

EXEMPTIONS FROM REQUIREMENTS FOR COVERED FARM VEHICLES SAFETY STUDY – REPORT TO CONGRESS

Pursuant to Section 32934 of the
Moving Ahead for Progress in the 21st Century Act (P.L. 112-141)
December 2014

BACKGROUND

Section 32934 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) directs the Secretary of the U.S. Department of Transportation (DOT) to conduct a safety study focused on covered farm vehicles. The Secretary is required to submit a report to the Senate Committee on Commerce, Science, and Transportation and the House Committee on Transportation and Infrastructure. Responsibility for the study and report was delegated to the Federal Motor Carrier Safety Administration (FMCSA). According to section 32934, the study must include the following:

- The number of covered farm vehicles in operation and the number drivers operating them.
- The number of crashes involving covered farm vehicles.
- The number of occupants and non-occupants injured in crashes involving covered farm vehicles.
- The number of fatalities of occupants and non-occupants killed in crashes involving covered farm vehicles.
- Crash investigations and accident reconstruction investigations of all fatalities in crashes involving covered farm vehicles.
- Overall operating mileage of covered farm vehicles.
- The number of covered farm vehicles operating in neighboring States.
- A listing of State regulations issued and maintained in each State that are identical to the Federal regulations subject to exemption under MAP-21 for covered farm vehicles.

This report presents the methodology and summary of findings from an analysis conducted by FMCSA in response to the requirement in MAP-21. Table 1 summarizes the statutory requirements for this study, the findings, and the extent to which available data permitted the subject areas to be addressed.

Table 1. Summary of study findings related to MAP-21 subject area requirements.

Subject Area	Findings
Number of covered farm vehicles and drivers operating them.	Analysis revealed an estimated 100,000 covered farm vehicles and 75,000 drivers of covered farm vehicles in the United States (based on a limited sample of 8 States).
Number of covered farm vehicle crashes.	The number of covered farm vehicle crashes could not be estimated from existing data. However, crash rates were examined. Crash rates for covered farm carriers are slightly higher than crash rates for all private carriers in these same States (based on a sample of 19 States).

Subject Area	Findings
Number of occupants and non-occupants injured in crashes involving covered farm vehicles.	As the number of occupants and non-occupants injured in crashes involving covered farm vehicles could not be estimated from existing data, the crash severity in farm vehicle crashes was assessed. Data suggest that crashes involving covered farm vehicles are no more likely to result in an injury or fatality than crashes involving commercial motor vehicles (CMVs) operated by other types of private carriers (based on a sample of 19 States).
Number of fatalities of occupants and non-occupants in crashes involving covered farm vehicles.	As the number of fatalities of occupants and non-occupants in crashes involving covered farm vehicles could not be estimated with existing data, the crash severity in farm vehicle crashes was assessed. Data suggest that crashes involving covered farm vehicles are no more likely to result in an injury or fatality than crashes involving CMVs operated by other types of private carriers (based on a sample of 19 States).
Analysis of covered farm vehicle crash investigations.	Data not available.
Overall operating mileage of covered farm vehicles.	Covered farm carriers had an average annual VMT of 37,962 miles per year. Based on this figure, the estimated national VMT for covered farm vehicles is 947 million miles per year (based on a limited sample of 8 States).
Number of covered farm vehicles operating in neighboring States.	Approximately 78 percent of covered farm carriers operate at least one covered farm vehicle across State lines. Applying this percentage to the estimated number of total covered farm vehicles gives a figure of approximately 79,000 total covered farm vehicles crossing State lines. These estimates are based on a limited sample of eight States, which did not include several large States. Therefore, results may be biased towards the characteristics of smaller States.
Listing of State regulations identical to the Federal regulations subject to exemption under MAP-21 for covered farm vehicles.	Most States have issued exemptions similar to those required by the Act, or are in the process of modifying existing regulations. Some States, however, still have regulations that are at variance with the MAP-21 covered farm vehicle exemptions.

Although the National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis and Reporting System (FARS) provides information on the total number of fatalities and injuries annually, it does not include enough detail to distinguish farm vehicle crashes from other crashes, or to determine the number of fatalities and injuries of occupants and non-occupants involved in farm vehicle crashes, as MAP-21 requires. FMCSA is therefore unable directly to address that particular requirement. Using available data, this study assesses the level of severity of crashes involving farm vehicles, based on the subset of farm vehicle crashes in which the vehicles have farm license plates identifiable in FMCSA's Motor Carrier Management Information System (MCMIS). The crashes in this subset that involve injuries and fatalities can be compared to similar statistics for all trucks associated with private carriers domiciled in the same States. This approach allows one to determine whether crashes involving covered farm vehicles are more likely to result in injuries and fatalities than crashes involving trucks from other types of carriers.

