

Missouri Commercial Motor Vehicle Safety Belt Survey Final Report



Submitted by:
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“Supported through MoDOT’s Traffic and Highway Safety Division”

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Executive Summary

In August of 2014, the Missouri Safety Center in conjunction with MoDot's Traffic and Highway Safety conducted the commercial motor vehicle driver's safety belt use survey. The methodology for this year's survey was identical to the established methodology for the 2004 survey. The survey was conducted at 250 locations in 76 Missouri counties. Survey sites were located throughout the nine Missouri State Highway Patrol (MSHP) Troop areas.

The number of sites per MSHP Troop continues to be assigned proportionally to four roadway types; freeway, expressway, two-lane and other (super 2 lane, 5-lane section, 3-lane section, multi-lane section, and one way) based upon CMV DVMT on each roadway type.

Shoulder belt usage in Class 7 (six to nine tires) and Class 8 (10 or more tires) trucks for the CMV driver was observed at each selected site. Observations were collected over a one week period (August 18-24, 2014) and each observation was 40 minutes in length. Eighteen percent of the vehicles observed were Type 7 vehicles and the remaining 82 percent were Type 8. A total of 18,776 observations were collected in the 76 counties at 250 observational sites.

The following is a list of the major findings.

- The overall safety belt usage rate for commercial motor vehicle drivers observed in the survey was 81.0 percent. This is a decrease of 0.5 percent over the 81.5 percent usage rate in 2012.
- The MSHP Troop F region had the highest safety belt usage rate and Troop B region had the lowest with 86.8 and 68.1 percent respectively.
- CMV drivers observed on the "Freeway" roadway type had the highest safety belt usage rate of 82.0 percent and drivers on "Two-Lane" roadways had the lowest usage rate of 72.4 percent.
- There were 9 counties that had a safety belt usage rates between 30 and 59 percent. They were Randolph, Barry, Christian, Dallas, Moniteau, Howell, Audrain, Gasconade, and Gentry.
- Twenty-two counties: Jackson, Henry, Bates, Johnson, Saline, Ray, Pettis, St. Louis, St. Francois, Ste. Genevieve, Clay, McDonald, St. Clair, Taney, Pemiscot, Cooper, Boone, Callaway, Cole, Miller, Oregon, and Phelps had safety belt usage rates between 80 and 89 percent.
- The safety belt usage rate was 90 percent or above in six counties, Lafayette, Cass, Perry, Franklin, Polk, and Montgomery.
- Commercial motor vehicle drivers of vehicles displaying hazardous material placards had a safety belt usage rate 91.8 percent

**Historic
Commercial Vehicle Driver's Safety Belt Usage Rate
By MSHP Troop**
(Data for Restrained Driver Only)

MSHP	Freq 2004	% Belted	Freq 2005	% Belted	% of Change 04/05	Freq 2006	% Belted	% of Change 05/06	Freq 2007	% Belted	% of Change 06/07	Freq 2008	% Belted	% of Change 07/08	Freq 2010	% Belted	% of Change 08/10	Freq 2012	% Belted	% of Change 10/12
A	1,707	55.97	1,583	60.35	+ 4.38	1,976	66.82	+ 6.47	2,464	62.9	- 3.9	2,275	72.0	+ 9.1	3,135	79.0	+7.0	3,385	86.7	+ 7.7
B	132	59.73	132	60.27	+ 0.54	105	68.63	+ 6.36	146	78.1	+ 9.5	147	73.5	- 4.6	199	80.6	+7.1	196	75.4	- 5.2
C	2,215	52.08	2,599	67.30	+ 15.22	3,300	63.83	- 3.48	6,066	68.8	+ 5.0	6848	74.8	+6.0	5,332	84.4	+9.6	3,953	80.3	- 4.1
D	1,266	71.97	1,309	72.88	+ 0.91	1,437	72.72	- 0.16	1,364	76.8	+ 4.6	1,404	77.0	+0.2	1,473	82.8	+5.8	1,792	83.2	+ 0.4
E	773	49.17	775	51.43	+ 2.26	854	57.94	+ 6.51	934	59.5	+ 1.6	1,051	68.3	+8.8	1,092	72.0	+3.7	1,145	74.5	+ 2.5
F	1,459	72.12	1,061	74.56	+ 2.44	961	75.31	+ 0.75	1,276	72.1	- 3.2	1,373	70.3	- 1.8	1,529	77.0	+6.7	1,623	90.9	+ 13.9
G	78	60.47	123	74.55	+ 14.08	161	62.16	- 12.39	257	71.0	+ 8.8	303	79.5	+ 8.5	145	79.8	+0.3	141	62.7	- 17.1
H	656	59.42	613	56.86	- 2.56	804	63.96	+ 7.10	745	62.2	- 1.8	608	61.4	- 0.8	720	63.8	+2.4	849	74.0	+ 10.2
I	794	59.56	1,035	75.55	+ 15.99	888	61.07	- 14.48	1,350	66.5	+ 5.4	1,656	77.8	+ 11.3	1,589	90.9	+13.1	1,164	74.2	- 16.7
Total	9,080	58.79	9,230	65.73	+ 6.94	10,486	65.64	- 0.09	14,602	67.5	+ 1.9	16,165	73.4	+ 5.9	15,214	80.6	+7.2	14,548	81.5	+0.9

MSHP	Freq 2014	% Belted	% of Change 12/14
A	3,195	84.1	-2.6
B	160	68.1	-7.3
C	5,270	83.5	+3.2
D	1,562	72.9	-10.3
E	1,260	79.2	+4.7
F	1,544	86.8	-4.1
G	108	70.6	+7.9
H	962	74.1	-0.1
I	1,152	78.5	+4.3
Total	15,213	81.0	-0.5

Introduction

In November of 2003, the Federal Motor Carrier Safety Administration released a national study, "Safety Belt Usage by Commercial Motor Vehicle Drivers." A total of 3,909 observations were conducted in 12 states which resulted in an overall commercial vehicle safety belt use of 48 percent. Missouri was selected as one of the sample states for this survey. Surveys were conducted at seven locations in Missouri (Boone, Callaway, Cole, Cooper, Lafayette, and Saline counties) which resulted in 329 truck observations. Based upon this limited sample, Missouri's commercial vehicle safety belt usage rate was 50.0 percent.

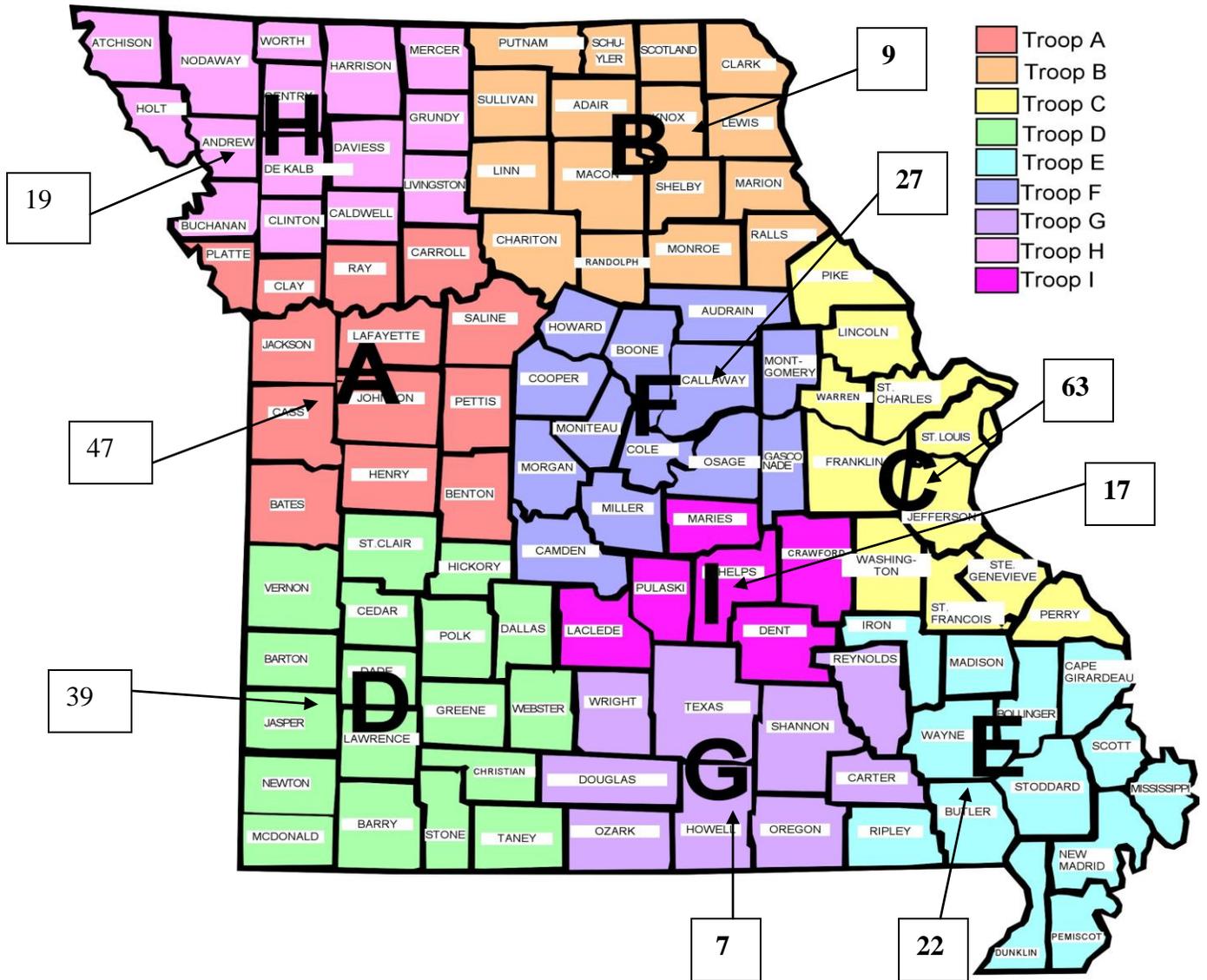
In 2004, the Missouri Safety Center was requested by the Highway Safety Division of the Missouri Department of Transportation to conduct a Commercial Vehicle Safety Belt Observational Survey. In preparation for the survey, meetings were held to outline the survey parameters, guiding principles and sampling procedures.

Five guiding principles identified through these collaborative meetings, served as the underlying basis for the sampling plan used in this study.

- The individual observation site would be the basic sample unit at which safety belt usage observations would be made.
- The safety belt usage rates of commercial vehicle drivers would be computed for each of the nine Missouri State Highway Patrol (MSHP) Troops.
- The number of sites selected from each of the Missouri State Highway Patrol troops would be in proportion to the commercial motor vehicle (CMV) daily vehicle miles of travel (DVMT) that troop has in comparison to the state total of 18,100,711 CMV DVMT.
- The location for each site in the nine MSHP Troops would be selected in proportion to the number of CMV DVMT for each of four roadway types; Freeway, Expressway, Two-lane and Other (Super 2 Lane, 5-Lane Section, 3-Lane Section, Multi-Lane, and One Way) that each troop has in comparison to the state total CMV DVMT of Freeway (10,216,308), Expressway (2,795,514), Two-lane (3,493,485) and Other (159,703).
- The sites within each troop would be selected in their descending order of CMV DVMT by roadway type to maximize the number of commercial vehicle drivers from each MSHP Troop.

The sampling procedure involved the development of a list of CMV DVMT by MSHP troop. Table 1 shows the total CMV DVMT by troop in descending order and the proportion that each troop has in comparison to the state-total of 18,100,711 CMV DVMT. The proportion of CMV DVMT that each troop has was then divided into 250 which is the total number of sites selected for the survey. Troop C had the highest number of sites, 67 and Troop G had the lowest, 7. The state of Missouri map shows the number of observation sites in the nine MSHP Troops.

For the 2014 survey, all the 2004 methodology was carried forward and used as the base line for future data collections.



**Number of Observation Sites
By MSHP Troops**

Methodology

Table 1
Percent of Daily CMV VMT by MSHP Troop
by Number of Observation Sites

<i>MSHP TROOP</i>	<i>CMV VMT Total</i>	<i>Percentage of Total CMV VMT</i>	<i>Total Number of Observation Sites</i>
<i>C</i>	4,666,704	25.55%	63
<i>A</i>	3,510,976	19.28%	47
<i>D</i>	2,735,803	15.66%	39
<i>F</i>	1,848,753	10.27%	27
<i>E</i>	1,605,545	8.80%	22
<i>H</i>	1,391,631	7.63%	19
<i>I</i>	1,216,495	6.65%	17
<i>B</i>	623,664	3.41%	9
<i>G</i>	501,141	2.75%	7
<i>Total</i>	18,100,711	100%	250

The specific number of observation sites from each MSHP troop was computed by multiplying the troops' percentages of the state's CMV DVMT by the total number of observation sites.

To identify the specific number of observation sites by roadway type for each troop, the number of observations for each troop was multiplied by the percentage of each roadway type's CMV DVMT in that troop. Tables 2-5 depicts the number of observation sites by troop for freeway, expressway, two-lane and other (Super 2 Lane, 5-Lane Section, 3-Lane Section, Multi-Lane, and One Way) roadway types.

Table 2
Percent of Observation Sites by MSHP Troop
by Freeway Roadway Type

MSHP TROOP	Total Number of Observation Sites	Total Number of Freeway CMV DVMT	Percent of Freeway CMV DVMT	Total Number of Freeway Sites
A	47	1,938,788	55%	26
B	9	3,171	0.005%	0
C	63	3,207,418	69%	43
D	39	1,288,821	47%	18
E	22	919,341	57%	12
F	27	956,412	52%	15
G	7	0	0%	0
H	19	945,203	68%	13
I	17	957,154	79%	14
Total	250	10,216,308	100.00%	141

Table 3
Percent of Observation Sites by Troop
by Expressway Roadway Type

MSHP TROOP	Total Number of Observation Sites	Total Number of Expressway CMV DVMT	Percent of Expressway CMV DVMT	Total Number of Expressway Sites
A	47	845,887	24%	11
B	9	193,188	31%	3
C	63	491,889	11%	7
D	39	472,208	17%	7
E	22	137,776	9%	2
F	27	366,351	20%	5
G	7	127,503	25%	2
H	19	150,946	11%	2
I	17	9,466	1%	0
Total	250	2,795,214	100.00%	39

Table 4
Percent of Observation Sites by Troop
by Two-Lane Roadway Type

MSHP TROOP	Total Number of Observation Sites	Total Number of Two-Lane CMV DVMT	Percent of Two-Lane CMV DVMT	Total Number of Two-Lane Sites
A	47	556,958	16%	8
B	9	410,297	66%	6
C	63	546,597	12%	8
D	39	588,871	22%	9
E	22	405,617	25%	6
F	27	388,411	21%	6
G	7	185,281	37%	2
H	19	249,582	18%	3
I	17	161,871	13%	2
Total	250	3,493,485	100.00%	50

Table 5
Percent of Observation Sites by Troop
by Other Roadway Type

MSHP TROOP	Total Number of Observation Sites	Total Number of Other CMV DVMT	Percent of Other CMV DVMT	Total Number of Other Sites
A	47	169,344	5%	2
B	9	17,007	3%	0
C	63	420,800	9%	5
D	39	385,902	14%	5
E	22	142,809	8%	1
F	27	137,580	7%	2
G	7	188,357	38%	3
H	19	45,900	3%	1
I	17	88,004	7%	1
Total	250	1,595,703	100.00%	20

The specific observational sites selected from each MSHP troop were determined by reviewing a state map that showed the total number of CMV DVMT on each state system roadway. In addition, MSHP Troop maps color-coded by roadway type; i.e. freeway, expressway, two-lane, and other, were also used in the selection process. See Attachment B. Observation sites for each troop were selected based upon the highest descending order of CMV DVMT on each roadway for each roadway type. The number of observation sites by troop, county, and roadway type is shown in Table 6.

