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EVALUATION OF 2009 OREGON CRASH DATA REPORTED TO MCMIS CRASH FILE

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16. Abstract

This report is part of a series evaluating the data reported to the Motor Carrier Management Information System (MCMIS) Crash File undertaken by the Center for National Truck and Bus Statistics at the University of Michigan Transportation Research Institute. Earlier studies have shown that reporting to the MCMIS Crash File was generally incomplete. This report examines reporting by the State of Oregon.

Because key variables used in the evaluation process are not recorded in the computerized state data files, it was not possible to calculate an overall reporting rate for Oregon. It appears that Oregon reported 28 of 30 qualifying vehicles in fatal crashes, and the 1,120 total vehicles actually reported is reasonably close to the number predicted by a model that estimates the number of vehicles reportable to the MCMIS Crash file. However, it was not possible to evaluate the extent of underreporting or overreporting.

An evaluation of timeliness in reporting shows that Oregon tended to upload records to the MCMIS Crash file well after the 90-day grace period ended. Only about 5 percent of records submitted were uploaded within the grace period.

Missing data rates are low for most variables, though specific problems were noted with the hazmat variables. Corresponding data elements in the MCMIS and Oregon crash files were reasonably consistent except as noted with the straight truck and truck tractor configurations.

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SI* (MODERN METRIC) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
		LENGTH		
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
		AREA		
in^2	square inches	645.2	square millimeters	mm^2
ft^2	square feet	0.093	square meters	m^2
yd^2	square yard	0.836	square meters	m^2
ac	acres	0.405	hectares	ha
mi^2	square miles	2.59	square kilometers	km^2
		VOLUME		
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liters	L
ft^3	cubic feet	0.028	cubic meters	m^3
yd^3	cubic yards	0.765	cubic meters	m^3
		NOTE: volumes greater than 1000 L shall be shown in m^3		
		MASS		
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")
		TEMPERATURE (exact degrees)		
^oF	Fahrenheit	5 (F-32)/9 or (F-32)/1.8	Celsius	^oC
		ILLUMINATION		
fc	foot-candles	10.76	lux	lx
fl	foot-Lamberts	3.426	$candela/m^2$	cd/m^2
		FORCE and PRESSURE or STRESS		
lbf	poundforce	4.45	newtons	N
lbf/in^2	poundforce per square inch	6.89	kilopascals	kPa

APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
		LENGTH		
mm	millimeters	0.039	inches	in
m	meters	3.28	feet	ft
m	meters	1.09	yards	yd
km	kilometers	0.621	miles	mi
		AREA		
mm^2	square millimeters	0.0016	square inches	in^2
m^2	square meters	10.764	square feet	ft^2
m^2	square meters	1.195	square yards	yd^2
ha	hectares	2.47	acres	ac
km^2	square kilometers	0.386	square miles	mi^2
		VOLUME		
mL	milliliters	0.034	fluid ounces	fl oz
L	liters	0.264	gallons	gal
m^3	cubic meters	35.314	cubic feet	ft^3
m^3	cubic meters	1.307	cubic yards	yd^3
		MASS		
g	grams	0.035	ounces	oz
kg	kilograms	2.202	pounds	lb
Mg (or "t")	megagrams (or "metric ton")	1.103	short tons (2000 lb)	T
		TEMPERATURE (exact degrees)		
^oC	Celsius	1.8C+32	Fahrenheit	^oF
		ILLUMINATION		
lx	lux	0.0929	foot-candles	fc
cd/m^2	$candela/m^2$	0.2919	foot-Lamberts	fl
		FORCE and PRESSURE or STRESS		
N	newtons	0.225	poundforce	lbf
kPa	kilopascals	0.145	poundforce per square inch	lbf/in^2

*SI is the symbol for the International System of Units. Appropriate rounding should be made to comply with Section 4 of ASTM E380.
(Revised March 2003)

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1. Introduction

The Motor Carrier Management Information System (MCMIS) Crash file was developed by the Federal Motor Carrier Safety Administration (FMCSA) to serve as a census file of trucks and buses involved in traffic crashes meeting a specified crash severity threshold. FMCSA maintains the MCMIS file to support its mission to reduce crashes, injuries, and fatalities involving large trucks and buses. Accurate and complete crash data are essential to assess the magnitude and characteristics of motor carrier crashes and to design effective safety measures to prevent such crashes. The data in the file are extracted by the States from their own crash records, and uploaded through the SafetyNet system. The usefulness of the MCMIS Crash file thus depends upon individual states identifying and transmitting the correct records on the trucks and buses involved in traffic crashes that meet the crash file severity threshold.

The present report is part of a series of reports that evaluate the completeness and accuracy of the data reported by States to the MCMIS Crash file. Previous reports showed some underreporting which seemed to be related in large part to problems in interpreting and applying the reporting criteria within the states' respective crash reporting systems. The problems often were more severe in large jurisdictions and police departments. States also had issues specific to the nature of its own system. [See references 1 to 39.] The States are responsible for identifying and reporting qualifying crash involvements. Accordingly, improved completeness and accuracy ultimately depends upon the efficiency and effectiveness of individual state systems.

This report focuses on reporting by Oregon to the MCMIS Crash file for 2009. Between 2004 and 2008, Oregon has reported from 1,263 to 1,507 involvements annually to the MCMIS Crash file. Oregon is the 27th largest State by population and in most years ranks about 32nd among the states in terms of the number of annual truck and bus fatal involvements. Between 2003 and 2008, the number of fatal truck and bus involvements in Oregon has ranged between 44 in 2008 and 66 in 2005.[40,41]

Police accident report (PAR) data recorded in Oregon's statewide files as of August, 2011, were used in this analysis. The 2009 PAR file contains the crash records for 76,731 units in 41,271 crashes.

The standard method for State evaluations consists of the following steps, which we attempted to pursue here:

1. The complete police accident report file (PAR file hereafter) from Oregon was obtained for the most recent year available, which was 2009. An algorithm was developed, using the data coded in the Oregon file, to identify all cases that qualified for reporting to the MCMIS Crash file.

2. All cases in the Oregon PAR file—those that qualified for reporting to the Crash file as well as those that did not—were matched to the cases actually reported to the MCMIS Crash file from Oregon.

3. Cases that should have been reported, but were not, were compared with those that were reported to identify the sources of underreporting.

4. Cases that did not qualify but which were reported were examined to identify the extent and nature of over-reporting.

2. Data Preparation

The Oregon PAR file and MCMIS Crash file each required some preparation before the records in the MCMIS Crash file reported from Oregon could be matched to the Oregon PAR file. In the case of the MCMIS Crash file, the major tasks were to extract records reported from Oregon and to eliminate duplicate records. The Oregon PAR file was reformatted to create a comprehensive vehicle-level file from accident, vehicle, and person data.

The following sections describe the methods used to prepare each file and some of the problems uncovered.

2.1 MCMIS Crash Data File

The 2009 MCMIS Crash file as of July 28, 2011 was used to identify records submitted from Oregon. For calendar year 2009 there were 1,120 cases reported to the file from Oregon. An analysis file was constructed using all variables in the MCMIS file. This analysis file was examined for duplicate records (more than one record submitted for the same vehicle in the same crash; e.g., the report number and sequence number were identical). No such duplicates were found.

In addition, records were reviewed to find cases with identical values on accident number, accident date/time, county, city, street, vehicle identification number (VIN), and driver license number, even though their vehicle sequence numbers were different. The purpose of this review is to find and eliminate cases where more than one record was submitted for the same vehicle and driver in a particular accident. This can happen if records are replaced during a correction, and the previous version is not deleted. No such duplicates were found. The resulting MCMIS file contains 1,120 unique records.

2.2 Oregon Police Accident Report File

The Oregon PAR data for 2009 was obtained from the state in August, 2011. The data were stored as a database in Microsoft Access format, representing Accident, Vehicle, and Person information. Data for the PAR file are coded from the Oregon Police Traffic Crash Report (6/2007) completed by police officers. [See Appendix A]

The PAR file was first examined for duplicate records (involvements where more than one record was submitted for the same vehicle in the same crash). A search for records with identical case numbers and vehicle numbers found no instances of duplicates. In addition, review of the case numbers verified that they were recorded in a consistent format; and there was no evidence of duplicate records based on similar, but not identical number formats (such as 1310651 and 131-651, for example).

Just as in the preparation of the MCMIS Crash file, cases also were examined to determine if there were any records that appeared to be duplicate vehicles within a given crash. Two distinct crash records would not be expected to be identical on all variables. Since the usual vehicle-specific variables such as VIN, vehicle license plate number, and driver license number were not available in the Oregon PAR file, other vehicle variables were used in the search for duplicate records. Records were examined for duplicate occurrences based on the fields for case number, accident date/hour (minute was not available), crash county, city, street, vehicle type, vehicle movement, vehicle safety equipment used (quantity), vehicle action, vehicle compass direction (to), and driver age. Based on the above algorithm, fourteen duplicate pairs were found.

Although the vehicle sequence number might differ among both cases of the pair, virtually all other recorded variables were identical.[1] Thus, these cases were considered to be duplicate records. After excluding one member of each pair, the resulting PAR file has 76,717 cases.

3. Matching Process

The next step involved matching records from the Oregon PAR file to corresponding records from the MCMIS file. There were 1,120 Oregon records from the MCMIS file available for matching, and 76,717 records from the Oregon PAR file. All records from the Oregon PAR data file were used in the match, even those that did not meet the requirements for reporting to the MCMIS Crash file. This allows the identification of cases reported to the MCMIS Crash file that may not meet the reporting criteria.

Matching records in the two files is accomplished by using combinations of variables common to the two files that have a high probability of uniquely identifying crashes and specific vehicles within the crashes.

The most direct method of matching the crash records would be to use the crash identifier variables in the crash files. In the PAR data the unique identifier was Crash_Id. Crash_Id in the PAR file is a 7-digit numeric field, and in the MCMIS Crash file Report Number is stored as a 12-character alphanumeric value. The first two columns in the MCMIS Crash Report Number field contain the state abbreviation (OR, in this case), followed by crash year (4 digits), and six numeric values. Unfortunately the PAR Crash_Id did not match any digits of the MCMIS Report Number, so these variables could not be used in the match.

Other data items used in matching at the crash level include Crash Date, Crash Time (stored in military time as hour/minute), Crash County, Crash City, Crash Street, and Reporting Officer's Identification number. The PAR file contained Crash Date and Hour (but no Minute), City Name, and County. A new City variable was created to convert MCMIS Crash City into a character-only variable. This variable was then used to match to the PAR variable. PAR City Name was missing in 27.0% of cases, but was always recorded in the MCMIS file. Upon closer examination, Route_ID and Street_name in the PAR file were frequently part of the MCMIS Crash Street text. Although these variables could not be matched directly due to differences in format, they could be used for verification purposes.

