

Practices for Permitting Superheavy Load Movements on Highway Pavements

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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM

NCHRP SYNTHESIS 476

**Practices for Permitting
Superheavy Load Movements
on Highway Pavements**

A Synthesis of Highway Practice

CONSULTANT

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Cover figure: Vehicle of 1.2 million lb GVW traveling from Houston to Flat Rock, Texas.
Credit: A.T. Papagiannakis.

FOREWORD

Highway administrators, engineers, and researchers often face problems for which information already exists, either in documented form or as undocumented experience and practice. This information may be fragmented, scattered, and unevaluated. As a consequence, full knowledge of what has been learned about a problem may not be brought to bear on its solution. Costly research findings may go unused, valuable experience may be overlooked, and due consideration may not be given to recommended practices for solving or alleviating the problem.

There is information on nearly every subject of concern to highway administrators and engineers. Much of it derives from research or from the work of practitioners faced with problems in their day-to-day work. To provide a systematic means for assembling and evaluating such useful information and to make it available to the entire highway community, the American Association of State Highway and Transportation Officials—through the mechanism of the National Cooperative Highway Research Program—authorized the Transportation Research Board to undertake a continuing study. This study, NCHRP Project 20-5, “Synthesis of Information Related to Highway Problems,” searches out and synthesizes useful knowledge from all available sources and prepares concise, documented reports on specific topics. Reports from this endeavor constitute an NCHRP report series, *Synthesis of Highway Practice*.

This synthesis series reports on current knowledge and practice, in a compact format, without the detailed directions usually found in handbooks or design manuals. Each report in the series provides a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems.

PREFACE

*By Donna L. Vlasak
Senior Program Officer
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The report documents the practices followed in issuing permits for overweight and super-heavy commercial vehicles (SHCVs) or “superloads.” These are trucks that exceed the thresholds set for overweight vehicles allowed to operate with annual permits throughout state highway networks. This synthesis collected detail on the practices that U.S. states and Canadian provinces use. It focuses on SHCV issues related to pavements. This synthesis can aid state officials and state highway engineers in permit activities.

A literature review and detailed survey responses from 52 of 60 states and Canadian provinces, yielding a response rate of 87%, are provided. Also, four case examples offer more detailed information on permitting practices.

A.T. Papagiannakis, University of Texas at San Antonio, collected and synthesized the information and wrote the report. The members of the topic panel are acknowledged on the preceding page. This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As progress in research and practice continues, new knowledge will be added to that now at hand.

CONTENTS

1	SUMMARY
5	CHAPTER ONE INTRODUCTION Objective, 5 Methodology, 5
6	CHAPTER TWO LITERATURE REVIEW Review of Superheavy Commercial Vehicle Weight Regulations, 6 Review of Superheavy Commercial Vehicle Permit Fees, 12
19	CHAPTER THREE SURVEY RESULTS Definition of Superheavy Commercial Vehicles, 19 Pavement Analysis Details, 20 Superheavy Commercial Vehicle Permit Fees, 23 Number of Superheavy Commercial Vehicle Permits and Type Issued, 25
26	CHAPTER FOUR CASE EXAMPLES Moving a Transformer from Houston to Flat Rock, Texas, 26 Moving a Reactor from Eastern Washington to the Idaho Border, 26 Moving an Anode through Arizona, 26 Moving a Water Purification Vessel Through Oregon, 27
28	CHAPTER FIVE CONCLUSIONS
30	REFERENCES
32	APPENDIX A SURVEY QUESTIONNAIRE
41	APPENDIX B LIST OF RESPONDING AGENCIES
42	APPENDIX C RAW SURVEY RESULTS

APPENDIX C BEGINNING ON PAGE 42 IS WEB-ONLY AND CAN BE FOUND AT WWW.TRB.ORG, SEARCH ON NCHRP SYNTHESIS 476.

Note: Photographs, figures, and tables in this report may have been converted from color to grayscale for printing. The electronic version of the report (posted on the web at www.trb.org) retains the color versions.

PRACTICES FOR PERMITTING SUPERHEAVY LOAD MOVEMENTS ON HIGHWAY PAVEMENTS

SUMMARY This Synthesis captures the state of the practice in permitting superheavy commercial vehicles (SHCVs) or “superloads.” These are trucks that exceed the thresholds set for overweight vehicles allowed to operate with annual permits throughout state highway networks. Instead, SHCVs are issued single-trip permits on specific routes, following some type of engineering analysis. Work for this synthesis consisted of a literature review and a survey questionnaire. The literature review covered the SHCV permitting regulations and fees for the United States and the Canadian provinces, as well as efforts undertaken in Europe, Australia, and South Africa to harmonize weight regulations between their member states. The survey questionnaire was designed to collect additional detail on the practices that U.S. states and Canadian provinces implement to handle SHCV permits.

The literature review revealed that the practice of permitting SHCVs in the United States varies widely between states in terms of both permissible vehicle configuration and weight and the amount of the permit fees levied. The gross vehicle weight (GVW) thresholds used to define SHCVs vary from 120 to 254.3 kips. Axle load limits by configuration also vary; ranging from 20 to 29 kips for single axles on dual tires, from 34 to 60 kips for tandem axles on eight tires, and from 50 to 81 kips for tridem axles on 12 tires. In addition, some states set limits on the tire weight per unit width (i.e., it varies between 500 and 800 lb/in.), whereas other states do not. This lack of uniformity in weight regulations effectively reduces the weights of SHCVs traveling through multiple jurisdictions to the least common set of rules in effect through the jurisdictions involved.

There have been regional efforts to establish uniform heavy truck permitting regulations in the United States, whereby a permit issued by one state is accepted for travel in other states. Twelve western states, under the auspices of the Western Association of State Highway and Transportation Officials (WASHTO), Arizona, Colorado, Idaho, Louisiana, Montana, New Mexico, Nevada, Oklahoma, Oregon, Texas, Utah, and Washington, agreed on a uniform set of truck weight regulations that allow trucks permitted in one of these states to legally operate throughout the rest. In summary, these limits consist of a GVW of 160 kips; tire weights of 600 lb/in. of width; overall consecutive axle weight limits governed by the Bridge Formula; and axle configuration weight limits of 21.5, 43, and 53 kips for single, tandem, and tridem axles, respectively. Similar regional efforts are being undertaken in other geographic regions of the country under the coordination of AASHTO’s Subcommittee on Highway Transport (SCOHT). Future efforts of this committee will include harmonization of oversize requirements, coordination of the truck permitting processes with local governments, development of a guide for assessing proposals for changes in truck size and weight standards, and formation of a state–industry advisory group on the movement of “superloads.” It can be noted that other industrialized countries such as Canada, Europe, Australia, and South Africa already have such regulations in place.

The literature review suggests that SHCV single-trip fees vary widely between the 62 jurisdictions in North America (i.e., 50 states, the District of Columbia, ten Canadian provinces, and the Yukon Territory):

- Twenty-three (37%) levy SHCV permit fees that are a function of weight-distance, typically in the form of \$/ton/mile for GVW exceeding a certain value. Interestingly, some of the states that use weight-distance taxes do not use the same approach for levying SHCV permit fees. This fee ranges from \$0.006/ton/mi to \$0.2/ton/mi, with an average value of about 0.049/ton/mi.
- Fifteen (24%) levy SHCV permit fees that are related to GVW/axle weight alone and do not consider at all the distance traveled by the vehicles.
- Eight (13%) levy a flat SHCV permit fee that ranges from \$5 to \$550 regardless of any pavement usage indicators; that is, the weight of the vehicle or the distance traveled.
- Seven (11%) levy a processing fee and may add an infrastructure usage fee after studying SHCVs on a case-by-case basis.
- Two jurisdictions (3%) levy a flat fee and the cost of repairing the infrastructure from any damage rather than the cost infrastructure utilization from SHCV movement.

A web-based survey was conducted between January and July 2014 to collect more detailed information on the practices of U.S. states and Canadian provinces in permitting SHCVs. A total of 39 states and five Canadian provinces responded to the survey questionnaire (i.e., response rates of 78% and 50%, respectively). Eight states submitted two responses, one by its permit officer and one by the engineer who analyzed the impact of SHCVs, bringing the total number of survey responses to 52.

The definition of a SHCV or “superload” varies significantly among jurisdictions. Sixteen of the responding agencies (41%) define SHCV in terms of GVW alone, five (13%) use GVW and axle loads regardless of axle spacing, and another five (13%) use GVW and axle loads as a function of axle spacing. Interestingly, the remaining 13 responding agencies (33%) use an alternative definition involving vehicle size, tire loading, axle spacing, and roadway condition. The definition of what constitutes a non-divisible superload also varies significantly among agencies. Some define it in terms of one-half day of labor effort to subdivide, while others define it in terms of more than 3 days of labor effort to subdivide into smaller shipments.

Thirty-eight agencies responded as to whether or not they conduct pavement analysis as part of their SHCV permit process. Of those, five (13%) always do (Delaware, Missouri, Louisiana, Tennessee, and Vermont), 15 (40%) do so depending on the circumstances (Arizona, Colorado, Iowa, Illinois, Indiana, North Carolina, North Dakota, Oregon, Washington, Wisconsin, Wyoming, Texas, Virginia, British Columbia, and Ontario), whereas the remaining 18 agencies (47%) never perform such an analysis. The majority of the agencies that perform pavement analysis do so when dealing with a vehicle exceeding their definition of a SHCV. Details on the pavement analysis performed were provided by 15 states. Their majority uses either their own in-house developed mechanistic-empirical pavement analysis approach or the mechanistic methods developed by industry. Several agencies indicated that they use the 1993 AASHTO *Guide for the Design of Pavement Structures* and characterize the traffic in terms of equivalent single axle loads. None of the responding agencies uses the *Mechanistic-Empirical Pavement Design Guide* for analyzing the impact of SHCVs.

Additional details on the pavement analysis performed by the 15 responding states suggest that the majority use representative thickness and layer/subgrade moduli and consider the entire length of the SHCV. About half of them consider only one wheel path, the actual number of tires in the wheel path, and the tire inflation pressure, while approximately 25% consider the vehicle speed. Furthermore, only four of the 15 responding agencies consider structural failure of the pavement layers and subgrade as part of the SHCV permitting analysis.

Only two of these four states gave details on the actual method used for analyzing the structural stability of the pavement layers. One indicated using the Mohr–Coulomb method, whereas the other reported using a slope-stability approach for this purpose.

The results of the survey questionnaire confirmed the findings of the literature review on the various methodologies agencies use for computing SHCV permit fees. Fifteen of the 46 responding agencies (33%) use a GVW-distance-traveled approach (Alabama, Florida, Illinois, Ohio, Missouri, Montana, North Dakota Tennessee, Utah, Vermont, Washington, West Virginia, Wyoming, British Columbia, and Ontario), two use a pavement damage-distance-traveled approach (Arizona and Oregon), another two use a number of axles-distance-traveled approach (Idaho and New Jersey), while 19 (41%) use a different methodology.

The findings of this study suggest that the practice of permitting SHCVs could be significantly improved through further study of their impact on pavements and implementation of the results in establishing equitable permit fees that cover pavement utilization and/or damage.

CHAPTER ONE

INTRODUCTION

There is an increasing demand for highway transport of very large non-divisible shipments that not only exceed legal gross vehicle weight (GVW) and axle weight limits, but also exceed the special provisions that allow overweight vehicles to operate with routine annual permits. Such vehicles are typically allowed to operate under single-trip permits following an engineering analysis of their impact on the pavement infrastructure (pavements and bridges) on a specific route.

State and provincial practices on permitting such vehicles, henceforth to be referred to as superheavy commercial vehicles (SHCVs) or “superloads,” have a significant impact on both transportation efficiency and infrastructure condition. Transportation efficiency is affected by the differences in SHCV permitting regulations between jurisdictions, which is especially true for inter-state or trans-border movements, where differences in regulations make border crossings problematic. The condition of the pavement infrastructure is affected where the fees collected for SHCV permitting do not cover the pavement damage cost caused by these vehicles. Therefore, documenting the practice states and provinces use in permitting SHCVs is very important. It provides a snapshot of current practices, illustrates their differences, and may serve as a guideline for making them more uniform. It is noted that this report precedes the publication of the final report of the Comprehensive Truck Size and Weight Limits Study (*J*) currently under way with MAP-21 funding (Moving Ahead for Progress in the 21st Century Act, Section 32801).

OBJECTIVE

The objective of this Synthesis is to document the practices states and provinces follow in issuing permits for overweight vehicles and SHCVs. It is recognized that SHCV permitting involves additional considerations, such as those resulting from their size (e.g., geometric and safety) as well as their impact on bridges. However, the focus of this Synthesis is on the SHCV permitting issues related to pavements.

METHODOLOGY

The methodology followed in this Synthesis included a literature review and a survey questionnaire. The literature review covered the U.S. and international literature on regulations, permitting fees related to SHCV vehicle movement, and recent research conducted to ascertain their impact on pave-

ments. It utilized specialized web search engines and resources; for example, RITA and TRID, in locating relevant documents. In addition, the literature of the various states and provinces on heavy vehicle weight and dimension regulations was reviewed with a focus on the limits of oversized–overweight (OS-OW) vehicles. Finally, any currently available information on the ongoing weight and dimensions study funded under MAP-21 was reviewed (i.e., scanning reports and public input feedback).

The web-based survey was designed to collect information on SHCV permitting practices from two groups of transportation officials; those that evaluate the compliance of heavy trucks with state weight and dimension rules (e.g., Departments of Commercial Vehicles), and those that assist the former in evaluating the impact of these vehicles on the pavement infrastructure (e.g., Departments of Transportation/Pavement Engineering). The questionnaire directed the responder to the appropriate set of questions on the basis of their response to the question “What Dept. do you work for?” It was developed through a series of interactions with the Synthesis Panel until it was approved and finalized in November 2013. The questionnaire is shown in Appendix A and consists of four main sections:

- Section A: General questions on SHCV permitting
- Section B: Jurisdiction’s definition of SHCVs
- Section C: Pavement analysis details
- Section D: Method used to establish the fees for SHCV permits.

The responder distribution list for the survey was developed by updating a contact list obtained from the Specialized Carriers and Rigging Association (Centreville, Virginia). Additional work was carried out to update this list and expand it by identifying the names and contact information of the Department of Transportation/Pavement Engineers that conduct the analysis of the SHCV being considered for permitting. The survey was circulated by e-mail on January 15, 2014; follow-up phone calls were made to encourage maximum participation. The survey was open until July 30, 2014. The remainder of the report is structured as follows:

- Chapter two covers the literature review,
- Chapter three presents the survey questionnaire results,
- Chapter four presents several SHCV case examples, and
- Chapter five presents the conclusions.

LITERATURE REVIEW

The literature review covers the national and international literature on the practices followed for permitting SHCVs. It is separated into two major parts, the first dealing with SHCV weight regulations and the second with the fees charged for permitting SHCVs.

REVIEW OF SUPERHEAVY COMMERCIAL VEHICLE WEIGHT REGULATIONS

Current SHCV weight regulations in the United States are set by individual states that recognize that there is a need to allow large non-divisible shipments within their jurisdictions. A summary of these regulations is given in Table 1. This summary was compiled with information primarily obtained from the *Oversize/Overweight Permit Manual: United States & Canada* published by the Specialized Carriers & Rigging Association (2). Heavy vehicle regulations of individual states and Canadian provinces were also used. The table lists the maximum limits of the type of vehicle that can be permitted in each state and province under annual overweight permits. It includes the GVW limit, the maximum weight allowed by unit tire width, the axle weight by axle configuration, and any special provisions that apply. Vehicles exceeding these limits may be permitted on a single-trip basis following an engineering bridge and pavement analysis; hence, they fit the definition of a “superload” or SHCV. Where “permit limit” is indicated in Table 1, the jurisdiction does not use the term “superload.” They simply indicate the maximum GVW permitted and, therefore, vehicles exceeding this GVW would require engineering analysis and fit the definition of a SHCV. Figure 1 shows the geographic distribution of these GVW limits. This figure suggests that some neighboring states have the same GVW limits (e.g., Oregon, Washington, and Idaho), but to a large extent the distribution of these limits appears to be random.

The differences in weight limits between jurisdictions, even those that have common borders, are substantial. For example, a vehicle with a GVW between 150 and 199 kips crossing the Florida–Georgia border would require a SHCV permit review in Georgia but not in Florida, and would be required to have a unit tire weight of less than 550 lb/in. only in Florida, since Georgia does not have this requirement. Similarly, a vehicle with a GVW between 144 and 191 kips crossing the Minnesota–Wisconsin border would require a SHCV permit review in Minnesota but not in Wisconsin, and would face different maximum permitted axle weights (e.g., tandem axle weights of 40 versus 60 kips and tridem

axle weights of 60 versus 81 kips, respectively). These differences in truck weight regulations and their impact have been described previously elsewhere in the literature [e.g., Bilal et al. (3) and Fu and Fu (4)]. SHCV permitting requirements are further complicated because some jurisdictions apply different weight thresholds for the engineering analysis of pavements than those used to define SHCV. Texas, for example, uses a 500 kips GVW threshold for pavement analysis (Figure 2), while defining SHCVs as those exceeding 254 kips (5). New York is another example of a state that has a higher GVW threshold (199.9 kips) but requires engineering analysis for vehicles GVWs exceeding 140 kips. Figure 2 also illustrates that the process followed for the pavement analysis may be labor-intensive, involving in situ pavement measurements such as falling weight deflectometer (FWD) and ground penetrating radar. It also suggests that a 1,000 cycles to failure criterion is used for deciding whether a SHCV would be allowed on a particular route. Clearly, there is a lack of uniformity in weight regulations for SHCVs between jurisdictions. It practically reduces the maximum weights of SHCVs traveling through multiple jurisdictions to the least common set of rules in effect in the jurisdictions traversed.

There have been regional efforts to establish uniform truck permitting regulations in the United States. Under the auspices of the Western Association of State Highway and Transportation Officials (WASHTO), 12 western states agreed on a uniform set of truck weight regulations that allow trucks permitted in one of these states to legally operate throughout the rest (6). In summary, these limits consist of a GVW of 160 kips, a tire unit weight of 600 lb/in. of width, overall consecutive axle weight limits governed by the Bridge Formula (Table 2), and axle configuration weight limits of 21.5, 43, and 53 kips for single, tandem, and tridem axles, respectively. The signatories of this agreement are Arizona, Colorado, Idaho, Louisiana, Montana, New Mexico, Nevada, Oklahoma, Oregon, Texas, Utah, and Washington State. Other regional efforts to harmonize truck weight limit regulations are under way under the auspices of AASHTO. This effort is being coordinated by the Highways Subcommittee on Highway Transport (SCOHT). In their most recent meeting (7), it was agreed that the focus of future activities would include harmonization of oversize requirements, coordination of the truck permitting processes with local governments, development of a guide for assessing proposals for changes in truck size and weight standards consistent with AASHTO highway design specifications, and formation of a state–industry advisory group on the movement of “superloads” and “megaloads.”

TABLE 1
SUMMARY OF STATE/PROVINCIAL SHCV WEIGHT REGULATIONS

State/Province	Superload GVW (kips)	Tire Weight Limit (lb/in.)	Permitted Axle Load Limits (kips) for single, tandem, tridem, and quad axles	Comments
Alabama	>150	700	22, 44, 66, 88	
Alaska	>150	700	30, 56, 70, 80	
Arizona	>250	—	—	
Arkansas	—	—	20, 40, 60, 68	
California	—	620	Depends on axle spacing and route type	
Colorado	>200	—	27, 50, 65, 72	
Connecticut	>140	600	22.4, 40, 60, 80	
Delaware	>120	—	20, 40, 60, 80	
D.C.	>248	—	31, 62, 93, 124*	*actual weight depends on spacing/tire pressure
Florida	>199	550	—	
Georgia	>150	—	23, —, 60, 92	
Hawaii	—	—	—	Over legal weights require bridge analysis
Idaho	>200	600	Depends on route type	
Illinois	>187	—	29, 54, 75, 100	
Indiana	>120	800	28, 48, 60, 80	
Iowa	>156	—	20, 40, 60, 80	
Kansas	>150	—	24, 49, 60, 65	
Kentucky	>200	700	20, 48, 60, 80	
Louisiana	>254	700	24, 45, 60, 80	Analysis performed off highway system only
Maine	>150	600	*, 39.1, 62.1, 110	*Single axle weight limited by tire width
Maryland	>150	—	27, 52, 63, —	
Massachusetts	130 permit max	800	Depends on axle spacing	
Michigan	>164	700	Depends on route, vehicle width, and tire size	Unit tire pressures 525/450 for rig/flex under restrictions
Minnesota	>144	600	20, 40*, 60, 72	*46 with bridge check
Mississippi	>190	550	12, 48, 57/*63, 64/*72	*Axle weights on interstate/off interstate. SASHTO agreement for GVW < 120 kips
Missouri	>160	—	20, 46, 60, 72	SASHTO agreement for GVW < 120 kips
Montana	126 permit max	500	22, 48, 51.75, 55.4	
Nebraska	>160	—	20, 34, 60	
Nevada	106 permit max	—	Depends on axle spacing and route	
New Hampshire	—	—	27.5, 50, 67.5, 80	
New Jersey	—	800	Based on tire unit weight	
New Mexico	—	—	Depends on route	
New York	>199.9	—	Depends on route, axle spacing, and vehicle configuration	Engineering review for GVW > 140 kips
North Carolina	>132	—	25, 50, 60, 68	
North Dakota	>150	—	12*, 45, 60, 68	*steer axle
Ohio	>120	—	29, 36/*50, 47/*60, 60/*80	* spacing 4 ft/4 ft, 1 in.
Oklahoma	>150	—	—, 40, 60, 65	
Oregon	>200	600	21.5/43/depends on spacing	
Pennsylvania	>201	800	27, 52, 63, 72	
Rhode Island	120 permit limit	—	Depends on route and vehicle configuration	
South Carolina	>130	—	20, 40, 60, 80	
South Dakota	>200	600	53.3% higher than bridge formula weight limits	
Tennessee	160 permit limit	—	20, 40, 60, 80	SASHTO agreement for GVW < 120 kips

(continued on next page)

TABLE 1
(continued)

State/Province	Superload GVW (kips)	Tire Weight Limit (lb/in.)	Permitted Axle Load Limits (kips) for single, tandem, tridem, and quad axles	Comments
Texas	>254.3	—	25, 46, 60, 70	Pavement analysis when GVW > 500 or tire weight > 6 kips
Utah	>125	600	29.5, 50, 61.75, Bridge f.	
Vermont	>150	600	Depends on tire size	
Virginia	>150	—	24, 44, 75/*54.5, 100/*64.5	*Interstate/other
Washington	>200	500/600	22, 43, 65, 70	
West Virginia	120 permit limit	—	28, 45, 50, 55	
Wisconsin	191 permit limit	—	20, 60, 81, 90	
Wyoming	>150	—	25, 55, 65, 74	
Alberta	Permit limits depend on axle spacing	—	Depends on axle configuration and number of tires	
British Columbia	141 permit limit	—	13.2, 50.7, 61.7, 63.9	
Manitoba	133.1 permit limit	—	20, 48.3, 60.5	
New Brunswick	171.9 permit limit	—	20, 52.5, 65, —	
Newfoundland	118 permit limit	—	Case-by-case basis	
Nova Scotia	—	—	—	
Ontario	140 permit limit	615	No limits up to max GVW	
Prince Edward Island	—	—	20, 58, 74, 79.2	
Quebec	163.1 permit limit	—	31.9, 52.8, 61.7, 62.8	
Saskatchewan	137.7 permit limit	560/*500	Depends on tire width	*steering/other
Yukon	—	—	—, 50.4, 60.8, —	

Based on information from the *Oversize/Overweight Permit Manual* (2).

— = none indicated

Where “permit limit” is indicated, jurisdiction does not use the term “superload,” which implies that vehicles with larger than the GVW indicated require special analysis and hence are SHCVs.