METHODOLOGY

The FMCSA developed a methodology to identify motor carriers in MCMIS with a high probability of having covered farm vehicles, as defined by MAP-21. The methodology utilizes MCMIS information on motor carrier cargo, inter- and intrastate driver counts, and types of vehicles operated, as well as information on license tag number configurations associated with farm license plates in various States, to identify such carriers (MAP-21 requires that covered farm vehicles both be associated with farming operations and have farm license plates or similar means of identification). Nevertheless, many non-farm entities, such as farm cooperatives and businesses specializing in various agricultural services were still captured by the farm carrier identification algorithms used in the study. To the extent possible, this latter group of non-farm carriers was removed from the final data analysis file by evaluating the names of the businesses initially captured and removing (either manually or by computer logic) those whose names seemed inconsistent with farming operations.

The exemptions for covered farm vehicles outlined in MAP-21 apply directly to vehicles engaged in interstate commerce and indirectly to those in intrastate operations. Although covered farm vehicles must have farm license plates or something similar, not all States have special license tag configurations for their farm license plates and not all States require 100 percent of their intrastate carriers to register with FMCSA. As a result, a census of all carriers operating covered farm vehicles could not be developed in this study.

Hence, this study produced estimates of the number of covered farm vehicles and carriers, their out-of-service (OOS) rates, and their crash rates by focusing on a sample of eight States that both require intrastate carriers to register with FMCSA and obtain a USDOT number, and also have special license tag configurations for farm vehicles that can be identified in roadside inspection data contained in MCMIS. All motor carriers domiciled in these particular states with farm-plated vehicles can be readily evaluated in MCMIS to determine if their operations are consistent with having covered farm vehicles. These sample data were supplemented by data from all 19 States whose farm license plate configurations can be recognized in MCMIS but who do not necessarily require all intrastate motor carriers to obtain USDOT numbers. Some but not all motor carriers domiciled in this larger group of 19 states can be evaluated in MCMIS to determine if their operations are consistent with having covered farm vehicles.

In order for a CMV to qualify for the farming exemptions granted under MAP-21, it must not only have a special farm license plate, but must also meet various requirements concerning vehicle weight and travel distance. However, if a CMV has farm license plates, inspectors at the roadside may assume that the vehicle is subject to the farming exemptions granted by Section 32934, due to the inspector's inability to determine whether a given vehicle meets the other requirements. Thus, this study also produced additional safety statistics for all carriers in MCMIS identified as having farm license plates (based on all 19 States whose special farm license tag configurations can be identified in roadside inspection data contained in MCMIS).

STATES USED FOR DATA ANALYSIS

Nineteen States have special tag number configurations for farm vehicles that can be used to identify such vehicles in the Agency's inspection and crash files. These States are Alabama, Alaska, Arizona, Delaware, Illinois, Indiana, Maryland, Michigan, Minnesota, Mississippi, New Jersey, New York, North Dakota, Oklahoma, Oregon, Pennsylvania, Virginia, West Virginia, and Wisconsin. Of these 19 States, only eight require their intrastate carriers to register with FMCSA and obtain a USDOT number, resulting in MCMIS registration information on cargo, inter- and intrastate drivers, and types of vehicles for the motor carrier. These States are Alabama, Alaska, Indiana, Michigan, Minnesota, New York, Oregon, and West Virginia. Due to this fact, data from these eight States are best suited for both identifying carriers with covered farm vehicles and evaluating the safety performance of these vehicles. National estimates of carriers and vehicles eligible for the covered farm vehicle exemptions can also be produced by extrapolating results from these same States to the country as a whole. Estimates based on data from other States could produce biased results, as a result of not including all intrastate carriers with covered farm vehicles.

