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**FEASIBILITY STUDY:
ACCIDENT RATES OF EXISTING LONGER
COMBINATION VEHICLES**

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FINAL REPORT

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16. Abstract <p>The objective of this effort was to determine the feasibility of a study to provide statistically sound estimates of the accident rates of longer combination vehicles currently operated in several of the Western states under special permit. In order to evaluate the feasibility of such a study, information on the types of longer combination vehicles allowed, number of permits issued, and accident data available was obtained from the 12 Western states that allow one or more of the longer combination vehicle types.</p> <p>The available information indicated that perhaps as many as 40,000 longer combination vehicles are permitted in the 12-state region. However, the available accident data identified about 500-600 accidents in 1986, only one-tenth the expected number. Given the uncertainty about the accident reporting, a pilot study in the state that appears to have the best accident reporting, Washington, is described. Separate surveys of accidents and travel would be conducted over a one-year study period.</p>					
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**FEASIBILITY STUDY:
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VEHICLES**

Introduction

Longer combination vehicles are currently operated under special permits in several Western states. For purposes of this study, the longer combination vehicles of interest are Turnpike Doubles, Rocky Mountain Doubles, and Triples. The current permits impose certain restraints on the operation of these vehicles. There is interest in these vehicles because they provide an opportunity for improved productivity in some situations. However, there is concern about the safety of these vehicles due to their greater length and configuration. In general, the constraints imposed by the permits are intended to compensate for these safety concerns. The objective of this study is to determine the feasibility of collecting accident and travel data that would permit accurate estimates of the accident rates of these longer combination vehicles under the current operating conditions.

For the purposes of this study it is assumed that a Rocky Mountain Double (RMD) is typically a 40-45 foot semitrailer with a 28-foot pup trailer. A Turnpike Double (TPD) is twin 42-45 foot trailers and a Triple is three trailers of approximately equal length.

In order to determine the feasibility of such a study, it is necessary to have information on the nature and extent of longer combination vehicle (LCV) use in the Western states and whether certain key information could be provided for an in-depth follow-up study. The key information includes maximum weight and length limits, permits issued, and accidents. It was also necessary to determine if longer combination vehicles could be identified from the general truck population, and if we could be notified and provided with a police report when a longer combination vehicle was involved in an accident. Thus, the first task was to contact the 17 contiguous Western states in order to assemble as much of this information as was available. States contacted included: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming. The results of this effort are described in Section 3, Overview of Current LCV Operations. Much of the supporting material is appended.

The study design issues are discussed in Section 4. These issues include the influence of operating restrictions on the accident experience of longer combination vehicles and the problems of comparing existing longer combination vehicle experience with other configurations not subject to the same restrictions, sampling frame issues associated with determining the exposure of longer combination vehicles, survey methods for accident and

exposure data, analysis methods, and possible study designs and costs. The findings of this feasibility study are summarized in the next section.

Summary

Twelve of the Western states contacted allow longer combination vehicles: Colorado, Idaho, Kansas, Montana, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming. The information available from those states indicates that about 40,000 annual permits have been issued plus about 60,000 single-trip permits. These figures tend to substantiate extensive use of these vehicles. The available accident data identify only 500-600 longer combination vehicles involved in police-reported accidents in 1986. This figure is much lower than would be expected based on the overall accident experience of combination vehicles in the United States. This situation may result from an over-estimation of use, accident rates appreciably lower than the national average due in part to the operating restrictions on these vehicles, or under-reporting of the accident experience. In any event, accident reporting is the critical element of the study design.

A pilot study is proposed in the state of Washington, in part because this state reports the highest accident experience of any of the states contacted even though some appear to issue many more permits. Unlike the IIHS case-control study in Washington, this study would measure accident rates as accidents per vehicle mile traveled rather than as the odds ratio of accident involvement at the accident sites. Accident rates are preferable because they quantify the system-wide risk, and provide the ability to distinguish the role of the roadway from that of the vehicle. Only the Rocky Mountain Double is permitted in Washington, simplifying the analysis and sample size requirements. Operation is allowed in Washington on an extensive network of about 6,700 miles of interstate and state highways. This study would allow one to isolate the experience of Rocky Mountain Doubles off the interstate roads, an issue of some interest. The pilot study period would be one year. At that time a decision could be made to end the study, continue for another year, or expand to other states.

Overview of Current LCV Operations

The 17 contiguous Western states were contacted for information on the operation of longer combination vehicles, including any operational constraints, permit or registration procedures, available records on longer combination vehicle permits and registrations, identification of longer combination vehicles on accident reports, and availability of accident reports. Twelve of the states (Colorado, Idaho, Kansas, Montana, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington and Wyoming) do allow longer combination vehicles and would agree to cooperate with a study by sending police reports on longer combination vehicle accidents. Not all states code or keep records in the same manner. For the states that just code "doubles" it will be necessary to look at each police report and determine if the combination involved qualifies as a longer combination vehicle. The information provided by the states is summarized here in three areas: longer combination vehicle limits, permits, and accidents. The information on limits focuses on the specific longer combination vehicle configurations allowed and pertinent allowable lengths, weights, and operating restrictions. The information on permits focuses on the available information that would identify longer combination vehicles operating in each state. This information is needed to develop a sampling plan for an exposure survey to determine longer combination vehicle travel. The accident information includes the available information on the number of accidents involving a longer combination vehicle, the ability to identify longer combination vehicle accidents, and the availability of the accident information. What follows is a presentation of information provided by the states as of May 1, 1988. A state by state summary is included at the end of this section.

LCV Limits

Colorado, South Dakota, Utah, and Montana provided specific overall lengths for all three longer combination vehicle types, Rocky Mountain Doubles, Turnpike Doubles, and Triples. Montana has two overall limits for Triples depending upon the cab style of the power unit. Washington, Wyoming, and Oklahoma have specific trailer length limitations. The rest, Idaho, Kansas, Nevada, and North Dakota only provided maximum overall lengths. All twelve states have specific maximum gross weight limitations with North Dakota having one for state highways and one for Interstates. The allowable lengths and weights for the three longer combination vehicle types are summarized in Table I.

TABLE I
MAXIMUM LENGTH AND WEIGHT BY STATE

	RMD	TRIPLE	TPD
Colorado	95' 80,000	105' 80,000	105' 80,000
Idaho	105' 105,500	105' 105,500	105' 105,500
Kansas	119' 120,000	119' 120,000	119' 120,000
Montana	95' 131,000	110' ^a 131,000	NA NA
Nevada	105' 129,000	105' 129,000	105' 129,000
North Dakota	110' 105,500 ^b	110' 105,500 ^b	110' 105,500 ^b
Oklahoma	No limit 90,000	29' trls 90,000	No limit 90,000
Oregon	68' ^c 105,500	68' ^c 105,500	NA NA
South Dakota	81.5' 129,000	115' 129,000	110' 129,000
Utah	98' 129,000	105' 129,000	105' 129,000
Washington	68' ^c 105,500	NA NA	NA NA
Wyoming	80' ^c 117,000	NA NA	NA NA

- a -110' conventional cab, 105' COE
- b -105,500 on state highway, 80,000 interstate
- c -combined trailer length
- NA -Not Allowed

The restrictions on operation vary greatly from state to state. Colorado and Montana have rather extensive provision for operational restrictions, whereas North Dakota is less restrictive. Colorado, Kansas, and Montana restrict all longer combination vehicles to Interstate roads (and sometimes other divided highways). South Dakota restricts turnpike doubles and Triples to Interstates while allowing Rocky Mountain doubles on many two-lane state highways. On the other hand, highway restrictions in Idaho are

based on offtracking. As a consequence, Triples are allowed on 650 miles of interstate plus another 1500 miles of state highways. Combinations with greater offtracking, Rocky Mountain Doubles and Turnpike Doubles, are restricted to the interstate highways. Washington has the most extensive network for Rocky Mountain Doubles with over 6,900 miles of designated interstate and state highways, most of which are two-lane.

South Dakota and Washington prohibit longer combination vehicle operation from one-half hour after sunset to one-half hour before sunrise. Colorado and Montana have a provision to impose restrictions on the hours of operation if they wish. These restrictions may be based on traffic volume (rush hour), accidents, holidays, complaints, or other safety considerations. Longer combination vehicles are restricted to the right lane in Colorado, Idaho, Montana, and Wyoming. Most states have some provision to restrict operation in hazardous weather, although the determination is made by state officials sometimes and left to the drivers and/or carriers otherwise. Other common restrictions address driver qualifications and company records, maintaining a 500-600 foot following distance, power and traction to achieve a minimum 15-20 mph speed on all grades, and restrictions on some or all hazardous materials.

Permits

All states gave figures on the numbers of permits used for either calendar year or business year 1986. The exception being North Dakota where no permit is needed. As can be seen, comparisons are difficult because most states have different permit time periods, types and vehicles covered. For most states, no breakdown was available as to combination type or for aggregate permit totals. The number of permits issued in 1986 is summarized by state in Table II.

**TABLE II
1986 PERMITS**

Colorado	27 companies annual permits covering 10,941 trucks.
Idaho	3,654 annual and single-trip.
Kansas	None needed for turnpike but 432 single-trip for access (1/1 – 6/30 1987).
Montana	20,489 doubles single-trip, 5,194 doubles annual. 387 Triple s single-trip, 691 Triple s annual.
Nevada	1,187 annual.
North Dakota	None needed.
Oklahoma	94,877 over length, 4,192 over width, 19,000 both.
Oregon	8,270 doubles annual, 4,653 Triple s annual.
South Dakota	11,580 single-trip. Not known if all permits used.
Utah	2,670 annual, single-trip and quarterly.
Washington	4,089 annual and monthly.
Wyoming	33,823 single-trip.

Unless otherwise specified, no breakdown is available as to combination type or permit type.

Doubles includes any two trailer combinations, not necessarily a longer combination vehicle.

There were about 40,000 annual permits issued by the 12 states in 1986, plus another 60,000 single-trip permits. Colorado and Oregon issued the most annual permits, over 10,000 each. Montana issued about 6,000 annual permits and 20,000 single-trip permits. Wyoming issued the most single-trip permits, 34,000 and Washington issued 4,000 annual and monthly permits.

Accidents

All twelve states would agree to cooperate with a study by sending police reports of accidents. For the states that just code "doubles" it will be necessary to look at each police report and determine if the combination involved is indeed a longer combination vehicle. Comparisons between states are difficult due to the different ways vehicles are coded in each state. The available information on the number of accidents involving longer combination vehicles is summarized in Table III.

TABLE III
ACCIDENTS IN 1986
INVOLVING MULTIPLE-TRAILER COMBINATIONS

State	Doubles	Triples	Other
Colorado	a	a	a
Idaho	129	10	
Kansas	13	0	
Montana	87 RMD	b	
Nevada	42	c	
North Dakota	31	1	
Oklahoma	13	2	
Oregon			291 d
South Dakota	30	1	
Utah	22 RMD	14	8 TPD
Washington	294 RMD	e	
Wyoming	132 RMD	e	

Doubles – Two trailers (regardless of length)
RMD – Rocky Mountain Doubles
TPD – Turnpike Doubles
Triples – Three trailers
Other – Other than truck or truck-tractor or truck-tractor + semitrailer

a – 2195 truck-tractor + semitrailer, 433 truck-tractor + tanker
b – Only allowed since 7/1/87
c – 8 “over length” other than doubles
d – doubles and Triples (TPD not allowed)
e – TPD and Triples not allowed

The available state accident statistics show minimal accident experience for the turnpike doubles and Triples. There are 535 accidents identified as involving Rocky Mountain Doubles. Approximately an equal number of accidents are identified for doubles without distinguishing the STAA doubles from longer combination vehicles. One might expect that the majority of these would be the shorter STAA double. Colorado was not able to distinguish multiple-trailer combinations from singles.

Summary by State

COLORADO

Colorado allows all three types of longer combination vehicles (RMD, TPD, TRI) to operate. They define RMD as a tractor, semitrailer and trailer with a maximum overall length of 95 feet. A TPD is a tractor, semi and one trailer with a 105 feet overall length and a Triple is a tractor, semi and two trailers with a 105 feet overall length. The maximum allowable GCW is 80,000 pounds.

Longer combination vehicles are permitted to operate on only six designated Interstate highway segments and within ten miles of said Interstates for access to terminals. The Interstate segments total about 600 miles.

Specifics covered by regulation include: Time/day restrictions, longer combination vehicle volume, complaints, accidents, safety hazards, unsafe weather/road conditions, cargo, driver qualifications, equipment provisions, operation restrictions, and insurance provisions.

Twenty-seven companies were issued annual permits in 1986 covering all 10,941 trucks in their fleets. No breakdown was available as to combination type. In 1986 2,195 truck-tractor and semitrailer and 433 truck-tractor and tankers were involved in accidents. No breakdown was available as to combination type.

Supporting documents can be found in Appendix A.

IDAHO

Idaho allows all three longer combination vehicle types to operate with a maximum overall length of 105 feet and a maximum GCW of 105,500 pounds.

Longer combination vehicles can operate on the Interstate system and designated state routes based on maximum offtracking (map in Appendix B).

Specifics covered by regulation include: hazardous conditions, traffic/weather/other safety conditions, weight distribution, operation restrictions, and insurance provisions.

Idaho issued 3,654 annual and single trip permits in 1986. No breakdown was available between the two types.

There were 129 doubles (regardless of combination type) and 10 Triple s accidents in Idaho in 1986.

Supporting documents can be found in Appendix B.

KANSAS

Kansas allows all three longer combination vehicle types to operate with a maximum overall length of 119 feet and a maximum GCW of 120,000 pounds.

Longer combination vehicles are only allowed to operate on the Kansas Turnpike (231 miles) and within ten miles of the Turnpike for access, except for Kansas City wheretwenty miles is allowed.

Specifics covered by regulation include: wind/weather/road or construction conditions, insurance, lights, flags, signs, and placarding laws.

No permits are needed for the Turnpike itself, but 432 single-trip permits were issued for access to the Turnpike during the first six months of 1987.

There were 13 doubles accidents (regardless of combination type) and no Triples accidents in Kansas in 1986.

Supporting documents can be found in Appendix C.

MONTANA

Montana allows all three longer combination vehicle types to operate. Doubles are limited to a maximum overall length of 95 feet. This works fine for RMD, which are typically a 40 foot trailer with a 28 foot pup. TPD are typically two 42'-45' trailers. The legal maximum of 95 feet makes a TPD a practical impossibility although not legally disallowed. TRIs have two different maximum overall lengths; 105 feet for cab-over tractors and 110 feet for conventional tractors. There is a 131,000 pound maximum GCW.

Longer combination vehicles are limited to the Interstate system and within two miles of the Interstate.

Specifics covered by regulation include: routes, hours of operation, days, seasonal periods, adverse traffic/weather conditions, other safety considerations, driver requirements, and insurance provisions.

Montana issued 20,489 doubles single-trip, 5,194 doubles annual (doubles includes any two trailer combination), 387 Triples single-trip, and 691 Triples annual permits in 1986.

There were 87 RMD accidents for 1986. Triples have been allowed only since 7/1/87, hence no data are available.

Supporting documents can be found in Appendix D.

NEVADA

Nevada allows all three longer combination vehicle types to operate. There is a maximum overall length of 105 feet and a maximum GCW of 129,000 pounds.

Specifics covered by regulation include: types and numbers of vehicles in combination, horsepower, operating speeds, braking ability, driver qualifications, minimum distance, lane of travel, and minimum power requirements.

Nevada issued 1,187 annual permits in 1986. No breakdown was available as to combination type.

There were 42 doubles (regardless of combination type) accidents and 8 "over length" other than doubles accidents.

Supporting documents can be found in Appendix E.

NORTH DAKOTA

North Dakota allows all three longer combination vehicle types. The maximum overall length is 10 feet. The maximum GCW is 80,000 pounds for Interstate and 105,500 pounds for state highways (map in appendix F).

Specifics covered by regulation include: minimum power requirement, weight distribution by trailer, and weather restrictions.

North Dakota does not require permits.

There were 31 doubles (regardless of combination type) and one Triples accident in North Dakota in 1986.

Longer combination vehicles can operate on Interstates and designated state highways (map in appendix F).

Supporting documents can be found in Appendix F.

OKLAHOMA

Oklahoma allows all three longer combination vehicle types. There is no maximum overall length but Triple trailers are restricted to 29 feet. The maximum GCW is 90,000 pounds.

Longer combination vehicles are restricted to divided highways having four or more lanes and Interstates, with 3 miles access to these roads.

Specifics covered by regulation include: equipment regulations, operational procedures, minimum distance, hazardous conditions, cargo restrictions, load sequence and stability.

Oklahoma issued 94,877 over length, 4,194 over width and 19,000 both over length and over width permits in 1986. No breakdown was available as to permit duration or combination type.

There were 13 doubles (regardless of combination type) accidents and two triples accidents in Oklahoma in 1986.

Supporting documents can be found in Appendix G.

OREGON

Oregon allows only RMD and Triples to operate. There is no maximum overall length but the combined trailer length is limited to 68 feet. The maximum GCW is 109,500 pounds. A Triple is defined as a motor truck and two trailers i.e., three cargo areas.

Longer combination vehicles are allowed on Interstates and approved state highways (map and list in appendix H).

Specifics covered by regulation include: weather restrictions, rainy weather routes (list in appendix H). There are no day/hour restrictions.

Oregon issued 8,270 doubles (regardless of combination type) and 4,653 Triple s annual permits in 1986.

There were 291 accidents involving "other than truck or truck-tractor or truck-tractor and semitrailer" in Oregon in 1986.

Supporting documents can be found in Appendix H.

SOUTH DAKOTA

South Dakota allows all three longer combination vehicle types. RMD has a maximum overall length of 81 1/2 feet with a longest trailer length of 45 feet. The typical RMD configuration is a 45 foot and a 28 1/2 foot trailer. TPD has a maximum overall length of 110 feet with a trailer length of 45 feet. The maximum overall length for Triples is 110 feet with a maximum trailer length of 28 1/2 feet. The maximum GCW is 129,000 pounds.

RMD can operate on any state highway. TPD and Triples are restricted to the Interstate with limited access off the Interstate and to segments of 3 non-Interstate highways. All longer combination vehicles are prohibited between sunset and sunrise.

Both TPD and Triples operate with single-trip permits. South Dakota issued 1,158 single-trip books, with 10 permits/book, in 1986. It is not known if all permits were used.

There were 30 doubles (regardless of combination type) accidents and one Triples accident in South Dakota in 1986.

Supporting documents can be found in Appendix I.

UTAH

Utah allows all three longer combination vehicle types. The maximum overall lengths are: RMD - 98 feet, TPD - 105 feet, and Triple - 105 feet. The maximum GCW is 129,000 pounds.

All longer combination vehicles are restricted to divided highways and two-lane roads for local delivery.

Specifics covered by regulation include: adverse weather, hazardous conditions, power and traction rules, equipment rules, minimum separation distance. No convoying is allowed. There are no time/day restrictions.

Utah issued 2,670 annual, single-trip, and quarterly permits in 1986. No breakdown was available either by permit type or combination type.

There were 22 RMD, 8 TPD, and 14 Triple accidents in Utah in 1986.

Supporting documents can be found in Appendix J.

WASHINGTON

Only RMDs are allowed. RMD is defined as a tractor with two trailing units with a combined trailer length maximum of 68 feet. The maximum GCW is 105,500 pounds.

The RMDs are allowed on 6,917 miles of interstate and designated state highways. Specifics covered by regulation include: patrolling, flagging, and daylight operation only.

Washington issued 4,089 annual and monthly permits in 1986. No breakdown was available by permit type.

There were 294 RMD accidents in Washington in 1986.

Supporting documents can be found in Appendix K.

WYOMING

Only RMDs are allowed with a combined trailer length of 80 feet and a maximum GVW of 117,000 pounds.

RMDs can operate on all primary and secondary highways but are restricted to the right lane.

Wyoming issued 33,823 single-trip permits in 1986.

There were 132 RMD accidents in Wyoming in 1986.

Supporting documents can be found in Appendix L.

Design Issues

In developing the study design, the issues to consider are listed below. Each will be discussed in view of the information presented in the previous section on the number of longer combination vehicles in use and their accident experience.

1. Identify the significant aspects of the existing operating restrictions that would be expected to influence accident rates.
2. Determine the number of these vehicles in operation, and identify possible methods of acquiring a representative sample for an exposure survey.
3. Identify a method for exposure data collection.
4. Identify a method for the collection of accident data.
5. Specify the analysis to be carried out on the data collected, and specific statistics to be developed.
6. Estimate the cost and period of time required for the study.

The restrictions on the operation of longer combination vehicles and the variation in the restrictions from state to state will be difficult to deal with. One approach would be to limit any study or analysis to individual states. However, this approach is very restrictive. While some states have the authority to restrict operation, one does not know how often such restrictions are actually imposed. Even in states where operation is prohibited at night or in hazardous weather, it isn't known how rigorously these restrictions are enforced. Consequently, it will be necessary to include information on the operating conditions in the collection of both accident and exposure data. Factors to consider are:

1. Road class: limited access versus undivided state routes
2. Day versus night
3. Weather and road surface condition
4. Driver age and qualifications (training)
5. Operation on grades
6. Traffic volume

In a large-scale survey, it is probably not feasible to incorporate all of these due to the level of effort required (particularly by the survey respondents), the complexity of the survey data files and large sample sizes required. While it might be possible to eliminate some of these in a carefully controlled comparison, these results are always difficult to generalize. At a minimum, the two road types, day/night, and driver age should be addressed in the study design.

The primary obstacle to any comprehensive study that would determine overall accidents rates is the limited number of longer combinations currently in use. The available information on registrations and permits is insufficient to form any clear picture of the number of longer combination vehicles in operation. In many states, permits are issued on a single-trip basis. For the total of the 12 states there were about 40,000 annual permits issued in 1986 for longer combination vehicles. About half of these are in Colorado and Oregon. Montana, Washington, and Wyoming appear to have a majority of the remainder. None of the states was able to provide any estimates of annual travel. However, it seems that the annual permits would provide a basis for random selection of vehicles for an exposure survey. At this point we do not have sufficient information to evaluate the consequences of omitting the single-trip permits from selection. If necessary, they could also be sampled to estimate the travel resulting from these permits.

Three general survey methods are considered here: a fleet-based survey, the case-control method used by IIHS, and separate surveys of accidents and exposure. Advantages of the fleet survey are that the accidents and the travel are for the same population of trucks, and there is the opportunity to control for operational factors by selecting trucks in comparable service. New equipment can be introduced and monitored in a more closely controlled setting. Disadvantages include a relatively long time period in order for sufficient numbers of accidents to occur and the difficulty in generalizing from the experience of individual fleets. Fleet-based results are often questioned because of the inherent vested interest of the fleet operator, and consequently are characterized as anecdotal.

The case control approach has the advantage of coupling the accident and exposure information through the location, time of day, and day of week (the "control variables"). The time period to generate a given accident sample size is determined by the geographic scope covered. The larger the highway network covered, the quicker a given number of accidents will be covered. The collection of the exposure data at the accident site requires that a survey team be dispatched the following week. The logistics and cost increase as the geographic scope increases. A major limitation of the case control approach is that comparisons are confined to the study itself. System-wide accident rates that might be compared to other studies are not generated by the case control method, only odds ratios. While the odds ratio is a valid basis for assessing relative risk at the accident sites, the relationship between the actual accident rates and the odds ratio is not known because the amount of travel without an accident is not measured. Moving goods without an accident is, of course, the fundamental transportation objective. The case control method, as applied by IIHS, does not allow one to compare the role played by the characteristics of the accident sites with the role of the vehicle characteristics. On the other hand, it may be more effective to direct countermeasures at the accident sites rather than the vehicles.

System-wide surveys of accidents and travel are generally more expensive, but they are capable of quantifying the overall risk of accident involvement and separating the contributions of highway, vehicle, driver, and environmental factors. System-wide surveys, if properly designed and conducted, can produce statistically sound estimates of the overall risk of accident for the existing transportation network. However, these statistics

will not be able to address elements that are not in sufficient use to produce sufficient sample sizes in the overall network. The desire to control for the many factors affecting accident risk and the desire to focus on small subsets of the total system compete for the available sample size, making it expensive to do both.

Only a comprehensive system-wide survey seems capable of addressing the basic objective, which is to assess the risk of transporting goods in longer combination vehicles. Thus the real issue is whether these vehicles are in sufficient use for such a survey to be economically feasible. The most cost-effective approach is to conduct separate surveys of accident and travel. With this approach, it is essential that each survey covers the same vehicle population and geographic area. The exposure survey method developed by the UMTRI Center for National Truck Statistics for the National Truck Trip Information Survey is the most economical approach, since the data collection is based on fleet records that can be acquired by telephone or mail. The reliability of this information can be assured by comparison with odometer readings, that are independently verified, before and after the survey period. Since the survey period is an individual day, adequate sampling sizes for exposure estimation can be produced over any period of time. In other words, the time period is determined by the need to obtain sufficient accident experience. An accurate listing of all of the vehicles in service in the study area is necessary to randomly select vehicles for the exposure survey.

The information gathered from the states is not sufficient for a clear assessment of the feasibility of a system-wide survey to determine the accident rates of longer combination vehicles. While the permit information indicates that sufficient vehicles (at least Rocky Mountain Doubles) are in operation, the accident data are insufficient. Based on an estimated vehicle population of 40,000, overall national statistics* project about 9,000 police-reported accidents per year. The statistics from the states (500-600) are low by at least a factor of 10. Of course, no estimates of annual travel are available. Some power units may operate infrequently as longer combination vehicles even though annual permits have been obtained. The existing operating restrictions can also be expected to be effective. Operation of combination vehicles on rural Interstates during the day has about 1/12 the fatal accident rate of operation on primary U.S and state routes at night. However, it seems clear that the major difficulty will be to get complete accident information. Longer combination vehicles are not accurately identified in most of the states. Accident reporting varies considerably in urban and rural areas, particularly for single vehicle accidents when the operator is self-insured.

Given that the accident reporting is the critical element, a pilot study might be appropriate. Based on the information supplied, the State of Washington appears best able to identify accidents involving Rocky Mountain Doubles (the only longer combination allowed in Washington). Half of the longer combination vehicle accidents reported by the states were from Washington. Either Washington has the most travel or the best accident reporting. Consequently, this state is a good candidate for a pilot study. The

*NASS estimates are about 200,000 police-reported accidents for a national population of about 900,000 tractors

Rocky Mountain Doubles are permitted on almost 7,000 miles of Interstate and state highways during the daylight hours. Thus, the complexity of day versus night is omitted. A one-year study period would generate about 300 accidents based on the 1986 data. Trucks would be sampled from the annual permits for the exposure survey. A sample of about 500 trucks contacted on each of four survey days would provide adequate travel data. A similar study was conducted for the State of Michigan with a sample of 1,000 trucks. This survey covered all tractor combinations and more combinations of operating conditions. Total cost for the exposure survey averages about \$75.00 per survey day. With 500 trucks surveyed on each of four days, the total cost would be about \$150,000.

The Washington State Patrol would be asked to monitor all accidents on the designated Interstate system to identify those involving Rocky Mountain Doubles, and provide the accident reports for the study. At the same time, each truck owner in the exposure sample would also be asked to provide notification on all accidents in Washington involving *any* Rocky Mountain Double that they operate. Since the exposure survey will include 1/8 of the trucks permitted in Washington, these owners will operate a significant portion of the vehicles, and redundant reporting by the owners will provide a check on the accident reporting provided by the State Police. The accident reports would be used to identify each Rocky Mountain Double involved in an accident, and a follow-up survey would be conducted on each accident. Total cost of the pilot study would be about \$200,000.

Depending on the outcome of the first year of the pilot study, the choices would be to terminate the study, extend the study another year, or expand to some or all of the following states: Oregon, Idaho, Montana, and Wyoming. Each of these states allows nighttime travel that is not allowed in Washington. The cost of both the accident and exposure surveys would increase in proportion.

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APPENDICES

APPENDIX A:

COLORADO

Operation of longer vehicle combinations on selected sections of interstate highways in Colorado

Truck size provisions

SEMI-TRAILER means any wheeled vehicle, without motive power, which is designed to be used in conjunction with a truck tractor so that some part of its own weight and that of its cargo load rests upon or is carried by such truck tractor and which is generally and commonly used to carry and transport property over the public highways.

"Truck" means any motor vehicle equipped with a body designed to carry property and which is generally and commonly used to carry and transport property over the public highways.

"Truck tractor" means any motor vehicle which is generally and commonly designed and used to draw a semitrailer and its cargo load over the public highways.

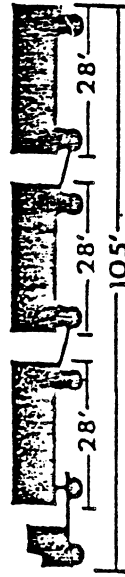
"Trailer" means any wheeled vehicle, without motive power and having an empty weight of more than two thousand pounds, which is designed to be drawn by a motor vehicle and to carry its cargo load wholly upon its own structure and which is generally and commonly used to carry and transport property over the public highways.

"Single Axle" means all wheels whose centers may be included between two parallel transverse vertical planes 40 inches apart, extending across the full width of the vehicle.

"Tandem Axle" means two or more consecutive axles whose centers may be included between parallel vertical planes spaced more than 40 inches and not more than 96 inches apart, extending across the full width of the vehicle.

THE FOLLOWING ARE CONFIGURATIONS AND THEIR COMMON NAMES:

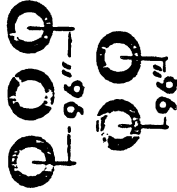
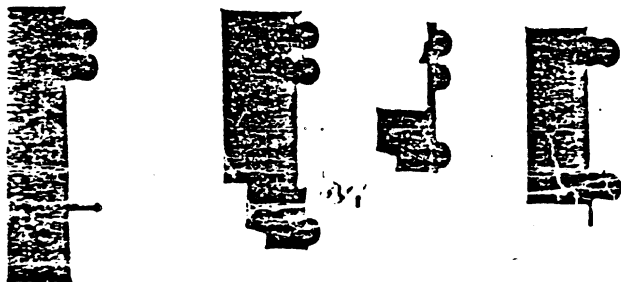
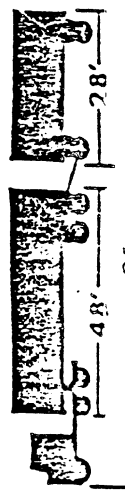
"TRIPLES"



"TURNPIKE DOUBLE"



"ROCKY MOUNTAIN DOUBLE"



Prior to H.B. 1407, Colorado did not have a legal weight limit applied to the tandem axle configuration per tandem, allowing Colorado to have a weight limit on Interstate, exceeding t

1983 TRUCK SIZE PROVISIONS
 COLORADO DEPARTMENT OF HIGHWAYS
 June 1983

goose neck is included in overall length

COLORADO LAW PRE HB 1071
 HB 1407, AND SURFACE
 TRANSPORTATION ASSISTANCE
 ACT OF 1982

SURFACE TRANSPORTATION
 ASSISTANCE ACT OF 1982
 (STAA) PROVISIONS

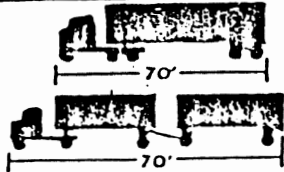
HB 1071 PROVISIONS

HB 1407 PROVISIONS

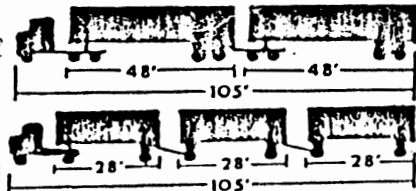
NET 1983 COLORADO RES

MAXIMUM LENGTH

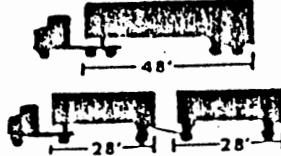
TRACTOR TRAILER
 COMBINATIONS



Tractor trailer units allowed up to 70'; not to exceed 4 units in the combination.
 CRS 42-4-404 (4)

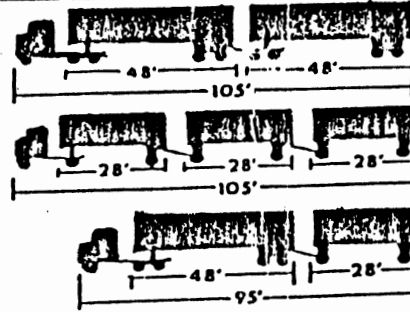


For testing period of 12 months, by permit only, a tractor can haul 2 trailers, equal length up to 105' or 3 trailers, 28' ea. up to 105', or 1-48' and 1-28', up to 95'.
 CRS 42-4-404.5



Must allow 48' single trailer and double 28' trailer with no overall length limit.
 Authorized on all state highways, except where posted. No permits necessary.