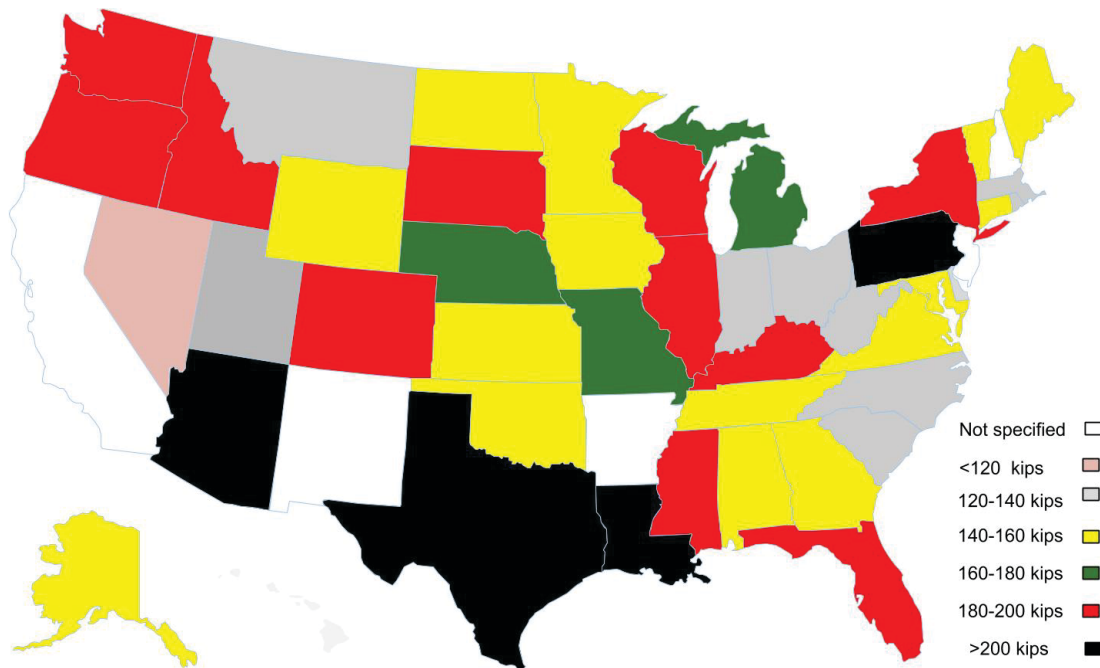


FIGURE 1 Geographic distribution of the GVWs defining SHCVs in the United States (data shown in Table 1).

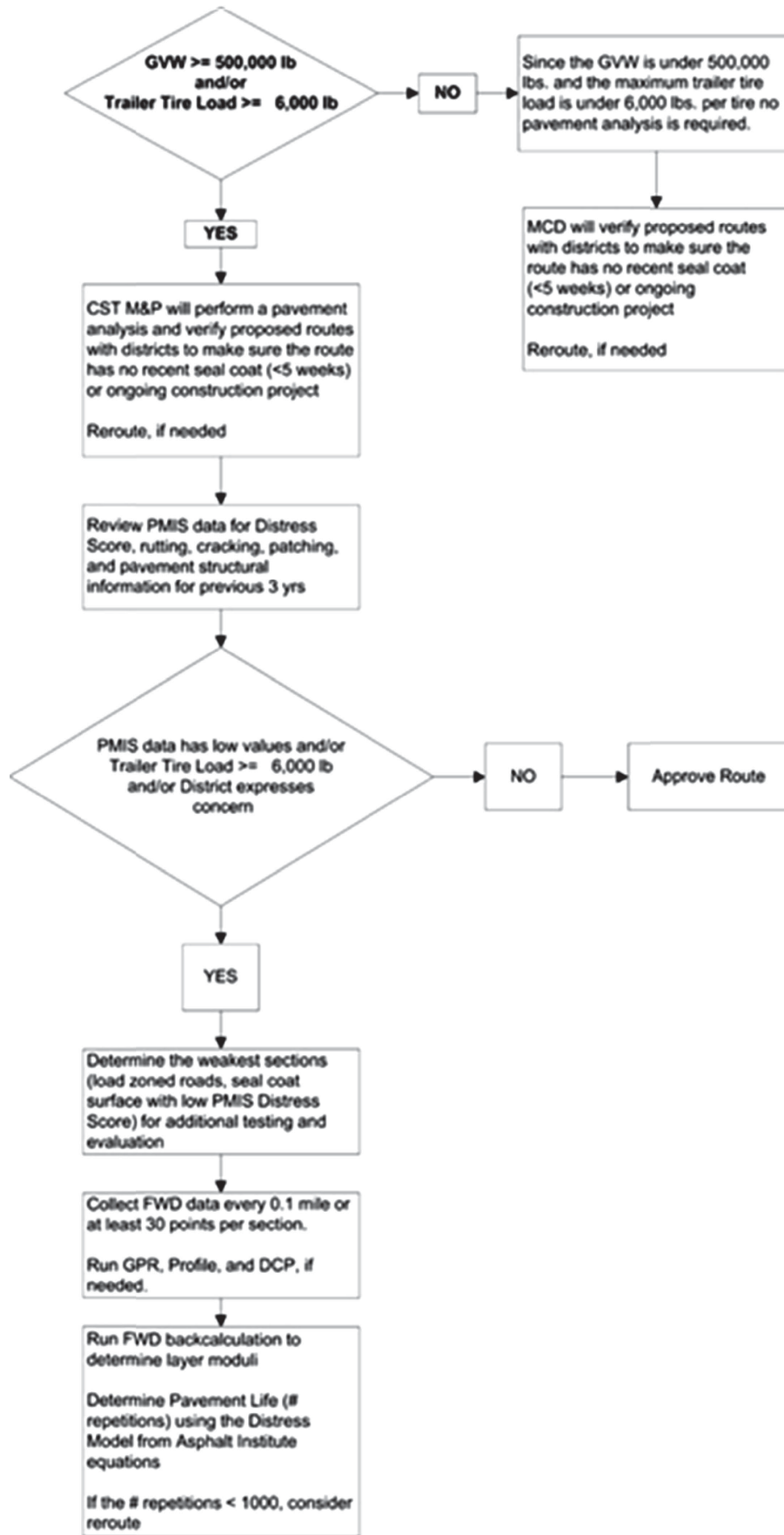


FIGURE 2 Process used in Texas for evaluating the impact of SHCVs on pavements (5).

TABLE 2
OVERWEIGHT VEHICLE AXLE WEIGHT LIMITS (lb) UNDER THE WASHTO AGREEMENT (6)

Distance*	Maximum load in pounds carried on any group of two or more consecutive axles									
	2 axles	3 axles	4 axles	5 axles	6 axles	7 axles	8 axles	9 axles	10 axles	
4	43,000	—	—	—	—	—	—	—	—	
5	43,000	—	—	—	—	—	—	—	—	
6	43,000	—	—	—	—	—	—	—	—	
7	43,000	—	—	—	—	—	—	—	—	
8	43,000	53,000	—	—	—	—	—	—	—	
9	43,000	53,000	—	—	—	—	—	—	—	
10	43,000	53,000	—	—	—	—	—	—	—	
11	—	53,000	—	—	—	—	—	—	—	
12	—	53,000	70,000	—	—	—	—	—	—	
13	—	53,000	70,900	—	—	—	—	—	—	
14	—	64,500	71,900	—	—	—	—	—	—	
15	—	—	72,800	—	—	—	—	—	—	
16	—	—	73,700	81,200	—	—	—	—	—	
17	—	—	74,700	82,100	—	—	—	—	—	
18	—	—	75,600	83,000	—	—	—	—	—	
19	—	—	76,500	83,300	—	—	—	—	—	
20	—	—	77,500	87,400	—	—	—	—	—	
21	—	—	78,400	85,600	—	—	—	—	—	
22	—	—	79,300	86,500	—	—	—	—	—	
23	—	—	80,300	87,300	—	—	—	—	—	
24	—	—	81,200	88,200	—	—	—	—	—	
25	—	—	82,100	89,100	—	—	—	—	—	
26	—	—	83,100	90,000	—	—	—	—	—	
27	—	—	84,000	90,800	—	—	—	—	—	
28	—	—	84,900	97,200	99,100	—	—	—	—	
29	—	—	85,900	92,600	100,000	—	—	—	—	
30	—	—	86,000	93,400	100,800	—	—	—	—	
31	—	—	—	94,300	101,600	—	—	—	—	
32	—	—	—	95,200	102,500	—	—	—	—	
33	—	—	—	96,100	103,300	—	—	—	—	
34	—	—	—	97,000	104,200	—	—	—	—	
35	—	—	—	97,800	105,000	—	—	—	—	
36	—	—	—	98,700	105,800	—	—	—	—	
37	—	—	—	99,600	106,700	—	—	—	—	
38	—	—	—	100,500	107,500	—	—	—	—	
39	—	—	—	101,300	108,400	—	—	—	—	
40	—	—	—	102,200	109,200	—	—	—	—	
41	—	—	—	103,100	110,000	—	—	—	—	
42	—	—	—	104,000	110,900	—	—	—	—	
43	—	—	—	104,800	111,700	—	—	—	—	
44	—	—	—	105,700	112,600	—	—	—	—	
45	—	—	—	106,600	113,400	—	—	—	—	
46	—	—	—	107,500	114,200	121,600	—	—	—	
47	—	—	—	—	115,100	122,400	—	—	—	
48	—	—	—	—	115,900	123,200	—	—	—	
49	—	—	—	—	116,800	124,000	—	—	—	
50	—	—	—	—	117,600	124,800	—	—	—	
51	—	—	—	—	118,400	125,700	—	—	—	
52	—	—	—	—	119,300	126,500	—	—	—	
53	—	—	—	—	120,100	127,300	—	—	—	
54	—	—	—	—	121,000	128,100	135,600	143,300	151,200	
55	—	—	—	—	121,800	128,900	136,400	144,100	152,000	
56	—	—	—	—	122,600	129,700	137,200	144,900	152,800	
57	—	—	—	—	123,500	130,600	138,000	145,700	153,500	
58	—	—	—	—	124,300	131,400	138,800	146,500	154,300	
59	—	—	—	—	125,200	132,200	139,600	147,300	155,100	
60	—	—	—	—	—	—	140,400	148,100	155,900	
61	—	—	—	—	—	—	141,200	148,800	156,600	
62	—	—	—	—	—	—	142,000	149,600	157,400	
63	—	—	—	—	—	—	142,800	150,400	158,200	
64	—	—	—	—	—	—	143,600	151,200	159,000	
65	—	—	—	—	—	—	144,400	152,000	159,800	
66	—	—	—	—	—	—	145,200	152,800	160,000	
67	—	—	—	—	—	—	146,000	153,600	—	
68	—	—	—	—	—	—	146,800	154,400	—	
69	—	—	—	—	—	—	147,600	155,100	—	
70	—	—	—	—	—	—	148,400	155,900	—	
71	—	—	—	—	—	—	149,200	156,700	—	
72	—	—	—	—	—	—	150,000	157,500	—	
73	—	—	—	—	—	—	150,800	158,300	—	
74	—	—	—	—	—	—	151,600	159,100	—	
75	—	—	—	—	—	—	152,400	159,900	—	
76	—	—	—	—	—	—	153,200	160,000	—	
77	—	—	—	—	—	—	154,000	—	—	
78	—	—	—	—	—	—	154,800	—	—	
79	—	—	—	—	—	—	155,600	—	—	
80	—	—	—	—	—	—	156,400	—	—	
81	—	—	—	—	—	—	157,200	—	—	
82	—	—	—	—	—	—	158,000	—	—	
83	—	—	—	—	—	—	158,800	—	—	
84	—	—	—	—	—	—	159,600	—	—	
85	—	—	—	—	—	—	160,000	—	—	

*Distance in feet between the first and last axle of any group of consecutive axles.
Note: In Oklahoma, a 9- or 10-axle configuration is limited to the allowances under the 8-axle configuration column.

As mentioned earlier, the U.S. Congress recently authorized a Comprehensive Truck Size and Weight Limits Study (1) under MAP-21 funding (Moving Ahead for Progress in the 21st Century Act; Section 32801), with the following objectives:

- Address the differences in safety risks, infrastructure impacts, and the effect on levels of enforcement between trucks operating at or within federal truck size and weight limits and trucks legally operating in excess of federal limits;
- Compare and contrast the potential safety and infrastructure impacts of alternative configurations (including configurations that exceed current federal limits) to the current federal truck size and weight law and regulations; and
- Estimate the effects of freight diversion resulting from these alternative configurations.

The alternative truck configurations to be studied include:

- Five-axle (3-S2) tractor-semitrailer with a maximum GVW of 88,000 lb.
- Six-axle (3-S3) tractor-semitrailer with a maximum GVW of 91,000 lb.
- Six-axle (3-S3) tractor-semitrailer with a maximum GVW of 97,000 lb.
- Twin-trailer (2-S1-2) combination with 33-foot trailers and a maximum GVW of 80,000 lb.
- Triple-trailer (2-S1-2-2) combination with 28.5-foot trailers and a maximum GVW of 105,500 lb.
- Triple-trailer (3-S2-2-2) combination with 28.5-foot trailers and a maximum GVW of 129,000 lb.

The truck weight impact on flexible and rigid pavements is being studied using the pavement damage functions incorporated into the *Mechanistic-Empirical Pavement Design Guide* (8). Although this study will not address the impact of SHCVs, it may provide a method for doing so in the future. The pavement analysis part of this study had not been completed at the time this report was written.

Since the early 1970s, Canada has recognized the need for harmonizing the diverse truck size and weight regulations across the ten provinces and three territories. It established a committee to study the pavement and bridge infrastructure needs and the type, weight, and dimension of trucks that can be safely accommodated on the national highway network. This led to a national Vehicle Weights and Dimensions Study, completed in 1986 under the auspices of the Canadian Council of Motor Transport Administrators/Roads and Transportation Association of Canada (CCMTA/RTAC) (9). This study dealt with two truck size and weight issues, safety and roll stability and axle weight effects on pavement response and damage. Safety was studied through a combination of static roll tests and dynamic vehicle roll simulations. Axle dynamics were evaluated through instrumentation on board

test vehicles (10), while pavement damage was estimated by measuring in situ pavement responses (strains and deflections). The latter were used for estimating relative pavement damage through mechanistic load equivalence factors using as a reference the damage from the conventional 18 kip single axle load. This study considered a variety of vehicle configurations including single unit, semi-trailer, and multi-trailer truck combinations. The committee used the findings of this study to develop a national Memorandum of Understanding (MOU) of vehicle weights and dimensions. The axle weight limits agreed upon are:

- 20 kips on single axles on four tires;
- 37.5 kips on tandem axles; and
- 46.3, 50.7, and 52.9 kips on tridem with minimum axle spacings of 96, 120, and 144 inches, respectively.

All Canadian provinces agreed to allow the configurations and axle load limits defined in the MOU to operate on their part of the national highway system, although some allowed heavier vehicles to operate within their boundaries. This MOU has been amended five times since 1989 to accommodate additional single unit trucks, truck-trailer combinations, and intercity buses. By 1999, more than 95% of truck trips in the four western provinces and 80% of the trucks in the six eastern provinces complied with the MOU (11). A study was conducted in 1994 to quantify the net annual benefits of the homogenized truck weight and dimension regulations resulting from the MOU (12). They were estimated to be in the order of \$142 million in 1992, and projected to increase to \$180 million in 1997 and \$222 million in 2002 (Canadian 1992 \$). To this day, all Canadian provinces use the framework established by the 1986 Truck Weights and Dimensions study to assess the impact of different heavy vehicles being proposed.

In Australia, the 2012 Heavy Vehicle National Law Act replaced provincial heavy vehicle legislation harmonizing the rules for freight movement on the national roadway network (13). These regulations consist of a combination of axle weight limits and GVW limits that are a function of tire width and axle spacing, respectively. The axle weight “exception” limits are 14.3, 22, 49.5, and 59.4 kips for steering axles with single tires, single axles with dual tires, tridem axles on 12 tires, and quad axles on 16 tires, respectively. Different GVW limits are specified for “general” trucks and double B-trains. The GVW limits for the latter are given in Table 3 because they resemble some of the SHCVs operating in the United States.

The 1996 European Weights and Dimensions Directive (96/53/EC) set maximum vehicle dimensions and weights for interstate European Union (EU) road transport (14). The limits established are 54.1 ft in length for semi-trailers and 61.75 ft for road trains, 8.5 ft in width, 13.1 ft in height, and 88 kips in GVW for normal operations/96.8 kips GVW for

TABLE 3
AUSTRALIAN GVW LIMITS AS
A FUNCTION OF OVERALL AXLE
SPACING

Wheel Base (feet)	GVW (kips)
0.0 to 8.2	33
8.2 to 12.1	50.6
12.1 to 12.5	51.7
12.5 to 13.1	52.8
13.1 to 13.8	53.9
13.8 to 14.1	55
14.1 to 14.8	56.1
14.8 to 15.4	57.2
—	—
168.3 to 168.9	366.3
168.9 to 169.6	367.4
169.6 to 169.9	368.5
169.9 to 170.6	369.6
170.6 to 171.2	370.7
171.2 to 171.5	371.8
171.5 to 172.2	372.9
172.2 to 172.9	374
172.9 to 173.2	375.1
173.2 to 173.8	376.2
173.8 to 174.5	377.3
174.5 to 174.8	378.4
>174.8	379.5

Based on information from Heavy Vehicle (Mass, Dimension and Loading) National Regulation Subordinate Legislation 2013 No. 77 (13).

intermodal transport (e.g., combination of truck and rail or ship). However, it is up to members or states to regulate larger and heavier trucks within their jurisdictions. In April 2013, the European Commission proposed to revise this directive to allow longer and heavier loads in order to accommodate new less polluting engines and the use of trailers that can carry 48-foot-long shipping containers. In addition, longer and superheavy trucks, referred to as “megatrucks” are allowed, measuring up to 82.8 feet in length and up to 132 kips in GVW, if they cross only one border between two member states that are willing to mutually permit such vehicles. In April 2014, the EU Parliament voted not to extend the use of megatrucks for the time being. The question has been referred back to the Commission, which has been asked to present a report on the effects of megatrucks on the infrastructure and their effect on possible modal shift. Any future proposal on this issue needs to be justified by a detailed impact assessment.

South Africa began establishing national weight and dimension limits for its trucks in 1974. These regulations have evolved over the years and are currently in their 8th edition, published in 2009 (15, 16). The current weight limits for single, tandem, and tridem axles on dual tires are set at 19.8, 39.6, and 52.8 kips, respectively, whereas the GVW limit is set at 123.2 kips. Vehicles that exceed these limits are referred to

as “abnormal” vehicles and are subjected to regulations under the “Conveyance of Abnormal Loads” legislation, abbreviated as TRH 11. For the purpose of assessing permit fees, the impact of the “abnormal loads” is estimated using the South African Mechanistic Design Method. This approach allows for the consideration of the pavement structural details and the load configuration, which is believed to provide more realistic results than the traditional empirical load equivalency factors [i.e., equivalent single-axle loads (ESALs)] (17).

REVIEW OF SUPERHEAVY COMMERCIAL VEHICLE PERMIT FEES

A summary of the fees levied for a single-trip permit of a SHCV is given in Table 4. The main source of this information is the *Oversize/Overweight Permit Manual: United States and Canada* published by the Specialized Carriers & Rigging Association (2). Additional sources used were heavy vehicle regulations and the corresponding permit fee structure of individual states/Canadian provinces. The single-trip SHCV permit fee differences between jurisdictions are substantial.

Summarizing the fee structures given in Table 4 reveals that among the 62 North American jurisdictions (i.e., 50 states, the District of Columbia, ten Canadian provinces, and the Yukon Territory):

- Twenty-three (37%) levy SHCV permit fees that are a function of weight-distance, typically in the form of \$/ton/mile for GVW exceeding a certain value. Interestingly, some of the states that use weight-distance taxes do not use the same approach for levying SHCV permit fees. This fee ranges from \$0.006/ton/mi to \$0.2/ton/mi, with an average value of approximately \$0.049/ton/mi. Interestingly, some states using weight-distance taxes instead of fuel taxes for trucks do not use the same approach for levying permit fees. These include Kentucky, New Mexico, New York, and Oregon.
 - Kentucky uses a SHCV fee that depends only on the results of bridge analysis.
 - New Mexico has a GVW-distance fee.
 - New York has a fixed-fee structure plus bonding.
 - Oregon has an axle load-distance fee structure.
- Fifteen (24%) levy SHCV permit fees that are related to GVW/axle weight alone and do not consider the distance traveled by the vehicles.
- Eight (13%) levy a flat SHCV permit fee that ranges from \$5 to \$550 regardless of any pavement usage indicators; that is, the weight of the vehicle or the distance traveled.
- Seven (11%) levy a processing fee and may add an infrastructure usage fee after studying SHCVs on a case-by-case basis.
- Two (3%), Kansas and California, levy a basic fee and in addition require that the shipper “must pay for all infrastructure repairs.” This approach targets pavement damage cost recovery rather than pavement usage cost recovery from SHCV movements.

TABLE 4
SUMMARY OF STATE AND PROVINCIAL “SUPERLOAD” SINGLE-TRIP PERMIT FEES

State/Province	Single-Trip “Superload” Permit Fees (GVW in kips); 2012\$
Alabama	Permit fee: \$100 for GVW > 150, additional fees decided on a case-by-case basis.
Alaska	Permit fee: \$20 for GVW > 150, additional fees decided on a case-by-case basis.
Arizona	Single trip registration: \$12/trip < 50 miles; \$48/trip > 50 miles, Use fuel fee: \$16/trip < 50 miles; \$65/trip > 50 miles, Class “A” overweight permit fee: \$75.
Arkansas	Permit fee: \$17 Extra charges/ton: < 100 miles: \$8 101 to 150 miles: \$10 151 to 200 miles: \$12 201 to 250 miles: \$14 > 251 miles \$16
California	Permit fee: \$16 Carrier pays cost of any infrastructure repairs.
Colorado	OW fee: \$10/overweight axle, regardless of distance traveled.
Connecticut	Permit fee: \$23, additional fees decided on a case-by-case basis.
Delaware	Permit fee: \$10 Fees: \$5 for each 8 kips in GVW over 120 kips, regardless of distance driven.
D.C.	Permit fee: \$30; no additional fees indicated.
Florida	GVW < 95: \$0.27/mi GVW 95–112: \$0.32/mi GVW 112–122: \$0.36/mi GVW 122–132: \$0.38/mi GVW 132–142: \$0.42/mi GVW 142–152: \$0.45/mi GVW 152–162: \$0.47/mi GVW 162–199: \$0.003/1000 lb/mi GVW > 199; \$0.003/1000 lb/mi
Georgia	GVW 150–180: \$125 GVW > 180: \$500 regardless of distance traveled.
Hawaii	Permit fee: \$5; no additional fee indicated.
Idaho	Permit fee: \$71; no additional fee indicated.
Illinois	Permit fee: \$50 Additional fees as a function of the number of axles, axle loads, GVW and distance traveled for GVW < 120. Fees for GVW > 120 not indicated.
Indiana	Permit fee: \$42.50 Additional fee for GVW 108–150: \$0.60/mi; for GVW > 150 \$1.0/mi.
Iowa	Permit fee: \$10; additional fees may be levied on a case-by-case basis.
Kansas	Permit fee: \$50 No specific additional fees indicated, but mover must pay all infrastructure damages.
Kentucky*	Permit fee: \$60 Additional fee that depends on bridge analysis (i.e., number of axles, axle weight/spacing).
Louisiana	Permit fee: \$10 Additional fee for GVW > 254: \$0.50/ton/mi of GVW > 80 plus fee for structural bridge analysis (\$125–\$850).
Maine	Permit fee: — Additional fees range from \$6 to \$27.50 depending on the amount by which the allowable 80 kip GVW is exceeded, regardless of distance traveled.
Maryland	Permit fee: \$50 Additional fees: \$30 for the first 40 kips plus \$5 for each additional ton, plus bridge analysis fees.
Massachusetts	Permit fee: \$350; additional fees may be decided on a case-by-case basis.
Michigan	Permit fee: \$50; additional fees decided on a case-by-case basis.
Minnesota	Permit fee: \$36 Additional fees based on damage assessment per mile (axle number and load).
Mississippi	Permit fee: — Additional \$0.05/mile/1,000 lb.
Missouri	Permit fee: \$15 Additional \$2/1000 lb in excess of legal GVW plus bridge analysis fee (\$425 for 0–50 mi, 625 for 51–200 mi, and \$925 for > 200 mi move).