Table 6
Observation Sites
by Troop, County and Roadway Type

County	Total # of Sites	Roadway Type			
		Freeway	Expressway	2 Lane	Other
MSHP Troop A					
Bates	2	0	2	0	0
Cass	3	0	3	0	0
Clay	7	7	0	0	0
Henry	2	0	1	1	0
Jackson	10	9	1	0	0
Johnson	2	0	1	1	0
Lafayette	7	3	3	0	1
Pettis	2	0	2	0	0
Platte	5	5	0	0	0
Ray	2	0	0	2	0
Saline	5	2	0	3	0
Total 11 Counties	47	26	13	7	1
MSHP Troop B					
Linn	3	0	1	2	0
Ralls	2	0	1	1	0
Randolph	3	0	1	2	0
Schuyler	1	0	1	0	0
Total 4 Counties	9	0	4	5	0

**Table 6
Continued**

County	Total # of Sites	Roadway Type			
		Freeway	Expressway	2 Lane	Other
MSHP Troop C					
Franklin	11	9	0	2	0
Jefferson	8	3	1	2	2
Lincoln	3	0	2	1	0
Perry	4	3	0	1	0
Pike	3	0	0	3	0
St. Charles	4	4	0	0	0
St. Francois	1	0	1	0	0
St. Louis	21	17	1	0	3
Ste. Genevieve	4	3	0	1	0
Warren	4	4	0	0	0
Total 10 Counties	63	43	5	10	5
MSHP Troop D					
Barry	1	0	0	1	0
Barton	1	0	1	0	0
Christian	3	1	1	0	1
Dallas	2	0	2	0	0
Greene	7	2	3	1	1
Jasper	4	2	2	0	0
Lawrence	6	2	1	2	1
McDonald	1	0	1	0	0
Newton	4	2	2	0	0
Polk	3	0	0	3	0
St. Clair	1	0	1	0	0
Taney	1	1	0	0	0
Vernon	1	1	0	0	0
Webster	4	2	1	1	0
Total 14 Counties	39	13	15	8	3

**Table 6
Continued**

County	Total # of Sites	Roadway Type			
		Freeway	Expressway	2 Lane	Other
MSHP Troop E					
Bollinger	1	0	0	1	0
Butler	1	0	1	0	0
Cape Girardeau	4	2	0	2	0
Dunklin	1	0	0	1	0
Mississippi	2	2	0	0	0
New Madrid	3	3	0	0	0
Pemiscot	3	3	0	0	0
Scott	4	2	0	1	1
Stoddard	2	0	1	1	0
Total 9 Counties	21	12	2	6	1
MSHP Troop F					
Audrain	2	0	1	1	0
Boone	7	4	1	1	1
Callaway	5	4	1	0	0
Camden	1	0	1	0	0
Cole	4	3	0	1	0
Cooper	2	2	0	0	0
Gasconade	1	0	0	1	0
Miller	1	0	1	0	0
Moniteau	1	0	0	1	0
Montgomery	2	2	0	0	0
Osage	1	0	0	0	1
Total 11 Counties	27	15	5	5	2
MSHP Troop G					
Howell	3	0	1	1	1
Oregon	2	0	0	1	1
Texas	2	0	1	0	1
Total 3 Counties	7	0	2	2	3

**Table 6
Continued**

County	Total # of Sites	Roadway Type			
		Freeway	Expressway	2 Lane	Other
MSHP Troop H					
Andrew	1	0	1	0	0
Atchison	2	2	0	0	0
Buchanan	5	3	1	0	1
Clinton	2	2	0	0	0
Daviess	2	2	0	0	0
DeKalb	1	0	0	1	0
Gentry	1	0	0	1	0
Harrison	2	2	0	0	0
Holt	2	2	0	0	0
Nodaway	1	0	0	1	0
Total 10 Counties	19	13	2	3	1
MSHP Troop I					
Crawford	4	3	0	1	0
Laclede	6	4	0	1	1
Phelps	4	3	0	1	0
Pulaski	3	3	0	0	0
Total 4 Counties	17	13	0	3	1

Two instruments were used to collect these data; Site Summary Form and a Vehicle/Driver Form (See Attachment C). The Site Summary Form identified the MSHP troop, county, site number, roadway type, day of week, direction of traffic flow, road condition and time of day. Data elements on the Vehicle/Driver Form included Vehicle Type 7 – Straight Frame (Van, Tanker, Dump truck, flat bed, bus and other, i.e. fire truck), Vehicle Type 8- Combination Vehicle (box trailer, single tanker, double trailer, flat trailer, car hauler, bobtail, dump and other i.e. large cement truck), driver’s restraint status, and if the vehicle was carrying hazardous materials.

The observations were held Monday, August 18 through Sunday, August 24, 2014. The observation period was 40 minutes in length and began at one of the following times: 8:00 am, 9:00 am, 10:00 am, 11:00 am, 12 noon, 1:00 pm, 2:00 pm, or 3:00 pm. Observational surveyors were identified and received written training instructions by mail (See Attachment D). One-hundred percent of the surveyors were experienced and had previously participated in safety belt observational surveys.

The majority of the observations, 99.5%, were conducted in dry weather. Twenty-seven percent of the observations were of the east direction of traffic flow, 26.4% from the west, with 23.8% and 22.5% from the north and south respectively. The percentage of observations by the time of day are: 8:00 am (10.5%), 9:00 am (15.9%), 10:00 am (17.8%), 11:00 am (13.4%), 12:00 noon (7.1%), 1:00 pm (15.2%), 2:00 pm (14.0%) and 3:00 pm (6.1%).

Key Findings

There were a total of 18,776 commercial vehicles observed. The frequency and percent of observations by Troop are located in Table 7.

Table 7
Frequency and Percent of Observations
By Troop

MSHP TROOP	Frequency of Observations	Percent of Observations
Troop A	3,799	20.2
Troop B	235	1.3
Troop C	6,310	33.6
Troop D	2,142	11.4
Troop E	1,592	8.5
Troop F	1,779	9.5
Troop G	153	0.8
Troop H	1,298	6.9
Troop I	1,468	7.8
TOTAL	18,776	100.0

Figure 1 shows the safety belt use by Driver for CMV and non-commercial vehicles. The commercial vehicle driver's usage rate, 81.0 percent, is 2.2 percent higher than the 2014 passenger vehicle safety belt usage rate of 78.8 percent on Missouri roadways.

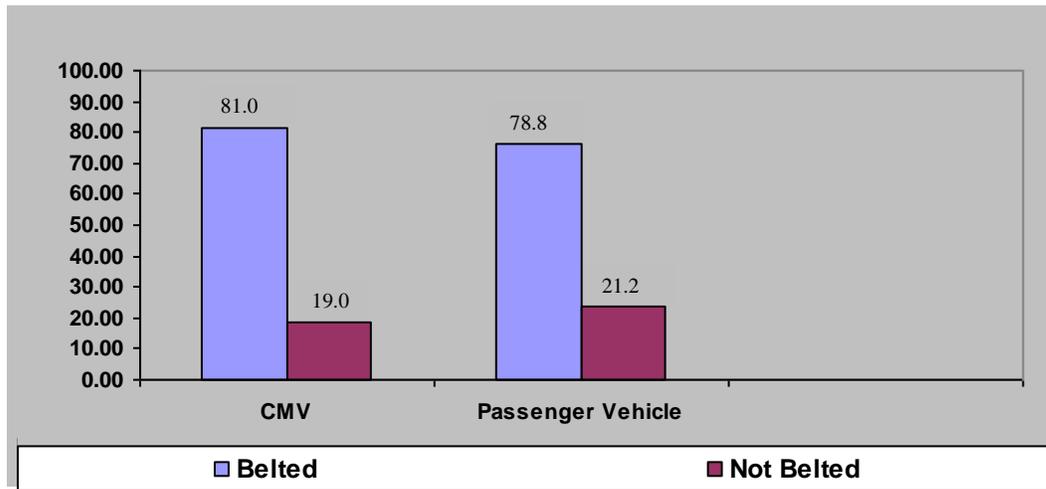


Figure 1: Safety Belt Use Rate for CMV Drivers and Passenger Vehicle Occupants

The commercial vehicle driver's safety belt use by MSHP Troop is depicted in Table 8. MSHP Troops F and A had the highest safety belt usage rates of 86.8 and 84.1 respectively. The lowest safety belt usage rates were in Troops B and G with 68.1 and 70.6 percent respectively.

There were 250 observation sites located in 76 counties in the nine MSHP Troops. In Troop A the safety belt usage rate ranged from 93.1 to 77.1 percent, Troop B from 76.6 to 56.6 percent, Troop C from 93.8 to 73.8 percent, Troop D from 91.7 to 42.9 percent, Troop E from 82.4 to 63.6 percent, Troop F from 97.7 to 30.4 percent, Troop G from 80.0 to 58.1 percent, Troop H from 79.0 to 50.0 percent and Troop I from 87.5 to 72.3 percent. The commercial vehicle driver's safety belt use by Troop by county is located in Table 9.

Table 8
Commercial Vehicle Driver's Safety Belt Use
By MSHP Troop

Drivers Safety Belt Use by MSHP Troop				
MSHP TROOP	Restrained		Not Restrained	
	Frequency	Percent	Frequency	Percent
A	3,195	84.1	604	15.9
B	160	68.1	75	31.9
C	5,270	83.5	1,040	16.5
D	1,562	72.9	580	27.1
E	1,260	79.2	332	20.8
F	1,544	86.8	235	13.2
G	108	70.6	45	29.4
H	962	74.1	336	21.9
I	1,152	78.5	316	21.5
TOTAL: Total Observations: 18,776	15,213	81.0	3,563	19.0

Table 9
Commercial Vehicle Driver's Safety Belt Use
by MSHP Troop by County

County	Restrained		Not Restrained	
	Frequency	Percent	Frequency	Percent
Troop A				
Bates	122	80.3	30	19.7
Cass	226	93.0	17	7.0
Clay	735	81.5	167	18.5
Henry	22	88.0	3	12.0
Jackson	936	83.5	185	16.5
Johnson	15	83.3	3	16.7
Lafayette	352	93.1	26	6.9
Pettis	14	87.5	2	12.5
Platte	418	77.1	124	22.9
Ray	26	83.9	5	16.1
Saline	329	88.7	42	11.3
Troop B				
Linn	32	68.1	15	31.9
Ralls	85	76.6	26	23.4
Randolph	43	56.6	33	43.4
Schuyler	0	0	1	100.0
Troop C				
Franklin	1,216	93.8	80	6.2
Jefferson	402	79.6	103	20.4
Lincoln	104	73.8	37	26.2
Perry	377	92.6	30	7.4
Pike	71	76.3	22	23.7
St. Charles	591	74.7	200	25.3
St. Francois	42	80.8	10	19.2
St. Louis	1,766	82.4	378	17.6
Ste. Genevieve	291	86.4	46	13.6
Warren	410	75.4	134	24.6
Troop D				
Barry	6	42.9	8	57.1
Barton	23	63.9	13	36.1
Christian	58	58.0	42	42.0
Dallas	28	51.9	26	48.1
Greene	334	70.9	137	29.1
Jasper	189	72.1	73	27.9
Lawrence	245	73.1	90	26.9
McDonald	36	83.7	7	16.3
Newton	299	77.9	85	22.1

County	Restrained		Not Restrained	
	Frequency	Percent	Frequency	Percent
Troop D (con't)				
Polk	110	91.7	10	8.3
St. Clair	10	83.3	2	16.7
Taney	4	80.0	1	20.0
Vernon	26	74.3	9	25.7
Webster	194	71.6	77	28.4
Troop E				
Bollinger	11	78.6	3	21.4
Butler	25	67.6	12	32.4
Cape Girardeau	190	78.8	51	21.2
Dunklin	7	63.6	4	36.4
Mississippi	172	79.6	44	20.4
New Madrid	299	78.3	83	21.7
Pemiscot	328	82.4	70	17.6
Scott	205	78.5	56	21.5
Stoddard	23	71.9	9	28.1
Troop F				
Audrain	14	30.4	32	69.6
Boone	490	88.9	61	11.1
Callaway	391	89.1	48	10.9
Camden	15	60.0	10	40.0
Cole	97	82.2	21	17.8
Cooper	272	89.8	31	10.2
Gasconade	3	25.0	9	75.0
Miller	31	88.6	4	11.4
Moniteau	9	56.3	7	43.7
Montgomery	213	97.7	5	2.29
Osage	9	56.3	7	43.7
Troop G				
Howell	36	58.1	26	41.9
Oregon	8	80.0	2	20.0
Texas	64	79.0	17	21.0

County	Restrained		Not Restrained	
	Frequency	Percent	Frequency	Percent
Troop H				
Andrew	13	65.0	7	35.0
Atchison	139	67.8	66	32.2
Buchanan	339	79.0	90	21.0
Clinton	182	78.5	50	21.5
Daviess	80	72.7	30	27.3
DeKalb	3	60.0	2	40.0
Gentry	2	50.0	2	50.0
Harrison	56	70.9	23	29.1
Holt	135	69.6	59	30.4
Nodaway	13	65.0	7	35.0
Troop I				
Crawford	234	79.1	62	20.9
Laclede	331	72.3	127	27.7
Phelps	301	87.5	43	12.5
Pulaski	286	77.3	84	22.7
Total 76 Counties	15,213	81.0	3,563	19.0

Figure 2 shows the commercial vehicle driver's safety belt use by roadway type. Commercial motor vehicle drivers' on "Freeway" roadway type had the highest usage at 82.0 percent and CMV drivers' on "Two-Lane" roads was the lowest at 72.4 percent.

