigation measures, and the real-world experiences of livestock haulers operating under fatigue risk management systems such as Australia's.

While this not a definitive list of fatigue risk-management measures the livestock hauling industry would support, we propose the following measures be included in a required fatigue risk-management system:

- Participating in training developed by the livestock industry, in consultation with FMCSA,⁷⁰ that addresses several fatigue countermeasures, including: hazards of working while fatigued; impact of chronic fatigue; how to recognize fatigue; how to mitigate fatigue; alertness strategies; and the basics of sleep physiology, sleep hygiene, and sleep disorders. Included within this industry-developed training would be a means to record successful completion of training by each driver utilizing this exemption.
- Driver-based fatigue risk management practices:
 - Completing a safe driving plan before each haul that includes a trip risk assessment and a strategy to ensure each planned haul can be completed successfully within the driver's available hours of service.

⁶⁹ 79 Fed. Reg. at 33636-33637.

⁷⁰ We propose that this training be an interactive, industry-specific online curriculum derived from both industry training materials and from the North American Fatigue Management Program developed by FMCSA and Transport Canada.

- Such plan should accommodate periodic short breaks while driving to check on animal welfare and mitigate fatigue.⁷¹
 - Completing a fitness for duty assessment before each haul that includes a risk assessment, a fatigue assessment, and a fitness for duty declaration.
- Company practices to support fatigue risk management. The following audit, review, and self-reporting measures would constitute highly efficient and cost-effective means to assist FMCSA in ensuring compliance with the fatigue mitigation countermeasures proposed herein:
 - Conducting internal audits and reviews to ensure drivers fulfill all obligations under their fatigue risk-management system.
 - Identifying and correcting compliance gaps.
 - Submitting compliance statement to FMCSA on an annual basis.

b. Carrier Safety Fitness Conditions under the Exemption:

Livestock haulers propose the following carrier safety fitness conditions on the use of the requested exemption:

- Carriers operating under this exemption may not have an “unsatisfactory” rating with FMCSA or be subject to any imminent hazard or out-of-service orders.
- A livestock hauler operating under the exemption would be required to notify FMCSA within 5 business days of any accident (as defined in 49 C.F.R. § 390.5) that occurs while its driver is operating under the exemption.

In proposing these risk-mitigation countermeasures, we re-commit to the practices and training underlying the livestock hauling industry’s enviable record of safe driving, and we offer the proven tools to accomplish this under the requested exemption.

VII. Negative Impacts if the Exemption is Not Granted

A. Summary:

FMCSA requires petitions for exemption to describe the impacts the petitioner could experience if the exemption is not granted.⁷²

⁷¹ As reported in the ACOEM study, work place fatigue management research identifies frequent rest breaks as one of the most effective fatigue mitigation countermeasures. Specifically, the study discusses “time-on-task fatigue” associated with work shifts that exceed 8 hours and states that “breaks within the schedule to fight time-on-task fatigue can greatly mitigate the increased risk associated with shifts longer than 8 hours.” ACOEM, *supra* note 11, at 241. Additionally, the article notes that “shorter, more frequent . . . breaks may be more beneficial than 1 or 2 longer breaks,” noting that breaks of 5 to 15 minutes have been shown to “reduce fatigue, improve productivity, and reduce the risk of errors or accidents.” *Id.* at 248.

⁷² 49 C.F.R. § 381.310(c)(6).

This petition exemplifies FMCSA’s particular concern that denial of an exemption petition would leave the petitioner unable “to test innovative safety management control systems.”⁷³ The fatigue countermeasure approach we propose here is based in research showing the effectiveness of more modern and innovative workplace fatigue approaches aimed at desired outcomes – the management of fatigue and safe driving. If this petition were not granted, livestock haulers would be unable to test how modern fatigue management tools could ensure safe driving more effectively and flexibly than strict HOS rules alone. We would be left to operate under outdated prescriptive HOS regulations that we find to be contrary to both modern fatigue management science and the Department’s own regulatory philosophy.

On a very practical level as well, the livestock industry would pay steep costs if this exemption were not granted. The current HOS regulations run counter to certain long-established animal welfare practices designed to ensure animal health while in transit and to protect against the spread of disease. Additionally, often-suggested methods for reconciling animal well-being with HOS limits, such as the use of team drivers or offloading livestock mid-route, are patently infeasible and financially punitive.