(continued on next page)

TABLE 4
(continued)

State/Province	Single-Trip "Superload" Permit Fees (GVW in kips); 2012\$
Montana	Permit fee: \$10–\$50 depending on miles driven Additional fee for GVW > 100: \$70 + \$3.50/5,000 lb on excess for each 25 miles driven.
Nebraska	Permit fee: \$20; additional fees decided on a case-by-case basis.
Nevada	\$25 regardless of GVW and mileage
New Hampshire	GVW 80–90: \$9.50 GVW 90–100: \$10.50 GVW > 100: \$2/each additional 10 kips regardless of distance traveled.
New Jersey	\$10 base fee + \$5/ton in excess of 80k GVW + \$5/ton on singles/tandems axles > 22.4/34 kips.
New Mexico*	\$25 + \$0.025/mile/ton over 86.4 kips
New York*	Permit fee: \$40–\$360 depending on commodity, plus analysis fee, plus bonding (\$10k–\$50k) depending on GVW.
North Carolina	\$12 + \$3/1,000 lb over 132 kips GVW regardless of mileage.
North Dakota	GVW 150–160: \$30 GVW 160–170: \$40 GVW 170–180: \$50 GVW 180–190: \$60 GVW > 190: \$70 + \$0.05/ton/mile on GVW > 200.
Ohio	\$135 flat rate + \$0.04/ton/mile in excess of 120 kips GVW.
Oklahoma	Special purpose overweight trip fee: \$40 \$10/1,000 lb overweight (GVW > 150 with 8 axles)
Oregon*	\$8 fee + for GVW > 98k, \$/mile that depends on GVW and number of axles (\$0.01–\$2.601/mi).
Pennsylvania	Fee: \$25 or \$50 + 0.03/ton/mile over carrier's registered weight.
Rhode Island	Fee: \$20 + for divisible loads: trailers \$100; tractors \$50/1,000 lb over legal weight (max. \$1,250); 2-, 3-, 4-axle trucks: \$50/1,000 lb over legal limit (max. \$1,500) regardless of distance traveled.
South Carolina	\$3/1,000 lb for GVW > 130 regardless of distance traveled.
South Dakota	Fee: \$20 + \$0.02/ton/mile for GVW > 40 on 2 axles, GVW > 60 on 3, GVW > 80 on 4, GVW > 85 on 5 axles, GVW > 90 on 6 axles, or GVW > 95 on 7 or more axles.
Tennessee	Fee: \$15 + bridge analysis fee (\$100 to actual cost) + \$0.05/ton/mile
Texas	Fee: \$90 + fee depending on the number of counties traversed (\$270–\$1,095) + maintenance fee for 200 < GVW < 254.3 (\$375) + supervision fee for 200 < GVW < 254.3 (\$35 for LOA > 95 ft, \$500 for LOA < 95 ft).
Utah	Fee: \$60 + fee ranging \$65–\$450 depending on GVW and distance traveled.
Vermont	Fee: \$35 + engineering inspection fees ranging from \$800 to \$10,000 depending on GVW.
Virginia	Fee: \$30 + \$0.1/mile/ton.
Washington	Fee: \$25 + \$4.25/mi + \$0.50/5,000 lb/mile for GVW in excess of 100 kips.
West Virginia	Fee: \$20 + \$0.04/ton/mile of overweight.
Wisconsin	Fee: \$105 + \$10/1,000 lb for GVW > 150 kips regardless of distance traveled.
Wyoming	Fee: \$40 + \$0.06/ton/mile traveled
Alberta	Fee: C\$15 + C\$0.03/tonne/km traveled.
British Columbia	Fee: C\$100/month. No fee for a single-trip permit is indicated.
Manitoba	Fee: C\$0.036/metric tonne/km traveled.
New Brunswick	Fee: C\$50–C\$500.
Newfoundland	—
Nova Scotia	Fees: GVW < 110 C\$30.41 GVW < 135 C\$60.81 GVW < 153.8 C\$91.42 GVW < 153.8 C\$243.44 Regardless of distance traveled.
Ontario	Fees: GVW < 264.5 traveling < 62 mi C\$100, traveling 62–310 mi C\$150, traveling >310 mi C\$200 GVW > 264.5 C\$500 regardless of distance traveled.
Prince Edward Island	Fee: C\$25.
Quebec	Fee: C\$10.80 + C\$247 regardless of distance traveled.
Saskatchewan	Fee: C\$11 + (difference between registered weight and actual weight in metric tonnes) x \$0.036 x km traveled + insurance using the same formula substituting C\$0.005 for C\$0.036 + fee of C\$5.
Yukon	Fee: C\$15 + fee based on axle weight-distance traveled.

Based on information from *Oversize/Overweight Permit Manual: United States and Canada (2)*.

— = no fee indicated.

*weigh-distance tax states.

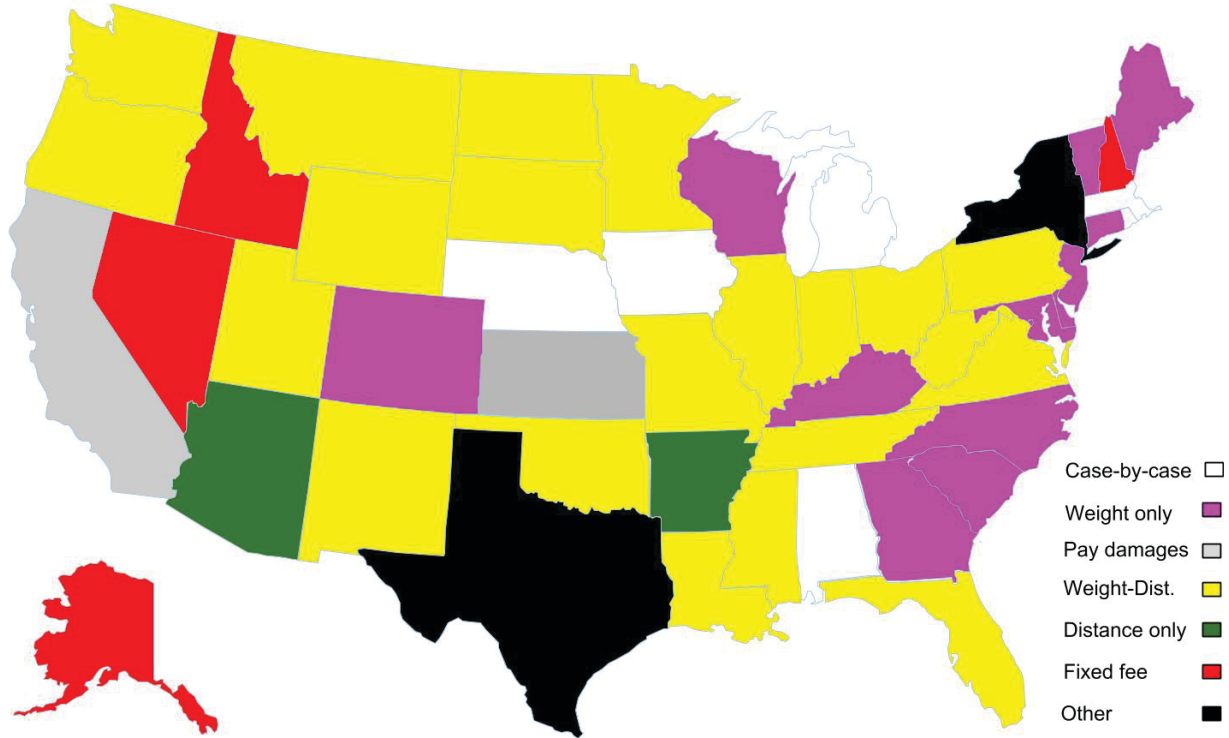


FIGURE 3 Geographic distribution of overweight single-trip permit fee structures in the United States (data shown in Table 4).

- Two (3%), Texas and Ontario, use variations of the GVW-distance approach for establishing SHCV permit fees. Texas uses the number of counties being crossed during movement as a surrogate of the distance traveled. Ontario indexes fees using a sliding distance scale only for vehicles with GVW < 264.5 kips, while charging vehicles with a GVW > 264.5 kips a flat fee of C\$500.

The geographic distribution of these overweight vehicle single-trip permit fee structures is shown in Figure 3. No particular pattern is evident, except in some Midwest and north-central states, where permit fees appear to be based on a combination of GVW-distance traveled.

Table 5 provides a summary of the SHCV permit unit fees (\$/ton/mile or \$/mile/vehicle) levied by states and provinces

TABLE 5
SUMMARY OF PER MILE SHCV PERMIT FEES FROM TABLE 4

State/Province	Unit Permit Fee (\$/ton/mi); GVW in kips (2012\$)
Florida	\$0.0057/ton/mi for GVW < 95 to 0.006/ton/mi for GVW > 199
Indiana	\$0.008/ton/mi for GVW 108–150 to \$0.0133/ton/mi for GVW > 150
Louisiana	\$0.50/ton/mi for GVW > 254 kips
Mississippi	\$0.025/ton/mi
Montana	\$0.056/ton/mi for GVW > 100 kips
New Mexico	\$0.025/ton/mi for GVW > 86.4 kips
North Dakota	\$0.05/ton/mi for GVW > 200 kips
Oregon✓	\$0.01–\$2.601/mi depending on GVW and number of axles
Pennsylvania	\$0.03/ton/mi over registered weight
South Dakota	\$0.02/ton/mi in excess of a GVW, given the number of axles
Tennessee	\$0.05/ton/mi
Virginia	\$0.1/ton/mi
Washington✓	\$4.25/mi regardless of GVW + \$0.20/ton/mi for GVW > 100
West Virginia	\$0.04/ton/mi overweight
Wyoming	\$0.06/ton/mi
Alberta	C\$0.03/metric tonne/km
Saskatchewan	C\$0.036/km/metric tonne in excess of registered weight

✓ fee is for entire vehicle.
\$/ton/mile unless otherwise noted.

that use the weight-distance approach. Although a direct comparison between these unit fees is not possible given the specific conditions that apply to each, it points out that they range from \$0.006/ton/mi to \$0.2/ton/mi, with an average value of approximately \$0.05/ton/mi. These values exclude Louisiana, which for vehicles with a GVW larger than 254 kips levies \$0.50/ton/mi on the GVW in excess of 80 kips. For comparison purposes Oregon, which uses an axle weight-distance tax approach to road user fees (Table 6), levies \$2.37/mi for a 10-axle vehicle with a GVW of 250 kips; that is, \$0.1896/ton/mi. Ideally, these permit fees would cover the infrastructure cost incurred by SHCVs plus any administrative costs (e.g., permit processing, engineering analysis, and enforcement) and any external costs (e.g., congestion, pollution, and noise).

Considerable work has been done in estimating the fair amount of pavement infrastructure cost attributable to various vehicle classes. The last major national cost allocation study was completed in 1997 (19). In addition, many states have conducted internal cost allocation studies; a good review of the latter is provided in *NCHRP Synthesis 378* (20). The widely accepted method for conducting highway cost allocation is referred to as the “Federal Method” and consists of two main steps:

1. Identify the cost of the basic roadway to be divided among all the vehicles classes in proportion to their vehicle-miles traveled (VMT), and

2. Distribute the pavement cost responsibility of the additional pavement structure required to accommodate trucks in proportion to their VMT and their impact on pavement deterioration.

Early efforts to quantify the pavement damage from load used an aggregate approach by indexing load through ESALs of 18,000 lb and serviceability loss as described in the 1993 *AASHTO Guide for the Design of Pavement Structures* (21). Instead, the 1997 cost allocation study considered individual pavement distresses and utilized mechanistic-empirical relationships to associate them with axle loads. The computer model NAPCOM (22), which was developed to implement this approach, incorporated 11 such distress functions for flexible and rigid pavements. These were state of the art at the time this work was conducted. A number of vehicle configurations were studied from single unit 2-axle trucks to 8-axle triple trailers. Their GVWs were raised in increments of 5,000 lb from empty to legally loaded. The highest GVW considered was 150,000 lb. The results of the unit pavement cost/mile allocated to various vehicle configurations for new construction and rehabilitation are shown in Table 7. The vehicle configurations considered are:

- Single unit 2 axles (SU2)
- Single unit 3 axles (SU3)
- Single unit 4 axles (SU4)
- Semi-trailer with 5 axles (CS5)

TABLE 6
OREGON DOT SUPERHEAVY VEHICLE ROAD USER ASSESSMENT FEES

Gross Weight (lbs.)		Numbers of Axles															
		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
178,001 to 180,000				199	136	95	60	44	37	27	24	22	16	14	14	12	10
180,001 to 182,000					142	98	67	46	40	30	25	22	17	14	14	12	10
182,001 to 184,000					151	102	69	47	41	30	26	24	17	15	15	12	11
184,001 to 186,000					156	108	71	52	42	31	27	24	19	16	15	12	11
186,001 to 188,000					164	111	73	54	45	32	27	25	19	16	15	12	12
188,001 to 190,000					171	116	80	56	46	34	29	26	22	17	16	14	12
190,001 to 192,000					179	122	82	59	51	36	30	26	22	17	16	14	12
192,001 to 194,000					186	127	85	60	52	39	30	27	24	19	16	15	12
194,001 to 196,000					194	131	87	65	55	40	31	27	24	19	17	15	12
196,001 to 198,000					202	137	93	67	56	41	32	29	25	22	17	15	12
198,001 to 200,000					211	141	97	70	59	42	34	29	25	22	19	16	14
200,001 to 202,000					217	146	101	72	60	44	36	30	26	24	19	16	14
202,001 to 204,000					227	153	105	75	61	46	37	31	26	24	22	16	14
204,001 to 206,000					235	157	110	81	66	47	39	31	27	25	22	17	15
206,001 to 208,000					243	164	113	83	67	52	40	32	29	26	22	17	15
208,001 to 210,000					252	169	118	86	70	54	41	34	29	26	24	17	15
210,001 to 212,000					260	176	126	88	72	55	42	34	30	27	25	19	16
212,001 to 214,000					272	182	130	95	75	57	44	36	31	29	25	19	16
214,001 to 216,000					282	187	137	98	80	60	46	37	31	29	25	19	17
216,001 to 218,000					289	196	142	102	82	61	47	39	32	30	26	22	17
218,001 to 220,000					299	202	147	108	83	65	52	40	34	31	26	22	19
220,001 to 222,000					310	211	154	111	86	66	54	41	34	32	27	22	19
222,001 to 224,000					323	218	158	115	88	69	56	42	36	32	29	24	19
224,001 to 226,000						227	167	122	93	71	57	44	37	34	29	24	22
226,001 to 228,000						237	173	126	97	73	60	46	37	36	30	25	22
228,001 to 230,000						244	182	131	100	76	61	47	39	36	30	25	24
230,001 to 232,000						255	188	137	102	80	66	51	40	37	31	25	24
232,001 to 234,000						267	197	141	105	82	69	52	41	37	31	26	25
234,001 to 236,000						274	203	147	108	83	71	55	41	39	32	26	25
236,001 to 238,000						286	214	154	112	86	75	57	42	40	32	27	26
238,001 to 240,000						299	225	158	116	88	80	60	44	41	34	27	26
240,001 to 242,000						310	235	162	120	91	82	61	45	42	36	29	27
242,001 to 244,000						321	244	167	125	95	85	65	46	44	37	30	27
244,001 to 246,000						331	254	171	128	97	87	66	47	45	39	31	29
246,001 to 248,000						343	264	174	132	100	90	69	49	46	40	32	29
248,001 to 250,000						354	273	179	137	102	93	70	51	47	41	34	30

Cents/mile [Oregon DOT Superheavy Vehicle Road User Assessment Fees, Oct. 1, 2010 (18)].

TABLE 7
PAVEMENT UNIT COST RESPONSIBILITY BY TRUCK CLASS

(a)

Operating Weight (000s)	SU2	SU3	CS5	CS6	DS5	DS8
0-10	0.14					
20	0.20	0.18				
30	0.44	0.24	0.24	0.24	0.31	
40	1.28	0.40	0.26	0.27	0.30	
50	3.75	0.79	0.30	0.31	0.41	0.29
60	8.58	1.48	0.42	0.36	0.59	0.33
70		2.70	0.68	0.46	0.87	0.40
80		4.13	1.01	0.62	1.76	0.52
90			1.59	0.96	2.68	0.62
100			2.61	1.35	3.95	0.90
110			4.09	2.02		1.24
120				2.79		1.78
130						2.55
140						3.45
150						5.50

(b)

Operating Weight (000s)	SU2	SU3	CS5	CS6	DS5	DS8
0-10	0.59					
20	0.73	0.69	0.64	0.62	0.65	
30	1.67	0.86	0.75	0.76	0.73	
40	6.45	1.62	0.89	0.87	0.94	
50	32.89	4.81	1.19	1.10	1.32	1.06
60		12.03	1.86	1.53	1.92	1.24
70		31.70	3.55	2.37	2.90	1.59
80			6.37	3.68	4.68	2.51
90			11.01	6.40	7.55	3.10
100			19.96	10.12	13.55	4.50
110			36.53	17.40		6.84
120				29.24		10.52
130						14.48
140						19.87
150						34.33

Cents/mile 2000\$.

For new construction (a) and repair/rehabilitation (b) [Federal Highway Cost Allocation Study (HCAS) Final Report (19)].

- Semi-trailer with 6 axles (CS6)
- Double trailer with 5 axles (DS5)
- Double trailer with 8 axles (DS8).

The pavement responsibility costs by vehicle class shown in Table 7 allow for computing unit costs of \$/ton/mi. For example, an 8-axle double trailer with a GVW of 150 kips would incur a unit pavement cost of \$0.00073/ton/mi for a new pavement and \$0.00457/ton/mi for rehabilitating/repairing an existing pavement. This methodology provides an objective mechanism for establishing the pavement share of the cost

responsibility of SHCVs and could be used to estimate part of the cost of permitting such vehicles. Although the ongoing *Comprehensive Truck Size and Weight Limits Study (1)* will address the infrastructure impact of trucks heavier than the current federal weight limits, it will not consider exceptionally loaded trucks such as the SHCVs discussed here.

An addendum to the 1997 cost allocation study presented the unit costs of external factors associated with the operation of heavy trucks, such as the cost of congestion, accidents, air pollution, and noise (Table 8). Evidently, in

TABLE 8
PAVEMENT, CONGESTION, ACCIDENTS, AIR POLLUTION, AND NOISE COSTS

Vehicle Class/Highway Class	Cents/mile (2000\$)					
	Pavement	Congestion	Crash	Air Pollution	Noise	Total
Autos/Rural Interstate	0	0.78	0.98	1.14	0.01	2.91
Autos/Urban Interstate	0.1	7.70	1.19	1.33	0.09	10.41
40 kip 4-axle S.U. Truck/Rural Interstate	1.0	2.45	0.47	3.85	0.09	7.86
40 kip 4-axle S.U. Truck/Urban Interstate	3.1	24.48	0.86	4.49	1.50	34.43
60 kip 4-axle S.U. Truck/Rural Interstate	5.6	3.27	0.47	3.85	0.11	13.3
60 kip 4-axle S.U. Truck/Urban Interstate	18.1	32.64	0.86	4.49	1.68	57.77
60 kip 5-axle Comb./Rural Interstate	3.3	1.88	0.88	3.85	0.17	10.08
60 kip 5-axle Comb./Urban Interstate	10.5	18.39	1.15	4.49	2.75	37.28
80 kip 5-axle Comb./Rural Interstate	12.7	2.23	0.88	3.85	0.19	19.85
80 kip 5-axle Comb./Urban Interstate	40.9	20.06	1.15	4.49	3.04	69.64

Note: S.U. = single unit, Comb. = combination.

Air pollution costs are averages of costs of travel on all rural and urban highway classes, not just interstates. Available data do not allow differences in air pollution costs for heavy truck classes to be distinguished.

Source: Addendum to the 1997 Federal Highway Cost Allocation Study (23).

some urban settings, these external cost responsibilities can be larger than the pavement cost responsibilities for heavy trucks.

Recent research on evaluating the impact of SHCVs on pavements has focused on mechanistic-empirical pavement damage relationships under repetitive loading [e.g., Chen et al. (24) and Oh and Whimsatt (25)]. A currently ongoing, pool-funded study (26) considers not only such conventional

pavement damage mechanisms, but also the direct damage that may be caused by SHCVs on pavement bases and subgrades. As determined by the results of the survey questionnaire presented in chapter three, several agencies conduct mechanistic pavement analysis for permitting SHCVs, but very few consider direct base and subgrade damage. It remains to be seen to what extent the findings of such research studies will be adopted into the practice of permitting these vehicles.

CHAPTER THREE

SURVEY RESULTS

The web-based survey was circulated to state officials dealing with the permitting of heavy trucks and to state transportation engineers who assist the former with evaluating the impact of these vehicles on the pavement infrastructure. The distribution list for the survey was developed by updating a contact list obtained from the Specialized Carriers and Rigging Association. Additional work was carried out to expand and update the list by identifying the names and contact information of the department of transportation pavement engineers who conduct the analysis of the SHCV being considered for permitting. The survey was circulated by e-mail on January 15, 2014, and follow-up phone calls were made to encourage maximum participation. The survey ran until July 30, 2014, at which point it was closed and the data were analyzed. A total of 39 states and five Canadian provinces responded. The corresponding response rates were 78% and 50%, respectively. Eight of the responding states submitted two separate responses, one from a permits official and the other from an engineer performing the impact evaluation. This brought the total number of the responses analyzed to 52. A list of the responding states and provinces and the job titles of the officials who responded to the survey is shown in Appendix B. The raw survey questionnaire responses are included in Appendix C. The following summarizes the survey questionnaire results and is divided into four parts:

1. Definition of SHCVs,
2. Pavement analysis details,
3. SHCV permit fees, and
4. Number of permits/type issued.

DEFINITION OF SUPERHEAVY COMMERCIAL VEHICLES

This section summarizes the survey results related to background questions and the way SHCVs are defined and permitted in each jurisdiction. Several options were offered in defining SHCV vehicles; namely, the number of axles, GVW only, GVW and axle load regardless of axle spacing, and GVW and axle load as a function of axle spacing. Figure 4 shows the distribution of agency responses to this question. It suggests that 16 of the responding agencies (41%) define SHCV in terms of a maximum GVW alone. The distribution of these GVW limits is plotted in Figure 5. They vary widely from 120 to 500 kips, with the most frequent value being 200 kips. Five of the responding agencies (13%) reported that they define SHCV in terms of GVW and axle group limits regardless of

axle spacing. The distribution of these GVW limits and the axle group load limits are listed in Table 9. The wide range of GVW and load limits is again evident; GVW limits range from 80 kips to 350 kips and tandem axle loads, for example, range from 34 kips to more than 60 kips. Another five of the responding agencies (13%) define SHCV in terms of GVW and axle group limits as a function of axle spacing. The distribution of these GVW limits, the axle group load limits, and the corresponding minimum axle spacings are listed in Table 10. In this case, GVWs vary from 100 to 254 kips, tandem load limits from 40 to 50 kips, whereas minimum tandem axle spacings vary from 6 to 12 feet. Interestingly, the remaining 13 of the responding agencies (33%) specified more complex definitions for SHCV under “other.” Several of these alternative definitions are quoted here:

- *Class C Permits/Superloads . . . are for loads that exceed 120' in length, 14' in width, 16' in height, and more than 250,000 lb GVW (any combination) or exceeding allowable weights on restricted bridges.*
- *Loads in excess of routine permit limits will be considered according to the following regulations when air, rail, or water terminal points are not available: (A) All permit applications with dimensions or weights exceeding the routine limits of the preceding oversize and overweight permit rule (i.e., generally in excess of 16 feet wide, 16 feet tall, 150 feet long and/or over 160,000 lb GVW).*
- *Exceeding 25 axles or the combination of wheel base/number of axles and tabulated GVW values.*
- *A vehicle that is considered “excessive overmass” when entered into our special permitting system and requires evaluation by the bridge engineer office of the Department of Transportation & Works.*
- *Weight requires approval of the department’s bridge bureau.*
- *Exceeding a certain GVW and/or exceeding a certain load by axle group as a function of axle spacing and/or exceeding the pre-approved weight threshold for its requested route.*
- *Exceed axle group weights. Must have more than 4 tires per axle*
- *We don’t use this (the SHCV) term.*
- *We can permit very large loads over the axle load on a wide axle (over 8' outside tire to outside tire), but can't permit for more than 600 lb/in. tire load.*
- *Exceeds a certain GVW and occupies two lanes.*

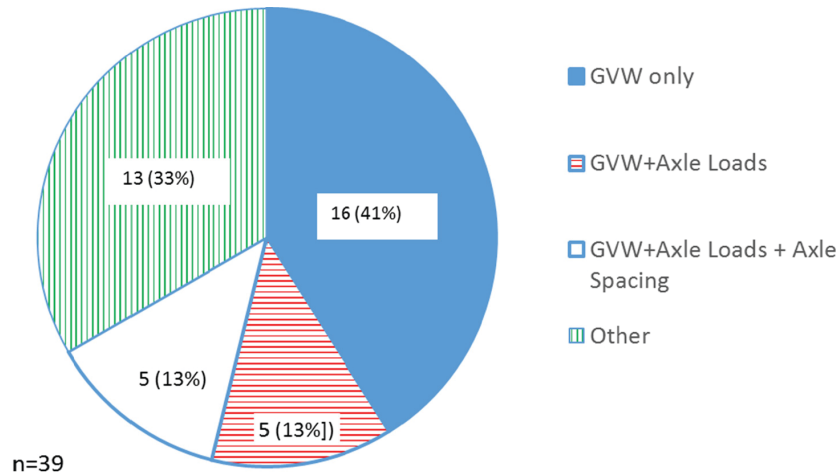


FIGURE 4 Vehicle characteristics used to define SHCVs.