[1] Generally, in preparing and evaluating the data we try to err on the side of accepting the data at face value. We recognize that other analysts may make different judgments.

Variables in the MCMIS file that are typically used to distinguish one vehicle from another within a crash include vehicle license plate number, driver license number, vehicle identification number (VIN), driver date of birth, and driver name. None of these variables were present in the PAR 2009 file, resulting in a very difficult matching process. As an alternative, Driver Age was used for matching PAR and MCMIS records. Driver Age was unrecorded in 12.1% of PAR cases, but in only 1.2% of MCMIS cases. In addition, a TruckBusType variable was created based on PAR Vehicle Type and MCMIS Vehicle Configuration, having code levels of SUT, Tractor/trailer, Bobtail, Bus, and Other. However, it was found that a more general variable (TruckBus) with code levels of Truck, Bus, and Other allowed for many more matches. When it was combined with Driver Age, the matches appeared to be valid.

The match was performed in four steps, using the available variables. At each step, records in either file with duplicate values on all the match variables for the particular step were excluded, along with records with missing values for the match variables. The first match included the variables crash date (month and day), crash hour, county, city, driver age, and TruckBus. The second match step dropped crash city. After some investigation of unmatched records, it was discovered that driver age sometimes differed by one year, preventing the match. So the third match step included the same variables as the second attempt, but used driver age plus one for the PAR variable. Likewise, the fourth match contained driver age minus one.

After the first four match steps, there were still 452 (about 40%) unmatched MCMIS cases. An attempt was made to match 25 of these records by hand, to determine if a hand-match was productive. In this process, we reviewed all cases in the PAR file in a crash in the specific county and crash date of the record in the MCMIS file. Records were searched to locate a crash occurring in that city, on that road, involving a truck or a bus. Frequently, PAR City was missing, and in some cases Street or Route was unrecorded. In other cases, crash month, day, hour, county, city and road matched, but a truck or bus was not found. In many cases the PAR lists of vehicles in crashes on that date, in that county, only contained passenger cars. This was particularly true when searching for a MCMIS bus. The lack of a PAR Body Type variable (such as flatbed, dump, etc.) also made truck-specific identification more difficult.

Of the 25 hand searches, only two cases found possible matches in the PAR file. Since Crash Number did not match between the two files, it was not possible to search for a particular accident, and proceed to examine all vehicles in the crash for a matching MCMIS truck or bus.

In total, this process resulted in matching 59.6 percent of the MCMIS records to the PAR file. Due to the lack of available variables in the Oregon PAR file that are useful in the matching process, this is the lowest percentage of all MCMIS evaluations conducted to date. In other MCMIS evaluations, it has not been uncommon to match more than 95 percent of the cases between the two files, and in some states it has been possible to match more than 99 percent of the cases.[30,39] Table 1 shows the variables used in each match step and the number of records matched at each step.

Table 1 Steps in MCMIS/Oregon PAR File Match, 2009

Step	Matching variables	Cases matched
Match 1	Crash date (month, day), crash hour, county, city, driver age, trkbus	154
Match 2	Crash date (month, day), crash hour, county, driver age, trkbus	463
Match 3	Crash date (month, day), crash hour, county, driver age+1, trkbus	21
Match 4	Crash date (month, day), crash hour, county, driver age-1, trkbus	30
Total cases matched		668

To the extent possible, the matches made were verified using other variables common to the MCMIS and PAR files as a final check to ensure each match was valid. In Oregon additional suitable variables for verification purposes were limited. Furthermore, in many cases the critical Crash Street or Route variables were blank in the PAR file. Therefore, all of the matches could not be verified. The above procedure resulted in 668 matches, representing 59.6 percent of the 1,120 records reported to MCMIS.

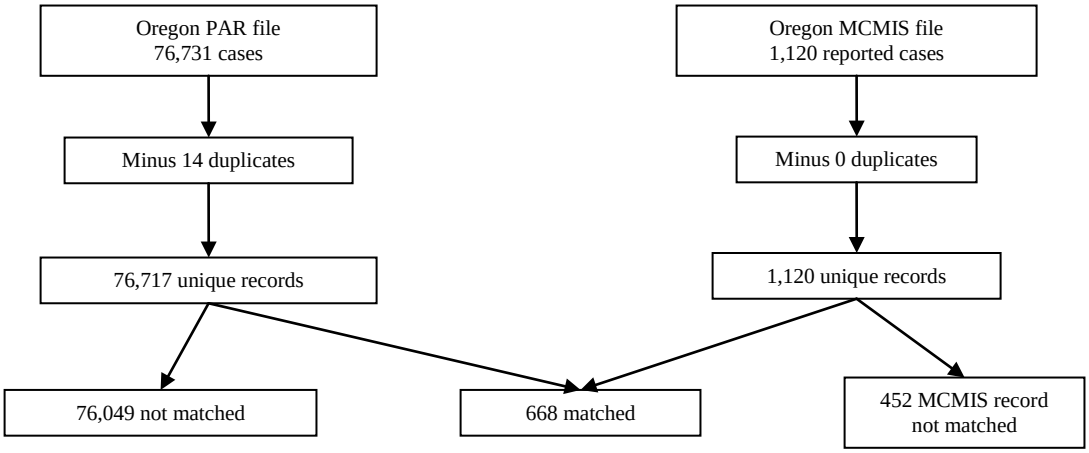

Figure 1 Case Flow in MCMIS/Oregon Crash File Match

The method of identifying cases reportable to the MCMIS Crash file is discussed in the next section.

4. Identifying Reportable Cases

The next step in the evaluation of crash reporting is to identify records in the Oregon data that qualify for reporting to the MCMIS Crash file. Records are selected as reportable using the information available in the computerized crash files supplied by the State of Oregon. Records that are reportable to the MCMIS Crash file meet criteria specified by the FMCSA. The reporting criteria cover the type of vehicle and the severity of the crash. These criteria are discussed in more detail below, but the point here is that records transmitted to the MCMIS Crash file must be selected from among all the records in the state's crash data.

The method developed to identify reportable records is intended to be separate from any prior selection by the state being evaluated. This approach provides an independent method of

evaluating the completeness of reporting. Accordingly, we use the information recorded by the officers on the crash report for all crashes.

Some states place some of the data elements intended for the MCMIS Crash file in a special section, with instructions to the reporting officer to complete that information only for vehicles and crashes that meet the MCMIS selection criteria. This is the case for Oregon which has a Police Truck/Bus/Hazmat Crash Supplemental section on page 3 of the crash report form (Appendix A). The definition that appears in the instruction manual that officers use to fill out the supplemental section matches the FMCSA definition closely.[42] However, if the present evaluation of state reporting were limited only to records where those data elements had been filled out, it would obviously miss cases that had been missed by the state selection process. Accordingly, the method of identifying reportable cases used in this report attempts to be independent, and relies on variables recorded from the main PAR file that describe vehicles and crash severity to determine if they meet the MCMIS Crash file reporting criteria. This approach should provide the best opportunity to identify any cases that might have been overlooked.

The MCMIS criteria for a reportable crash involving a qualifying vehicle are shown in Table 2. Reportable records must meet both the vehicle type and crash severity criteria.

Table 2 Vehicle and Crash Severity Threshold for MCMIS Crash File

Vehicle	Truck with GVWR over 10,000 or GCWR over 10,000, or Bus with seating for at least nine, including the driver, or Vehicle displaying a hazardous materials placard.
Accident	Fatality, or Injury transported to a medical facility for immediate medical attention, or Vehicle towed due to disabling damage.

The process of identifying reportable vehicles, although constrained, is fairly straightforward in the Oregon PAR file. However, there are major limitations associated with identifying qualifying accidents, as will be discussed. The method of identifying qualifying vehicles is discussed first.

4.1 Qualifying Vehicles

All information needed to determine if a vehicle qualifies for reporting to the MCMIS Crash file according to the vehicle criteria outlined in the top portion of Table 2 appears to be captured on the Oregon Police Traffic Crash Report (Appendix A). At the vehicle level, there is space on the crash report for the investigating officer to fill in the following information:

1. Vehicle Identification Number (VIN)
2. Vehicle type
3. Vehicle make
4. Vehicle model
5. Hazardous materials checkbox

All of these variables, used in combination, are valuable in identifying qualifying vehicles. The VIN is the most objective source of vehicle type information, and David Hetzel of the National Institute for Safety Research (NISR) has kindly decoded VINs for vehicles in other states to aid in vehicle identification for other MCMIS evaluations. The vehicle type, make, and model, as recorded by the investigating officer, can help to confirm that a vehicle is in fact a qualifying truck or bus. For example, it is unlikely that an officer would record a well-known heavy vehicle make (eg. Freightliner, Mack, International, Peterbilt), if the vehicle were not a heavy truck or bus. Finally, there is a checkbox for the officer to check if the crash involved a vehicle carrying hazardous materials.

Although space is provided on the crash form to record information on all these variables, only data for the vehicle type variable is actually recorded in the Oregon computerized PAR file. Therefore, vehicle type provides the only source of information for identifying qualifying vehicles. Table 3 shows the distribution of vehicle type for all 76,717 unique vehicles in the 2009 data file. The shaded rows in the table are those most likely to meet the MCMIS vehicle criteria and consist of truck tractors, straight trucks, and buses. Also highlighted in the table are identifiers for pickups, vans, and light delivery vehicles. In some cases, these vehicles may also be qualifying trucks, especially light delivery vehicles. However, without additional information such as VIN, make, or model, it is not possible to determine what fraction of these vehicles might qualify as those with GVWR greater than 10,000 pounds. MCMIS evaluations for other states have shown that reporting rates for these smaller truck configurations tend to be lower than the rates for the larger configurations such as truck tractors. Therefore, the estimate of qualifying vehicles given in this report will be conservative, in the sense that it is expected to be somewhat lower than the number calculated if additional information were available.

Table 3 Vehicle Type, Oregon PAR File, 2009

Vehicle type	Count	Percent
Passenger car, pickup, van, light delivery	72,518	94.5
Truck tractor no trailer (bobtail)	16	<0.1
Farm tractor or farm equipment (not truck)	21	<0.1
Truck tractor with trailer/ mobile home in tow	1,258	1.6
Truck with non-detachable bed	453	0.6
Moped, minibike, motor scooter	43	0.1
School bus/ van used to transport students	130	0.2
Other bus	161	0.2
Motorcycle, dirt bike,	892	1.2
Other: forklift, golf cart, snowplow, etc.	99	0.1
Motorhome	83	0.1
Motorized street car	1	<0.1
ATV	19	<0.1
Motorized scooter (standing)	9	<0.1
Unknown vehicle type	1,014	1.3
Total	76,717	100.0

In total, there were 2,000 vehicles identified as eligible trucks or buses in the Oregon PAR data. Table 4 shows the distribution by vehicle type. In addition to the vehicle type variable, there is a special use variable recorded in the data file indicating if a vehicle was in use for police, fire, or

ambulance purposes. Eighteen of 2,018 vehicles were identified as trucks and excluded as eligible vehicles. There is a hazmat checkbox on the first page of the main PAR form (Appendix A), but no variable in the Oregon data file captures that information, so vehicles transporting hazmat could not be identified.