B. Analysis:

1. *Livestock Haulers would be Unable to Test Innovative Fatigue Risk-Management Safety Countermeasures if the Requested Exemption were not Granted.*

The fatigue countermeasure approach we propose in this petition falls squarely within the FMCSA exemption procedure’s single example of a negative impact if an exemption were not granted: “inability to test innovative safety management control systems.”⁷⁴

The countermeasures we propose are premised upon fatigue management research showing the effectiveness of more modern and innovative workplace fatigue approaches aimed at desired outcomes: safe driving.

We note, again, how a shift from FMCSA’s prescriptive approach relying only on HOS limits to the exemption terms we propose here incorporating performance-based, data-driven fatigue mitigation measures would align tightly with Secretary Chao’s repeated focus on performance-based regulation to manage and mitigate transportation safety risks.

Finally, we emphasize that, while innovative, this approach to fatigue management is not unproven. In general, the effectiveness of performance-based regulation has been acknowledged in several contexts, including in transportation

⁷³ *Id.*

⁷⁴ *Id.*

safety.⁷⁵ And more specifically, the exemption and countermeasures we propose here draw from twenty years⁷⁶ of professional fatigue management research and on-road experience of the Australian road transport industry.

But if this exemption were not granted, neither FMCSA nor the U.S. livestock hauling industry could readily take advantage of that vast body of work. Unable to evaluate how modern fatigue management tools could ensure safe driving more effectively and flexibly than strict HOS rules alone, we would be left to operate exclusively under prescriptive and outdated HOS regulations – a scenario contrary to both modern fatigue management science and the Department’s own regulatory philosophy.

2. *Public Safety Measures to Ensure Animal Welfare and Prevent the Spread of Disease are Undermined by Current HOS Rules.*

State and Federal animal transport regulations and procedures seek to protect livestock health and well-being and minimize the risk of animal disease spreading. U.S. DOT statute and State rules permit livestock to remain in transport trailers for up to 28 hours.⁷⁷ Animal welfare laws require that certain livestock crossing state lines travel with interstate certificates of veterinary inspection that detail where the load came from and where it is going. Crossing international borders requires even more stringent trailer sealing and biosecurity measures. All of these measures are undermined by current HOS driving and on-duty limits.

For example, requiring livestock haulers to unload and reload animals during transport once current HOS limits are reached increases the stress of transport on the livestock, increases the likelihood that animals will be injured, compromises the

⁷⁵ Marc Scribner, *Toward Performance-Based Transportation Safety Regulation Focus on Results Instead of Rigid Rules to Improve Safety and Promote Innovation*, ON POINT, No. 225, (Mar. 29, 2017), <https://cei.org/content/toward-performance-based-transportation-safety-regulation>; OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, CIRCULAR A-4, REGULATORY ANALYSIS, 8 (Sept. 17, 2003) (“Performance standards express requirements in terms of outcomes rather than specifying the means to those ends. They are generally superior to engineering or design standards because performance standards give the regulated parties the flexibility to achieve regulatory objectives in the most cost-effective way. In general, you should take into account both the cost savings to the regulated parties of the greater flexibility and the costs of assuring compliance through monitoring or some other means.”); Press Release, *The White House, Moon, Mars, and Worlds Beyond: Winning the Next Frontier* (Feb. 21, 2018), <https://www.whitehouse.gov/briefings-statements/moon-mars-worlds-beyond-winning-next-frontier/> (“The Department of Transportation would require a single license for all types of launch and re-entry vehicle operations and transform the launch and re-entry regulatory process from one of prescriptive requirements to a performance based licensing regime.”).

⁷⁶ See NHVR, *supra* note 52.

⁷⁷ 49 U.S.C. § 80502.

transport of animals that are subject to interstate certificates of veterinary inspection (ICVIs)⁷⁸, and increases the risk of a major livestock disease outbreak in the U.S.⁷⁹

Even if these significant animal welfare and public health threats could be mitigated when loading and unloading mid-route, such rest breaks are generally not feasible because suitable off-truck rest areas meeting USDA regulatory standards⁸⁰ are uncommon. Another alternative – keeping livestock loaded in a parked trailer for 10 hours while the driver rests – is detrimental to animal welfare due to animals’ temperature sensitivity while stationary in trailers.⁸¹

ICVIs do not usually contemplate a waypoint of unloading, and if livestock haulers were required to unload and reload the livestock, they may need to acquire a new ICVI from the state where the livestock were unloaded and reloaded. The already-stringent trailer sealing and biosecurity measures required when crossing international borders become more complicated the more often livestock are loaded, unloaded, and reloaded.

The head of the North Dakota’s Department of Agriculture explained the practical impacts of all these challenges, in the closely-related context of Federal electronic logging device mandates, as follows:

The unintended consequences of this regulation to livestock haulers are that livestock will have to be loaded and unloaded more frequently and each state where the livestock are offloaded will need animal health certificates specific to each state if applicable. This will add countless hours on to the time it currently takes to transport livestock which is taxing on the drivers and the animals. There are limited locations where animals could be offloaded which requires involvement of numerous officials to maintain the integrity of animal health regulations. Animals that are offloaded will be

⁷⁸ The American Veterinary Medical Association defines a certificate of veterinary inspection as “an official document issued by a federal, state, tribal, or accredited veterinarian certifying that the animals identified on the document have been inspected and were found to satisfy the regulations pertaining to their intended movement – within the same state, between states, or internationally.”

<https://www.avma.org/public/PetCare/CVI/Pages/default.aspx>

⁷⁹ T. Grandin, *Assessment of Stress During Handling and Transport*, 75 J. ANIM. SCI. 249 (1997).

⁸⁰ USDA’s longstanding Statement of Policy under the Twenty-Eight Hour Law describes the agency’s standards for feeding pens housing livestock in transit. The accommodations described therein as appropriate for livestock care are not generally available along U.S. livestock hauling routes. *See* 9 C.F.R. § 89.5, Feeding Pens.

⁸¹ FMCSA, after evaluating several public comments describing the negative impacts of stopping a CMV on animal welfare, concluded that “[s]topping a CMV with livestock on board in extreme weather conditions can seriously jeopardize the health and welfare of the animals, even when the CMV is stopped for as little as 10 minutes.” 79 Fed. Reg. 33634. *See also* Letter from Scott George, President, National Cattlemen’s Beef Association to Anne Ferro, Administrator, FMCSA (Sept. 11, 2013); Letter from Randy Spronk, President, National Pork Producers Council, to Docket Management Facility, DOT (Sept. 11, 2013); Letter from Scott Randall, Director of Safety, Hogan Transports, Inc., to Anne Ferro, Administrator, FMCSA (Sept. 4, 2013); and Letter from Michael Formica, Chief Envtl. Counsel, National Pork Producers Council, to Anthony Foxx, U.S. Secretary of Transportation, and Anne Ferro, Administrator, FMCSA (Nov. 21, 2013).

held in quarantine which further stresses the animals and delays shipments. In addition, every time livestock is loaded and offloaded there is potential for injury to both the animals and the people.⁸²

Additionally, strict adherence to HOS requirements for livestock haulers may significantly increase the potential for a major disease outbreak among livestock in the U.S. According to the USDA, “[d]iseases such as classical swine fever (hog cholera), foot-and-mouth disease (FMD), and highly pathogenic avian influenza (HPAI) can cause high death rates or severe illness and production losses.”⁸³ One major risk factor for the spread of FMD is the extensive mobility of animals, products, and feed. The movement of animals and the potential comingling of infected stock will increase, ultimately increasing the potential for widespread transmission of FMD and other diseases, if livestock haulers are forced to unload and reload animals over the course of their trip in order to meet HOS limits.⁸⁴

As seen in the major FMD outbreaks that occurred in the United Kingdom in 2001 and again in 2007, the economic consequences of such outbreaks can be devastating. The 2001 outbreak lasted for 223 days, but the U.S. denied beef imports from the U.K. for almost two years. “The 2001 foot and mouth scare turned into one of the world’s largest and most expensive animal disease outbreaks, with overall costs estimated at up to 12 billion euros (\$16 billion). Authorities slaughtered 6.5 million animals in Britain and burned them France, Ireland and the Netherlands were also hit.”⁸⁵ In addition to direct impacts on U.K.’s agriculture industry, FMD also caused losses in tourism and other sectors that reverberated across the entire economy.⁸⁶

The Center for Food Security and Public Health at Iowa State University explained the potential impacts of a similar U.S. outbreak in stark terms: “Foot and mouth disease presents the greatest economic threat to the U.S. animal agriculture and is viewed as the most important transboundary animal disease in the world. An

⁸² Letter from Doug Goehring, Agriculture Commissioner, State of ND, to Elaine L. Chao, U.S. Secretary of Transportation (Dec. 5, 2017).

⁸³ U.S. DEPT. OF AGRICULTURE: FOOD SAFETY & INSPECTION SERVICE, REPORTABLE AND FOREIGN ANIMAL DISEASES (Dec. 16, 2015), https://www.fsis.usda.gov/wps/wcm/connect/2afa4f5f-e7df-479c-9058-55aecc60d145/PHVt-Reportable_Foreign_Animal_Diseases.pdf?MOD=AJPERES.

⁸⁴ Recent internationally-derived animal disease outbreaks in the United States include the 2013 Porcine Epidemic Diarrhea virus, which arrived from Asia and killed an estimated 8 million baby pigs, and the 2015 HPAI (“bird flu”) virus which also arrived from Asia and killed an estimated 31 million poultry in Iowa in two months. See Jim Roth, Director, Center for Food Safety & Public Health, Iowa State University, Address titled *The Value of an Expanded U.S. FMD Vaccine Bank for the Beef Cattle Industry* (2017).

⁸⁵ Katherine Baldwin, *Foot and mouth disease found in cattle on UK farm*, REUTERS (Aug. 3, 2007) <https://www.reuters.com/article/us-britain-cattle-idUSL037131720070803>.

⁸⁶ *Id.*

outbreak of FMD in the U.S. would have a devastating impact on the U.S. economy extending far beyond animal agriculture.”⁸⁷

Because of the enormous and widespread economic consequences of a major disease outbreak, the U.S. livestock industry’s practice of limiting unnecessary transport of animals should not be sacrificed to certain prescriptive HOS requirements. Nor is such sacrifice necessary, when the data-driven, outcomes-based fatigue approach we propose would reconcile the legitimate public health and roadway safety concerns at issue here.

3. *Driver Shortages and Resulting Transportation Cost Increases Would be Aggravated if the Requested Exemption were not Granted.*

The U.S. trucking industry, including the nation’s livestock hauling industry in particular, is experiencing significant driver shortages that are well-documented and expected to grow.⁸⁸ These shortages, when combined with the ELD mandate and HOS requirements, are already contributing to increased costs throughout the industry, which are almost inevitably passed on to consumers through increased commodity prices.⁸⁹ The current commercial driver shortage will be exacerbated if the requested exemption is not granted, which, in turn, will lead to increased transportation costs for the entire livestock industry and ultimately drive up the prices American consumers must pay for beef, pork, and other livestock products.

Any argument that livestock haulers could simply and comprehensively use a team of drivers to conduct hauls ignores the fundamental hurdles to transitioning to team driving. First, anecdotal reports from across the industry show team driving would nearly double the cost of transporting livestock, making team driving financially punitive for carriers.⁹⁰ Second, given the severe driver shortage already experienced by the livestock industry, the supply of drivers required for team hauls is extremely limited,

⁸⁷ James A. Roth and Anna Rovid Spickler, *FMD Vaccine Surge Capacity for Emergency Use in the United States*, VETERINARY MICROBIOLOGY AND PREVENTIVE MEDICINE REPORTS (Jan. 9, 2014), https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1007&context=vmpm_reports.

⁸⁸ See Bob Costello, TRUCK DRIVER SHORTAGE ANALYSIS 2017, AM. TRUCKING ASSOCIATIONS (Oct. 2017), <http://progressive2.acs.playstream.com/truckline/progressive/ATAs%20Driver%20Shortage%20Report%202017.pdf> and Jennifer Smith, *Trucking Companies Are Struggling to Attract Drivers to the Big-Rig Life*, WALL ST. J. (Apr. 3, 2018), <https://www.wsj.com/articles/trucking-companies-are-struggling-to-attract-drivers-to-the-big-rig-life-1522756801>. See also Sam Bloch, *Can America’s love affair with two-day shipping continue when drivers are in such short supply?*, THE NEW FOOD ECONOMY (July 13, 2018), <https://newfoodeconomy.org/amazon-prime-day-truck-driver-shortage/> (citing examples of several companies facing increased transportation costs: “[i]n January, delivery loads were outpacing available big rigs by fifteen to one, with shipping companies like Michelin either postponing deliveries or paying extra to ‘jump to the front of the line.’”; “[i]n February, Tyson Foods said it would raise prices to offset \$200 million in new freight costs. In March, General Mills announced it would raise prices on meals and snacks, and sell some products in smaller packages.”; and “in February, the CEO of Lowe’s Market said the trucking shortage was causing problems in stocking his warehouse.”).

⁸⁹ Ben Kuebrich, *Livestock Hauling Industry Concerned About New Federal Rules*, ILLINOIS PUBLIC MEDIA NEWS (Feb. 5, 2018), <https://will.illinois.edu/news/story/livestock-hauling-industry-concerned-about-new-federal-rules>.

⁹⁰ *Id.*

making team driving infeasible for many carriers. Livestock-hauling drivers are in short supply in part because they are a specialized subset of drivers that are required to be expert handlers and transporters of live animals. As such, these drivers cannot simply be hired from the general pool of CMV drivers during a shortage; livestock hauling requires unique skills and training that take time to master.

Even absent widespread adoption of team driving, the impacts of the livestock driver shortage have already begun to radiate down the supply chain, affecting the cost of beef, pork, and other livestock products. In fact, several companies have already been forced to impose freight service increases on fresh and frozen beef and pork, due to driver shortages aggravated by the new ELD requirement. Tyson Fresh Meats notified their customers in January 2018 that meat prices will increase in part because of the “declining driver participation rate” (*i.e.* the driver shortage) and the “electronic log mandate,” which have “resulted in significant inflationary impacts to both contract and spot market freight rates.”⁹¹ Tyson Foods is the world’s second largest processor of chicken, beef, and pork with 123 food processing plants across the U.S. and sales of nearly \$40 billion per year, so the impacts of its price increases will be felt across the country.

Other meat processing companies face similar cost increases. The Greater Omaha Packing Co., a Nebraska beef processing company that ships beef to every state in the country, recently informed its customers that, after struggling for twelve months with “every creative option to hold down costs,” the company was forced by driver shortages and other transportation costs to raise prices for its products.⁹² The company specifically cited the ELD mandate and driver shortages as contributing to its higher costs.⁹³

Without the requested exemption to provide some relief to the well-documented driver shortage, livestock haulers expect this troubling trend of transportation-related cost increases to escalate throughout the entire supply chain of the U.S. livestock industry. These costs will ultimately be borne by consumers.

VII. Conclusion

For the foregoing reasons and under the terms and conditions outlined above, livestock haulers request that FMCSA grant an exemption for five years from the 11- and 14-hour limits of the HOS regulations, permitting livestock haulers, after 10 consecutive hours off duty, to drive through the 16th consecutive hour after coming on duty, and to drive a total of 15 hours during that 16-hour period.

We appreciate the HOS improvements FMCSA has made to date that recognize and partially accommodate the unique nature of transporting livestock and other agricultural commodities; the exemption we request here is fully consistent with those

⁹¹ Letter from Jerry Holbrook, SVP Sales & Marketing, Tyson Fresh Meats, to a customer (Jan. 23, 2018).

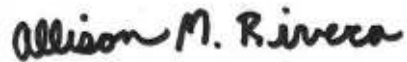
⁹² Letter from Dan Jensen, VP Sales, Greater Omaha Packing Co., Inc. to a customer (Jan. 8, 2018).

⁹³ *Id.*

improvements. As this petition documents, granting this exemption under the terms and conditions proposed herein would likely achieve a level of safety that is equivalent to, or greater than, the level that could be achieved absent such exemption.

We welcome the opportunity to address any questions you may have on this petition.

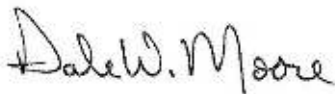
Very truly yours,



Allison Rivera
Executive Director Government Affairs
National Cattlemen's Beef Association



Jara Settles
General Counsel
Livestock Marketing Association



Dale Moore
Executive Vice President
American Farm Bureau Federation



Tim May
President
American Beekeeping Federation

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Kelvin Adee
President
American Honey Producers Association

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Jim Parsons
President
National Aquaculture Association