Initial Report

TRyy1025a

Motor Carrier Safety Survey

Prepared for Missouri Department of Transportation Organizational Results

By

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July 2010

The opinions, findings, and conclusions expressed in this publication are those of the principal investigators and the Missouri Department of Transportation. They are not necessarily those of the U.S. Department of Transportation, Federal Highway Administration. This report does not constitute a standard or regulation.

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Table of Contents

LIST OF TABLES	
LIST OF FIGURES	
OBJECTIVES	
TECHNICAL APPROACH	
RESULTS AND DISCUSSION	
SEAT BELT USAGE	
SAFETY CONCERNS	
SEAT BELT USAGE	
APPENDIX A: SURVEY QUESTIONS	
Research Questions	A
DEMOGRAPHIC QUESTIONS	A-:
APPENDIX B: DEMOGRAPHICS	
Truck Operations	
DRIVER DEMOGRAPHICS	B

List of Tables

Table 1: Motor Carrier Seatbelt Usage	2
Table 2: Perceived Chance of Obtaining Ticket for Violating Seat Belt Laws	2
Table 3: Why I Use a Seatbelt	
Table 4: Why I Don't Use a Seatbelt	
Table 5: Safety Concerns about Passenger Vehicle Drivers	5
Table 6: Safety Concerns about Commercial Drivers	6
Table 7: Trust in MCS	
Table 8: Truck Operations: Location	B-1
Table 9: Truck Operations: Type of Vehicle	B-1
Table 10: Truck Operations: Straight Truck Type	
Table 11: Truck Operations: Combination Vehicle Type	B-3
Table 12: Demographics: Age Groups	B-4
Table 13: Demographics: Gender	B-4
Table 14: Demographics: Residence	B-4
Table 12: Demographics: Ethnicity	B-5
Table 13: Demographics: Household Income	B-5

List of Figures

Figure 1:	Concerns about Passenger Vehicle Drivers vs. Commercial Drivers	8
Figure 2:	Survey Welcome	A-1
Figure 3:	Questions 1 and 2	A-2
Figure 4:	Question 1 Supplemental: Why I Use a Seatbelt	A-3
Figure 5:	Question 1 Supplemental: Why I Don't Use a Seatbelt	A-3
Figure 6:	Question 3: Safety Concerns about Passenger Vehicle Drivers	A-4
Figure 7:	Question 4: Safety Concerns about Commercial Drivers	A-4
Figure 8:	Question 5: Trust in MCS	A-5
Figure 9:	Questions A and B: Truck Operations	A-5
Figure 10): Question B1: Straight Truck Type	A-6
Figure 11	: Question B2: Combination Vehicle Type	A-6
	2: Age, Gender, and Residence	
	3: Ethnicity and Household Income	

Objectives

This research was intended to measure and evaluate the current attitudes and awareness of commercial drivers concerning highway safety. The research focused on seatbelt usage and related attitudes, but other elements of motor carrier highway safety were also measured.

Technical Approach

MoDOT Motor Carrier Services (MCS) and Heartland Market Research LLC (Heartland) jointly developed the surveys questions using the questions MoDOT developed for the June 2010 Highway Safety Driver Survey as a starting point. Heartland programmed these questionnaires into an online survey with two skip patterns to probe reasons for particular answers. A copy of the survey is available in Appendix A.

The survey list for research was developed by starting with every single MCS client with an email address who had conducted business with MoDOT in fiscal year 2010. This provided a list of 40,489 email addresses. After eliminating duplicates, the number of unique email addresses was 7,139. Since the focus of the research was motor carriers, 220 email addresses that obviously belonged to permit services, such as fastservice@PermitsNow.com, were eliminated. The resulting list of 7,139 names was then fed into an email validation program which reduced this list to 1,866 working email addresses.

On the morning of June 21, 2010 an invitation to participate in the survey was emailed to all 1,866 people on the list. Heartland only received 95 failure to deliver messages (a failure rate of just 5.1%). Each failure to deliver was due to one of the following problems: bad email address (rare), email mailbox was full (common), or antispam software blocked survey (common). 193 survey responses were obtained by July 8, a response rate of 10.9% (193 responses divided by the 1,771 emails that were successfully sent). A response rate of 10.9% is high for an online survey and probably reflects both a high respondent interest in the subject and an overall willingness to provide information for MoDOT.