Exemptions for covered farm vehicles under MAP-21 might conceivably be granted to other farm-plated vehicles not covered under the Act. Such a scenario could happen if inspectors at the roadside do not have the ability to distinguish between vehicles that are covered and those that are not. For example, it may not be realistic to assume that an inspector would necessarily refuse to grant MAP-21 exemptions to a vehicle belonging to a grain elevator company or farm cooperative (companies that are not true farms), given that it has farm plates. In other cases, the inspector may not have enough information about the business to make a proper determination. Thus, in the most extreme case, MAP-21 exemptions for covered farm vehicles might end up being granted at the roadside to all vehicles with farm plates. For this reason, this study also produces motor carrier safety performance statistics for all carriers that have vehicles with farm plates identifiable in MCMIS in addition to statistics for carriers believed to operate covered farm vehicles. For estimates based on all vehicles with farm plates, data from all 19 States are used.

SUMMARY OF FINDINGS

Number of Vehicles and Drivers

This study estimates that roughly 100,000 vehicles and 75,000 drivers are impacted by the MAP-21 exemptions for covered farm vehicles and their drivers. Covered farm carriers identified in the eight key States had an average vehicle miles traveled (VMT) of 37,962 miles per year. Based on this figure, the estimated national VMT for covered farm vehicles is 947 million miles per year. These estimates, however, are derived in large part from motor carrier information from only eight States whose data were extrapolated to the other States. The limited number of States available to use in this extrapolation may impact the accuracy of these estimates.

While the total number of farms operating in the United States is estimated to be over 2 million,¹ many of these operations do not qualify for exemptions under MAP-21. For example, farm vehicles without farm license plates (or something similar), as well as vehicles over 26,000 pounds, traveling across State lines and a distance of more than 150 air miles beyond the farm are not covered under MAP-21. Furthermore, any farming operation whose activities include anything beyond crop cultivation or animal husbandry (such as preparation and packaging) are not considered farms by FMCSA. Due to these considerations, the estimates of the total number of vehicles and farms impacted by MAP-21 are considerably smaller than the total number of farming operations in the United States. However, carriers engaged in farming operations whose vehicles have never been inspected at the roadside are not identified in this analysis. As a result, the estimates produced in this study for the total number of vehicles and farms impacted by MAP-21 should be considered a “floor” for the total number of vehicles impacted by MAP-21.

Vehicles Operating Across State Lines

Based on MCMIS data from these same eight States, approximately 78 percent of covered farm carriers operate at least one covered farm vehicle across State lines. Applying this percentage to the estimated total number of covered farm vehicles gives a figure of approximately 79,000 covered farm vehicles crossing State lines. The reader must be cautioned, however, that data from large agricultural States like California and Texas are not included in this estimate. In addition to having, in all likelihood, a large number of covered farm vehicles, the percentage of such vehicles engaged in interstate operations may be lower due to their sheer physical size. For this reason, the estimate of covered farm vehicles crossing State lines produced from this study may be an overestimate.

Roadside Inspection Out-of-Service and Violation Rates

Driver and vehicle OOS rates for covered farm vehicles domiciled in the eight key States were higher than similar rates for all private carriers prior to enactment of MAP-21 (6.8 percent versus 5.4 percent for drivers; 29.0 percent versus 24.2 percent for vehicles). The difference in OOS rates between covered farm carriers and all private carriers in the eight key States is statistically significant in the case of the vehicle OOS rate (at the 95-percent level of confidence), but is not in the case of the driver OOS rate. Inspection results from all 19 States where farm license tag numbers can be identified in MCMIS, are similar.

After enactment of MAP-21, both the driver and vehicle OOS rates for covered farm vehicles in the eight key States dropped. The largest drop occurred in the vehicle OOS rate, which decreased by 51 percent (29.0 percent OOS to 14.1 percent OOS), while the driver OOS rate dropped by 26 percent (6.8 percent OOS to 5.0 percent OOS). Presumably these changes occurred, at least in part, because covered farm vehicles became subject to fewer regulations

¹ U.S. Department of Agriculture, “2012 Census of Agriculture” available at http://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_1_US/usv1.pdf

subsequent to MAP-21. The data also show that the population of all private carriers experienced only slight changes in vehicle and driver OOS rates after enactment of MAP-21.

In addition to covered farm vehicles, all farm-plated vehicles also showed a decrease in OOS rates after enactment of MAP-21, although less pronounced. These parallel trends suggest that roadside inspectors may not always be able to determine which vehicles are eligible for MAP-21 farming exemptions and which are not.

The violation rates for failure to prepare a record of duty status (RODS) or for inadequate RODS, and for lack of a valid medical certificate were higher in the period immediately prior to enactment of MAP-21 for both drivers of covered farm vehicles and for drivers of all vehicles with farm license plates, when compared to drivers of all private carriers (these differences are, for the most part, statistically significant). Differences in hours-of-service (HOS) violation rates between drivers from all private carriers and drivers of covered farm vehicles or vehicles with farm plates during this same period cannot be shown to be statistically significant. However, the HOS violation rate for all vehicles with farm plates is 40 percent higher than the HOS violation rate for all private carriers (2.1 violations per 100 inspections versus 1.5 for all private carriers). This information is provided in Table 2, below.

Table 2. Driver-related violation rates pertaining to HOS and medical qualifications for covered farm vehicles and vehicles with farm plates, for the 9-month period prior to the enactment of MAP-21.[§]

Vehicles/Carriers	Violations Per 100 Inspections (Number of Inspections)			
	Exceeding Maximum HOS	No/Inadequate Record-of-Duty Status	Physically Unqualified Driver	No Medical Certification
Covered Farm Vehicles Key Eight States [*]	1.0 (833)	10.3** (833)	0.5 (833)	14.5** (833)
19 States [†]	1.5 (1,809)	7.9 (1,809)	0.3 (1,809)	13.7** (1,809)
Vehicles with Farm Plates 19 States [‡]	2.1 (7,156)	9.7** (7,156)	0.3 (7,156)	14.4** (7,156)
All Private Carriers Key Eight States	1.7 (67,964)	7.5 (67,964)	0.3 (67,964)	9.5 (67,964)
19 States	1.5 (163,565)	6.5 (163,565)	0.4 (163,565)	8.9 (163,565)

^{*}Based on vehicles belonging to carriers identified by both farm identification algorithms and domiciled in one of the following eight States: AL, AK, IN, MI, MN, NY, OR, WV.

[†]Based on vehicles belonging to carriers identified by both farm identification algorithms and domiciled in one of the following 19 States: AL, AK, AZ, DE, IL, IN, MD, MI, MN, MS, NJ, NY, ND, OK, OR, PA, VA, WV, WI.

[‡]Based on inspected vehicles with farm plates from one of the following States: AL, AK, AZ, DE, IL, IN, MD, MI, MN, MS, NJ, NY, ND, OK, OR, PA, VA, WV, WI, excluding carriers listed in MCMIS as “for-hire,” and carriers with more than 500 power units.

[§]Source: FMCSA, MCMIS, data snapshot as of September 27, 2013.

**Indicates that the difference between estimate and number for all private carriers in State grouping is statistically significant at the 95-percent level of confidence.

Crash Rates

Crash rates in 2011 and 2012, expressed both in terms of crashes per 100 power units and crashes per million VMT, were generally slightly higher for carriers identified by the study as covered farm carriers (i.e., carriers identified as operating covered farm vehicles) than for all private carriers based on data from the eight key States and from all 19 States whose farm license plates can be recognized in MCMIS inspection and crash data. This same relationship also holds for all carriers operating farm-plated vehicles. When comparing crash rates “per power unit” of all carriers with farm-plated vehicles and of all private carriers in these 2 years, the former have crash rates that are approximately 45–55 percent higher, and these differences are statistically significant. This information is presented in Table 3.

Table 3. Crash rates for covered farm vehicles and vehicles with farm plates[‡] in 2011 and 2012.

Vehicles/Carriers	2011			2012		
	Carriers Used in Crashes per Power Unit / per VMT Calculations	Crashes per 100 Power Units	Crashes per Million VMT	Carriers in Crashes per Power Unit, per VMT Calculations	Crashes per 100 Power Units	Crashes per Million VMT
Covered Farm Vehicles						
Key Eight States:	1,905 / 282	0.9	1.5**	1,853 / 221	1.1	0.7
19 States:	4,175 / 630	1.2	0.9	4,077 / 524	1.2	0.8
All Vehicles with Farm Plates and USDOT Numbers in 19 States[†]	7,881 / 1,117	1.3**	0.6	7,722 / 1,075	1.4**	0.9
All Private Carriers[§]						
Key Eight States:	60 / 544	0.9	0.6	63 / 378	0.9	0.6
19 States:	110 / 638	1.1	0.7	117 / 581	1.0	0.7

*Based on vehicles belonging to carriers identified by both farm identification algorithms and domiciled in one of the following eight States: AL, AK, IN, MI, MN, NY, OR, WV.

†Based on inspected vehicles with farm plates from one of the following States: AL, AK, AZ, DE, IL, IN, MD, MI, MN, MS, NJ, NY, ND, OK, OR, PA, VA, WV, WI, excluding carriers listed in MCMIS as “for-hire,” and carriers with more than 500 power units.

‡Source: FMCSA, MCMIS, data snapshot as of September 27, 2013.

§For quality control purposes, only carriers whose MCMIS data indicated no more than 150,000 VMT per power unit and no more than five power units per driver were included.

**Indicates that the difference between estimate and number for all private carriers in State grouping is statistically significant at the 95-percent level of confidence.

Injury and Fatality Rates

In 2011, 41 percent of covered farm vehicle crashes involving carriers with plates from the eight key States resulted in an injury, and 5 percent resulted in a fatality. The data for all covered farm carriers from all 19 States whose farm license plates can be recognized in MCMIS show similar results. These results are similar to results obtained for all private carriers in these same States. Although the percentage of crashes involving a fatality is slightly higher for carriers with

covered farm vehicles than for all private carriers, these differences are not statistically significant at the 95-percent level.

In 2012, the percentage of crashes that resulted in an injury, based on carriers domiciled in the eight key States, was slightly lower for carriers with covered farm vehicles than for all private carriers in these same States (36 percent versus 39 percent). This same percentage, when based on all covered farm carriers identified in all 19 States where farm plates can be identified, was slightly higher for carriers with covered farm vehicles than for all private carriers in these same States (43 percent versus 39 percent). Neither of these percentage differences is statistically significant.

In the case of fatalities, the relative number of crashes involving a fatality is identical for both population groups in 2012, both for the 8 key States and for all 19 States whose farm license plate configurations can be identified in MCMIS. The 2012 crash data, taken as a whole, confirm the results from the 2011 data and suggest that crashes involving covered farm vehicles are no more likely to result in an injury or fatality than crashes involving other types of CMVs operated by private carriers.

The data do not suggest that crashes involving covered farm vehicles are more likely to result in an injury or fatality than crashes involving CMVs from other types of private carriers. However, the percentage of all private carrier fatality-related crashes involving covered farm carriers is marginally higher than the percentage of covered farm carriers in the general private carrier population.

State Laws at Variance with MAP-21

States have 3 years under the Motor Carrier Safety Assistance Program (MCSAP) to make their motor vehicle regulations compatible with the MAP-21 Federal regulations pertaining to covered farm vehicles. Most States have already issued exemptions similar to those required by the Act, or are in the process of modifying existing regulations. Some States, however, still have regulations that are at variance with the MAP-21 exemptions. That is, these States currently have laws similar to the Federal regulations from which covered farm vehicles are now exempt; these State laws still apply to covered farm vehicles or to a subset of these vehicles.

The State of Florida, for example, plans to continue to subject covered farm vehicles to some repair and maintenance requirements (analogous to 49 CFR 396.6 and 396.3(a)(1)), CDL licensing requirements (for drivers employed solely as drivers), and drug and alcohol testing requirements for drivers of farm vehicles still required to have a CDL. The State of Nebraska does not consider articulated trucks carrying hazardous materials to be covered farm vehicles, which is consistent with MAP-21, but it appears to allow straight trucks carrying hazardous materials to receive the exemption. The State of Idaho currently grants CDL exemptions only for farm vehicles that are specifically engaged in “farm to market” operations. Once all States adopt their covered farm vehicles laws, FMCSA will work with any States whose laws appear to be at variance with MAP-21, with the goal of ensuring compliance.

The table below provides information on the current status of each State's efforts to conform its laws to MAP-21 in terms of exemptions granted to farm vehicles.

Table 4. Progress of States and Territories in Making Their Laws Conform with MAP-21 Farm Vehicle Exemptions

State	Current Status	State	Current Status
Alabama	Completed	Montana	Completed
Alaska	In progress	Nebraska	Completed
American Samoa	In progress	Nevada	In progress
Arizona	In progress	New Hampshire	Completed
Arkansas	Completed	New Jersey	Completed
California	In progress	New Mexico	In progress
Colorado	Completed	New York	In progress
Connecticut	Completed	North Carolina	In progress
Delaware	In progress	North Dakota	Completed
District of Columbia	Completed	Northern Marianas	In progress
Florida	In progress	Ohio	In progress
Georgia	Completed	Oklahoma	Completed
Guam	In progress	Oregon	Completed
Hawaii	In progress	Pennsylvania	Completed
Idaho	In progress	Puerto Rico	In progress
Illinois	In progress	Rhode Island	Completed
Indiana	Completed	South Carolina	Completed
Iowa	In progress	South Dakota	Completed
Kansas	Completed	Tennessee	Completed
Kentucky	Completed	Texas	In progress
Louisiana	Completed	Utah	Completed
Maine	Completed	Vermont	Completed
Maryland	Completed	Virgin Islands	In progress
Massachusetts	Completed	Virginia	Completed
Michigan	Completed	Washington	Completed
Minnesota	In progress	West Virginia	Completed
Mississippi	Completed	Wisconsin	In progress
Missouri	Completed	Wyoming	Completed

Summary

This study estimates that roughly 100,000 vehicles and 75,000 drivers are impacted by MAP-21's exemptions for covered farm vehicles and their drivers. Covered farm carriers identified in the eight key States had an average annual VMT of 37,962 miles per year. Based on this figure, the estimated national VMT for covered farm vehicles is 947 million miles per year. These estimates, however, are based in large part on motor carrier information from only eight States, whose data were extrapolated to the national level. The limited number of States available to use in this extrapolation may impact the accuracy of these estimates.

Based on MCMIS data from these same eight States, approximately 78 percent of covered farm carriers operate at least one covered farm vehicle across State lines. Applying this percentage to the estimated total number of covered farm vehicles gives a figure of approximately 79,000 covered farm vehicles crossing State lines. As stated earlier in the report, this estimate is based on data from only eight States, which do not include several large agricultural States, therefore the estimate of covered farm vehicles crossing State lines may be an overestimate.

Driver and vehicle OOS rates for covered farm vehicles domiciled in the eight key States were higher than similar rates for all private carriers prior to the enactment of MAP-21 (6.8 percent versus 5.4 percent for drivers; 29.0 percent versus 24.2 percent for vehicles). The difference in the OOS rates between covered farm carriers and all private carriers in those States is statistically significant in the case of the vehicle OOS rate (at the 95-percent level of confidence), but is not statistically significant in the case of the driver OOS rate (presumably, due to the small sample size). Results for covered farm vehicles are similar, based on inspections from all 19 States where farm license tag numbers can be identified in MCMIS.

The violation rates for failure to prepare a record of duty status (RODS) or for inadequate RODS and for lack of a valid medical certificate were higher in the period immediately prior to the enactment of MAP-21 for both drivers of covered farm vehicles and for drivers of all vehicles with farm license plates when compared to drivers of all private carriers. These differences are, for the most part, statistically significant.

After the enactment of MAP-21, both driver and vehicle OOS rates for covered farm vehicles appear to have dropped, based on a sample of motor carriers deemed likely to operate covered farm vehicles. Vehicle OOS rates dropped by approximately half for these vehicles, and driver OOS rates dropped by 20–25 percent. Presumably, these changes in both the vehicle and driver OOS rates are attributable, at least in part, to the fact that covered farm vehicles were subject to fewer regulations after enactment of MAP-21.

Crash rates in 2011 and 2012, expressed both in terms of crashes per 100 power units and crashes per million VMT, were generally slightly higher for carriers identified by the study as covered farm carriers than for all private carriers, based on data from the eight key States that require all intrastate carriers to obtain USDOT numbers, as well as data from all 19 States whose farm license plates can be recognized in MCMIS inspection and crash data. This same relationship holds for all carriers operating farm-plated vehicles. When comparing crash rates “per power unit” of all carriers with farm-plated vehicles and of all private carriers in these 2 years, the former have crash rates that are approximately 45–55 percent higher, and these differences are statistically significant.

The data do not suggest that crashes involving covered farm vehicles are more likely to result in an injury or fatality than crashes involving CMVs from other types of private carriers. However, the percentage of all private carrier fatality-related crashes involving covered farm carriers is marginally higher than the percentage of covered farm carriers in the general private carrier population.

States have 3 years under MCSAP to make their motor vehicle regulations compatible with the MAP-21 Federal regulations pertaining to covered farm vehicles. Most States have already issued exemptions similar to those required under the Act, or are in the process of modifying existing current regulations. In some cases, however, States still have regulations that are at variance with the MAP-21 exemptions. Once all States adopt their covered farm vehicles laws, FMCSA will work with any States whose laws appear to be at variance with MAP-21, with the goal of ensuring compliance.