*80,000 limit
 All Hwys*

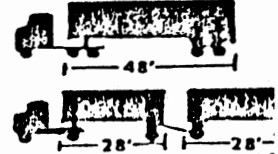


Under Annual Permit, a tractor can haul 2 trailers, equal length up to 105' or 3 trailers, 28' ea. up to 105', or 1 - 48' and 1 - 28' up to 95'.
 Authorized for travel on I-25, I-225, I-270, I-70 east of I-25, I-76, and approved access and egress.

80,000 limit

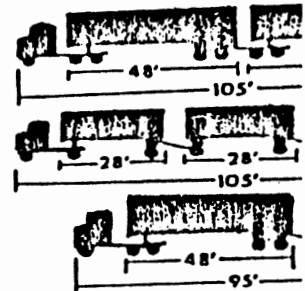
Conforms with STAA
 Must allow 48' single trailer and double 28' trailer with no overall length limit.

HB 1407 PROVISIONS
 Must allow 48' single trailer and double 28' trailer with no length limit.



When a 48' trailer or double are used, the vehicle may not exceed other combinations limit.

HB 1071 PROVISIONS
 Under Annual Permit a tractor can haul 2 trailers, equal length up to 105' or 3 trailers, 28' ea. up to 105', or 1 - 48' and 1 - 28' up to 95'.
 Permits are issued by the Dept. of Highways, at 4201 East Avenue, Denver, CO 80222



*Turnpike
 Double
 Triples
 Rocky Mtn Double*

MAXIMUM WIDTH

96" - Not including safety devices

Must allow maximum width of 102" - Not including Safety Devices

None

102" maximum width allowed on Interstate and designated state highways.

6" increase in width

MAXIMUM WEIGHT
 Total Gross Veh. Wt.
 AXLE WEIGHT
 Tandem

80,000 Interstate
 85,000 Non-interstate

80,000 Interstate

None

None
 36,000 lbs Interstate
 40,000 lbs Non-Interstate

No change
 Colorado grandfathered at above federal limit on Interstate

Single Axle

20,000
 (Ash and trash are exempt)

20,000

None

None

none

CHAPTER 3

PERMIT REQUIREMENTS

3-1

The issuance of a longer vehicle permit is subject to the approval of the Department for the movement of a longer vehicle combination. The Department shall give first consideration to the safety and convenience of the general public and the protection of the state highway system. Permits are expressly conditioned upon the applicant having an established safety program as provided in Section 10-1.

3-2

Longer vehicle combinations operating under a permit shall travel only on those highway segments designated as follows:

- A) On I-25 from the Colorado-New Mexico state line to the Colorado-Wyoming state line. 240 mi.
- B) On I-70 from the junction of I-25 in Denver to the Colorado-Kansas state line. 140
- C) On I-76 from the junction of I-25 in Denver to the Colorado-Nebraska state line. 140
- D) On I-270 from the junction of I-70 to the junction of I-76. 5
- E) On I-225 from the junction of I-25 to the junction of I-70. 10
- F) Routes of ingress and egress as provided in Chapter 7. —
- G) On I-70 from the Utah/Colorado state line to the junction of state highway 65. 40



CHAPTER 4

ISSUANCE OF PERMITS

4-1

As a condition of issuance of the longer vehicle permit the permit holder agrees to abide by the terms and conditions of the permit. The permit may include but shall not be limited to the terms and conditions specified by the Department and found in these rules and regulations or otherwise as provided by law. Additional terms and conditions may be imposed by the Department to protect the safety of the traveling public and the integrity of roads and highways under state jurisdiction. Application forms may be obtained from the permit agency at the following address: Staff Maintenance Branch, Colorado Department of Highways, 4201 East Arkansas Avenue, Denver, Colorado, 80222.

4-2

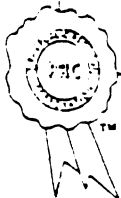
Permits will be issued in the following circumstances:

- (A) For a period of one year for the permit holder, and
- (B) For travel on the designated routes as identified in Section 3-2.

4-3

Issuance of permits is restricted to longer vehicle combinations having at least six axles and not more than nine axles and consisting of not more than three cargo units in the following longer vehicle combinations as approved by the Department:

- (A) A truck tractor, semi-trailer, and two trailers, which have an overall combination length of not more than one hundred five feet. A semi-trailer used with a converter dolly is considered a trailer. Semi-trailers and trailers must be approximately equal length.



4-3 (cont.)

- (B) A truck tractor, semi-trailer, and single trailer, which have an overall combination length of not more than one hundred five feet. A semi-trailer used with a converter dolly is considered a trailer. Semi-trailers and trailers must be approximately equal length.

- (C) A truck tractor, semi-trailer, and trailer, one of which cannot exceed forty-eight feet and the other which cannot exceed twenty-eight feet nor be less than twenty-six feet, and which have an overall combination length of not more than ninety-five feet. A semi-trailer used with a converter dolly is considered to be a trailer. The shorter trailer must always be operated as the rear trailer.

- (D) A truck and single trailer, having an overall length of not more than eighty-five feet, the truck of which is not more than thirty-five feet long and the trailer of which is not more than forty feet long. For the purposes of this paragraph (D), a semitrailer used with a converter dolly shall be considered a trailer.

4-4

The permit shall be issued to the qualified carrier company for annual operation of longer vehicle combinations in accordance with these rules. The application shall be accompanied by an annual permit fee of two hundred fifty dollars.

4-5

Application for the permit shall be made during regular business hours 8:00 a.m. to 5:00 p.m. on Monday through Friday except on legal holidays observed by the State of Colorado.

4-6

Application must be made in person to the permit agency at the address as provided in Section 4-1 and the application must be signed by the owner or lessee of the longer vehicle combinations covered under the permit, or by the authorized representative of such owner or lessee.



CHAPTER 6

HOURS OF OPERATION, RESTRICTIONS ON OPERATION, AND
HANDLING OF HAZARDOUS MATERIAL

6-1

The Department may restrict or prohibit operation of longer vehicle combinations during the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. Monday through Friday on the highway segments of I-225, I-270, I-25 between S.H. 88 and S.H. 123, I-75 between I-25 and S.H. 85, and I-70 between I-25 and I-225 in Denver; I-25 between junction S.H. 83 on the south to junction I-25 business route (Nevada Avenue) on the north in Colorado Springs; and I-25 between Lake Avenue and 40th Street in Pueblo. The Department shall exercise its discretion to so restrict or prohibit operation when, due to the number of combinations operating during the hours and on the segments identified or due to the number and nature of accidents or complaints reported under Sections 10-3 and 10-4, the Department determines that such operation poses a safety hazard to the traveling public. Such a restriction of hours shall be considered a modification of the permit.

6-2

The Department may restrict or prohibit operation of longer vehicle combinations during times or periods when in the Department's judgment such operation is unsafe due to weather or road conditions which include, but are not limited to:

- A) Wind, ice, snow, frost, or water; and
- B) Mud, rocks, debris from an accident, or a natural disaster, etc.

This decision may be made in conjunction with the Colorado State Patrol, Port of Entry, Public Utilities Commission, and counties or municipalities. In addition, the longer vehicle combination driver shall cease operation when notified by the Department of the above conditions or when the driver becomes aware of such conditions that make operation hazardous to the combination or to other highway users.



6-3

Longer vehicle combinations are prohibited from transporting explosives and hazardous material, as defined in 49 CFR Sections 173.50 through 173.389 as referenced in paragraph 1-1 above. Longer vehicle combinations also are prohibited from transporting any other material deemed to be unduly hazardous by the department. This prohibition includes, but shall not be limited to transportation of bulk quantities of flammable liquids including, but not limited to gasoline, fuel oil, or heating oil.

6-4

In accordance with Sections 42-4-401 through 411 and 42-8-106, C.R.S. 1973, as amended, the total gross weights of longer vehicle combinations cannot exceed weight determined by the following formula or eighty thousand pounds GVW whichever is less:

$$W = 500 (LN/N-1 + 12N + 36)$$

W = overall gross weight on any group of two or more consecutive axles to the nearest five hundred pounds.

L = distance in feet between the extreme of any group of two or more consecutive axles.

N = number of axles in the group under consideration.

In addition the weight on any single axle shall not exceed twenty thousand pounds and the weight on tandem axles shall not exceed thirty-six thousand pounds.

6-5

Loading of trailer units in longer vehicle combinations shall be restricted such that the shorter trailer shall be operated as the rear trailer, and the trailer with the heavier gross weight shall be operated as the front trailer. In the event that the shorter trailer is also the heavier, the load must be adjusted so that the front trailer is the longer and the heavier of the two. If these conditions cannot be met, operation of the combination is prohibited.



CHAPTER 7

INGRESS AND EGRESS PROVISIONS

7-1

To ensure the safety of the public and to maintain the capacity of street and road system, longer vehicle combinations shall be operated off the designated segments of the interstate system only to access the permit holder's separately owned or leased terminals. In any regard, this off-segment travel is limited to a maximum of ten miles which shall be measured by the most direct route traveled rather than by the radius from the terminal to the interstate. *Can be leased from agent*

7-2

In order to minimize the hazard of non-interstate travel by longer vehicle combinations, the formation or breaking up of combinations other than at the permit holder's terminal is prohibited.

7-3

The route to be traveled between the designated segment of the interstate and the permit holders terminal is subject to approval of the public entities having jurisdiction over streets and roads encountered. Where the State of Colorado has jurisdiction over the routes of ingress and egress in determining whether to approve such a route it will consider criteria such as:

- (A) Traffic volume patterns;
- (B) Geometrics of the street and road design;
- (C) Zoning and general characteristics of the route to be encountered; and
- (D) Such other criteria as special circumstances dictate.



7-4

Reasonable ingress and egress is allowed to provide drivers of longer vehicle combinations access to food, fuel, repairs, and rest.

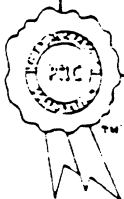
7-5

Hours of operation for routes of ingress and egress may be prohibited, under the same conditions outlined in Section 6-1 of these Regulations, during the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. Monday through Friday where such routes access the interstate highway system at the following segments:

Colorado I-25 between junction S.H. 83 on the south
Springs: to junction I-25 business route (Nevada
Avenue) on the north

Denver: I-25 from S.H. 88 (Bellevue) to S.H. 123
I-70 from I-25 to I-225
I-76 from I-25 to S.H. 85
I-225 from I-25 to I-70
I-270 from I-76 to I-70

Pueblo: I-25 from Lake Avenue to 40th Street



CHAPTER 8

DRIVER QUALIFICATIONS

8-1

The driver must fully comply with driver's qualifications as set forth in the Federal Motor Carrier Safety Regulations, 49 CFR Part 391 as referenced in paragraph 1-1 above, and driver's qualifications as set forth in the Colorado Uniform Motor Vehicle Law, Article 2 of Title 42, C.R.S., as referenced in paragraph 1-1 above.

8-2

The driver must have had no suspension of driving privileges in any state during the past three years where such suspension arose out of the operation of a motor vehicle used as a contract or common carrier of persons or property, as defined in Sections 40-10-101(4)(a) and 40-11-101(3), C.R.S. 1973, as amended, or out of the operation of a commercial vehicle as defined in Section 42-4-234, C.R.S. 1973, as amended.

8-3

The permit holder shall ensure that the driver has received special instructions and training as provided in the Federal Motor Carrier Safety Regulations in the operation of longer vehicle combinations prior to operating any such combination on a highway.

8-4

The permit holder shall exercise control and supervision over any driver operating a longer vehicle combination under permit holder's permit. This control and supervision shall include, but is not limited to, designation of routes, hours of operation and methods of operation.



CHAPTER 9

EQUIPMENT SELECTION

9-1

Longer vehicle combinations shall be comprised of an individual truck tractor and trailer units such that the combinations comply with permissible longer vehicle combinations as identified in Section 4-3.

9-2

The truck tractor unit of all longer vehicle combinations shall have adequate power to maintain a minimum speed of twenty mph on any grade over which the combination is operated and to operate on level grades at speeds compatible with other traffic.

9-3

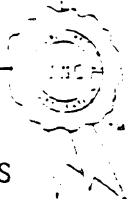
All longer vehicle combinations shall have adequate traction to maintain a minimum speed of twenty mph on any grade over which the combination is operated to be able to resume a speed of twenty mph after stopping on any such grade.

9-4

Longer vehicle combinations shall be operated with tires that meet the standards set forth in 49 CFR Section 393.75 as referenced in paragraph 1-1 above.

9-5

All longer vehicle combinations are required to have a heavy duty fifth wheel and equal strength pick-up plates as provided in 49 CFR Section 393.70 as referenced in paragraph 1-1 above. This equipment must be properly lubricated and located in a position which provides stability in accordance with the requirements of Section 10-2(E).



9-6

For all longer vehicle combinations utilizing a kingpin, the kingpin must be of a solid type and permanently fastened; screw-out or folding type kingpins are prohibited.

9-7

All longer vehicle combination hitch connections must be of no-slack type, preferably air actuated ram.

9-8

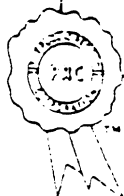
All longer vehicle combination draw bar lengths shall be adequate to provide for the clearances required between the truck tractor and the trailer for turning and backing maneuvers.

9-9

All longer vehicle combination axles must be those designed for the width of the body of the trailer.

9-10

All longer vehicle combination braking systems must comply with 49 C.F.R. Sections 393.40 through 393.52 as referenced in paragraph 1-1 above, and Section 42-4-220, C.R.S. In addition, fast air transmission and release valves must be provided on all trailer, semi-trailer and converter dolly axles. A brake force limiting valve, sometimes called a "slippery road" valve, may be provided on the steering axle.



CHAPTER 10

SAFETY CONSIDERATIONS

10-1

Each applicant for longer vehicle combination permit and each current permit holder must have an established safety program which contains at a minimum the following requirements:

(A) The applicant or permit holder must at all times be in compliance with the following equipment and operator requirements:

- (1) The Federal Motor Carrier Safety Regulations, 49 CFR Parts 390 through 397 as referenced in paragraph 1-1 above.
- (2) The rules of the Colorado Public Utilities Commission promulgated pursuant to Section 40-2.1-103, C.R.S. 1973, as amended.
- (3) The Colorado Uniform Motor Vehicle Law, Articles 1 through 4 of Title 42, C.R.S. 1973, as amended.

(B) All drivers of longer vehicle combinations operating under a permit must be certified by the permit holder's safety office. The certification shall demonstrate that the driver has met the written requirements of the Federal Motor Carrier Safety Regulations, 49 CFR Parts 390 through 397 as referenced in paragraph 1-1 above. The certification will also show that the driver has successfully completed a company approved road test for each type of combination to be operated as provided in Section 4-3. The driver certification forms must be current and on file in the permit holder's Colorado business office as stated on the application and must be available for inspection during normal business hours.

(C) All permit applicants are subject to prior approval to ensure that their equipment conforms with the requirements of these regulations and the requirements of the Federal Motor Carrier Safety Regulations, 49 CFR Parts 390 through 397 as referenced in paragraph 1-1 above. In addition, all equipment operated under the permit by the permit holder are subject to periodic field inspection to ensure continued compliance with equipment requirements.

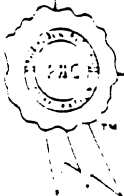


Failure to establish and maintain such a safety program is grounds for refusal to issue a permit to an applicant or to revoke the permit of the permit holder pursuant to Chapter 11.

10-2

In operating longer vehicle combinations, the following safety standards shall be followed:

- (A) The driver of the longer vehicle combination shall maintain a minimum of six hundred feet between his vehicle and vehicles he is following except when overtaking and passing such vehicles.
- (B) Except when passing another vehicle traveling in the same direction, or when conditions exist such that the longer vehicle combination cannot be safely operated in the furthestmost right hand lane, longer vehicle combinations must remain in the furthestmost right hand lane.
- (C) In the event a longer vehicle combination is disabled for any reason, the driver shall park the combination as far off the traveled way as possible. In the case of an accident, the combination shall remain as close to the scene of the accident as possible without obstructing traffic more than necessary.
- (D) The maximum speed for any longer vehicle combinations operated under permit shall not exceed the speed at which the combination can be safely operated and shall not exceed the posted speed limit. The minimum speed for any combination is provided in Section 9-2.
- (E) All longer vehicle combinations must be stable at all times during normal operation including braking. The trailer units of a longer vehicle



APPENDIX B

IDAHO

Designated routes for ext-a-length vehicle combinations

Legal allowable gross loads

RULE NO. 02.05.9

DESIGNATED ROUTES
FOR EXTRA-LENGTH VEHICLE COMBINATIONS62,01 Authority

Under authority of 49-913 and 49-905, Idaho Code the Idaho Transportation Board hereby designates certain routes for operation of vehicle combinations having an overall length in excess of the limits imposed in 49-913, Idaho Code, but not to exceed 105 feet.

62,02 Conditions and Requirements for Extra-Length

Extra-length vehicle combinations shall be subject to the following conditions, limitations and requirements:

- 1, Vehicle combinations operating with an overall length in excess of the limits imposed in 49-913, Idaho Code, shall consist of not more than 4 units and no such vehicle combination shall include more than three cargo units except that a full truck and full trailer may have an overall length in excess of 75 but not in excess of 85 feet.
- 2, For the purposes of these regulations, a cargo unit shall be defined as a full truck, a semi-trailer, a full trailer, or a semi-trailer converted to a full trailer by means of a dolly or a converter gear mounting a fifth wheel. A dromedary tractor equipped with conventional fifth wheel, not stinger steered, shall be excluded from the definition of a cargo unit.
- 3, Routes for extra-length operations shall be designated in three categories:
 - 1, Routes for combinations not exceeding 85 feet in overall length. (Blue coded routes.)

An extra-length combination operating on routes designated for 85-foot combination shall be designed and assembled in a manner whereby its maximum off-tracking will not exceed 5.5 feet on a 165-foot radius when computed by the following equation developed by WHI (Western Highway Institute) for computation of maximum vehicular off-track (MOT).

$$\text{MOT} = 161 - \sqrt{161^2 - (A^2 + B^2 + C^2 + D^2 + \dots)}$$

where 161 represents the 165 radius of curve minus 1/2 width of vehicle, $(165 - 4) = 161$; and $(A^2 + B^2 + C^2 + D^2 + \dots)$ represents the sum of the squares of the distances between points of articulation.

Note: The square of any stinger dimension (trailer axle to pintle hook) is negative.

- 2, Routes for combinations of vehicles not exceeding 105 feet in overall length. (Red coded routes.)

An extra-length combination operating on routes designated for 105-foot combination shall be designed and assembled in a manner whereby its maximum off-tracking will not exceed 6.5 feet on a 165-foot radius when computed by the WHI equation referred to above.

62,02 Continued

- 3, Interstate system routes and specified interchanges providing access to approved breakdown areas located in close proximity to the Interstate system. (Black coded routes)

An extra-length combination operating on routes in this category shall be designed and assembled in such a manner that its off-tracking may exceed 6.5 feet but shall not exceed 8.75 feet when computed by the WHI equation referred to above.

- 4, The power unit of extra-length combinations shall have adequate power and traction to maintain a minimum of 15 miles per hour under normal operating conditions on any up-grade over which the combination is operated.
- 5, Fifth wheel, drawbar, and other coupling devices shall be as specified by Federal Motor Carrier Safety Regulations, Section 393.70, which shall be considered to be a part of these regulations.
- 6, Extreme caution in the operation of a motor vehicle shall be exercised when hazardous conditions such as those caused by snow, ice, sleet, fog, mist, rain, dust, or smoke adversely affect visibility or traction. Speed shall be reduced when such conditions exist. When conditions become sufficiently dangerous, the company or the operator shall discontinue operations and operations shall not be resumed until the vehicle can be safely operated. The state may restrict or prohibit operations during periods when in the state's judgment traffic, weather, or other safety conditions make such operations unsafe or inadvisable.
- 7, In any extra-length combination, the respective loading of any trailer shall not be substantially greater than the weight of any trailer located ahead of it in the vehicle combination. (Substantially greater shall be defined as more than 4,000 pounds heavier.)
- 8, The following operating restrictions shall be met by all vehicle combinations governed by these regulations:
 - 1, A minimum distance of 500 feet shall be maintained between combinations of vehicles except when overtaking and passing.
 - 2, Except when passing another vehicle when traveling in the same direction, the combination shall be driven so as to remain at all times on the righthand side of the centerline of a two-lane, two-way highway, or on the righthand side of a lane stripe or marker of a highway of four or more lanes.
- 9, Every combination operated under these regulations shall be covered by insurance of not less than \$500,000 combined single limit. The permittee or driver of the permitted vehicle combination shall carry in the vehicle evidence of insurance written by an authorized insurer to certify that insurance in this minimum amount is currently in force.

IDAHO TRANSPORTATION DEPARTMENT
LEGAL ALLOWABLE GROSS LOADS

June 1986

Idaho Code Section	49-901b		49-901, enacted by 1972 Legislature, amended 1986								Idaho Code Sect.
Column	A	B	C	D	E	F	G	H	I	J	Column
Single Axle Weight	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	Single Axle Wt.
Distance in Feet Between First And Last Axle Of Any Group Of Consecutive Axles	Maximum load in pounds carried on any group of two or more consecutive axles										Distance in Feet Between First And Last Axle Of Any Group Of Consecutive Axles
	Vehicles With Three or Four Axles	Vehicles With Five or More Axles	Excess Weight Permits Required on Interstate Highways if over 80,000 lbs								
			2 Axles	3 Axles	4 Axles	5 Axles	6 Axles	7 Axles	8 Axles	9 Axles	
4	37,800	37,800	34,000								4
5	37,800	37,800	34,000								5
6	37,800	37,800	34,000								6
7	37,800	37,800	34,000								7
8	37,800	37,800	34,000	42,000							8
9	37,800	37,800	39,000	42,500							9
10	37,800	37,800	40,000	43,500							10
11	37,800	37,800		44,000							11
12	37,800	37,800		45,000	50,000						12
13	56,470	56,470		45,500	50,500						13
14	57,940	57,940		46,500	51,500						14
15	59,400	59,400		47,000	52,000						15
16	60,610	60,610		48,000	52,500	52,500					16
17	61,820	61,820		48,500	53,500	53,500					17
18	63,140	63,140		49,500	54,000	54,000					18
19	64,350	64,350		50,000	54,500	54,500					19
20	65,450	65,450		51,000	55,500	55,500					20
21	66,000	66,300		51,500	56,000	56,000					21
22	66,000	67,250		52,500	56,500	56,500					22
23	66,000	67,880		53,000	57,500	57,500					23
24	66,000	68,510		54,000	58,000	58,000					24
25	66,000	69,150		54,500	58,500	58,500					25
26	66,000	69,770		55,500	59,500	59,500					26
27	66,000	70,440		56,000	60,000	60,000					27
28	66,000	70,950		57,000	60,500	61,000	61,000				28
29	66,000	71,500		57,500	61,500	62,000	62,000				29
30	66,000	72,050		58,500	62,000	63,000	63,000				30
31		72,600		59,000	62,500	64,000	64,500				31
32		73,150		60,000	63,500	65,000	65,000				32
33		73,700			64,000	66,000	66,000				33
34		74,250			64,500	67,000	67,000				34
35		74,800			65,500	68,000	68,000				35
36		75,350			66,000	69,000	69,000				36
37		75,900		(6) -	68,000	70,000	70,000				37
38		76,450			68,000	71,000	71,000				38
39		77,000			68,000	72,000	72,000				39
40		77,550			68,500	73,000	73,000				40
41		78,100			69,500	73,500	73,500				41
42		78,650			70,500	74,000	74,000				42
43		79,000			70,500	75,000	75,000				43
44		79,000			71,500	75,500	75,500				44
45		79,000			72,000	76,000	76,000				45
46		79,000			72,500	76,500	80,000	80,000			46
47		79,000			73,500	77,000	81,000	81,000			47
48		79,000			74,000	78,000	82,000	82,000			48
49		79,000			74,500	78,500	83,000	83,000			49
50		79,000			75,500	79,000	84,000	84,000			50
51		79,000			76,000	80,000	84,500	85,000			51
52		79,000			76,500	80,500	85,000	86,000			52
53		79,000			77,500	81,000	86,000	87,000			53
54		79,000			78,000	81,500	86,500	88,000	91,000	91,000	54
55		79,000			78,500	82,500	87,000	89,000	92,000	92,000	55
56		79,000			79,500	83,000	87,500	90,000	93,000	93,000	56
57		79,000		(5) -	80,000	83,500	88,000	91,000	94,000	94,000	57
58		79,000				84,000	89,000	92,000	95,000	95,000	58
59		79,000				85,000	89,500	93,500	96,000	96,000	59
60		79,000				85,500	90,000	95,000	97,000	97,000	60
61		79,000				86,000	90,500	95,500	98,000	98,000	61
62		79,000				87,000	91,000	96,000	99,000	99,000	62
63		79,000				87,500	92,000	97,000	100,000	100,000	63
64		79,000				88,000	92,500	97,500	101,000	101,000	64
65		79,000				88,500	93,000	98,000	102,000	102,000	65
66		79,000				89,500	93,500	98,500	103,000	103,000	66
67		79,000				90,000	94,000	99,000	104,000	104,000	67
68		79,000				90,500	95,000	99,500	105,000	105,000	68
69		79,000				91,000	95,500	100,000	105,500	105,000	69
70		79,000				92,000	96,000	101,000	105,500	105,500	70
71		79,000				92,500	96,500	101,500	105,500	105,500	71
72		79,000				93,000	97,000	102,000	105,500	105,500	72
73		79,000				93,500	98,000	102,500	105,500	105,500	73
74		79,000				94,500	98,500	103,000	105,500	105,500	74
75		79,000				95,000	99,000	103,500	105,500	105,500	75
76		79,000				95,500	99,500	104,000	105,500	105,500	76
77		79,000				96,000	100,000	105,000	105,500	105,500	77
78		79,000				97,000	101,000	105,500	105,500	105,500	78
79		79,000				97,500	101,500	105,500	105,500	105,500	79
80		79,000				98,000	102,000	105,500	105,500	105,500	80
81		79,000				98,500	102,500	105,500	105,500	105,500	81
82		79,000				99,000	103,000	105,500	105,500	105,500	82
83		79,000				100,000	104,000	105,500	105,500	105,500	83
84		79,000					104,500	105,500	105,500	105,500	84
85		79,000					105,000	105,500	105,500	105,500	85
86 or more		79,000					105,500	105,500	105,500	105,500	86 or more

IDAHO STATE HIGHWAY SYSTEM

ROUTES DESIGNATED FOR EXTRA-LENGTH COMBINATIONS

REGULATIONS OF THE IDAHO TRANSPORTATION BOARD

All extra-length vehicle combinations shall be controlled by special permit issued to the power unit and shall be subject to the requirements and conditions of Rule No. 02.05.9.62 published on the reverse side of this map.

Any extra-length combination having an internal dimension between points of articulation (pivot points) of 30 feet or more, or any doubles combination having an overall length of 90 feet or more, shall in addition to the extra-length permit, have a Form DH-749 Extra-Length Computation Form complete with internal dimensions and computation of off-track based on a turning radius of 165 feet. The Form DH-749 shall be made available for inspection of law enforcement officers as evidence of compliance with maximum off-track as specified below.

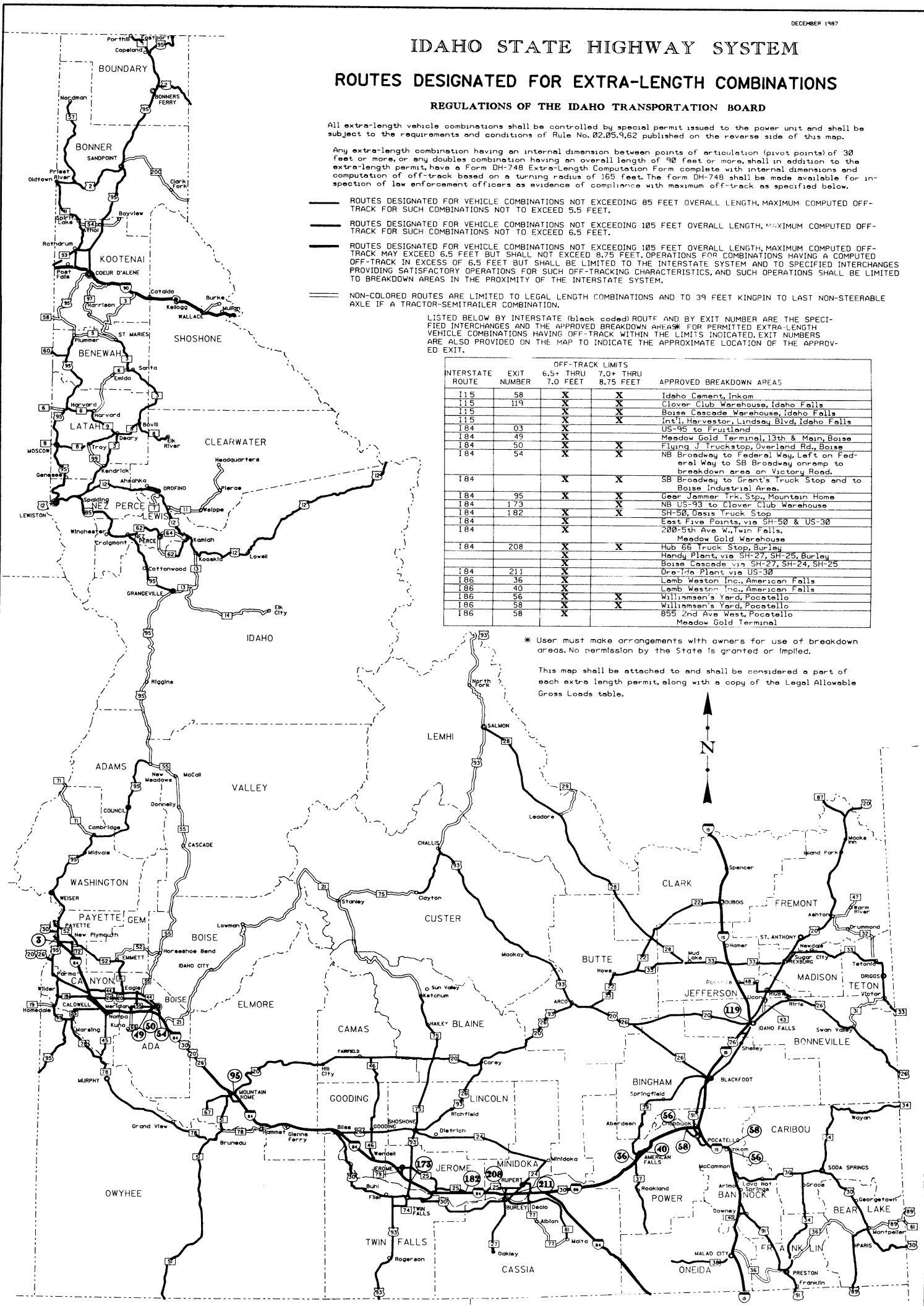
- ROUTES DESIGNATED FOR VEHICLE COMBINATIONS NOT EXCEEDING 85 FEET OVERALL LENGTH, MAXIMUM COMPUTED OFF-TRACK FOR SUCH COMBINATIONS NOT TO EXCEED 5.5 FEET.
- ROUTES DESIGNATED FOR VEHICLE COMBINATIONS NOT EXCEEDING 105 FEET OVERALL LENGTH, MAXIMUM COMPUTED OFF-TRACK FOR SUCH COMBINATIONS NOT TO EXCEED 6.5 FEET.
- ROUTES DESIGNATED FOR VEHICLE COMBINATIONS NOT EXCEEDING 105 FEET OVERALL LENGTH, MAXIMUM COMPUTED OFF-TRACK MAY EXCEED 6.5 FEET BUT SHALL NOT EXCEED 8.75 FEET. OPERATIONS FOR COMBINATIONS HAVING A COMPUTED OFF-TRACK IN EXCESS OF 6.5 FEET BUT SHALL BE LIMITED TO THE INTERSTATE SYSTEM AND TO SPECIFIED INTERCHANGES PROVIDING SATISFACTORY OPERATIONS FOR SUCH OFF-TRACKING CHARACTERISTICS, AND SUCH OPERATIONS SHALL BE LIMITED TO BREAKDOWN AREAS IN THE PROXIMITY OF THE INTERSTATE SYSTEM.
- NON-COLORED ROUTES ARE LIMITED TO LEGAL LENGTH COMBINATIONS AND TO 39 FEET KINGPIN TO LAST NON-STEERABLE AXLE IF A TRACTOR-SEMITRAILER COMBINATION.