Results and Discussion

With a survey size of 193, the general margin of error at a 95% level of confidence is 7.05%.

Seat Belt Usage

Depending upon their opinions, respondents answered two, three, or four questions pertaining to their behavior and thoughts concerning seat belts.

Question 1: How often do you use seat belts when you drive or ride commercially?

The vast majority of drivers always wore their seatbelts (84.4%). Another 10.4% wore them most of the time. 97.4% of the drivers wore their seatbelts at least half of the time.

Table 1: Motor Carrier Seatbelt Usage

Tuble 10 Hiller Culties Southers Chage		
How often do you use seat belts when you drive or ride commercially?		
	Frequency	Percent
Always	162	84.4%
Most of the Time	20	10.4%
Half of the Time	5	2.6%
Rarely	4	2.1%
Never	1	0.5%
Total	192	100.0%

Question 2: What do you think the chances are of getting a ticket if you don't wear your safety belt?

A plurality (32.6%) of commercial drivers thought they would receive a ticket about half of time if they did not wear their seatbelt. 72.1% thought they would receive a ticket at least half of the time if they did not comply with the seatbelt law.

Table 2: Perceived Chance of Obtaining Ticket for Violating Seat Belt Laws

What do you think the chances are of getting a ticket if you don't wear your safety belt?		
	Frequency	Percent
Always	26	13.7%
Most of the Time	49	25.8%
Half of the Time	62	32.6%
Rarely	51	26.8%
Never	2	1.1%
Total	190	100.0%

Question 1 Supplemental: Why I Use a Seatbelt: Pick the most accurate statements (select as many as apply) - I use a seat belt...

The most popular (38.6%) reason given for wearing a seatbelt was to comply with the law and company policy. However, three of the options were variants on prompting the driver to think about it (if I happen to think about it, when someone reminds me to buckle up, and when I see a sign that reminds me to buckle up). These three reminder options totaled almost half (47.7%) of the responses, indicating that reminders such as public service announcements are effective.

Table 3: Why I Use a Seatbelt

Pick the most accurate statements (select as many as apply) - I use a seat belt		
	Frequency	Percent
if I happen to think about it	10	22.7%
only in a passenger vehicle	3	6.8%
only in a commercial motor vehicle	3	6.8%
only because I have to - law and company policy	17	38.6%
when someone reminds me to buckle up	7	15.9%
when I see a sign that reminds me to buckle up	4	9.1%
Total	44	100.0%

Question 1 Supplemental: Why I Don't Use a Seatbelt: Pick the most accurate statements (select as many as apply) - <u>I don't use</u> a seat belt...

The most frequent reason (29.5%) for not wearing a seatbelt was because of how tight or constraining the seatbelt makes some people feel.

Table 4: Why I Don't Use a Seatbelt

Pick the most accurate statements (select as many as apply) - I don't use a seat belt		
	Frequency	Percent
because I forget	9	20.5%
on principle	3	6.8%
because it is too tight or constraining	13	29.5%
because I'm in and out of the vehicle a lot	10	22.7%
because of stories I've heard	2	4.5%
other	7	15.9%
Total	44	100.0%

Question 1 Supplemental: Why I Don't Use a Seatbelt - Other: *If you selected OTHER above, please elaborate.*

Respondents who answered "other" to the previous question were given the opportunity to elaborate. The responses of those who did so are presented here as they were entered by the drivers.

Because of the condition I work in (dirt, grease, etc.)

I know driving is a privilege but im not killing or hurting anyone but myself. That's why I sometimes I don't wear one.

I seen an accident and was first on the scene to find a seat belt had cut the man's throat and he bleed to death while I was trying to hold his juggler vein together until emergency personnel got there.

I'm short and the belt doesn't sit on my shoulder, it hits my neck

Should be my own choice of if I want to wear it just like if I want to all my vegetables or not. Do not need to be told what to do and people live by them just as much as they die by them

Three back surgeries, hurts like hell!