Policies also vary in terms of the definition of a “non-divisible” load. Twenty-six of the 42 agencies that answered this question (62%) indicated that they do have a definition of what a non-divisible load is, while the remaining 16 (38%) do not. Of those that do have a definition, 11 (42%) described it in terms of the number of work days that would be required to break it down into smaller shipments (i.e., the remaining 15 indicated “other” without providing any specifics). Their responses are shown in Figure 6. Clearly, there are significant differences between jurisdictions as to the definition of a non-divisible load to be carried by a SHCV.

The survey included additional questions as to whether hard axle load limits and unit tire loads (i.e., lb/in. of tire width) are set by legal statute. Of the 42 agencies that answered the first question, half said that they do limit axle loads by statute, and the other half that they do not. Of the 39 agencies that answered the second question, 39% (15) stated that they do limit unit tire widths by statute, while the remaining 61% (24) stated that they do not.

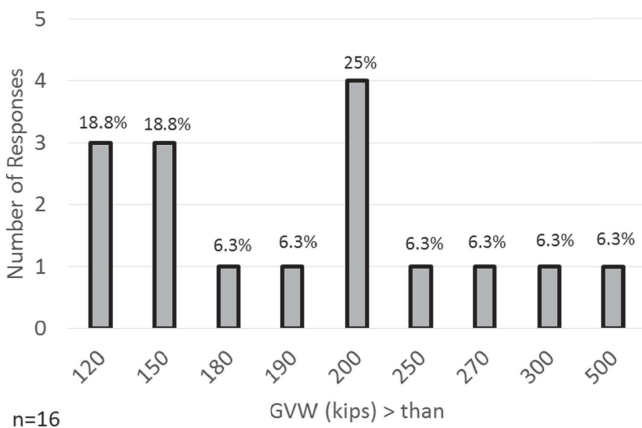


FIGURE 5 SHCV definition based on GVW only.

PAVEMENT ANALYSIS DETAILS

A total of 40 agencies replied to the question as to whether or not they perform a pavement impact analysis as part of evaluating SHCV permit applications. Figure 7 shows the distribution of their responses. It suggests that only 22 of the 40 responding agencies (55%) perform pavement analysis for permitting SHCVs. Of those, six always do (Delaware, Louisiana, Missouri, Mississippi, Tennessee, and Vermont) and 16 do so depending on the circumstances (Arizona, Colorado, Iowa, Illinois, Indiana, North Dakota, North Carolina, Oregon, Tennessee, Texas, Virginia, Washington State, Wisconsin, Wyoming, British Columbia, and Ontario), whereas the remaining 18 agencies (45%) never perform such analysis.

Several of the agencies that answered “it depends” provided additional comments describing the circumstances under which they undertake pavement impact analysis prior to permitting SHCVs. Some of these comments are listed here verbatim:

- *Normally if the GVW is more than 500,000 lb or/and per axle load exceeds 30,000 lb. The analysis of the pavement is performed by the Pavement Division. I do the bridge analysis of all bridges on the proposed route if the GVW is 200,000 lb or more.*
- *The Ministry has provisions in our O/O [oversize/overweight] permit issuing policies allowing for pavement analysis under exceptional loadings; however, we have not resorted to this requirement in over 25 years.*
- *Rare situation of exceeding 25 axles or exceeding tabulated values.*
- *If the load is exceptionally heavy or if the pavement is breaking up we might. It is on a case-by-case basis.*
- *Anything over 20,000 lb per axle.*
- *If the GVW exceeds 270 kips the application is referred to pavement engineers for a standard review. “Detailed analysis” may be required if axle loadings exceed 27,000 lb per line or time of travel coincides with spring*

TABLE 9
DEFINITION OF SHCV USING GVW AND AXLE WEIGHT (FIVE JURISDICTIONS)

GVW Limit (kips)	Load Limits by Axle Configuration (kips)			
	Single	Tandem	Tridem	Quad
150	24	48	60	60
80	28	34	56	—
350	26	—	—	—
250	30	60	60	60
125	28	50	60	—

— no maximum weight specified.

TABLE 10
DEFINITION OF SHCV USING GVW, AXLE WEIGHT, AND AXLE SPACING (FIVE JURISDICTIONS)

GVW Limit (kips)	Axle Configuration							
	Single		Tandem		Tridem		Quad	
	Max. Load (kips)	Min. Spacing (ft)	Max. Load (kips)	Min. Spacing (ft)	Max. Load (kips)	Min. Spacing (ft)	Max. Load (kips)	Min. Spacing (ft)
140	22	—	40	6	48	12	60	15
171.96	24	—	50	10	>60	12	>60	—
254.3	24	12	46	12	60	12	>60	—
100	24	—	48	—	60	—	60	—
232	22	9	48	9	60	9	>60	—

— none specified.

thaw, flooding, or other unusual weather that is likely to reduce road strength.

- Our bridge analysis engineers involve the geo-technical branch for pavement considerations on requests that are unusually heavy or where there is some unknown factor on the requested route that would be of interest to the pavement engineers.
- All loads are processed through the bridge analysis and, if they pass, then away they go.
- There are cases of pavement studies undertaken for introduction of new vehicle configurations.
- For the most part detailed analysis is not required. It is on a case-by-case basis.

- The Pavement Section sets criteria for us to follow. Send all information to them if the GVW exceeds 800,000 lb or if load exceeds 500,000 lb and 6,000 lb per wheel load.
- Answered by the pavement engineers: If axle weights exceed 29,000 lb.
- Bridges are the limiting conditions; require axle and tire loads to be limited to reduce potential impacts to pavement.
- We have performed pre- and post-pavement review for some loads exceeding 1,000,000 lb.
- We require bridge analysis, but not specific pavement analysis. If it is determined necessary to require pavement analysis we have the authority to do so but I have not seen this required.
- When travel is required on a highway that has been weight restricted additional pavement analysis is required.

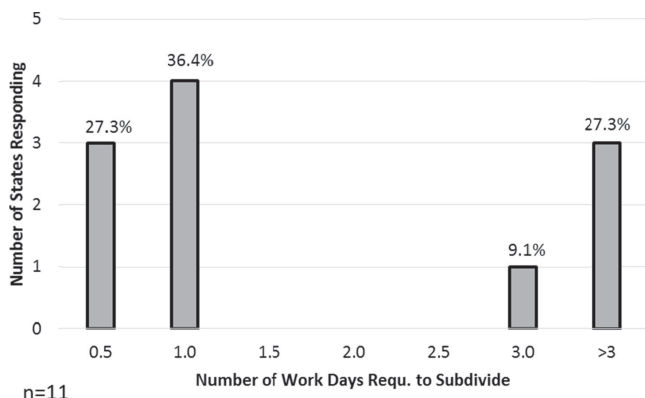


FIGURE 6 Defining “non-divisible” loads in terms of the number of work days required to divide them.

Evidently, the criteria used for deciding to perform a pavement analysis as part of the permitting process of superheavy vehicles are more complex than simply their classification as a SHCV by means of their GVW or axle weight and axle spacing.

The type of pavement analysis performed varies as indicated by the 16 agencies that responded to this question (Figure 8). The majority of these jurisdictions use either their own in-house developed mechanistic-empirical pavement analysis approach or the mechanistic methods developed by industry; for example, the Asphalt Pavement Association (27)

Does your jurisdiction require detailed pavement analysis as part of SHCV permitting?

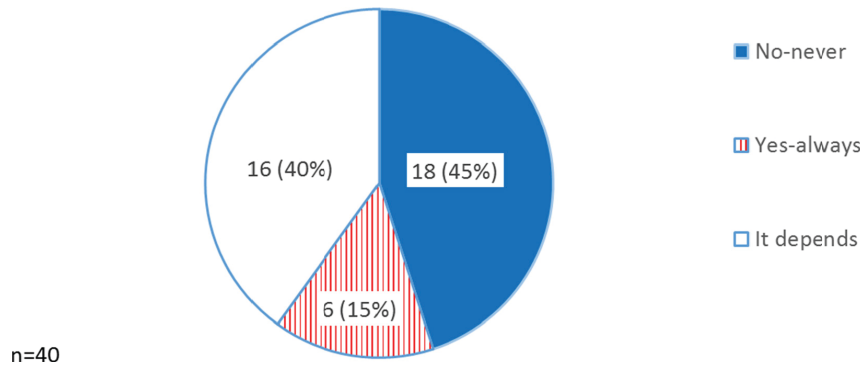


FIGURE 7 Distribution of states/provinces responses to whether they carry pavement analysis as part of SHCV permitting.

and Portland Cement Association (28). These methods rely on structural analysis models, typically layered elastic analysis for flexible pavements, and finite element analysis for rigid pavements. They allow direct input of axle loads and compute their impact on performance through transfer fractions that translate stresses and strains to pavement damage (i.e., cracking rutting and so on). Several agencies indicated that they use the 1993 AASHTO *Guide for the Design of Pavement Structures* (21) and characterize the traffic in terms of ESALs, while one agency takes a hybrid approach using the 1993 AASHTO *Guide for the Design of Pavement Structures*, with load equivalency factors computed mechanistically (i.e., ratios of pavement damage computed as a function of strain ratios). None of the responding agencies indicated using the *Mechanistic-Empirical Pavement Design Guide* (8) for evaluating the impact of SHCVs on pavements.

Additional details on the pavement analysis performed for permitting SHCVs are shown in Figures 9 and 10. Figure 9

shows that the majority of the 15 jurisdictions that responded to this question perform such analysis using representative thickness and layer/subgrade moduli for the entire route, while few consider seasonal variations in layer properties. Figure 10 indicates that most agencies analyze the full length of the vehicle (i.e., all the axles), about half consider only one wheel path and the actual number of tires in the wheel path and their tire inflation pressure, whereas only approximately 25% of them consider the vehicle speed.

Figure 11 suggests that only four of the 15 responding agencies (27%) consider the stability of the pavement subgrade. Of those four, two specified the type of subgrade analysis conducted, one indicated that it uses a Mohr–Coulomb type of analysis, and the fourth that they use a slope-stability numerical method for the analysis.

Figure 12 suggests that where there is a risk for excessive pavement/subgrade damage from a proposed SHCV, agen-

What type of pavement analysis method is used to evaluate the impact of SHCVs?

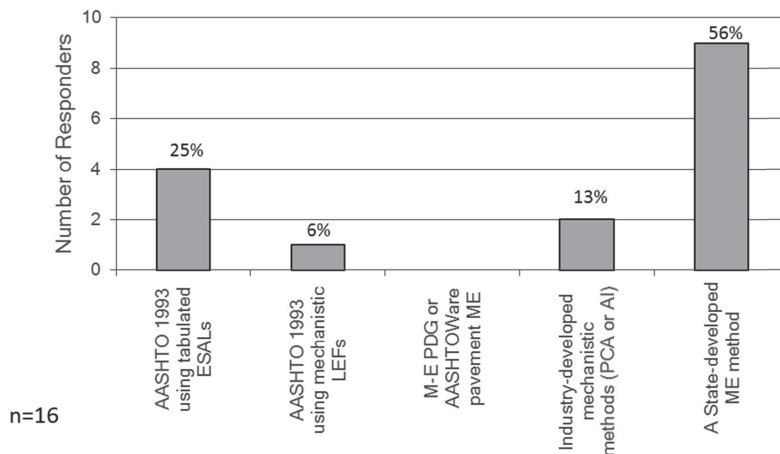


FIGURE 8 Type of pavement analysis performed.

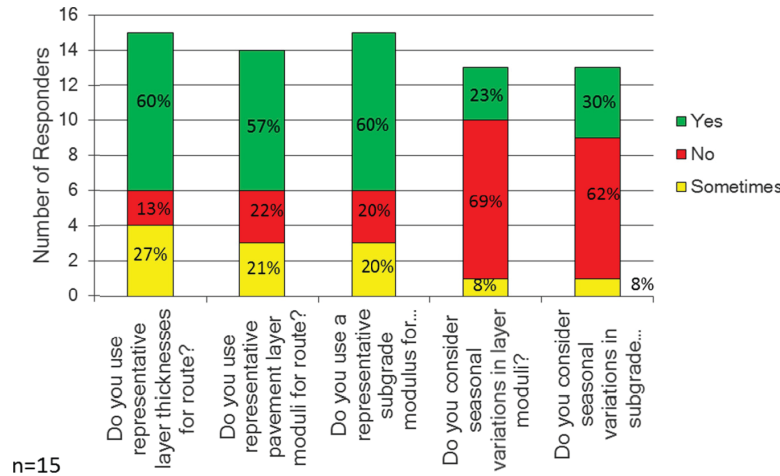


FIGURE 9 Structural details of the pavement analysis.

cies are most likely to either request a different axle configuration from the shipper or would propose an alternative route with stronger pavements. A few agencies would either request that the shipment be divided up and some that protective measures are taken to reduce the risk of damage to pavements and utilities (e.g., steel plates over water and sewer lines). Several jurisdictions replied “other” to this question. Some of their comments are listed here:

- *The moving company is requested to post a bond to cover potential pavement damage.*
- *Has not occurred to date.*
- *Shipper is requested to conduct FWD [falling weight deflectometer] testing before and after to detect any damages to the pavement/subgrade.*
- *We provide a number of suggestions to the shipper and we allow them to choose what is appropriate among these suggestions and then resubmit for a second round of reviews.*
- *If nothing can be done by the carrier to better spread the load, deflection tests and condition evaluations are conducted.*
- *Action is guided by a flow chart provided (see Figure 2 in chapter two).*

SUPERHEAVY COMMERCIAL VEHICLE PERMIT FEES

Survey questions on the way the actual SHCV permit fees are calculated revealed substantially different methodologies between jurisdictions. Figure 13 shows that for establishing their SHCV permit fees, 15 of the 46 responding agencies (33%) use a GVW-distance traveled approach (Alabama, Florida, Illinois, Ohio, Missouri, Montana, North Dakota, Tennessee, Utah, Vermont, Washington State, West Virginia, Wyoming, British Columbia, and Ontario), two use a pavement damage-distance traveled approach (Arizona and Oregon), and two use a number of axles-distance traveled approaches (Idaho and New Jersey). Furthermore, 19 of the 46 responding agencies (41%) selected “other” in answering this question. Some of the explanations provided in selecting “other” are shown here:

- *Carrier pays for all incurred damages.*
- *There is a fee for a bridge analysis when the load exceeds #250,000 pounds or exceeds the allowable weight on a restricted bridge; \$125.00 per 50-mile increment of proposed route.*
- *The permit for SHCVs is \$110.00 plus we charge the company requesting the move for the detailed bridge analysis, which is an hourly rate for the engineer.*

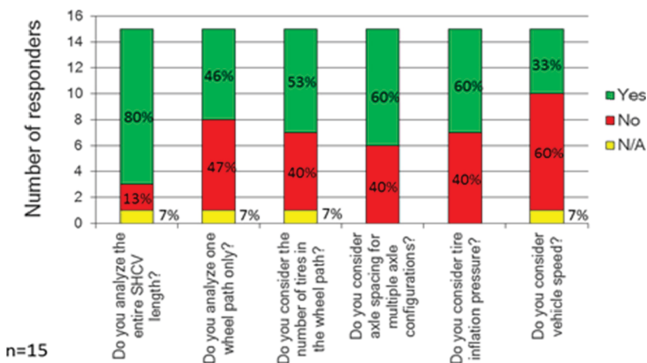


FIGURE 10 Load analysis details.

Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

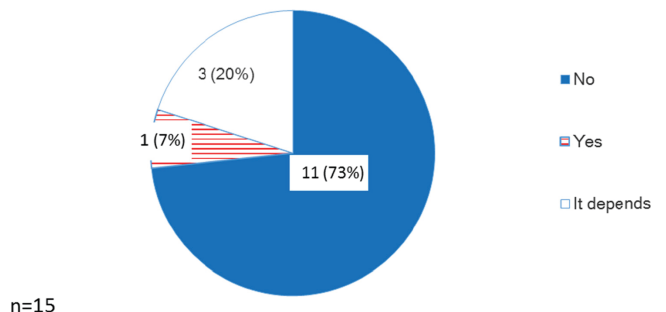


FIGURE 11 Pavement subgrade stability analysis details.

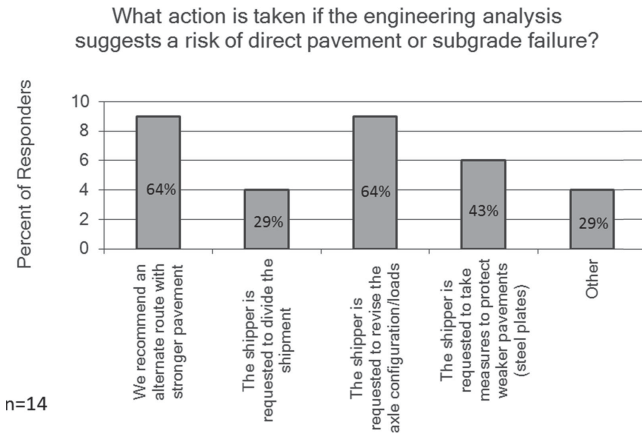


FIGURE 12 Actions taken if analysis shows risk of damage to pavement/subgrade.

- Flat fee of \$10 is charged for all permit loads.
- Flat fee \$10 for a single-trip permit.
- Fees are calculated on the basis of weight.
- Basic fee plus weight fee.
- Fees are regulated under the Motor Vehicle Act (Regulation 89-65). They are based on type of permit, vehicle configuration, GVW, and duration.
- A single-trip permit for an oversize/overweight permit is issued per each load. If a load exceeds the weight per number of axles, an additional overweight fee is charged at a rate of two cents per ton-mile for the excess weight.
- Standard fee of \$250 per trip.
- There is a vehicle supervision fee and a permit fee. The vehicle supervision fee is based on whether the load crosses bridges or not. The permit fee is a flat fee for the permit and additional fee for the weight.
- A flat fee is charged for all permits, superload or routine issue. These are established by regulation.
- Fees are both codified and regulatory. Please review VA Code: 46.2-652.1 to see pavement damage-related fees
- $GVW - 80,000 \text{ lb}/2000 = \text{Ton Mile} \times \$0.50 \times \text{Actual Mileage} + \$10.00 \text{ Admin Fee} + \text{Structural Evaluation Fee} = \text{Permit Fee}$.
- Determined by vehicle size + ton/mile fee.

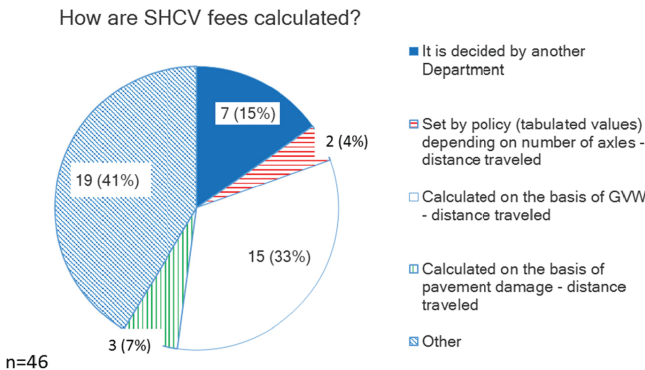


FIGURE 13 Methods used for calculating SHCV permit fees.

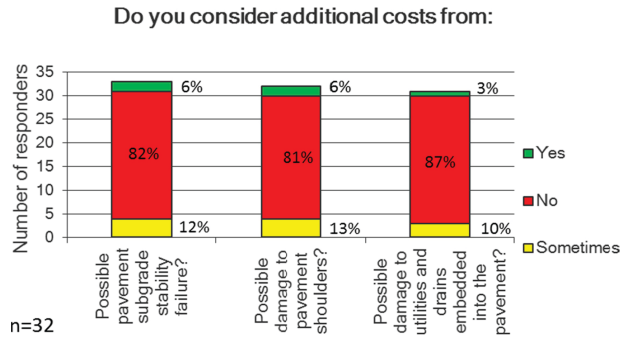


FIGURE 14 Additional SHCV permitting fees being levied.

The differences between jurisdictions in terms of the SHCV single-trip permitting fees levied are significant, ranging from a flat fee of \$10 regardless of the loads involved and the distance traveled to pavement damage-distance-based fees being added to the pavement and bridge analysis fees. Figure 14 shows that 26 of the 32 agencies that responded to these questions (81%) do not collect additional permit fees to cover potential damage to pavement embankments, shoulders, and utilities from SHCVs.

Figure 15 shows the distribution of responses from 37 agencies on some of their operational practices in handling SHCV permits.

- More than half of those that responded have implemented electronic SHCV permit processing systems.
- The large majority of those that responded allow wide multi-lane vehicle movements.
- Twenty-five percent of the agencies that responded restrict vehicle movements during spring thaw.
- Twenty-two percent of the agencies that responded allow multiple trips with one permit.
- Fifty-six percent of the agencies that responded coordinate their permit provisions with those of neighboring jurisdictions. As pointed out in the literature review, only some of the WASHTO-affiliated states have established homogenized cross-border heavy vehicle permitting standards.

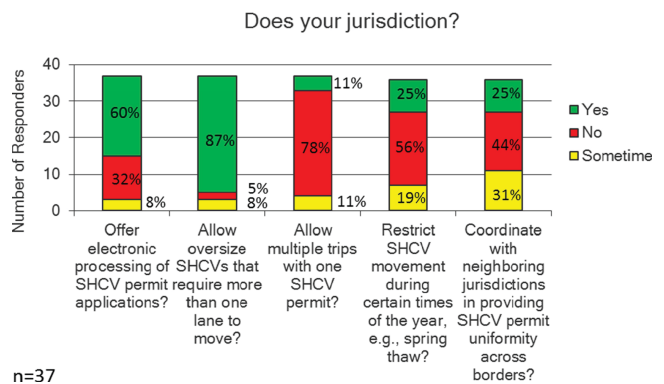


FIGURE 15 Operational details of SHCV permitting.

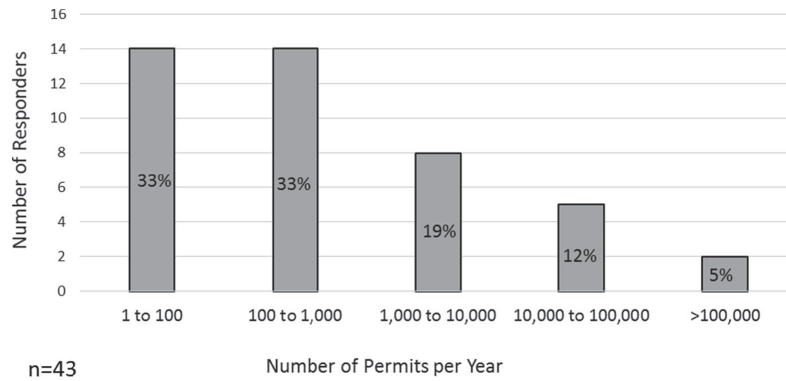


FIGURE 16 Number of SHCV permits issued annually (2013).

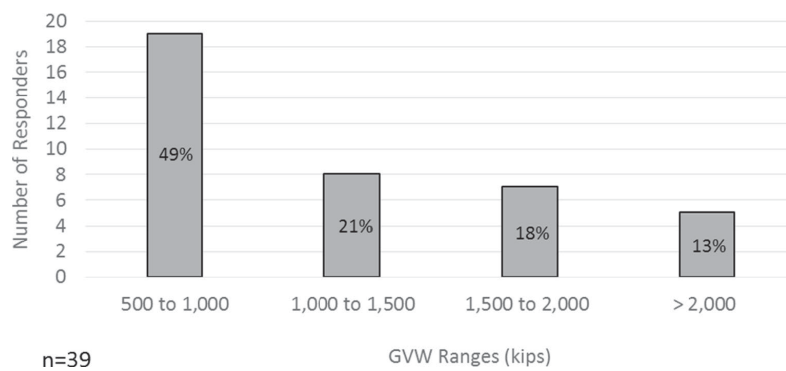


FIGURE 17 Maximum SHCV GVW ever permitted.

NUMBER OF SUPERHEAVY COMMERCIAL VEHICLE PERMITS AND TYPE ISSUED

The number of SHCV permits issued annually varies significantly between jurisdictions. Figure 16 shows that the majority of states and provinces issue fewer than 1,000 such permits each year. Several jurisdictions reported a very large number of such permits (e.g., more than 10,000 permits per year) probably as a result of the way they define an SHCV (i.e., Figure 5

shows that several jurisdictions have a SHCV GVW threshold as low as 120 kips). Finally, Figure 17 reveals the distribution of the largest GVW ever permitted in the 46 jurisdictions that responded to this question. The most frequent extreme GVW was under 1,000 kips (41% of the responding jurisdictions), while a few (i.e., 11% of the responding jurisdictions) indicated that they have permitted vehicles with a GVW of more than 2,000 kips.

CHAPTER FOUR

CASE EXAMPLES

This chapter presents several case examples of SHCV movements and provides details on the permits issued and the type of analysis conducted as part of issuing the permits.