LISTED BELOW BY INTERSTATE (block coded) ROUTE AND BY EXIT NUMBER ARE THE SPECIFIED INTERCHANGES AND THE APPROVED BREAKDOWN AREAS FOR PERMITTED EXTRA-LENGTH VEHICLE COMBINATIONS HAVING OFF-TRACK WITHIN THE LIMITS INDICATED. EXIT NUMBERS ARE ALSO PROVIDED ON THE MAP TO INDICATE THE APPROXIMATE LOCATION OF THE APPROVED EXIT.

INTERSTATE ROUTE	EXIT NUMBER	OFF-TRACK LIMITS		APPROVED BREAKDOWN AREAS
		6.5+ THRU 7.0 FEET	7.0+ THRU 8.75 FEET	
I 15	58	X	X	Idaho Cement, Inkom
I 15	119	X	X	Clover Club Warehouse, Idaho Falls
I 15		X	X	Boise Cascade Warehouse, Idaho Falls
I 15		X	X	Int'l. Harvestor, Lindsay Blvd, Idaho Falls
I 84	03	X		US-95 to Fruitland
I 84	49	X		Meadow Gold Terminal, 13th & Main, Boise
I 84	50	X	X	Flying J Truckstop, Overland Rd., Boise
I 84	54	X	X	NB Broadway to Federal Way, Left on Federal Way to SB Broadway onramp to breakdown area on Victory Road.
I 84		X	X	SB Broadway to Grant's Truck Stop and to Boise Industrial Area.
I 84	95	X	X	Gear Jammer Trk. Stop, Mountain Home
I 84	173	X	X	NB US-93 to Clover Club Warehouse
I 84	182	X	X	SH-50, Oasis Truck Stop
I 84		X		East Five Points, via SH-50 & US-30
I 84		X		200-5th Ave W, Twin Falls
I 84	208	X	X	Meadow Gold Warehouse
I 84		X	X	Hub 66 Truck Stop, Burley
I 84		X	X	Handy Plant, via SH-27, SH-25, Burley
I 84		X	X	Boise Cascade via SH-27, SH-24, SH-25
I 84		X	X	Ore-Ida Plant via US-30
I 86	36	X		Lamb Weston Inc., American Falls
I 86	40	X		Lamb Weston Inc., American Falls
I 86	56	X	X	Williamson's Yard, Pocatello
I 86	58	X	X	Williamson's Yard, Pocatello
I 86	58	X	X	855 2nd Ave West, Pocatello
I 86	58	X	X	Meadow Gold Terminal

* User must make arrangements with owners for use of breakdown areas. No permission by the State is granted or implied.

This map shall be attached to and shall be considered a part of each extra length permit, along with a copy of the Legal Allowable Gross Loads table.



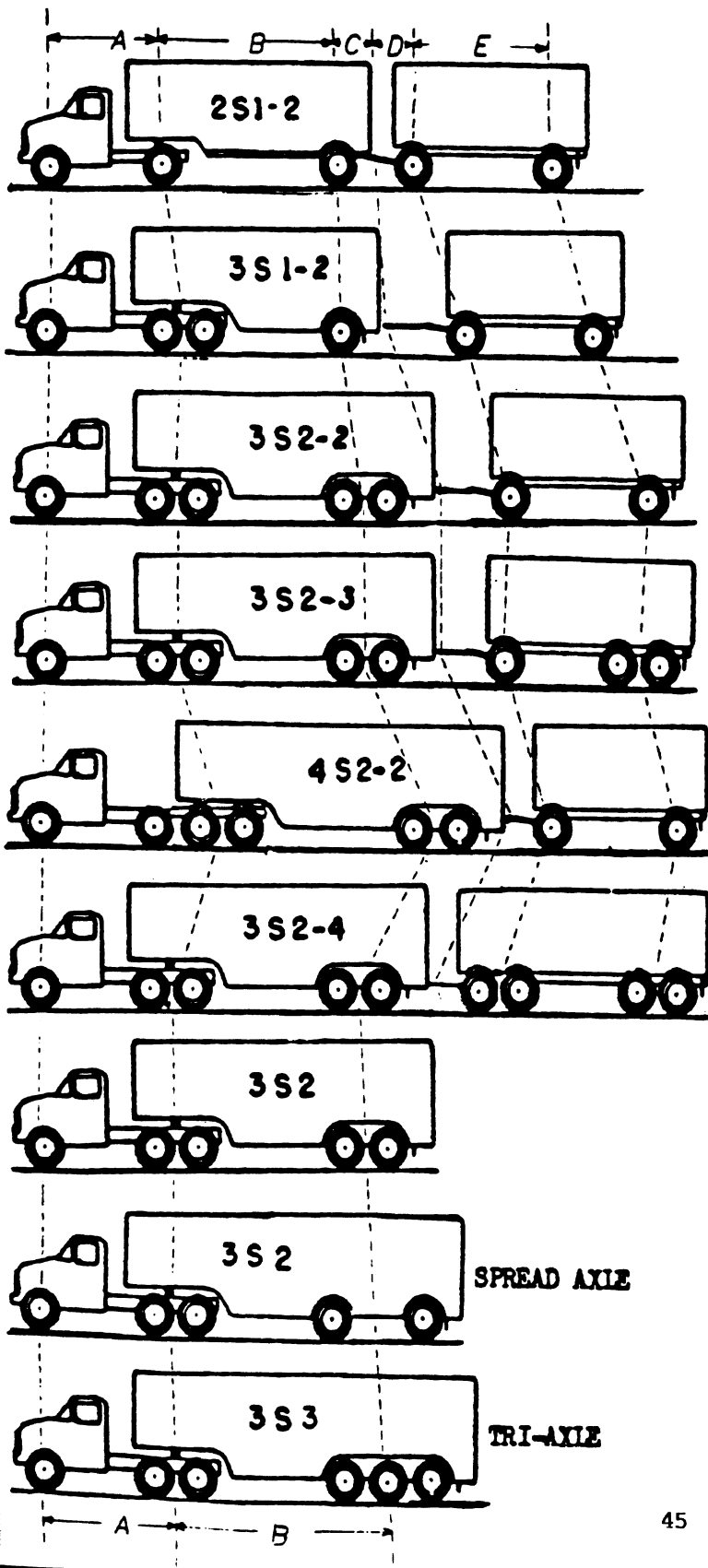
43

44



OFF-TRACK COMPUTATION FORM

This form shall be completed and accompany the extra-length permit for any vehicle combination which includes an internal dimension of 30 feet or more, or for any doubles combination which has an overall length of 90 feet or more. Refer to the sketches of doubles combinations below and enter the appropriate internal dimensions in the spaces provided. Follow steps (1) through (18) to compute maximum off-track based on a vehicle combination with its steering axle centered on a 165-foot radius curve. The computed off-track will be the radius to the inside front wheel of the steering axle minus the radius to the inside of the rear axle of the combination. $R = 165 - 4 = 161$.



Use these decimal equivalents instead of inches:

1 in. = .08 ft.	7 in. = .58 ft.
2 in. = .17 ft.	8 in. = .67 ft.
3 in. = .25 ft.	9 in. = .75 ft.
4 in. = .33 ft.	10 in. = .83 ft.
5 in. = .42 ft.	11 in. = .92 ft.
6 in. = .50 ft.	12 in. = 1.00 ft.

- (1) A = _____ ft. (6) $A^2 =$ _____
- (2) B = _____ ft. (7) $B^2 =$ _____
- (3) C = _____ ft.
- (4) D = _____ ft. (8) $D^2 =$ _____
- (5) E = _____ ft. (9) $E^2 =$ _____
- (10) Add (6) (7) (8) & (9) = _____
- (11) $R^2 = 161^2 =$ 25,921.00
- (12) $C^2 =$ _____
- (13) Add (11) and (12) = _____*
- (14) Enter (10) = _____
- (15) Subtract (14) from (13) = _____
- (16) R = " 161.00
- (17) Square root of (15) = _____
- (18) Off-track = $161 - (17) =$ _____

* If (15) is less than 24,180 off-track is greater than 5.5, maximum for blue routes. If (15) is less than 23,870 off-track is greater than 6.5 maximum for red routes. If (15) is less than 23,716, off-track is greater than 7.0. If assistance is required in the computation of maximum off-track, measure the internal dimensions and call (208) 334-3690.

APPENDIX C

KANSAS

Turnpike use restrictions – oversize vehicles/loads



KANSAS TURNPIKE AUTHORITY

BOX 780007 WICHITA, KANSAS 67278 (316) 682-4537

TURNPIKE USE RESTRICTIONS - OVERSIZE VEHICLES/LOADS

To assist you in determining what types of oversize vehicles and loads are permitted to use the Kansas Turnpike with, and without authorization, the following is offered:

WIDE LOADS - Vehicles and loads up to, but not exceeding 12 ft. - 6 in. in width may use the turnpike without authorization, and operate both day and night.

Vehicles and loads up to, but not exceeding 14 ft. in width may use the turnpike without authorization, but can operate only during *daylight hours.

Vehicles and loads exceeding 14 ft. wide are required to obtain authorization from the Chief Engineer/Manager, or Highway Patrol Captain prior to using the turnpike. Authorization will not be granted for night operation, except in extreme emergency, or disaster conditions.

Vehicles and loads exceeding 16 ft. in width will rarely be authorized for any operation on the turnpike.

HIGH LOADS - Vehicles and loads activating high load detectors upon entering the turnpike are required to stop, and cannot proceed until authorized by a turnpike trooper.

LONG LOADS - Vehicles composed of tandem, or triple trailer units may operate day or night provided they do not exceed 119 ft. in overall length.

Any vehicle, or combination of vehicles, trailer(s), or load exceeding 119 ft. in overall length must obtain authorization from the Chief Engineer/Manager, or Highway Patrol Captain prior to moving such vehicle on the turnpike. Authorization will not be granted for night operation, except in extreme emergency, or disaster conditions.

WEIGHT - All vehicle axle weights must comply with Kansas Law.

No vehicle is permitted to use the turnpike with an overall gross weight exceeding 120,000 lbs..

Any vehicle exceeding the above weight limitations cannot legally use the turnpike without authorization from the Chief Engineer/Manager, the Division I, or Division II Engineer, or the Highway Patrol Captain. Such authorization will be unlikely except in extreme emergency, or disaster situations.

*Daylight hours 30 minutes before sunrise until 30 minutes after sunset.

KANSAS TURNPIKE AUTHORITY

Policy on the Movement of Oversize Loads on the Kansas Turnpike

Written permits are not required for the movement of oversize loads on the Kansas Turnpike. However, due to the size and configuration of some loads, prior approval is required from the Chief Engineer/Manager or the Turnpike Highway Patrol Commander before such loads or vehicles can be moved or transported on the Kansas Turnpike.

The following guidelines indicate the maximum vehicle and payload size allowable without prior approval.

1. Tractor-Trailer Combination Units

The Kansas Turnpike presently allows tandem and triple trailer combinations up to and including 119 feet.

2. Height Restrictions

All overhead structures on the Kansas Turnpike will allow movement of loads not exceeding 14 feet in height. All vehicles and loads over 14 feet in height will be denied entry until a Highway Patrol Trooper has measured the load. The trooper may authorize or prohibit entry onto the turnpike, depending upon the destination of the load.

3. Width Restrictions

Loads not exceeding 12 feet and 6 inches in width may be moved at anytime on the turnpike. They must be properly lighted during the hours of darkness. Loads 12 feet and 6 inches to 14 feet in width may be moved only during daylight hours. Loads exceeding 14 feet in width must have prior authorization from the Chief Engineer/Manager, or the Highway Patrol Commander, and may be limited to movement during the period of Monday through Thursday between 8:30 a.m. and 4:30 p.m. Loads exceeding 16 feet in width will not be authorized except in extreme emergencies.

4. Weight Restrictions

All vehicles must comply with Kansas weight laws regarding axle weights. 34,000 lbs. on tandem axles and 20,000 lbs. on single axles are permitted. The movement of vehicles and loads requiring authorization because of weight will not be made until such authorization has been received in advance from the Chief Engineer/Manager, or a turnpike District Engineer. Vehicles and loads exceeding a gross weight of 120,000 lbs. will not be authorized.

5. Mobile Homes

- a. Loads up to 12 feet and 6 inches in width may be moved day or night.
- b. Loads over 12 feet and 6 inches in width, and up to and including 14 feet in width may be moved only during daylight hours.
- c. The movement of mobile homes over 14 feet in width may be limited to daylight hours, Monday through Thursday between 8:30 a.m. and 4:30 p.m. Additionally, the movement of such loads on the turnpike should be concluded by noon on any day preceding a legal state holiday. At least one escort vehicle is required to accompany the movement of mobile homes over 14 ft. in width on the turnpike.
- d. Length will be allowed up to 119 feet.
- e. All mobile homes must be towed by a truck-tractor specifically designed and equipped to tow such loads. Towing of more than one mobile home will not be allowed.
- f. All movement of mobile homes must comply with the Kansas Department of Transportation Rules and Regulations regarding flags, lights, signing, and insurance requirements.

6. Other Information

Special permits from the Kansas Department of Transportation are not required to move oversize loads on the Kansas Turnpike. All oversize loads must comply with Kansas laws governing insurance, lights, flags, signs, and placarding. It is the responsibility of the driver of any oversize load and vehicle entering or exiting the turnpike to determine if the toll plaza has adequate space for the safe entry or exiting of the vehicle and load. Restrictions on the movement of some or all oversize vehicles and loads may be temporarily implemented due to wind, weather, road or construction conditions.

APPENDIX D

MONTANA

G.V.W. law booklet

Special vehicle combinations

of highways or local authority may issue or withhold a special permit at its discretion or, if the permit is issued, limit the number of trips or establish seasonal or other time limitations within which the vehicle, combination of vehicles, load, object, or other thing described may be operated on the public highways indicated, or otherwise limit or prescribe conditions of operation of the vehicle, combination of vehicles, load, object, or other thing when necessary to assure against damage to the road foundation, surfaces, or structures or safety of traffic, and may require an undertaking or other security considered necessary to compensate for injury to a roadway or road structure. During harvest no permit may be denied to oversize harvest or harvest-related agricultural machinery solely on the grounds that the travel takes place on a Saturday or Sunday. No permit may be denied to dealers in implements of husbandry and self-propelled machinery solely on the grounds that the travel may take place on a Saturday or Sunday.

61-10-123. Haystack movers. A self-propelled vehicle used only for the purpose of moving haystacks on a commercial basis is subject to 61-10-121 through 61-10-127, except as follows:

- (1) The vehicle, loaded or unloaded, may not exceed 55 feet in length or 20 feet in width.
- (2) A single load may not be moved on the vehicle a distance greater than 75 miles from the point of origin on public roads.
- (3) When the vehicle is hauling a load, it shall be accompanied by two pilot cars. Each car shall be equipped with a flashing warning light, a red flag, and a sign with the words "wide load" written on it. One car shall precede the vehicle by not less than 100 yards or more than one-fourth mile, and one shall follow the vehicle at a distance not less than 100 yards or more than one-fourth mile. The following pilot car shall be in radio contact with the vehicle at all times.
- (4) The speed of the vehicle shall be reasonable and proper but not in excess of 35 miles per hour.
- (5) The vehicle shall be operated only between the hours of sunrise and sunset.
- (6) The vehicle may not be operated on an interstate or controlled-access highway.
- (7) A term or blanket permit may be issued for the vehicle.

61-10-124. (Temporary) Special permits for cranes. (1) As used in this section, "crane" means a self-propelled single-unit vehicle consisting of not more than four axles and used for raising, shifting, and lowering heavy weights by means of a projecting swinging arm. (2) Except as provided in subsections (3)(b) and (6), in addition to the regular registration and gross vehicle weight fees, a fee of \$10 for each trip permit and a fee of \$75 for each term permit issued for size and weight in excess of that

specified in 61-10-101 through 61-10-110 shall be paid for all movements under special permits on the public highways under the jurisdiction of the department of highways.

(3) (a) Except as provided in subsections (3)(b) and (6), term or blanket permits may not be issued for an overwidth vehicle, combination of vehicles, load, or other thing in excess of 15 feet; an overlength vehicle, combination of vehicles, load, object, or other thing in excess of 95 feet; and an overweight vehicle, combination of vehicles, load, or other thing in excess of 14 feet, or of a limit determined by the department. A vehicle, combination of vehicles, load, or other thing in excess of these dimensions is limited to trip permits. Special permits for vehicle combinations of more than two trailers or more than two units designed for or used to carry a load are not permitted except as provided in subsection (6). Special permits for vehicle combinations may specify and special permits under subsection (6) must specify highway routing and otherwise limit or prescribe conditions of operation of the vehicle or combination, including but not limited to required equipment, speed, stability, operational procedures, and insurance.

(b) A term permit may be issued to a dealer in implements of husbandry and self-propelled machinery for an overwidth or overlength vehicle referred to in subsection (3)(a). The fee for this permit is \$75. This permit covers a period of 1 year and expires on December 31 of each year with no grace period.

(c) With payment of the appropriate gross weight fee required by 61-10-203 and with payment of the fee prescribed in subsection (2), allowable gross weight of a five-axle combination logging vehicle is 80,000 pounds.

(4) Except as provided in subsection (3)(b), a permit may not be issued for a period of time greater than the period for which the GVW license is valid as provided in this title, including grace periods allowed by this title. Owners of vehicles licensed in other jurisdictions may, at the discretion of the department of highways, purchase permits to expire with their registration. A license required by the state governs the issuance of a special permit.

(5) The owner or operator of a crane with a gross vehicle weight of less than 80,000 pounds may purchase a 30-day special permit for overweight if the crane has a current special mobile equipment identification plate and if the department of highways has approved the configuration of the crane through a weight analysis completed within the same calendar year. The permit is not transferable, and the fee for the permit is \$200.

(6) The department may issue special permits to the operating company for a truck-trailer-trailer combination or truck tractor-semitrailer-trailer-trailer combination of vehicles under the following conditions:

- (a) the combination may be operated only on highways that are

part of the federal-aid interstate system as defined in 60-1-103 and within a 2-mile radius of an interchange on the interstate system on other highways only in order to obtain necessary services or to load or unload at a terminal. When a terminal is beyond a 2-mile radius, the department may authorize travel between the terminal and the interchange.

(b) a combination of vehicles powered by a cab-over (tilt cab) type truck-tractor or a truck may not exceed overall length of 105 feet, inclusive of front and rear bumpers and overhang; (c) a combination of vehicles powered by a conventional truck-tractor may not exceed overall length of 110 feet, inclusive of front and rear bumpers and overhang;

(d) no individual cargo unit of the combination may exceed 28 1/2 feet in length and 102 inches width; be paid on the truck gross weight fees under 61-10-203 must be paid on the truck-tractor for the declared registered gross weight of the vehicle; (e) the combination, but not to exceed the formula in 61-10-107;

(f) the combination must have a restricted route permit under 61-10-107(3) and a special overlength permit issued at a fee of \$200 for a term permit or \$20 for each trip permit;

(g) travel of the combination may be restricted to specific routes, hours of operation, specific days, or seasonal periods; and (h) the department may enforce any other restrictions determined by the department to be necessary.

61-10-124. (Effective July 1, 1989) Special permits -- fee --

(1) As used in this section, "crane" means a self-propelled single-unit vehicle consisting of not more than four axles and used for raising, shifting, and lowering heavy weights by means of a projecting swinging arm.

(2) Except as provided in subsection (3)(b), in addition to the regular registration and gross vehicle weight fees, a fee of \$10 for each trip permit and a fee of \$75 for each term permit issued for size and weight in excess of that specified in 61-10-101 through 61-10-110 shall be paid for all movements under special permits on the public highways under the jurisdiction of the department of highways.

(3) (a) Except as provided in subsection (3)(b), term or blanket permits may not be issued for an overwidth vehicle, combination of vehicles, load, or other thing in excess of 15 feet; an overlength vehicle, combination of vehicles, load, object, or other thing in excess of 95 feet; and an overheight vehicle, combination of vehicles, load, or other thing in excess of 14 feet, or of a limit determined by the department. A vehicle, combination of vehicles, load, or other thing in excess of these dimensions is limited to trip permits. Special permits for vehicle combinations of more than two trailers are not permitted under this section. Special permits for vehicle

combinations may specify highway routing and otherwise limit or prescribe conditions of operation of the vehicle or combination, including but not limited to required equipment, speed, stability, operational procedures, and insurance.

(b) A term permit may be issued to a dealer in implements of husbandry and self-propelled machinery for an overwidth or overlength vehicle referred to in subsection (3)(a). The fee for this permit is \$75. This permit covers a period of 1 year and expires on December 31 of each year with no grace period.

(c) With payment of the appropriate gross weight fee required by 61-10-203 and with payment of the fee prescribed in subsection (2), allowable gross weight of a five-axle combination logging vehicle is 80,000 pounds.

(d) Except as provided in subsection (3)(b), a permit may not be issued for a period of time greater than the period for which the CVP license is valid as provided in this title, including grace periods allowed by this title. Owners of vehicles licensed in other jurisdictions may, at the discretion of the department of highways, purchase Permits to expire with their registration. A license required by the state governs the issuance of a special permit.

(5) The owner or operator of a crane with a gross vehicle weight of less than 80,000 pounds may purchase a 30-day special permit for overwidth of the crane, for a crane with special mobile equipment identification plate, and if the department of highways has approved the configuration of the crane through a weight analysis completed within the same calendar year. The permit is not transferable, and the fee for the permit is \$200.

61-10-125. Other fees. In addition to the permit fee, there shall be charged for single trip permits, for the excess load over the gross allowable load or the sum of the excess axle loads, whichever is greater:

- (1) \$10 for distances to and including 100 miles;
- (2) \$30 for distances from 101 to 199 miles; and
- (3) \$50 for distances over 200 miles traveled.

61-10-126. Deposit of fees. All fees collected under 61-10-101 through 61-10-125 shall be forwarded to the state treasurer for deposit in the state highway account in the state special revenue fund.

61-10-127. Permits issued to governmental entities. Permits issued to the United States government, State, County, cities, and their political subdivisions shall be issued without fee for a term beginning with the date of issuance and expiring December 31.

61-10-128. (Temporary) When authorities may restrict right to use roadway. (1) Neither the department nor a local authority

MONTANA

18.8.517. SPECIAL VEHICLE COMBINATIONS

(1) A "special vehicle combination" is a truck-trailer-trailer combination of vehicles or truck tractor-semitrailer-trailer-trailer combination of vehicles.

(2) No special vehicle combination may be operated without a valid overlength permit.

(3) Special overlength permits shall be issued to a specific truck or truck tractor and are non-transferrable, and may not be used for any other combination other than a "special vehicle combination" as defined in this rule.

(4) In addition to the special overlength permit, the operator must obtain all other necessary permits for travel in Montana.

(5) When a terminal is beyond a 2-mile radius of an interchange on the interstate system, the Department of Highways may authorize travel between the terminal and the interchange. The operator shall apply in writing to the Department of Highways for authorization to travel outside the 2-mile radius to reach a terminal. The written application must specify requested routing and show good cause why the travel is necessary.

(6) The Department of Highways may restrict or prohibit travel of special vehicle combinations to specific routes, hours of operation, specific days, or seasonal periods, when adverse conditions, traffic, weather or other safety considerations make such operation unsafe or inadvisable. Special vehicle combinations shall not be dispatched during adverse weather conditions, as defined in Section 392.14 of the Federal Motor Carrier Safety Regulations. If adverse weather or road conditions are encountered or if the road surface is icy or snowpacked, the driver of the special vehicle combination shall proceed to the next available exit or turnout and drop a trailer or wait for conditions to improve. If road or weather conditions are deemed sufficiently hazardous by the Montana Department of Highways or the Montana Highway Patrol, they may instruct the special vehicle combinations to cease operations immediately until such hazardous conditions no longer exist.

(7) The following equipment requirements apply to special vehicle combinations:

(a) All trucks and truck tractors shall be powered to provide adequate acceleration ability and hill climbing ability under normal operating conditions, and to operate on level grades at speeds compatible with other traffic. The ability to maintain a minimum speed of 20 mph under normal operating conditions on any grade over which the combination is operated is required.

(b) All trucks and truck tractors shall have adequate traction to maintain a minimum speed of 20 mph under normal operating conditions on any grade over which the

combination is operated and to be able to resume a speed of 20 mph after stopping on any such grade and to negotiate all grades encountered.

(c) Each individual single and tandem axle shall have tires of the same size and construction (radial or non-radial). Tires must be properly inflated for the load being carried, and shall meet the standards set forth in 49 CFR Section 393.75.

(d) All fifth wheels shall be clean and lubricated with a light duty grease. The fifth wheel shall be located in a position which provides adequate stability. The fifth wheel shall be heavy duty as required in 49 CFR Section 393.70.

(e) Pick-up plates shall be of equal strength to the fifth wheel, as provided in 49 CFR Section 393.70.

(f) The king pin shall be of a solid type and permanently fastened. Screw out or folding type king pins are prohibited.

(g) All hitch connections shall be of a no-slack type, preferably air actuated ram. Air actuated hitches, when used, must be isolated from the primary air transmission system.

(h) The drawbar length shall be the practical minimum consistent with weight distribution and clearances required between trailers for turning and backing maneuvers.

(i) Permanently attached trailer axles must be those designed for the width of the trailer.

(i) Truck-trailer-trailer combinations must have a minimum of six (6) axles and a maximum of nine (9) axles.

(ii) Truck tractor-semitrailer-trailer-trailer combinations must have a minimum of seven (7) axles and a maximum of nine (9) axles.

(j) All braking systems shall comply with state and federal requirements. In addition, fast air transmission and release valves shall be provided for all trailers, semitrailers, and converter dollies. A brake force proportioning valve may be provided on the steering axle. Indiscriminate use of engine retarder brakes is prohibited.

(k) Anti-sail mud flaps are required. If anti-sail mud flaps are not used, mud flaps and anti-spray and splash suppressant device systems are required.

(8) Special vehicle combinations are restricted to the following operating conditions:

(a) The total weight on any single axle may not exceed 20,000 pounds. The total weight on any tandem axle may not exceed 34,000 pounds. The total weight on any group of two or more consecutive axles may not exceed the amount provided in Section 61-10-107, MCA.

(b) In no case may any trailer or semitrailer be placed in front of another trailer or semitrailer which carries an appreciably heavier load. The heaviest trailer or semitrailer shall be placed in front and the lightest at the rear. An empty trailer or semitrailer may not precede a loaded trailer or semitrailer.

(c) A special vehicle combination shall be stable at all times during normal braking and normal operation. A special vehicle combination, when travelling on a level, smooth, paved surface, shall follow in the path of the towing vehicle without shifting or swerving more than three inches to either side when the towing vehicle is moving in a straight line.

(d) While operating on a highway with two lanes in one direction, permitted vehicles shall remain in the right hand lane unless otherwise posted or conditions otherwise require, or when passing another vehicle or when emergency conditions exist.

(e) A minimum safe distance of 100 feet per 10 mph of speed shall be maintained between a special vehicle combination and other vehicles except when overtaking and passing.

(f) In the event a special vehicle combination is disabled for any reason other than an accident, it shall be parked as far off the travelled way as possible and marked as required by Federal Motor Carrier Safety regulations.

(9) As required by 49 CFR Section 177.835(c), transportation of Class A explosives is prohibited.

(10) A driver of a special vehicle combination shall be experienced in driving these combinations, maintain a good driving record and be subject to the following requirements:

(a) The driver shall comply with all of the driver's requirements of the Motor Carrier Safety Regulations of the U.S. Department of Transportation.

(b) The driver must have had documented special instruction and training in the operation of special vehicle combinations prior to operating any such combination on a highway.

(c) The driver shall be under the control and supervision of the company holding the overlength permit.

(d) No person who has had any suspension of driving privileges in any state during the past three years where such suspension arose out of the operation of a motor vehicle used as a contract or common carrier of persons or property may operate a special vehicle combination.

(e) All drivers of special vehicle combinations operating under a permit shall be certified by the permit

holder's safety office. The certification shall demonstrate that the driver has met the written requirements of the Federal Motor Carrier Safety Regulations, 49 CFR Parts 390 through 397. The certification shall also show that the driver has successfully completed a company approved road test for each type of combination to be operated. The driver certification forms shall be current and on file in the permit holder's business office as stated on the application and shall be available for inspection during normal business hours.

(f) All permit applicants are subject to prior approval to ensure that their equipment conforms with the requirements of these regulations and the requirements of the Federal Motor Carrier Safety Regulations, 49 CFR Parts 390 through 397. In addition, all equipment operated under the permit by the permit holder is subject to periodic field inspection to ensure continued compliance with equipment requirements.

(11) No person may operate any special vehicle combination under Section 61-10-124(4), MCA, at a speed greater than 55 miles per hour. Violation of this restriction shall result in confiscation of permits.

(12) Every special vehicle combination operated under an oversize permit shall be covered by insurance of not less than \$750,000 public liability and \$50,000 property damage unless a greater amount is required by state or federal law or regulations.

(13) No overlength permit may be issued to a company which does not have a documented, established and aggressive safety program, including a driver training and certification program.

(14) Any company approved to operate special vehicle combinations under an overlength permit shall provide the Department of Highways with any information relating to accidents, operational costs, safety inspections, equipment, maintenance, and other items which may be requested.

(15) Notwithstanding other state and federal requirements for reporting motor vehicle accidents, reportable accidents involving special vehicle combinations operated under a special overlength permit must be reported to the Montana Highway Department within 10 days of the date of the accident.

(16) The original permit shall be carried in the truck or truck-tractor of the special vehicle combination operating under the permit, and shall be displayed to any peace officer, employee of the Department of Highways, Montana Highway Patrol, or Public Service Commission upon request.

APPENDIX E

NEVADA

Regulations for the operation of 70 to 105 foot combinations

MAY 1, 1980

The Department of Transportation hereby adopts the following regulation pursuant to subsection 3 of NRS 484.739:

1. Definitions.

As used in this regulation, unless the context otherwise requires, the words and terms defined in sections 2 to 12, inclusive, have the meanings ascribed to them in those sections.

2. "Cargo body" defined.

"Cargo body" means the part of the body of a vehicle which is used to haul cargo.

3. "Cargo unit" defined.

"Cargo unit" means a full sized truck, a trailer, a semi-trailer, or a semi-trailer which has been converted to a trailer by use of a converter gear dolly. The term does not mean a truck tractor or a full sized truck which has a cargo body and a hitch for the transportation of trailers or semitrailers.

4. "Combination of vehicles" defined.

"Combination of vehicles" means two or more vehicles which, when coupled together, have a total length of more than 70 feet and less than or equal to 105 feet.

5. "Converter gear dolly" defined.

"Converter gear dolly" has the meaning ascribed to it in NRS 706.056.

6. "Department" defined.

"Department" means the Department of Transportation.

7. "Highway" defined. "Highway" has the meaning ascribed to it in NRS 484.065.

8. "Semitrailer" defined.

"Semitrailer" has the meaning ascribed to it in NRS 484.168.

9. "Trailer" defined.

"Trailer" has the meaning ascribed to it in NRS 484.207.

10. "Truck" defined.

"Truck" has the meaning ascribed to it in NRS 484.211.

11. "Truck tractor" defined.

"Truck tractor" has the meaning ascribed to it in NRS 484.213.

12. "Vehicle" defined.

"Vehicle" has the meaning ascribed to it in NRS 484.217.

13. Vehicles: Maximum length when coupled together.

A person shall not operate on any highway of this state two or more vehicles which, when coupled together, have a total length of more than 105 feet.

14. Combinations of vehicles: Maximum number of cargo units.

A combination of vehicles may not consist of more than three cargo units.

15. Combinations of vehicles: Maximum length of trailers, semitrailers.

A trailer, semitrailer, or a semitrailer converted to a trailer by the use of a converter gear dolly must not have a cargo body which is more than 45 feet long if it is operated in a combination of vehicles consisting of more than one cargo unit.