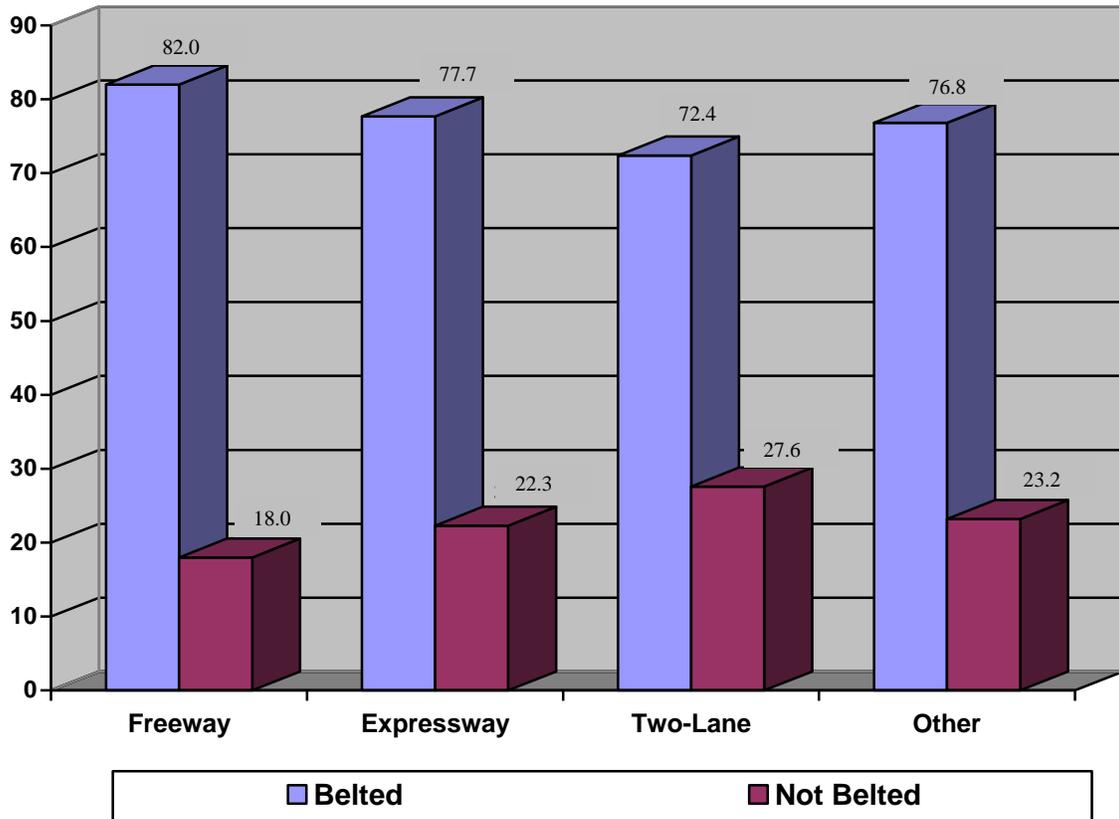


Figure 2: Percent of Commercial Vehicle Driver's Safety Belt Use by Roadway Type

Table 10 shows the frequency of restrained and not restrained commercial motor vehicle drivers and their corresponding safety belt usage rate by MSHP Troop by county by roadway type. Of the 250 observational sites, 83.7 percent were on "Freeways", 9.8 percent were on "Expressways", 4.1 percent were on "Two-lane" roadways and 2.4 percent were on "Other" roadways.

Table 10
Commercial Vehicle Driver's Safety Belt Use
by MSHP Troop by County by Roadway Type

County	Freeway				Expressway				Two-Lane				Other			
	Restrained		Not Restrained		Restrained		Not Restrained		Restrained		Not Restrained		Restrained		Not Restrained	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Troop A																
Bates	0	0	0	0	122	80.3	30	19.7	0	0	0	0	0	0	0	0
Cass	0	0	0	0	226	93.0	17	7.0	0	0	0	0	0	0	0	0
Clay	735	81.5	167	18.5	0	0	0	0	0	0	0	0	0	0	0	0
Henry	0	0	0	0	19	86.4	3	13.6	3	100.0	0	0	0	0	0	0
Jackson	893	83.2	180	16.8	43	89.6	5	10.4	0	0	0	0	0	0	0	0
Johnson	0	0	0	0	11	91.7	1	8.3	4	66.7	2	33.3	0	0	0	0
Lafayette	288	94.1	18	5.9	48	87.3	7	12.7	0	0	0	0	16	94.1	1	5.9
Pettis	0	0	0	0	14	87.5	2	12.5	0	0	0	0	0	0	0	0
Platte	418	77.1	124	22.9	0	0	0	0	0	0	0	0	0	0	0	0
Ray	0	0	0	0	0	0	0	0	26	83.9	5	16.1	0	0	0	0
Saline	278	90.6	29	9.4	0	0	0	0	51	79.7	13	20.3	0	0	0	0
Troop B																
Linn	0	0	0	0	27	71.1	11	28.9	5	55.6	4	44.4	0	0	0	0
Ralls	0	0	0	0	48	77.4	14	22.6	37	75.5	12	24.5	0	0	0	0
Randolph	0	0	0	0	13	48.2	14	51.8	30	61.2	19	38.8	0	0	0	0
Schuyler	0	0	0	0	0	0	1	100.0	0	0	0	0	0	0	0	0

County	Freeway				Expressway				Two-Lane				Other			
	Restrained		Not Restrained		Restrained		Not Restrained		Restrained		Not Restrained		Restrained		Not Restrained	
	Freq.	%	Freq.	%												
Troop C																
Franklin	1,213	93.9	79	6.1	0	0	0	0	3	75.0	1	25.0	0	0	0	0
Jefferson	339	80.5	82	19.5	13	68.4	6	31.6	14	82.4	3	17.6	36	75.0	12	25.0
Lincoln	0	0	0	0	96	75.0	32	25.0	8	61.5	5	38.5	0	0	0	0
Perry	351	93.4	25	6.6	0	0	0	0	26	83.9	5	16.1	0	0	0	0
Pike	0	0	0	0	0	0	0	0	71	76.3	22	23.7	0	0	0	0
St. Charles	591	74.7	200	25.3	0	0	0	0	0	0	0	0	0	0	0	0
St. Francois	0	0	0	0	42	80.8	10	19.2	0	0	0	0	0	0	0	0
St. Louis	1,567	82.4	335	17.6	12	75.0	4	25.0	0	0	0	0	187	82.7	39	17.3
Ste. Genevieve	277	87.4	40	12.6	0	0	0	0	14	70.0	6	30.0	0	0	0	0
Warren	410	75.4	134	24.6	0	0	0	0	0	0	0	0	0	0	0	0
Troop D																
Barry	0	0	0	0	0	0	0	0	6	42.9	8	57.1	0	0	0	0
Barton	0	0	0	0	23	63.9	13	36.1	0	0	0	0	0	0	0	0
Christian	17	58.6	12	41.4	32	59.3	22	40.7	0	0	0	0	9	52.9	8	47.1
Dallas	0	0	0	0	28	51.9	26	48.1	0	0	0	0	0	0	0	0
Greene	163	64.7	89	35.3	149	77.6	43	22.4	22	84.6	4	15.4	0	0	1	100.0
Jasper	131	70.1	56	29.9	58	77.3	17	22.7	0	0	0	0	0	0	0	0
Lawrence	207	72.9	77	27.1	9	60.0	6	40.0	17	77.3	5	22.7	12	85.7	2	14.3
McDonald	0	0	0	0	36	83.7	7	16.3	0	0	0	0	0	0	0	0
Newton	214	76.2	67	23.8	85	82.5	18	17.5	0	0	0	0	0	0	0	0
Polk	0	0	0	0	0	0	0	0	110	91.7	10	8.3	0	0	0	0
St. Clair	0	0	0	0	10	83.3	2	16.7	0	0	0	0	0	0	0	0
Taney	4	80.0	1	20.0	0	0	0	0	0	0	0	0	0	0	0	0
Vernon	26	74.3	9	25.7	0	0	0	0	0	0	0	0	0	0	0	0
Webster	175	72.9	65	27.1	13	68.4	6	31.6	6	50.0	6	50.0	0	0	0	0

County	Freeway				Expressway				Two-Lane				Other			
	Restrained		Not Restrained		Restrained		Not Restrained		Restrained		Not Restrained		Restrained		Not Restrained	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Troop E																
Bollinger	0	0	0	0	0	0	0	0	11	78.6	3	21.4	0	0	0	0
Butler	0	0	0	0	25	67.6	12	32.4	0	0	0	0	0	0	0	0
Cape Girardeau	178	79.1	47	20.9	0	0	0	0	12	75.0	4	25.0	0	0	0	0
Dunklin	0	0	0	0	0	0	0	0	7	63.6	4	36.4	0	0	0	0
Mississippi	172	79.6	44	20.4	0	0	0	0	0	0	0	0	0	0	0	0
New Madrid	299	78.3	83	21.7	0	0	0	0	0	0	0	0	0	0	0	0
Pemiscot	328	82.4	70	17.6	0	0	0	0	0	0	0	0	0	0	0	0
Scott	178	79.5	46	20.5	0	0	0	0	8	80.0	2	20.0	19	70.4	8	29.6
Stoddard	0	0	0	0	13	72.2	5	27.8	10	71.4	4	28.6	0	0	0	0
Troop F																
Audrain	0	0	0	0	7	43.8	9	56.2	7	23.3	23	76.7	0	0	0	0
Boone	449	89.4	53	10.6	33	84.6	6	15.4	4	100.0	0	0	4	66.7	2	33.3
Callaway	366	89.9	41	10.1	25	78.1	7	21.9	0	0	0	0	0	0	0	0
Camden	0	0	0	0	15	60.0	10	40.0	0	0	0	0	0	0	0	0
Cole	97	82.9	20	17.1	0	0	0	0	0	0	1	100.0	0	0	0	0
Cooper	272	89.8	31	10.2	0	0	0	0	0	0	0	0	0	0	0	0
Gasconade	0	0	0	0	0	0	0	0	3	25.0	9	75.0	0	0	0	0
Miller	0	0	0	0	31	88.6	4	11.4	0	0	0	0	0	0	0	0
Moniteau	0	0	0	0	0	0	0	0	9	56.3	7	43.7	0	0	0	0
Montgomery	213	97.7	5	2.3	0	0	0	0	0	0	0	0	0	0	0	0
Osage	0	0	0	0	0	0	0	0	0	0	0	0	9	56.3	7	43.7

County	Freeway				Expressway				Two-Lane				Other			
	Restrained		Not Restrained		Restrained		Not Restrained		Restrained		Not Restrained		Restrained		Not Restrained	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Troop G																
Howell	1	25.0	3	75.0	24	66.7	12	33.3	0	0	0	0	11	50.0	11	50.0
Oregon	0	0	0	0	0	0	0	0	5	83.3	1	16.7	3	75.0	1	25.0
Texas	0	0	0	0	41	77.4	12	22.6	0	0	0	0	23	82.1	5	17.9
Troop H																
Andrew	0	0	0	0	13	65.0	7	35.0	0	0	0	0	0	0	0	0
Atchison	139	67.8	66	32.2	0	0	0	0	0	0	0	0	0	0	0	0
Buchanan	296	80.2	73	19.8	25	71.4	10	28.6	0	0	0	0	18	72.0	7	28.0
Clinton	182	78.5	50	21.5	0	0	0	0	0	0	0	0	0	0	0	0
Daviess	80	72.7	30	27.3	0	0	0	0	0	0	0	0	0	0	0	0
DeKalb	0	0	0	0	0	0	0	0	3	60.0	2	40.0	0	0	0	0
Gentry	0	0	0	0	0	0	0	0	2	50.0	2	50.0	0	0	0	0
Harrison	56	70.9	23	29.1	0	0	0	0	0	0	0	0	0	0	0	0
Holt	135	69.6	59	30.4	0	0	0	0	0	0	0	0	0	0	0	0
Nodaway	0	0	0	0	0	0	0	0	13	65.0	7	35.0	0	0	0	0
Troop I																
Crawford	223	79.6	57	20.4	0	0	0	0	11	68.8	5	31.2	0	0	0	0
Laclede	330	73.3	120	26.7	0	0	0	0	0	0	6	100.0	1	50.0	1	50.0
Phelps	298	87.7	42	12.3	0	0	0	0	3	75.0	1	25.0	0	0	0	0
Pulaski	286	77.3	84	22.7	0	0	0	0	0	0	0	0	0	0	0	0
Total 76 Counties	12,874	82.0	2,833	18.0	1,429	77.7	411	22.3	562	72.4	214	27.6	348	76.8	105	23.2

Table 11 and 12 depicts the commercial vehicle driver's safety belt use by type of vehicle. Type 7 vehicles generally had six or more tires and a straight frame and Type 8 vehicles had 10 or more tires and were combination vehicles. The commercial vehicle driver's safety belt use was lower for the Type 7 vehicles (71.8%) than for Type 8 vehicles (83.1%). Among the Type 7 vehicles, tanker drivers had the highest safety belt use whereas dump truck drivers had the lowest with 86.1 and 54.4 percent respectively. The Type 8 double trailer drivers' safety belt use was 90.6 percent while the Type 8 dump drivers' had only a 56.8 percent safety belt usage rate.

Table 11
CMV Driver's Safety Belt Use
By Vehicle – Type 7

Vehicle Type 7 Straight Frame	Restrained		Not Restrained	
	Frequency	Percent	Frequency	Percent
Van	1,209	75.0	404	25.0
Tanker	99	86.1	16	13.9
Dump	174	54.4	146	45.6
Flat Bed	342	65.3	182	34.7
Bus	293	84.9	52	15.1
Other	364	67.7	174	32.3
Total	2,481	71.8	974	28.2

Table 12
CMV Driver's Safety Belt Use
By Vehicle – Type 8

Vehicle Type 8 Combination Vehicle	Restrained		Not Restrained	
	Frequency	Percent	Frequency	Percent
Box Trailer	8,695	84.9	1,553	15.1
Single Tanker	981	87.3	143	12.7
Double Trailer	685	90.6	71	9.4
Flat Trailer	1,498	79.0	398	21.0
Car Hauler	187	78.9	50	21.1
Bobtail	219	79.6	56	20.4
Dump	332	56.8	253	43.2
Other	135	67.5	65	32.5
Total	12,732	83.1	2,589	16.9

There were 804 vehicles with hazardous material placards. Of those commercial vehicle drivers, 91.8 (738) percent were wearing safety belts. These results are displayed in Figure 3.