In MCMIS evaluations for other states, the percentage of qualifying vehicles as a percentage of total vehicles has ranged from about 2.5 to 6.5. For this evaluation, the percentage is 2,000/76,717 = 2.6 which is inside the range found in other states, but close to the lower bound. By using the vehicle type variable as the only source for identifying eligible vehicles, it is likely that the estimate of 2,000 is conservative, in the sense that not all qualifying vehicles have been identified.

Table 4 Vehicles Meeting MCMIS Vehicle Criteria, Oregon PAR File, 2009

Vehicle type	Count	Percent
Trucks	1,709	85.5
Buses	291	14.6
Hazardous materials placard	NA	NA
Total	2,000	100.0

4.2 Crash Severity

The next step is to identify among the 2,000 qualifying vehicles, those involved in crashes of sufficient severity to qualify for reporting to the MCMIS Crash file. Qualifying crashes include those involving a fatality, an injured person transported for immediate medical attention, or a vehicle towed from the scene due to disabling damage.

Again, as with the vehicle level information needed to determine if a vehicle is eligible for reporting to the MCMIS Crash file, all information needed to determine if a vehicle qualifies for reporting according to the crash severity criteria outlined in the bottom portion of Table 2 appears to be captured on the Oregon Police Traffic Crash Report (Appendix A). At the crash severity level, there is space on the crash report for the investigating officer to fill in the following information:

1. Person injury severity (KABCO)
2. Vehicle towed due to disabling damage (circle Y or N)
3. Driver taken (circle Y or N)
4. Passenger taken (circle Y or N)

Unfortunately, the only information recorded in the computerized Oregon PAR file is person injury severity, which is coded in the familiar KABCO form. Whether the crash included a fatal injury can be determined from the computerized data, but the other criteria—an injured person transported for immediate medical attention or a vehicle towed due to disabling damage—cannot be applied to the data. The information for both circumstances is collected on the PAR form, but it is not incorporated into the computerized crash file. There is information in the computerized crash file about the severity of personal injury, but not whether the injured person was transported for treatment. On the PAR form, there is a field that describes vehicle damage, but it

is related to dollar amount, whether the vehicle rolled over, or whether the vehicle was totaled, which does not match the definition of towed due to disabling damage, which is needed here. And in any event, vehicle damage is not recorded in the computerized data file.

The omission of this information from the computerized file makes it impossible to identify all the crash involvements that should be reportable to the MCMIS Crash file. So a full and comprehensive evaluation of reporting from Oregon is not possible. In addition, because key variables needed in the matching process are not recorded in the PAR data file, approximately 40 percent of those vehicle records submitted by Oregon to the MCMIS Crash file could not be matched between the two files. Therefore, even if it were possible to identify all reportable vehicles based on information recorded in the Oregon PAR file, there would be no way to know with good confidence whether certain reportable vehicles were reported or not, but just were not matched.

Based on the discussion above, only a very limited evaluation of reporting to the MCMIS Crash file by Oregon is possible. The limited evaluation of reporting is based on information that is known with good certainty, and a model that has been shown to be able to predict the number of vehicles involved in nonfatal crashes that are reportable to the MCMIS Crash file with good accuracy. A more complete discussion of the evaluation process is described next.

4.3 Estimating Overall Reporting Rate

Of the 1,120 vehicle records submitted by Oregon to the MCMIS Crash file, 668 could be matched to the Oregon PAR file, resulting in a matching percentage of 59.6 percent. [see Figure 2]. Section 3 explains the matching process in detail, but the reason that approximately 40 percent of the records could not be matched is because the PAR data file does not contain key variables routinely used in the matching process such as vehicle license plate number, driver license number, vehicle identification number (VIN), driver date of birth, and driver name. In MCMIS evaluations of other states in which these key variables have been recorded in the PAR files, it has been common for matching percentages to be greater than 95 percent, and in some cases matching percentages have been greater than 99 percent.

Because approximately 40 percent of the records in the MCMIS Crash file could not be matched, it is not possible to accurately estimate the reporting rate for Oregon. In addition, although all the information needed to determine if a vehicle meets both the vehicle and crash severity criteria for reporting to the MCMIS Crash file as outlined in Table 2 is captured on the Oregon Police Traffic Crash Report [Appendix A], only vehicle type and injury to persons (KABCO) is actually recorded in the data file. Whether any persons in the crash were transported for medical care or whether any vehicles in the crash were towed due to disabling damage cannot be determined from information in the Oregon PAR file.

Despite the inability to estimate a reporting rate for Oregon, it is possible to assess other indicators that provide some insight as to whether Oregon reported vehicles to the MCMIS Crash file that should have been reported. The first method examines reporting of qualifying vehicles involved in fatal crashes. Since vehicle type and injury severity in the crash are recorded in the Oregon PAR file, it is possible to asses reporting of fatal involvements to the MCMIS Crash file. Of course fatal involvements are more likely than other reportable involvements to have been

reported, but at least this provides a way to determine if vehicles involved in these serious crashes were reported.

The second method is based on reporting patterns from other states that have been evaluated and whose data are sufficiently complete to identify all reportable cases with some confidence. These data were used to develop a means of predicting reportable nonfatal involvements from counts of fatal involvements. Since the number of fatal involvements is well-established in NHTSA's Fatality Analysis Reporting System (FARS) and UMTRI's Trucks Involved in Fatal Accidents and Buses Involved in Fatal Accidents files, it is possible to estimate the number of nonfatal reportable cases from the number of fatal involvements. The development of this method is fully described in *A New Model of Crash Severities Reportable to the MCMIS Crash* File.[43] The method discussed in the paper provides an equation from which it is possible to predict the number of reportable cases.

For the first method, any qualifying truck, bus, or hazmat placarded vehicle in a crash involving a fatality should have been reported to the MCMIS Crash file. From preliminary FARS data, there were 33 trucks and buses involved in fatal crashes in Oregon in 2009. In the 2009 PAR file used in this report, it was possible to identify 30 trucks and buses that were involved in fatal crashes. Of the 668 vehicles matched between the PAR file and the MCMIS file, 22 of the 30 vehicles were reported. However, because 40 percent of the MCMIS records could not be matched, it is possible that the remaining eight fatal involvements were reported, but were not matched. The MCMIS file was searched based on accident date, accident time, accident county, and driver age information in the PAR file, and it was determined that six of the remaining eight were close matches. Therefore, it is estimated that Oregon reported 28/30 or about 93.3 percent of reportable fatal involvements.

For the second method, a model was used that predicts the number of nonfatal reportable involvements from the number of fatal involvements. As stated above, preliminary FARS data indicates that 33 trucks and buses were involved in fatal crashes in Oregon in 2009. The predicted number of nonfatal reportable involvements using 33 fatal involvements as input to the model gives 990 with a 90 percent prediction interval of (778, 1,259). Adding the 30 fatal involvements identified in the Oregon PAR file gives an estimated total of 1,020 vehicles reportable to the MCMIS Crash file. Note that Oregon reported 1,120 vehicles to the MCMIS Crash file and this number would be well within the 90 percent prediction interval that includes the 30 additional fatal crashes.

The preceding discussion provides some evidence that the number of vehicles reported to the MCMIS Crash file by Oregon may be reasonably close to the number actually reportable. For vehicles in fatal crashes, it appears that 28 out of 30 were reported. However, it should be noted that other states have had similar high reporting rates for fatal crashes, but lower reporting rates for the injured and transported, and towed due to disabling damage criteria.

A model using data from other states with sufficient data to predict with good confidence the number of nonfatal reportable crashes suggests that what Oregon did report is well within the bounds expected based on the number of fatal truck and bus crashes that occurred in 2009. However, since 40 percent of what was reported could not be matched to the PAR file, and the PAR file is missing key variables on persons transported for care and whether a vehicle was towed due to disabling damage, there is no objective way to know if the *right* vehicles were

reported. In almost all MCMIS evaluations conducted to date, there have been sources of underreporting, and to a lesser extent there have also been sources of overreporting. Overreporting occurs when vehicles are reported that do not meet the criteria of a MCMIS reportable crash. Due to the lack of data in the Oregon PAR file, it is not possible to assess the amount of underreporting and overreporting.

For the reasons described above, it is not possible to estimate a reporting rate for Oregon with good certainty. It is only possible to say that Oregon appears to have reported 28 of 30 qualifying vehicles in fatal crashes, and the 1,120 total vehicles actually reported is reasonably close to the number predicted by a model that estimates the number of vehicles reportable to the MCMIS Crash file.

5. Reporting Latency

Delays in transmitting vehicles that qualify for reporting to the MCMIS Crash file according to the vehicle and accident criteria outlined in Table 2 may partially account for the incompleteness of the MCMIS Crash file. The time lag in extracting and submitting reports to the file might explain some portion of the unreported cases. All reportable crash involvements for a calendar year are required to be transmitted to the MCMIS Crash file within 90 days of the date of the crash. In this report, the 2009 MCMIS Crash file as of July 28, 2011 was used to identify records submitted from Oregon, so all 2009 cases should have been reported by that date.

Figure 2 shows the median latency in case submission by month, where latency is the number of days between crash date and the date the case was uploaded to the MCMIS Crash file, minus the 90-day grace period. Therefore, a positive number for a month gives the median number of days cases were submitted after the 90-day grace period. Negative numbers give the median number of days that cases were submitted within the 90-day grace period for a month. Since all numbers in the plot are large and positive, Oregon tended to submit cases well after the 90-day grace period. A declining trend is evident over time, but even for crashes that occurred in December 2009, cases tended to be submitted 159 days (more than five months) after the grace period ended. For crashes that occurred in January 2009, cases were generally not uploaded to the MCMIS Crash file until 497 days (more than sixteen months) after the end of the grace period. Note that since the MCMIS file is dated July 28, 2011, which is about nineteen months after December 2009, it is likely that the file contains almost all records intended to be submitted by Oregon. As shown by the horizontal line, over the entire 12 months, cases were submitted approximately 260 days after the end of the grace period.