16. Combinations of vehicles: Placement of cargo units.

1. Except as provided in subsection 2, the shortest trailer must be placed at the rear of a combination of vehicles.

2. If a shorter trailer is heavier and a longer trailer is lighter, the longer trailer must be placed behind the shorter trailer.

17. Combinations of vehicles: Use of converter gear dolly.

A converter gear dolly used in a combination of vehicles may have one or more axles and must be equipped with safety chains or cables to be secured to the vehicle pulling the dolly. The combination of any safety chains or cables used must be strong enough to prevent the dolly from completely separating from the vehicle which is pulling it if the hitch on the dolly fails.

18. Combinations of vehicles: Towing forklifts.

1. A series of vehicles which consists of not more than two cargo units and which has a total length when coupled together of less than 70 feet may tow a forklift which, when added to the length of the vehicles, makes the total length 70 feet or more, if all the conditions of this section are met.

2. The forklift must be required for loading or unloading a cargo unit or a cargo body on the towing vehicle.

3. The forklift must be towed behind the last vehicle in the combination of vehicles.

4. The total length of the forklift must not be more than 18 feet, as measured from the rear of the vehicle which is towing the forklift to the rear of the forklift.

5. The operator of a combination of vehicles which includes a forklift must limit the speed of the vehicles to a speed which does not cause the forklift to sway or track in an alignment different than that of the vehicle towing it.

6. If a forklift is towed after dark, it must have permanent or temporary tail lamps, stop lamps, turn signals and any other lighting required to be on the rear of the last vehicle in a combination of vehicles. A temporary device which meets the requirements for lighting may be attached to the forklift to comply with this subsection.

7. All lamps and other lighting on a forklift must be operated in the same manner as lamps and lighting on the rear of the last vehicle in a combination of vehicles.

8. A pressure hitch is not required to couple a forklift to the vehicle towing it, but the device used for coupling must be strong enough to prevent the forklift from separating from the vehicle which is towing it.

19. Combination of vehicles: Brakes.

All systems and components used for braking a combination of vehicles must be in compliance with all state and federal laws and regulations, including laws and regulations relating to the installation and maintenance of systems for normal braking, for automatic braking upon the unexpected separation of vehicles, for parking brakes, and for warning devices.

20. Combination of vehicles: Type of hitch required.

Except as provided in subsection 8 of section 18, hitches which couple and lock under pressure (for example, under pneumatic pressure or pressure exerted by a spring) must be used to couple any two vehicles in a combination of vehicles.

21. Combination of vehicles: Requirement that vehicles track in straight alignment.

All vehicles in a combination of vehicles and all devices used to couple vehicles in the combination must be designed, constructed and installed so that each towed vehicle follows the alignment of the towing vehicle, without shifting or swerving more than 3 inches to the right or left of that alignment when the combination is moving in a straight line on a level, smooth, paved highway during calm, dry weather conditions.

22. Combination of vehicles: Minimum requirement of power.

1. A combination of vehicles must, during calm, dry weather conditions, be capable of:

(a) Acceleration and operation on a level highway at speeds which are compatible with other traffic and the speed limit on the highway; and

(b) Maintaining a minimum speed of 20 miles per hour on any grade on which the combination is to be operated.

2. The operator of a towing vehicle used in a combination of vehicles shall maintain the engine and drive train of the towing vehicle to meet the requirements of this section.

23. Combination of vehicles: Emergency and safety equipment.

Every full sized truck or truck tractor used in a combination of vehicles must be equipped with at least the following emergency and safety equipment:

1. One fire extinguisher which meets "Classification B" of the National Fire Protection Association or the standards of Underwriter's Laboratories, Inc., 207 East Ohio Street, Chicago, Illinois, which were in effect on June 30, 1951.

2. One spare light bulb for every electrical lighting device used on the rear of the last vehicle in a combination of vehicles.

3. One spare fuse for each different kind and size of fuse used in every vehicle in the combination of vehicles. If the electrical system of any vehicle in the combination contains any devices for protection of electrical circuits from overloading, other than fuses and circuit breakers which can be reset, one spare of each such device must be kept as emergency and safety equipment.

4. Any flares, reflectors or red electrical lanterns which meet state or federal law or regulation.

5. During the seasons when it is likely that weather conditions may require the use of tire chains, one set of chains for each wheel to which power is applied.

24. Combination of vehicles: Restrictions on operation.

Every operator of a combination of vehicles shall comply with the following restrictions on its operation:

1. The maximum speed for a combination of vehicles is the lowest of the following speeds:

(a) The maximum speed posted on the highway being used;

(b) The speed set forth in a permit issued by the department for a particular highway or a section of a particular highway; or

(c) Fifty-five miles per hour.

2. An operator who uses correcting lenses to meet the requirements of subsection 3 of section 25 (relating to vision) shall wear properly prescribed glasses or contact lenses whenever he operates a combination of vehicles.

3. A distance of at least 500 feet must be maintained between any two combinations of vehicles operating at highway speeds, except when one combination of vehicles is passing another. If a substantial number of faster moving vehicles are traveling in the same direction as two combinations of vehicles, the distance between the two combinations must be increased to allow for safer passing.

4. Except when passing another vehicle traveling in the same direction, a combination of vehicles must not be driven on any highway if it cannot be operated at all times on the right-hand side of the centerline of a highway having one lane for

each direction of traffic or in the right-hand lane of a highway having two or more lanes for each direction of traffic.

5. If a combination of vehicles is disabled for any reason other than an accident, it must be parked off the highway or as far off the traveled portion of the highway as is possible.

6. If it is necessary to stop a combination of vehicles on the paved portion of a highway, the operator shall not leave the combination of vehicles unattended except to seek help after placing flares and markers in the required manner.

7. The operator of a combination of vehicles must place flares, reflectors or red electrical lanterns as warning devices if he stops the combination of vehicles on or adjacent to a highway during the hours of darkness.

Informational note: Federal regulations prohibit the use of certain warning devices if hazardous materials are being transported.

25. Combination of vehicles: Physical and mental requirements for operators.

1. Every person who is responsible for hiring, training, supervising or dispatching operators of combinations of vehicles shall ensure that the operators meet the provisions of this section and shall not knowingly allow any person who does not meet the requirements of this section to operate a combination of vehicles.

2. An operator must be in good mental health and physical condition, and he must not have:

(a) Lost a leg, arm, foot or hand;

(b) Any mental, nervous, organic or functional disease which is likely to interfere with his ability safely to operate a combination of vehicles; or

(c) Any impairment of a leg, arm, foot or hand (including missing fingers) or any other physiological defect or limitation which is likely to interfere with his ability safely to operate a combination of vehicles.

3. An operator must:

(a) Have a visual acuity of at least 20/40 (based on a Snellen test) in each eye, either with or without correcting lenses;

(b) Have a field of vision in the horizontal meridian which totals at least 140 degrees; and

(c) Be able to distinguish the colors red, green and yellow from all other colors.

4. An operator must, without the use of a hearing aid, have hearing for conversational tones which is at least 10/20 in his better ear.

5. An operator must not be addicted to any narcotic or other habit-forming drug and shall not excessively consume alcoholic beverages or liquors.

6. An operator must be at least 25 years of age and be competent, by experience or training, to operate a combination of vehicles safely.

7. An operator must be able to read, speak and understand the English language and be familiar with the laws and regulations pertaining to operation of combinations of vehicles in this state.

26. Combination of vehicles: Medical examination and certification of operators required.

1. A person shall not operate a combination of vehicles unless he has a current medical certification as described in this section.

2. A person shall not require or allow any other person to operate a combination of vehicles unless that person has a current medical certification as described in this section.

3. Except as provided in subsection 4, before operating a combination of vehicles a person must be examined by a licensed physician (either medical or osteopathic) and obtain his legible signature on the forms described in subsection 5. The physician must certify that the person examined meets the requirements of section 25.

4. To meet the requirements of subsection 3 of section 25, a person may have his vision examined by a licensed optometrist and obtain his legible signature on the forms described in subsection 5. The optometrist must certify that the person examined meets the requirements of subsection 3 of section 25.

5. The forms for medical examination and certification which are required by the driver's license division of the department of motor vehicles before it will issue a Class I driver's license must be used for the medical examination and certification required by this section.

6. For purposes of this section "current" means a medical examination and certification which was made:

(a) For persons under 50 years of age, within the previous 24 months; and

(b) For persons 50 years of age or older, within the previous 12 months.

27. Combination of vehicles: Medical certification; copy required at business and in possession of operator.

1. Every person who owns or manages a business which operates one or more combinations of vehicles shall keep at its principal place of business a copy of the current medical certificate of each person who operates a combination of vehicles for the business.

2. Every operator of a combination of vehicles shall have in his possession while he is operating the combination, a copy of his current medical certification.

3. For purposes of this section, "current" has the meaning ascribed to it in subsection 6 of section 26.

28. Combination of vehicles: Required insurance.

Every operator of a combination of vehicles operated in this state must procure and be covered by a policy of liability insurance which has limits for personal injury of at least \$100,000 per person and \$300,000 per accident and limits for damage to property of least \$50,000.

29. Combination of vehicles: Certification to Department.

Before operating a combination of vehicles on a highway of this state, the owner or operator of the combination must certify to the department, on a form provided by it, that all vehicles and equipment in the combination meet the requirements of and will be operated in compliance with this regulation.

30. Combination of vehicles: Additional restrictions or requirements.

1. The Department may impose additional restrictions and requirements not set forth in this regulation as a condition for the operation of combinations of vehicles over particular highways or sections of particular highways in this state.

2. The Department will revoke or amend a decision to allow the operation of a combination of vehicles on any highway of this state if changed circumstances or conditions render the operation of the combination of vehicles impracticable or unsafe.

31. Repeal of existing regulations.

All prior regulations of the Department of Transportation which deal with vehicles having a length of more than 70 feet and less than 105 feet are hereby repealed.

Informational note. The following statutes are included with the regulations of the Department of Transportation for your information:

NRS 484.739 Provides:

"1. No bus or motortruck may exceed a length of 40 feet.

2. Except as provided in subsections 3 and 6, no combination of vehicles, including any attachments thereto coupled together, may exceed a length of 70 feet.

3. The department of transportation, by regulation, shall provide for the operation of vehicle combinations in excess of 70 feet in length, but in no event exceeding 105 feet. The regulations must establish standards for the operation of such vehicles, which standards must be consistent with their safe operation upon the public highways and must include, but not be limited to, the following:

- (a) Types and number of vehicles to be permitted in combination;
- (b) Horsepower of a motortruck;
- (c) Operating speeds;
- (d) Braking ability; and
- (e) Driver qualifications.

The operation of such vehicles is not permitted on highways where, in the opinion of the department of transportation, their use would be inconsistent with the public safety due to narrow roadway, excessive grades, extreme curvature or vehicular congestion.

4. Vehicle combinations operated under the provisions of subsection 3 may, after obtaining a special permit issued at the discretion of, and in accordance with procedures established by, the Department of Transportation, carry vehicle loads not to exceed the values set forth in the following formula:

$(W=500[LN/(N-1)+12N + 36]$, wherein:)

(a) W equals the maximum load in pounds carried on any group of two or more consecutive axles;

(b) L equals the distance in feet between the extremes of any group of two or more consecutive axles; and

(c) N equals the number of axles in the group under consideration.

The distance between axles must be measured to the nearest foot. When a fraction is exactly one-half foot the next largest whole number must be used. Such permits may be restricted in such manner as the department of transportation deems necessary and may, at the option of the department be canceled without notice. No such permits may be issued for operation on any highway where that operation would prevent the state from receiving federal funds for highway purposes.

5. Upon approving an application for a permit to operate vehicle combinations under the provisions of subsection 4, the department of transportation shall withhold issuance of the permit until such time as the applicant has furnished proof of compliance with the provisions of NRS 706.531.

6. The load upon any motor vehicle operated alone, or the load upon any combination of vehicles, must not extend beyond the front or the rear of the vehicle or combination of vehicles for a distance of more than 10 feet, or a total of 10 feet both to the front or the rear, and no combination of vehicles and load thereon may exceed a total of 75 feet without

having secured a permit pursuant to subsection 3 or to NRS 484.737. The provisions of this subsection do not apply to the booms or masts of shovels, cranes or water well drilling and servicing equipment carried upon a vehicle if:

(a) The booms or masts do not extend by a distance greater than two-thirds of the wheelbase beyond the front tires of the vehicle.

(b) The projecting structure or attachments thereto are securely held in place to prevent dropping or swaying.

(c) No part of the structure which extends beyond the front tires is less than 7 feet from the roadway.

(d) The driver's vision is not impaired by the projecting or supporting structure.

7. Lights and other warning devices which are required to be mounted on a vehicle under this chapter must not be included in determining the length of a vehicle or combination of vehicles and the load thereon.

8. This section does not apply to vehicles used by a public utility for the transportation of poles."

Note: Except as otherwise noted in NRS 706.531 below, department means Department of Motor Vehicles.

NRS 706.531 Provides:

"1. After the department of transportation has approved an application for a permit under the provisions of subsection 4 of NRS 484.739, and prior to issuance, the department shall issue special identifying devices for vehicle combinations to

be operated under the permit, which must be carried and displayed on any vehicle combination operating under the permit in such manner as the department determines the devices issued may be transferred from one vehicle combination to another, under such conditions as the department may by regulation prescribe, but must not be transferred from one person or operator to another without prior approval of the department of transportation. Such devices may be used only on motor vehicles regularly licensed under the provisions of NRS 706.506 or 706.516.

2. The annual fee for each vehicle combination identifying device or devices is \$20 for each 1,000 pounds or fraction thereof of gross vehicle combination weight in excess of 77,000 pounds, which fee must be reduced one-twelfth for each month that has elapsed since the beginning of each calendar year, rounded to the nearest dollar, but must not be less than \$50. The fee must be paid in addition to all other fees required under the provisions of this chapter.

3. Any person operating a vehicle combination licensed pursuant to the provisions of subsection 2, who is apprehended operating a vehicle combination in excess of the gross vehicle load for which the fee in subsection 2 has been paid is, in addition to all other penalties provided by law, liable for the difference between the fee for the load being carried and the fee paid, for the full licensing period.

4. Any person apprehended operating a vehicle combination without having complied with the provisions of NRS 484.739 and in this section is, in addition to all other penalties provided by law, liable for the payment of the fee which would be due under the provisions of subsection 2 for the balance of the calendar year for the gross load being carried at the time of apprehension."

PROCEDURE FOR DETERMINING MAXIMUM GROSS WEIGHT

$$W = 500 \left[\left(\frac{LN}{N-1} \right) \neq 12 N \neq 36 \right]$$

- W = maximum load in pounds carried on any group of two or more consecutive axles.
 L = distance in feet between the extremes of any group of two or more consecutive axles.
 N = number of axles in the group under consideration.

1. No single axles will be allowed more than 20,000 pounds.
- *2. No set of tandem axles will be allowed more than 34,000 pounds (axles are considered to be tandem when two or more consecutive axles whose center are more than 40 inches but not more than 96 inches apart).
3. No internal group of axles shall have a gross load more than shown by the table developed by using the formula

$$W = 500 \left[\left(\frac{LN}{N-1} \right) \neq 12 N \neq 36 \right]$$

4. The above sub-items will be totaled and compared with the total gross calculated by the formula. Whichever value is the smaller, will be the gross load permitted.

Distance in ft. between the extremes of any group of 2 or more consecutive axles.

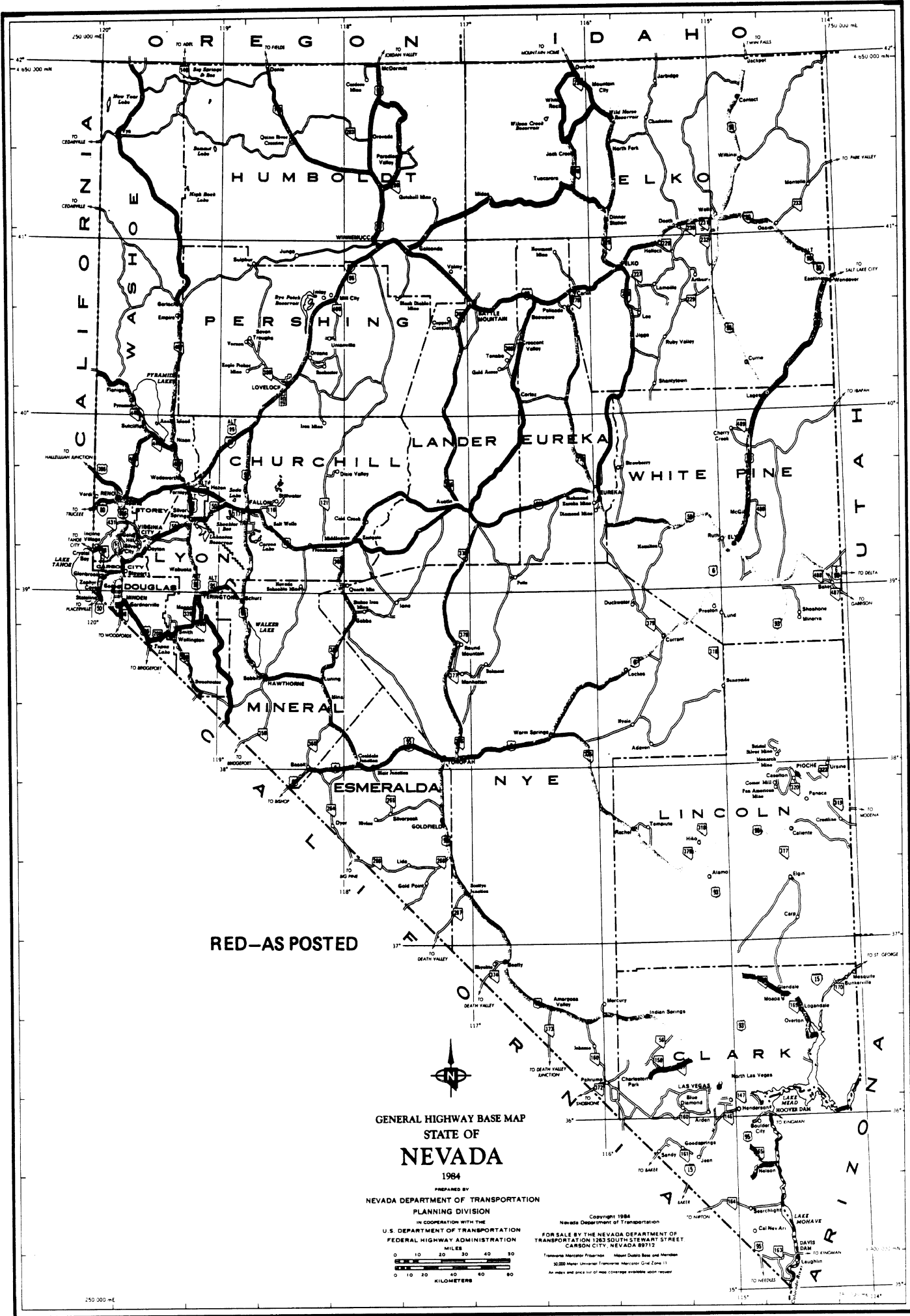
Maximum load in pounds carried on any group of 2 or more consecutive axles.

	2* Axles	3 Axles	4 Axles	5 Axles	6 Axles	7 Axles	8 Axles	9 Axles
4	34,000							
5	34,000							
6	34,000							
7	34,000							
8	34,000	42,000						
9	39,000	43,000						
10	40,000	43,500						
11		44,500						
12		45,000	50,000					
13		46,000	50,500					
14		46,500	51,500					
15		47,500	52,000					

	2* Axles	3 Axles	4 Axles	5 Axles	6 Axles	7 Axles	8 Axles	9 Axles
16		48,000	52,500	58,000				
17		49,000	53,500	58,500				
18		49,500	54,000	59,500				
19		50,500	54,500	60,000				
20		51,000	55,500	60,500	66,000			
21		52,000	56,000	61,000	66,500			
22		52,500	56,500	62,000	67,000			
23		53,500	57,500	62,500	68,000			
24		54,000	58,000	63,000	68,500	74,000		
25		55,000	58,500	63,500	69,000	74,500		
26		55,500	59,500	64,500	69,500	75,000		
27		56,500	60,000	65,000	70,000	76,000		
28		57,000	60,500	65,500	71,000	76,500	82,000	
29		58,000	61,500	66,000	71,500	77,000	82,500	
30		58,500	62,000	67,000	72,000	77,500	83,000	
31		59,500	62,500	67,500	72,500	78,000	83,500	
32		60,000	63,500	68,000	73,000	78,500	84,500	90,000
33			64,000	68,500	74,000	79,500	85,000	90,500
34			64,500	69,500	74,500	80,000	85,500	91,000
35			65,500	70,000	75,000	80,500	86,000	91,500
36			66,000	70,500	75,500	81,000	86,500	92,500
37			66,500	71,000	76,000	81,500	87,000	93,000
38			67,500	72,000	77,000	82,000	87,500	93,500
39			68,000	72,500	77,500	83,000	88,500	94,000
40			68,500	73,000	78,000	83,500	89,000	94,500
41			69,500	73,500	78,500	84,000	89,500	95,000
42			70,000	74,500	79,000	84,500	90,000	95,500
43			70,500	75,000	80,000	85,000	90,500	96,000
44			71,500	75,500	80,500	85,500	91,000	97,000
45			72,000	76,000	81,000	86,500	91,500	97,500
46			72,500	77,000	81,500	87,000	92,500	98,000
47			73,500	77,500	82,000	87,500	93,000	98,500
48			74,000	78,000	83,000	88,000	93,500	99,000
49			74,500	78,500	83,500	88,500	94,000	99,500
50			75,500	79,500	84,000	89,000	94,500	100,000
51			76,000	80,000	84,500	90,000	95,000	100,500
52			76,500	80,500	85,000	90,500	95,500	101,500
53			77,500	81,000	86,000	91,000	96,500	102,000
54			78,000	82,000	86,500	91,500	97,000	102,500
55			78,500	82,500	87,000	92,000	97,500	103,000

	2*	3	4	5	6	7	8	9
	Axles	Axles	Axles	Axles	Axles	Axles	Axles	Axles
56			79,500	83,000	87,500	92,500	98,000	103,500
57			80,000	83,500	88,000	93,500	98,500	104,000
58				84,500	89,000	94,000	99,000	104,500
59				85,000	89,500	94,500	99,500	105,000
60				85,500	90,000	95,000	100,500	106,000
61				86,000	90,500	95,500	101,000	106,500
62				87,000	91,000	96,000	101,500	107,000
63				87,500	92,000	97,000	102,000	107,500
64				88,000	92,500	97,500	102,500	108,000
65				88,500	93,000	98,000	103,000	108,500
66				89,500	93,500	98,500	103,500	109,000
67				90,000	94,000	99,000	104,500	109,500
68				90,500	95,000	99,500	105,000	110,500
69				91,000	95,500	100,500	105,500	111,000
70				92,000	96,000	101,000	106,000	111,500
71				92,500	96,500	101,500	106,500	112,000
72				93,000	97,000	102,000	107,000	112,500
73				93,500	98,000	102,500	107,500	113,000
74				94,500	98,500	103,000	108,500	113,500
75				95,000	99,000	104,000	109,000	114,000
76				95,500	99,500	104,500	109,500	115,000
77				96,000	100,000	105,000	110,000	115,500
78				97,000	101,000	105,500	110,500	116,000
79				97,500	101,500	106,000	111,000	116,500
80				98,000	102,000	106,500	111,500	117,000
81				98,500	102,500	107,500	112,500	117,500
82				99,500	103,000	108,000	113,000	118,000
83				100,000	104,000	108,500	113,500	118,500
84					104,500	109,000	114,000	119,500
85					105,000	109,500	114,500	120,000
86					105,500	110,000	115,000	120,500
87					106,000	111,000	115,500	121,000
88					107,000	111,500	116,500	121,500
89					107,500	112,000	117,000	122,000
90					108,000	112,500	117,500	122,500
91					108,500	113,000	118,000	123,000
92					109,000	113,500	118,500	124,000
93					110,000	114,500	119,000	124,500
94					110,500	115,000	119,500	125,000
95					111,000	115,500	120,500	125,500

	2* Axles	3 Axles	4 Axles	5 Axles	6 Axles	7 Axles	8 Axles	9 Axle
96					111,500	116,000	121,000	126,000
97					112,000	116,500	121,500	126,500
98					113,000	117,000	122,000	127,000
99					113,500	118,000	122,500	127,500
100					114,000	118,500	123,000	128,500
101					114,500	119,000	123,500	129,000



RED-AS POSTED

GENERAL HIGHWAY BASE MAP
STATE OF
NEVADA
1984

PREPARED BY
NEVADA DEPARTMENT OF TRANSPORTATION
PLANNING DIVISION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION



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Nevada Department of Transportation
FOR SALE BY THE NEVADA DEPARTMENT OF
TRANSPORTATION 1283 SOUTH STEWART STREET
CARSON CITY, NEVADA 89712
Transportation Information - Mount Diablo Base and Meridian
30,000 Meter Universal Transverse Mercator Grid Zone 11
An index and price list of map coverage available upon request

APPENDIX F

NORTH DAKOTA

North Dakota vehicle size and weight guide

Multiple vehicle combinations



NORTH DAKOTA VEHICLE SIZE AND WEIGHT GUIDE
State Highway Patrol
NDHP 906 SFN 3488 (Rev. 7-87)

I. Legal Width

A. 8 feet 6 inches on all highways.

B. Exceptions:

1. Construction and building contractors' equipment and vehicles used to move such equipment which does not exceed ten feet in width when being moved by contractors or resident carriers.
2. Implements of husbandry being moved by resident farmers, ranchers, or dealers between sunrise and sunset. Furthermore, the limitation shall not apply to implements of husbandry being moved between sunset and sunrise by resident farmers, ranchers, or dealers on public state, county, or township highway systems other than interstate highway systems.
3. Hay in the stack being moved along the extreme right edge of a roadway between sunrise and sunset by someone other than a commercial mover. Commercial haystack movers, overwidth self-propelled fertilizer spreaders and hay grinders if the owners have seasonal permits from this office.
4. All vehicles exempt from width limitations are subject to safety rules adopted by the Highway Patrol.

II. Legal Height

A. 13 feet 6 inches whether loaded or unloaded, except that such height limitation shall not affect any present structure such as bridges and underpasses that are not 13 feet 6 inches in height.

B. Exception:

1. Implements of husbandry may not exceed 15 feet 6 inches in height when being moved by resident farmers, ranchers, or dealers between sunrise and sunset provided the trip is not more than 40 miles, and is not on an interstate highway.

III. Legal Length

A. A single unit vehicle with two or more axles including the load thereon shall not exceed a length of 50 feet.

B. A combination of two units including the load thereon shall not exceed a length of 75 feet.

C. A combination of three or four units including the load thereon shall not exceed a length of 75 feet subject to safety rules adopted by the Highway Commissioner.

D. A combination of two, three, or four units including the load thereon may exceed 75 feet in length but shall not exceed 110 feet in length when traveling on four-lane divided highways and those highways designated by the Highway Commissioner and local authorities as to the highways under their respective jurisdictions. All such combinations are subject to safety rules adopted by the Highway Commissioner.

E. The length of a trailer or semitrailer may not exceed 53 feet except that trailers and semitrailers titled and registered in North Dakota prior to July 1, 1987, may not exceed a length of 60 feet.

F. Exceptions to Length Limitations:

1. Building moving equipment.
2. Emergency tow trucks towing disabled lawful combinations of vehicles to a nearby repair facility.
3. Vehicles and equipment owned and operated by the armed forces of the United States or the national guard of this state.
4. Structural material of telephone, power, and telegraph companies.
5. Truck-mounted haystack moving equipment, provided such equipment does not exceed a length of 56 feet.
6. A truck-tractor and semitrailer or truck-tractor, semitrailer and trailer when operated on interstate highway system or parts of the federal aid primary system designated by the Highway Commissioner.



IV. Mobile Homes

- A. A mobile home permit is not required unless the mobile home itself exceeds 8 feet 6 inches in width or 13 feet 6 inches in height or 75 feet in overall length including the towing vehicle.

V. Legal Weight Limitations

A. Gross Vehicle Weight

- 1. The gross vehicle weight of any vehicle or combination of vehicles is determined by the following weight formula of

$$W = 500\left(\frac{LN}{N-1} + 12N + 36\right)$$

where on the interstate highway system W equals maximum weight in pounds carried on any group of two or more axles; L equals distance in feet between the extremes of any group of two or more consecutive axles; and N equals number of axles in the group under consideration, except that two consecutive sets of tandem axles may carry a gross load of 34,000 pounds each, providing the overall distance between the first and last axles of the consecutive sets of tandem axles is at least 36 feet;

and where on highways other than the interstate system W equals the maximum gross weight in pounds on any vehicle or combination of vehicles; L equals distance in feet between the two extreme axles of any vehicle or combination of vehicles; and N equals the number of axles of any vehicle or combination of vehicles under consideration.

- 2. The maximum gross vehicle weight on state highways is 105,500 pounds unless otherwise posted. On the interstate highway system the maximum gross vehicle weight is 80,000 pounds. On all other highways the maximum gross vehicle weight is 80,000 pounds unless designated for more, not to exceed 105,500 pounds.

B. Axle Weight

- 1. No single axle shall carry a gross weight in excess of 20,000 pounds. Axles spaced 40 inches or less apart are considered one axle. Axles spaced eight (8) feet apart or over are considered as individual axles. The gross weight of two individual axles may be restricted by the weight formula except that on highways other than the interstate, two axles spaced eight (8) feet apart or more may have a combined gross weight not to exceed 40,000 pounds. Spacing between axles shall be measured from axle center to axle center.
- 2. Axles spaced over 40 inches apart and less than eight (8) feet apart shall not carry a gross weight in excess of 17,000 pounds per axle. The gross weight of three or more axles in a grouping is determined by the measurement between the extreme axle centers except that on highways other than the interstate, groupings of three or more axles may have a gross weight not to exceed 48,000 pounds.
- 3. During the spring breakup season or on otherwise posted highways, reductions in the above axle weights may be specified. Axle weights may also be reduced by the Bridge Load Limitations Map.

C. Wheel Weight

- 1. The weight in pounds on any one wheel shall not exceed one-half the allowable axle weight. Dual tires are considered one wheel.

D. Tire Weight

- 1. The weight per inch width of tire shall not exceed 550 pounds. The width of tire for solid tires shall be the rim width; for pneumatic tires, the manufacturer's width.

PERMITS FOR OVERSIZE AND OVERWEIGHT VEHICLES AND LOADS, AND OTHER SIZE AND WEIGHT INFORMATION, CAN BE OBTAINED BY CALLING 701-224-2621 OR WRITING TO

North Dakota Highway Patrol
 Motor Carrier Division
 Capitol Grounds
 Bismarck, ND 58505

Attachments: Weight Limitations Chart
 Weight Limitations Map
 Designated Highway Map

**CHAPTER 37-06-04
COMBINATIONS OF TWO, THREE, OR FOUR VEHICLES -
OVER SEVENTY-FIVE FEET**

Section	
37-06-04-01	Authorized Combinations of Vehicles Exceeding Seventy-Five Feet
37-06-04-02	Routes of Operation
37-06-04-03	Minimum Power Requirement
37-06-04-04	Weight Distribution by Trailer Weight
37-06-04-05	Signing Requirement
37-06-04-06	Weather Restrictions

37-06-04-01. Authorized combinations of vehicles exceeding seventy-five feet. The following combinations of vehicles exceeding seventy-five feet [22.86 meters] in overall length may be operated on those highways described in section 37-06-04-02:

1. Any combination of two units.
2. A truck-tractor and semitrailer may draw a trailer or semitrailer converted to a trailer by use of a converter dolly and fifth wheel. This combination of vehicles is commonly referred to as a double bottom.
3. A truck-tractor and semitrailer may draw a semitrailer. This combination of vehicles is commonly referred to as a B-train.
4. A truck properly registered and designed to legally carry a gross weight of more than twenty-four thousand pounds [10886.22 kilograms] may draw two trailers or semitrailers provided both trailers or semitrailers are designed to legally carry gross weights of more than twenty-four thousand pounds [10886.22 kilograms], provided both trailers or semitrailers are equipped with safety chains and brakes adequate to control the movement of and to stop and hold such trailers or semitrailers. The brakes shall be designed as to be applied by the driver of the truck from the cab. The brakes shall be designed and connected so that in case of an accidental breakaway the brakes shall be automatically applied on the trailer or semitrailer that breaks loose.
5. A combination of four units consisting of a truck-tractor, semitrailer, and two trailers. A semitrailer used with a converter dolly is considered to be a trailer. This

combination of vehicles is commonly referred to as triple trailers or a triple bottom.