MOVING A TRANSFORMER FROM HOUSTON TO FLAT ROCK, TEXAS

The vehicle shown in Figure 18 hauled a transformer from East Houston to Flat Rock, Texas, in August 2014. Its GVW was 1.2 million lb, and it had a total of 31 axle assemblies and measured 320 ft, 4 in. in length and 20 ft, 3 in. in width. The picture was taken on FM Road 3009 in Bexar County, Texas. Each trailer axle assembly consisted of two 4-tire axles side-by-side, taking the width of two adjacent roadway lanes. The heaviest axle assembly of this vehicle was 48,000 lb divided among eight tires. The move involved flag vehicles and police escorts. The permit fee charged for this vehicle was \$935 and stipulated that the hauler is liable of any infrastructure damage.

The pavement analysis followed the process outlined earlier (see Figure 2). The maximum tire load applied was deemed acceptable. The route selected by the mover involved several reduced load pavement zones. The pavement condition of these zones was examined using data from the Texas Pavement Management Information System and was determined to be in good condition with respect to the move. As a result, no further pavement analysis was conducted for this vehicle. If the pavement condition on a proposed route was considered poor and/or the axle loads were deemed too high, linear elastic analysis would have been conducted using the computer program FPS19w (29). In this case, the computed strains at the bottom of the asphalt concrete layer and the top of the subgrade would have been computed and translated into the number of cycles to failure using the Asphalt Pavement Association damage functions (27). If one passage of the vehicle consumed less than 1/1000th of the life of the pavement, the vehicle would have been permitted.

MOVING A REACTOR FROM EASTERN WASHINGTON TO THE IDAHO BORDER

Figure 19 shows a SHCV carrying a 503,000-lb reactor over a short distance on US-195. It traveled from the Port of Wilma on the Snake River in Washington State to the Idaho border

in August 2014. Its final destination was a refinery at Great Falls, Montana. The GVW of this vehicle was 790,000 lb, its length was 310 ft, and the width was 21 ft, 1 in. The reactor was carried by eight sets of double axles at the front and another eight sets of double axles in the rear. Each axle set involved two single axles side-by-side with four tires each. This trailer was pulled by a single tractor in the front and pushed by two tractors in the rear. Its heaviest axle set load was 52,500 lb. The permit fee paid for this move was \$337. The pavement analysis was conducted with the layer elastic computer model Everstress, which is part of the Everseries software (30). The analysis involved computation of asphalt concrete bottom strains and subgrade top strains. These strains were input into fatigue and rutting damage functions to estimate the number of repetitions to failure (27). Although there are no hard threshold values for the number of repetitions to failure, engineering judgment is used to decide whether the number of repetitions is unusually low. If so, the hauler is requested to modify its vehicle by adding axles. The Washington State DOT describes additional details of their SHCV permitting process as follows:

- Pavement analysis follows the bridge analysis.
- The majority of its pavement analysis for SHCV permitting is done on secondary roads. Higher classification roads appear to have sufficient structural capacity to handle most SHCVs.
- SHCV permitting is done for a single trip per vehicle. The permit explicitly states that a particular permit does not imply that a similarly configured vehicle will be allowed to operate on the same route again.

MOVING AN ANODE THROUGH ARIZONA

Arizona DOT handles “superload” permitting through its Department of Public Safety and the Enforcement and Compliance Department. “Superloads” defined as trucks with a GVW of more than 250 kips that measure more than 120 ft in length, 16 ft in height, or 14 ft in width require a Class C approval/permit. This permit prescribes the route to be followed, the hours during which the load can travel, and whether or not law enforcement escorts are required. This permit applies only to highways under the jurisdiction of Arizona DOT. Where the proposed route crosses roads under the jurisdiction of cities, towns, or municipalities it is the hauler’s responsibility to coordinate with them and acquire additional permissions. The



FIGURE 18 Vehicle of 1.2 million lb GVW traveling from Houston to Flat Rock, Texas.

vehicle shown in Figure 20 has a GVW of 570,000 lb and its cargo is an electrical anode used in the copper refining process. It was subjected to a bridge analysis, but not to a pavement analysis. It traveled from Nevada to Miami through Arizona and was the heaviest load that traveled across the new Hoover Dam bypass bridge. Its move took place between August 9 and August 16, 2011, and a permit fee of approximately \$125/50 miles of haul was paid.

MOVING A WATER PURIFICATION VESSEL THROUGH OREGON

A massive water purification vessel used in oil refining was transported from its manufacturing origin in Portland through Oregon, Idaho, and Montana to its final destination in Alberta, Canada. The vessel was delivered by Columbia River barge to Umatilla, Oregon, traveled for a short distance east on I-84, and then followed secondary roads south to the Idaho border near Ontario, Oregon. The vehicle had an overall length of 375 ft, 4 in. and a width of 22 ft, 2 in. (Figure 21). Its GVW was 900 kips and its maximum tandem axle load was 44.75 kips. It was equipped with 32 axles and its maximum tire unit load was 604 lb/in. It was propelled by two pusher tractors and one pull tractor. No pavement analysis was



FIGURE 19 Vehicle of 792 kips GVW traveling from Eastern Washington to the Idaho Border.



FIGURE 20 Vehicle of 570 kips GVW traveling across Arizona.

conducted for its impact on the I-84 continuous reinforced concrete pavement, because it was determined to be unnecessary given the 8-in.-thick slab over a crushed gravel base that was in very good condition. The pavement analysis was conducted for the impact of this SHCV on the secondary low-volume asphalt concrete pavements. The pavement analysis was conducted using the 1993 AASHTO *Guide for the Design of Pavement Structures*. A typical flexible pavement section of an 8-inch asphalt concrete layer over a 12-inch base layer was considered with structural layer coefficients of 0.38 and 0.08, respectively. The terminal serviceability index (PSI) of the pavement was assumed to be 2.5 on a scale of 0 to 5. The ESAL value of this SHCV was estimated to be 60. In estimating the corresponding permit fee, it was not possible to use the existing Oregon DOT charts (see Table 6). Instead, its ESAL value was used and a fee of \$0.071/ESAL/mi was levied that translated to \$4.26/mile for the entire vehicle. No seasonal restrictions were placed on the movement of this load because it was determined that the subgrade soil conditions encountered were relatively dry and therefore not susceptible to frost heave and/or spring thaw. The move took place in November 2013, during which frost and non-frost conditions were encountered.



FIGURE 21 Vehicle of 900 kips GVW traveling across Oregon.

CONCLUSIONS

The practices of permitting superheavy commercial vehicles (SHCVs) in the United States varies widely between agencies in terms of both the criteria used to define them, the analysis details for evaluating their impact on pavements, and the fees levied for permitting them. The gross vehicle weight (GVW) thresholds used to define SHCVs vary from 120 kips to 254.3 kips. Axle load limits by configuration also vary, ranging from 20 to 29 kips for single axles on dual tires, from 34 to 60 kips for tandem axles on 8 tires, and from 50 to 81 kips for tridem axles on 12 tires. In addition, some agencies set limits on the tire weight per unit width (i.e., it varies between 500 and 800 lb/in.), whereas others do not. This obvious lack of uniformity in weight regulations reduces the weights of SHCVs traveling through multiple jurisdictions to the least common set of rules in effect through the jurisdictions involved and imposes a considerable administrative burden on shipping companies.

There have been regional efforts to establish uniform heavy truck permitting regulations in the United States, whereby a permit issued by one state is accepted for travel in neighboring states. Twelve western states, under the auspices of the Western Association of State Highway and Transportation Officials (WASHTO) agreed on a uniform set of truck weight regulations that allow trucks permitted in one of these states to legally operate throughout the rest. In summary, these limits consist of a GVW of 160 kips, tire weights of 600 lb/in. of width, overall consecutive axle weight limits governed by the Bridge Formula, and axle configuration weight limits of 21.5, 43, and 53 kips for single, tandem, and triple axles, respectively. Similar regional efforts are being undertaken in other geographic regions of the country under the coordination of AASHTO's Subcommittee on Highway Transport (SCOHT). Future efforts of this committee will include harmonization of oversize requirements, coordination of the truck permitting processes with local governments, development of a guide for assessing proposals for changes in truck size and weight standards, and formation of a state–industry advisory group on the movement of “superloads.” It can be noted that other industrialized countries, such as Canada, Europe, Australia, and South Africa, already have such regulations in place.

The literature review also suggests that SHCV single-trip fees vary considerably among the 62 jurisdictions in North America (i.e., 50 states, the District of Columbia, ten Canadian provinces, and the Yukon Territory):

- Twenty-three (37%) levy SHCV permit fees that are a function of weight-distance, typically in the form of \$/ton/mile for GVW exceeding a certain value. Interestingly, some of the states that use weight-distance taxes do not use the same approach for levying SHCV permit fees. This fee ranges from \$0.006/ton/mi to \$0.2/ton/mi with an average value of about \$0.049/ton/mi.
- Fifteen (24%) levy SHCV permit fees that are related to GVW per axle weight alone and do not consider the distance traveled by the vehicles.
- Eight (13%) levy a flat SHCV permit fee that ranges from \$5 to \$550, regardless of any pavement usage indicators, that is the weight of the vehicle or the distance traveled.
- Seven (11%) levy a processing fee and may add an infrastructure usage fee after studying SHCVs on a case-by-case basis.
- Two jurisdictions (3%) levy a flat fee and the cost of repairing the infrastructure from any damage rather than the cost infrastructure utilization from SHCV movement.

The web-based survey was conducted between January and July 2014 to collect detailed information on the practices the United States and Canadian provinces use in permitting SHCVs. A total of 39 states and five Canadian provinces responded to this survey (response rates of 78% and 50%, respectively). Eight states submitted two responses, one by their permit officer and one by the engineer that analyzed the impact of SHCVs, bringing the total number of survey responses to 52.

Thirty-eight agencies responded as to whether or not they conduct pavement analysis as part of their SHCV permit process. Of those, five (13%) always do (Delaware, Missouri, Louisiana, Tennessee, and Vermont), 15 (40%) do so depending on the circumstances (Arizona, Colorado, Iowa, Illinois, Indiana, North Carolina, North Dakota, Oregon, Washington State, Wisconsin, Wyoming, Texas, Virginia, British Columbia, and Ontario), whereas the remaining 18 agencies (47%) never perform such an analysis. The majority of the agencies that perform pavement analysis do so when dealing with a vehicle exceeding their definition of a SHCV. Details of pavement analysis performed were provided by 15 states. Their majority uses either their own in-house developed mechanistic-empirical pavement analysis approach or the mechanistic methods developed by industry (i.e., Asphalt Pavement Association and Portland Cement Association). Several agencies indicated that they use the 1993 *AASHTO Guide for the Design of Pavement Structures* and characterize the truck

loads in terms of equivalent single axle loads. None of the responding agencies uses the *Mechanistic-Empirical Pavement Design Guide* for analyzing the impact of SHCV. Additional details on the pavement analysis performed by the 15 responding states suggest that their majority uses representative thickness and layer/subgrade moduli, and consider the entire length of the SHCV. About half consider only one wheel path and the actual number of tires in the wheel path and the tire inflation pressure, while approximately 25% consider the actual vehicle speed. Furthermore, only four of the 15 responding agencies consider the stability of the pavement subgrade and of those one indicated using a Mohr–Coulomb type of analysis and another using a slope-stability numerical method type of analysis.

The number of SHCV permits issued annually varies between agencies and to a large extent depends on their definition of SHCVs. The range is from fewer than 100 to more than 10,000 per year. The GVW of the heaviest SHCV ever permitted by some agencies exceeds 2 million lb.

In conclusion, the findings of this study suggest that the practice of permitting SHCVs may be improved by carrying out and implementing future research on:

- The methodologies used for evaluating the impact of SHCV on pavements and,
- The approaches used for levying permit fees that cover pavement utilization.

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APPENDIX A

Survey Questionnaire

Survey for NCHRP Synthesis 45-14

Dear survey responder:

NCHRP Synthesis 45-14 seeks to document the practice States/Provinces follow in issuing permits for superheavy commercial vehicles (SHCV). In general, SHCVs are defined as vehicles carrying non-divisible loads larger than those allowed under routine overweight/oversize permits and typically require pavement engineering analysis.

This survey consists of 4 sections:

Section A: General questions on SHCV permitting

Section B: Your jurisdiction's definition of SHCVs

Section C: Pavement analysis details

Section D: Method used to establish the fees for SHCV permits.

The survey is addressed to either motor vehicle/public safety officers that process permits or pavement engineers that assist them with the analysis-you will get routed to the appropriate section. It should take less than 10 minutes to complete the survey.

Your response to this survey will be summarized in a document that describes the North-American practice in permitting and operating vehicles carrying superheavy loads. On behalf of the Transportation Research Board, please accept my thanks for your time in responding.

Tom Papagiannakis PhD PE
at.papagiannakis1@gmail.com
(210) 268 2356

Your Background

Please note that questions marked with a * require an answer.

1. Please give us your name:

***2. Your State or Province?**

***3. Your Job Title?**

***4. What Department do you work for?**

- Department of Transportation/Commercial Vehicles
- Department of Transportation/Pavement Engineering
- Department of Motor Vehicles
- Department of Public Safety
- Other

If Other (please specify below):

SECTION A: General Information Questions

*** 5. Does your jurisdiction have a statute that does not permit exceeding axle load limits?**

Yes

No

General Information Questions (Continues)

Define non-divisible Superheavy loads.

*** 6. Does your jurisdiction have a definition of what is a non-divisible Superheavy load?**

Yes

No

General Information Questions (Continues)

Define non-divisible Superheavy loads (If "Yes" was selected above).

7. Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

General Information Questions (Continues)

8. Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

No

Max tire load/unit width

Give maximum weight/tire width allowed (If "Yes" was selected above).

9. Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in):

SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

*10. How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

- Exceeding a certain number of axles
 Exceeding a certain gross vehicle weight (GVW).
 Exceeding a certain GVW and exceeding a certain load by axle group regardless of axle spacing.
 Exceeding a certain GVW and exceeding a certain load by axle group as a function of axle spacing.
 Other

If Other, please describe below:

Defining SHCV (Continues):

Number of axles only.

11. Give the number of axles over which a vehicle is considered Superheavy:

Number of axle more than:

Defining SHCV (Continues):

GVW only:

12. Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than:

Defining SHCV (Continues):

GVW and axle load limits regardless of axle spacing:

13. Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than:

14. Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

	a load of (lbs):
When a single axle load exceeds	<input type="text"/>
When a tandem axle load group exceeds	<input type="text"/>
When a triple axle load group exceeds	<input type="text"/>
When a quad axle load group exceeds	<input type="text"/>
Other:	<input type="text"/>

Defining SHCV (Continues):

GVW and axle load limits as a function of axle spacing:

15. Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than:

16. Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

	a load of (lbs):	with a spacing less than (ft):
When a single axle load exceeds	<input type="text"/>	<input type="text"/>
When a tandem axle load group exceeds	<input type="text"/>	<input type="text"/>
When a triple axle load group exceeds	<input type="text"/>	<input type="text"/>
When a quad axle load group exceeds	<input type="text"/>	<input type="text"/>

Defining SHCV (Continues)

Other definition of SHCVs

17. If "other" is selected in defining SHCVs, please describe below:

SHCV Operation

18. Does your jurisdiction:

	Yes	No	Sometime
Offer electronic processing of SHCV permit applications?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allow oversize SHCVs that require more than one lane to move?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allow multiple trips with one SHCV permit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you selected "Sometime" in one of the questions above, please explain:

SECTION C: Pavement Analysis for Issuing a SHCV Permit*** 19. Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?**

- No-never
- Yes-always
- It depends

"It depends", please explain:

Pavement Analysis (Continues)

Who does the analysis?

*** 20. Who performs the pavement analysis?**

- My Department
- A different Department
- It is outsourced

If outsourced, please give us the name of the Company:

Pavement Analysis (Continues)

Note:

M-E PDG version 1.0 was the one documented in AASHTO's July 2008 Interim Report. AASHTOWare Pavement ME Design is the version currently distributed through AASHTO.

***21. What type of pavement analysis method is used to evaluate the impact of Superheavy loads.**

- AASHTO 1993 Pavement Design Guide using ESALs computed from tables/equations
- AASHTO 1993 Pavement Design Guide using mechanistic Load Equivalence Factors
- Mechanistic-Empirical Pavement Design Guide (M-E PDG) version earlier to 1.0
- Mechanistic-Empirical Pavement Design Guide (M-E PDG) version 1.0
- AASHTOware Pavement ME Design
- Industry-developed mechanistic methods, e.g. Portland Cement Association or Asphalt Institute
- A State-developed mechanistic or other method.

If State or Other method, please specify:

Pavement Analysis (Continues)

Pavement Analysis Details

22. Please specify the following pavement analysis details:

	Yes	No	Sometimes
Do you use representative layer thicknesses for an entire selected route?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you use representative pavement layer moduli for an entire selected route?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you use a representative subgrade modulus for an entire selected route?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you consider seasonal variations in pavement layer moduli?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you consider seasonal variations in subgrade modulus?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you selected sometimes in one of the questions above, please describe the circumstances:

23. Please specify the following load analysis details:

	Yes	No	N/A
Do you analyze the entire length of the SHCV (i.e., all the axles)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you analyze one wheel path only?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you consider the number of tires in the wheel path?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you consider axle spacing for multiple axle configurations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you consider tire inflation pressure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you consider vehicle speed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Pavement Subgrade Stability Analysis

24. Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

- No
- Yes
- It depends

If it depends, please explain:

Type of Pavement Subgrade Stability Analysis**25. Type of pavement subgrade stability analysis**

- I do not know
- Mohr-Coulomb type of analysis
- Complete slope stability analysis using a software package (e.g., Geo-Slope, SoilVision or similar)
- Other

If Other, please specify:

Pavement Analysis (Continues)**26. What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):**

- Our Department recommends an alternate route with stronger pavement structures, if possible.
- The shipper is requested to divide the shipment into smaller parts
- The shipper is requested to revise the axle configuration/loads of the SHCV
- The shipper is requested to take measures to protect weaker pavement structures (e.g., steel plate covers).
- Other

If other (please specify)

SECTION D: Method for Establishing SHCV Permit Fees

Method for Computing SHCV permit fees.

***27. How are SHCV fees calculated?**

- I do not know-I pass the pavement analysis results to the Permitting Office and they decide.
- Fees are established by policy (tabulated values) depending on the number of axles - distance traveled
- Fees are calculated on the basis of weight - distance traveled
- Fees are calculated on the basis of pavement damage - distance traveled
- Fees are calculated by factoring the annual license fee paid by a reference truck in proportion to the relative pavement damage caused by the SHCV and the miles traveled.
- Other

If Other, please specify:

28. In establishing SHCV permit fees, do you consider additional costs from:

	Yes	No	Sometimes
Possible pavement subgrade stability failure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Possible damage to pavement shoulders?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Possible damage to utilities and drains embedded into the pavement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you selected sometimes in one of the questions above, please describe the circumstances:

29. Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: Yes No

Concluding Questions:***30. Please give the approximate average number of SHCV permits issued by your Department per year:**

Number/year:

***31. What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?**

GVW (lbs):

Finally, is there any Documentation?

32. Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Thank you very much for your time in responding to this Survey. I offer to send you a summary of the survey results, once this Synthesis is completed.

Sincerely

Tom Papagiannakis.

APPENDIX B

List of Responding Agencies

State or Province	Responder's Job Function
Alabama	Assistant Maintenance Bureau Chief
Alaska	Chief, CVE & Permitting
Arizona	Transportation Engineering Permit Tech 3
Arkansas	Captain—(Commander of AHP Permit Section)
British Columbia	Commercial Transport Advisor
California	Oversize/Overweight Permits Office Manager
Colorado	Extra-legal Permits Manager
Connecticut	Manager of Bridge Operations
Delaware	Pavement Design Engineer Hauling Permit Agent
Florida	State Bridge Evaluation Engineer
Georgia	Operations Coordinator
Idaho	Motor Carrier Service Manager
Illinois	Permit Unit Chief
Indiana	Permit Services Engineer
Iowa	Pavement Engineer Permits Manager
Kansas	Bridge Engineer
Louisiana	LaDOTD Transportation Permits Manager Pavement and Geotechnical Manager
Manitoba	Director, Motor Carrier Permits and Development
Minnesota	Pavement Design Engineer
Mississippi	Director Permit/Motor Carrier Division
Missouri	Motor Carrier Compliance Supervisor—OSOW
Montana	License & Permit Bureau Chief
Nevada	ODV Permit Manager
New Brunswick	Supervisor Special Permits Unit (Trucking Technician)
New Hampshire	Senior Engineer
New Jersey	Manager of Freight Planning Services
New York	Acting Manager of the NYSDOT Central Permit Office
Newfoundland & Labrador	Manager, Transportation Regulation Enforcement
North Carolina	State Pavement Design Engineer Director of NCDOT Permits
North Dakota	Administrative Staff Office
Ohio	Manager, Special Hauling Permits Section
Ontario	Weight & Load Engineer
Oregon	Program Coordinator Pavement Design Engineer
Pennsylvania	Central Permit Office Manager
South Dakota	Operations Maintenance Engineer
Tennessee	Admin. Services Assistant 4
Texas	Permit Section—Super Load Team Supervisor Transportation Engineer
Utah	Supervisor/Superload Coordination Team
Vermont	Chief of Records & Motor Carrier Services
Virginia	Deputy Director Motor Carrier Size and Weight Services
Washington	State Pavement Design Engineer Permit Program Manager
West Virginia	Central Permit Office Administrator
Wisconsin	Pavement Structure Engineer Permit Chief—Motor Carrier Services Section—DMV
Wyoming	Overweight Loads Office

APPENDIX C

Raw Survey Results

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#1

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Friday, January 24, 2014 4:50:11 AM**Last Modified:** Friday, January 24, 2014 5:00:29 AM**Time Spent:** 00:10:18**IP Address:** 129.71.250.254

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

WV

Q3: Your Job Title?

Central Permit Office Administrator

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

1.0

Man-days:

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than:

120000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	Generally, if a SHCV is also oversize, we do not let them move at night. However, if a neighboring state requires them to move at night, we will try to work with them.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 35000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1000000


PAGE 24: Finally, is there any Documentation?

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

www.transportation.wv.gov, then click Permits, then Hauling Permits, then Permit Information.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

<p>#2</p> 	<p>COMPLETE</p> <p>Collector: Web Link (Web Link) Started: Friday, January 24, 2014 5:12:19 AM Last Modified: Friday, January 24, 2014 5:28:13 AM Time Spent: 00:15:54 IP Address: 63.66.64.247</p>
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PAGE 2: Your Background

Q1: Please give us your name:	[REDACTED]
Q2: Your State or Province?	PA
Q3: Your Job Title?	Central Permit Office Manager
Q4: What Department do you work for?	Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?	No
---	----

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?	Yes
---	-----

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):	
	Number
Days or:	>3
Man-days:	
Other (please describe below):	We mirror the Federal guidelines, which establishes 8 hours.

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Other,
If Other, please describe below:
A superload is any load that exceeds 16' wide, 160' long, or 201,000lbs

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

A superload is any load that exceeds 16' wide, 160' long, or 201,000lbs

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify:
Determined by vehicle size + ton/mile fee

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No, Yes

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one:

Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1500

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1700000

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#3

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Friday, January 24, 2014 6:30:45 AM**Last Modified:** Friday, January 24, 2014 6:57:35 AM**Time Spent:** 00:26:50**IP Address:** 12.29.26.18

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Arkansas

Q3: Your Job Title?

Captain - (Commander of AHP Permit Section)

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

Loads must be reduced as much as practical. No reducible load is allowed to obtain oversize and/or overweight permits. We use 1 day and/or 8 man hours as a guideline when dealing with large pieces of equipment etc.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 180000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications? Yes

Allow oversize SHCVs that require more than one lane to move? Sometime

Allow multiple trips with one SHCV permit? No

Restrict SHCV movement during certain times of the year, e.g., spring thaw? No

Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders? No

If you selected "Sometime" in one of the questions above, please explain:

Based on Safety. Traffic volume, terrain, total number of traffic lanes, bridge structures, etc are all taken into consideration when issuing a permit of this nature.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,

"It depends", please explain:
When travel is required on a highway that has been weight restricted additional pavement analysis is required.

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

My Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

AASHTO 1993 Pavement Design Guide using ESALs computed from tables/equations

PAGE 18: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Sometimes
Do you use representative pavement layer moduli for an entire selected route?	No
Do you use a representative subgrade modulus for an entire selected route?	No
Do you consider seasonal variations in pavement layer moduli?	Yes
Do you consider seasonal variations in subgrade modulus?	Yes
If you selected sometimes in one of the questions above, please describe the circumstances:	When GPR or current cores are not available.

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	Yes
Do you consider the number of tires in the wheel path?	No
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	No
Do you consider vehicle speed?	No

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?	No
---	----

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis	<i>Respondent skipped this question</i>
---	---

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):	Our Department recommends an alternate route with stronger pavement structures, if possible.
--	--

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of pavement damage - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 3000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?