It should be noted that Figure 2 is limited to 212 matched and likely reportable cases submitted by Oregon, and not the complete 1,120 vehicles uploaded to the MCMIS Crash file. That is, of the 668 vehicles that were matched between the Oregon PAR and MCMIS Crash files, 212 involved a fatality, an A-injury or a B-injury. Independent analysis of the General Estimates System (GES) data from 2004-2008, which has all variables for determining whether a vehicle qualifies for reporting to the MCMIS Crash file based on both the vehicle and the accident severity criteria, suggests that 94.6 percent of trucks and buses in crashes involving a fatality, A- or B-injury meet the criteria for reporting to the MCMIS Crash file.[44] Therefore, this analysis is restricted to vehicles that were likely reportable.

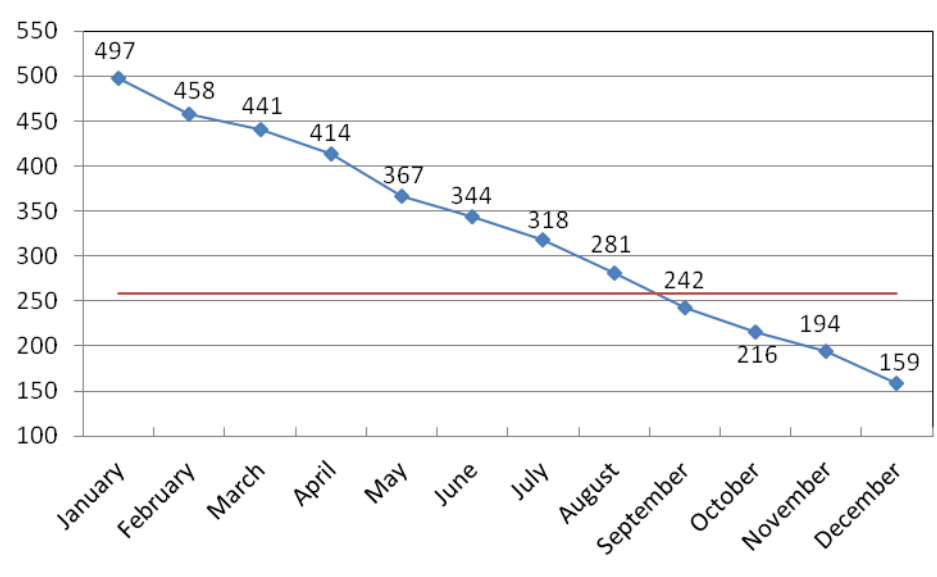

Figure 2 Median Latency (in Days, Minus 90) in Reporting to the MCMIS Crash File, Oregon Matched and Likely Reportable Cases, 2009

Another way to assess reporting latency is to examine an empirical cumulative distribution (ECD) plot of vehicles submitted according to number of days after the crash. Such a plot shows the percentage of vehicles uploaded at a particular point in time. Figure 3 shows the ECD plot for Oregon. A vertical line at 90 days shows that less than 5 percent of the vehicles were uploaded to the MCMIS Crash file within the 90-day grace period. Only half (50%) of the cases submitted were uploaded within 360 days (about one year). About 90 percent of the cases submitted were uploaded within 540 days (about a year and a half).

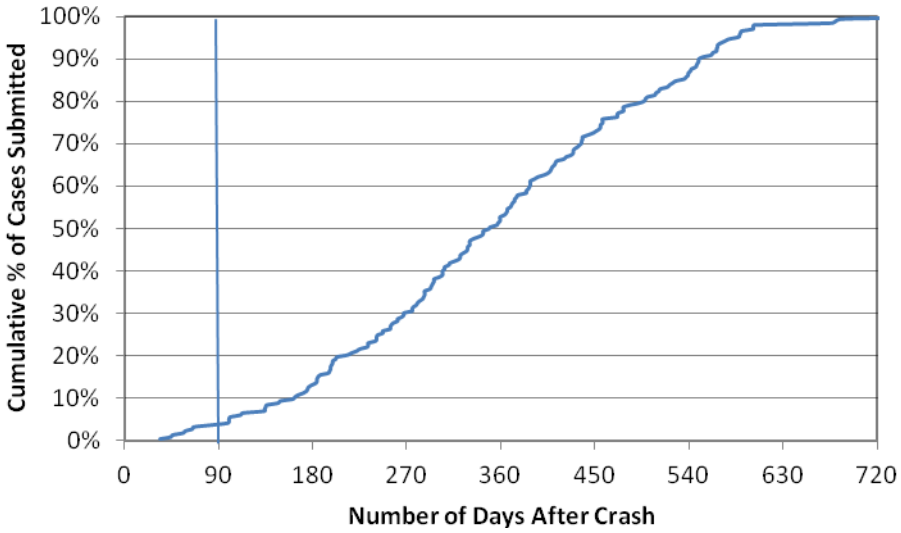

Figure 3 Cumulative Percentage of Cases Submitted to MCMIS Crash File by Number of Days After the Crash, Oregon Matched and Likely Reportable Cases, 2009

6. Data Quality of Reported Cases

In this section, data quality of the records reported to the MCMIS crash file is considered. Two aspects of data quality are examined. The first is the proportion of records with missing data. Missing data rates affect the usefulness of a data file because records with missing data cannot contribute to an analysis. All 1,120 records reported by Oregon to the MCMIS Crash file are considered in the calculation of missing data percentages.

The second aspect of data quality considered is the consistency of coding between records as they appear in the Oregon Crash file and in the MCMIS Crash file. Inconsistencies may indicate problems in translating information recorded on the crash report to the values in the MCMIS Crash file. The 668 vehicles that could be matched between the Oregon PAR file and the MCMIS Crash file for 2009 are used since the purpose of the analysis is to examine the quality of the data as reported.

6.1 Missing data

Table 5 shows missing data rates for selected, important variables in the MCMIS Crash file. Missing data rates are generally low, with a few exceptions. On most fundamental, structural variables, such as date, time, number of fatalities and number of injuries, missing data rates are zero.

Rates for some of the sequence of events variables may appear to be high, but reflect the fact that crashes typically include only one harmful event, the collision itself. The missing data rate for DOT number is calculated only for carriers coded as “Interstate,” which therefore must have a DOT number, and 3.0% of the records in MCMIS were found to be missing that information. Overall, the rates of missing data are low, reflecting very complete data collection for most variables.

Table 5 Missing Data Rates for Selected MCMIS Crash File Variables, Oregon 2009

Variable	Percent unrecorded	Variable	Percent unrecorded
Report number	0.0	Fatal injuries	0.0
Accident year	0.0	Non-fatal injuries	0.0
Accident month	0.0	Interstate	0.0
Accident day	0.0	Light	0.0
Accident hour	0.0	Event one	0.1
Accident minute	0.0	Event two	77.3
County	0.0	Event three	89.8
Body type	0.8	Event four	96.3
Configuration	0.7	Number of vehicles	0.0
GVWR class	0.8	Road access	0.0
DOT number *	3.0	Road surface	0.0
Carrier state	0.0	Road trafficway	0.0
Citation issued	0.4	Towaway	0.0
Driver date of birth	1.2	Truck or bus	0.0
Driver license number	0.7	Vehicle license number	1.3
Driver license state	0.7	Vehicle license state	1.3
Driver license class	2.2	VIN	1.9
Driver license valid	0.4	Weather	0.0

* Based on cases where the carrier is coded interstate.

Hazardous materials variable	Percent unrecorded
Hazardous materials placard	92.5
Percentages of hazmat placarded vehicles only:	
Hazardous cargo release	58.3
Hazardous materials class (1-digit)	16.7
Hazardous materials class (4-digit)	0.0
Hazardous materials name	8.3

The second section of the table shows missing data rates for the hazardous materials (hazmat) variables. Data are missing on the hazardous materials placard variable for 92.5 percent of the 1,120 vehicles reported. It could be that data were not recorded consistently for the hazmat placard variable. The other missing data rates shown are limited to the twelve Oregon records showing the vehicle displayed a hazmat placard, indicating it was carrying hazmat. Again, some of the variables have high percentages of missing data. Hazardous cargo release was not recorded for 58.3 percent of the twelve vehicles recorded as displaying a placard.

6.2 Inconsistent records

The second check on data quality is to compare values for the records in the Oregon data with values for comparable variables in the MCMIS Crash file. Inconsistencies between the files may indicate a problem in preparing the data for upload. This comparison was made for all substantive variables, other than those that were used to match records in the two files.

Table 6 shows a comparison between the vehicle configuration variable in the MCMIS Crash file and the vehicle type variable in the Oregon PAR file for the 668 matched vehicles. Likely or possible inconsistencies between the variables are shaded. The largest percentage of agreement is

for the 412 vehicles classified as tractor semitrailers in both files. However, the shaded rows in the table account for 11.5 percent of the total. The largest inconsistencies are for vehicles that were classified as straight trucks in the MCMIS file, but were classified as truck tractors with trailers in the Oregon PAR file. Summing these shaded rows accounts for 1.8+3.3+3.0=8.1 percent of the total.

Table 6 Comparison of Vehicle Configuration in MCMIS File with Vehicle Type in Oregon Crash File

Vehicle Configuration	Vehicle Type		
MCMIS Crash File	Oregon Crash File	Count	Percent
Unrecorded	Truck tractor with trailer	4	0.6
	Truck with non-detachable bed	2	0.3
Bus(seats 9-15, incl dr)	Other bus	2	0.3
Bus(seats >15, incl dr)	School bus / van	25	3.7
	Other bus	28	4.2
SUT, 2-axle, 6-tire	Truck tractor with trailer	12	1.8
	Truck with non-detachable bed	20	3.0
SUT, 3+ axles	Truck tractor with trailer	22	3.3
	Truck with non-detachable bed	44	6.6
Truck trailer	Truck tractor with trailer	20	3.0
	Truck with non-detachable bed	10	1.5
Truck tractor (bobtail)	Bobtail	5	0.7
	Truck tractor with trailer	6	0.9
Tractor/semitrailer	Bobtail	3	0.4
	Truck tractor with trailer	412	61.7
	Truck with non-detachable bed	7	1.0
Tractor/double	Truck tractor with trailer	40	6.0
	Truck with non-detachable bed	1	0.1
Tractor/triple	Truck tractor with trailer	4	0.6
	Truck with non-detachable bed	1	0.1
Total		668	100.0

Another variable that is recorded in both the MCMIS and Oregon Crash files is light condition. Table 7 shows a comparison of this variable between the two files with possible and likely inconsistencies shaded. Because light condition is coded with several categories that are similar, but technically different (dark-lighted, dark-not lighted) many of the rows in the table are shaded. However, agreement between the two files is greater than 90 percent.

Table 7 Comparison of Light Condition in MCMIS and Oregon Crash Files, 2009

Light Condition			
MCMIS Crash File	Oregon Crash File	Cases	%
Daylight	Daylight	440	65.9
	Dark-lit	2	0.3
	Dark-not lit	7	1.0
	Dawn	7	1.0
	Dusk	3	0.4
Dark-not lighted	Daylight	2	0.3
	Dark-lit	9	1.3
	Dark-not lit	105	15.7
	Dawn	7	1.0
	Dusk	3	0.4
Dark-lighted	Daylight	2	0.3
	Dark-lit	31	4.6
	Dark-not lit	9	1.3
	Dawn	1	0.1
	Dusk	1	0.1
Dawn	Daylight	5	0.7
	Dark-not lit	2	0.3
	Dawn	20	3.0
Dusk	Daylight	3	0.4
	Dusk	8	1.2
Unknown	Dusk	1	0.1
Total		668	100.0

Lastly, Table 8 shows a comparison between the coding of the number of fatals in the crash. Among the 668 matched cases there is exact agreement between the two variables. Note that the 22 vehicles in crashes involving a fatality match the results described in Section 4.3 where it is explained that 22 vehicles in fatal crashes were matched and reported to the MCMIS Crash file.

Table 8 Comparison of Number of Fatals in the Crash, MCMIS and Oregon Crash Files, 2009

Number of Fatals in Crash			
MCMIS Crash File	Oregon Crash File	Cases	%
0	0	646	96.7
1	1	20	3.0
2	2	2	0.3
Total		668	100.0

7. Summary and Discussion

In order to conduct a comprehensive evaluation of reporting by a state to the MCMIS Crash file, it is important that a state's computerized data file contain two broad categories or groups of variables. The first group consists of variables that are needed to match records between the state's crash data file and the MCMIS Crash file. If a large percentage of records cannot be matched between the two files, then any amount of underreporting cannot be estimated

accurately since there is no reliable way of determining if a reportable vehicle identified in the state PAR file was in fact uploaded by the state to the MCMIS Crash file. It may have been uploaded, but just not matched. Of course, the above discussion assumes that the variables needed to determine if a vehicle is reportable to the MCMIS Crash file are recorded in the state PAR file. Therefore, the second group of variables consists of those that are needed to determine if a vehicle meets the criteria established by the FMCSA for reporting to the MCMIS Crash file as outlined in Table 2 of this report. If variables in this second group are not recorded, then any amount of overreporting cannot be estimated accurately because even though a vehicle has been uploaded to the MCMIS file, there is no reliable way to know if it was non-reportable.

Unfortunately, variables belonging to both groups described in the discussion above are largely not recorded in the Oregon PAR file. For the matching process, key variables generally used such as vehicle license plate number, driver license number, vehicle identification number (VIN), driver date of birth, and driver name are not recorded in the PAR file. As a result, approximately 60 percent of the MCMIS records were matched with those in the PAR file. This is the lowest matching percentage of all MCMIS evaluations conducted to date. For MCMIS evaluations of other states, it has been common to match 95 percent of the records in the MCMIS Crash file, or in some cases as much as 99 percent, to the records in the state data file.

For the MCMIS vehicle and crash severity criteria, the only variables recorded are vehicle type and person injury severity. Whether anyone involved in the crash was transported for medical care or whether any vehicles were towed due to disabling damage cannot be determined from the coded PAR data. In addition, no variables are recorded in the data file giving information about display of a hazardous materials placard. It should be noted that there is space on the Oregon Police Traffic Crash Report (Appendix A) for the investigating officer to fill in all the information referenced above that, if recorded in the data file, would have made it possible to conduct a comprehensive evaluation of reporting to the MCMIS Crash file. There is also space for filling in vehicle make, model, and VIN, which along with vehicle type, aids in identifying qualifying vehicles.

Since vehicle type was coded in the Oregon PAR file, it was possible to identify 2,018 trucks and buses. A special use variable indicates that eighteen trucks were used for police, ambulance, or fire purposes, giving a total of 2,000 qualifying trucks and buses.

Since an overall reporting rate could not be calculated, two methods were used to assess whether Oregon reported vehicles to the MCMIS Crash file that should have been reported. The first method examines reporting of qualifying vehicles involved in fatal crashes. Since vehicle type and injury severity in the crash are recorded in the Oregon PAR file, it is possible to asses reporting of fatal involvements to the MCMIS Crash file. The second method is based on a model developed at the University of Michigan Transportation Research Institute that predicts the number of nonfatal reportable vehicles for a state, using the number of fatal reportable vehicles for that state.[43] The model uses data from sixteen states that have sufficiently complete data recorded on variables needed to conduct a comprehensive MCMIS evaluation. Because fatal involvements are known with good accuracy, it has been found that a basic relationship exists between fatal involvements and reportable nonfatal involvements.

From preliminary FARS data, there were 33 trucks and buses involved in fatal crashes in Oregon in 2009. In the 2009 PAR file used in this report, it was possible to identify 30 trucks and buses

that were involved in fatal crashes. Of the 668 vehicles matched between the PAR file and the MCMIS file, 22 of the 30 vehicles were reported. However, because 40 percent of the MCMIS records could not be matched, it is possible that the remaining eight fatal involvements were reported, but were not matched. The MCMIS file was searched based on accident date, accident time, accident county, and driver age information in the PAR file, and it was determined that six of the remaining eight were close matches. Therefore, it is estimated that Oregon reported 28/30 or about 93.3 percent of reportable fatal involvements.

For the second method, the predicted number of nonfatal reportable involvements using 33 fatal involvements as input to the model gives 990 with a 90 percent prediction interval of (778, 1,259). Adding the 30 fatal involvements identified in the Oregon PAR file gives an estimated total of 1,020 vehicles reportable to the MCMIS Crash file. Oregon actually reported 1,120 vehicles to the MCMIS Crash file and this number is well within the 90 percent prediction interval that includes the 30 additional fatal crashes.

While it appears that Oregon reported about 93 percent of fatal involvements, these are the most serious and most likely to be reported. Other states have also exhibited high reporting rates for fatal involvements, only to have lower rates for the injured and transported crashes and even lower rates for vehicles involved in crashes in which at least one vehicle was towed due to disabling damage. However, the reporting rate of 93 percent for fatal involvements provides some evidence that at least the most serious outcomes were likely reported.

The modeling procedure predicts nonfatal reportable involvements and the 1,120 that Oregon did report is close to the 990 predicted by the model plus 30 fatal involvements identified in the Oregon PAR file for a total predicted number of 1,020. However, since 40 percent of what was reported could not be matched to the PAR file, and the PAR file is missing key variables on persons transported for care and whether a vehicle was towed due to disabling damage, there is no objective way to know if the *right* vehicles were reported. In almost all MCMIS evaluations conducted to date, there have been sources of underreporting, and to a lesser extent there have also been sources of overreporting. Due to the lack of data in the Oregon PAR file, it is not possible to assess the amount of underreporting and overreporting.

Oregon does have a Police Truck/Bus/Hazmat Crash Supplemental form on page 3 of the Police Traffic Crash Report. The directions on this form instruct officers to fill this form out when a qualifying vehicle is involved in a crash that meets the criteria for reporting to the MCMIS Crash file. Again, none of the information on this form is recorded in the Oregon PAR file, so evaluation of any kind was not possible. It should be noted that various other states also have a supplemental truck/bus/hazmat form attached as part of their traffic crash reports and have been evaluated with underreporting, so inclusion of the supplemental form does not necessarily guarantee a high reporting rate to the MCMIS Crash file.

All reportable crash involvements for a calendar year are required to be transmitted to the MCMIS Crash file within 90 days of the date of the crash. An examination of timeliness of reporting suggests that Oregon tended to submit cases well after the 90-day grace period. In January of 2009, which was the worst month, the median number of days vehicle records were submitted to the MCMIS Crash file after the grace period ended was 497 (more than sixteen months). The best month was December in which the median number of days vehicle records were submitted to the MCMIS Crash file after the grace period ended was 159 (more than five

months). A cumulative distribution plot indicates that less than 5 percent of records uploaded were submitted within the 90-day grace period. It appears Oregon does not upload records to the MCMIS file in a timely manner.

Except for the hazardous materials variables, missing data rates in the MCMIS Crash file are generally low. A comparison of coding of selected variables between the Oregon PAR file and the MCMIS Crash file for the 668 matched records shows general good agreement with a few inconsistencies. For the vehicle configuration variable there is about 11.5 percent disagreement. The largest inconsistencies are for vehicles that were classified as straight trucks in the MCMIS file, but were classified as truck tractors with trailers in the Oregon PAR file.

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33 Blower, D., and Matteson, A., Evaluation of 2007 Oklahoma Crash Data Reported to MCMIS Crash File. University of Michigan Transportation Research Institute, Ann Arbor, Michigan. June 2009. Sponsor: Federal Motor Carrier Safety Administration, U.S. D.O.T.

34 Blower, D., and Matteson, A., Evaluation of 2008 North Dakota Crash Data Reported to MCMIS Crash File. University of Michigan Transportation Research Institute, Ann Arbor, Michigan. July 2009. 34 p. Sponsor: Federal Motor Carrier Safety Administration, U.S. D.O.T.

35 Blower, D., and Matteson, A., Evaluation of 2008 Vermont Crash Data Reported to MCMIS Crash File. University of Michigan Transportation Research Institute, Ann Arbor, Michigan. September 2009. 40 p. Sponsor: Federal Motor Carrier Safety Administration, U.S. D.O.T.

36 Blower, D., and Matteson, A., Evaluation of 2007 Texas Crash Data Reported to MCMIS Crash File. University of Michigan Transportation Research Institute, Ann Arbor, Michigan. November 2009. 35 p. Sponsor: Federal Motor Carrier Safety Administration, U.S. D.O.T.

37 Blower, D., and Matteson, A., Evaluation of 2008 Mississippi Crash Data Reported to MCMIS Crash File. University of Michigan Transportation Research Institute, Ann Arbor, Michigan. January 2010. 38 p. Sponsor: Federal Motor Carrier Safety Administration, U.S. D.O.T.

38 Blower, D., and Matteson, A., Evaluation of 2008 Kansas Crash Data Reported to MCMIS Crash File. University of Michigan Transportation Research Institute, Ann Arbor, Michigan. February 2010. 39 p. Sponsor: Federal Motor Carrier Safety Administration, U.S. D.O.T.

39 Green, P.E., and Matteson, A., Evaluation of 2008 Florida Crash Data Reported to MCMIS Crash File. University of Michigan Transportation Research Institute, Ann Arbor, Michigan. September 2010. 46 p. Sponsor: Federal Motor Carrier Safety Administration, U.S. D.O.T.

40 Trucks Involved in Fatal Accidents (TIFA) 2003-2008, Center for National Truck and Bus Statistics, University of Michigan Transportation Research Institute.

41 Buses Involved in Fatal Accidents (BIFA) 2003-2008, Center for National Truck and Bus Statistics, University of Michigan Transportation Research Institute.