History: Effective October 1, 1983; amended effective December 1, 1985.
General Authority: NDCC 39-12-04
Law Implemented: NDCC 39-12-04

37-06-04-02. **Routes of operation.** Authorized combinations of vehicles may be operated on all four-lane divided state highways and on those state highways designated by the commissioner as shown on special highway maps available at the highway patrol and highway department headquarters in Bismarck and at the respective district offices in Williston, Minot, Devils Lake, Grand Forks, Fargo, Valley City, Jamestown, and Dickinson. Authorized combinations of vehicles may travel off the designated system a distance of ten miles [16.09 kilometers] on a state highway for the purpose of procuring food, fuel, repairs, obtaining sleeping quarters (rest), or going to a terminal or points of loading or unloading.

History: Effective October 1, 1983; amended effective November 1, 1987.
General Authority: NDCC 39-12-04
Law Implemented: NDCC 39-12-04

37-06-04-03. **Minimum power requirement.** The power unit shall have adequate power and traction to maintain a minimum speed of fifteen miles [24.14 kilometers] per hour on all grades.

History: Effective October 1, 1983.
General Authority: NDCC 39-12-04
Law Implemented: NDCC 39-12-04

37-06-04-04. **Weight distribution by trailer weight.**

1. In any three-unit combination, the lighter trailer must always be operated as the rear trailer except when the gross weight differential with the other trailer does not exceed five thousand pounds [2267.96 kilograms].
2. In any four-unit combination, the lightest trailer must always be operated as the rear trailer. The other two trailers must be arranged as provided in subsection 1.

History: Effective October 1, 1983.
General Authority: NDCC 39-12-04
Law Implemented: NDCC 39-12-04

37-06-04-05. **Signing requirement.** The last trailer in any combination must have an "OVERLENGTH" sign mounted on the rear. The "OVERLENGTH" sign must be a minimum twelve inches [30.48 centimeters] in

height and sixty inches [152.4 centimeters] in length. The lettering must be eight inches [20.32 centimeters] in height with one-inch brush strokes. The letters must be black on yellow background. A "LONG LOAD" sign may be used in lieu of the overlength sign. Beginning January 1, 1985, the "LONG LOAD" sign is mandatory.

History: Effective October 1, 1983.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

37-06-04-06. Weather restrictions. Movements of combinations of vehicles authorized for operation under this chapter are prohibited:

1. When road surfaces, due to ice, snow, slush, or frost present a slippery condition which may be hazardous to the operation of the unit or to other highway users;
2. When wind or other conditions may cause the unit or any part thereof to swerve, to whip, to sway, or fail to follow substantially in the path of the towing vehicle; or
3. When visibility is reduced due to snow, ice, sleet, fog, mist, rain, dust, or smoke.

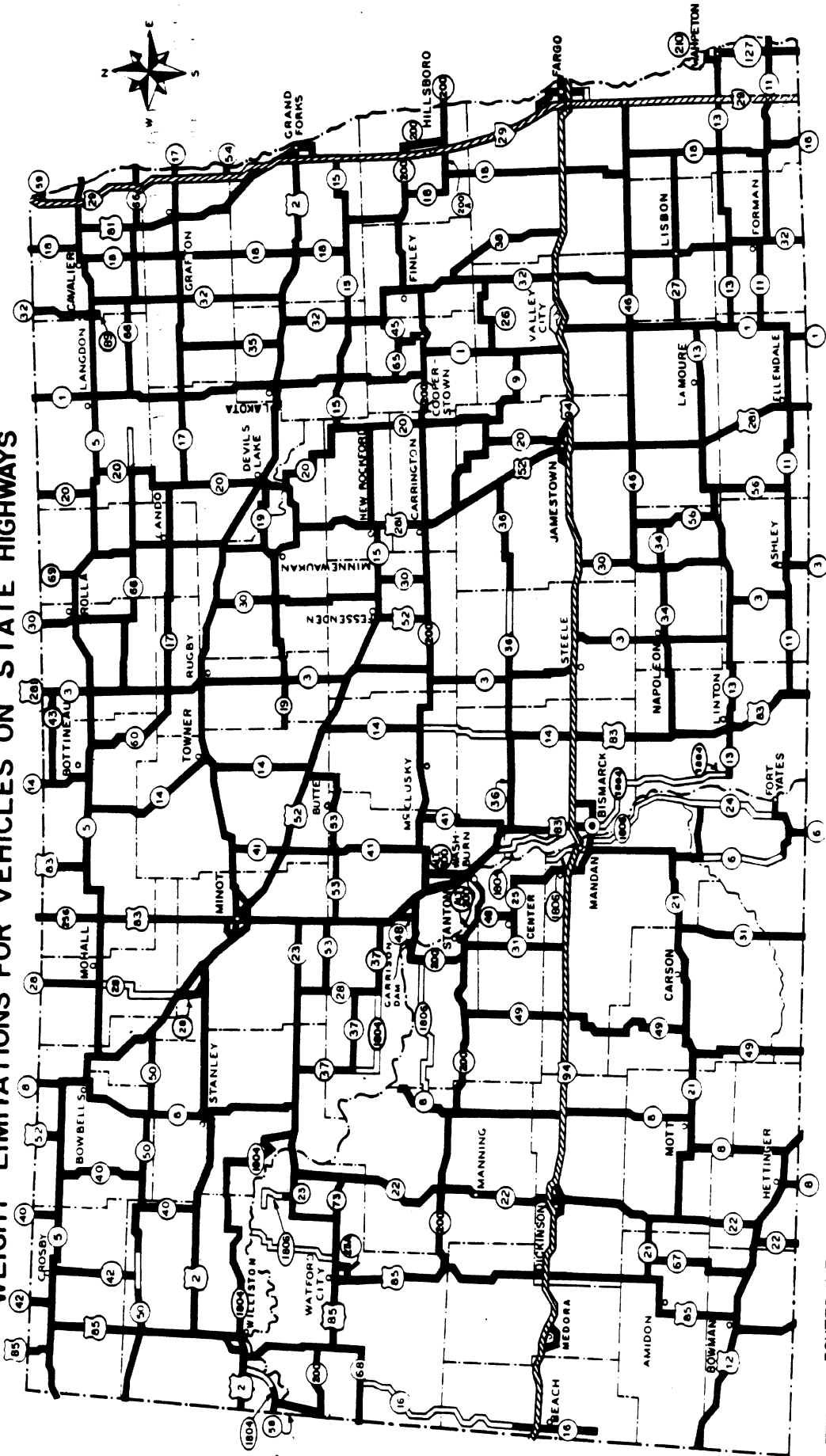
The North Dakota highway patrol may restrict or prohibit operations during periods when in its judgment traffic, weather, or other safety conditions make travel unsafe.

History: Effective October 1, 1983.

General Authority: NDCC 39-12-04

Law Implemented: NDCC 39-12-04

NORTH DAKOTA STATE HIGHWAY SYSTEM WEIGHT LIMITATIONS FOR VEHICLES ON STATE HIGHWAYS

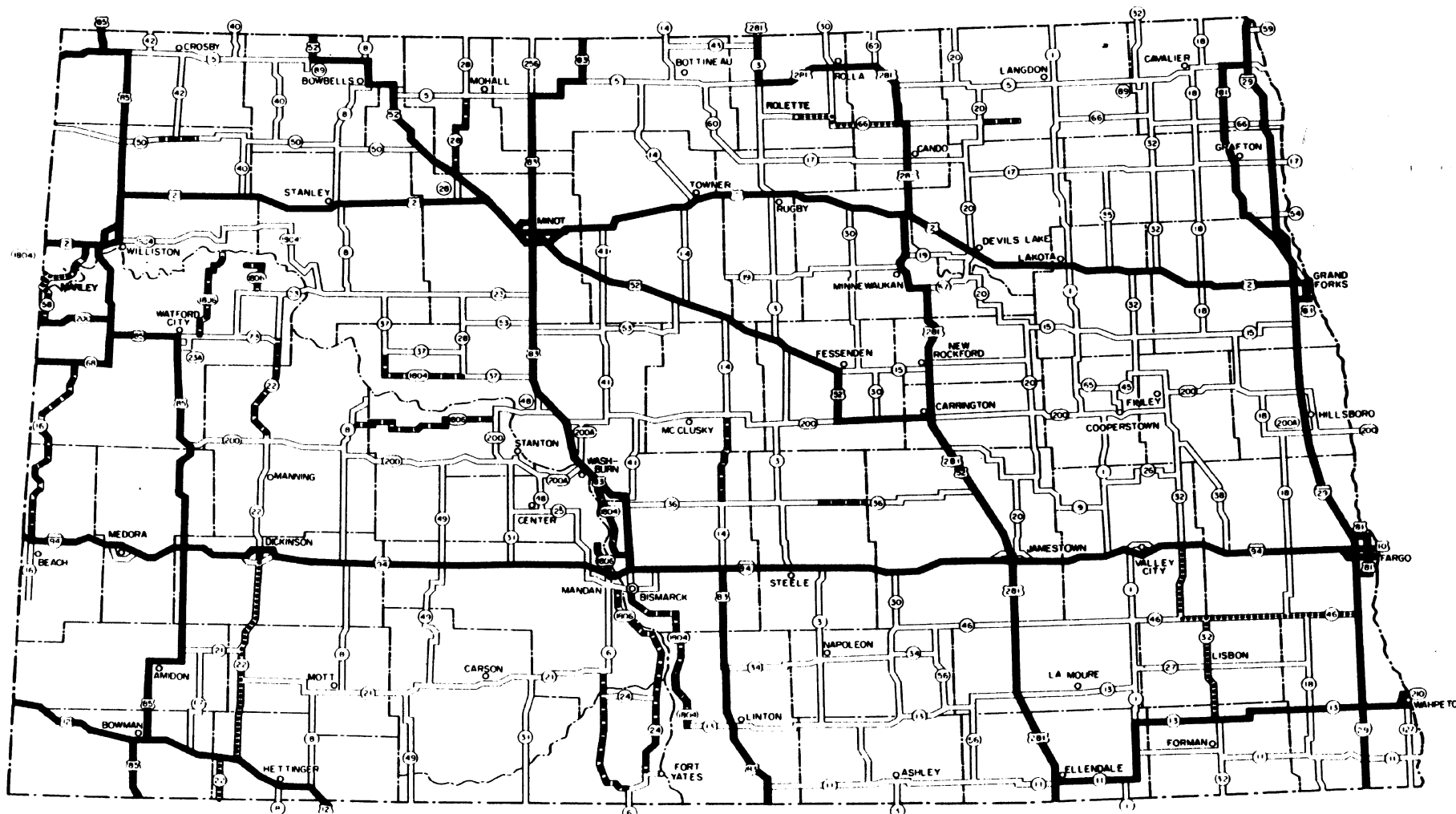


- A - ROUTES WITH GROSS VEHICLE WEIGHT NOT TO EXCEED 105,500 LBS.
- B - POSTED ROUTES WITH GROSS VEHICLE WEIGHT NOT TO EXCEED 80,000 LBS.
- C - INTERSTATE ROUTES WITH GROSS VEHICLE WEIGHT NOT TO EXCEED 80,000 LBS.

The gross Vehicle Weight for all vehicles and vehicle combinations is determined by the WEIGHT LIMITATION CHART, NDHP FORM 921

APPROVED: *[Signature]*
STATE HIGHWAY COMMISSIONER
DATE 4-20-87

DESIGNATED NORTH DAKOTA STATE HIGHWAYS FOR VEHICLE COMBINATIONS EXCEEDING 75 FEET IN OVERALL LENGTH



06

————— Indicates highways posted where vehicle combinations may not exceed 75 feet in overall length.

===== Indicates designated highways where vehicle combinations as provided for in Chapter 37-08-04, NDAC, may exceed 75 feet but not exceed 88 feet in overall length.

————— or - - - - - Indicates designated highways where vehicle combinations as provided for in Chapter 37-08-04, NDAC, may exceed 75 feet but not exceed 110 feet in overall length.

————— Indicates designated highways where the following vehicle combinations are exempt from overall length limitations as provided for in the Surface Transportation and Assistance Act of 1982: 1. A truck-tractor and semitrailer. 2. Truck-tractor, semitrailer and trailer, or semitrailer converted to a trailer by use of a converter dolly and fifth wheel.

Vehicle combinations authorized to exceed 75 feet in overall length may travel a distance of 10 miles on state highways off the designated routes.

APPROVED:
Walter N. Ziel 7-3-87
STATE HIGHWAY COMMISSIONER DATE

CATEGORY VM
SUBJECT 2-1.3

APPENDIX G

OKLAHOMA

Rules and regulations relative to special combination vehicles

SECTION II

A. General

1. A special combination vehicle [SC vehicle] shall consist of a truck-tractor semi-trailer combination towing two complete trailers or semi-trailers. No semi-trailer or trailer used in such a combination shall have a length greater than twenty-nine (29) feet nor shall a SC vehicle exceed the weight limitations imposed by Sections 14-109 and 14-116 of Title 47 of the Oklahoma Statutes.

2. No person shall operate or permit the operation of a SC vehicle within Oklahoma without a current Special Combination Vehicle Permit [SC Vehicle Permit] for the vehicle issued by the Department. Such permits may only be used for operation upon Federal Aid Interstate Highway or four-lane divided Federal Aid Primary Highways and for access or egress between points of origin or destination. Egress or access shall not exceed three (3) statute miles.

3. A copy of a valid SC Vehicle Permit shall be carried at all times in the authorized vehicle.

4. Any operator that disposes of or deletes a SC vehicle from operation shall return the issued permit for that particular vehicle to the Department.

5. Any notice required by law or by the rules of the Department to be served upon any holder of a SC Vehicle Permit shall be served personally or mailed to the last known address of such person as reflected by the records on file with the Department. Notice is deemed complete ten (10) days

SECTION III

REGULATIONS FOR ALL PERMIT HOLDERS AND OPERATORS IN THE STATE OF OKLAHOMA

A. Equipment

1. Power

All truck-tractors shall be powered to provide adequate acceleration and hill climbing ability under normal operating conditions, and to operate on level grades at speeds compatible with other traffic. The ability to maintain a minimum speed of 40 MPH under normal operating conditions on any grade over which the combination is operated is required.

2. Traction

All truck-tractors shall have adequate traction to maintain a minimum speed of 20 MPH under normal operating conditions on any grade over which the combination is operated and to be able to resume a speed of 20 MPH after stopping on any such grade and, except in extreme road or weather conditions, to negotiate at any speed all grades encountered.

3. Tires

Stiff sidewall tires are recommended. Adequate tread and safe condition is required.

4. Fifth Wheel

A heavy duty fifth wheel is required. All fifth wheels must be clean and lubricated with a light duty grease at all times while operating within this state.

5. Pick-up Plates

Pick-up plates must be of equal strength to the fifth wheel.

6. King Pin

The king pin must be of a solid type and permanently fastened. Screw out or folding type king pins are prohibited

7. Pintle Hook and Eye

All hitch connections must be of a no-slack type, preferably air actuated ram. Air actuated hitches which are isolated from the primary air transmission system are recommended.

8. Drawbar

The length of the drawbars (a beam which serves as a point of connection for some trailers) shall be consistent with the clearance required between trailers for turning and backing maneuvers.

9. Axles

Axles must be those designed for the width of the body.

10. Brakes

All braking systems must comply with state and federal requirements. In addition, fast air transmission and release valves must be provided on all trailers, semi-trailers and converter dolly axles. A brake force limiting valve, sometimes called a "slippery road" valve may be provided on the steering axle. Indiscriminate use of engine retarder brakes is prohibited.

11. Mud Flaps or Splash Guards

As required by state law.

B. Operational Procedures

1. A minimum distance of 500 feet shall be maintained between SC vehicles and other vehicles except when overtaking and passing. Except when passing another vehicle in the same direction, or when emergency conditions exist, a SC vehicle shall remain at all times in the right hand outside lane.

2. In the event a SC vehicle is disabled for any reason other than an accident, it shall be parked as far off the travelled roadway as possible and proper warning devices displayed as required by state law.

3. Extreme caution in the operation of a SC vehicle shall be exercised when hazardous conditions such as those caused by snow, wind, ice, sleet, fog, mist, rain, dust or smoke adversely affect control, visibility or traction. Speed shall be reduced when such conditions exist. When conditions become sufficiently dangerous, the company or driver shall discontinue operations and shall not resume until the vehicle can be safely operated. The State may restrict or prohibit operations during periods when in the State's judgment, traffic, weather, or other safety conditions make such operations unsafe or inadvisable.

4. Transportation by SC vehicles of Class A and B explosives, Class A poisons and Class 1, 2 and 3 radioactive material or any other material deemed to be unduly hazardous by the Department is prohibited. This prohibition does not

include the transportation of gasoline, fuel, oil, or heating oil, or such petroleum products.

C. Stability

All multiple trailer combinations must be stable at all times during normal braking and normal operation. A multiple trailer combination when traveling on a level, smooth, paved surface must follow in the path of the towing vehicle without shifting or swerving more than three inches to either side when the towing vehicle is moving in a straight line.

D. Weight

1. The total weight on any single axle shall not exceed 20,000 pounds. The total axle weight on any tandem axle shall not exceed 34,000 pounds. The total weight on any group of two or more consecutive axles shall not exceed the amounts shown in Section 14-109 of Title 47, Oklahoma Statutes. Gross combination weight shall not exceed 90,000 pounds.

2. All special combination vehicles must be properly registered. An Interstate (I.S.) Permit to operate on the interstate system in Oklahoma is required if registered above 80,000 pounds.

E. Load Sequence

The heaviest trailer or semi-trailer should be placed in front and the lightest at the rear. In no case shall any trailer or semi-trailer be placed ahead of another trailer or semi-trailer which carries an appreciably heavier load. An empty trailer or semi-trailer will not precede a loaded trailer or semi-trailer.

APPENDIX H

OREGON

Oregon administrative rules – highway division

OREGON ADMINISTRATIVE RULES
CHAPTER 734, DIVISION 73 — HIGHWAY DIVISION

DIVISION 73

**ISSUANCE OF 14-FOOT HIGH LOAD
PERMITS FOR VEHICLES CARRYING
MULTIPLE ITEM COMMODITIES**

Standards for Overheight Permits — Issuance of 14-Foot High Load Permits for Vehicles Carrying Multiple Item Commodities

734-73-005 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

Permissible Loads

734-73-010 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

Non-Permissible Loads

734-73-015 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

Equipment

734-73-020 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

Weight Allowances

734-73-025 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

Permit Application

734-73-030 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

Approved Routes

734-73-035 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

Permittee Liability

734-73-040 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

Permit Cancellation

734-73-045 [1 OTC 10-1978, f. & ef. 11-30-78;
Repealed by 2HD 3-1982, f. & ef. 8-30-82]

**102"-Wide Commercial Vehicles
Truck Tractor-Semitrailer and
Truck Tractor-Semitrailer-Trailer
Combinations Not Subject to
Overall Length Restrictions**

Scope

734-73-050 OAR 734-73-050 to 734-73-075 apply to the operation, over state highways, of certain vehicles and vehicle combinations described in Section 411 and 416 of Public Law 97-424, also known as the "Surface Transportation Assistance Act of 1982", hereinafter referred to as STAA 1982. Section 411 of STAA 1982, 49 USC 2311, relates to the lengths of truck tractor-semitrailer combinations and truck tractor-semitrailer-trailer combinations. Section 416 of STAA 1982, 49 USC 2316, relates to 102-inch-wide vehicles.

Stat. Auth.: ORS Ch. 483
Hist.: 2HD 20-1983, f. & ef. 9-23-83

Vehicle Width

734-73-055 (1) Commercial vehicles, which for purposes of this rule consist only of buses, trucks, truck tractors, semitrailers and trailers engaged in commerce principally to transport passengers or cargo, may operate with a width limitation of 102 inches.

(2) In addition to the maximum width specified in section (1) of this rule, the vehicles are allowed additional width, pursuant to the provisions of ORS 483.504(1), to accommodate necessary safety accessories.

(3) State highway routes approved for the movement of 102-inch-wide vehicles may consist of all highways under the jurisdiction of the Department of Transportation.

Stat. Auth.: ORS Ch. 483
Hist.: 2HD 20-1983, f. & ef. 9-23-83

Truck Tractor-Semitrailer Combinations

734-73-060 (1) The length of a semitrailer in a truck tractor-semitrailer combination shall not exceed 48 feet. The overall length of the combination is not restricted.

(2) The length of any load carried on the semitrailer of a truck tractor-semitrailer combination as described in section (1) of this rule, shall not exceed the semitrailer length by more than five feet and the load shall not overhang the rear of the semitrailer by more than five feet.

(3) State highway routes approved for the movement of combinations of vehicles described in section (1) of this rule, shall consist of the state highways listed in Exhibit 1, hereby made a part of this rule.

Stat. Auth.: ORS Ch. 483
Hist.: 2HD 20-1983, f. & ef. 9-23-83

Truck Tractor-Semitrailer-Trailer Combinations

734-73-065 (1) The maximum length of any semitrailer or trailer in a truck tractor-semitrailer-trailer combination shall not exceed 40 feet.

(2) The overall length of the combination is not restricted; however, the maximum dimension when measured from the front of the first semitrailer to the rear of the second semitrailer or trailer shall not exceed those dimensions set forth in section (3) of this rule.

(3)(a) Provided the distance from the front of the first semitrailer to the rear of the second semitrailer or trailer does not exceed 60 feet, the combination of vehicles may operate over those state highways listed in Exhibit 2, hereby made a part of this rule.

(b) If the distance from the front of the first semitrailer to the rear of the second semitrailer or trailer is more than 60 feet but does not exceed 68 feet, the combination of vehicles may operate over those state highways listed in Exhibit 1.

(c) In no instance, shall the distance from the front of the first semitrailer to the rear of the second semitrailer or trailer exceed 68 feet.

(d) The length of any load carried on the semitrailer or trailer of a truck tractor-semitrailer-trailer combination as described in this rule shall not exceed the semitrailer or trailer length by more than five feet and the load shall not overhang the rear of the semitrailer or trailer by more than five feet.

Stat. Auth.: ORS Ch. 483
Hist.: 2HD 20-1983, f. & ef. 9-23-83

Revisions to Approved Routes

734-73-070 (1) The State Highway Engineer is hereby authorized to add by written order additional state highways or sections thereof to those listed on Exhibits 1 and 2. In taking such action, the State Highway Engineer:

(a) Will determine if the public interests will be served:

**OREGON ADMINISTRATIVE RULES
CHAPTER 734, DIVISION 74 — HIGHWAY DIVISION**

DIVISION 74

**THE ISSUANCE OF PERMITS FOR
COMBINATIONS OF VEHICLES
HAVING GROSS WEIGHTS IN
EXCESS OF 80,000 POUNDS**

Scope

734-74-005 These rules shall apply to and govern the issuance of permits for movement of certain vehicle combinations having a total gross weight in excess of 80,000 pounds. The loads carried by these vehicles may be of a nature which are reducible or can be readily dismantled.

Stat. Auth.: ORS Ch. 184, 366 & 483

Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

Types and Allowable Lengths of Vehicle Combinations Subject to This Rule

734-74-010 (1)(a) Combinations of vehicles described in OAR 734-71-010, Table I, items a, b, and e which are:

- (A) Truck and trailer; or truck-tractor and double trailers. (Item a)
- (B) Dromedary truck or truck-tractor and semitrailer. (Item b)
- (C) Log truck and stinger-steered pole trailer. (Item e)

(b) Combinations of vehicles described in OAR 734-71-020, which are a dromedary truck or truck-tractor and semitrailer provided the overall length of the combination does not exceed 65 feet and the semitrailer does not exceed a length of 48'.

(c) A combination of vehicles as described in ORS 483.527(2). This combination of vehicles is commonly referred to as "triple trailers".

(d) A combination of vehicles consisting of a motor truck and two trailers. This combination of vehicles is commonly referred to as "triple trailers".

(e) A combination of vehicles consisting of a truck-tractor or dromedary truck, drawing two stinger-steered semitrailers equipped with 5th wheel hitching mechanisms. The semitrailers, excluding the stinger extension thereto, shall not exceed 40' in length. The combination of vehicles shall be designed and assembled in a manner whereby the maximum off-track of the combination does not exceed 6 feet when traversing a 165' radius curve.

(2)(a) The maximum allowable overall lengths for combinations of vehicles described under subsection (1)(a) of this rule shall be those lengths indicated in OAR 734-71-010, Table I.

(b) The maximum allowable over all lengths for combinations of vehicles described under subsection (1)(b) of this rule shall be those lengths described in OAR 734-71-020.

(3)(a) The power units of vehicle combinations described under subsection (1)(c) of this rule may be equipped with single drive axles.

(b) All other vehicle combinations must have power units equipped with tandem drive axles, except the power units used in double trailer combinations may be equipped with single drive axles provided the power unit was first registered in Oregon prior to April 1, 1983.

(4) It is intended, by this rule, that the use of "booster" or variable load suspension axles be viewed with scrutiny. Preservation of highway surfacing is of paramount importance. Improper use of these axles is considered detrimental to paved surfaces. For these reasons the use of "booster" or variable load suspension axles shall be subject to approval of the State Highway Engineer. The State Highway Engineer is hereby granted authority to approve by written order the use of these

types of axles, the design of the suspensions, their locations on vehicles, and the type of vehicles they may be used on.

(5) If any trailer or semitrailer of a combination of vehicles is substantially lighter than any other trailer, it shall be placed in the rear of the combination. "Substantially lighter" is defined as a weight difference of 1,500 pounds or more.

(6) Combinations of vehicles described as "triple trailers" shall have a visible and fully operable method of adjustment to eliminate slack in the hitch mechanism. The device used may be air chamber operated or it may be adjustable by a mechanical cam method.

Stat. Auth.: ORS Ch. 184, 366 & 483

Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

Hitching Arrangement

734-74-015 [1 OTC 6-1980, f. & ef. 3-27-80;

Repealed by 2HD 6-1983, f. & ef. 2-18-83]

Maximum Allowable Weights

734-74-020 (1) The maximum allowable weights for single axles and tandem axles shall not exceed those specified under ORS 483.506.

(2) The maximum allowable weight for groups of axles spaced at 46 feet or less shall not exceed those specified under ORS 483.506.

(3) The maximum allowable weights for groups of axles spaced at 47 feet or more; and, the gross combined weight for any combination of vehicles shall not exceed those set forth in Table I.

Stat. Auth.: ORS Ch. 184, 366 & 483

Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

Application for Permit

734-74-023 (1) Application for permits may be made in person or by mail to the Highway Division Permit and Weighmaster Section, Room 102, 2960 State Street E., Salem, Oregon 97310.

(2) Telephone applications for permits may be made by calling toll free 1-800-336-3602 and the executed permit will be transmitted electronically for pick up by the applicant at the nearest state office equipped with a receiving device.

(3) Routine information such as permittee name, address and vehicle identification must be included for the application.

(4) Permits will not be issued when an application is incomplete.

Stat. Auth.: ORS Ch. 184, 366 & 483

Hist.: 2HD 6-1983, f. & ef. 2-18-83

Permit Duration

734-74-025 At the discretion of the State Highway Engineer, permits may be issued for periods of time up to one (1) year.

Stat. Auth.: ORS Ch. 184, 366 & 483

Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

Other Permit Eligibility

734-74-027 Combinations of vehicles operating under the authority of permits issued pursuant to this rule will not be eligible to also operate with increased weights authorized under permits issued pursuant to ORS 483.527(4).

Stat. Auth.: ORS Ch. 184, 366 & 483

Hist.: 2HD 6-1983, f. & ef. 2-18-83

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OREGON ADMINISTRATIVE RULES
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Permit Cancellation

734-74-028 (1) Permits may be cancelled for reasons set forth under ORS 483.528(9).

(2) The operation of any combination of vehicles under this rule over highways not authorized shall constitute a serious violation of this rule. The State Highway Engineer has authority to cancel all such permits held by any person, company, or firm for such periods of time as the State Highway Engineer considers appropriate.

(3) If any of the provisions of this rule are found to be contrary to federal law to the extent that loss of federal-aid funds may result, the State Highway Engineer may immediately delete from any otherwise valid permit that portion of the permit in conflict.

Stat. Auth.: ORS Ch. 184, 366 & 483
Hist.: 2HD 6-1983, f. & ef. 2-18-83

Insurance Requirements

734-74-029 At the discretion of the State Highway Engineer, permit applicants may be required to furnish liability and indemnity insurance as provided for under ORS 483.528(2)(d).

Stat. Auth.: ORS Ch. 184, 366, 483
Hist.: 2HD 6-1983, f. & ef. 2-18-83

Approved Routes

734-74-030 (1) State highways approved for travel by combinations of vehicles operating under this rule shall be designated by the State Highway Engineer. In designating such highways the State Highway Engineer shall take into consideration the increased gross weights carried by the vehicles and shall, by use of engineering judgment, determine that the highways so approved, and the structures and bridges on those highways, can safely accommodate the increased weights.

(2) Permits will not authorize travel over any street or road not under State of Oregon, Highway Division, jurisdiction. For movement over such streets or roads separate permission must be obtained from the proper authority.

Stat. Auth.: ORS Ch. 184, 366 & 483
Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

Minimum Speeds

734-74-035 It is anticipated that vehicles to be operated under OAR 734, Division 74 have the capabilities to maintain speeds on grades which will not interfere with the flow of other traffic. If it should appear desirable or necessary to establish minimum speeds, which such vehicle combinations must be capable of maintaining, it will be accomplished by amendment to this rule.

Stat. Auth.: ORS Ch. 184, 366 & 483
Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

Operating Days and Hours

734-74-040 Vehicles and combinations of vehicles described in this rule may operate on a 24-hour, seven-day week basis.

Stat. Auth.: ORS Ch. 184, 366 & 483
Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

Weather Restrictions for Vehicle Combinations Exceeding 75' in Overall Length

734-74-045 Movement of vehicle combinations exceeding 75 feet in overall length is prohibited under the following weather conditions:

(1) When road surfaces, due to ice, snow, slush or frost present a slippery condition which may be hazardous to the operation of the unit or to other highway users; or

(2) When wind or other conditions may cause the unit or any part thereof to swerve, to whip, to sway or fail to follow substantially in the path of the towing vehicle.

Stat. Auth.: ORS Ch. 184, 366 & 483
Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

Spacing Interval

734-74-050 [1 OTC 6-1980, f. & ef. 3-27-80;
Repealed by 2HD 6-1983, f. & ef. 2-18-83]

Splash and Spray Suppressant Devices

734-74-051 (1) The State Highway Engineer may require combinations of vehicles operating under OAR 734, Division 74 during rainy weather conditions to be equipped with devices designed to suppress water splash and spray.

(2) It is recognized that the use of such devices has not been a practice of long standing and in a number of aspects is still in experimental stages. For these reasons, and for purposes of further experimentation, the design, installation and use of the splash and spray suppressant devices shall be subject to approval by the State Highway Engineer.

(3) The State Highway Engineer is hereby granted authority to approve and require by written order the type, style, design, installation details, and time table for the installation of various devices, including those devices presently being manufactured and those which may be developed and manufactured in the future. These devices may consist of but are not limited to the following:

- (a) Air deflectors mounted on the vehicles;
- (b) Fender flaps behind wheels;
- (c) Side flaps over wheels; and
- (d) Water collection type fenders.

(4) In approving the splash and spray suppressant devices and their use, the State Highway Engineer may take into consideration experimental testing performed by industry laboratories, reports furnished by various motor carriers, results of field testing performed by the Department of Transportation personnel, and other tests, reports, observations, or data the State Highway Engineer may deem appropriate. Conditional or temporary approval of certain devices may be granted by the State Highway Engineer for purposes of motor carrier testing under actual travel conditions.