GVW (lbs): 685314

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Permit manual.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

<p>#4</p> 	<p>COMPLETE</p> <p>Collector: Web Link (Web Link) Started: Friday, January 24, 2014 9:51:47 AM Last Modified: Friday, January 24, 2014 10:17:52 AM Time Spent: 00:26:05 IP Address: 159.105.153.132</p>
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PAGE 2: Your Background

Q1: Please give us your name:	[REDACTED]
Q2: Your State or Province?	Vermont
Q3: Your Job Title?	Chief of Records & Motor Carrier Services
Q4: What Department do you work for?	Department of Motor Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?	Yes
---	-----

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?	Yes
---	-----

PAGE 5: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

	Number
Days or:	0.5
Man-days:	
Other (please describe below):	Any load or vehicle exceeding applicable dimensions or weight limits which, if sparated into smaller loads or vehicles would: 1. Compromise the intended us of the vehicle, i.e., make it unable to perform the function for which it was intended. 2. Destroy the value of the load or vehicle, i.e., make it unusable for its intended purpose; or 3. Require more than 8 work hours to dismantle.....

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? Yes

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 150000

PAGE 11: Defining SHCV (Continues):

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications? No

Allow oversize SHCVs that require more than one lane to move? Yes

Allow multiple trips with one SHCV permit? Yes

Restrict SHCV movement during certain times of the year, e.g., spring thaw? Yes

Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders? Sometime

If you selected "Sometime" in one of the questions above, please explain:

When a route issued by a neighboring state is routing the carrier onto a Vermont route that is not acceptable for the dimensions/weight.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Yes-always

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

A different Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 675

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 600000

PAGE 24: Finally, is there any Documentation?

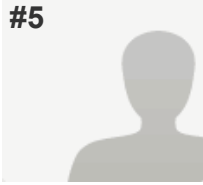
Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

http://dmv.vermont.gov/sites/dmv/files/pdf/DMV-VX012-Oversize_Permit_Rules.pdf

Does not include any of the engineering processes

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#5

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Friday, January 24, 2014 11:21:25 AM**Last Modified:** Friday, January 24, 2014 11:32:30 AM**Time Spent:** 00:11:05**IP Address:** 204.64.21.50

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Texas

Q3: Your Job Title?

Transportation Engineer

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Respondent skipped this question

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Industry-developed mechanistic methods, e.g. Portland Cement Association or Asphalt Institute

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route? Yes

Do you use representative pavement layer moduli for an entire selected route? Sometimes

Do you use a representative subgrade modulus for an entire selected route? Sometimes

Do you consider seasonal variations in pavement layer moduli? No

Do you consider seasonal variations in subgrade modulus? No

If you selected sometimes in one of the questions above, please describe the circumstances:

Conservative representative values are used unless deflection tests are run and the values are calculated specifically.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	No
Do you analyze one wheel path only?	Yes
Do you consider the number of tires in the wheel path?	Yes
Do you consider axle spacing for multiple axle configurations?	No
Do you consider tire inflation pressure?	Yes
Do you consider vehicle speed?	No

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

- The shipper is requested to take measures to protect weaker pavement structures (e.g., steel plate covers).
- ,
- The shipper is requested to revise the axle configuration/loads of the SHCV
- ,
- Our Department recommends an alternate route with stronger pavement structures, if possible.
- ,
- If other (please specify)
- If nothing can be done by the carrier to better spread the load, deflection tests and condition evaluations are conducted. See http://onlinemanuals.txdot.gov/txdotmanuals/pdm/super_heavy_load_evaluation_process.htm for the full flow chart.

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q27: How are SHCV fees calculated?

I do not know-I pass the pavement analysis results to the Permitting Office and they decide.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	Yes
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 100

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?


GVW (lbs): 2400000

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

http://onlinemanuals.txdot.gov/txdotmanuals/pdm/load_zoning_and_super_heavy_load_analysis.htm

Superheavy Commercial Vehicles (SHCV) Permitting Practices

<p>#6</p> 	<p>COMPLETE</p> <p>Collector: Web Link (Web Link) Started: Friday, January 24, 2014 2:45:08 PM Last Modified: Friday, January 24, 2014 3:04:32 PM Time Spent: 00:19:24 IP Address: 63.225.17.34</p>
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PAGE 2: Your Background

Q1: Please give us your name:	[REDACTED]
Q2: Your State or Province?	Colorado
Q3: Your Job Title?	Extra-legal Permits Manager
Q4: What Department do you work for?	Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?	Yes
---	-----

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?	Yes
---	-----

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):	
	Number
Days or:	
Man-days:	
Other (please describe below):	Mirrors federal language concerning 8 work hours for divisibility, however, this load would be differentiated by a gross weight exceeding 500,000 pounds and occupying 2 lanes of roadway, or an empty dual lane trailer that occupies two lanes.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Other,
If Other, please describe below:
Exceeds a certain GVW and occupies two lanes.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Also includes an empty dual lane expandable trailer that occupies two lanes.

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	We work with other city and county jurisdictions within our state but not directly with other states. In Colorado, the state does not have the authority to permit on city streets or county roads.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,
"It depends", please explain:
We require bridge analysis but not specific pavement analysis. If it is determined necessary to require pavement analysis we have the authority to do so but I have not seen this required.

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

My Department

PAGE 17: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. A State-developed mechanistic or other method., If State or Other method, please specify: not certain.

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Sometimes
Do you use representative pavement layer moduli for an entire selected route?	Sometimes
Do you use a representative subgrade modulus for an entire selected route?	Sometimes
Do you consider seasonal variations in pavement layer moduli?	No
Do you consider seasonal variations in subgrade modulus?	No
If you selected sometimes in one of the questions above, please describe the circumstances:	Uncertain how to answer this section. This is not a function that is regularly performed, however, it could be if the state determined it necessary.

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	No
Do you consider the number of tires in the wheel path?	No
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	No
Do you consider vehicle speed?	Yes

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No, If it depends, please explain: Not at this point.

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

The shipper is requested to take measures to protect weaker pavement structures (e.g., steel plate covers).

,

The shipper is requested to revise the axle configuration/loads of the SHCV

,

Our Department recommends an alternate route with stronger pavement structures, if possible.

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify: Fees are set in statute.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?

No

Possible damage to pavement shoulders?

No

Possible damage to utilities and drains embedded into the pavement?

No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one:

No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year:

50

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs):

1600000

PAGE 24: Finally, is there any Documentation?

Superheavy Commercial Vehicles (SHCV) Permitting Practices


Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

<http://www.lexisnexis.com/hottopics/Colorado/>

(42-4-510C.R.S.)

<http://www.coloradodot.info/business/permits/truckpermits/documents> (Rules and Regulations for Transport Permits)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#7 	COMPLETE Collector: Web Link (Web Link) Started: Monday, January 27, 2014 6:36:16 AM Last Modified: Monday, January 27, 2014 6:55:53 AM Time Spent: 00:19:37 IP Address: 166.67.66.7
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PAGE 2: Your Background

Q1: Please give us your name:	<input type="text" value="██████████"/>
Q2: Your State or Province?	Virginia
Q3: Your Job Title?	Deputy Director Motor Carrier Size and Weight Services
Q4: What Department do you work for?	Department of Motor Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?	No
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PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?	Yes
---	-----

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):	
	Number
Days or:	>3
Man-days:	

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Other,
If Other, please describe below:
Exceeding Size and/or weight

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	If a bordering State will only grant Sunday movement or only nighttime movement, we will conform to allow seamless movement.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? It depends,
It "It depends", please explain:
We have performed pre and post pavement review for some loads exceeding 1,000,000lbs.

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? It is outsourced

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? *Respondent skipped this question*

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Other,
If Other, please specify:
Fees are both codified and regulatory. Please review VA Code: 46.2-652.1 to see pavement damage related fees

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 40000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1400000

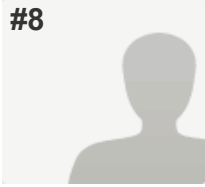
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

www.dmvnow.com

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#8

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, January 27, 2014 11:10:28 AM**Last Modified:** Monday, January 27, 2014 11:20:50 AM**Time Spent:** 00:10:22**IP Address:** 199.192.2.24

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

New Hampshire Department of Transportation

Q3: Your Job Title?

Senior Engineer

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

0.5

Man-days:

Other (please describe below):

less than 8 work hours

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW),
If Other, please describe below: >149,999 #

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 150000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications? Sometime

Allow oversize SHCVs that require more than one lane to move? Sometime

Allow multiple trips with one SHCV permit? No

Restrict SHCV movement during certain times of the year, e.g., spring thaw? Sometime

Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders? Yes

If you selected "Sometime" in one of the questions above, please explain:

portions of permit review are not completed electronically (i.e., bridge overweight engineering reports). allow more than one lane under limited conditions. Moves are restricted depending on road conditions. not all roads get posted for spring conditions

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

No-never,

It "It depends", please explain: bridges are the limiting conditions, require axle and tire loads to be limited to reduce potential impacts to pavement

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? *Respondent skipped this question*

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Other,
If Other, please specify:
fess calculated based on weight

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

If you selected sometimes in one of the questions above, please describe the circumstances: hauling company responsible to repair any damage

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 5

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1200000

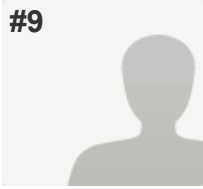
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

<http://www.nh.gov/dot/org/operations/highwaymaintenance/overhaul/index.htm>

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#9

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, January 28, 2014 9:42:57 AM**Last Modified:** Tuesday, January 28, 2014 9:50:04 AM**Time Spent:** 00:07:07**IP Address:** 170.3.8.253

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

New York

Q3: Your Job Title?

Acting Manager of the NYSDOT Central Permit Office

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

It would fall under our normal non-divisible load requirements, which are 8 man-hours to disassemble.

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 200000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify:

A flat fee is charged for all permits, superload or routine issue. These are established by regulation.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one:

Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 500

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 855000

PAGE 24: Finally, is there any Documentation?

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

NYS DOT Permits Website: www.nypermits.org. Superload information is located in the Special Hauling Permit section.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#10

**INCOMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, January 28, 2014 2:05:17 PM**Last Modified:** Tuesday, January 28, 2014 2:18:18 PM**Time Spent:** 00:13:01**IP Address:** 205.200.189.2

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Manitoba

Q3: Your Job Title?

Director, Motor Carrier Permits and Development

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 1363

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain GVW and exceeding a certain load by axle group as a function of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? *Respondent skipped this question*

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year: *Respondent skipped this question*

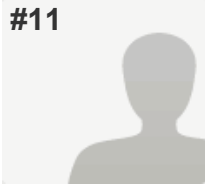
Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction? *Respondent skipped this question*

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#11

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Wednesday, January 29, 2014 8:09:03 AM**Last Modified:** Wednesday, January 29, 2014 8:30:51 AM**Time Spent:** 00:21:48**IP Address:** 163.191.13.130

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Illinois Department of Transportation

Q3: Your Job Title?

Permit Unit Chief

Q4: What Department do you work for?

Other,

If Other (please specify below):

Department of

Transportation/Highways/Maintenance/Permits

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

8 hours to dismantle

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain GVW and exceeding a certain load by axle group as a function of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 100000

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

	a load of (lbs):	with a spacing less than (ft):
When a single axle load exceeds	24000	
When a tandem axle load group exceeds	48000	
When a triple axle load group exceeds	60000	
When a quad axle load group exceeds	60000	

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Sometime
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	Locals have spring thaw restrictions Neighboring states share restrictions re specific loads

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,
"It depends", please explain:
If axle weights exceed 29,000

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? My Department

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. A State-developed mechanistic or other method.

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Yes
Do you use representative pavement layer moduli for an entire selected route?	Yes
Do you use a representative subgrade modulus for an entire selected route?	Yes
Do you consider seasonal variations in pavement layer moduli?	No
Do you consider seasonal variations in subgrade modulus?	No

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	Yes
Do you consider the number of tires in the wheel path?	No
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	Yes
Do you consider vehicle speed?	No

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Our Department recommends an alternate route with stronger pavement structures, if possible.

The shipper is requested to revise the axle configuration/loads of the SHCV

The shipper is requested to take measures to protect weaker pavement structures (e.g., steel plate covers).

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 240000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1000000

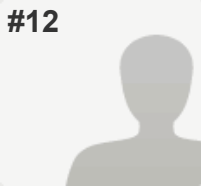
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Oversize and Overweight Permit Movements on State Highways 2012 manual
Illinois Vehicle Code

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#12

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Wednesday, January 29, 2014 9:46:50 AM**Last Modified:** Wednesday, January 29, 2014 11:45:35 AM**Time Spent:** 01:58:45**IP Address:** 164.110.166.237

PAGE 2: Your Background

Q1: Please give us your name:

Jim Wright

Q2: Your State or Province?

State of Washington

Q3: Your Job Title?

Permit Program Manager

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):**Number****Days or:****Man-days:**

Other (please describe below):

Generally 8 hours but a reasonable amount of time and not to jeopardize the item's integrity.

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? Yes

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:
Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 600

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 200000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

100

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?

No

Allow oversize SHCVs that require more than one lane to move?

Yes

Allow multiple trips with one SHCV permit?

No

Restrict SHCV movement during certain times of the year, e.g., spring thaw?

Sometime

Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?

No

If you selected "Sometime" in one of the questions above, please explain:

Most SHCV loads are moved at night. Some are restricted to certain hours or days dependant on traffic volumes. SHCV cannot travel in areas where traction devices are required or recommended.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,

It "It depends", please explain:

Answered by the WSDOT pavement engineers

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

A different Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? *Respondent skipped this question*

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

If you selected sometimes in one of the questions above, please describe the circumstances: Permit fees are established by the legislature in state law. Based on excess weight per mile.

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 900

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 900000

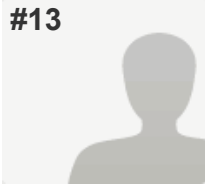
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

www.wsdot.wa.gov/permitting Washington Administrative Code (WAC) 468-38-405 in particular but all of WAC 468-38

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#13

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, January 30, 2014 7:51:10 AM**Last Modified:** Thursday, January 30, 2014 7:57:00 AM**Time Spent:** 00:05:50**IP Address:** 156.63.133.8

PAGE 2: Your Background

Q1: Please give us your name:

State or Province?

Ohio

Q3: Your Job Title?

Manager, Special Hauling Permits Section

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

Mirrors the 23 CFR 658.5 definition.

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 120000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 30000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1005700

PAGE 24: Finally, is there any Documentation?

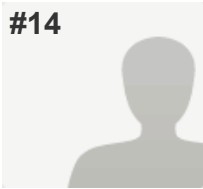
Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

All information on the web site: www.dot.state.oh.us/permits/

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#14

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, January 30, 2014 9:46:50 AM**Last Modified:** Thursday, January 30, 2014 10:05:22 AM**Time Spent:** 00:18:32**IP Address:** 204.64.21.50

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Texas

Q3: Your Job Title?

Permit Section - Super Load Team Supervisor

Q4: What Department do you work for?

Department of Motor Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

>3

Man-days:

Other (please describe below):

Definition: nondivisible load- A load that cannot be reduced to a smaller dimension without compromising the integrity of the load or requiring more than eight hours of work using appropriate equipment to dismantle.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain GVW and exceeding a certain load by axle group as a function of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 254300

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

	a load of (lbs):	with a spacing less than (ft):
When a single axle load exceeds	24000	12
When a tandem axle load group exceeds	46000	12
When a triple axle load group exceeds	60000	12
When a quad axle load group exceeds	>60000	12

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? It depends,
It "It depends", please explain:
TxDOT Pavement Section set a criteria for us to follow. Send all information to them if the GVW exceeds 800,000 lbs. or if load exceeds 500,000 lbs. and 6,000 lbs. per wheel load.

PAGE 16: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q20: Who performs the pavement analysis?

It is outsourced,

If outsourced, please give us the name of the Company:

As we are the TxDMV, the pavement analysis is done by TxDOT Pavement Section.

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q27: How are SHCV fees calculated?

Other,

If Other, please specify:

There is a vehicle supervision fee and a permit fee. The vehicle supervision fee is based on if the load crosses bridges or no bridges are crossed. The permit fee is a flat fee for the permit and additional fee for the weight.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 700

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 2200000

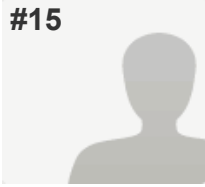
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

<http://txdmv.gov/oversize-weight-permits/super-heavy-single-trip>

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#15

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, January 30, 2014 1:26:49 PM**Last Modified:** Thursday, January 30, 2014 1:36:08 PM**Time Spent:** 00:09:19**IP Address:** 129.115.2.47

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Nevada

Q3: Your Job Title?

ODV Permit Manager

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

Non-divisible is just that non divisible so we do not break it down.

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 500000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	Yes
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Sometime
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No
If you selected "Sometime" in one of the questions above, please explain:	Nevada has spring thaw limitations on some routes,

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify:
Standard fee of \$250 per trip.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 250

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1800000

Superheavy Commercial Vehicles (SHCV) Permitting Practices

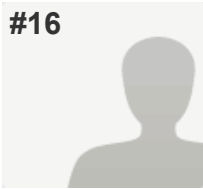
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Yes to a degree.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#16

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Friday, January 31, 2014 10:45:45 AM**Last Modified:** Friday, January 31, 2014 10:54:07 AM**Time Spent:** 00:08:22**IP Address:** 164.110.221.225

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Washington

Q3: Your Job Title?

State Pavement Design Engineer

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? *Respondent skipped this question*

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

A State-developed mechanistic or other method.,
If State or Other method, please specify:
Everstress Software / Spreadsheet

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Yes
Do you use representative pavement layer moduli for an entire selected route?	Yes
Do you use a representative subgrade modulus for an entire selected route?	Yes
Do you consider seasonal variations in pavement layer moduli?	Yes
Do you consider seasonal variations in subgrade modulus?	Yes

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	Yes
Do you consider the number of tires in the wheel path?	No
Do you consider axle spacing for multiple axle configurations?	No
Do you consider tire inflation pressure?	Yes
Do you consider vehicle speed?	No

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): Other, If other (please specify) NA

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Other

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 50

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1600000

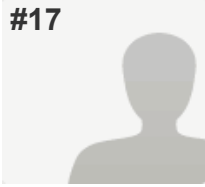
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#17

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Friday, January 31, 2014 12:46:16 PM**Last Modified:** Friday, January 31, 2014 1:13:00 PM**Time Spent:** 00:26:44**IP Address:** 164.154.96.76

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

South Dakota

Q3: Your Job Title?

Operations Maintenance Engineer

Q4: What Department do you work for?

Other,

If Other (please specify below):

South Dakota Department of Transportation-
Operation Support

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? Yes

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:
Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 600

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Other,
If Other, please describe below:
We can permit very large loads over the axle load on a wide axle (over 8' outside tire to outside tire) but can't permit for over 600lb/in if tire.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

see previous answer

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Other,
If Other, please specify:
A single trip permit for an oversize/overweight permit is issued per each load. If a load exceeds the weight per number of axles an additional overweight fee is charged at a rate of two cents per ton-mile for the excess weight.

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 0

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 0

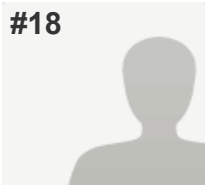
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

<http://www.sdtruckinfo.com/>

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#18

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, February 03, 2014 7:42:08 AM**Last Modified:** Monday, February 03, 2014 7:47:10 AM**Time Spent:** 00:05:02**IP Address:** 143.100.37.25

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

GA

Q3: Your Job Title?

Operations Coordinator

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Other,
If Other, please describe below:
We don't use this term.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

n/a

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	No
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?	No-never
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PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?	<i>Respondent skipped this question</i>
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PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.	<i>Respondent skipped this question</i>
---	---

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:	<i>Respondent skipped this question</i>
---	---

Q23: Please specify the following load analysis details:	<i>Respondent skipped this question</i>
---	---

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?	<i>Respondent skipped this question</i>
--	---

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Other,
If Other, please specify: We don't use this term.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 0

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 0

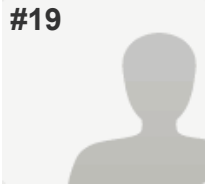
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

n/a

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#19

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, February 03, 2014 8:16:35 AM**Last Modified:** Monday, February 03, 2014 8:34:07 AM**Time Spent:** 00:17:32**IP Address:** 165.234.253.13

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

North Dakota

Q3: Your Job Title?

Adminstrative Staff Office

Q4: What Department do you work for?

Department of Public Safety

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 550

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain gross vehicle weight (GVW),.

If Other, please describe below:

Exceed axle group weights. Must have more than 4 tires per axle

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than: 200000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Yes
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	Currently working with MN to coordinate requests for wind tower movements

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,
 If "It depends", please explain:
 For the most part detailed analysis is not required. It is on a case by case basis

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

My Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

A State-developed mechanistic or other method.,
 If State or Other method, please specify:
 Analysis for superheavy load movements is completed by district engineers on a case by case basis

PAGE 18: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Yes
Do you use a representative subgrade modulus for an entire selected route?	Yes

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	Yes
Do you consider the number of tires in the wheel path?	Yes
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	No
Do you consider vehicle speed?	Yes

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

It depends,

If it depends, please explain:
superheavy load movements are approved on a case by case basis by district engineers.

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

I do not know

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Our Department recommends an alternate route with stronger pavement structures, if possible.

,

The shipper is requested to divide the shipment into smaller parts

,

The shipper is requested to revise the axle configuration/loads of the SHCV

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q27: How are SHCV fees calculated? Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? Sometimes

Possible damage to pavement shoulders? Sometimes

If you selected sometimes in one of the questions above, please describe the circumstances: DOT may require carrier to post a bond with the state.

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 427

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1000000

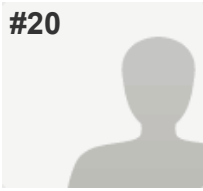
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

www.nd.gov/ndhp, click on Motor Carrier, then Permit Policies

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#20

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, February 03, 2014 8:29:49 AM**Last Modified:** Monday, February 03, 2014 9:07:44 AM**Time Spent:** 00:37:55**IP Address:** 168.178.122.16

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Utah

Q3: Your Job Title?

Supervisor/ Superload Coordination Team

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

Utah defines a non-divisible load as: any load or vehicle exceeding applicable length, width, or height or weight limits which, if separated into smaller loads or vehicles would: A. compromise the intended use of the load or vehicle; B. destroy the value of the load or vehicle; or C. require more than eight work hours to dismantle using appropriate equipment.

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in):

500

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain GVW and exceeding a certain load by axle group regardless of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than: 125000

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

	a load of (lbs):
When a single axle load exceeds	28000
When a tandem axle load group exceeds	50000
When a triple axle load group exceeds	>60000
When a quad axle load group exceeds	>60000
Other:	Quad axle does not have a specific set amount to it. It goes by bridge weight

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	Sometime
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No
If you selected "Sometime" in one of the questions above, please explain:	These are considered on a case by case basis - and if they paid for the proper total number of miles. When authorized they have to stay with in the measurements on the permit.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

No-never,
It "It depends", please explain:
All loads are processed through the bridge analysis and if they pass then away they go.

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

140

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 400

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1750000

PAGE 24: Finally, is there any Documentation?

Superheavy Commercial Vehicles (SHCV) Permitting Practices

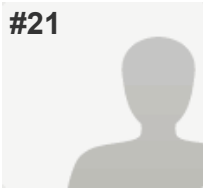
Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

go to www.udot.utah.gov then click on motor carrier division and then click on the trucking guide. This is the same area a company would go to to purchase permits.

142

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#21

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, February 03, 2014 10:11:22 AM**Last Modified:** Monday, February 03, 2014 10:32:12 AM**Time Spent:** 00:20:50**IP Address:** 158.145.224.113

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Alaska

Q3: Your Job Title?

Chief, CVE & Permitting

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain GVW and exceeding a certain load by axle group regardless of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than:

250000

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

	a load of (lbs):
When a single axle load exceeds	30000
When a tandem axle load group exceeds	>60000
When a triple axle load group exceeds	>60000
When a quad axle load group exceeds	>60000

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?

No

Allow oversize SHCVs that require more than one lane to move?

Yes

Allow multiple trips with one SHCV permit?

No

Restrict SHCV movement during certain times of the year, e.g., spring thaw?

Sometime

Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?

No

If you selected "Sometime" in one of the questions above, please explain:

Spring thaw (weight restrictions) and other seasonal impacts are considered for these moves.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 20

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 900000

PAGE 24: Finally, is there any Documentation?

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#22

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, February 03, 2014 8:24:40 AM**Last Modified:** Monday, February 03, 2014 10:56:39 AM**Time Spent:** 02:31:59**IP Address:** 142.139.0.55

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

New Brunswick

Q3: Your Job Title?