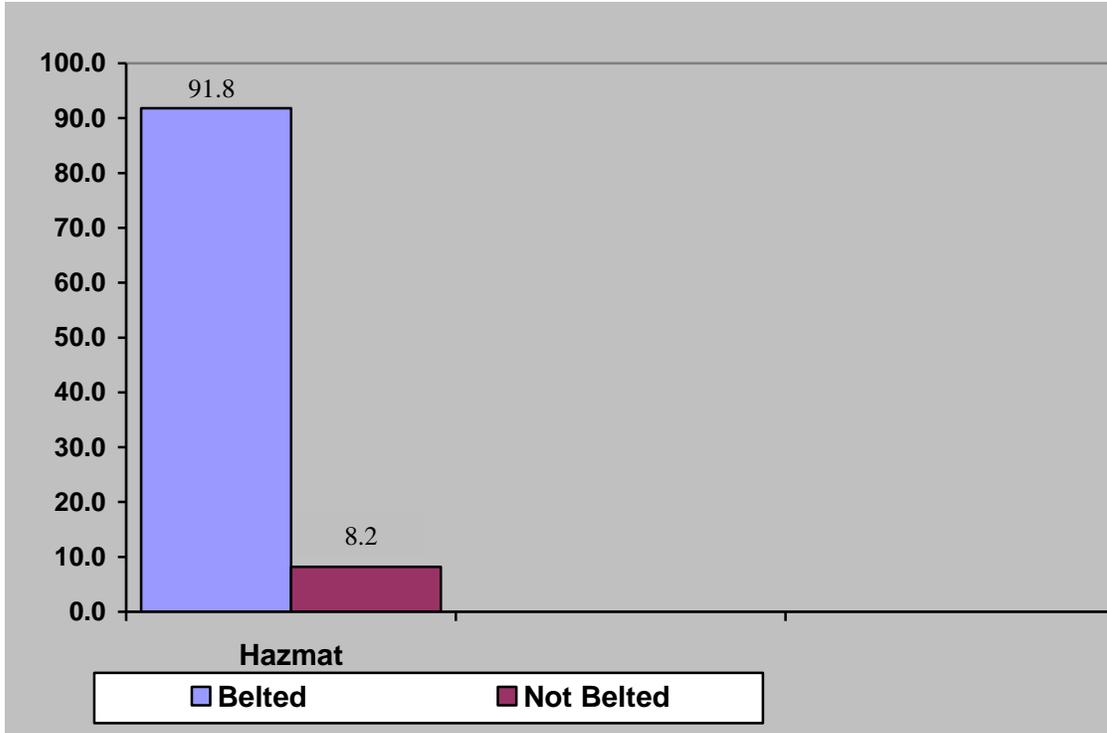
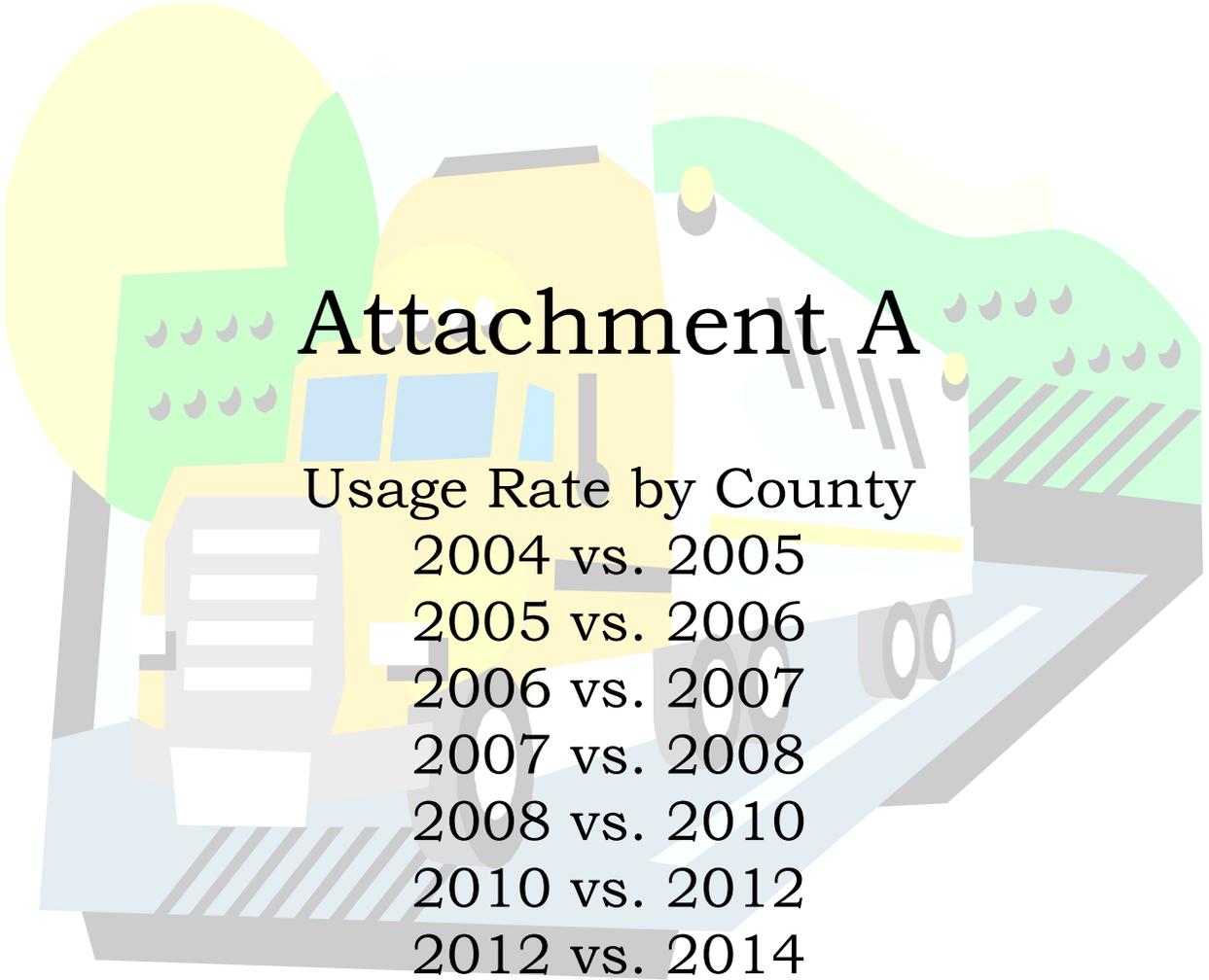


Figure 3: Safety Belt Use Rate for Commercial Drivers' of Vehicles with Hazardous Material Placards



Attachment A

Usage Rate by County

2004 vs. 2005

2005 vs. 2006

2006 vs. 2007

2007 vs. 2008

2008 vs. 2010

2010 vs. 2012

2012 vs. 2014

Attachment A

Please note the percentage change between 2005, 2006, 2007, 2008, 2010, 2012 and 2014 may be somewhat misleading in counties where the sampling was small. Data collections from larger frequency bases are more reflective of indicated change.

Commercial Vehicle Driver's Safety Belt Usage Rate By MSHP Troop by County by Year of Survey

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change
	Freq	%	Freq	%		Freq	%		Freq	%		Freq	%		Freq	%		Freq	%	
Troop A																				
Bates	31	46.3	42	55.3	+ 9.0	46	61.3	+6.1	72	69.2	+7.9	63	75.9	+6.7	93	83.0	+7.1	188	93.1	+10.1
Cass	81	72.3	82	56.5	- 15.8	119	76.8	+20.3	115	73.7	-3.1	110	76.4	+2.7	128	83.1	+6.7	293	88.0	+4.9
Clay	494	50.8	472	61.2	+ 10.4	415	58.7	-2.5	505	66.7	+8.0	498	71.2	+4.5	532	71.3	+0.1	626	80.2	+8.9
Henry	35	62.5	22	84.6	+ 22.1	23	76.7	-7.9	26	70.3	-6.4	33	86.8	+16.5	34	85.0	-1.8	34	91.9	+6.9
Jackson	355	52.7	337	52.7	0	446	65.0	+12.3	523	61.1	-3.9	696	68.7	+7.6	887	85.1	+16.4	1,149	93.6	+8.5
Johnson	28	63.6	6	66.7	+ 3.1	9	60.0	-6.7	20	80.0	+20.0	25	78.1	-1.9	17	58.6	-19.5	16	72.7	+14.1
Lafayette	268	73.6	185	78.7	+ 5.1	292	81.6	+2.9	350	69.2	-12.4	533	79.3	+10.1	549	87.4	+8.1	564	92.0	+4.6
Pettis	28	59.6	9	90.0	+ 30.4	18	85.7	-4.3	14	60.9	-24.8	26	86.7	+25.8	26	78.8	-7.9	19	90.5	+11.7
Platte	159	43.0	177	42.7	- 0.3	246	52.1	+9.4	514	50.5	-1.6	320	55.7	+5.2	375	62.0	+6.3	409	70.0	+8.0
Ray	11	61.1	9	47.4	- 13.7	15	51.7	+4.3	7	43.8	-7.9	16	50.0	+6.2	16	57.1	+7.1	30	83.3	+26.2
Saline	217	66.6	242	87.4	+ 20.8	347	84.8	-2.6	318	75.5	-9.1	455	84.4	+8.9	478	86.6	+2.2	357	90.4	+3.8
Total	1,707	56.0	1,583	60.4	+ 4.4	1,976	66.8	+6.4	2,464	62.9	-3.9	2,775	72.0	+9.1	3,135	79.0	+7.0	3,685	86.7	+7.7

County	Restrained 2014		% Change
	Freq	%	
Troop A			
Bates	122	80.3	-12.8
Cass	226	93.0	+5.0
Clay	735	81.5	+1.3
Henry	22	88.0	-3.9
Jackson	936	83.5	-10.1
Johnson	15	83.3	+10.6
Lafayette	352	93.1	+1.1
Pettis	14	87.5	-3.0
Platte	418	77.1	+7.1
Ray	26	83.9	+0.6
Saline	329	88.7	-1.7
Total	3,195	84.1	-2.6

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change
	Freq	%	Freq	%		Freq	%		Freq	%		Freq	%		Freq	%		Freq	%	
Troop B																				
Linn	40	52.6	23	52.3	-0.36	29	82.9	+30.6	28	82.4	-0.5	32	82.1	-0.3	44	84.6	+2.5	21	60.0	-24.6
Ralls	44	68.8	62	64.6	-4.17	38	67.9	+3.3	61	76.3	+8.4	62	64.6	-11.7	98	81.7	+17.1	111	83.5	+1.8
Randolph	44	58.7	44	60.3	+1.6	36	63.2	+2.9	56	78.9	+15.7	48	85.7	+6.8	55	77.5	-8.2	51	57.1	-20.4
Schuyler	4	66.7	3	50.0	-16.7	2	40.0	-10.0	1	50.0	+10.0	5	55.6	+5.6	2	50.0	-5.6	13	81.3	+31.3
Total	132	59.7	132	60.3	+0.54	105	68.7	+8.4	146	78.1	+9.5	147	73.5	-4.6	199	80.6	+7.1	196	75.4	-5.2

County	Restrained 2014		% Change
	Freq	%	
Troop B			
Linn	32	68.1	+8.1
Ralls	85	76.6	-6.9
Randolph	43	56.6	-0.5
Schuyler	0	0	-81.3
Total	160	68.1	-7.3

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change
	Freq	%	Freq	%		Freq	%		Freq	%		Freq	%		Freq	%		Freq	%	
Troop C																				
Franklin	183	71.6	254	66.2	-5.3	311	55.8	-10.3	938	66.5	+10.7	1,134	76.4	+9.9	747	85.2	+8.8	825	80.3	-4.9
Jefferson	176	50.3	148	69.8	+19.5	257	64.1	-5.7	482	77.9	+13.8	699	70.3	-7.6	253	72.5	+2.2	380	92.7	+20.2
Lincoln	65	54.6	70	57.9	+3.2	80	55.6	-2.3	236	71.1	+15.5	112	66.3	-4.8	247	80.5	+14.2	124	87.3	+6.8
Perry	148	44.2	197	75.5	+31.3	236	79.2	+3.7	255	83.1	+3.9	285	95.3	+12.2	282	93.1	-2.2	328	80.8	-12.3
Pike	81	45.8	91	47.6	+1.9	112	57.1	+9.5	288	72.2	+15.1	51	73.9	+1.7	116	81.7	+7.8	106	91.4	+9.7
St. Charles	222	60.7	232	52.1	-8.5	390	65.6	+13.4	550	63.9	-1.7	404	64.0	+0.1	834	87.0	+23.0	342	68.7	-18.3
St. Francois	15	32.6	19	51.4	+18.7	29	64.4	+13.1	50	84.8	+20.4	48	87.3	+2.5	35	87.5	+0.2	63	84.0	-3.5
St. Louis	984	47.3	1,194	69.7	+22.4	1,478	63.0	-6.7	2,616	65.5	+2.5	3,571	75.0	+9.5	1,972	83.0	+8.0	1,044	74.2	-8.8
Ste. Genevieve	190	58.3	212	77.7	+19.4	224	73.2	-4.5	232	87.2	+14.0	304	95.6	+8.4	225	87.9	-7.7	331	86.2	-1.7
Warren	151	75.9	182	80.5	+4.7	183	64.7	-15.9	419	73.6	+8.9	240	63.2	-10.4	621	87.6	+24.4	410	89.9	+2.3
Total	2,215	52.1	2,599	67.3	+15.2	3,300	63.8	-3.5	6,066	68.8	+5.0	6,848	74.7	+5.9	5,332	84.4	+9.7	3,953	80.3	-4.1

County	Restrained 2014		% Change
	Freq	%	
Troop C			
Franklin	1,216	938	+13.5
Jefferson	402	79.6	-13.1
Lincoln	104	73.8	-13.5
Perry	377	92.6	+11.8
Pike	71	76.3	-15.1
St. Charles	591	74.7	+6.0
St. Francois	42	80.8	-3.2
St. Louis	1,766	82.4	+8.2
Ste. Genevieve	291	86.4	+0.2
Warren	410	75.4	-14.4
Total	5,270	83.5	+3.2

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change
	Freq	%	Freq	%		Freq	%		Freq	%		Freq	%		Freq	%		Freq	%	
Troop D																				
Barry	13	52.0	19	63.3	+ 11.3	17	48.6	-14.8	13	68.4	+19.8	16	51.6	-16.8	17	89.5	+37.9	10	66.7	-22.8
Barton	20	87.0	32	91.4	+ 4.5	28	93.3	+1.9	20	74.1	-19.2	12	75.0	+0.9	42	100.0	+25.0	33	89.2	-10.8
Christian	42	56.0	34	42.0	- 14.0	31	38.8	-3.2	81	75.7	+37.0	54	67.5	-8.2	45	64.3	-3.2	128	92.8	+28.5
Dallas	20	66.7	38	63.3	- 3.3	102	85.0	+21.7	24	46.2	-38.8	32	57.1	+10.9	46	79.3	+22.2	58	68.2	-11.1
Greene	287	65.5	258	56.6	- 9.0	255	52.2	-4.4	335	72.4	+20.3	282	64.7	-7.7	285	71.3	+6.6	439	88.3	+17.0
Jasper	180	88.7	246	91.5	+ 2.8	268	91.8	+0.3	143	80.3	-11.5	136	78.6	-1.7	192	83.8	+5.2	201	81.4	-2.4
Lawrence	178	82.8	182	86.3	+ 3.5	189	87.1	+0.8	184	87.6	+0.5	169	84.5	-3.1	183	87.1	+2.6	248	80.8	-6.3
McDonald	15	79.0	25	83.3	+ 4.4	36	97.3	+14.0	29	96.7	-0.6	36	85.7	-11.0	27	90.0	+4.3	26	81.3	-8.7
Newton	243	85.0	203	83.8	- 1.1	213	87.3	+3.5	229	89.8	+2.5	241	91.6	+1.8	213	97.7	+6.1	257	79.1	-18.6
Polk	54	52.4	71	73.2	+ 20.8	72	64.9	-8.3	76	71.1	+6.8	57	60.0	-11.1	71	78.0	+18.0	91	81.3	+3.3
St. Clair	3	37.5	2	33.3	- 4.2	3	37.5	+4.2	7	35.0	-2.5	1	20.0	-15.0	7	63.6	+43.6	12	80.0	+16.4
Taney	2	50.0	7	77.8	+ 27.8	1	14.3	-63.5	2	66.7	+52.4	2	33.3	-33.4	4	50.0	+16.7	5	62.5	+12.5
Vernon	23	92.0	27	100.0	+ 8.0	22	84.6	-15.4	17	73.9	-10.7	16	84.2	+10.3	12	80.0	-4.2	27	87.1	+7.1
Webster	186	61.0	165	67.9	+ 6.9	200	71.4	+3.5	203	71.7	+0.3	350	87.1	+15.4	329	86.8	-0.3	257	84.5	-2.3
Total	1,266	72.0	1,309	72.9	+ 0.9	1,437	72.7	-0.2	1,364	76.8	+4.1	1,404	77.0	+0.2	1,473	82.8	+5.8	1,792	83.2	+0.4