Stat. Auth.: ORS Ch. 184, 366 & 483
Hist.: 2HD 6-1983, f. & ef. 2-18-83; 2HD 21-1983, f. & ef. 9-23-83

Trailer Placement

734-74-055 [1 OTC 6-1980, f. & ef. 3-27-80;
Repealed by 2HD 6-1983, f. & ef. 2-18-83]

Warning Signs for Vehicle Combinations Exceeding 75' in Overall Length

734-74-060 (1) A warning sign bearing the legend "LONG LOAD" is to be displayed on the back of the rearmost trailer or semitrailer within vehicle combinations exceeding 75 feet in overall length.

(2) The sign shall be positioned at such height as to be readily visible to following drivers and it shall be kept in good repair, free from dirt, grease and "road film" in order that it may be clearly readable to following drivers.

(3) The sign shall meet uniform AASHTO standards which are:

- (a) Size — 7' wide by 18" high;
- (b) Letters — 10" high with a 1-3/8" stroke width;

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(c) Color — Black letters on highway yellow background.
 Stat. Auth.: ORS Ch. 184, 366 & 483
 Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

pounds, under the authority of a permit issued pursuant to the directive described in section (1) of this rule, may continue to operate under the terms and conditions of that permit until the date of expiration of the permit, unless the permit is cancelled prior to its expiration date for reasons provided under OAR 734-74-028.

Cancellation of Other Rules

734-74-065 (1) This rule cancels and supersedes Oregon Transportation Commission Directive No. 1, adopted by the Oregon Transportation Commission on January 3, 1974, and any Amendments to this Directive subsequently adopted by the Oregon Transportation Commission.

(2) It is the intent of this rule that any combination of vehicles operating with a gross weight in excess of 80,000

Stat. Auth.: ORS Ch. 184, 366 & 483

Hist.: 1 OTC 6-1980, f. & ef. 3-27-80; 2HD 6-1983, f. & ef. 2-18-83

TABLE 1
(734-74-020)

Axle Spacing In Feet	Maximum Gross Weight in Pounds on:			
	5 Axle	6 Axle	7 Axle	8 or More Axles
47	77,500	81,000	81,000	81,000
48	78,000	82,000	82,000	82,000
49	78,500	83,000	83,000	83,000
50	79,000	84,000	84,000	84,000
51	80,000	84,500	85,000	85,000
52	80,500	85,000	86,000	86,000
53	81,000	86,000	87,000	87,000
54	81,500	86,500	88,000	91,000
55	82,500	87,000	89,000	92,000
56	83,000	87,500	90,000	93,000
57	83,500	88,000	91,000	94,000
58	84,000	89,000	92,000	95,000
59	85,000	89,500	93,000	96,000
60	85,500	90,000	94,000	97,000
61	86,000	90,500	95,000	98,000
62	87,000	91,000	96,000	99,000
63	87,500	92,000	97,000	100,000
64	88,000	92,500	97,500	101,000
65	88,500	93,000	98,000	102,000
66	89,000	93,500	98,500	103,000
67	90,000	94,000	99,000	104,000
68		95,000	99,500	105,000
69		95,500	100,000	105,500
70		96,000	101,000	
71		96,500	101,500	
72			102,000	
73			102,500	
74			103,000	
75			104,000	
76			104,500	
77			105,000	
78			105,500	

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EXHIBIT 1

State Highway Number	Posted Route Number	Termini
1	I-5	OR/WA border to OR/CA border
1E	OR 99E	Portland to Salem
1W	OR 99W	Portland to Eugene
2	I-84, US 730	Portland to OR/WA border
2W	US 30	Portland to Astoria
4	US 197, US 97	OR/WA border to Jct. Hwy. 44 and Jct. Hwy. 42 to OR/CA border
6	I-84	Jct. Hwy. 2 (US 730) to OR/ID border
7	US 20, US 26 OR 201	Bend to OR/ID border
8	OR 11	OR/WA border to Pendleton
9	US 101	OR/WA border to Cannon Beach Jct., Otis to Newport and Florence to Port Orford, Gold Beach to Brookings
15	OR 126	Eugene to Jct. Hwy. 215 and Sisters to Redmond
16	US 20	Albany to Sweet Home and Jct. Hwy. 215 to Sisters
17	US 20	Sisters to Bend
18	OR 58	Eugene to Jct. Hwy. 4
19	OR 31, US 395	LaPine to OR/CA border
20	OR 39, OR 140	Klamath Falls to Jct. Hwy. 50
22	OR 62	Medford to Trail
25	OR 199	Grants Pass to OR/CA border
26	US 26	Portland to Jct. Hwy. 53
28	US 395	Pendleton to Long Creek
29	OR 8	Beaverton to Forest Grove
30	OR 22	Jct. Hwy. 30 (near Willamina) to Salem
31	US 20	Albany to Corvallis
33	US 20	Corvallis to Newport
35	OR 42	Coos Bay to Coquille
37	OR 6	Tillamook to Jct. Hwy. 47
39	OR 18	Jct. Hwy. 9 to Jct. Hwy. 1W
40	OR 10	Beaverton to Portland
41	OR 126, US 26	Redmond to Mitchell
42	US 97	Biggs to Jct. Hwy. 4
44	OR 216	Warm Springs to Jct. Hwy. 4
45	OR 38	Reedsport to Aunlauf
47	US 26	Jct. Hwy. 9 to Portland
48	US 395	John Day to Burns
49	US 395	Riley to Valley Falls
50	OR 39	Jct. Hwy. 20 to Jct. Hwy. 426
51	—	Wilsonville to Hubbard
52	OR 74	Lexington to Heppner
53	US 26	Warm Springs to Madras
54	US 395	Umatilla to Stanfield
58	OR 99E	Albany to Junction City
59	US 30 Bus.	Jct. Hwy. 1E to Jct. Hwy. 123 (in Portland)
60	OR 99	Grants Pass to Jct. Hwy. 1
61	I-405	In city of Portland
62	OR 125	Florence to Eugene
63	OR 99	Central Point to Ashland
64	I-205	Tualatin to OR/WA border
66	US 30	North Powder to Baker
67	US 30, OR 37	In city of Pendleton
69	Beltline	In city of Eugene
120	—	In north Portland
122	—	In north Portland
123	US 30 Bypass	Jct. Hwy. 2W to Jct. Hwy. 2 (near Troutdale)
140	OR 214	Woodburn to Silverton
144	OR 217	Jct. Hwy. 47 to Jct. Hwy. 1
162	OR 22	Salem to Santiam Jct.
171	OR 224	Jct. Hwy. 1E to Clackamas

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State Highway Number	Posted Route Number	Termini
189	OR 223	Dallas to Rickreall
191	OR 223	Jct. Hwy. 30 to Dallas
210	OR 34	Corvallis to Lebanon
215	OR 126	Jct. Hwy. 16 to Jct. Hwy. 15
227	I-105	Eugene to Springfield
231	OR 138	Elkton to Jct. Hwy. 1
235	OR 99	Jct. Hwy. 35 to Jct. Hwy. 1
236	OR 99	Jct. Hwy. 45 to Jct. Hwy. 1
283	US 30	In city of Cascade Locks
300	OR 206	Wasco to Heppner
320	OR 207	Lexington to Jct. Hwy. 333
321	OR 207	Jct. Hwy. 300 to Kinzua Rd. (MP 23.56)
331	—	Jct. Hwy. 8 to Jct. Hwy. 6
333	OR 207	Jct. Hwy. 2 to Jct. Hwy. 320
360	US 26	Madras to Prineville
402	—	In Long Creek
442	OR 78	Burns to Jct. Hwy. 456
456	US 95	Jct. Hwy. 442 to OR/NV border

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EXHIBIT "B"

GROUP 1 HIGHWAYS

Name	Section	Route No.	Miles	Name	Section	Route No.	Miles
1 Pacific	Wash. State line at Portland to Cal. State line S. of Ashland	ORE99 I-5	308.38	17 McKenzie-Bend	Jct. ORE126 at Sisters to jct. US97 at Bend	US20	18.51
1E Pacific East	Jct. I-5 north of Portland to jct. I-5 south of Salem	ORE99E	62.97	18 Willamette	Jct. I-5 at Goshen to jct. US97 near Chemult	ORE58	88.68
1W Pacific West	Jct. I-5 north of Portland to jct. I-5 at Eugene	ORE99W ORE99	132.19	19 Fremont	Jct. US97 near LaPine to Cal. State line at New Pine Creek	ORE31 US395	157.73
2 Columbia River	Jct. I-5 in Portland to Washington State line near Wallula	I-80N US730	200.98	20 Klamath Falls-Lakeview	Jct. US97 at Klamath Falls to jct. US395 at Lakeview	ORE140	96.51
2 Umatilla Bridge Spur	Jct. US730 to bridge	—	0.86	21 Green Springs	Jct. ORE99 in Ashland to Buckhorn Road (M.P. 9.18). Also M.P. 30.36 (near Jackson-Klamath Co. line) to jct. US97 at Klamath Falls	ORE66	50.25
2W Lower Columbia River	Jct. ORE99E in Portland to jct. US101 at Astoria	US30	96.57	22 Crater Lake	Jct. ORE99 in Medford to jct. US97 near Chiloquin (except through Crater Lake Park)	ORE62	85.35
3 Oswego	Jct. US26 in Portland to jct. ORE99E at Oregon City	ORE43	11.66	23 Dairy-Bonanza	Jct. ORE140 at Dairy to Bonanza	ORE70	6.97
4 The Dalles-California	Wash. State line at The Dalles to Cal. State line near Worden	US197 US97	281.22	25 Redwood	Jct. I-5 in Grants Pass to Cal. State line near O'Brien	US199	45.92
5 John Day	Jct. I-80N at Arlington to jct. US20 at Vale	ORE19 US26	277.08	26 Mt. Hood	Jct. ORE99W in Portland to jct. I-80N in Hood River	US28 ORE35	96.83
6 Old Oregon Trail	Jct. US730 near Boardman to Idaho State line at Ontario	I-80N	210.43	27 Alesia	Jct. US101 at Waldport to jct. US20 at Philomath	ORE34	58.62
7 Central Oregon	Jct. US97 at Bend to Idaho State line at Nyssa	US20 US26	264.64	28 Pendleton-John Day	Jct. US30 at Pendleton to jct. US26 at Mt. Vernon	US395	119.64
8 Oregon-Washington	Jct. US30 at Pendleton to Wash. State line at Milton-Freewater	ORE11	33.42	29 Tualatin Valley	Jct. US26 west of Portland to jct. ORE99W near McMinnville	ORE8 ORE47	41.87
9 Oregon Coast	Astoria to Cal. State line S. of Brookings	US101	348.36	30 Willamina-Salem	Jct. ORE18 near Willamina to jct. ORE99E at Salem	ORE22	25.92
10 Willowa Lake	Jct. ORE203 at La Grande to Joseph	ORE82	70.79	31 Albany-Corvallis	Jct. ORE34 in Corvallis to jct. ORE99E in Albany	US20	11.13
11 Enterprise-Lewiston	Washington State line to jct. ORE82 at Enterprise	ORE3	43.19	32 Three Rivers	Jct. US101 at Hebo to jct. ORE18 at Valley Junction	ORE22	24.97
12 Baker-Copperfield	Jct. US30 at Baker to Idaho State line including Halfway Spur	ORE86	70.70	33 Corvallis-Newport	Jct. US101 at Newport to jct. ORE99W in Corvallis	US20	52.24
13 Baker-Unity	Jct. US30 at Baker to jct. US26 near Unity	ORE7	46.01	35 Coos Bay-Roseburg	Jct. US101 near Coos Bay to jct. I-5 near Roseburg	ORE42 ORE99	75.15
14 Crooked River	Jct. US26 at Prineville to M.P. 6.00	ORE27	6.00	36 Pendleton-Cold Springs	Jct. US730 near Hat Rock State Park to jct. US30 at Pendleton	ORE37	30.88
15 McKenzie	Jct. ORE99 at Eugene to jct. Clear Lake Highway, also from Dugout Lake Way (M.P. 84.14) to jct. US97 in Redmond	ORE126 ORE242	82.65	37 Wilson River	Jct. US101 in Tillamook to jct. US26 near North Plains	ORE8	51.20
16 Santiam	Jct. ORE99E at Albany to Sisters	US20 ORE126	100.36	38 Oregon Caves	Jct. US199 at Cave Junction to M.P. 13.26 (Sucker Creek Road)	ORE46	13.26

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Name	Section	Route No.	Miles	Name	Section	Route No.	Miles
39 Salmon River	Jct. ORE99W near Dayton to jct. US101 near Otis	ORE18	54.18	64 East Portland Freeway	Jct. I-5 at Tualatin to jct. ORE224 at Clackamas	I-205	12.67
40 Beaverton-Hillsdale	Jct. ORE8 in Beaverton to jct. ORE99W in Portland	ORE10	6.87	66 La Grande-Baker	Jct. I-80N near La Grande to jct. I-80N south of Baker	US30	61.90
41 Ochoco	Jct. US97 at Redmond to jct. ORE19 near Crook-Wheeler County line	ORE126 US26	98.37	67 Pendleton	Jct. I-80N M.P. 207.10 to jct. I-80N M.P. 213.37 (Pendleton area)	US30	6.63
42 Sherman	Washington State line near Biggs to jct. US197 south of Shaniko	US97	68.39	68 Cascade North	Jct. Airport Road, Portland, to jct. ORE224 near Clackamas	ORE213	10.21
43 Monmouth-Independence	Jct. ORE99W at Monmouth to Independence	ORE51	2.35	69 Beilaine Highway	Jct. ORE128 to jct. I-5	—	13.00
44 Wapinitia	Jct. US26 at Warnsprings Jct. to jct. US197 near Maupin	ORE216	25.99	102 Nehalem	Jct. US101 in Astoria to M.P. 8.00. Also Jewell to jct. ORE8 at Forest Grove	ORE202 ORE47	66.68
45 Umpqua	Jct. US101 at Reedsport to jct. I-5 at Curtin	ORE38 ORE99	57.16	104 Fort Stevens	Jct. US101 to Fort Stevens	—	4.48
47 Sunset	Jct. US101 near Seaside to jct. I-5 in Portland	US26	74.62	105 Warrenton	Jct. Fort Stevens Highway in Warrenton to jct. ORE202 in Astoria	US101 ALT	7.25
48 John Day-Burns	Jct. US28 at John Day to jct. US20 north of Burns	US395	67.69	120 Swift	Jct. I-5 & ORE99E to Columbia Blvd. (Portland)	—	2.93
49 Lakeview-Burns	Jct. US20 at Riley to jct. ORE31 at Valley Falls	US395	89.79	122 Vancouver Avenue	Jct. ORE99E to Columbia Blvd. (Portland)	—	0.59
50 Klamath Falls-Mallin	Jct. US97 at Klamath Falls to Cal. State line near Mallin	ORE39	32.38	123 N.E. Portland	Jct. US30 at St. Johns Bridge in Portland to jct. I-80N near Fairview	US30 Bypass	18.74
51 Wilsonville-Hubbard	Jct. I-5 near Wilsonville to jct. ORE99E near Hubbard	—	5.94	125 Crown Point	Jct. I-80N near Troutdale to M.P. 10.60 near Crown Point State Park	US30 Scenic	10.72
52 Heppner	Jct. I-80N east of Arlington to jct. US395 south of Pilot Rock	ORE74	83.13	130 Little Nestucca	Jct. US101 south of Cloverdale to jct. ORE22 near Dolph	—	9.30
53 Warm Springs	Jct. ORE35 near Government Camp to jct. US97 at Madras	US26	60.07	131 Netarts	Oceanside to jct. US101 at Tillamook	—	9.06
54 Umatilla-Stanfield	Jct. US730 at Umatilla to jct. I-80N near Stanfield	US395 ORE32	12.90	140 Hillsboro-Silverton	Jct. ORE8 at Hillsboro to Silverton	ORE214 ORE219	50.27
58 Albany-Junction City	Jct. I-5 at Albany to jct. ORE99W at Junction City	ORE99E	32.46	141 Beaverton-Tualatin	Jct. ORE8 at Beaverton to jct. I-5 near Wilsonville	ORE217	13.05
59 Sandy Boulevard	Jct. ORE99E in Portland to jct. US30 Bypass east of Portland	—	5.56	142 Farmington	Jct. ORE8 at Beaverton to jct. ORE219 near Farmington	ORE208	9.98
60 Rogue River	Jct. US199 at Grants Pass to jct. I-5 near Gold Hill	ORE99	14.89	143 Scholls	Jct. ORE10 at Raleigh Hills to jct. ORE219 at Scholls	ORE210	12.48
61 Stadium Freeway	Jct. I-5 at M.P. 299.56 to jct. I-5 at M.P. 303.47 in Portland	I-405	4.21	144 Beaverton-Tigard	Jct. US26 near Beaverton to jct. I-5 near Tigard	ORE217	7.44
62 Florence-Eugene	Jct. US101 at Florence to jct. ORE99 in Eugene	ORE126	59.80	150 Salem-Dayton	Jct. ORE18 near Dayton to jct. ORE22 in West Salem	ORE221	22.22
63 Rogue Valley	Jct. I-5 near Central Point to jct. I-5 near Ashland	ORE99	24.12				

**OREGON ADMINISTRATIVE RULES
CHAPTER 734, DIVISION 73 — HIGHWAY DIVISION**

Name	Section	Route No.	Miles	Name	Section	Route No.	Miles
151 Yamhill-Newberg	Jct. ORE47 at Yamhill to jct. ORE99W at Newberg	ORE240	11.55	201 Aisea-Deadwood	Jct. ORE34 at Aisea to M.P. 9.49	—	9.49
153 Bellevue-Hopewell	Jct. ORE99W at Amity to jct. ORE221 near Hopewell	—	8.13	210 Corvallis-Lebanon	Jct. ORE99W in Corvallis to jct. US20 in Lebanon	ORE34	18.12
154 Lafayette	Jct. ORE18 west of Dayton to jct. Bellevue-Hopewell Highway west of Hopewell	—	6.36	211 Albany-Lyons	Jct. US20 east of Albany to jct. ORE22 at Mehama	ORE226	25.32
155 Amity-Dayton	Jct. ORE99W north of Amity to jct. ORE221 at Dayton	ORE233	9.38	212 Halsey-Sweet Home	Jct. ORE99E at Halsey to jct. US20 at Sweet Home	ORE228	21.50
156 McMinnville	Jct. ORE99W to jct. ORE18 (McMinnville)	—	1.71	215 Clear Lake	Jct. US20 near Santiam Junction to jct. ORE242 near Belknap Springs	ORE126	19.81
157 Willamina-Sheridan	Jct. ORE18 & ORE22 (Wallace Bridge) to jct. ORE18 near Sheridan via Willamina	ORE18 Bus.	8.60	222 Springfield-Creswell	Jct. ORE126 at Springfield to jct. ORE99 at Creswell	—	14.79
160 Cascade South	Jct. ORE99E at Oregon City to jct. ORE214 in Silvertown	ORE213	29.71	225 McVay	Jct. ORE126 east of Eugene to jct. I-5 near Goshen	—	2.53
161 Woodburn-Estacada	Jct. ORE99E at Woodburn to jct. ORE224 at Estacada	ORE211	33.41	226 Goshen-Divide	Jct. I-5 at Goshen to jct. I-5 at Divide via Cottage Grove	ORE99	19.96
162 North Santiam	Jct. ORE99E in Salem to jct. US20 near Santiam Pass	ORE22	83.37	227 Eugene-Springfield	Jct. ORE99 in Eugene to jct. ORE126 in Springfield	I-105	9.96
164 Jefferson	Jct. I-5 to jct. I-5 via Jefferson	—	8.39	228 Springfield	Jct. I-105 to jct. ORE126 in Springfield	—	1.40
171 Clackamas	Jct. River Road at Milwaukie (near ORE99E) to Oak Grove Fork of Clackamas River	ORE224	49.43	229 Mapleton-Junction City	Jct. ORE126 at Mapleton to Swisshome. Also Triangle Lake to jct. ORE99 south of Junction City	ORE36	33.22
172 Eagle Creek-Sandy	Jct. ORE224 at Eagle Creek to jct. US26 at Sandy	ORE211	6.17	230 Tiller-Trail	Jct. I-5 at Canyonville to M.P. 31.55 (Drew)	ORE227	31.55
173 Timberline	Jct. US26 near Government Camp to Timberline Lodge	—	5.49	231 Elkton-Sutherlin	Jct. ORE38 at Elkton to jct. ORE99 at Sutherlin, also South Sutherlin Spur	ORE138	26.87
174 Clackamas-Boring	Jct. ORE212 near Rock Creek to jct. US26 near Boring	ORE212	8.87	232 Crater Lake North	Diamond Lake to North Crater Lake Park boundary	ORE138	4.92
181 Siletz	Jct. US101 at Kernville to M.P. 9.05. Also from M.P. 15.23 to jct. US20 near Toledo	ORE229	25.27	233 West Diamond Lake	Jct. ORE62 near Union Creek to jct. Crater Lake North Highway near Diamond Lake	ORE230	23.62
182 Otter Rock	Jct. US101 to Otter Rock Park	—	0.75	234 Oakland-Shady	Jct. I-5 near Oakland to jct. ORE42 near Winston	ORE99	22.29
189 Dallas-Rickreall	Dallas to jct. ORE22 near Rickreall	ORE223	4.01	235 Dillard	Jct. ORE42 at Winston to jct. I-5 via Dillard	ORE99	8.49
191 Kings Valley	Jct. ORE22 near Dallas to jct. US20 at Wren	ORE223	31.40	236 Drain-Yoncalla	Jct. ORE38 at Drain to jct. I-5 via Yoncalla.	ORE99	8.05
193 Independence	Jct. ORE22 west of Salem to Independence	ORE51	6.34	237 Myrtle Creek	Jct. I-5 near Myrtle Creek to jct. I-5 via Myrtle Creek	ORE99	5.72
200 Territorial	Jct. ORE99W at Monroe to M.P. 37.86 (Lorane)	—	36.70	240 Cape Arago	Jct. US101 in North Bend to Charleston	—	8.55

OREGON ADMINISTRATIVE RULES
CHAPTER 734, DIVISION 73 — HIGHWAY DIVISION

Name	Section	Route No.	Miles	Name	Section	Route No.	Miles
241 Coos River	Jct. US101 to M.P. 1.12 ("D" Street in Eastside)	—	1.12	333 Hermiston	Jct. US730 east of Umatilla to jct. Lexington-Echo Highway west of Echo	ORE207	17.83
242 Powers	Jct. ORE42 east of Myrtle Point to Powers	—	18.91	334 Athena-Holdman	Jct. ORE37 east of Holdman to jct. ORE11 near Athena	—	17.03
243 Empire-Coos Bay	Jct. US101 to jct. Cape Arago Highway (in Coos Bay)	—	3.57	335 Havana-Helix	Helix to jct. ORE11	—	9.79
244 Coquille-Bandon	Jct. US101 at Bandon to jct. ORE42 at Coquille	ORE425	17.28	338 Ordinance Depot	Ordinance to jct. I-80N	—	0.41
250 Cape Blanco	Jct. US101 near Sikes to M.P. 3.91	—	1.66	339 Freewater	Washington State line to jct. ORE11 at Milton-Freewater	—	7.93
260 Rogue River Loop	M.P. 12.97 (Rogue River Bridge) to jct. US199 at Wilderville	—	9.30	340 Medical Springs	Jct. ORE237 at Union to jct. ORE86 near Baker	ORE203	41.45
270 Lake of the Woods	ORE62 near Eagle Point to jct. ORE21 near Klamath Falls	ORE140	68.76	341 Ukiah-Hilgard	Jct. US395 near Ukiah to jct. I-80N at Hilgard	ORE244	47.22
271 Sams Valley	Jct. I-5 near Gold Hill to jct. ORE62 near Eagle Point (including Gold Hill Spur)	ORE234	18.74	342 Cove	Jct. ORE82 at Island City to jct. ORE203 at Union	ORE237	22.09
272 Jacksonville Secondary	Jct. US199 near Grants Pass to jct. ORE99 at Medford	ORE238	37.78	350 Little Sheep Creek	Jct. ORE10 at Joseph to Imnaha	—	29.36
282 Odell	Jct. Hood River Highway to jct. ORE35 via Odell	—	3.43	351 Joseph-Wallowa Lake	Jct. ORE10 at Joseph to Wallowa Lake	—	6.94
283 Cascade Locks	Jct. I-80N to jct. I-80N through Cascade Locks	—	2.08	360 Madras-Prineville	Jct. US97 near Madras to Prineville	US26	26.28
290 Sherars Bridge	M.P. 13.34 to jct. US97 at Grass Valley	ORE216	15.08	361 Culver	Jct. US97 in Madras to jct. US97 near Culver	—	11.62
292 Mosier-The Dalles	Jct. I-80N at Rowena to jct. US197 at The Dalles	US30	10.85	370 O'Neil	Jct. US97 north of Redmond to jct. ORE126 at Prineville	—	17.67
300 Wasco-Heppner	Jct. US97 at Wasco to jct. ORE74 at Heppner	ORE206 ORE207	85.79	371 Powell Butte	Jct. ORE126 at Powell Butte to jct. US20 east of Bend	—	18.02
301 Celilo	Jct. I-80N at Celilo to jct. US97 at Wasco, including spur to Biggs	ORE206	18.38	372 Century Drive	Jct. US97 in Bend to M.P. 21.62	—	21.62
320 Lexington-Echo	Jct. ORE74 at Lexington to jct. I-80N near Echo	ORE207	40.25	380 Paulina	Jct. US26 near Prineville to Paulina	—	55.49
321 Heppner-Spray	Jct. ORE206 at Ruggs to jct. ORE19 near Spray	ORE207	40.87	390 Service Creek-Mitchell	Jct. ORE19 near Service Creek to jct. US26 at Mitchell	ORE207	24.38
330 Weston-Elgin	Jct. ORE11 near Weston to jct. ORE82 at Elgin	ORE204	41.87	402 Kimberly-Long Creek	Jct. ORE19 at Kimberly to jct. US395 at Long Creek	—	34.88
331 Umatilla-Mission	Jct. ORE11 to jct. I-80N (east of Pendleton)	—	4.84	410 Sumpter Valley	County road to Granite jct., M.P. 0.00, to jct. ORE7 south of Baker	ORE220	22.78
332 Sunnyside-Umapine	Washington State line to jct. ORE11 via Umapine	—	7.93	411 Haines-Anthony	Jct. US30 at Haines to Forest boundary	—	15.32
				413 Halfway-Cornucopia	Halfway to Holbrook County Road, M.P. 5.66	—	5.79
				414 Pine Creek	Jct. Halfway-Cornucopia Highway to jct. ORE86	—	0.91

Name	Section	Route No.	Miles
420 Midland	Jct. ORE140 at Klamath Falls to jct. US97 south of Klamath Falls	—	5.65
422 Chiloquin	Jct. ORE62 to jct. Modoc Point Highway via Chiloquin	—	9.70
423 Lower Klamath Lake	Jct. US97 south of Klamath Falls to jct. ORE39	—	7.02
425 East Diamond Lake	Jct. Crater Lake North Highway to jct. US97	ORE138	14.82
426 Hatfield	Jct. ORE39 to California State line near Tulelake	ORE139	2.42
427 Modoc Point	Jct. ORE62 near Klamath Agency to jct. US97 at Modoc Point	—	12.89
428 Sun Mountain	Jct. US97 to jct. ORE62 at Fort Klamath	ORE232	27.00
429 Crescent Lake	Jct. ORE58 to Crescent Lake	—	2.39
431 Warner	Jct. US395 north of Lakeview to Nevada State line	ORE140	65.28
440 Frenchglen	Jct. ORE78 near Burns to jct. with road to Roaring Springs Ranch, M.P. 74.93	ORE205	73.35
442 Steens	Jct. US20 at Burns to jct. US95 near Scotts Butte	ORE78	91.85
449 Huntington	Jct. I-80N at M.P. 342.52 near Lime to jct. I-80N near Farewell Bend State Park	—	11.09
450 Succor Creek	Nyssa to Idaho State line including Homedale Spur	ORE201	25.09
455 Olds Ferry-Ontario	Jct. I-80N near Farewell Bend State Park to jct. US20 west of Ontario, including Weiser, Payette and Ontario Spurs	ORE201	37.12
456 Idaho-Oregon-Nevada	Idaho State line to Nevada State line	US95	121.36



HIGHWAY DIVISION

**SPECIAL TRANSPORTATION PERMIT
ATTACHMENT 14**

**APPROVED ROUTES
For Triple-Trailer Combinations**

WHEN OPERATING ON STATE HIGHWAYS WITHIN CITIES

City	Route No.	Highway No.	Section
Albany	US 20	16	Jct. with OR 99E to Jct. with I-5
	OR 99E	58	Jct. with I-5 to Jct. with US 20
Arlington	OR 19	5	Jct. with I-84 to Cottonwood, Cottonwood to Jct. with I-84
Ashland	OR 99	63	Jct. with Valley View Rd. to Jct. with Central Ave.
Astoria	US 101	9	South city limits on Marine Dr. to Jct. with 8th St. Right turn on 8th to Commercial. Commercial onto Marine Dr. Leave Marine Dr. at 23rd St. Return to south city limits on Marine Dr.
Baker	US 30	66	North city limits of Baker on 10th St. to Broadway. Left on Broadway to main. Right onto Elm to south city limits
Eugene and Springfield	OR 99	1W	Jct. with Beltline Rd. to Jct. with I-105. Jct. I-5 to Jct. with 13th St. in Eugene
	OR 126	15	Jct. with McVay Hwy. to Jct. with 28th St.
	McVay Hwy.	225	Jct. with I-5 to Jct. with OR 126 Bus.
	I-105	227	Jct. with #228 Springfield Hwy. MP 4.94 to Jct. with OR 99 MP 0.00
	Springfield Hwy.	228	Jct. with Eugene-Springfield Hwy. to Jct. with McKenzie Hwy. MP 0.00 to MP 1.40
	Beltline Rd.	69	Jct. I-5 to Jct. with OR 126
Forest Grove	OR 8	29	Jct. of Hawthorne/19th Ave. to east city limits to Hawthorne/20th Ave.
Grants Pass	OR 199	25	Jct. with I-5 to Jct. with OR 99 (#60)
	OR 99	60	Jct. with OR 199 to MP 8.81, Jct. with county road in Rogue River
Halsey	OR 99E	58	Jct. with OR 228 to Jct. with "I" St. in Halsey
	OR 228	212	Jct. with I-5 to Jct. with Albany-Junction City (OR 99E) at Halsey
Klamath Falls	OR 39	50	Jct. with Esplanade Spur to east city limits (Klamath Falls-Malin Hwy.)
La Grande	US 30	66	Jct. I-84 west of La Grande to Jct. with 3rd St. in La Grande (truck route—Third to Jefferson to Hemlock). Jct. with Hemlock in La Grande to Jct. I-84 east of La Grande
Medford	OR 62	22	Jct. with I-5 to Jct. with OR 99 (#63)
	OR 99	63	Jct. with OR 62 (Crater Lake Hwy) MP 5.53 to Jct. with Stewart St. MP 8.09
Newport	US 101	9	MP 139.32 Jct. with NW 20th to Jct. with US 20 MP 140.37 Olive St.
	US 20	33	Jct. US 101 to east city limits MP 0.93 (NOTE: Turning movement from US 20 to US 101 or from US 101 to US 20 prohibited between hours of 6:00 AM and midnight)
Ontario	OR 201	455	East city limits on Idaho Avenue to SW 1st (left turn onto SW 1st). SW 1st to SW 4th (right turn onto SW 4th) to west city limits
Pendleton	US 30	67	Jct. I-8 near west city limits to Jct. with I-84 near east city limits
	Mission cut-off	331	Jct. with I-84 to MP 4.20