Supervisor Special Permits Unit (Trucking Technician)

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 559

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain GVW and exceeding a certain load by axle group as a function of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than: 171960

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

	a load of (lbs):	with a spacing less than (ft):
When a single axle load exceeds	24000	
When a tandem axle load group exceeds	50000	10
When a triple axle load group exceeds	>60000	12
When a quad axle load group exceeds	>60000	16

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	Sometime
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Yes
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	NB is a gate way province to Nova Scotia , PEI and NFLD. When a vehicle requests use of NB highway to reach a destination located in one of these provinces, we will often request the limits set by the destination province and their approval for extreme loads

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

No-never,
It "It depends", please explain:
This answer is given in terms of permit issuance. There are cases of pavement studies undertaken for introduction of new vehicle configurations

PAGE 16: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify:

Fees are regulated under the Motor Vehicle Act (Regulation 89-65) They are based on type of permit, vehicle configuration, GVW, and duration.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? Sometimes

Possible damage to pavement shoulders? Sometimes

Possible damage to utilities and drains embedded into the pavement? Sometimes

If you selected sometimes in one of the questions above, please describe the circumstances:

The above items are considered on issuance of permit. We are authorised under the Motor Vehicle Act and Highway Act to obtain surity or deposits in addition to the permitting fees. (If it is determined to be required during the application review process)

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 525

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 542337

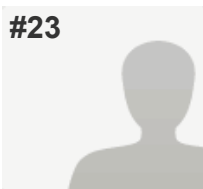
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Our policies are currently under review, however, and have been removed from our web page. Our Department web page is <http://www2.gnb.ca/content/gnb/en/departments/dti.html>
You may contact Speicla Permits unit at 506-453-2982 or by e-mail at special.permits@gnb.ca

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#23

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, February 03, 2014 12:35:42 PM**Last Modified:** Monday, February 03, 2014 12:51:30 PM**Time Spent:** 00:15:48**IP Address:** 142.36.211.148

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

British Columbia

Q3: Your Job Title?

Commercial Transport Advisor

Q4: What Department do you work for?

Other,

If Other (please specify below):

I am with the Ministry of Transportation /
Commercial Vehicles, but I am answering the
survey with input from the Ministry's bridge and geo-
technical engineers

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

Our definition of loads that are non-reducible for weight is shown below. To be considered an extraordinary load ("super heavy"), the GCVW of the vehicle and non-reducible load would exceed the pre-approved threshold for its requested route (typically either 64,000 kg or 85,000 kg): "Non-reducible load", for overweight permits, means any load or vehicle exceeding applicable weight limits that, if separated into smaller loads or vehicles, would: a) Compromise the intended use or destroy the value of the load or vehicle; b) Require more than 8 hours to dismantle using appropriate equipment. c) Result in the vehicle being greatly underweight if one component were removed, where the load consists of only two large components, and the total weight being permitted does not exceed 3,500 kg. In addition, up to two unattached additional pieces which belong to a component or machine (e.g., buckets, blades, C frames, rippers, etc.) may be transported on the same vehicle and the combined load will still be considered non-reducible, provided that: the gross combined weight of the load and vehicle does not exceed the preapproved weight rating (64,000 kg except as shown in section 6.3.4) on any portion of its approved route. Note that BC also has a definition of 'non-reducible' for size. Our answer to #9 is 100 kg/cm (the field will only accept the number portion of this response).

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Other,

If Other, please describe below:
Exceeding a certain GVW and/or exceeding a certain load by axle group as a function of axle spacing and/or exceeding the pre-approved weight threshold for its requested route.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below:

Exceeding a certain GVW and/or exceeding a certain load by axle group as a function of axle spacing and/or exceeding the pre-approved weight threshold for its requested route.

Maximum permissible weight for axle groups is 9100 kg/single, 17000 kg/tandem and 28,000 kg/tridem (29,000 kg with no booster or a single axle booster), with spacings that do not break Bridge Formula. Bridge Formula is $30 \times \text{wheelbase (cm)} + 18,000 \text{ kg} = \text{Maximum weight}$.

A vehicle combination with compliant axle group weights and spacings would be considered an extraordinary load (a "super heavy" load) if its GCVW exceeds the pre-approved weight threshold for its requested route (typically 64,000 kg or 85,000 kg).

Maximum permissible weight for axle groups is 9100 kg/single, 17000 kg/tandem and 28,000 kg/tridem (29,000 kg with no booster or a single axle booster), with spacings that do not break Bridge Formula. Bridge Formula is $30 \times \text{wheelbase (cm)} + 18,000 \text{ kg} = \text{Maximum weight}$.

A vehicle combination with compliant axle group weights and spacings would be considered an extraordinary load (a "super heavy" load) if its GCVW exceeds the pre-approved weight threshold for its requested route (typically 64,000 kg or 85,000 kg).

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	Sometime
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Yes
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	Extraordinary loads over 6.0 m wide or 4.88 m high (5.33 m in one region of BC, the Peace River Region) require signoff by Ministry of Transportation representatives in each district through which it intends to pass, and by RCMP and utility companies along the requested route. Where possible, we align our commercial vehicle regulations and permitting policy with other Western Canadian provinces, and are guided by federal (TAC) standards. However, our terrain is generally more mountainous than our neighbours and that does lead to exceptions.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,

It "It depends", please explain:

Our bridge analysis engineers involve the geo-technical branch for pavement considerations on requests that are unusually heavy or where there is some unknown factor on the requested route that would be of interest to the pavement engineers.

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

My Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

A State-developed mechanistic or other method.,

If State or Other method, please specify:
AASHTO 1993 Pavement Design Guide using ESALs computed from tables/equations as well as TAC Guidelines using ESALs computed from tables/equations

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route? Sometimes

Do you use representative pavement layer moduli for an entire selected route? Sometimes

Do you use a representative subgrade modulus for an entire selected route? Sometimes

Do you consider seasonal variations in pavement layer moduli? Sometimes

Do you consider seasonal variations in subgrade modulus? Sometimes

If you selected sometimes in one of the questions above, please describe the circumstances:

All depends on length of route, knowledge of pavement structure along these routes, and the number of regional boundaries the route crosses. It will depend on the historic records or information we have on the routes as the type of pavement analysis that we are capable of doing. It also depends on the time frame we have to complete the analysis as a more detailed and sophisticated analysis requires more time than sometimes we are given.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	No
Do you consider the number of tires in the wheel path?	Yes
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	Yes
Do you consider vehicle speed?	Yes

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

It depends,

If it depends, please explain:

It depends on time we are given to get a response to the permit request as well as the amount of information available about the subgrade materials along the route we are trying to analyze. There are times when we don't have the information available or the time to get all the information we would need.

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Complete slope stability analysis using a software package (e.g., Geo-Slope, SoilVision or similar)

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Other,

If other (please specify)

We provide a number of suggestions to the shipper and we allow them to choose what is appropriate among these suggestions and then resubmit for a second round of reviews.

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year:

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs):

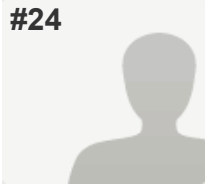
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

http://www.th.gov.bc.ca/cvse/ctpm/Chapter_6.pdf - Heavy Haul & Extraordinary Load Guidelines
<http://www.th.gov.bc.ca/CVSE/extraordinary/> - Extraordinary Load FAQ

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#24

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, February 03, 2014 1:22:09 PM**Last Modified:** Monday, February 03, 2014 1:40:26 PM**Time Spent:** 00:18:17**IP Address:** 161.7.111.161

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Montana

Q3: Your Job Title?

License & Permit Bureau Chief

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

	Number
Days or:	1.0
Man-days:	
Other (please describe below):	For the purposes of this section, a "nondivisible load" is: (a) on public roads off of interstate highways, a load that cannot be readily or reasonably dismantled and that is reduced to a minimum practical size and weight; (b) on interstate highways, a load or vehicle exceeding applicable length or weight limits that, if separated into smaller loads or vehicles, would: (i) compromise the intended use of the vehicle; (ii) destroy the value of the load or vehicle; or (iii) require more than 8 work hours to dismantle using appropriate equipment

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Other,
If Other, please describe below:
weight requires approval of the department's bridge bureau

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

No true definition regarding this

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications? Yes

Allow oversize SHCVs that require more than one lane to move? Yes

Allow multiple trips with one SHCV permit? No

Restrict SHCV movement during certain times of the year, e.g., spring thaw? Sometime

Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders? Yes

If you selected "Sometime" in one of the questions above, please explain: travel conditions may be limited or certain travel times may be required

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? *Respondent skipped this question*

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

,

If Other, please specify: fees are set by statute

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Respondent skipped this question

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one:

No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year:

1704

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs):

1600000000

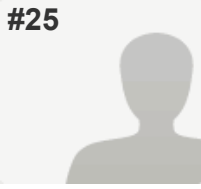
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#25

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, February 04, 2014 4:19:07 AM**Last Modified:** Tuesday, February 04, 2014 4:27:57 AM**Time Spent:** 00:08:50**IP Address:** 167.21.1.225

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

DE

Q3: Your Job Title?

Hauling Permit Agent

Q4: What Department do you work for?

Department of Motor Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

8 man hours

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 120000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Yes

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? Yes-always

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? A different Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify: Basic fee plus weight fee

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? Yes

Possible damage to pavement shoulders? Yes

Possible damage to utilities and drains embedded into the pavement? Yes

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one:

No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 2500

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 840000

PAGE 24: Finally, is there any Documentation?

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

OSOW Permit System www.osow.deldot.gov
Policy and Procedures Manual

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#26

**INCOMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, February 04, 2014 5:43:09 AM**Last Modified:** Tuesday, February 04, 2014 6:05:21 AM**Time Spent:** 00:22:12**IP Address:** 130.47.34.2

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

wisconsin

Q3: Your Job Title?

Permit Chief - Motor Carrier Services Section - DMV

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than:

270000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	WI and MN have a Governor's Memorandum of Understanding instructing the permit offices of both states to harmonize operation to the extent possible. Coordination with IA and IL is more case-by-case and typically reserved for loads over 350k gw and/or of exceptionally large dimensions.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,

It "It depends", please explain:
If the gw exceeds 270k the application is referred to WI pavement engineers for a standard review. "Detailed analysis" may be required if axle loadings exceed 27,000 lbs per line or time of travel coincides with spring thaw, flooding or other unusual weather that is likely to reduce road strength.

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

My Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Respondent skipped this question

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Respondent skipped this question

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Respondent skipped this question

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Respondent skipped this question

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

Respondent skipped this question

PAGE 24: Finally, is there any Documentation?

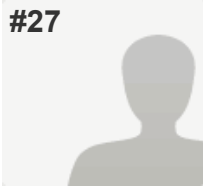
Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#27

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, February 04, 2014 8:21:28 AM**Last Modified:** Tuesday, February 04, 2014 8:39:23 AM**Time Spent:** 00:17:55**IP Address:** 199.90.35.11

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

North Carolina

Q3: Your Job Title?

Director of NCDOT Permits

Q4: What Department do you work for?

Other,

If Other (please specify below):
NCDOT - Mobility and Safety

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

8 hours

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain GVW and exceeding a certain load by axle group regardless of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 350000

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

	a load of (lbs):
When a single axle load exceeds	26000
When a tandem axle load group exceeds	
When a triple axle load group exceeds	
When a quad axle load group exceeds	

PAGE 12: Defining SHCV (Continues):

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

A different Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? *Respondent skipped this question*

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Other,
If Other, please specify:
Fees are calculated on the basis of weight

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 600

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1284012

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#28

**INCOMPLETE****Collector:** Web Link (Web Link)**Started:** Wednesday, February 05, 2014 6:37:21 AM**Last Modified:** Wednesday, February 05, 2014 6:50:41 AM**Time Spent:** 00:13:20**IP Address:** 98.143.143.254

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Newfoundland & Labrador

Q3: Your Job Title?

Manger, Transportation Regulation Enforcement

Q4: What Department do you work for?

Other,

If Other (please specify below): Service NL

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Other,

If Other, please describe below:
a vehicle that is considered "excessive overmass" when entered into our special permitting system and requires evaluation by the bridge engineer office of the Dept. of Transportation & Works

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Sometime
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	Sometime
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No
If you selected "Sometime" in one of the questions above, please explain:	Sometimes an application can be emailed, processed and returned to the applicant electronically. We will sometimes allow multiple moves on a permit for very large projects where every aspect of the vehicle and load are identical.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? *Respondent skipped this question*

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Respondent skipped this question

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Respondent skipped this question

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Respondent skipped this question

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Respondent skipped this question

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

Respondent skipped this question

PAGE 24: Finally, is there any Documentation?

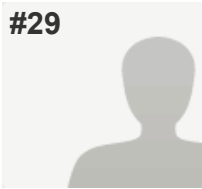
Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#29

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Wednesday, February 05, 2014 7:50:31 AM**Last Modified:** Wednesday, February 05, 2014 7:58:31 AM**Time Spent:** 00:08:00**IP Address:** 24.241.228.167

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

WI

Q3: Your Job Title?

Pavement Structure Engineer

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? *Respondent skipped this question*

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

A State-developed mechanistic or other method.,
If State or Other method, please specify:
We have a long-standing, simple process of weights and tires per axle. I do not know, specifically, upon what it is based. We still design our pavements based on AASHTO '72 (we will be adopting ME soon). I believe our approval limits are based on AASHTO '72 and the DAMA program.

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Yes
Do you use representative pavement layer moduli for an entire selected route?	Yes
Do you use a representative subgrade modulus for an entire selected route?	Yes
Do you consider seasonal variations in pavement layer moduli?	No
Do you consider seasonal variations in subgrade modulus?	No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	No
Do you consider the number of tires in the wheel path?	Yes
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	Yes
Do you consider vehicle speed?	No

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): The shipper is requested to revise the axle configuration/loads of the SHCV

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? I do not know-I pass the pavement analysis results to the Permitting Office and they decide.

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 0

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 0

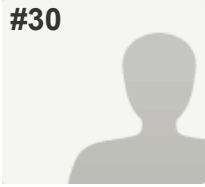
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Questions 11-14 must be answered by someone else. I entered zero for 13 and 14 because I do not know the answers.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#30

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Friday, January 24, 2014 6:43:00 AM**Last Modified:** Wednesday, February 05, 2014 8:17:15 AM**Time Spent:** Over a week**IP Address:** 192.234.241.107

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Louisiana

Q3: Your Job Title?

LaDOTD Transportation Permits Manager

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

0.5

Man-days:

Other (please describe below):

If the load can be broken down in 8 hours or less, it is considered a divisible load

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? Yes

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:
Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 700

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain GVW and exceeding a certain load by axle group as a function of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 232000

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

	a load of (lbs):	with a spacing less than (ft):
When a single axle load exceeds	22000	9
When a tandem axle load group exceeds	48000	9
When a triple axle load group exceeds	60000	9
When a quad axle load group exceeds	>60000	9

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Yes
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Yes

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Yes-always

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

A different Department

PAGE 17: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? *Respondent skipped this question*

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Other,
If Other, please specify:
GVW - 80,000 lbs./ 2000 = Ton Mile x \$.50 x
Actual Mileage + \$10.00 Admin Fee + Structural
Evaluation Fee = Permit Fee

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? Sometimes

Possible damage to pavement shoulders? Sometimes

Possible damage to utilities and drains embedded into the pavement? Sometimes

If you selected sometimes in one of the questions above, please describe the circumstances: If weight per lat in is over 700 lbs., bonding is required for possible damage

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 200

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 4500000

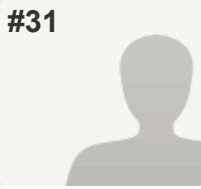
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#31

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, February 06, 2014 1:16:23 PM**Last Modified:** Friday, February 07, 2014 2:17:55 PM**Time Spent:** Over a day**IP Address:** 170.141.177.36

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

TN

Q3: Your Job Title?

Admin. Services Assitant 4

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

1.0

Man-days:

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than:

150000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?	Yes-always
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PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?	A different Department
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PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.	<i>Respondent skipped this question</i>
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PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:	<i>Respondent skipped this question</i>
---	---

Q23: Please specify the following load analysis details:	<i>Respondent skipped this question</i>
---	---

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?	<i>Respondent skipped this question</i>
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Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? Sometimes

Possible damage to pavement shoulders? Sometimes

Possible damage to utilities and drains embedded into the pavement? Sometimes

If you selected sometimes in one of the questions above, please describe the circumstances: In Tennessee, we can require a pre-inspection of routes as well as post-inspection for the routes requested from an independent consultant if loads exceed 500,000 pounds or more.

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 12000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1404869

PAGE 24: Finally, is there any Documentation?

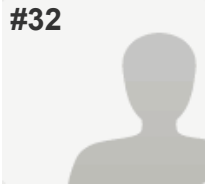
Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

<http://www.state.tn.us/sos/rules/1680/1680-07/1680-07-01.pdf>

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#32

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, February 06, 2014 10:57:53 AM**Last Modified:** Monday, February 10, 2014 12:48:49 PM**Time Spent:** Over a day**IP Address:** 165.206.209.230

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Iowa

Q3: Your Job Title?

Permits Manager

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

8 work hours

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Other,
If Other, please describe below: per axle and weight

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below:

per axle and weight

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	Yes
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Yes
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Yes

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?	It depends, It "It depends", please explain: anything over 20,000 lbs per axle.
--	---

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?	A different Department
---	------------------------

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.	<i>Respondent skipped this question</i>
---	---

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:	<i>Respondent skipped this question</i>
---	---

Q23: Please specify the following load analysis details:	<i>Respondent skipped this question</i>
---	---

PAGE 19: Pavement Subgrade Stability Analysis

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify: \$10 for a sing permit

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one:

Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 120000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1000000

PAGE 24: Finally, is there any Documentation?

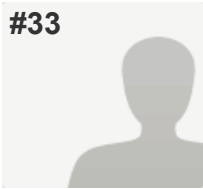
Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Iowa Truck information Guide. www.iowadot.gov/mvd

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#33

**INCOMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, February 11, 2014 6:19:43 AM**Last Modified:** Tuesday, February 11, 2014 6:57:29 AM**Time Spent:** 00:37:46**IP Address:** 165.206.209.230

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Iowa

Q3: Your Job Title?

Pavement Engineer

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? *Respondent skipped this question*

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

AASHTO 1993 Pavement Design Guide using mechanistic Load Equivalence Factors

,

Industry-developed mechanistic methods, e.g. Portland Cement Association or Asphalt Institute

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	No
Do you use representative pavement layer moduli for an entire selected route?	No
Do you use a representative subgrade modulus for an entire selected route?	No
Do you consider seasonal variations in pavement layer moduli?	No
Do you consider seasonal variations in subgrade modulus?	Yes

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	No
Do you consider the number of tires in the wheel path?	Yes
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	No
Do you consider vehicle speed?	No

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

No,

If it depends, please explain:

We use the subgrade modulus in the analysis, but we don't perform a separate stability analysis.

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Our Department recommends an alternate route with stronger pavement structures, if possible.

,

The shipper is requested to revise the axle configuration/loads of the SHCV

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify:

Flat fee of \$10 is charged for all permit loads.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 7000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1000000

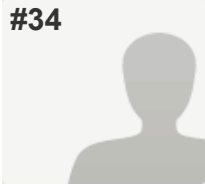
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#34

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, February 11, 2014 8:25:23 AM**Last Modified:** Tuesday, February 11, 2014 8:35:47 AM**Time Spent:** 00:10:24**IP Address:** 167.21.1.225

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

DE

Q3: Your Job Title?

Pavement Design Engineer

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Respondent skipped this question

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

AASHTO 1993 Pavement Design Guide using ESALs computed from tables/equations

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route? Sometimes

Do you use representative pavement layer moduli for an entire selected route? Yes

Do you use a representative subgrade modulus for an entire selected route? Yes

Do you consider seasonal variations in pavement layer moduli? No

Do you consider seasonal variations in subgrade modulus? No

If you selected sometimes in one of the questions above, please describe the circumstances:

prior to looking at the route, the department goes out and samples each roadway in varying intervals, the change in thickness is included in the analysis.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	N/A
Do you analyze one wheel path only?	N/A
Do you consider the number of tires in the wheel path?	N/A
Do you consider axle spacing for multiple axle configurations?	No
Do you consider tire inflation pressure?	Yes
Do you consider vehicle speed?	Yes

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

- Our Department recommends an alternate route with stronger pavement structures, if possible.
- ,
- The shipper is requested to divide the shipment into smaller parts
- ,
- The shipper is requested to revise the axle configuration/loads of the SHCV
- ,
- The shipper is requested to take measures to protect weaker pavement structures (e.g., steel plate covers).

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? I do not know-I pass the pavement analysis results to the Permitting Office and they decide.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q28: In establishing SHCV permit fees, do you consider additional costs from:

If you selected sometimes in one of the questions above, please describe the circumstances:

Not sure about the fees, but we do add into the permit of superloads that the contractor video the path before and after the load has passed through to verify that there was not any immediate damage.

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Respondent skipped this question

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1

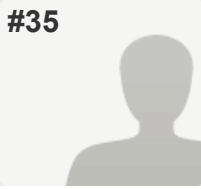
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#35

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, February 13, 2014 5:28:53 AM**Last Modified:** Thursday, February 13, 2014 7:25:18 AM**Time Spent:** 01:56:25**IP Address:** 156.98.4.11

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Minnesota

Q3: Your Job Title?

Pavement Design Engineer

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? *Respondent skipped this question*

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

A State-developed mechanistic or other method.,
If State or Other method, please specify:
Convert the load to a stress and see if it is lower than the allowable criteria in MnPAVE (available on the MnDOT Pavement Design Website)

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Yes
Do you use representative pavement layer moduli for an entire selected route?	Yes
Do you use a representative subgrade modulus for an entire selected route?	Yes
Do you consider seasonal variations in pavement layer moduli?	Yes
Do you consider seasonal variations in subgrade modulus?	Yes

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	No
Do you analyze one wheel path only?	Yes
Do you consider the number of tires in the wheel path?	Yes
Do you consider axle spacing for multiple axle configurations?	No
Do you consider tire inflation pressure?	Yes
Do you consider vehicle speed?	N/A

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

- Our Department recommends an alternate route with stronger pavement structures, if possible.
- ,
- The shipper is requested to divide the shipment into smaller parts
- ,
- The shipper is requested to revise the axle configuration/loads of the SHCV
- ,
- The shipper is requested to take measures to protect weaker pavement structures (e.g., steel plate covers).

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? I do not know-I pass the pavement analysis results to the Permitting Office and they decide.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q28: In establishing SHCV permit fees, do you consider additional costs from:

If you selected sometimes in one of the questions above, I do not know
please describe the circumstances:

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

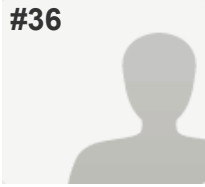
GVW (lbs): 476000

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#36

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, February 13, 2014 10:39:54 AM**Last Modified:** Thursday, February 13, 2014 11:55:56 AM**Time Spent:** 01:16:02**IP Address:** 159.238.13.4

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

WY

Q3: Your Job Title?

Overweight Loads Office

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain GVW and exceeding a certain load by axle group as a function of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	Sometime
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Sometime
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Sometime
If you selected "Sometime" in one of the questions above, please explain:	We allow multiple moves on the same bridge analysis if the route and all information is the same. We want to know up front if it's for multiple moves. Would require a separate permit for each move. We don't have an automatic spring thaw but if a road is breaking up we may put a weight restriction on it.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?	It depends, It "It depends", please explain: If the load is exceptionally heavy or if the pavement is breaking up we might. It is on a case by case basis.
--	--

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?	A different Department
---	------------------------

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.	<i>Respondent skipped this question</i>
---	---

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:	<i>Respondent skipped this question</i>
---	---

Q23: Please specify the following load analysis details:	<i>Respondent skipped this question</i>
---	---

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

If you selected sometimes in one of the questions above, please describe the circumstances:

In rare cases we have required a bond to be posted to cover damages

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 800

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 2000000

Superheavy Commercial Vehicles (SHCV) Permitting Practices

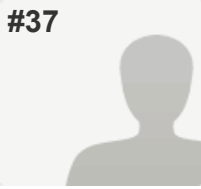
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

we are working on updating information, once it is done it will be @ whp.dot.state.wy.us under superloads

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#37

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, March 03, 2014 12:34:59 PM**Last Modified:** Monday, March 03, 2014 12:45:55 PM**Time Spent:** 00:10:56**IP Address:** 129.115.2.47

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

LA

Q3: Your Job Title?

Pavement and Geotechnical Manager

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? *Respondent skipped this question*

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

AASHTO 1993 Pavement Design Guide using ESALs computed from tables/equations

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Yes
Do you use representative pavement layer moduli for an entire selected route?	Yes
Do you use a representative subgrade modulus for an entire selected route?	Yes

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	Yes
Do you consider the number of tires in the wheel path?	Yes
Do you consider axle spacing for multiple axle configurations?	No
Do you consider tire inflation pressure?	No
Do you consider vehicle speed?	No

PAGE 19: Pavement Subgrade Stability Analysis

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): If other (please specify)
Shipper is requested to conduct FWD testing before and after to detect any damages to the pavement/subgrade.