Safety Concerns

Two other safety questions were asked of the drivers, one pertaining to passenger vehicle drivers and the other concerning commercial truck drivers. Drivers were also given the opportunity to provide additional information about their answers to these two questions.

Question 3: The top three safety concerns I have about other <u>passenger vehicle drivers</u> are: (Please select three of the following)

Commercial drivers were most concerned (27.3%) with how passenger vehicle drivers could be distracted while driving. Judging by the comments, cell phone use was a primary source of passenger driver distraction. Careless behavior (23.6%) and excessive speed (16.1%) were the next two most common concerns about passenger vehicle drivers.

Table 5: Safety Concerns about Passenger Vehicle Drivers

The top three safety concerns I have about other passenger vehicle drivers are: (Please select three of the following)		
	Frequency	Percent
Fatigue	52	9.0%
Distraction	157	27.3%
Excessive speed	93	16.1%
Careless behavior	136	23.6%
Sharing the road with other travelers	24	4.2%
Impaired driving (drugs/alcohol)	77	13.4%
Poor maintenance/equipment failure	22	3.8%
Other	15	2.6%
Total	576	100.0%

Question 3 Supplemental: Safety Concerns about Passenger Vehicle Drivers - Other: *If* you selected OTHER above, please elaborate.

Respondents who answered "other" to the previous question were given the opportunity to elaborate. The responses of those who did so are presented here as they were entered by the drivers.

All of the above. Today's drivers are not educated on sharing the road with heavy vehicles and have driving habits that create dangerous situations.

CARELESS BEHAVIOR-- TEXTING WHILE DRIVING POOR MAINTENANCE -- TIRES EXPLODING

Cell Phones

Cell phones and texting

Cell phones and texting. They need to be held to the same standards as CDL drivers.

Distraction as CELL PHONE USE while operating a vehicle

DRIVERS NOT AWARE OF BLIND SPOTS AROUND TRUCKS

Elderly drivers causing congestion and their ability to enter and exit the roads.

I don't worry about other people or companies.

Lack of Missouri State Patrol to stop large trucking companies trucks that break every rule for fear of being reprimanded. They prefer to pick on small companies because they don't have the power that large companies. In our county everyone thinks the State Patrol is scared and hides out rather than being out on the road stopping these law breakers and dangerous drivers. It's not uncommon to see Beelman trucks run 75+ mph on narrow two lane highways. You will never see a state patrolman stop a Beelman truck for fear of being transferred.

My first concern is talking and texting on cell phones.

people in cars and trucks texting and talking on cell phones, not paying attention to what they're doing

poor education of driving skills, do not look far enough ahead, texting very big problem.

rocks coming out of the bottom half of dump trucks under the tail gate when they hit a bump in the highway!

texting and talking on the phone

texting while driving talking on cell phones

Question 4: The top three safety concerns I have about other <u>commercial drivers</u> are: (Please select three of the following)

As with concerns about passenger vehicle drivers, distracted driving (23.7%) heads the list of concerns about other commercial drivers. Judging by the comments, cell phone use was also a primary source of commercial driver distraction. Fatigue (21.8%) and careless behavior (17.3%) were the next two most common concerns about commercial vehicle drivers.

Table 6: Safety Concerns about Commercial Drivers

The top three safety concerns I have about other commercial drivers are: (Please select three of the following)		
	Frequency	Percent
Fatigue	121	21.8%
Distraction	132	23.7%
Excessive speed	55	9.9%
Careless behavior	96	17.3%
Sharing the road with other travelers	39	7.0%
Impaired driving (drugs/alcohol)	31	5.6%
Poor maintenance/equipment failure	74	13.3%
Other	8	1.4%
Total	556	100.0%

Question 4 Supplemental: Safety Concerns about Commercial Drivers - Other: *If you selected OTHER above, please elaborate.*

Respondents who answered "other" to the previous question were given the opportunity to elaborate. The responses of those who did so are presented here as they were entered by the drivers.

1 - Operators that can't speak or comprehend English creates confusion. 2 - I don't worry about other people or companies, none of my business.

Cell phones

company drivers that have no respect for anyone.

Distraction as in CELL PHONE USE while operating an 89,000 pound lethal weapon.

I believe shippers and receivers should be made more responsible for making and keeping appointment times so that drivers are able to manage their time better.

I put it on the other question, the rock coming out of dump trucks under the tail gates! inexperience and selfish driving habits

improperly trained drivers and ones that should never been allowed behind the wheel of a semi.

NOT CHECKING THEIR BLIND SPOTS

OTHER TRAVELERS NOT UNDERSTANDING BLIND SPOTS, CUTTING OFF TRUCKS, AND NOT ALLOWING TRUCKS ROOM TO MERGE OR MAKE TURNS.

talking & texting on cell phones use of cell phones while driving

The Top Three Safety Concerns I Have about Other Drivers Are: 30% 25% 20% 15% 10% 5% 0% Sharing the Impaired Poor Excessive Careless road with driving maintenance Fatigue Distraction Other speed behavior other (drugs/ /equipment travelers alcohol) failure ■ Passenger Vehicle Drivers 9.0% 27.3% 16.1% 23.6% 4.2% 13.4% 3.8% 2.6% ■ Commerical Drivers 21.8% 23.7% 9.9% 17.3% 5.6% 1.4% 7.0% 13.3%

Figure 1: Concerns about Passenger Vehicle Drivers vs. Commercial Drivers

Distraction and careless behavior of other drivers, both of passenger and commercial vehicles, were concerns of many drivers. The type of driver – passenger vs. commercial – greatly influenced how commercial truck drivers judged the other safety hazards.

Trust

One question was asked about how the drivers felt about MCS.

Question 5: How much do you trust MoDOT Motor Carrier Services?

95.8% of the commercial drivers trusted MoDOT's MCS. Judging by the comments, some commercial drivers associate MCS with Highway Troopers.

Table 7: Trust in MCS

How much do you trust MoDOT Motor Carrier Services?		
	Frequency	Percent
Very much trust	115	60.2%
Somewhat trust	68	35.6%
Somewhat distrust	5	2.6%
Very much distrust	3	1.6%
Total	191	100.0%

Question 5 Supplemental: If you wish to explain why you trust (or do not trust) MoDOT, the following will provided to MoDOT exactly as you type it.

Respondents were given the opportunity to provide information on why they did or did not trust MCS. The responses of those who did so are presented here as they were entered by the drivers.

Dots think they are kings of the road and treat drivers like criminals even if they are pulling you over for no seat belt, or petty stuff like that.

Have no reason yet not to trust.

Have not been given reason not to trust.

haven't dealt with you enough to build any kind of trust

Highway patrol Troopers are highly trusted. Not so much Fixed Weight Scale Troopers.

I know DOT is out there trying to keep all safe, by inspections and proper paper work. I respect them for that. I know they are just doing their job when they stop us. Just like we are doing our job.

I see DOT pull over nice trucks, when trucks that you can see need to be pulled over drive right by. It seems that if a truck goes by that has problems they just don't want to deal with it. Some of the dump trucks are held together by duck tape and wire and you never see them getting stoped. Why do we see a new truck getting stopped and a 15 year old truck roll on by?

if you have a question all you have to do is ask

The law is interpreted by each officer in his own way. What is ok with one is not with the other. I have had officers delay myself and our drivers on several occasions for several hours while they try to determine if something is ok or not. I feel they are usually concerned more with collecting a fine than they are about keeping roads safe.

They have a lot less road side checks. I have trucks that travel in Kansas and they are check at least once a year, while in Missouri we have maybe one roadside check every two years and I have nine trucks that travel in both states.

They have been exceptionally helpful every time I contact them.

TRUST WITH WHAT

When stopped for checks we have spent as much as 2 hours waiting while too few individuals work on too many trucks during major check point operations.

But I don't think we have the man power to keep the bad drivers and none speaking English ones off the road or do the inspections as needed for safety.

Appendix A: Survey Questions

Each motor carrier received an email inviting them to participate in a brief survey. The email included a link to an online survey. Screen shots from the actual survey are presented here.

Figure 2: Survey Welcome



Your participation is greatly appreciated! One of MoDOT's objectives is to make the roads safer for motor carriers and you can help us do so by sharing your perspective. Please take a few minutes to complete this survey.

Your responses will be recorded and analyzed by Heartland Market Research LLC, a research-based organization partnering with MoDOT. Heartland will forward general survey findings to MoDOT, but it will not provide any information on individual respondents. Therefore, please feel comfortable about providing honest feedback. Your survey responses will be used anonymously.

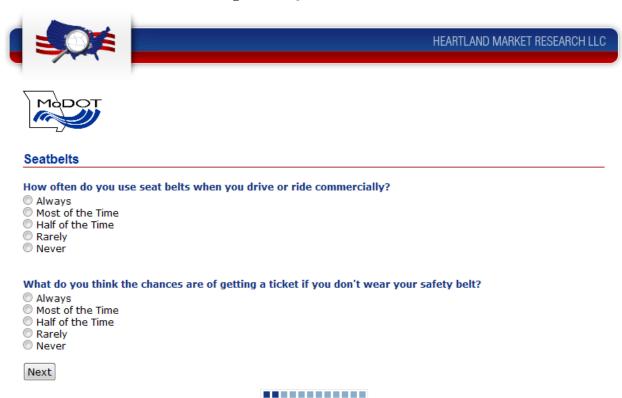
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Once again, thank you!

Next

Research Questions

Figure 3: Questions 1 and 2



Question 1 was used to determine which questions the respondent was asked next. If the respondents always wore a seatbelt, they were taken to Question 3 after answering questions 1 and 2. If the respondents never wore a seatbelt, they were taken to Question 1 Supplemental: Why I Don't Use a Seatbelt. The respondents who sometimes wore a seatbelt were asked both supplemental questions – both why they did and did not wear their seatbelt.

Figure 4: Question 1 Supplemental: Why I Use a Seatbelt

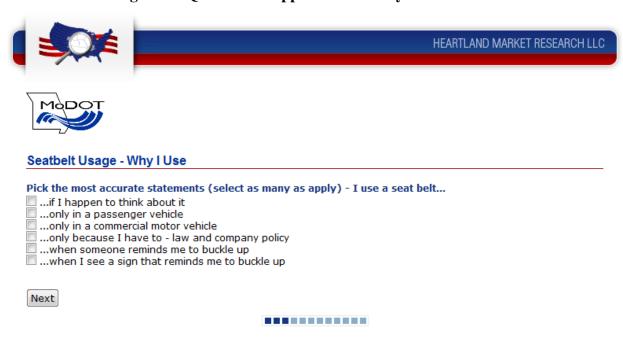


Figure 5: Question 1 Supplemental: Why I Don't Use a Seatbelt

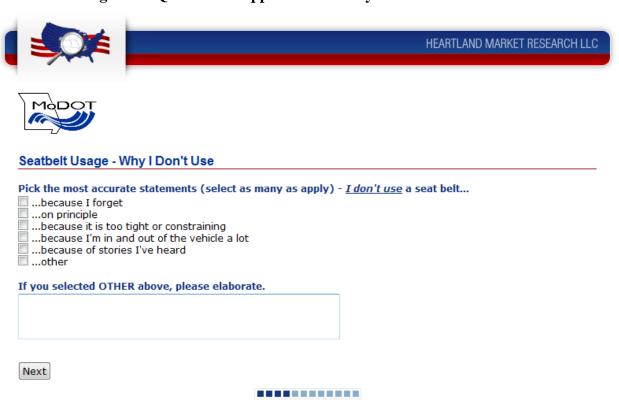


Figure 6: Question 3: Safety Concerns about Passenger Vehicle Drivers

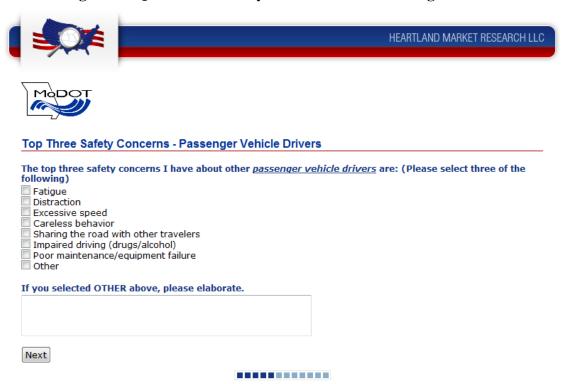


Figure 7: Question 4: Safety Concerns about Commercial Drivers

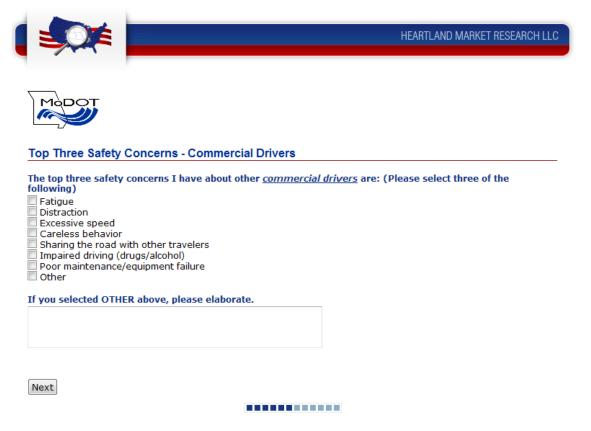
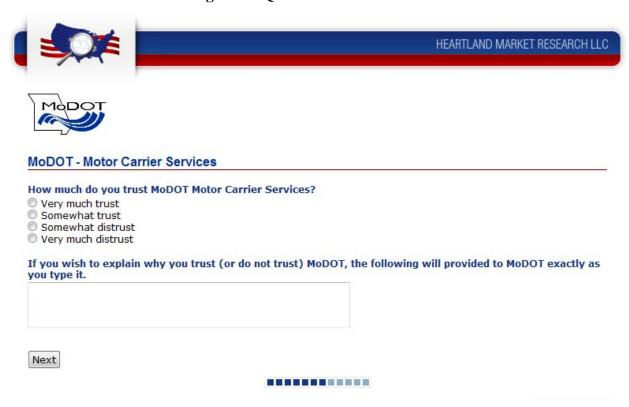


Figure 8: Question 5: Trust in MCS



Demographic Questions

Figure 9: Questions A and B: Truck Operations



The online survey used the motor carrier's responses to Question B to determine which of the following questions each motor carrier saw. Each motor carrier only saw one of the following two screens.

Figure 10: Question B1: Straight Truck Type

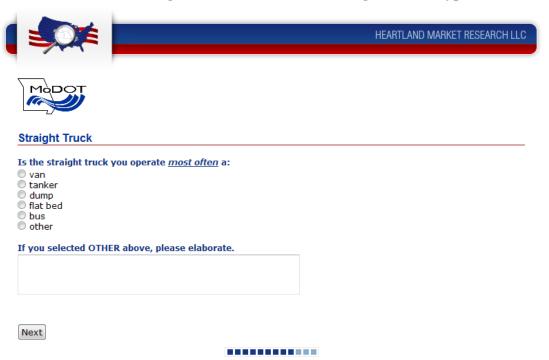
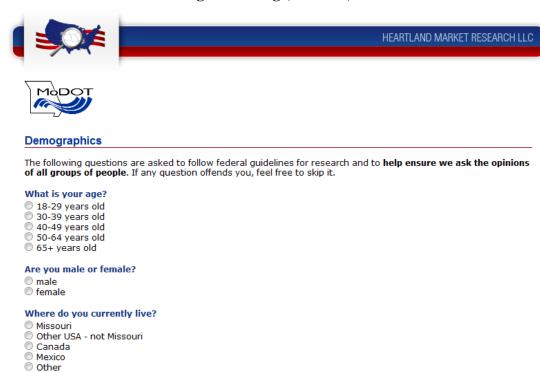


Figure 11: Question B2: Combination Vehicle Type



Figure 12: Age, Gender, and Residence



Next

Submit Survey

Figure 13: Ethnicity and Household Income



Appendix B: Demographics

Truck Operations

Each respondent was asked three of four possible questions concerning their truck operations. The first two questions were asked of all drivers and then the drivers were asked a follow-up question about the specific type of truck they drove most often. Drivers were also given the opportunity to elaborate if they indicated they drove an "other" type of truck.

Question A: *I operate...*

The vast majority (87.0%) of the drivers surveyed operated in more than just Missouri.

Table 8: Truck Operations: Location

l operate		
	Frequency	Percent
within Missouri only	25	13.0%
interstate	167	87.0%
Total	192	100.0%

Question B: The truck type I operate most often is a

The majority (78.1%) of the commercials primarily operated a combination vehicle.

Table 9: Truck Operations: Type of Vehicle

The truck type I operate most often is a		
	Frequency	Percent
Straight truck	42	21.9%
Combination vehicle	150	78.1%
Total	192	100.0%

Question B1: Is the straight truck you operate <u>most often</u> a

Table 10: Truck Operations: Straight Truck Type

Is the straight truck you operate most often a:		
van	10	23.8%
dump	6	14.3%
flat bed	13	31.0%
bus	2	4.8%
other	11	26.2%
Total	42	100.0%

Question B1 Supplemental: *If you selected OTHER above, please elaborate.*

Respondents who answered "other" to the previous question were given the opportunity to elaborate. The responses of those who did so are presented here as they were entered by the drivers.

26 ft straight, 26,000 lbs

box truck

concrete mixer

Concrete Pump Truck

derrick or aerial device

Electrical, digger derrick

Mixer truck

Motorcoaches

operate both van and flatbed

pickup

Pickup

Wrecker

Question B2: Is the combination vehicle you operate <u>most often</u> a:

Table 11: Truck Operations: Combination Vehicle Type

Is the combination vehicle you operate most often a:		
	Frequency	Percent
box trailer	22	14.8%
single trailer	45	30.2%
double trailer	4	2.7%
flat trailer	45	30.2%
car hauler	4	2.7%
dump	5	3.4%
other	24	16.1%
Total	149	100.0%

Question B2 Supplemental: *If you selected OTHER above, please elaborate.*

Respondents who answered "other" to the previous question were given the opportunity to elaborate. The responses of those who did so are presented here as they were entered by the drivers.

cement tankers and end dumps

Drop Deck Lowboy Trailer moving oversize equipment

gooseneck

Grain hopper

grain hopper

grain trailer

Grain trailer with hopper bottoms

hopper bottom

Hopper Bottom

LIVESTOCK CATTLE TRAILER

low boy

low boy Heavy hauler

LOWBOY MOVING HEAVY EQUIPMENT

Manufactured & Modular homes

marine transport trailer. Lowboy

mobile homes

Motorcoach

O/S- wide double drop

rgn

RGN(double drop) SADDLEMOUNT tanker

Driver Demographics

Question C: What is your age?

Table 12: Demographics: Age Groups

What is your age?		
	Frequency	Percent
18-29 years old	8	4.3%
30-39 years old	33	17.7%
40-49 years old	54	29.0%
50-64 years old	82	44.1%
65+ years old	9	4.8%
Total	186	100.0%

Question D: Are you male or female?

Table 13: Demographics: Gender

Are you male or female?		
	Frequency	Percent
male	148	80.0%
female	37	20.0%
Total	185	100.0%

Question E: Where do you currently live?

Table 14: Demographics: Residence

Where do you currently live?		
	Frequency	Percent
Missouri	142	74.0%
Other USA - not Missouri	43	22.4%
Canada	4	2.1%
Other	3	1.6%
Total	192	100.0%

Question F: What is your ethnicity?

Table 15: Demographics: Ethnicity

What is your ethnicity?		
	Frequency	Percent
American Indian or Alaska Native	7	3.8%
Black or African American	1	0.5%
White or Caucasian	178	95.7%
Total	186	100.0%

Question G: What is your household income?

Table 16: Demographics: Household Income

What is your household income?		
	Frequency	Percent
Under \$30,000	9	5.5%
\$30,000 - \$49,999	38	23.0%
\$50,000 - \$69,999	45	27.3%
\$70,000 or greater	73	44.2%
Total	165	100.0%