County	Restrained 2014		% Change
	Freq	%	
Troop D			
Barry	6	42.9	-23.8
Barton	23	63.9	-25.3
Christian	58	58.0	-34.8
Dallas	28	51.9	-16.3
Greene	334	70.9	-17.4
Jasper	189	72.1	-9.3
Lawrence	245	73.1	-7.7
McDonald	36	83.7	+2.4
Newton	299	77.9	-1.2
Polk	110	91.7	+10.4
St. Clair	10	83.3	+3.3
Taney	4	80.0	+17.5
Vernon	26	74.3	-12.8
Webster	194	71.6	-12.9
Total	1,562	72.9	-10.3

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change
	Freq	%	Freq	%																
Troop E																				
Bollinger	7	31.8	4	33.3	+1.5	9	52.9	+19.6	9	50.0	-2.9	8	57.1	+7.1	10	62.5	+5.4	12	63.2	+0.7
Butler	18	36.0	13	28.3	-7.7	13	36.1	+7.9	20	45.5	+9.4	22	53.7	+8.2	22	56.4	+2.7	26	59.1	+2.7
Cape Girardeau	124	49.8	106	47.3	-2.5	119	60.1	+12.8	143	56.5	-3.6	181	68.8	+12.3	155	68.3	-0.5	180	74.7	+6.4
Dunklin	7	36.8	4	28.6	-8.3	2	28.6	0.0	3	27.3	-1.3	1	14.3	-13.0	5	62.5	+48.2	7	58.3	-4.2
Mississippi	105	54.7	111	56.9	+2.2	122	64.2	+7.3	116	63.0	-1.2	140	71.8	+8.8	150	75.8	+4.0	150	77.3	+1.5
New Madrid	183	49.9	205	56.6	+6.8	217	60.3	+3.7	222	62.0	+1.7	240	69.0	+7.0	273	72.4	+3.4	265	73.4	+1.0
Pemiscot	193	55.6	199	57.9	+2.2	209	57.3	-0.6	233	63.0	+5.7	288	73.1	+10.1	286	77.1	+4.0	287	75.3	-1.8
Scott	121	44.5	119	44.7	+0.3	148	55.9	+11.1	165	57.7	+1.9	156	63.2	+5.5	171	69.0	+5.8	194	78.5	+9.5
Stoddard	15	27.8	14	31.8	+4.0	15	41.7	+9.9	23	51.1	+9.4	15	51.7	+0.6	20	62.5	+10.8	24	63.2	+0.7
Total	773	49.2	775	51.4	+2.3	854	57.9	+6.5	934	59.5	+1.6	1,051	68.3	+8.8	1,092	72.0	+3.7	1,145	74.5	+2.5

County	Restrained 2014		% Change
	Freq	%	
Troop E			
Bollinger	11	78.6	+15.2
Butler	25	67.6	+8.5
Cape Girardeau	190	78.8	+4.1
Dunklin	7	63.6	+5.3
Mississippi	172	79.6	+2.3
New Madrid	299	78.3	+4.9
Pemiscot	328	82.4	+7.1
Scott	205	78.5	0.0
Stoddard	23	71.9	+8.7
Total	1,260	79.2	+4.7

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change
	Freq	%	Freq	%		Freq	%		Freq	%		Freq	%		Freq	%		Freq	%	
Troop F																				
Audrain	18	37.5	24	52.2	+ 14.7	18	41.9	-10.3	21	46.7	+4.8	18	69.2	+22.5	29	56.9	-12.3	27	69.2	+12.3
Boone	519	80.4	445	85.4	+ 5.1	348	85.7	+0.3	451	80.5	-5.2	333	74.3	-6.2	500	83.9	+9.6	541	94.9	+11.0
Callaway	397	63.5	215	69.4	+ 5.8	222	71.2	+1.8	385	70.0	-1.2	460	67.9	-2.1	472	67.9	0.0	487	88.2	+20.3
Camden	13	28.9	22	38.6	+ 9.7	39	52.7	+14.1	22	34.4	-18.3	22	50.0	+15.6	12	60.0	+10.0	23	74.2	+14.2
Cole	52	41.9	70	59.3	+ 17.4	67	55.8	-3.5	81	60.9	+5.1	83	73.5	+12.6	67	69.8	-3.7	81	77.1	+7.3
Cooper	261	92.2	167	86.5	- 5.7	140	94.6	+8.1	155	77.5	-17.1	224	75.7	-1.8	207	83.5	+7.8	204	96.2	+12.7
Gasconade	3	60.0	3	50.0	- 10.0	6	60.0	+10.0	2	25.0	-35.0	6	66.7	+41.7	15	88.2	+21.5	6	60.0	-28.2
Miller	8	25.0	17	65.4	+ 40.4	13	34.2	-31.2	8	47.1	+12.9	27	77.1	+30.0	17	77.3	+0.2	27	93.1	+15.8
Moniteau	5	62.5	6	54.6	- 7.9	8	80.0	+25.5	3	23.1	-56.9	8	61.5	+38.4	9	75.0	+13.5	4	80.0	+5.0
Montgomery	174	90.2	87	74.4	- 15.8	86	91.5	+17.1	141	83.9	-7.6	180	66.9	-17.0	184	88.0	+21.1	212	96.8	+8.8
Osage	9	64.3	5	27.8	- 36.5	14	66.7	+38.9	7	58.3	-8.4	12	57.1	-1.2	17	81.0	+23.9	11	84.6	+3.6
Total	1,459	72.1	1,061	74.6	+ 2.4	961	75.3	+0.8	1,276	72.1	-3.2	1,373	70.3	-1.8	1,529	77.0	+6.7	1,623	90.9	+13.9

County	Restrained 2014		% Change
	Freq	%	
Troop F			
Audrain	14	30.4	-38.8
Boone	490	88.9	-6.0
Callaway	391	89.1	+0.9
Camden	15	60.0	-14.2
Cole	97	82.2	+5.1
Cooper	272	89.8	-6.4
Gasconade	3	25.0	-35.0
Miller	31	88.6	-4.5
Moniteau	9	56.3	-23.7
Montgomery	213	97.7	+0.9
Osage	9	56.3	-28.3
Total	1,544	86.8	-4.1

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change	
	Freq	%	Freq	%		Freq	%		Freq	%		Freq	%		Freq	%		Freq	%		Freq
Troop G																					
Howell	31	53.6	40	75.5	+22.0	60	57.1	-18.3	129	69.7	+12.6	102	77.3	+7.6	85	81.7	+4.4	57	58.2	-23.5	
Oregon	19	76.0	33	71.7	-4.3	29	55.8	-16.0	11	55.0	-0.8	87	79.1	+24.1	22	73.3	-5.8	9	56.3	-17.0	
Texas	28	60.9	50	75.8	+14.9	72	70.6	-5.2	117	74.5	+3.9	114	82.0	+7.5	38	79.2	-2.8	75	67.8	-11.4	
Total	78	60.5	123	74.6	+14.1	161	62.2	-12.4	257	71.0	+8.8	303	79.5	+8.5	145	79.7	+0.2	141	62.7	-17.0	

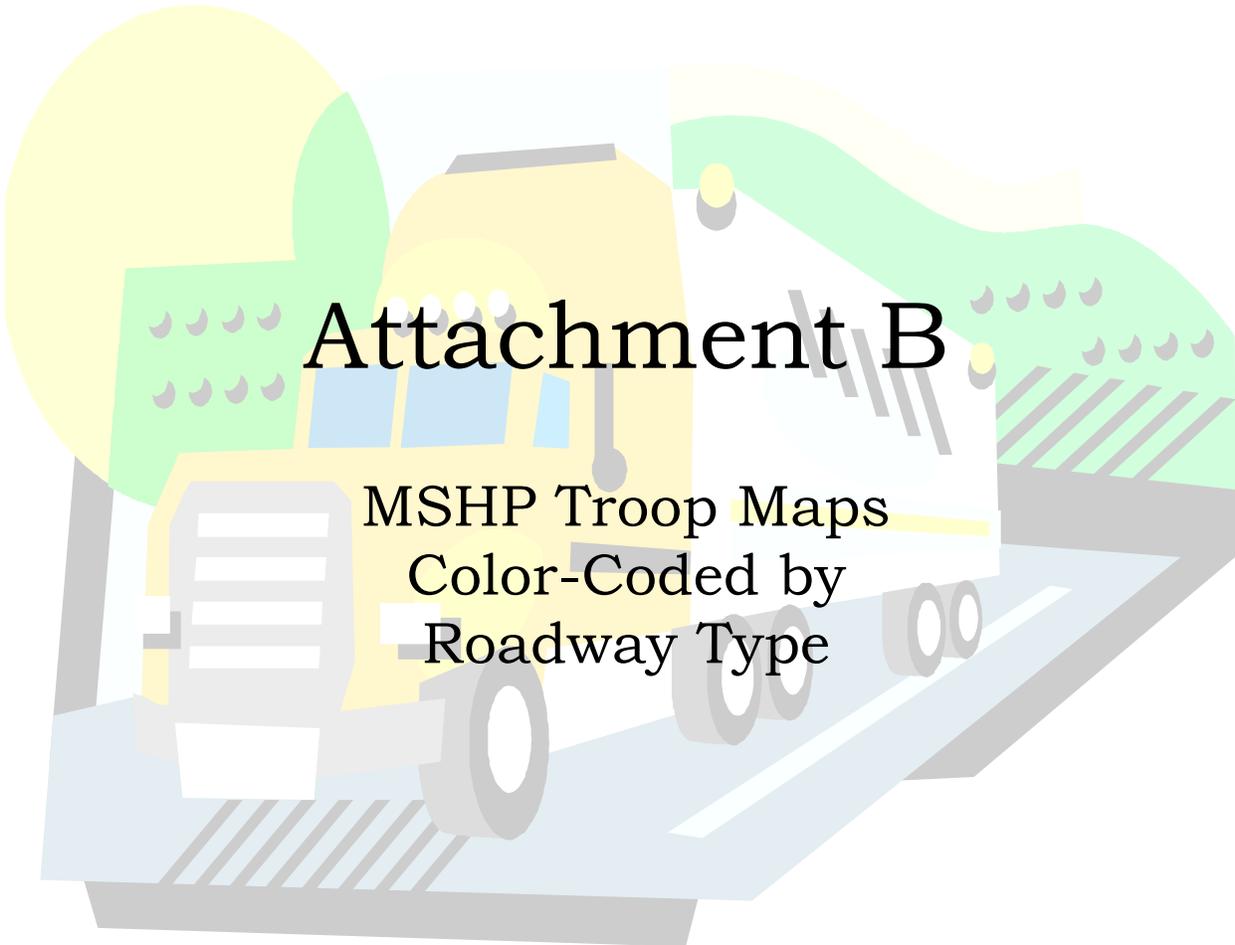
County	Restrained 2014		% Change
	Freq	%	
Troop G			
Howell	36	58.1	-0.1
Oregon	8	80.0	+23.7
Texas	64	79.0	+11.2
Total	108	70.6	+7.9

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change
	Freq	%	Freq	%																
Troop H																				
Andrew	4	17.4	13	50.0	+32.6	15	51.7	+1.7	15	51.7	-0.02	8	36.4	-15.3	11	44.0	+7.6	13	59.1	+15.1
Atchison	85	51.8	72	60.5	+8.7	121	72.9	+12.4	90	62.9	-10.0	64	54.7	-8.2	123	68.3	+13.6	92	68.2	-0.01
Buchanan	234	66.3	235	58.5	-7.8	235	60.4	+1.9	284	65.4	+5.0	195	58.0	-7.4	205	64.3	+6.3	248	72.5	+8.2
Clinton	153	71.8	128	59.3	-12.6	138	56.8	-2.5	106	71.1	+14.3	113	64.9	-6.2	136	69.4	+4.5	164	84.1	+14.7
Daviess	45	51.1	60	50.4	-0.7	113	76.4	+25.6	106	62.4	-14.0	95	71.4	+9.0	61	57.0	-14.4	101	78.9	+21.9
DeKalb	0	0	4	66.7	+66.7	3	75.0	+8.3	1	20.0	-55.0	0	0.0	+55.0	1	50.0	+50.0	1	50.0	0.0
Gentry	1	50.0	1	50.0	0	1	50.0	0.0	1	16.7	-33.3	1	33.3	+16.6	6	54.6	+21.3	7	50.0	-4.6
Harrison	45	67.2	39	45.9	-21.3	87	71.3	+25.5	79	56.8	-14.5	56	62.2	+5.4	61	58.7	-3.5	87	75.0	+16.3
Holt	85	48.9	53	61.6	+12.8	84	62.7	+1.1	60	53.6	-9.1	70	70.0	+16.4	107	64.1	-5.9	122	70.1	+6.0
Nodaway	4	26.7	8	47.1	+20.4	7	35.0	-12.1	3	27.3	-7.7	6	40.0	+12.7	9	52.9	+12.9	14	73.7	+20.8
Total	656	59.4	613	56.9	-2.6	804	64.0	+7.1	745	62.2	-1.8	608	61.4	-0.8	720	63.8	+2.4	849	74.0	+10.2

County	Restrained 2004		% Change
	Freq	%	
Troop H			
Andrew	13	65.0	+5.9
Atchison	139	67.8	-0.4
Buchanan	339	79.0	+6.5
Clinton	182	78.5	-5.6
Daviess	80	72.7	-6.2
DeKalb	3	60.0	+10.0
Gentry	2	50.0	0.0
Harrison	56	70.9	-4.1
Holt	135	69.6	-0.5
Nodaway	13	65.0	-8.7
Total	962	74.1	+0.1

County	Restrained 2004		Restrained 2005		% Change	Restrained 2006		% Change	Restrained 2007		% Change	Restrained 2008		% Change	Restrained 2010		% Change	Restrained 2012		% Change
	Freq	%	Freq	%		Freq	%		Freq	%		Freq	%		Freq	%		Freq	%	
Troop I																				
Crawford	180	62.5	229	72.7	+ 10.2	250	72.7	0.0	247	63.3	-9.4	414	82.3	+19.0	359	93.3	+11.0	299	77.7	-15.6
Laclede	260	60.1	357	77.6	+ 17.6	244	47.6	-30.1	552	72.8	+25.2	482	66.0	-6.8	464	90.6	+24.6	361	75.1	-15.5
Phelps	189	55.4	239	76.1	+ 20.7	197	64.2	-11.9	222	55.1	-9.1	309	80.1	+25.0	359	86.7	+6.6	200	71.4	-15.3
Pulaski	165	60.9	210	74.7	+ 13.8	197	67.9	-6.8	329	68.5	-0.6	451	88.6	+20.1	407	92.9	+4.3	304	71.9	-21.0
Total	794	59.6	1,035	75.6	+ 16.0	888	61.1	-14.5	1,350	66.5	+5.4	1,656	77.8	+11.3	1,589	90.9	+13.1	1,164	74.2	-16.7
Total 76 Counties	9,080	58.8	9,230	65.7	+ 6.9	10,486	65.6	-0.1	14,602	67.5	+1.9	16,165	73.4	+5.9	15,214	80.6	+7.2	14,548	81.5	+0.9