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? I do not know-I pass the pavement analysis results to the Permitting Office and they decide.

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 200

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

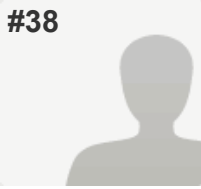
GVW (lbs): 4500000

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#38

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, March 04, 2014 1:13:37 PM**Last Modified:** Tuesday, March 04, 2014 3:00:28 PM**Time Spent:** 01:46:51**IP Address:** 205.174.143.2

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Alabama

Q3: Your Job Title?

Assistant Maintenance Bureau Chief

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

The Director of the Department of Transportation or the official of the department designated by the director may, in his discretion, upon application and for good cause being shown therefor, issue a permit in writing authorizing the applicant to operate or move upon the state's public roads a vehicle or combination of no more than two vehicles and loads whose weight, width, length or height, or combination thereof, exceeds the maximum limit specified by law; provided, that the load transported by such vehicle or vehicles is of such nature that it is a unit which cannot be readily dismantled or separated; provided however, that bulldozers and similar construction equipment shall not be deemed readily separable for purposes of this chapter; and further provided, that no permit shall be issued to any vehicle whose operation upon the public roads of this state threatens to unduly damage a road or any appurtenances thereto.

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than: 250000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications? Yes

Allow oversize SHCVs that require more than one lane to move? Yes

Allow multiple trips with one SHCV permit? No

Restrict SHCV movement during certain times of the year, e.g., spring thaw? No

Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders? Yes

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? *Respondent skipped this question*

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q27: How are SHCV fees calculated?

Other,

If Other, please specify:

The permit for SHCV's is 110.00 plus we charge the company requesting the move for the detailed bridge analysis which is an hourly rate for the engineer.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: Yes

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 360

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1300000

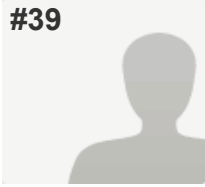
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

http://www.dot.state.al.us/maweb/Permits/SuperloadRequirements_20130131.pdf

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#39

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Tuesday, March 04, 2014 2:36:07 PM**Last Modified:** Tuesday, March 04, 2014 3:10:12 PM**Time Spent:** 00:34:05**IP Address:** 167.131.0.194

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Oregon

Q3: Your Job Title?

Pavement Design Engineer

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Respondent skipped this question

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

AASHTO 1993 Pavement Design Guide using ESALs computed from tables/equations

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Yes
Do you use representative pavement layer moduli for an entire selected route?	Yes
Do you use a representative subgrade modulus for an entire selected route?	Yes
Do you consider seasonal variations in pavement layer moduli?	No
Do you consider seasonal variations in subgrade modulus?	No

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	No
Do you consider the number of tires in the wheel path?	No
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	No
Do you consider vehicle speed?	No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

It depends,

If it depends, please explain:

Our current standards limit tire loading to about 600 lb per inch tire width. Although we have not done so to date, we would conduct a subgrade stability analysis if forced to review a load beyond about 600 lb per inch tire width.

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Mohr-Coulomb type of analysis

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Other,

If other (please specify) Has not occurred to date.

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of pavement damage - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure? No

Possible damage to pavement shoulders? No

Possible damage to utilities and drains embedded into the pavement? No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Respondent skipped this question

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 900000

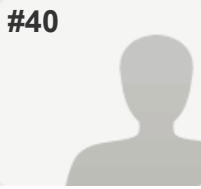
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

http://www.oregon.gov/ODOT/mct/Pages/od.aspx#Weight_Tables

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#40

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Wednesday, March 05, 2014 1:54:46 PM**Last Modified:** Wednesday, March 05, 2014 2:15:55 PM**Time Spent:** 00:21:09**IP Address:** 129.115.2.47

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

OR

Q3: Your Job Title?

Program Coordinator

Q4: What Department do you work for?

Other,

If Other (please specify below):
DOT/Over-Dimension Permit Unit

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 600

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Other,

If Other, please describe below:
Exceeding 25 axles or the combination of wheel base/number of axles and GVW values tabulated in Table 5 (see web site)

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	Yes
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,

It "It depends", please explain:
Seldom situation of exceeding 25 axles or exceeding Table 5 values

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

A different Department

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of pavement damage - distance traveled

,

If Other, please specify:
Tabulated fees per mile published on web site.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Respondent skipped this question

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 900000

Superheavy Commercial Vehicles (SHCV) Permitting Practices

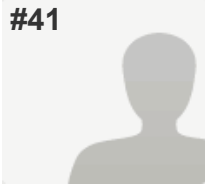
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#41

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, March 06, 2014 12:33:31 PM**Last Modified:** Thursday, March 06, 2014 12:47:41 PM**Time Spent:** 00:14:10**IP Address:** 199.90.35.10

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

North Carolina

Q3: Your Job Title?

State Pavement Design Engineer

Q4: What Department do you work for?

Department of Transportation/Pavement Engineering

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Respondent skipped this question

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Respondent skipped this question

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

A State-developed mechanistic or other method.,
If State or Other method, please specify:
Analysis is not typically done. The load per axle is reviewed. If the load per axle is less than or equal to 20 kips, the permit is recommended for approval. If the load per axle is greater than 20 kips and the route carries significant truck traffic, the permit is recommended for approval. If the load per axle is greater than 20 kips and the route does not carry significant truck traffic, the District Engineer is contacted, and with his concurrence a bond is requested from the moving company to cover repair of pavement damage. The District Engineer provides input on the amount of the bond.

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	No
Do you use representative pavement layer moduli for an entire selected route?	No
Do you use a representative subgrade modulus for an entire selected route?	No
Do you consider seasonal variations in pavement layer moduli?	No
Do you consider seasonal variations in subgrade modulus?	No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	No
Do you consider the number of tires in the wheel path?	No
Do you consider axle spacing for multiple axle configurations?	No
Do you consider tire inflation pressure?	No
Do you consider vehicle speed?	No

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? No

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): Other,
If other (please specify)
The moving company is requested to post a bond to cover potential pavement damage.

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? I do not know-I pass the pavement analysis results to the Permitting Office and they decide.

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1

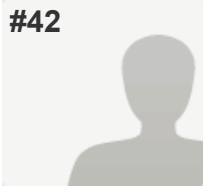
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#42

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Wednesday, March 12, 2014 1:45:49 PM**Last Modified:** Wednesday, March 12, 2014 2:37:49 PM**Time Spent:** 00:52:00**IP Address:** 168.166.124.100

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

MO

Q3: Your Job Title?

Motor Carrier Compliance Supervisor - OSOW

Q4: What Department do you work for?

Other,

If Other (please specify below):
MoDOT Motor Carrier Services

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Other,

If Other, please describe below:

Loads in excess of routine permit limits will be considered according to the following regulations when air, rail, or water terminal points are not available: (A) All permit applications with dimensions or weights exceeding the routine limits of the preceding oversize and overweight permit rule (generally in excess of sixteen feet (16') wide, sixteen feet (16') high, one hundred fifty feet (150') long and/or over one hundred sixty thousand (160,000) pounds gross weight)

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Loads in excess of routine permit limits will be considered according to the following regulations when air, rail, or water terminal points are not available:
 (A) All permit applications with dimensions or weights exceeding the routine limits of the preceding oversize and overweight permit rule (generally in excess of sixteen feet (16') wide, sixteen feet (16') high, one hundred fifty feet (150') long and/or over one hundred sixty thousand (160,000) pounds gross weight)

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Yes

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? Yes-always

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? My Department

PAGE 17: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. A State-developed mechanistic or other method.,
If State or Other method, please specify:
Federal Bridge Formula

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Do you use representative layer thicknesses for an entire selected route?	Yes
Do you use representative pavement layer moduli for an entire selected route?	Yes
Do you use a representative subgrade modulus for an entire selected route?	Yes
Do you consider seasonal variations in pavement layer moduli?	No
Do you consider seasonal variations in subgrade modulus?	No

Q23: Please specify the following load analysis details:

Do you analyze the entire length of the SHCV (i.e., all the axles)?	Yes
Do you analyze one wheel path only?	No
Do you consider the number of tires in the wheel path?	Yes
Do you consider axle spacing for multiple axle configurations?	Yes
Do you consider tire inflation pressure?	Yes
Do you consider vehicle speed?	Yes

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? Yes

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis I do not know

PAGE 21: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Our Department recommends an alternate route with stronger pavement structures, if possible.

The shipper is requested to divide the shipment into smaller parts

The shipper is requested to revise the axle configuration/loads of the SHCV

The shipper is requested to take measures to protect weaker pavement structures (e.g., steel plate covers).

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

If you selected sometimes in one of the questions above, please describe the circumstances:

Single trip overweight permits in excess of one hundred sixty thousand (160,000) pounds gross weight—\$15 plus \$20 per each ten thousand (10,000) pounds in excess of legal gross weight plus bridge and roadway analysis fee of \$425 for each permit for moves from 0–50 miles in length; \$625 for 51–200 miles; \$925 for over 200 miles (see section (15)). Identical permit applications with identical vehicle 10 configurations will only be charged one bridge and roadway analysis fee if the original bridge study is less than thirty (30) days old for loads in excess of three hundred thousand (300,000) pounds and if the original bridge study is less than sixty (60) days old for loads weighing less than three hundred thousand (300,000) pounds. An additional four hundred twenty-five dollar (\$425) bridge study fee will be charged if the applicant modifies dimensions or weights on an application and a new bridge analysis is required after the original analysis has been completed;

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one:

Yes

PAGE 23: Concluding Questions:

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 3000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1000000

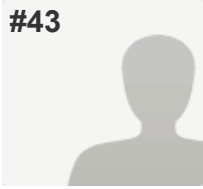
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

modot.mo.gov

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#43

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, March 13, 2014 5:29:16 AM**Last Modified:** Thursday, March 13, 2014 5:53:22 AM**Time Spent:** 00:24:06**IP Address:** 206.177.43.74

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Ontario

Q3: Your Job Title?

Weight & Load Engineer

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

	Number
Days or:	1.0
Man-days:	
Other (please describe below):	A vehicle and/or load is deemed indivisible when the dimensions or weight limits exceed the HTA, and, if separated into smaller loads or vehicles, would: (A) Compromise the intended use of the vehicle or load, i.e. make it unable to perform the function for which it was intended, (B) Destroy the value of the load or vehicle, i.e. make it unusable for its intended purposes or, (C) Require more than 8 (eight) work hours to dismantle using appropriate resources and equipment.

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? Yes

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:
Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 614

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain GVW and exceeding a certain load by axle group as a function of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than:

140000

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

	a load of (lbs):	with a spacing less than (ft):
When a single axle load exceeds	22000	
When a tandem axle load group exceeds	40000	6
When a triple axle load group exceeds	48000	12
When a quad axle load group exceeds	60000	15

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Sometime
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Yes
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No
If you selected "Sometime" in one of the questions above, please explain:	Electronic processing of Oversize/Overweight permits is expected to start later in 2014.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,

It "It depends", please explain:
The Ministry has provisions in our O/O permit issuing policies allowing for pavement analysis under exceptional loadings, however we have not resorted to this requirement on over 25 years.

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

It is outsourced

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 40000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 800000

PAGE 24: Finally, is there any Documentation?

Superheavy Commercial Vehicles (SHCV) Permitting Practices

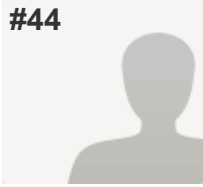
Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

<http://www.mto.gov.on.ca/english/trucks/oversize/guide.shtml>

260

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#44

**INCOMPLETE****Collector:** Web Link (Web Link)**Started:** Friday, March 14, 2014 9:26:16 AM**Last Modified:** Friday, March 14, 2014 9:28:57 AM**Time Spent:** 00:02:41**IP Address:** 159.247.3.210

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Connecticut

Q3: Your Job Title?

Manager of Bridge Operations

Q4: What Department do you work for?

Other,

If Other (please specify below):

Department of Transportation - Maintenance

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Respondent skipped this question

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? *Respondent skipped this question*

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? *Respondent skipped this question*

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year: *Respondent skipped this question*

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction? *Respondent skipped this question*

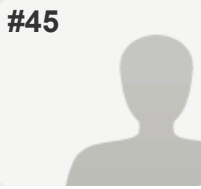
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below: *Respondent skipped this question*

264

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#45

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, March 17, 2014 6:15:41 PM**Last Modified:** Monday, March 17, 2014 6:22:05 PM**Time Spent:** 00:06:24**IP Address:** 67.10.157.148

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

NJ

Q3: Your Job Title?

Manager of Freight Planning Services

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 800

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain GVW and exceeding a certain load by axle group regardless of axle spacing.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than: 80000

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

	a load of (lbs):
When a single axle load exceeds	28000
When a tandem axle load group exceeds	34000
When a triple axle load group exceeds	56000
When a quad axle load group exceeds	
Other:	Ocean-born containers are allowed 38000 lbs on one tandem, if the other has less than 34000. Bridge formula is mentioned but axle spacing is not considered on OW fees.

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	No
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Yes

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are established by policy (tabulated values) depending on the number of axles - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Respondent skipped this question

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1

PAGE 24: Finally, is there any Documentation?

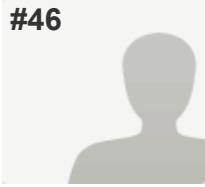
Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

SCR & A Manual 2012 Edition-e mailed.

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#46

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Wednesday, March 19, 2014 12:49:25 PM**Last Modified:** Wednesday, March 19, 2014 12:54:47 PM**Time Spent:** 00:05:22**IP Address:** 156.75.180.198

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Florida

Q3: Your Job Title?

State Bridge Evaluation Engineer

Q4: What Department do you work for?

Other,

If Other (please specify below):

Department of Transportation Office of Maintenance

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 605

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:
GVW more than: 300000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply): *Respondent skipped this question*

PAGE 13: Defining SHCV (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q17: If "other" is selected in defining SHCVs, please describe below: *Respondent skipped this question*

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	Yes
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process? No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis? *Respondent skipped this question*

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads. *Respondent skipped this question*

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Fees are calculated on the basis of weight - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 100

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1300000

PAGE 24: Finally, is there any Documentation?

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

N/A

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#47

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Wednesday, March 26, 2014 12:06:17 PM**Last Modified:** Wednesday, March 26, 2014 12:49:16 PM**Time Spent:** 00:42:59**IP Address:** 162.59.200.193

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Arizona

Q3: Your Job Title?

Transportation Engineering Permit Tech 3

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Number

Days or:

Man-days:

Other (please describe below):

Require more than 8 hours to dismantle

PAGE 6: General Information Questions (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits? No

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width: *Respondent skipped this question*

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction? Other,
If Other, please describe below:
Class C Permits/Superloads in Arizona are for loads that exceeds 120' in length, 14' in width, 16' in height and over #250,000 lbs (any combination) or exceeding allowable weights on restricted bridges.

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply): *Respondent skipped this question*

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	No

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated?

Other,

If Other, please specify:
There is a fee for a bridge analysis when the load exceeds #250,000 pounds or exceeds the allowable weight on a restricted bridge \$125.00 per 50 mile increment of proposed route.

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit?

Select one: No

PAGE 23: Concluding Questions:

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 6000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 2000000

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

Administrative Rules Title 17 Chapter 6 : http://www.azsos.gov/public_services/rules.htm

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#48

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, March 27, 2014 7:03:09 PM**Last Modified:** Thursday, March 27, 2014 7:11:48 PM**Time Spent:** 00:08:39**IP Address:** 67.10.157.148

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

KS

Q3: Your Job Title?

Bridge Engineer

Q4: What Department do you work for?

Other,

If Other (please specify below): Bridge Engineer

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

No

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 7: Max tire load/unit width

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain GVW and exceeding a certain load by axle group regardless of axle spacing.

If Other, please describe below:
Called "superloads" to distinguish them from OS-OW called "special mobile equipment"

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than: 150000

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

	a load of (lbs):
When a single axle load exceeds	24000
When a tandem axle load group exceeds	48000
When a triple axle load group exceeds	60000
When a quad axle load group exceeds	>60000
Other:	These axle loads are for normal width vehicle. Wider loads are allowed higher loads

PAGE 12: Defining SHCV (Continues):

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Yes

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

No-never

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q22: Please specify the following pavement analysis details: *Respondent skipped this question*

Q23: Please specify the following load analysis details: *Respondent skipped this question*

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting? *Respondent skipped this question*

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Other,
If Other, please specify:
carrier pays for all incurred damages

Q28: In establishing SHCV permit fees, do you consider additional costs from:

If you selected sometimes in one of the questions above, please describe the circumstances: see above

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs):

1

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

yes-sent via e-mail

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#49

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Thursday, Apr 03, 2014 7:35:18 AM**Last Modified:** Thursday, Apr 03, 2014 7:39:20 AM**Time Spent:** 00:04:02**IP Address:** 129.115.2.47

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

ID

Q3: Your Job Title?

Motor Carrier Service Manager

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Please specify the maximum tire load/unit width that cannot be exceeded by statute (lbs/in): 600

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Exceeding a certain gross vehicle weight (GVW).

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

GVW more than: 200000

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

Offer electronic processing of SHCV permit applications?	No
Allow oversize SHCVs that require more than one lane to move?	Yes
Allow multiple trips with one SHCV permit?	No
Restrict SHCV movement during certain times of the year, e.g., spring thaw?	Yes
Coordinate with neighboring jurisdictions in providing SHCV permit uniformity across borders?	Yes

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?	No-never
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PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?	<i>Respondent skipped this question</i>
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PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.	<i>Respondent skipped this question</i>
---	---

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:	<i>Respondent skipped this question</i>
---	---

Q23: Please specify the following load analysis details:	<i>Respondent skipped this question</i>
---	---

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?	<i>Respondent skipped this question</i>
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Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? Fees are established by policy (tabulated values) depending on the number of axles - distance traveled

Q28: In establishing SHCV permit fees, do you consider additional costs from:

Possible pavement subgrade stability failure?	No
Possible damage to pavement shoulders?	No
Possible damage to utilities and drains embedded into the pavement?	No

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 30

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1000000

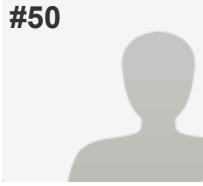
PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below:

yes....

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#50

**COMPLETE****Collector:** Web Link (Web Link)**Started:** Monday, Apr 07, 2014 7:37:47 AM**Last Modified:** Monday, Apr 07, 2014 10:32:41 AM**Time Spent:** 02:54:54**IP Address:** 108.59.48.2

PAGE 2: Your Background

Q1: Please give us your name:

[REDACTED]

Q2: Your State or Province?

Indiana

Q3: Your Job Title?

Permit Services Engineer

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

No

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

Yes

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Yes

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Other,
If Other, please describe below:
GVW 200,000 lbs and over

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 14: SHCV Operation

Q18: Does your jurisdiction:

If you selected "Sometime" in one of the questions above, please explain:

We do not restrict Superload movement during any specific period of the year, except when the air teperature falls to zero F or below.

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

It depends,

It "It depends", please explain:
Normally if the GVW is over 500,000 lbs or and per axle load exceeds 30,000 lbs. The analysis of the pavement is performed by the Pavement Division. I do the bridge analysis of all bridges on the proposed route if the GVW is 200,000 lbs or more.

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

A different Department,

If outsourced, please give us the name of the Company:
The Pavement Division

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis *Respondent skipped this question*

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply): *Respondent skipped this question*

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? I do not know-I pass the pavement analysis results to the Permitting Office and they decide.

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year:

Number/year: 1000

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction?

GVW (lbs): 1250000

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below: *Respondent skipped this question*

Superheavy Commercial Vehicles (SHCV) Permitting Practices

#51

**INCOMPLETE****Collector:** Web Link (Web Link)**Started:** Friday, March 28, 2014 7:21:09 AM**Last Modified:** Tuesday, Apr 08, 2014 5:18:32 PM**Time Spent:** Over a week**IP Address:** 164.165.237.19

PAGE 2: Your Background

Q1: Please give us your name:

Q2: Your State or Province?

Idaho

Q3: Your Job Title?

Motor Carrier Services Manager

Q4: What Department do you work for?

Department of Transportation/Commercial Vehicles

PAGE 3: SECTION A: General Information Questions

Q5: Does your jurisdiction have a statute that does not permit exceeding axle load limits?

Yes

PAGE 4: General Information Questions (Continues)

Q6: Does your jurisdiction have a definition of what is a non-divisible Superheavy load?

No

PAGE 5: General Information Questions (Continues)

Q7: Define super heavy non-divisible loads in terms of the amount of work (number of days or man-days) required to break them down into smaller shipments (select from drop menu):

Respondent skipped this question

PAGE 6: General Information Questions (Continues)

Q8: Does your jurisdiction have a statute that does not permit exceeding load/tire width limits?

Respondent skipped this question

PAGE 7: Max tire load/unit width

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q9: Maximum tire load/unit width:

Respondent skipped this question

PAGE 8: SECTION B: Defining Super Heavy Commercial Vehicles (SHCV)

Q10: How do you define Superheavy Commercial Vehicles (SHCV) in your jurisdiction?

Respondent skipped this question

PAGE 9: Defining SHCV (Continues):

Q11: Give the number of axles over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 10: Defining SHCV (Continues):

Q12: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

PAGE 11: Defining SHCV (Continues):

Q13: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q14: Give the axle load limits over which a vehicle is considered Superheavy (select from drop menu all that apply):

Respondent skipped this question

PAGE 12: Defining SHCV (Continues):

Q15: Give the GVW (lbs) over which a vehicle is considered Superheavy:

Respondent skipped this question

Q16: Give the axle load/axle spacing limits over which a vehicle is considered Superheavy (enter all that apply):

Respondent skipped this question

PAGE 13: Defining SHCV (Continues)

Q17: If "other" is selected in defining SHCVs, please describe below:

Respondent skipped this question

PAGE 14: SHCV Operation

Superheavy Commercial Vehicles (SHCV) Permitting Practices

Q18: Does your jurisdiction:

Respondent skipped this question

PAGE 15: SECTION C: Pavement Analysis for Issuing a SHCV Permit

Q19: Does your jurisdiction require detailed analysis of the effect of Superheavy loads on pavements as part of the permit issuing process?

Respondent skipped this question

PAGE 16: Pavement Analysis (Continues)

Q20: Who performs the pavement analysis?

Respondent skipped this question

PAGE 17: Pavement Analysis (Continues)

Q21: What type of pavement analysis method is used to evaluate the impact of Superheavy loads.

Respondent skipped this question

PAGE 18: Pavement Analysis (Continues)

Q22: Please specify the following pavement analysis details:

Respondent skipped this question

Q23: Please specify the following load analysis details:

Respondent skipped this question

PAGE 19: Pavement Subgrade Stability Analysis

Q24: Does your jurisdiction conduct a pavement subgrade stability analysis for SHCV permitting?

Respondent skipped this question

PAGE 20: Type of Pavement Subgrade Stability Analysis

Q25: Type of pavement subgrade stability analysis

Respondent skipped this question

PAGE 21: Pavement Analysis (Continues)

Q26: What action is taken if the engineering analysis suggests a risk of direct pavement or subgrade failure from the proposed SHCV? (Please select all that apply):

Respondent skipped this question

Superheavy Commercial Vehicles (SHCV) Permitting Practices

PAGE 22: SECTION D: Method for Establishing SHCV Permit Fees

Q27: How are SHCV fees calculated? *Respondent skipped this question*

Q28: In establishing SHCV permit fees, do you consider additional costs from: *Respondent skipped this question*

Q29: Does your jurisdiction have a statute requiring a bond to be placed as a condition for issuing a SHCV permit? *Respondent skipped this question*

PAGE 23: Concluding Questions:

Q30: Please give the approximate average number of SHCV permits issued by your Department per year: *Respondent skipped this question*

Q31: What was the GVW of the heaviest ever SHCV permitted in your jurisdiction? *Respondent skipped this question*

PAGE 24: Finally, is there any Documentation?

Q32: Are there any reports, manuals or web pages documenting in detail your SHCV permitting practices? If so, please give title or web page below: *Respondent skipped this question*

Abbreviations used without definitions in TRB publications:

A4A	Airlines for America
AAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI-NA	Airports Council International-North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HMCRP	Hazardous Materials Cooperative Research Program
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
MAP-21	Moving Ahead for Progress in the 21st Century Act (2012)
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
PHMSA	Pipeline and Hazardous Materials Safety Administration
RITA	Research and Innovative Technology Administration
SAE	Society of Automotive Engineers
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation