STUDY ON COMMERCIAL MOTOR VEHICLE DRIVER COMMUTING REPORT TO CONGRESS

Pursuant to Section 5515 of the Fixing America's Surface Transportation Act (Pub. L. 114-94)

May 2020

Section 5515 of the Fixing America's Surface Transportation Act (Pub. L. 114-94) required the Administrator of the Federal Motor Carrier Safety Administration (FMCSA) to conduct a study on the safety effects of motor carrier operator commutes exceeding 150 minutes and submit to Congress a report containing the study's findings. The study was unable to find data to identify safety effects of motor carrier operator commutes exceeding 150 minutes. The following report details the study approach, study findings, and conclusions.

Study Approach

The study approach was to conduct a literature review, conduct carrier interviews, and analyze data from the U.S. Census Bureau's American Community Survey (ACS). The findings from each of these tasks are documented within this report.

STUDY FINDINGS

Literature Review

The goal of the literature review as to determine whether there was existing research into the topic of commercial motor vehicle (CMV) driver commuting times and potential safety impacts. It was determined that existing research related to transportation workers' commuting times and safety is limited to several commuting-related studies relevant to the airline and railroad industries. Researchers also reviewed literature on the health impacts of commuting in general. Overall findings from the literature review suggest that long commuting times are associated with increased fatigue and several adverse health outcomes¹.

Carrier Interviews

The study included interviews with representatives from nine carriers to generally gauge carrier sensitivity to the potential impacts of excessive driver commute times on fatigue and to capture policies and management practices used to mitigate the potential fatigue risks. The interviewed carriers indicated awareness of potential issues surrounding commute lengths and performance. Many indicated that they avoid hiring drivers who might face excessive commutes, which they define using distance rather than time, as various factors can affect the time of a commute. The practices are also variable, depending on the position; a driver with a longer commute might be

¹ See References

considered suitable for an over-the-road work configuration. Some carriers indicated that the current driver shortage has led them to modify their practices on how far away a driver may live.

All interviewed carriers reported that they provide their drivers and leaders with initial and recurring training on fatigue, including continuous hours of wakefulness (to which excessive commute times can be a contributing factor). They also regularly communicate their expectations that drivers arrive at work well rested, with some reporting that they use newsletters to remind drivers of the dangers of fatigue and the importance of restorative sleep.

These carriers suggested that there are limits to what they are willing to do regarding length of commute. To use it as a factor to modify dispatch logic would add another constraint to an already dynamic process, and others voiced concerns that internal discussions could make them vulnerable in post-crash litigation.

Analysis of ACS Data

Researchers reviewed and analyzed the Census Bureau ACS Journey to Work data to identify trends in CMV drivers' home-to-work commutes. Home-to-work commute time is the only available data through the ACS, and while it may sometimes be accurate that the home-to-work commute is the same as the work-to-home commute, this is not always the case. Therefore, the study team refrained from trying to extrapolate a round-trip commuting time from the one-way commuting time reported in the ACS. While ACS does contain data on CMV drivers, it is aggregated with data for other types of drivers. For this analysis, CMV drivers category refers to drivers within the drivers/sales workers, truck drivers, and commercial bus drivers categories.

<u>Length of Commute.</u> Among drivers/sales workers, truck drivers, and commercial bus drivers, the length of the average home-to-work commute was 27.8 minutes in 2017, similar to prior years. The percentage of CMV drivers with home-to-work commutes less than 30 minutes was 62.7 percent in 2013 and 60.6 percent in 2017.

Table 1 displays the percentages of CMV drivers reporting various thresholds of home-to-work commuting times, from 2013 to 2017. Of these workers, 0.9 percent reported that their usual home-to-work commute was 150 minutes or more in 2017. When extrapolated to the broader population of these occupations, this represents about 32,000 people. Separately, 4.4 percent of CMV drivers reported that they usually spend 75 minutes or more commuting from home to work.

How many minutes did it usually take this person to get from home to work LAST WEEK? (one-way commute time)	2013 (33,357)	2014 (34,101)	2015 (34,240)	2016 (34,398)	2017 (34,817)
<30 minutes	62.7%	62.5%	61.5%	61.0%	60.6%
30–45 minutes	20.2%	20.5%	20.6%	21.5%	21.4%
45–60 minutes	7.8%	7.6%	8.0%	7.8%	7.9%
60–75 minutes	5.4%	5.3%	5.6%	5.5%	5.6%
75–90 minutes	0.7%	0.8%	0.7%	0.7%	0.8%
90–120 minutes	1.2%	1.0%	1.4%	1.2%	1.4%

Table 1. Length of time for home-to-work commute among CMV drivers.

How many minutes did it usually take this person to get from home to work LAST WEEK? (one-way commute time)	2013 (33,357)	2014 (34,101)	2015 (34,240)	2016 (34,398)	2017 (34,817)
120–150 minutes	1.5%	1.7%	1.5%	1.7%	1.4%
≥150	0.5%	0.5%	0.6%	0.6%	0.9%
Median (minutes)	19.6	19.6	19.6	19.7	19.7
Mean (minutes)	26.7	26.8	27.3	27.5	27.8

Source: ACS, 2013–17².

<u>Crossing Time Zones.</u> ACS data provide some insight into drivers' needs to cross time zones, at least concerning the journey from their home to their work location. Of the surveyed drivers/sales workers, truck drivers, and commercial bus drivers, 2.2 percent reported that they work in a time zone which is different from where they live; this figure is higher for drivers/sales workers and truck drivers (2.3 percent) than it is for commercial bus drivers (1.1 percent).

<u>Modes of Transportation Used for Commuting.</u> Trends in transportation modes used for commuting have changed little since 2013. The most common mode of transportation used by CMV drivers to commute was a car, truck, or van (93.9 percent in 2017). Each of the other transportation modes (i.e., bus or trolley bus, streetcar or trolley car, subway or elevated, railroad, ferryboat, taxicab, motorcycle, bicycle, walking, or other method) was used by about 2 percent or less of workers in these categories.

CONCLUSIONS

The ACS data indicate that a very small percentage of drivers have extremely long commutes from home to work. Additional research into the issue may be warranted, although it may be difficult to separate confounding variables (e.g., lengths of shifts, crossing time zones during the work assignment, and non-driving labor such as loading and unloading) in the analysis. Commuting is just one contributing factor to driver fatigue, and ideally should not be analyzed in isolation. The motor carriers interviewed were aware of the risks associated with extremely long driver commutes and reported having taken steps to limit their occurrence. The data necessary to assess the safety risk of long commutes are not available at this time, such as being able to aggregate an individual driver's commute with their individual safety record. Additionally, since driver schedules may be unique depending on the type of operation (e.g., short-haul vs. long-haul), the number of days per week or month that a driver commutes would be necessary to analyze potential correlation between a driver's commute and their safety record. In order to link safety and commuting data in a statistically meaningful way, FMCSA would need a large, nationally representative data collection from individual drivers, a major undertaking.

² Data from the ACS can be found at: <u>https://www.census.gov/data.html</u>

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