County	Restrained 2004		% Change
	Freq	%	
Troop I			
Crawford	234	79.1	+1.4
Laclede	331	72.3	-2.8
Phelps	301	87.5	+16.1
Pulaski	286	77.3	+5.4
Total	1,152	78.5	+4.3
Total 76 Counties	15,213	81.0	-0.5



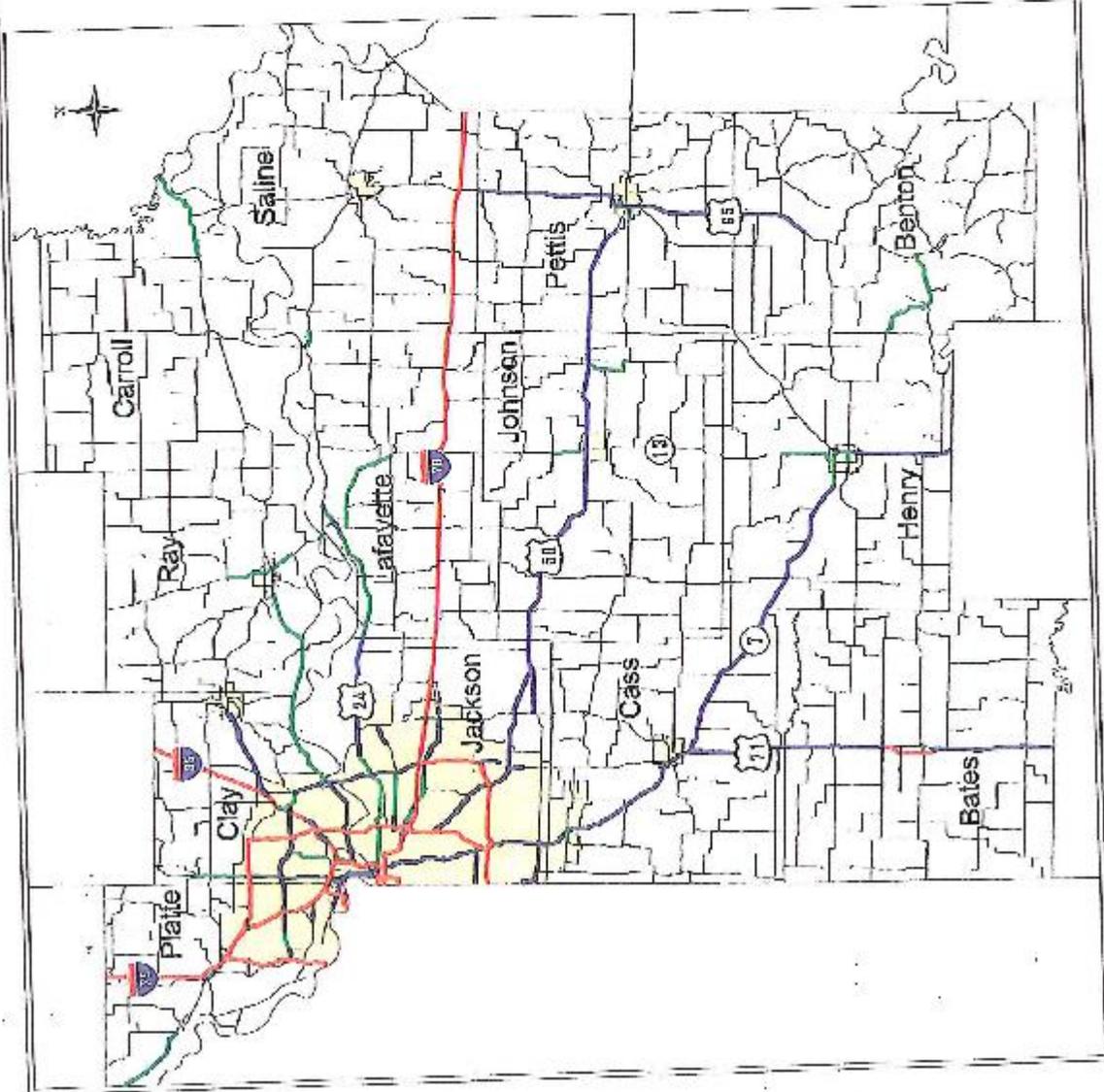
Attachment B

MSHP Troop Maps
Color-Coded by
Roadway Type



Troop A

- Roadway Type
- FREEWAY
 - EXPRESSWAY
 - TWO-LANE
 - 3 LANE SECTION
 - 5 LANE SECTION
 - MULTI-LANE
 - ONE-WAY
 - SUPER 2-LANE



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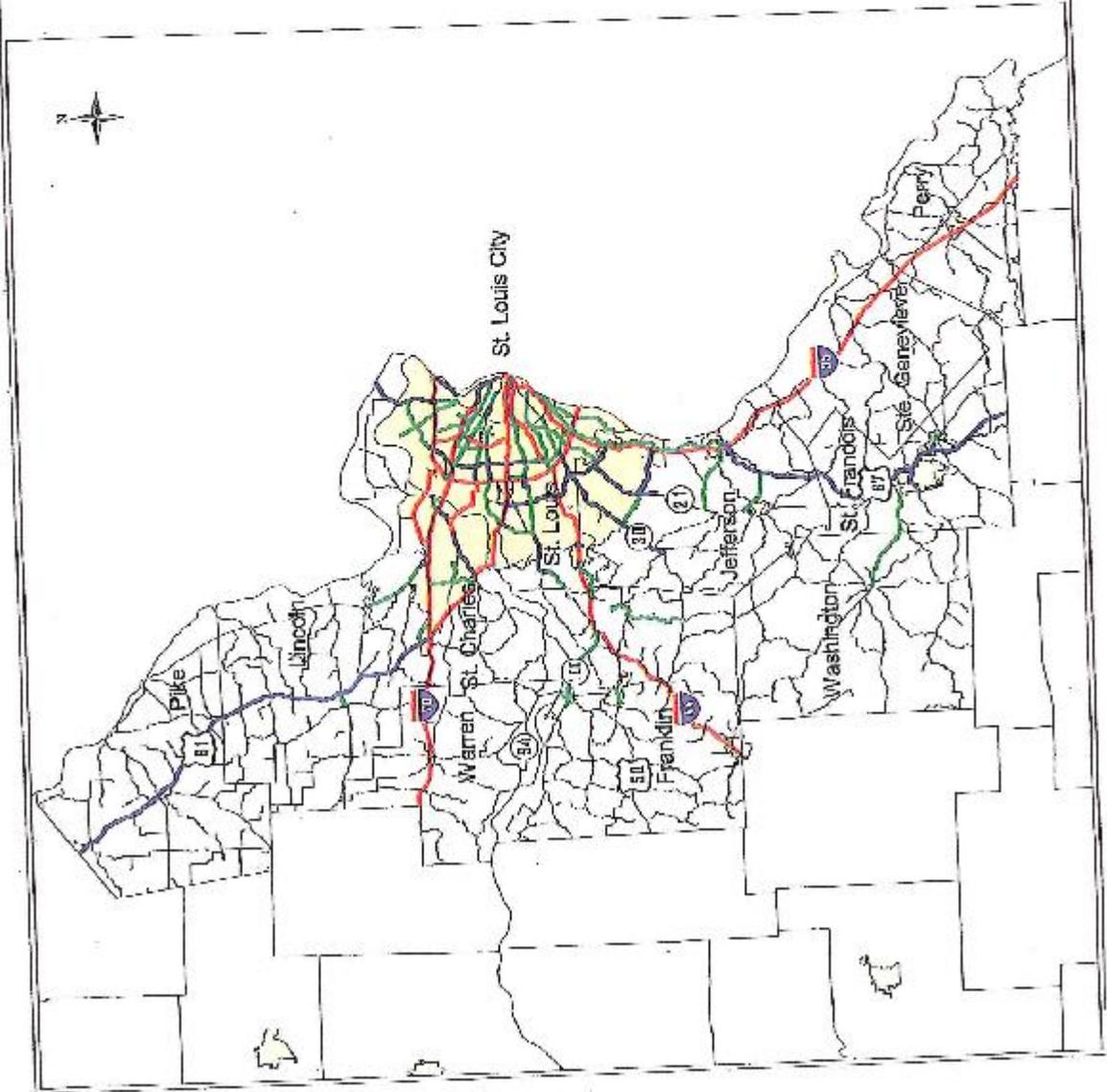
Troop C

- Roadway Type
- FREEWAY
 - EXPRESSWAY
 - TWO-LANE
 - 3 LANE SECTION
 - 5 LANE SECTION
 - MULTI-LANE
 - ONE-WAY
 - SUPER 2-LANE



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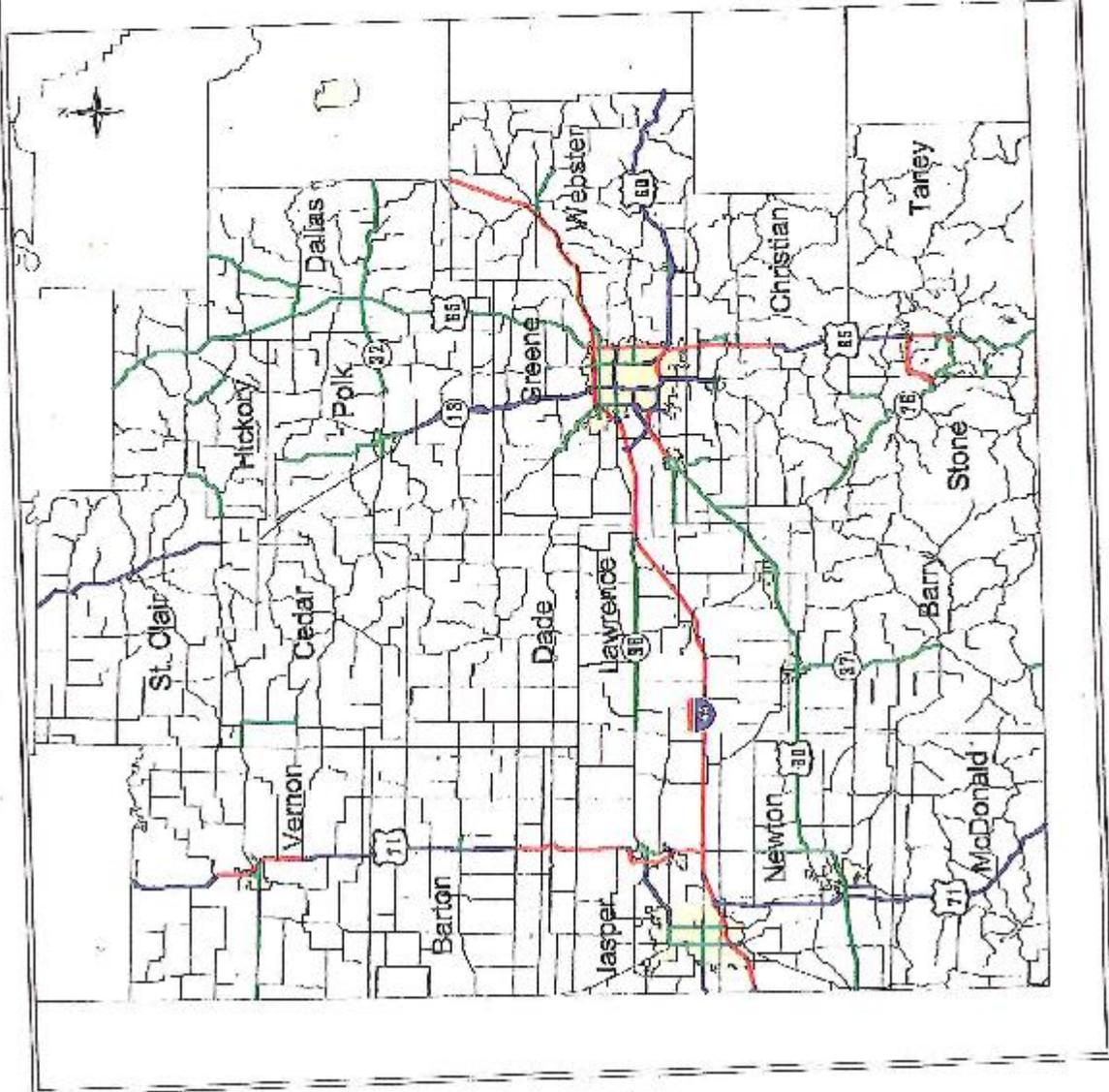
19-Jul-2004





Troop D

- Roadway Type
-  FREEWAY
 -  EXPRESSWAY
 -  TWO-LANE
 -  3 LANE SECTION
 -  5 LANE SECTION
 -  MULTILANE
 -  ONE-WAY
 -  SUPER 2-LANE



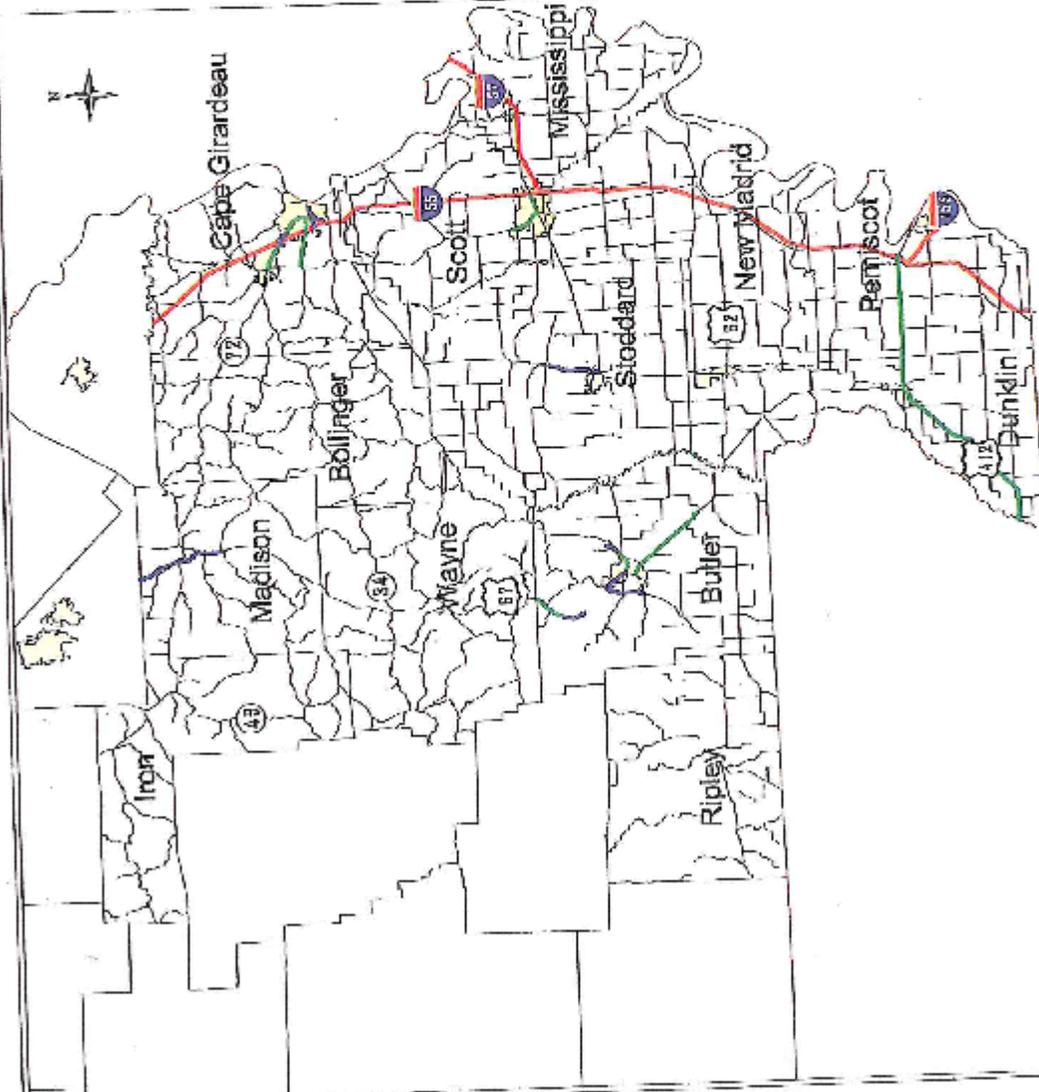
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Troop E

- Roadway Type
- FREEWAY
 - EXPRESSWAY
 - TWO-LANE
 - 3 LANE SECTION
 - 5 LANE SECTION
 - MULTI-LANE
 - SUPER 2-LANE



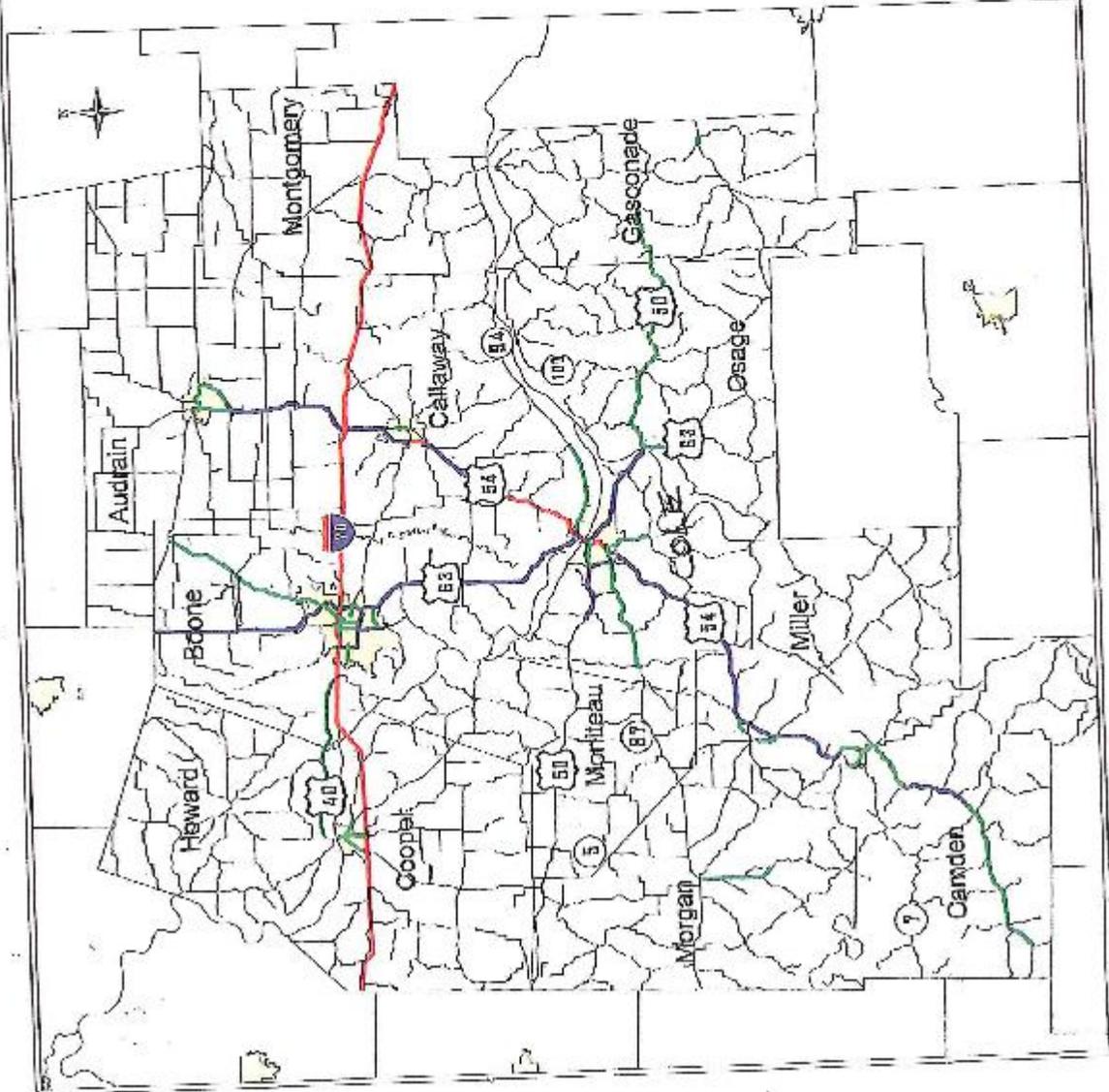
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Troop F

- Roadway Type
- FREEWAY
 - EXPRESSWAY
 - TWO-LANE
 - 3 LANE SECTION
 - 5 LANE SECTION
 - MULTI-LANE
 - ONE-WAY
 - SUPER 2-LANE



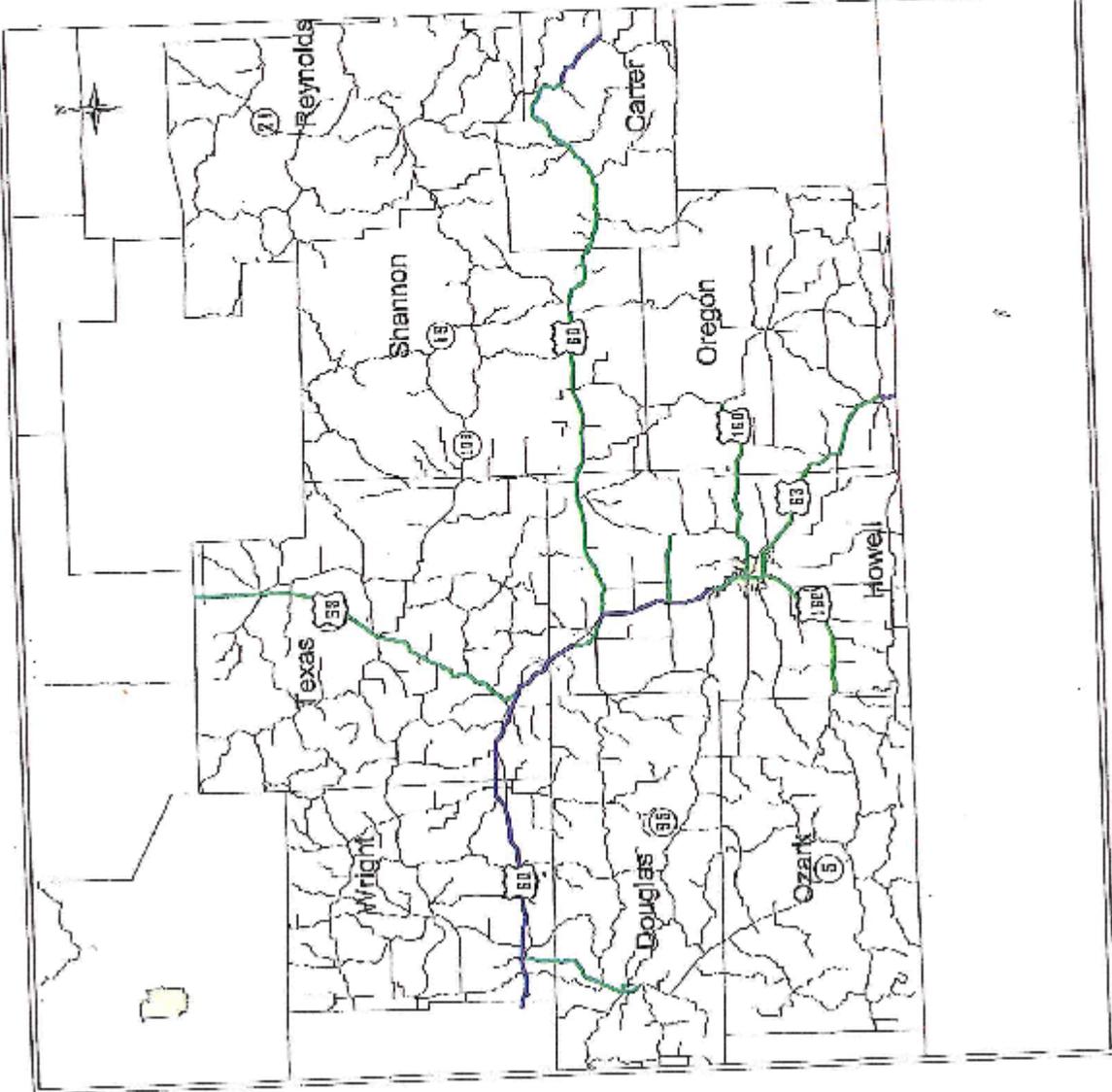
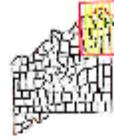
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Troop G

Roadway Type
 EXPRESSWAY
 TWO-LANE
 3 LANE SECTION
 5 LANE SECTION
 MULTI-LANE
 SUPER 2-LANE



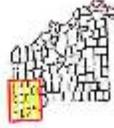
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Troop H

Roadway Type
 FREEWAY
 EXPRESSWAY
 TWO-LANE
 3 LANE SECTION
 5 LANE SECTION
 MULTI-LANE
 SUPER 2-LANE



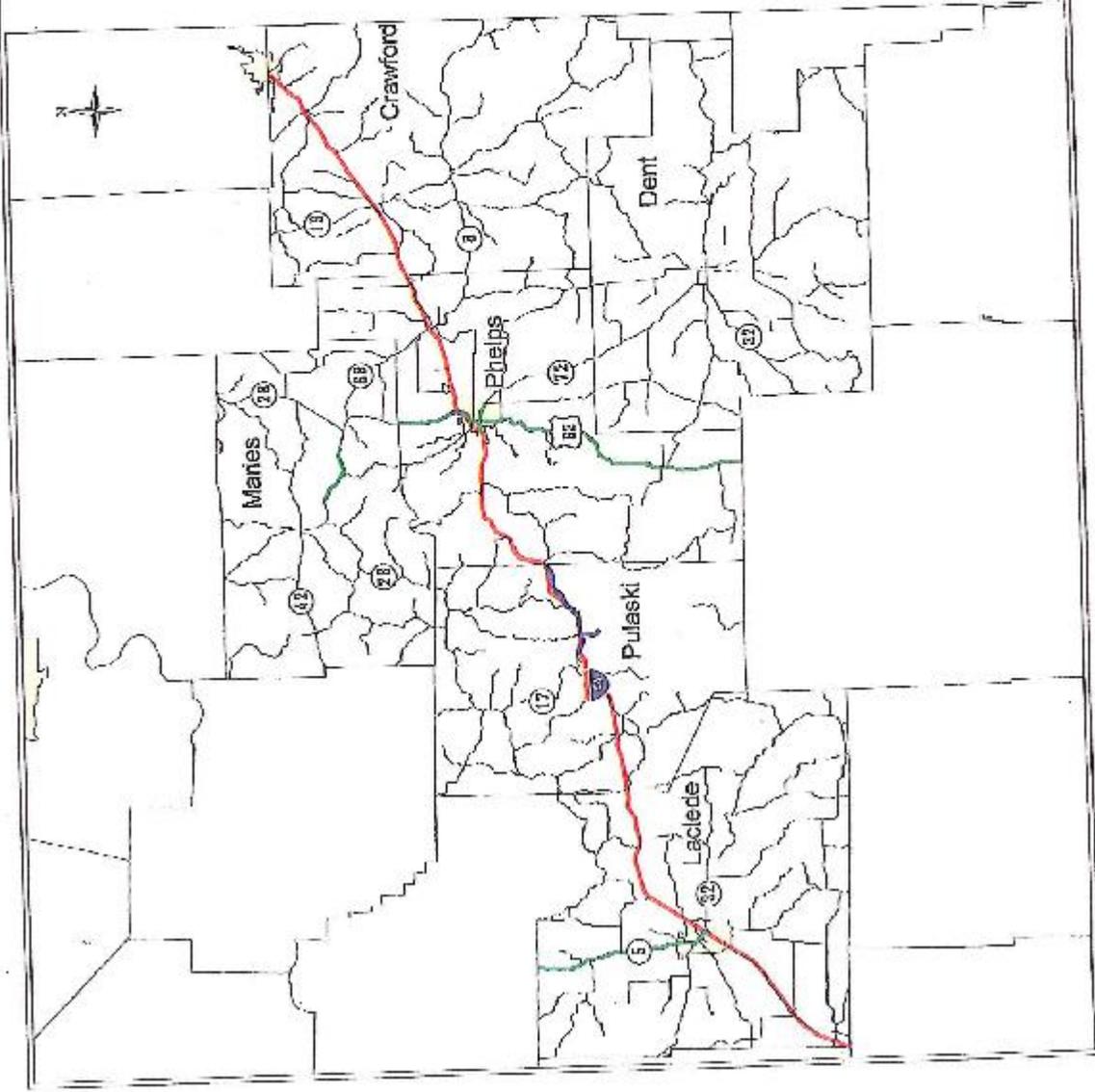
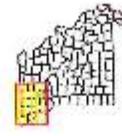
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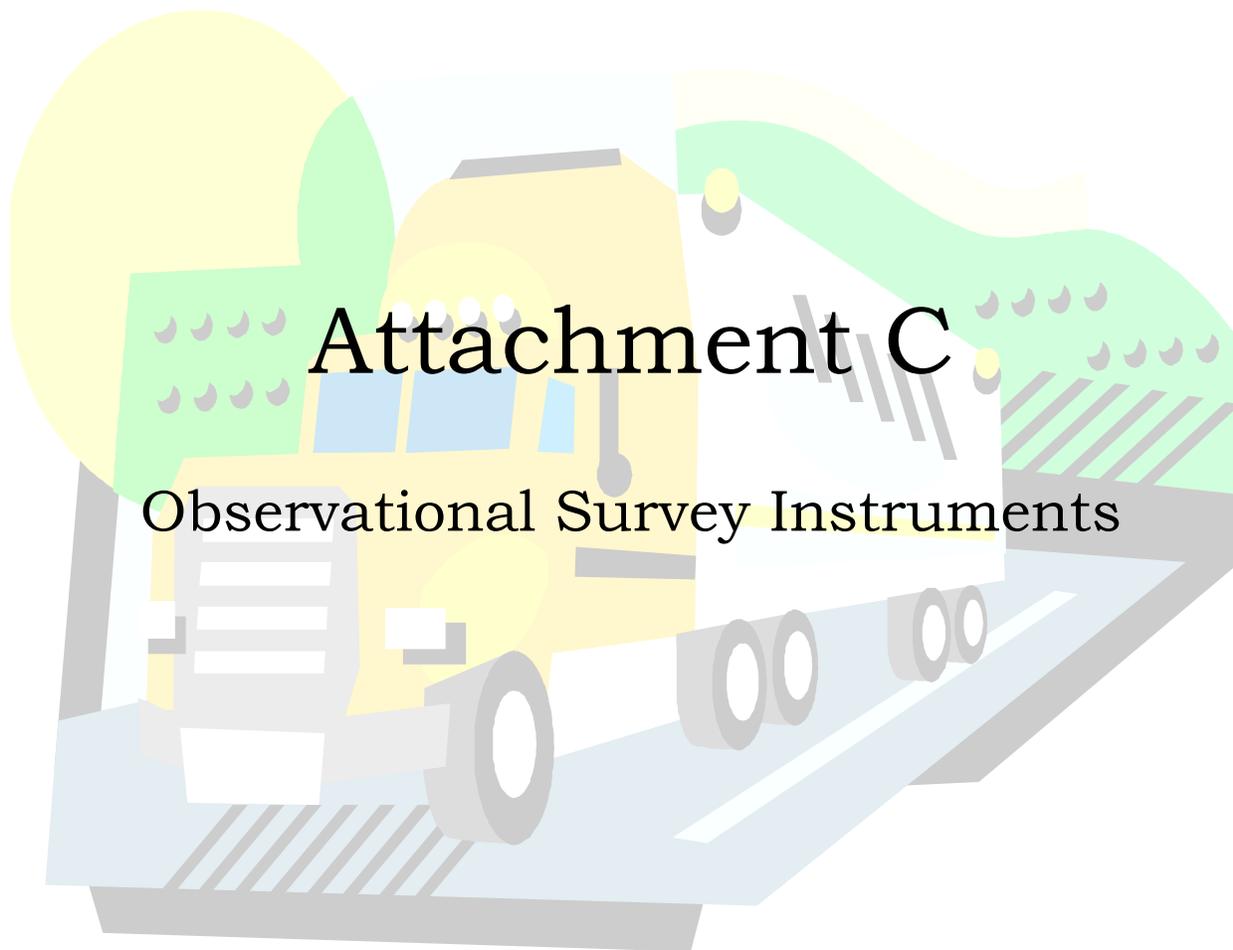
Troop I

Roadway Type
FREEWAY
EXPRESSWAY
TWO-LANE
3 LANE SECTION
5 LANE SECTION
MULTI-LANE
SUPER 2-LANE



Prepared By
 McDOT TMS Query Application

20-Jul-2004



Attachment C

Observational Survey Instruments

Commercial Vehicle Safety Belt Survey

Site Summary Form

Observers: _____ Troop: _____

County: _____

Date: _____ Time: Start _____ End _____

Troop:	County:	Site:	Road Type:
<input type="radio"/> A	<input type="radio"/> <input type="radio"/> 0	<input type="radio"/> <input type="radio"/> 0	<input type="radio"/> Freeway
<input type="radio"/> B	<input type="radio"/> <input type="radio"/> 1	<input type="radio"/> <input type="radio"/> 1	<input type="radio"/> Expressway
<input type="radio"/> C	<input type="radio"/> <input type="radio"/> 2	<input type="radio"/> <input type="radio"/> 2	<input type="radio"/> Two-Lane
<input type="radio"/> D	<input type="radio"/> <input type="radio"/> 3	<input type="radio"/> <input type="radio"/> 3	<input type="radio"/> Other: _____
<input type="radio"/> E	<input type="radio"/> <input type="radio"/> 4	<input type="radio"/> <input type="radio"/> 4	
<input type="radio"/> F	<input type="radio"/> <input type="radio"/> 5	<input type="radio"/> <input type="radio"/> 5	
<input type="radio"/> G	<input type="radio"/> <input type="radio"/> 6	<input type="radio"/> <input type="radio"/> 6	
<input type="radio"/> H	<input type="radio"/> <input type="radio"/> 7	<input type="radio"/> <input type="radio"/> 7	
<input type="radio"/> I	<input type="radio"/> <input type="radio"/> 8	<input type="radio"/> <input type="radio"/> 8	
	<input type="radio"/> <input type="radio"/> 9	<input type="radio"/> <input type="radio"/> 9	

Day of the Week:	Traffic Flow:	Road Condition:
<input type="radio"/> Monday	<input type="radio"/> North	<input type="radio"/> Dry
<input type="radio"/> Tuesday	<input type="radio"/> South	<input type="radio"/> Wet
<input type="radio"/> Wednesday	<input type="radio"/> East	<input type="radio"/> Fog
<input type="radio"/> Thursday	<input type="radio"/> West	<input type="radio"/> Other: _____
<input type="radio"/> Friday		
<input type="radio"/> Saturday		
<input type="radio"/> Sunday		

Start Time:

8:00 9:00 10:00 11:00 12:00 1:00 2:00 3:00 4:00 5:00

Observation Point (be specific): _____

Major Distraction: _____

Troop: O A County: O O 0 Site: O O 0
 O B O O 1 O O 1
 O C O O 2 O O 2
 _____ O D _____ O O 3 _____ O O 3
 O E O O 4 O O 4
 O F O O 5 O O 5
 O G O O 6 O O 6
 O H O O 7 O O 7
 O I O O 8 O O 8
 O O 9 O O 9

Observers: _____

Page: _____ of _____

Vehicle Type 7-Straight Frame

Vehicle Type 8-Combination Vehicle

	Vehicle Type 7-Straight Frame						Vehicle Type 8-Combination Vehicle								Belted		Hazmat	
	Van	Tanker	Dump	Flat Bed	Bus	Other	Box Traile	Single Tanker	Double Tanker	Flat Trailer	Car Haule	Bobtail	Dump	Other	Yes	No	Yes	No
1.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
2.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
4.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
8.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
9.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
10.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
11.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
12.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
13.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
14.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
15.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O



Attachment D

Surveyor Training Materials

Commercial Vehicle Safety Belt Survey Instructions for Conducting the Survey

Thank you for serving as an observer for the 2014 Commercial Vehicle Safety Belt Survey. The following training materials will guide you through the survey process. Please read the **entire** set of instructions carefully. If you have any questions regarding the survey process, please call the Missouri Safety Center at 800-801-3588.

Survey Dates

- Monday, August 18 – Sunday, August 24, 2014
- If you have excessive rain during one of your survey times or dates, the survey should be conducted either in a different time period on the same survey day or, if available, on a different day at the scheduled time during the next week.

Observation Periods

- Your observation periods are scheduled Monday through Sunday and will begin at one of the following times: 8:00 am, 9:00 am, 10:00 am; 11:00 am, 12:00 noon, 1:00 pm, 2:00 pm, or 3:00 pm.
- The observation period at each site will be **40 minutes**. Actual observation time periods will begin at the scheduled times (8:00 am, 9:00 am, etc.) or as close to these times as practical (+ or – 15 minutes). Counting will end at the precise end of the 40-minute time period.
- Each day's observation sites have been clustered to decrease travel time from one site to another. If travel time exceeds the 20 minute allotted time period, then begin your next survey as close to the assigned time as possible.

Observation Materials

- **Informational Packet**—contains:
 - Authorization Letter(s)
 - Instructions for Conducting the Survey
 - County Map(s) with site locations marked
 - A “Daily Schedule” list that describes assigned sites, the site location and the direction of travel you are to survey
 - Magnetic “Survey” Signs for Vehicle
 - Commercial Vehicle Identification/Classification System—For the Commercial Vehicle Seat Belt Survey
 - FedEx Pak's and return labels, for returning completed survey's to the Missouri Safety Center

- **Daily Observational Packet**--your observation packet are several daily survey observation folders. Each folder is labeled with the date of the survey, i.e. Monday, August 18th ; Tuesday, August 19th, etc. These folders provide you the information you need to complete your observations for that particular day. Remember, you may not have a folder for each day of the week. You will only receive folders for the days you have been assigned to conduct observations.

Sample “Daily Schedule”

Daily Schedule
Troop D, Team 1

Day/Date – <i>The day and date you are to conduct the survey</i>	Time – <i>The time you are to start the survey</i>	Site NO - <i>Site Number These sites are also plotted on the county map(s) in your folder</i>	County	Description <i>Location of the Site Since we are most concerned about your safety, you may need to move to a location close to this reference point. You may choose to use frontage roads, entrance/exit ramps, truck stops, parking lots, etc. Again, please position your vehicle with safety and visibility in mind.</i>	Roadway <i>The road you are to survey</i>
Wednesday 8-20-14	10:00 am	9	Newton	WB I-44 at Hwy 43 exit 4 – view WB I-44 traffic	Freeway Hwy I-44
Wednesday 8-20-14	12:00 pm	10	Newton	EB Hwy I-44 at Hwy 43 exit 4 – view EB I-44 traffic	Freeway Hwy I-44
Wednesday 8-20-14	01:00 pm	20	Newton	NB Hwy 71 at Hwy V – view NB 71 traffic	Expressway Hwy 71

- Survey Forms – Use **only** the black markers provided to fill in the dots on these forms. Refer to the attached Sample Forms
 - **Site Summary Form**
 - You will have one Site Summary Form per location.
 - The following dots are filled in by the Missouri Safety Center staff
 - Troop
 - County
 - Sites
 - Road Type
 - Day of the Week
 - Traffic Flow
 - Start Time
 - The **surveyors must fill in the following areas** on the form:
 - Observer(s)
 - Date
 - Time: Start _____ and End _____
 - Road Condition
 - Observation Point – Please write a concise description of your location. Be very specific and identify any key reference points.
 - Major distractions. – If for any reason you are not able to use the site location, i.e. road construction, serious crash, etc., note it on the form. Find another usable location as close to the original site as possible and conduct or complete the observation.
 - **Vehicle/Driver Observation Form**
 - You will have multiple Vehicle/Driver Observation forms for each location.
 - We have provided additional blank forms in case you exceed the number needed per site.
 - The following dots are filled in by the Missouri Safety Center staff
 - Troop
 - County
 - Sites
 - The surveyor must fill in the following areas on the form:
 - Observer(s)
 - Page _____ of _____
 - The 15 observations per page

How Do I complete the Vehicle/Driver Observation Form? (Refer to Attached Sample Form)

The form is divided into four (4) sections; Vehicle Type 7 – Straight Frame; Vehicle Type 8 - Combination Vehicle; Belted (Driver); and Hazmat. For each observation you will make a total of **THREE** dots; one dot for type of vehicle, one dot for the driver's safety belt use (yes belted / no belted) and one dot if the vehicle is displaying a hazardous materials placard (hazmat – Yes or No).

We have attached two picture reference sheets to help you identify the Type 7 and 8 vehicles. As a general rule Type 7 vehicles have 6 to 9 tires with straight frames and Type 8 vehicles have 10 or more tires with a combination frame. For each observation, you will select **ONLY ONE** vehicle from the Vehicle Type 7 and Vehicle Type 8 sections.

For each observation you will make three (3) Dots. They are:

● **DOT ONE** (Refer to Picture Reference Sheets)

Select only ONE vehicle per observation from the following list of Type 7 or 8 vehicles. **REMEMBER:** if you are unsure or do not know which category of commercial vehicle to mark – go to the next vehicle. Do not guess.

Examples of Vehicle Type 7 – Straight Frame (general rule 6-9 tires)

- Van – Delivery truck, i.e. bread, potato chip, small Federal Express trucks
- Tanker – A truck carrying a liquid, i.e. gasoline, milk, propane, etc.
- Dump – A dump truck carrying dirt, rock, etc.
- Flat Bed – A truck carrying lumber, machinery, etc.
- Bus – a commercial bus or school bus
- Other – smaller trash trucks, smaller fire truck, utility truck, etc.

Examples of Vehicle Type 8 – Combination Vehicle (general rule 10 or more tires)

All 18-Wheelers fall into one of these categories

- Box Trailer – Semi truck with one box trailer
- Single Tanker – Semi truck with tanker, i.e. gasoline, liquid nitrogen, oil
- Double Trailer – Semi truck with 2 trailers
- Flat Trailer – Semi Truck with a flat trailer
- Car Hauler – Semi Truck with a car hauler
- Bobtail – Semi Truck only – no attached trailers
- Dump – Larger dump truck carrying dirt, rock, etc.
- Other – Larger trash trucks, larger fire truck, etc.

● DOT TWO

You will record the safety belt use for **ONLY the DRIVER of the vehicle**. Mark “yes” if driver is belted and “No” if driver is not belted.

● DOT THREE

If the vehicle is displaying a hazardous materials placard dot “Yes”. Dot “No” if there is no placard or the placard frame is empty. See the picture reference sheet for samples of the hazardous material placards.

What if I make an ERROR? (Refer to the sample Vehicle/Driver Observation Form)

If you make an error, go immediately to the next line and record the observation. After the survey is completed or at a convenient time, go back to the line with the error and fill in all the dots. By filling in all the dots on the line with the error, we immediately know that this observation should be deleted.

Equipment for Observers

Before you leave to do your observation, make sure you have:

1. The correct day’s survey packet.
2. The site map(s) and site location sheet.
3. Clipboard and provided black markers
4. Clips
5. The correct day’s and sites Observation Forms
6. The vehicle picture reference sheet.
7. Watch or timer.
8. Dash Survey signs
9. Appropriate clothing for current or potential weather conditions

Depending on the weather conditions and survey situations, you may want to consider taking:

1. Sunglasses
2. Sunscreen
3. Bug repellent
4. Water/snacks/lunch

Basic Observation Instructions

1. Arrive at collection site ahead of schedule to allow time to locate a safe and convenient observation site. Make sure it provides good visibility for the roadway and direction of travel you are observing.
2. Complete the Site Summary Sheet. Don't forget to fill out the "Observation Point" section with a concise description of your selected site.
3. Observation period should last for 40 continuous minutes. The observation period should start on the hour + or – 15 minutes.
4. Observation Instructions for Interstate Sites
 - a. Safety should be your first concern when selecting an observation site.
 - b. Select an observation point as close as possible to the designated location.
 - c. Suggested locations may include frontage roads and exit ramps.
5. Vehicles to be observed – refer to previous information and picture reference chart. **REMEMBER:** if you are unsure or do not know which type of commercial vehicle to mark – go to the next vehicle. Do not guess.
6. Belt use will be recorded for only the driver of the vehicle.
7. When the observations are completed, clip each site together carefully and place all the observation for that day back in the appropriate folder.
8. When **all** surveys are completed, place all the daily folders in the provided Federal Express envelope(s) and mail. These envelopes have been pre-addressed to the Missouri Safety Center for your convenience.

Questions or notification of an emergency situation should be directed to the Missouri Safety Center at 800-801-3588.