42 Instruction Manual, Oregon Police Traffic Crash Report and Police Truck/Bus/Hazmat Crash Supplemental, Oregon Department of Transportation, Driver and Motor Vehicle Services, Salem OR 97314, September 2007.

43 Green, P.E., and Blower, D. A New Model of Crash Severities Reportable to the MCMIS Crash file. University of Michigan Transportation Research Institute, Ann Arbor, Michigan. September 2010. 26 p. Sponsor: Federal Motor Carrier Safety Administration, US DOT.

Appendix A Oregon Traffic Accident Reports (rev. 6/2007)

DMV OREGON POLICE TRAFFIC CRASH REPORT PAGE OF

POLICE INCIDENT / CASE NUMBER | CRASH DATE | DAY OF WEEK M T W TH F S SN | CRASH TIME AM PM | POLICE NOTIFIED AM PM | POLICE ARRIVAL AM PM | DMV FILE NUMBER

COUNTY | ROAD ON WHICH CRASH OCCURRED | LATITUDE | LONGITUDE | MILE POST | DMV CODE

☐ WITHIN ______ FEET N S ☐ NEAR ______ MILES E W OF NEAREST INTERSECTING ROAD | ☐ WITHIN ______ FEET N S ☐ NEAR ______ MILES E W OF NEAREST CITY / TOWN

☐ PROPERTY DAMAGE ☐ PUBLIC PROPERTY DAMAGE ESTIMATE: ☐ UNDER $1500 ☐ OVER $1500 ☐ UNKNOWN | ☐ HAZ. MATERIALS ☐ PHOTOS TAKEN ☐ TRAIN R/R ☐ TRUCK / BUS

UNIT # | NAME (LAST, FIRST, MIDDLE) | DRIVER LICENSE NUMBER | STATE | SEX | RACE | DOB

PED BIC PRK PRP | ADDRESS | PHONE: ☐ HOME ☐ WORK ☐ CELL ( )

VEHICLE OWNER ☐ SAME | PHONE: ☐ HOME ☐ WORK ☐ CELL ( )

FIRE Y N | STD SPD | PST SPD | INSURANCE COMPANY ☐ NONE | INSURANCE POLICY NUMBER

EJECTED Y P N | EXTRCTD Y N | VEHICLE IDENTIFICATION NUMBER (VIN) | LICENSE PLATE NUMBER | STATE | YEAR | MAKE | MODEL | STYLE | COLOR

VEHICLE TOWED DUE TO VEHICLE DAMAGE Y N ☐ UNKNOWN BY: TO: | DRIVER TAKEN: Y N ☐ UNKNOWN BY: TO:

VEHICLE DAMAGE FRONT
MARK ALL THAT APPLY: DAMAGE ESTIMATE ☐ ROLLOVER ☐ NONE ☐ UNDERCAR ☐ UNDER $1500 ☐ TOTALED ☐ OVER $1500 ☐ UNKNOWN
USE ARROW TO SHOW FIRST IMPACT (SHADE IN DAMAGED AREA)

INJURY: ☐ NONE ☐ COMPLAINT OF PAIN ☐ VISIBLE INJURY ☐ INCAPACITATED ☐ FATAL
EQUIPMENT: ☐ NO EQP USED ☐ LAP ONLY ☐ LAP / SHLDR ☐ CHLD RST-PRP ☐ A/BAG-DEPLYD ☐ NONE INSTLD ☐ UNKNOWN ☐ SHLDR ONLY ☐ HELMET ☐ CHLD RST-IMPR ☐ A/BAG-NOT DP
ACTION / ARREST / CITES

HIT AND RUN
SUSPECT NAME | AKA | IN CUSTODY Y N
ADDRESS | OTHER INFORMATION:
SEX | RACE | DOB | HT | WT | HAIR | EYES | LOCAL ID

UNIT # | NAME (LAST, FIRST, MIDDLE) | DRIVER LICENSE NUMBER | STATE | SEX | RACE | DOB

PED BIC PRK PRP | ADDRESS | PHONE: ☐ HOME ☐ WORK ☐ CELL ( )

VEHICLE OWNER ☐ SAME | PHONE: ☐ HOME ☐ WORK ☐ CELL ( )

FIRE Y N | STD SPD | PST SPD | INSURANCE COMPANY ☐ NONE | INSURANCE POLICY NUMBER

EJECTED Y P N | EXTRCTD Y N | VEHICLE IDENTIFICATION NUMBER (VIN) | LICENSE PLATE NUMBER | STATE | YEAR | MAKE | MODEL | STYLE | COLOR

VEHICLE TOWED DUE TO VEHICLE DAMAGE Y N ☐ UNKNOWN BY: TO: | DRIVER TAKEN: Y N ☐ UNKNOWN BY: TO:

VEHICLE DAMAGE FRONT
MARK ALL THAT APPLY: DAMAGE ESTIMATE ☐ ROLLOVER ☐ NONE ☐ UNDERCAR ☐ UNDER $1500 ☐ TOTALED ☐ OVER $1500 ☐ UNKNOWN
USE ARROW TO SHOW FIRST IMPACT (SHADE IN DAMAGED AREA)

INJURY: ☐ NONE ☐ COMPLAINT OF PAIN ☐ VISIBLE INJURY ☐ INCAPACITATED ☐ FATAL
EQUIPMENT: ☐ NO EQP USED ☐ LAP ONLY ☐ LAP / SHLDR ☐ CHLD RST-PRP ☐ A/BAG-DEPLYD ☐ NONE INSTLD ☐ UNKNOWN ☐ SHLDR ONLY ☐ HELMET ☐ CHLD RST-IMPR ☐ A/BAG-NOT DP
ACTION / ARREST / CITES

UNIT # | ☐ PASSENGER NAME ☐ WITNESS | ADDRESS
SEX | RACE | DOB | PHONE: ☐ HOME ☐ WORK ☐ CELL ( ) | INJURY ☐ COMPLAINT OF PAIN ☐ INCAPACITATED ☐ NONE ☐ VISIBLE INJURY ☐ FATAL | LOCATION ☐LF ☐CF ☐RF ☐LR ☐CR ☐RR | OTHER: | EJECTED Y P N | EXTRCTD Y N
PASSENGER TAKEN: Y N ☐ UNKNOWN BY: TO: | EQUIPMENT ☐ NO EQP USED ☐ LAP ONLY ☐ LAP / SHLDR ☐ CHLD RST-PRP ☐ A/BAG-DEPLYD ☐ NONE INSTLD ☐ UNKNOWN ☐ SHLDR ONLY ☐ HELMET ☐ CHLD RST-IMPR ☐ A/BAG-NOT DP

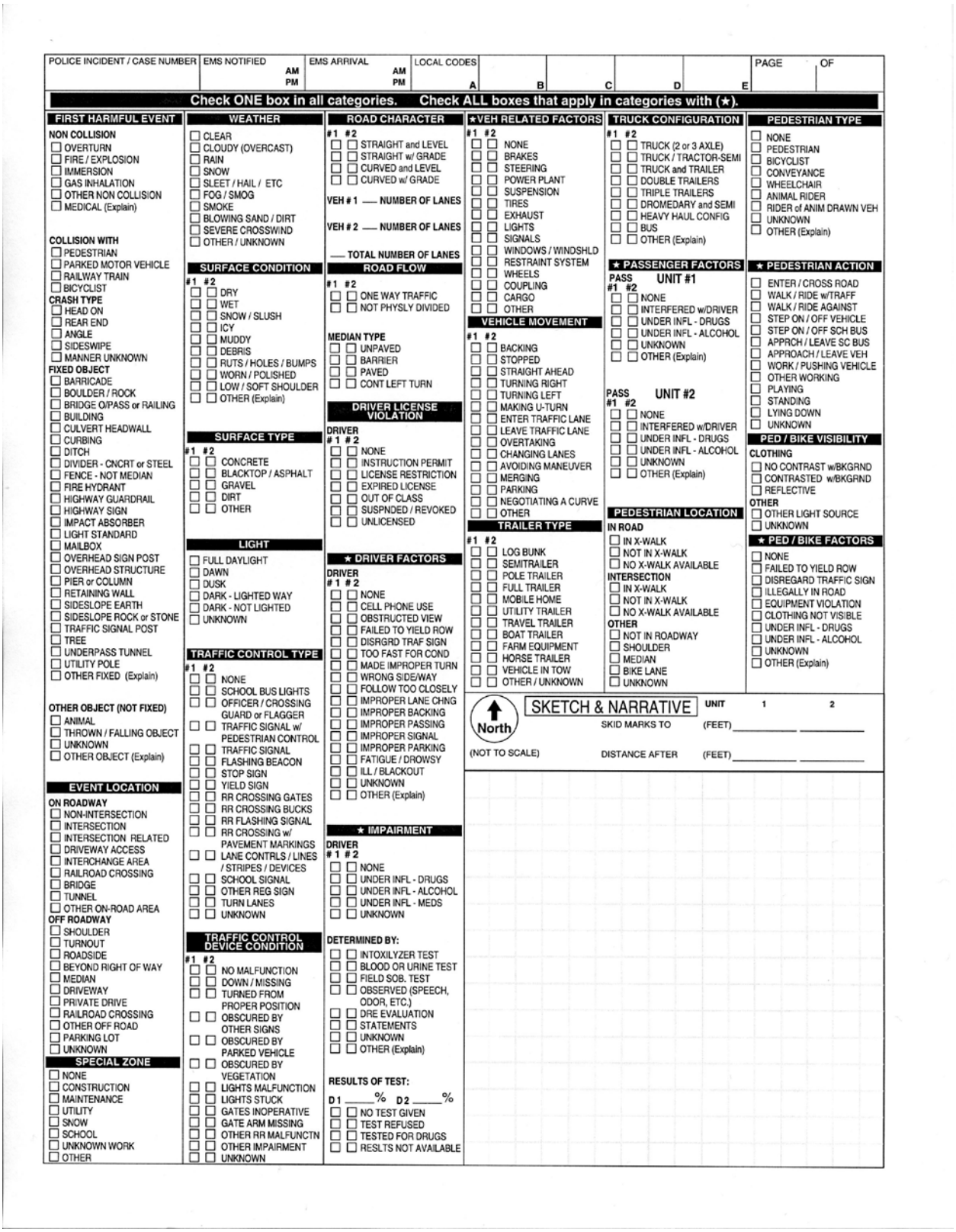
UNIT # | ☐ PASSENGER NAME ☐ WITNESS | ADDRESS
SEX | RACE | DOB | PHONE: ☐ HOME ☐ WORK ☐ CELL ( ) | INJURY ☐ COMPLAINT OF PAIN ☐ INCAPACITATED ☐ NONE ☐ VISIBLE INJURY ☐ FATAL | LOCATION ☐LF ☐CF ☐RF ☐LR ☐CR ☐RR | OTHER: | EJECTED Y P N | EXTRCTD Y N
PASSENGER TAKEN: Y N ☐ UNKNOWN BY: TO: | EQUIPMENT ☐ NO EQP USED ☐ LAP ONLY ☐ LAP / SHLDR ☐ CHLD RST-PRP ☐ A/BAG-DEPLYD ☐ NONE INSTLD ☐ UNKNOWN ☐ SHLDR ONLY ☐ HELMET ☐ CHLD RST-IMPR ☐ A/BAG-NOT DP

UNIT # | ☐ PASSENGER NAME ☐ WITNESS | ADDRESS
SEX | RACE | DOB | PHONE: ☐ HOME ☐ WORK ☐ CELL ( ) | INJURY ☐ COMPLAINT OF PAIN ☐ INCAPACITATED ☐ NONE ☐ VISIBLE INJURY ☐ FATAL | LOCATION ☐LF ☐CF ☐RF ☐LR ☐CR ☐RR | OTHER: | EJECTED Y P N | EXTRCTD Y N
PASSENGER TAKEN: Y N ☐ UNKNOWN BY: TO: | EQUIPMENT ☐ NO EQP USED ☐ LAP ONLY ☐ LAP / SHLDR ☐ CHLD RST-PRP ☐ A/BAG-DEPLYD ☐ NONE INSTLD ☐ UNKNOWN ☐ SHLDR ONLY ☐ HELMET ☐ CHLD RST-IMPR ☐ A/BAG-NOT DP

DISTRIBUTION

OFFICER NAME / NUMBER | DATE | AGENCY | APPROVED BY

735-46A (6-07) STK# 300017



POLICE INCIDENT / CASE NUMBER | EMS NOTIFIED AM PM | EMS ARRIVAL AM PM | LOCAL CODES A B C D E | PAGE OF

Check ONE box in all categories. Check ALL boxes that apply in categories with (★).

FIRST HARMFUL EVENT

NON COLLISION
- ☐ OVERTURN
- ☐ FIRE / EXPLOSION
- ☐ IMMERSION
- ☐ GAS INHALATION
- ☐ OTHER NON COLLISION
- ☐ MEDICAL (Explain)

COLLISION WITH
- ☐ PEDESTRIAN
- ☐ PARKED MOTOR VEHICLE
- ☐ RAILWAY TRAIN
- ☐ BICYCLIST

CRASH TYPE
- ☐ HEAD ON
- ☐ REAR END
- ☐ ANGLE
- ☐ SIDESWIPE
- ☐ MANNER UNKNOWN

FIXED OBJECT
- ☐ BARRICADE
- ☐ BOULDER / ROCK
- ☐ BRIDGE O/PASS or RAILING
- ☐ BUILDING
- ☐ CULVERT HEADWALL
- ☐ CURBING
- ☐ DITCH
- ☐ DIVIDER - CNCRT or STEEL
- ☐ FENCE - NOT MEDIAN
- ☐ FIRE HYDRANT
- ☐ HIGHWAY GUARDRAIL
- ☐ HIGHWAY SIGN
- ☐ IMPACT ABSORBER
- ☐ LIGHT STANDARD
- ☐ MAILBOX
- ☐ OVERHEAD SIGN POST
- ☐ OVERHEAD STRUCTURE
- ☐ PIER or COLUMN
- ☐ RETAINING WALL
- ☐ SIDESLOPE EARTH
- ☐ SIDESLOPE ROCK or STONE
- ☐ TRAFFIC SIGNAL POST
- ☐ TREE
- ☐ UNDERPASS TUNNEL
- ☐ UTILITY POLE
- ☐ OTHER FIXED (Explain)

OTHER OBJECT (NOT FIXED)
- ☐ ANIMAL
- ☐ THROWN / FALLING OBJECT
- ☐ UNKNOWN
- ☐ OTHER OBJECT (Explain)

EVENT LOCATION

ON ROADWAY
- ☐ NON-INTERSECTION
- ☐ INTERSECTION
- ☐ INTERSECTION RELATED
- ☐ DRIVEWAY ACCESS
- ☐ INTERCHANGE AREA
- ☐ RAILROAD CROSSING
- ☐ BRIDGE
- ☐ TUNNEL
- ☐ OTHER ON-ROAD AREA

OFF ROADWAY
- ☐ SHOULDER
- ☐ TURNOUT
- ☐ ROADSIDE
- ☐ BEYOND RIGHT OF WAY
- ☐ MEDIAN
- ☐ DRIVEWAY
- ☐ PRIVATE DRIVE
- ☐ RAILROAD CROSSING
- ☐ OTHER OFF ROAD
- ☐ PARKING LOT
- ☐ UNKNOWN

SPECIAL ZONE
- ☐ NONE
- ☐ CONSTRUCTION
- ☐ MAINTENANCE
- ☐ UTILITY
- ☐ SNOW
- ☐ SCHOOL
- ☐ UNKNOWN WORK
- ☐ OTHER

WEATHER
- ☐ CLEAR
- ☐ CLOUDY (OVERCAST)
- ☐ RAIN
- ☐ SNOW
- ☐ SLEET / HAIL / ETC
- ☐ FOG / SMOG
- ☐ SMOKE
- ☐ BLOWING SAND / DIRT
- ☐ SEVERE CROSSWIND
- ☐ OTHER / UNKNOWN

SURFACE CONDITION

#1	#2	
☐	☐	DRY
☐	☐	WET
☐	☐	SNOW / SLUSH
☐	☐	ICY
☐	☐	MUDDY
☐	☐	DEBRIS
☐	☐	RUTS / HOLES / BUMPS
☐	☐	WORN / POLISHED
☐	☐	LOW / SOFT SHOULDER
☐	☐	OTHER (Explain)

SURFACE TYPE

#1	#2	
☐	☐	CONCRETE
☐	☐	BLACKTOP / ASPHALT
☐	☐	GRAVEL
☐	☐	DIRT
☐	☐	OTHER

LIGHT
- ☐ FULL DAYLIGHT
- ☐ DAWN
- ☐ DUSK
- ☐ DARK - LIGHTED WAY
- ☐ DARK - NOT LIGHTED
- ☐ UNKNOWN

TRAFFIC CONTROL TYPE

#1	#2	
☐	☐	NONE
☐	☐	SCHOOL BUS LIGHTS
☐	☐	OFFICER / CROSSING GUARD or FLAGGER
☐	☐	TRAFFIC SIGNAL w/ PEDESTRIAN CONTROL
☐	☐	TRAFFIC SIGNAL
☐	☐	FLASHING BEACON
☐	☐	STOP SIGN
☐	☐	YIELD SIGN
☐	☐	RR CROSSING GATES
☐	☐	RR CROSSING BUCKS
☐	☐	RR FLASHING SIGNAL
☐	☐	RR CROSSING w/ PAVEMENT MARKINGS
☐	☐	LANE CONTRLS / LINES / STRIPES / DEVICES
☐	☐	SCHOOL SIGNAL
☐	☐	OTHER REG SIGN
☐	☐	TURN LANES
☐	☐	UNKNOWN

TRAFFIC CONTROL DEVICE CONDITION

#1	#2	
☐	☐	NO MALFUNCTION
☐	☐	DOWN / MISSING
☐	☐	TURNED FROM PROPER POSITION
☐	☐	OBSCURED BY OTHER SIGNS
☐	☐	OBSCURED BY PARKED VEHICLE
☐	☐	OBSCURED BY VEGETATION
☐	☐	LIGHTS MALFUNCTION
☐	☐	LIGHTS STUCK
☐	☐	GATES INOPERATIVE
☐	☐	GATE ARM MISSING
☐	☐	OTHER RR MALFUNCTN
☐	☐	OTHER IMPAIRMENT
☐	☐	UNKNOWN

ROAD CHARACTER

#1	#2	
☐	☐	STRAIGHT and LEVEL
☐	☐	STRAIGHT w/ GRADE
☐	☐	CURVED and LEVEL
☐	☐	CURVED w/ GRADE

VEH # 1 ___ NUMBER OF LANES

VEH # 2 ___ NUMBER OF LANES

___ TOTAL NUMBER OF LANES

ROAD FLOW

#1	#2	
☐	☐	ONE WAY TRAFFIC
☐	☐	NOT PHYSLY DIVIDED

MEDIAN TYPE
- ☐ ☐ UNPAVED
- ☐ ☐ BARRIER
- ☐ ☐ PAVED
- ☐ ☐ CONT LEFT TURN

DRIVER LICENSE VIOLATION

DRIVER

#1	#2	
☐	☐	NONE
☐	☐	INSTRUCTION PERMIT
☐	☐	LICENSE RESTRICTION
☐	☐	EXPIRED LICENSE
☐	☐	OUT OF CLASS
☐	☐	SUSPNDED / REVOKED
☐	☐	UNLICENSED

★ DRIVER FACTORS

DRIVER

#1	#2	
☐	☐	NONE
☐	☐	CELL PHONE USE
☐	☐	OBSTRUCTED VIEW
☐	☐	FAILED TO YIELD ROW
☐	☐	DISRGRD TRAF SIGN
☐	☐	TOO FAST FOR COND
☐	☐	MADE IMPROPER TURN
☐	☐	WRONG SIDE/WAY
☐	☐	FOLLOW TOO CLOSELY
☐	☐	IMPROPER LANE CHNG
☐	☐	IMPROPER BACKING
☐	☐	IMPROPER PASSING
☐	☐	IMPROPER SIGNAL
☐	☐	IMPROPER PARKING
☐	☐	FATIGUE / DROWSY
☐	☐	ILL / BLACKOUT
☐	☐	UNKNOWN
☐	☐	OTHER (Explain)

★ IMPAIRMENT

DRIVER

#1	#2	
☐	☐	NONE
☐	☐	UNDER INFL - DRUGS
☐	☐	UNDER INFL - ALCOHOL
☐	☐	UNDER INFL - MEDS
☐	☐	UNKNOWN

DETERMINED BY:
- ☐ ☐ INTOXILYZER TEST
- ☐ ☐ BLOOD OR URINE TEST
- ☐ ☐ FIELD SOB. TEST
- ☐ ☐ OBSERVED (SPEECH, ODOR, ETC.)
- ☐ ☐ DRE EVALUATION
- ☐ ☐ STATEMENTS
- ☐ ☐ UNKNOWN
- ☐ ☐ OTHER (Explain)

RESULTS OF TEST:

D1 ____% D2 ____%
- ☐ ☐ NO TEST GIVEN
- ☐ ☐ TEST REFUSED
- ☐ ☐ TESTED FOR DRUGS
- ☐ ☐ RESLTS NOT AVAILABLE

★VEH RELATED FACTORS

#1	#2	
☐	☐	NONE
☐	☐	BRAKES
☐	☐	STEERING
☐	☐	POWER PLANT
☐	☐	SUSPENSION
☐	☐	TIRES
☐	☐	EXHAUST
☐	☐	LIGHTS
☐	☐	SIGNALS
☐	☐	WINDOWS / WINDSHLD
☐	☐	RESTRAINT SYSTEM
☐	☐	WHEELS
☐	☐	COUPLING
☐	☐	CARGO
☐	☐	OTHER

VEHICLE MOVEMENT

#1	#2	
☐	☐	BACKING
☐	☐	STOPPED
☐	☐	STRAIGHT AHEAD
☐	☐	TURNING RIGHT
☐	☐	TURNING LEFT
☐	☐	MAKING U-TURN
☐	☐	ENTER TRAFFIC LANE
☐	☐	LEAVE TRAFFIC LANE
☐	☐	OVERTAKING
☐	☐	CHANGING LANES
☐	☐	AVOIDING MANEUVER
☐	☐	MERGING
☐	☐	PARKING
☐	☐	NEGOTIATING A CURVE
☐	☐	OTHER

TRAILER TYPE

#1	#2	
☐	☐	LOG BUNK
☐	☐	SEMITRAILER
☐	☐	POLE TRAILER
☐	☐	FULL TRAILER
☐	☐	MOBILE HOME
☐	☐	UTILITY TRAILER
☐	☐	TRAVEL TRAILER
☐	☐	BOAT TRAILER
☐	☐	FARM EQUIPMENT
☐	☐	HORSE TRAILER
☐	☐	VEHICLE IN TOW
☐	☐	OTHER / UNKNOWN

TRUCK CONFIGURATION

#1	#2	
☐	☐	TRUCK (2 or 3 AXLE)
☐	☐	TRUCK / TRACTOR-SEMI
☐	☐	TRUCK and TRAILER
☐	☐	DOUBLE TRAILERS
☐	☐	TRIPLE TRAILERS
☐	☐	DROMEDARY and SEMI
☐	☐	HEAVY HAUL CONFIG
☐	☐	BUS
☐	☐	OTHER (Explain)

★ PASSENGER FACTORS

PASS UNIT #1

#1	#2	
☐	☐	NONE
☐	☐	INTERFERED w/DRIVER
☐	☐	UNDER INFL - DRUGS
☐	☐	UNDER INFL - ALCOHOL
☐	☐	UNKNOWN
☐	☐	OTHER (Explain)

PASS UNIT #2

#1	#2	
☐	☐	NONE
☐	☐	INTERFERED w/DRIVER
☐	☐	UNDER INFL - DRUGS
☐	☐	UNDER INFL - ALCOHOL
☐	☐	UNKNOWN
☐	☐	OTHER (Explain)

PEDESTRIAN LOCATION

IN ROAD
- ☐ IN X-WALK
- ☐ NOT IN X-WALK
- ☐ NO X-WALK AVAILABLE

INTERSECTION
- ☐ IN X-WALK
- ☐ NOT IN X-WALK
- ☐ NO X-WALK AVAILABLE

OTHER
- ☐ NOT IN ROADWAY
- ☐ SHOULDER
- ☐ MEDIAN
- ☐ BIKE LANE
- ☐ UNKNOWN

PEDESTRIAN TYPE
- ☐ NONE
- ☐ PEDESTRIAN
- ☐ BICYCLIST
- ☐ CONVEYANCE
- ☐ WHEELCHAIR
- ☐ ANIMAL RIDER
- ☐ RIDER of ANIM DRAWN VEH
- ☐ UNKNOWN
- ☐ OTHER (Explain)

★ PEDESTRIAN ACTION
- ☐ ENTER / CROSS ROAD
- ☐ WALK / RIDE w/TRAFF
- ☐ WALK / RIDE AGAINST
- ☐ STEP ON / OFF VEHICLE
- ☐ STEP ON / OFF SCH BUS
- ☐ APPRCH / LEAVE SC BUS
- ☐ APPROACH / LEAVE VEH
- ☐ WORK / PUSHING VEHICLE
- ☐ OTHER WORKING
- ☐ PLAYING
- ☐ STANDING
- ☐ LYING DOWN
- ☐ UNKNOWN

PED / BIKE VISIBILITY

CLOTHING
- ☐ NO CONTRAST w/BKGRND
- ☐ CONTRASTED w/BKGRND
- ☐ REFLECTIVE

OTHER
- ☐ OTHER LIGHT SOURCE
- ☐ UNKNOWN

★ PED / BIKE FACTORS
- ☐ NONE
- ☐ FAILED TO YIELD ROW
- ☐ DISREGARD TRAFFIC SIGN
- ☐ ILLEGALLY IN ROAD
- ☐ EQUIPMENT VIOLATION
- ☐ CLOTHING NOT VISIBLE
- ☐ UNDER INFL - DRUGS
- ☐ UNDER INFL - ALCOHOL
- ☐ UNKNOWN
- ☐ OTHER (Explain)

SKETCH & NARRATIVE

North

(NOT TO SCALE)

UNIT 1 2

SKID MARKS TO (FEET) _____ _____

DISTANCE AFTER (FEET) _____ _____

Page ____ of ____

POLICE **TRUCK / BUS / HAZMAT** CRASH SUPPLEMENTAL*

Complete this form if one or more qualifying vehicles was involved. Check at least one box in **Category 1 and 2** listed below.

CATEGORY 1 ☐ FATAL ☐ INJURY ☐ VEHICLE TOWED DUE TO DAMAGE | CATEGORY 2 ☐ 16 OR MORE PASSENGER CAPACITY ☐ 10,001 LBS OR MORE (GVWR) ☐ HAZARDOUS MATERIAL PLACARD

POLICE INCIDENT / CASE NUMBER	CRASH DATE	DAY OF WEEK M T W TH F S SN	CRASH TIME AM PM	ROAD ON WHICH CRASH OCCURRED

BRIEF NARRATIVE:

VEHICLE INFORMATION

BASE PLATE NUMBER ☐☐ STATE ☐☐☐☐☐☐☐ PLATE NUMBER

OR DOT PLATE NUMBER ☐☐☐☐☐☐☐

GROSS VEHICLE WEIGHT RATING: (normally located inside driver door)

Truck, Tractor or Bus _____

Trailer or Trailers Total _____

Total Number of Axles (including Trailers) _____

Did vehicle have a HAZARDOUS MATERIAL placard? 1. Yes 2. No ☐

If "Yes," enter name or 4 digit number from placard diamond or box (CODE #32) ☐☐☐☐

Enter 1 Digit Number from bottom of diamond: ☐

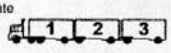
Was hazardous material (cargo) released from this vehicle? 1. Yes 2. No ☐

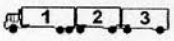
Was inspection done on this vehicle? 1. Yes 2. No ☐

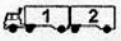
Inspection Number _____ Level: 1, 2, 3, 4 ☐

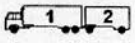
VEHICLE CONFIGURATION

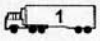
Select Appropriate

☐ 1  Triples (tractor with 3 trailers)

☐ 2  Triples (truck with 2 trailers)

☐ 3  Doubles (any)

☐ 4  Straight Truck-Full Trailer

☐ 5  Standard Tractor/Semi Trailer

☐ 6  Straight Truck

☐ 7  Bobtail

☐ 8  Saddlemount

☐ 9  Heavy Haul

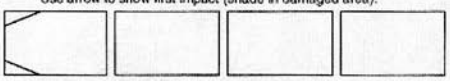
☐ 10  Bus / Van (16 or more passenger capacity)

☐ 11  Auto / Pickup

☐ **Cargo Body Type (circle appropriate type):**
Van Flatbed, Tank, Dump, Belly-Dump, Pole, Garbage, Drop-Box, Auto Carrier, Livestock, Chip, Low-Boy, Mobile Home Toter, Utility, Container, Bulk-Hopper, Fixed Load, Other _____

VEHICLE DAMAGE

Use arrow to show first impact (shade in damaged area).

FRONT 

SEQUENCE OF EVENTS (for this vehicle)

1 2 3 4		1 2 3 4	
☐☐☐☐	RAN OFF ROAD	☐☐☐☐	CRASH INVOLVING MOTOR VEHICLE IN TRANSPORT
☐☐☐☐	JACKKNIFE / SKID	☐☐☐☐	CRASH INVOLVING PARKED MOTOR VEHICLE
☐☐☐☐	OVERTURN	☐☐☐☐	CRASH INVOLVING TRAIN
☐☐☐☐	DOWNHILL RUNAWAY	☐☐☐☐	CRASH INVOLVING PEDAL CYCLE
☐☐☐☐	CARGO LOSS OR SHIFT	☐☐☐☐	CRASH INVOLVING ANIMAL
☐☐☐☐	EXPLOSION OR FIRE	☐☐☐☐	CRASH INVOLVING FIXED OBJECT
☐☐☐☐	SEPARATION OF UNITS	☐☐☐☐	CRASH INVOLVING OTHER OBJECT
☐☐☐☐	CRASH INVOLVING PEDESTRIAN	☐☐☐☐	OTHER

CARRIER INFORMATION

NAME

ADDRESS (Street or PO Box Number)

CITY

STATE ZIP CODE

IDENTIFICATION NUMBERS None = 0 ☐

US DOT ☐☐☐☐☐☐☐ ICC MC ☐☐☐☐☐☐☐

DRIVER INFORMATION

NAME (Last, First, Middle)

DRIVER LICENSE #	STATE	CLASS	ENDORSEMENT	MEDICAL CERT. EXP. DATE

CO-DRIVER INFORMATION

NAME (Last, First, Middle)

DRIVER LICENSE #	STATE	CLASS	ENDORSEMENT	MEDICAL CERT. EXP. DATE

DRIVER HOURS RECAP For Certified Inspectors

DATE	HOURS ON DUTY
TOTAL	

☐ FALSE LOG

☐ NO LOG BOOK

☐ DRIVER OUT-OF SERVICE

☐ DRIVER LOG NOT CURRENT

☐ 60/70 HOUR RULE VIOLATION

☐ 10 HOUR RULE VIOLATION

☐ 15 HOUR RULE VIOLATION

☐ CURRENT AND PREVIOUS DAYS LOG NOT IN POSSESSION

☐ FAILURE TO RETAIN 7 PREVIOUS DAYS LOG

☐ LOG VIOLATION-GENERAL

☐ OTHER _____

OFFICER NAME / NUMBER	DATE	AGENCY	APPROVED BY

735-47 (4-07) * FAX only this Supplemental report to ODOT Crash Analysis Reporting Unit at (503) 986-4249 within 24 hours. STK # 300570