City	Route No.	Highway No.	Section
Portland	OR 99E	1E	Jct. with I-84 to Holgate
	OR 99E	1E	Jct. with 18th St. to Jct. with I-205
	OR 99W	1W	Jct. with Oregon St. connection to Jct. with US 26 at Ross Island Br.
	OR 99W	1W	Jct. with I-5 near 61st Ave. to Jct. with OR 217 near Tigard
	US 30 W	2W	West city limits to Jct. with 18th Ave.
	US 26	26	Jct. with 17th Ave. to Hood
	US 26	47	Jct. with I-405 to west city limits
	OR 213	68	Jct. with US 30 Bypass to Airport Rd. MP 0.00
	Swift Hwy	120	N Portland Blvd. to I-5 (PERMISSION DENIED FOR USE OF SOUTH-BOUND FROM I-5 TO WESTBOUND SWIFT HWY.)
	US 30 By	123	Jct. with US 30 to Jct. with 181st MP 15.46
OR 217	144	Jct. with I-5 to Jct. with Greenburg Rd. MP 4.95	
Roseburg	OR 99	234	Jct. with Garden Valley Blvd. to Jct. with I-5 near Shady
Salem	OR 99E	1E	MP 45.87 Jct. with I-5 near north city limits to MP 47.94 Jct. with Pine St.
	OR 22	161	MP 1.42 Jct. with I-5 to MP 0.61 Jct. of Mission/Airport Rds.
Sutherlin	OR 138	231	MP 24.22 Jct. with I-5 to MP 25.39
Toledo	Toledo front. rd	33	MP F6.93 Main St. to Jct. with US 20 (Corvallis-Newport Hwy.)
Woodburn	OR 99E	1E	Jct. with Wilsonville-Hubbard sec. (#51) to Jct. with OR 214
	Wilsonville Hubbard sec.	51	Jct. with I-5 to Jct. with OR 214 (MP 27.53-31.70)
	OR 214	140	Jct. OR 99E to Jct. I-5 (MP 39.29-36.80) WESTBOUND ONLY



HIGHWAY DIVISION

**SPECIAL TRANSPORTATION PERMIT
ATTACHMENT 15****APPROVED ROUTES
For Combinations of Vehicles
Described in OAR 734-74-010 (1) (a)
Otherwise known as "Triple Trailers"****WHEN OPERATING DURING RAINY WEATHER CONDITIONS**

Route No.	Highway Name	Highway Section
OR 99E	Pacific Hwy East #1E	(1) Jct. Wilsonville-Hubbard Hwy to Jct. OR 214 (M.P. 27.53 to M.P. 31.70) (2) Bybee Blvd. to 23rd Ave. (M.P. 3.7 to M.P. 6.30)
ORE 99W ORE 99	Pacific Hwy West #1W	(1) In Tigard; Jct. I-5 to Jct. Beaverton-Tigard Hwy (ORE 217). (2) In Eugene; Jct. Beltline Hwy to I-105.
US 30	Lower Columbia River #2W	1) Jct. I-405 to Linnton Lane (M.P. 0.95 to M.P. 8.15) 2) NW 44th (M.P. 4.21) to St. Johns Bridge Approaches (M.P. 6.41)
ORE 82	Wallowa Lake #10	Jct. I-5 (M.P. 0.89) to State Offices (M.P. 1.40).
ORE 7	Baker-Copperfield #12	Jct. US 30 in Baker to Jct. I-84 (M.P. 0.00 to M.P. 1.56).
US 20	Santiam Hwy #16	Jct. I-5 (M.P. 0.87) to State Truck Scales (M.P. 1.48).
ORE 62	Crater Lake #22	Jct. Rogue River Hwy. in Medford to Antelope Rd. (M.P. 0.00 - 6.33)
ORE 99 US 199	Redwood #25	Jct. I-5 to Jct. Rogue River Hwy. (M.P. X2.74 to M.P. 0.00).
ORE 42	Coos Bay-Roseburg #35	Jct. Dillard Hwy to Jct. I-5 (M.P. 73.77 to M.P. 77.17).
—	Wilsonville-Hubbard #51	Jct. I-5 to Jct. 99E (M.P. X0.31 to M.P. 5.63).
US 395	Umatilla-Stanfield #54	North City Limits of Hermiston to Jct. I-84 (M.P. 4.30 to M.P. 12.90).
ORE 99E	Albany-Junction City #58	Jct. I-5 in N. Albany (M.P. 0.00) to Jct. Santiam Hwy (M.P. 1.38).
ORE 99	Rogue River #63	(1) In Medford, from Ehrman Way (M.P. 4.58) to Jct. Crater Lake Hwy. (M.P. 5.50). (2) In Medford, from Jct. Crater Lake Hwy. (M.P. 5.50) to Stewart St. (M.P. 8.09). (3) Near Ashland, from Valley View Rd. (M.P. 17.02) to (M.P. 17.20).
US 30	La Grande-Baker #66	1) Near La Grande; (M.P. 4.93 to M.P. 5.62) 2) North Powder (M.P. 32.02 to M.P. 32.33) 3) Baker (M.P. 49.96) to southerly Jct. I-84.
US 30	Pendleton Hwy #67	Jct. I-84 to UPS Terminal at Westgate (M.P. X0.03) to (M.P. 0.71)
ORE 213	Cascade Hwy. North #68	Jct. US 30 Bypass to Airport Road (M.P. 0.24) to (M.P. 0.00).
—	Beltline Hwy #69	Jct. Pacific Hwy West to Jct. River Road. (M.P. 6.58) to (M.P. 8.46).
—	Swift #120	Beginning of State jurisdiction at U.P.R.R. R/W line to Jct. I-5 (M.P. 0.00 M.P. 2.93)
US 30 Bypass	Northeast Portland #123	(1) St. Johns Bridge (M.P. 0.00) to (M.P. 1.31). (2) Jct. I-5 to 15th Ave. (M.P. 5.26) to (M.P. 6.80).
ORE 214	Hillsboro-Silverton #140	Jct. ORE 99E to Jct. I-5 Westbound only. (M.P. 39.29) to (M.P. 36.80).
ORE 217	Beaverton-Tigard #144	Jct. I-5 (M.P. 7.44) to Jct. Greenburg Rd. (M.P. 4.95).
ORE 224	Clackamas Hwy #171	(1) Jct. I-205 (M.P. 5.00) to McLoughlin Blvd. (M.P. 0.00). (2) Jct. I-205 to S.E. 122nd Ave. (M.P. 5.03) to (M.P. 6.56).
—	McVay #225	Jct. McKenzie Hwy (ORE 126 Bus. in Springfield) to Jct. I-5 near Goshen.

Route No.	Highway Name	Highway Section
OR 138	Elkton-Sutherlin #231	Jct. I-5 (M.P. 23.53) to (M.P. 25.39)
ORE 99	Dillard #235	Jct. Coos Bay-Roseburg Hwy to Roseburg Lumber Co. (M.P. 2.00).
US 30	Cascade Locks #283	Entire Highway (2.08 miles)
—	Umatilla-Mission #331	Jct. I-84 to Arrowhead Truck Stop (M.P. 4.20) to (M.P. 11.09).
ORE 207	Hermiston #333	Jct. Umatilla-Stanfield Hwy to Jct. I-84 (M.P. 7.24 to M.P. 12.59).
US 30	Huntington Hwy #449	Jct. I-84 (M.P. 11.09) to (M.P. 10.52)
ORE 201	Olds Ferry-Ontario #455	1) Jct. I-84 to West City limits Ontario (M.P. 25.13 to M.P. 29.2). 2) Jct. Oregon St/Idaho Ave to Oregon/Idaho Border (M.P. Y27.02) to (M.P. Y28.39)

ROUTE MAP 7

LENGTH LIMITATIONS

1. Truck tractor-semitrailer combinations: Semitrailer shall not exceed 48 feet in length. No restriction on overall length.
2. Truck tractor-semitrailer-trailer combinations: No trailer or semitrailer shall exceed 40 feet in length. Measurement from the front of the first semitrailer to the rear of the second semitrailer or trailer shall not exceed 68 feet. No restriction on overall length.
3. Loads on combinations described in 1 and 2 shall not extend beyond the rear of the semitrailer or trailer by more than 5 feet.

For additional permit information contact the
**Transportation Permit Unit, 2960 E. State St.,
 Room 102, Salem, Oregon 97310**
**Mail request to:
 P.O. Box 14030 97309-5003**
**Phone: (503) 378-2568
 (In-State WATTS): 1-800-362-3602**

ORS 818.010

**MAXIMUM ALLOWABLE WEIGHTS EXCEPT WHEN
 OPERATING UNDER AUTHORITY OF SPECIAL PERMIT**

Subject to reduced load limits established pursuant to ORS 818.040, the following weight provisions as set forth under ORS 818.010 are applicable upon any state highway.

The gross axle or tandem axles weight of any axle or tandem axles of a vehicle shall not exceed 600 pounds per inch of the total tire width of the axle or tandem axles.

The gross weight of any single axle of a vehicle shall not exceed 20,000 pounds. The gross weight of any tandem axles of a vehicle shall not exceed 34,000 pounds.

The gross weight of any vehicle, group of axles or combination of vehicles shall not exceed the sums of the permissible axle, tandem axles or group of axles weights or the weights set forth in the following table of weights for the distance in feet between the first and last axles of the number of axles specified, whichever is less; except that two consecutive sets of tandem axles may have a gross weight of 34,000 pounds each, providing the distance between the first and last axles of the two sets of tandem axles is 30 feet or more, and a group of four axles consisting of a set of tandem axles and two axles spaced nine feet or more apart may have a gross weight of 70,000 pounds, providing the distance between the first and last axle of the group is 35 feet or more.

MAXIMUM GROSS WEIGHT IN POUNDS ON:

DISTANCE IN FEET	2 AXLES	3 AXLES	4 AXLES	5 AXLES	6 or MORE AXLES
4	34,000				
5	34,000				
6	34,000				
7	34,000				
8	34,000				
Over 8 but less than 9	34,000	42,000			
9	39,000	42,500			
10	40,000	43,500			
11	40,000	44,000			
12	40,000	45,000	50,000		
13	40,000	45,500	50,500		
14	40,000	46,500	51,500		
15	40,000	47,000	52,000		
16	40,000	48,000	52,500	52,500	
17	40,000	48,500	53,500	53,500	
18	40,000	49,500	54,000	54,000	
19	40,000	50,000	54,500	54,500	
20	40,000	51,000	55,500	55,500	
21	40,000	51,500	56,000	56,000	
22	40,000	52,500	56,500	56,500	
23	40,000	53,000	57,500	57,500	
24	40,000	54,000	58,000	58,000	
25	40,000	54,500	58,500	58,500	
26	40,000	55,500	59,500	59,500	
27	40,000	56,000	60,000	60,000	
28	40,000	57,000	60,500	61,000	
29	40,000	57,500	61,500	62,000	
30	40,000	58,500	62,000	63,000	

MAXIMUM GROSS WEIGHT IN POUNDS ON:

DISTANCE IN FEET	2 AXLES	3 AXLES	4 AXLES	5 AXLES	6 or MORE AXLES
31	40,000	59,000	62,500	64,000	
32	40,000	60,000	63,500	65,000	
33	40,000	60,000	64,000	66,000	
34	40,000	60,000	64,500	67,000	
35	40,000	60,000	65,500	68,000	
36	40,000	60,000	66,000	69,000	
37	40,000	60,000	66,500	70,000	
38	40,000	60,000	67,500	71,000	
39	40,000	60,000	68,000	72,000	
40	40,000	60,000	68,500	73,000	
41	40,000	60,000	69,500	73,500	
42	40,000	60,000	70,000	74,000	
43	40,000	60,000	70,500	75,000	
44	40,000	60,000	71,500	75,500	
45	40,000	60,000	72,000	76,000	
46	40,000	60,000	72,500	76,500	80,000
47	40,000	60,000	73,500	77,000	80,000
48	40,000	60,000	74,000	78,000	80,000
49	40,000	60,000	74,500	78,500	80,000
50	40,000	60,000	75,500	79,000	80,000
51	40,000	60,000	76,000	80,000	80,000
52	40,000	60,000	76,500	80,000	80,000
53	40,000	60,000	77,500	80,000	80,000
54	40,000	60,000	78,000	80,000	80,000
55	40,000	60,000	78,500	80,000	80,000
56	40,000	60,000	79,500	80,000	80,000
57 or over	40,000	60,000	80,000	80,000	80,000

Distance measured to nearest foot; when exactly 1/2 foot, take next larger number.

EXTENDED WEIGHT TABLE

Gross weight over 80,000 pounds authorized only when operating under the authority of a Special Transportation Permit.

MAXIMUM ALLOWABLE WEIGHTS

- (1) The maximum allowable weights for single axles and tandem axles shall not exceed those specified under ORS 818.010.
- (2) The maximum allowable weight for groups of axles spaced at 46 feet or less shall not exceed those specified under ORS 818.010.
- (3) The maximum weights for groups of axles spaced at 47 feet or more; and, the gross combined weight for any combination of vehicles shall not exceed those set forth in the following table:

Maximum Gross Weight in Pounds on:

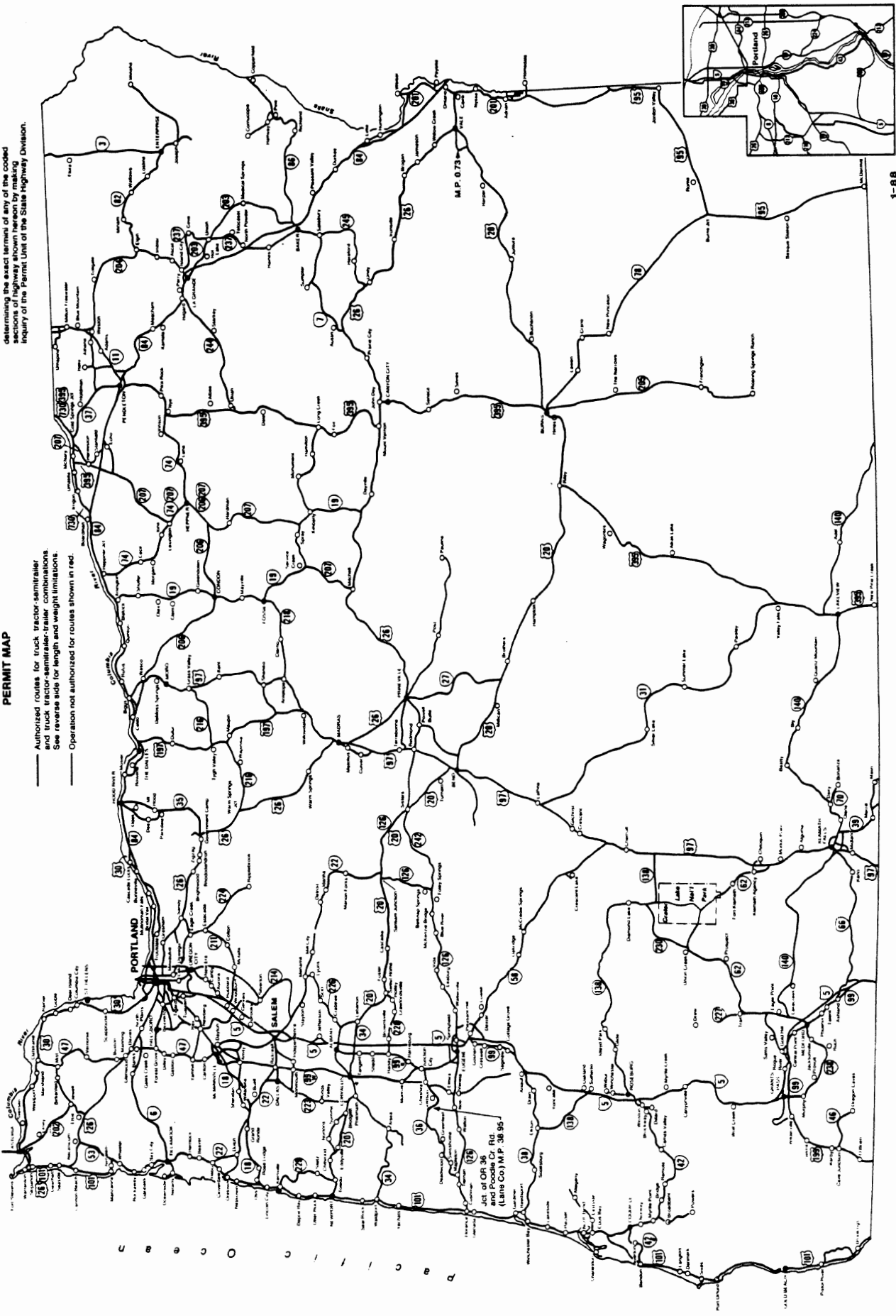
Axle Spacing in feet	5 Axles	6 Axles	7 Axles	8 or More Axles
47	77,500	81,000	81,000	81,000
48	78,000	82,000	82,000	82,000
49	78,500	83,000	83,000	83,000
50	79,000	84,000	84,000	84,000
51	80,000	84,500	85,000	85,000
52	80,500	85,000	86,000	86,000
53	81,000	86,000	87,000	87,000
54	81,500	86,500	88,000	91,000
55	82,500	87,000	89,000	92,000
56	83,000	87,500	90,000	93,000
57	83,500	88,000	91,000	94,000
58	84,000	89,000	92,000	95,000
59	85,000	89,500	93,000	96,000
60	85,500	90,000	94,000	97,000
61	86,000	90,500	95,000	98,000
62	87,000	91,000	96,000	99,000
63	87,500	92,000	97,000	100,000
64	88,000	92,500	97,500	101,000
65	88,500	93,000	98,000	102,000
66	89,000	93,500	98,500	103,000
67	90,000	94,000	99,000	104,000
68		95,000	99,500	105,000
69		95,500	100,000	105,500
70		96,000	101,000	
71		96,500	101,500	
72			102,000	
73			102,500	
74			103,000	
75			104,000	
76			104,500	
77			105,000	
78			105,500	

Distance measured to nearest foot; when exactly 1/2 foot, take next larger number.

**ROUTE MAP 7
OREGON HIGHWAY DIVISION
PERMIT MAP**

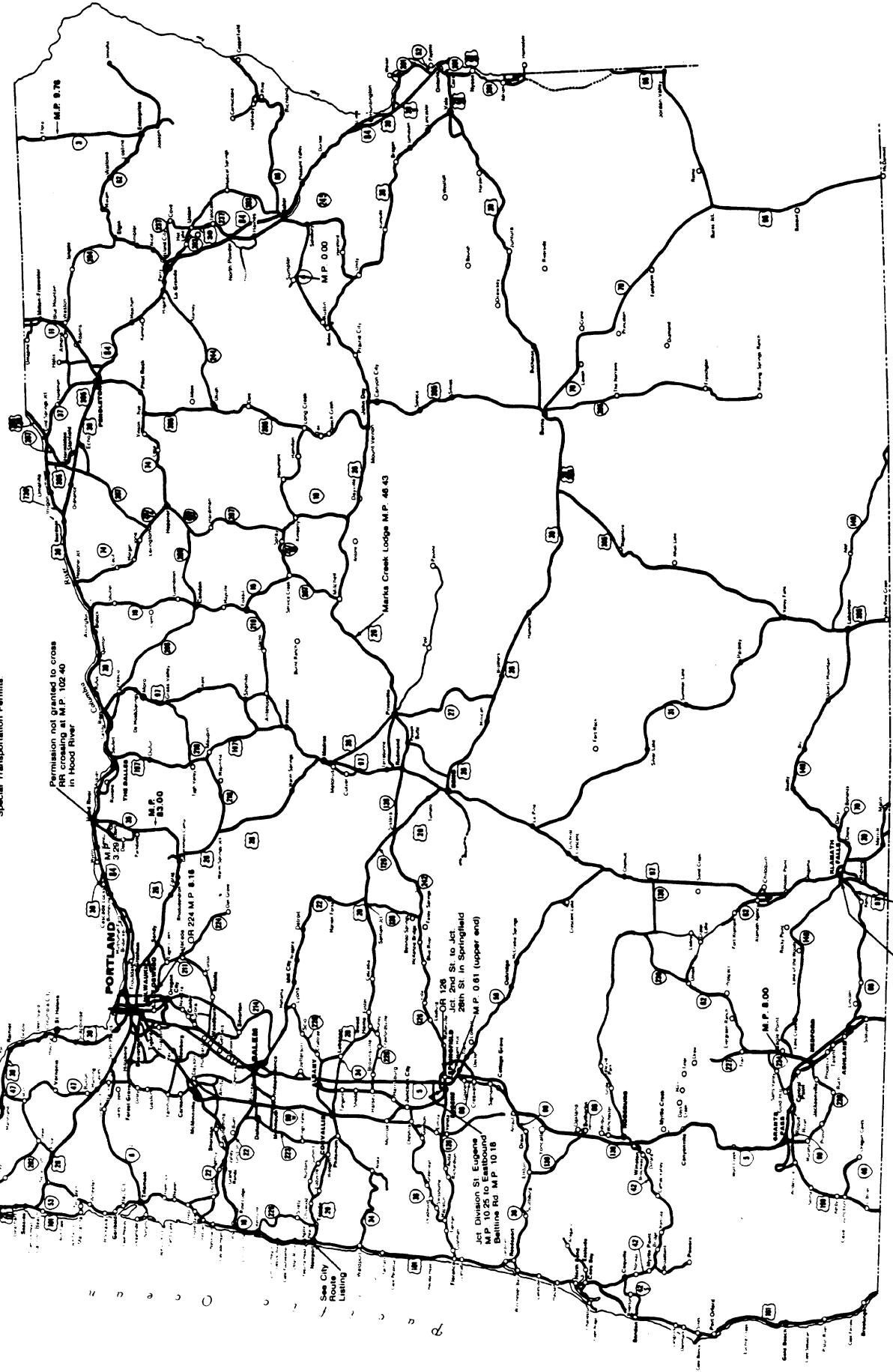
Note: Each driver, chauffeur or owner of any combination of vehicles shall be responsible for the proper use of the map and for the coded sections of highway shown hereon by making inquiry of the Permit Unit of the State Highway Division.

— Authorized routes for truck tractor-semitrailer and truck tractor-semitrailer-trailer combinations. See reverse side for length and weight limitations.
 - - - Operation not authorized for routes shown in red.



ROUTE MAP 5
OREGON STATE HIGHWAY DIVISION
APPROVED ROUTES FOR "TRIPLES" COMBINATIONS
 Movements are permitted only under authority of
 Special Transportation Permits

LEGEND
 — APPROVED ROUTES FOR "TRIPLES" COMBINATIONS
 — ROUTES SHOWN IN RED NOT AUTHORIZED



OR 66 Jct. OR 140 M.P. 56.66
 to Jct. US 97 M.P. 59.40

**OREGON STATE HIGHWAY DIVISION
EXTENDED WEIGHT TABLE**

MAXIMUM ALLOWABLE WEIGHTS

- (1) The maximum allowable weights for single axles and tandem axles shall not exceed those specified under ORS 818.010
- (2) The maximum allowable weight for groups of axles spaced at 46 feet or less shall not exceed those specified under ORS 818.010
- (3) The maximum weights for groups of axles spaced at 47 feet or more; and, the gross combined weight for any combination of vehicles shall not exceed those set forth in the following table:

Axle Spacing in Feet	Maximum Gross Weight in Pounds on:			
	5 Axle	6 Axle	7 Axle	8 or More Axles
47	77,500	81,000	81,000	81,000
48	78,000	82,000	82,000	82,000
49	78,500	83,000	83,000	83,000
50	79,000	84,000	84,000	84,000
51	80,000	84,500	85,000	85,000
52	80,500	85,000	86,000	86,000
53	81,000	86,000	87,000	87,000
54	81,500	86,500	88,000	91,000
55	82,500	87,000	89,000	92,000
56	83,000	87,500	90,000	93,000
57	83,500	88,000	91,000	94,000
58	84,000	89,000	92,000	95,000
59	85,000	89,500	93,000	96,000
60	85,500	90,000	94,000	97,000
61	86,000	90,500	95,000	98,000
62	87,000	91,000	96,000	99,000
63	87,500	92,000	97,000	100,000
64	88,000	92,500	97,500	101,000
65	88,500	93,000	98,000	102,000
66	89,000	93,500	98,500	103,000
67	90,000	94,000	99,000	104,000
68		95,000	99,500	105,000
69		95,500	100,000	105,500
70		96,000	101,000	
71		96,500	101,500	
72			102,000	
73			102,500	
74			103,000	
75			104,000	
76			104,500	
77			105,000	
78			105,500	

APPENDIX I

SOUTH DAKOTA

South Dakota motor carrier handbook

Letter – Department of Transportation Administrative Aide Jim Schwas



Department of Transportation

Office of the Secretary

Pierre, South Dakota 57501

February 29, 1988

Mr. Leslie Pettis
UMTRI
2901 Baxter Road
Ann Harbor, Michigan 48109-2150

Dear Mr. Pettis:

This letter is in response to your request for information regarding longer combination vehicle accidents in South Dakota.

In order to avoid confusion over the term longer vehicle combination, it is necessary to define what type of vehicle combinations are allowed to operate upon South Dakota highways. South Dakota allows the following vehicle combinations:

1. A straight truck and trailer combination - the overall length of this combination may not exceed 80 feet. This combination may travel upon any state highway.
2. A truck tractor-semitrailer-trailer combination (Rocky Mountain double) - the maximum overall length of the semitrailer-trailer combination (excluding the truck tractor) is 81 1/2 feet. The maximum length of the semitrailer in this combination is 45 feet. This combination generally consists of a 45 foot semitrailer and 28 1/2 foot pup trailer. The Rocky Mountain double combination may travel upon any state highway.
3. A truck tractor-semitrailer-semitrailer combination (Turnpike Doubles or Twin 45 Foot Trailers) - the maximum overall length of the Twin 45 foot trailers is 110 feet and individual trailers may not exceed 45 feet. These combinations operate under the authority of a single trip permit and are restricted to Interstate highways with limited access off the Interstate, and to segments of three non-Interstate highways.
4. A truck tractor-semitrailer-trailer-trailer combination (Triples) - the maximum overall length of the triple trailer combinations is 110 feet and individual trailers may not exceed 28 1/2 feet. The triple trailer program is a demonstration program established July 1, 1985, which will become a permanent program July 1, 1988. The triple trailers operate under the authority of a single trip permit and are restricted to the Interstate with limited access off the Interstate and to segments of three non-Interstate highways.

Mr. Leslie Pettis
February 29, 1988
Page 2

With respect to the accident rate of turnpike doubles, enclosed is an April 1984 report "Interstate XX Demonstration Evaluation Report" prepared by the Department's Planning Division.

With respect to the accident rate of triple trailers, during the demonstration period of July 1, 1985 through November 30, 1987, there has been one (1) property accident in 7,595 trips. This accident was weather-related and involved a company that was not authorized to participate in the demonstration program.

With respect to the number of tractor-semitrailer accidents versus double trailer accidents over the last ten years the number of accidents are as follows:

<u>Year</u>	<u>Semitrailer</u>	<u>Double Trailer</u>
1978	684	3
1979	726	12
1980	610	8
1981	585	6
1982	593	12
1983	603	25
1984	586	21
1985	571	32
1986	482	30
1987	395	21

Accident type data is attached for single and double trailers for the five year period 1983-1987.

Finally, I am enclosing a copy of South Dakota's 1986 Motor Vehicle Traffic Accident Summary. If you have any further questions, please do not hesitate to contact me at (605) 773-3265.

Sincerely,



Jim Schmidt
Administrative Aide

JS:jrr

Enclosures

Bridge Weight Limit Map," require approval by the DOT, Operations Support Office, before the permit may be issued by any permit issuing authority. The approval process may require special load analysis. Processing time when special load analysis is required may take up to two working days.

Annual Oversize Permits for Governmental Entities

Annual oversize permits may be issued to governmental entities at the discretion of the permit issuing authority. Governmental entities include state agencies, local government subdivisions of South Dakota, foreign states and their local subdivisions, the U.S. Government and its agencies, departments and divisions. Any special operating restriction shall be stated on the annual permit. There is no charge for annual permits issued to governmental entities.

Twin 45 Program

1. Authorized Combinations:
 - A. Truck tractor semitrailer-semitrailer;
 - B. Truck tractor semitrailer-trailer.
2. Maximum Length: Single units in the vehicle combination may not exceed 45 feet and the overall length of the combination may not exceed 110 feet.
3. Maximum Weight: Vehicle combinations must comply with tire, axle and bridge weight formula. The maximum gross weight is 129,000 pounds.
4. Licensing Requirements: The vehicle combination must be registered and commercial license fees must be paid for the gross weight of the vehicle and load prior to the use of the permit. (See SDCL 32-9-15 for commercial license fee schedule).
5. Single Trip Permits: Vehicle combinations may only operate under the authority of a single trip permit. The permits are self-issuing and sold in books of 10 for \$100. A round trip requires two single-trip permits.
6. Permit Requirements: The single-trip permit form must be completed, signed and the duplicate copy of the permit mailed to the Department of Transportation before beginning the trip. The signed permit must be carried in the vehicle and be available for inspection by any authorized enforcement personnel upon demand. The vehicle combination may not exceed 55 MPH on rural interstate highways.

7. Route Restrictions: Vehicle combinations are restricted to the Interstate Highway System with limited access off the Interstate approved by the Department of Transportation.

Twin 42 Program

1. Authorized Combinations:
 - A. Truck tractor semitrailer-semitrailer;
 - B. Truck tractor semitrailer-trailer.
 2. Maximum Length: Single units in the vehicle combination may not exceed 42 feet and the overall length of the combination may not exceed 110 feet.
 3. Maximum Weight: Vehicle combinations must comply with tire, axle and bridge weight formula. The maximum gross weight is 129,000 pounds.
 4. Licensing Requirements: The vehicle combination must be registered and commercial license fees must be paid for the gross weight of the vehicle and load prior to the use of the permit. (See SDCL 32-9-15 for commercial license fee schedule).
 5. Single Trip Permits: Vehicle combinations may only operate under the authority of a single trip permit. The permits are self-issuing and sold in books of 10 for \$100. A round trip constitutes two trips.
 6. Permit Requirements: The single-trip permit form shall be completed, signed, and the duplicate copy of the permit mailed to the Department of Transportation before beginning the trip. The signed permit must be carried in the vehicle and be available for inspection by any authorized enforcement personnel upon demand. The vehicle combination may not exceed 55 MPH on rural interstate highways.
 7. Route Restrictions: Vehicle combinations are restricted to specific routes between elevators as stated on the permit.
- #### Triple Trailer Demonstration Program
- Motor carriers wishing to participate in the triple trailer demonstration program must receive approval from the Department of Transportation. Vehicle combinations may only operate under single-trip permit and monthly reports must be submitted to the DOT.
1. Demonstration Period through June 30, 1988. The DOT reserves the right to terminate the program or prohibit operations during periods when in

the Department's judgment traffic, weather, or other safety conditions make such operations unsafe or inadvisable.

2. **Vehicle Combinations** - A truck tractor and three trailing units (semi-trailers or trailers) provided, the individual trailers do not exceed 28 1/2 feet. The overall length of the vehicle combination may not exceed 110 feet. The respective weight of any trailer may not exceed the weight of the trailer(s) located ahead of it by more than 3,000 lbs.
3. **Combination Weight** - The gross weight of the vehicle combination may not exceed 129,000 lbs. The vehicle combination must comply with tire, axle and bridge formula weight limits.
4. **Triple Trailer Routes** - Triple trailers are restricted to the Interstate Highway System with access off the Interstate subject to Department approval.
5. **Vehicle Speed** - The triple trailer combination may not exceed a speed limit of 55 MPH on rural interstate highways.
6. **Single Trip Permits Required** - A single trip permit is required for each trip. A round trip constitutes two trips. Single trip permits in books of 10 may be obtained from the Department of Revenue for \$100. The permittee shall complete the permit form, sign the permit, and send the duplicate copy of the permit to the Department of Transportation before beginning the trip. The signed permit is the permit for the movement of the combination and shall be carried in the transporting vehicle and shall be available for inspection by any enforcement authority.
7. **Vehicle Licensing** - Commercial license fees set forth in SDCL 32-9-15 must be paid before single trip permits will be issued.
8. **Permit Violation** - A violation of any dimension, weight, or operating restriction under the triple demonstration program may result in denial of future permit privileges to the carrier.
9. **Record Keeping Requirements** - Records of each trip shall be kept by the operators and a recap of trips must be submitted monthly on forms approved by the Department.
10. **Accident Reporting** - All accidents involving a triple trailer combination resulting in personal injury or death or property damage in excess of \$500 shall be reported in writing to the Department of Transportation by the carrier. Accidents shall be reported within 24 hours to the:

South Dakota Department of Transportation
Office of the Secretary
700 Broadway East
Pierre, SD 57501

Please Note: The accident reporting requirement under the Demonstration Program guidelines is for Department of Transportation informational purposes. All drivers must also comply with SDCL 32-34-7 which states "The driver of any motor vehicle involved in an accident resulting in bodily injuries or death to any person or property damage to an apparent extent of five hundred dollars or more to any one person's property or one thousand dollars per accident shall immediately, by the quickest means of communication, give notice of such accident to the nearest available peace officer who has jurisdiction."

Single Trip Permits for over 80,000 pounds on the Interstate - Single trip permits are available for over 80,000 pounds on the Interstate if the motor vehicle combination complies with tire, axle and bridge formula weight limits and is within the state's legal length limits provided in SDCL 32-22-8.1. Permits are available from the Department of Revenue in books of ten for \$10.

Lift Axles/Variable Load Axles - Effective July 1, 1987, motor vehicles registered in South Dakota which are equipped with a variable load axle must be equipped with a pressure control device located outside the driver's compartment so that the weight carried on the axle may not be varied by anyone in the vehicle. The control to fully raise or lower a variable load axle may be accessible to the driver but it may not also function as the pressure control device. A violation of this requirement is a Class 2 misdemeanor (\$100 and/or 30 days in jail).

A lift axle may not be raised, if when it is raised it causes the other axles to be overloaded, unless the operator has acquired an annual lift axle permit. The permit is \$50 and allows the raising of the lift axle 100 feet before beginning a turn provided the axle is lowered within 100 feet after completing the turn. The annual permit is not valid on the Interstate.

Mobile Home Permits - Annual or single trip oversize permits may be obtained for the movement of overwidth mobile homes up to 16 feet in width. The annual permit is \$200 per truck or \$1,000 per fleet. Single trip permits are \$20.

Municipal Sludge Vehicles Annual Oversize and/or Overweight Permits - The Department of Revenue may issue an annual overwidth permit to municipal sludge vehicles owned and operated by a municipality. Certain overweight municipal sludge vehicles which were purchased prior to July 1, 1984, may be issued an annual overweight permit subject to route approval by the Department of Transportation. There is no charge for the permit(s).

Haystack Movers - A tractor towed or truck mounted haystack mover with single and tandem axles must comply with all tire and axle weight requirements. A stackmover built prior to July 1, 1983, and modified with a third

ADMINISTRATIVE RULES OF SOUTH DAKOTA

November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987.
General Authority: SDCL 32-22-42.
Law Implemented: SDCL 32-22-42.

70:03:01:06. Permit to be available for inspection -- Violation of permit. The permit shall be available for inspection by any authorized enforcement authority. An authorized enforcement authority may void a permit for a particular trip if he finds the permittee has violated the terms of the permit. For the operator of a vehicle, the effect of a voided permit is the same as never having the permit issued.

Source: 8 SDR 45, effective October 28, 1981; 10 SDR 7, effective July 31, 1983; transferred from S 70:01:04:04.01, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987.
General Authority: SDCL 32-22-42.
Law Implemented: SDCL 32-22-42.

70:03:01:07. Movement not allowed from sunset to sunrise -- Exceptions. No permit may be granted for movement of overwidth loads between the hours of sunset and sunrise, but the secretary of commerce and regulation or his authorized representatives may issue permits in an emergency or in the interest of national defense for movement of oversize loads at any time.

Source: SL 1975, ch 16, S 1; 4 SDR 91, effective July 11, 1978; 5 SDR 97, effective May 20, 1979; 6 SDR 31, effective July 30, 1979; 10 SDR 7, effective July 31, 1983; 11 SDR 33, effective September 3, 1984; 12 SDR 138, effective February 23, 1986; transferred from S 70:01:04:05, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987.
General Authority: SDCL 32-22-41, 32-22-42.
Law Implemented: SDCL 32-22-41, 32-22-42, 32-22-46.

MOVEMENT OF OVERSIZE OR OVERWEIGHT VEHICLES

70:03:01:08. Only single-trip overweight permits issued on interstate highway system -- Permits required for oversize movement on interstate. Only single-trip permits may be issued on the interstate highway system for overweight loads. All persons moving an oversize load, regardless of its use or purpose, must have a permit before entering any portion of the interstate highway system.

Source: SL 1975, ch 16, S 1; 10 SDR 7, effective July 31, 1983; 12 SDR 7, effective July 28, 1985; transferred from S 70:01:04:06, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987.

General Authority: SDCL 32-22-42.
Law Implemented: SDCL 32-22-38, 32-22-42.

70:03:01:09. Permits not issued when load can be reduced. No permit may be issued for movement of a load that could be readily reduced in size or weight, except as provided by this chapter.

Source: SL 1975, ch 16, S 1; 2 SDR 71, effective May 1, 1976; 4 SDR 91, effective July 11, 1978; 10 SDR 7, effective July 31, 1983; transferred from S 70:01:04:07, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987.

General Authority: SDCL 32-22-42.
Law Implemented: SDCL 32-22-38, 32-22-42.

70:03:01:10. Designation of route of permit holders. The route to be traveled by a load under permit may be designated by any authorized permit-issuing authority, except where otherwise specified in this chapter.

Source: SL 1975, ch 16, S 1; 10 SDR 7, effective July 31, 1983; transferred from S 70:01:04:09, effective November 1, 1986; 13 SDR 129, 13 SDR 134, effective July 1, 1987.

MOVEMENT OF OVERSIZE OR OVERWEIGHT VEHICLES

Source: 11 SDR 33, effective September 3, 1984; transferred from S 70:01:04:55, effective November 1, 1986; 13 SDR 129, 13 SDR 134, effective July 1, 1987. General Authority: SDCL 32-22-42. Law Implemented: SDCL 32-22-42.

70:03:01:60. Overlength and overweight permits authorized for three-unit combinations on interstate -- fee. The department of revenue may issue overlength and overweight permits in books of 10 for truck tractor-semitrailer-semitrailer or tractor-semitrailer-trailer combinations traveling over the interstate highway system. The fee for the book of 10 permits is \$100.

Source: 11 SDR 33, effective September 3, 1984; transferred from S 70:01:04:56, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987. General Authority: SDCL 32-22-42. Law Implemented: SDCL 32-22-42.

70:03:01:61. Maximum combination length and operating requirements for three-unit combinations. The overall length of the vehicle combinations authorized by S 70:03:01:60 may not exceed 110 feet, and individual units may not exceed 45 feet in length. The combinations must be operated within the weight limits provided in SDCL 32-22-16 and 32-22-16.1 and may not exceed a gross weight of 129,000 pounds.

Source: 11 SDR 33, effective September 3, 1984; transferred from S 70:01:04:57, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987. General Authority: SDCL 32-22-42. Law Implemented: SDCL 32-22-42.

70:03:01:62. Maximum weight -- Commercial license. The weight of the vehicle or combination of vehicles Revised through July 1, 1987 31

ADMINISTRATIVE RULES OF SOUTH DAKOTA

Source: 11 SDR 33, effective September 3, 1984; transferred from S 70:01:04:52, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987. General Authority: SDCL 32-22-42. Law Implemented: SDCL 32-22-42.

70:03:01:57. Single-trip permits for overlength semitrailers -- fee. Single-trip permits may be issued by the department of revenue, highway patrol troopers, and ports of entry for semitrailers over 53 feet long. The permit fee is \$20.

Source: 11 SDR 33, effective September 3, 1984; 12 SDR 7, effective July 28, 1985; transferred from S 70:01:04:53, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987. General Authority: SDCL 32-22-42. Law Implemented: SDCL 32-22-42.

70:03:01:58. Overlength semitrailers -- Operating restrictions. The department of revenue, highway patrol troopers, and ports of entry may impose operating restrictions on overlength semitrailers granted an annual or single-trip permit pursuant to S 70:03:01:56 and 70:03:01:57. All operating restrictions shall be stated on the permit.

Source: 11 SDR 33, effective September 3, 1984; transferred from S 70:01:04:54, effective November 1, 1986; 13 SDR 179, effective June 1, 1987; 13 SDR 129, 13 SDR 134, effective July 1, 1987. General Authority: SDCL 32-22-42. Law Implemented: SDCL 32-22-42.

70:03:01:59. Overlength semitrailers -- Permit must be carried in cab. The annual or single-trip validated permit is the permit for the movement of the overlength semitrailer and must be carried in the cab of the truck tractor.

Revised through July 1, 1987

APPENDIX J

UTAH

Utah regulations for legal and permitted vehicles

400.1 Permit Required:

It shall be unlawful and constitute a misdemeanor for any person to drive, operate, or move, or for the owner to cause or permit to be driven or moved upon any state highway within Utah, whether paved or unpaved, any vehicle or combination of vehicles exceeding legal size and/or weight without a valid permit (See Section 200.01), or to exceed the limits of the applicable permit.

400.2 Overweight/Oversize Divisible Loads:

An overweight permit may be issued for moving a combination of vehicles and loads exceeding the legal limits under the following conditions:

- (1) The combination of vehicles is properly registered for 78,001 pounds.
- (2) The height of the combination and/or load does not exceed 14 feet.
- (3) The width of the combination does not exceed 8-1/2 feet.
- (4) The axle, groups of axles, and GW does not exceed the Utah Weight Table, page 400-3. (See Appendix-A for weights on Categories I and III until Phase-Out effective December 31, 1985.)
- (5) The routes over which the vehicle or combination is operated are confined to those designated by the Department for such operation.
 - (a) Divided Highways - Combinations of vehicles to a maximum length of 105' shall be allowed to operate on divided highways as designated by the Department of Transportation. Combinations of vehicles hauling bulk gasoline or LP gas shall not exceed 95' in length.
 - a.1 A truck and two trailers, the trailers of approximately equal length having an overall combination length not to exceed 95 feet.
 - a.2 A tractor and two trailers, consisting of a long and short trailer not to exceed an overall length of 98 feet. (Rocky Mountain Doubles)
 - a.3 A tractor and three trailers, the trailers of approximately equal length having an overall combination length not to exceed 105 feet. (Triple Trailers)
 - a.4 A tractor and two trailers of approximately equal length having an overall combination length not to exceed 105 feet. (Turnpike Doubles)
 - a.5 An auto transporter combination consisting of a truck and two stinger steered semi-trailers having an overall combination length not to exceed 105 feet.
 - a.6 While in transit, no trailer shall be positioned ahead of another trailer which carries an appreciably heavier load. An empty trailer shall not precede a loaded trailer.

400.2 Overweight/Oversize Divisible Loads: (Continued)

- a.7. Extended length multiple unit combinations listed on page 400-2, paragraph 5, sub-paragraphs a.1, a.2, a.3, a.4, a.5 shall not be dispatched during adverse weather conditions, as defined in Section 392.14 of the Federal Motor Carrier Safety Regulations. Extreme caution in the operation of a motor vehicle shall be exercised when hazardous conditions such as those caused by snow, ice, sleet, fog, mist, rain, dust or smoke adversely affect visibility or traction. Speed shall be reduced when such conditions exist. If conditions become sufficiently dangerous, the operation of the vehicles shall be discontinued and shall not be resumed until the vehicle can be safely operated. Whenever compliance with the foregoing provisions of this rule increases hazard to the motorist, vehicle, occupants and security of the vehicles and its cargo, the driver may proceed to the first place offering a safe haven.
- (b) Two-lane Highways
- b.1 The maximum overall length for a truck-trailer two-unit combination shall not exceed 77 feet; three unit combinations shall not exceed 92 feet in length.
 - b.2 Three-unit combinations hauling bulk gasoline or LP gas on two-lane roads shall not exceed 85 feet in length.
 - b.3 Oversize signs required on vehicles in excess of 75 feet in length on two lane highways.
 - b.4 Extended length multiple unit combinations listed above in paragraphs b.1 and b.2 shall be dispatched in accordance with travel restrictions listed in Section 500.2, subparagraph 1.
- (6) The combinations will be permitted to operate only when covered by a valid Special Transportation Permit.
- (7) The following rules and regulations regarding equipment will apply to all units in the combinations as applicable:
- (a) Power & Traction. All tractor trucks shall be powered to provide adequate acceleration ability and hill climbing ability under normal operating conditions, and to operate on level terrain at speeds compatible with other traffic. The ability to maintain a minimum speed of 20 mph, under normal operating conditions on any grade of 5% or less over which the combination is operated and be able to resume a speed of 20 mph after stopping on any such grade and, except in extreme weather conditions to negotiate all grades of 5% or less encountered. Non-compliance with this minimum speed requirement will constitute a violation and the permit will be subject to revocation for a period of thirty (30) days.

400.2 Overweight/Oversize Divisible Loads: (continued)

- (b) Fifth Wheel. A heavy duty fifth wheel is required. All fifth wheels must be clean and lubricated with a light duty grease prior to each trip. The fifth wheel must be located in a position which provides adequate stability.
 - (c) Pick-up Plates. Pick-up plates must be of equal strength to the fifth wheel.
 - (d) King Pin. The king pin must be of a solid type and permanently fastened. Screw out or folding type king pins are prohibited.
 - (e) Pintle Hook and Eye. All hitch connections must be of a no-slack type, preferably power actuated ram. Air actuated hitches which are isolated from the primary air transmission system are recommended.
 - (f) Drawbar. The drawbar length should be the practical minimum consistent with the clearances required between trailers for turning and backing maneuvers.
 - (g) Axles. Axles must be those designed for the width of the body.
 - (h) Brakes. All braking systems must comply with State and Federal requirements. In addition, fast air transmission and release valves must be provided on all semi-trailer and converter dolly axles. A brake force limiting valve, sometimes called a "slippery road" valve, may be provided on the steering axle. Indiscriminate use of engine retarded brakes is prohibited.
 - (i) Mud Flaps or Splash Guards. Anti-sail type mud flaps are recommended.
- (8) All extended length multiple trailer combinations must be stable at all times during normal braking and normal operation. An extended length multiple trailer combination when traveling on a level, smooth, paved surface must follow in the path of the towing vehicle without shifting or swerving more than three (3) inches to either side when the towing vehicle is moving in a straight line.
- (9) Time of Travel Restrictions - Except for adverse weather as provided in paragraphs a.7 page 400-4 and section 500-2 paragraph 1, page 500-3 extended length multiple-unit combinations shall be allowed to operate 24 hours per day including weekends and holidays on approved routes, including local delivery destination travel on two-lane roads.
- (10) Vehicles operating pursuant to special permits issued for overweight and overlength shall not be operated at any time in excess of the posted speed limit or the speed indicated on the permit form, whichever is less. Permits shall be subject to cancellation for any violation of such speed.

400.2 Overweight/Oversize Divisible Loads: (continued)

- (11) No convoy movements are permitted.
- (12) Minimum Distance. Every oversize vehicle and/or load shall maintain a minimum distance of 500 feet from another commercial vehicle traveling in the same direction on the same highway.
- (13) Securing Load. Loads shall be securely fastened to the transporter with material and devices of sufficient strength to prevent the load from becoming loose, detached or dangerously displaced or in any manner a hazard to other highway users.

The components of the load shall be reinforced or bound securely in advance of travel to prevent debris from being blown off the unit and endangering the safety of the traveling public. Any debris from the special permit vehicle deposited on the highway right-of-way shall be removed by the permittee.

- (14) Insurance. Bodily injury and property damage insurance is required before a special Transportation Permit will be issued by the Utah Highway Patrol (U.C.A. 27-12-155 or 54-6-17 whichever is greater).

Evidence of insurance issued by a company licensed in Utah shall be filed on certificate Form POE 50 or other form(s) designated by the Utah Highway Patrol. The form must be completed and signed by an agent of the insuring company showing coverage in the minimum amounts authorized by State law. The insurance policy shall contain a provision specifically providing that damage to the property of the State of Utah caused by negligence of the carrier is covered by said policy or other satisfactory evidence of such coverage, such as a letter from the insurance company, will be required.

In the event any carrier desires to post an indemnity bond rather than furnish the liability and property damage insurance above described, said indemnity bond in the minimum amount of \$50,000 shall be filed on Form POE 50 for damage to any highway or highway structure occasioned by movement over a highway authorized by a permit issued by the Utah Highway Patrol.

Two exceptions not required to post additional insurance as a condition to the issuance of a Special Transportation Permit are:

- (a) Carriers who have permits or certificates of convenience and necessity from the Public Service Commission covering the type of movement contemplated, and who have policies of insurances on file with the Public Service Commission of Utah.
 - (b) Applicants who are qualified self-insurers and hold a certificate of insurance as provided in U.C.A. Section 41-12-34.
- (15) This regulation does not release the permittee from complying with other existing laws, local ordinances, or resolutions which may govern the movement.

APPENDIX K

WASHINGTON

Overweight/oversize vehicle permits

SECTION 2
NEED FOR SPECIAL PERMITS

HIGHWAY MOVEMENTS REQUIRING A PERMIT

Movements that involve any of the following features require a special permit since they exceed the limits for weight or size established by law.

1. WIDTH - Over 8½ feet (RCW 46.44.010)
2. HEIGHT - Over 14 feet (RCW 46.44.020)
3. LENGTH - (RCW 46.44.030)
 - Single Unit Over 40 feet
 - Single Trailer Over 48 feet
 - Combination:
 - Truck and Trailer Over 75 feet
 - Two Trailing Units Over 60 feet
4. WEIGHT - (RCW 46.44.041)
 - Single Axle: Over 20,000 lbs.
 - Tandem Axles: Over 34,000 lbs.

NON-REDUCIBLE LOADS

To qualify for a permit, the hauler must show that the load cannot reasonably be dismantled or disassembled. If the load can be reduced, even if that would require the use of additional vehicles, no special permit will be issued (WAC 468-38-050).

INFORMATION REQUIRED FOR PERMIT

Information about the vehicle, the owner, the load, the route to be traveled, and the need for the move, may be required when requesting a permit. Misrepresentation of any such information is an infraction (RCW 46.44.105).

An operator who moves an overlegal load without a valid permit may incur a \$100 fine as well as other penalties prescribed by law (RCW 46.44.105).

LIABILITY OF PERMITTEE

The person responsible for the movement is liable for any damage to the highway or structures caused by his or his employee's negligence or illegal operation of the vehicle (RCW 46.44.110).

GENERAL CONDITIONS FOR OPERATION UNDER PERMIT

Only the owner of the hauling vehicle or a person operating it under lease can be issued a permit. Specific limitations may be added as to highways used, patrolling, flagging, and hours of operation. These are conditions attached to each permit and the permit is valid only if the conditions are met.

If a State Patrol officer or Commercial Vehicle Enforcement Officer (CVEO) finds a person operating a vehicle in violation of the conditions of the permit, he may confiscate the permit (RCW 46.44.105). In addition, if the patrolman or CVEO finds that the load exceeds the permitted size or weight, he may issue a citation and require that some of the load be transferred to another vehicle (RCW 46.44.100).

Monetary penalties may also be assessed against a carrier who operates a vehicle that does not meet legal requirements or that does not conform to the conditions of the permit.

WASHINGTON STATE TRANSPORTATION COMMISSION
DEPARTMENT OF TRANSPORTATION
VEHICLE WEIGHT TABLE

Section 46.44.041
As Last Amended By SB No. 3120, 1985 Session

No vehicle or combination of vehicles shall operate upon the public highways of this state with a gross load on any single axle in excess of twenty thousand pounds, or upon any group of axles in excess of that set forth in the following table, except that two consecutive sets of tandem axles may carry a gross load of thirty-four thousand pounds each, if the overall distance between the first and last axles of such consecutive sets of tandem axles is thirty-six ft. or more.

Maximum load in pounds carried on any group of 2 or more consecutive axles									
Distance in feet between the extremes of any group of 2 or more consecutive axles	2 axles	3 axles	4 axles	5 axles	6 axles	7 axles	8 axles	9 axles	
4	34,000								
5	34,000								
6	34,000								
7	34,000								
8	34,000	42,000							
9	39,000	42,500							
10	40,000	43,500							
11		S 44,000							
12		E 45,000	50,000						
13		E 45,500	50,500						
14			46,500	51,500					
15		N 47,000	52,000						
16		O 48,000	52,500	52,500					
17		T 48,500	53,500	53,500					
18		E 49,500	54,000	54,000					
19			50,000	54,500					
20		B 51,000	55,500	55,500					
21		E 51,500	56,000	56,000					
22		L 52,500	56,500	56,500					
23		O 53,000	57,500	57,500					
24		W 54,000	58,000	58,000					
25			54,500	58,500					
26			55,500	59,500					
27			56,000	60,000					
28			57,000	60,500	61,000				
29			57,500	61,500	62,000	62,000			
30			58,500	62,000	63,000	63,000			
31			59,000	62,500	64,000	64,500			
32			60,000	63,500	65,000	65,000			
33				64,000	66,000	66,000			
34				64,500	67,000	67,000			
35				65,500	68,000	68,000			
36				66,000	69,500	69,500			
37				66,500	70,500	70,500			
38				67,500	72,000	72,000			
39				68,000	72,500	72,500			
40				68,500	73,000	73,000			
41				69,500	73,500	73,500			
42				70,000	74,000	74,000			
43				70,500	75,000	75,000			
44				71,500	75,500	75,500			
45				72,000	76,000	76,000			
46				72,500	76,500	80,000			
47				73,500	77,000	81,000			
48				74,000	78,000	82,000			
49				74,500	78,500	83,000			
50				75,500	79,000	84,000			
51				76,000	80,000	84,500			
52				76,500	80,500	85,000	86,000		
53				77,500	81,000	85,000	87,000		
54				78,000	81,500	86,500	88,000	91,000	91,000
55				78,500	82,500	87,000	89,000	92,000	92,000
56				79,500	83,000	87,500	90,000	93,000	93,000
57				80,000	83,500	88,000	91,000	94,000	94,000
58	NOTE: It is unlawful to operate upon the public highways any single unit vehicle			84,000	89,000	92,000	95,000	95,000	95,000
59	supported upon 3-axles or more with a gross weight including load in excess of			85,000	89,500	93,500	96,000	96,000	96,000
60	60,000 lbs. or any combination of vehicles having a gross weight in excess of 80,000			85,500	90,000	95,000	97,000	97,000	97,000
61	lbs. without first obtaining an additional tonnage permit as provided for in RCW			86,000	90,500	95,500	98,000	98,000	98,000
62	46.44.095; PROVIDED, That when a combination of vehicles has purchased license			87,000	91,000	96,000	99,000	99,000	99,000
63	tonnage in excess of 72,000 lbs. as provided by RCW 46.16.070, such excess			87,500	92,000	97,000	100,000	100,000	100,000
64	license tonnage may be applied to the power unit subject to limitations of RCW			88,000	92,500	97,500	101,000	101,000	101,000
65	46.44.042 and this table when such vehicle is operated without a trailer.			88,500	93,000	98,000	102,000	102,000	102,000
66				89,500	93,500	98,500	103,000	103,000	103,000
67				90,000	94,000	99,000	104,000	104,000	104,000
68				90,500	95,000	99,500	105,000	105,000	105,000
69				91,000	95,500	100,000	105,500	105,500	105,500
70				92,000	96,000	101,000	105,500	105,500	105,500

WHEN INCHES ARE INVOLVED: Under six inches take lower. Six inches or over take higher.

The maximum load on any axle in any group of axles shall not exceed 1.2 times the load given in the above table divided by the number of axles in that group, and shall not exceed the single axle or tandem axle allowance as set forth elsewhere. For considering the number of axles in a group the front axle of a unit supplying motive power need not be included in the axle group.

The maximum axle and gross weights specified in this table are subject to the braking requirements set up for the service brakes upon any motor vehicles as provided by law.

It is unlawful to operate any vehicle upon the public highways equipped with two axles spaced less than seven feet apart, unless the two axles are so constructed and mounted in such a manner as to provide oscillation between the two axles and that either one of the two axles will not at any one time carry more than the maximum gross weight allowed for one axle specified in this table.

LENGTH PERMITTED (RCW 46.44.0941)

Single-trip permits may be issued for non-reducible loads which are greater than legal lengths \$5.00

Thirty day permits may be issued for loads having non-reducible overlength features.\$10.00

An annual permit may be issued to operate a truck-tractor pulling a single semitrailing unit if the trailing unit exceeds 48 feet but is not longer than 56 feet\$100.00

An annual permit may be issued to operate a truck-tractor pulling two trailing units which together exceed 60 feet but are no longer than 68 feet\$100.00

A single trailing unit hauling reducible loads operating under permit up to 56 feet may not have an overhang extending beyond 56 feet. Double trailing units hauling reducible loads operating under permit may not have an overhang extending beyond 68 feet.

If overall length of vehicles and load exceeds 100 feet or if rear overhang of load from the last axle exceeds one-third of total length, one escort car or a riding flagperson is required on two-lane highways (WAC 468-38-100).

If overall length exceeds 140 feet, one rear escort car is required on multiple-lane highways (WAC 468-38-100).

WSDOT may require escort cars if, in its judgment, the safety of the traveling public requires it (WAC 468-38-100).

BUILDINGS

RCW 46.44.092 addresses the movement of buildings. On a two-lane highway, the fourteen foot width limit may be exceeded to move a building under the following conditions:

1. Controlled traffic in one direction is maintained at all times;
2. The distance of the move is not more than 5 miles on a state highway;
3. The WSDOT may approve a longer distance in individual cases of hardship;
4. A visual inspection by a qualified WSDOT employee must be made and the employee satisfied that structures and overhead obstructions can be cleared or moved and a constant movement of the building be maintained;
5. Special escort requirements may be imposed if necessary, and the Washington State Patrol should be notified.

If the height of a building may require the movement of power or telephone wires, the utilities must be consulted. If traffic signals need to be moved, the District

SECTION 5
GENERAL REGULATIONS

ESCORT VEHICLES (WAC 468-38-110)

1. The escort car itself may be a passenger car or a two-axle truck.
2. Escort cars should travel approximately 800-1,500 feet from the load unless congestion or heavy urban traffic requires that they be closer.
3. The escort car driver should act as a flagperson if necessary to control traffic, and should advise the driver of the towing vehicle when to proceed.

SIGNS (WAC 468-38-190)

OVERSIZE LOAD signs must be at least 5 feet wide and 10 inches high with 1 inch black stroke on yellow background.

They must be mounted at least five feet above the roadway surface or as high as practicable:

- 1) on the front of the towing vehicle,
- 2) on the rear of the trailing unit, and
- 3) above the roof line of the escort vehicle.

HOURS AND DAYS OF MOVEMENT

All oversize movements are prohibited on Fridays after 4:00 p.m. Widths in excess of 10 feet are prohibited after 2:00 p.m. on Fridays. If visibility is reduced to less than 1,000 feet, no overlegal movement is allowed.

All oversize movements are prohibited after 12:00 noon on Sundays and all day on the holidays of:

New Years Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day
And during the afternoon on the day preceding these holidays.

Should any of these holidays fall on a Saturday or Sunday, the preceding Friday or following Monday shall be considered such holiday. (WAC 468-38-230)

Permit offices are closed on Saturdays and Sundays and legal holidays. (WAC 468-38-250)

During the winter period, restrictions may be in effect on some types of movement (WAC 468-38-390). If any signs are displayed indicating that snow tires or chains are recommended or required, all movement by special permit is prohibited.

Movements by permit are allowed only during daytime hours, i.e., one-half hour before sunrise until one-half hour after sunset. However, movement of loads up to ten feet wide may be allowed at night on lanes of travel which are at least 12 feet wide. This exception does not allow movement of loads up to 10 feet wide during the Friday afternoon curfew or during curfews in commuter areas.

Regulations for Combinations Operating Under Permit for Overlength

1. The following combinations may be operated at night, on weekends, and during commuter curfews if the permit is stamped REQUIREMENTS WAIVED.
 - a. A truck-tractor with a single trailing unit between 48-56 feet in length;
 - b. A truck-tractor with two trailer units between 60-68 feet in length.
 - c. A vehicle carrying non-reducible items up to 60 feet in length on a single trailer.
2. A combination with an overhang of more than 4 feet beyond the structure of the last trailer must, when operating during hours of darkness, be equipped with red tail, stop, clearance and identification lights positioned at the rear of the load. These lights shall meet the requirements of Chapter 46.37 RCW. Whenever visibility is reduced to less than 1,000 feet during the day, these lighting requirements must be met.
3. A combination with an overhang of more than 4 feet must display 12 inch square red flags on the widest and longest points of the overhang when operating during daylight hours.
4. Non-contained loads with an overhang longer than 15 feet measured from the last axle must have that exemption clearly noted on the permit. Such loads may not be hauled except during daylight hours and when oversize loads are permitted. An OVERSIZE LOAD sign must be attached.

APPENDIX L

WYOMING

Regulation of traffic on highways

The Wyoming weight study

loads other than a part of the weight of the vehicles and load drawn. For the purpose of this act, a truck-tractor equipped with a dromedary unit shall be considered a part of the weight of the vehicle and not a load thereon;

(xxxiii) "Vehicle" means a device in, upon or by which any person or property may be transported or drawn upon a highway, except devices moved by human power or used exclusively upon rails or tracks;

(xxxiv) "Variable load suspension axle" means an axle used in conjunction with two (2) or more axles to produce an arrangement, with the variable load suspension axle capable of producing approximately equal distribution of the load between axle arrangements;

(xxxv) "Vehicle combination" means any connected assemblage of a motor vehicle and one (1) or more other vehicles;

(xxxvi) "Width" means the total outside transverse dimension of a vehicle including any load or load-holding devices thereon, but excluding approved safety devices and tire bulge due to load;

(xxxvii) "This act" means W.S. 31-5-1001 through 31-5-1007. (Laws 1971, ch. 257, § 1; W.S. 1957, § 31-217.2; Laws 1973, ch. 123, § 1; 1979, ch. 19, § 1; 1980, ch. 32, § 1; 1983, ch. 108, § 1; 1984, ch. 2, § 1.)

§ 31-5-1002. General requirements.

(a) All vehicles operated on the highways of this state shall comply with the following:

(i) Width — all highways:

(A) No vehicle, unladen or with load or load-holding device thereon shall exceed one hundred two (102) inches in width.

(ii) Height — all highways:

(A) No vehicle, unladen or with load or load-holding devices thereon, shall exceed fourteen (14) feet in height.

(iii) Notwithstanding paragraph (i) of this subsection, implements and produce of husbandry of greater widths, not otherwise provided for in this act, may be moved in agricultural operations during daylight hours, without a permit or fee, but subject to and in accordance with regulations promulgated by the department for the protec-

tion of persons, property, highways and bridges. Regarding movement of implements of husbandry not exceeding sixteen (16) feet in width, the rules and regulations shall:

(A) Not require the use of escort vehicles provided the implement is kept to the right of the center line;

(B) Require the display of an oversize vehicle sign and warning lights as approved by the highway department.

(iv) Length — all highways:

(A) Repealed by Laws 1984, ch. 46, § 2.

(B) No combination of vehicles shall consist of more than three (3) single vehicles. No single vehicle shall have an overall length in excess of sixty (60) feet;

(C) In a truck-tractor semitrailer combination, no semitrailer shall exceed sixty (60) feet in length. In a truck-tractor, semitrailer, trailer combination, the length of the semitrailer shall not exceed forty-eight (48) feet and the length of the trailer shall not exceed forty (40) feet including connecting mechanisms. The combined length of the semitrailer and trailer shall not exceed eighty (80) feet including connecting mechanisms, and the longest trailer not including connecting mechanisms shall be the first unit behind the truck tractor. For any other combination of vehicles the overall length shall not exceed eighty-five (85) feet. For the purpose of this section, "truck-tractor" shall be defined as the noncargo carrying power unit that operates in a combination with a semitrailer or trailer, except that a truck-tractor and semitrailer engaged in the transportation of automobiles may transport motor vehicles on part of the power unit.

(v) Weights:

(A) The wheels of all vehicles except those operated at a speed of less than ten (10) miles per hour shall be equipped with pneumatic tires;

(B) No wheel equipped with solid tires shall carry a load in excess of eight thousand (8,000) pounds;

(C) No wheel shall carry a load in excess of ten thousand (10,000) pounds. No tire on a steering axle shall carry a load in excess of seven hundred fifty (750) pounds per inch of tire width and no other tire on a vehicle shall carry a load in excess of six hundred (600) pounds per inch of tire width. "Tire width" means the width stamped on the tire by the manufacturer;

(D) No single axle shall carry a load in excess of twenty thousand (20,000) pounds;

TOM W AAN

Trucks hauling on the interstate system in Wyoming prior to July of 1985 were limited by federal law to 80,000 pounds maximum gross vehicle weight (GVW). The state of Wyoming allows 117,000 pounds maximum GVW on its primary and secondary highways. Four of the six states bordering Wyoming have allowable GVW limitations exceeding Wyoming's on their interstate systems. The Wyoming Legislature, in Enrolled Joint Resolution 1, of the 1985 General Ssession, requested a study be done by the Highway Department on the effects of raising the allowable gross vehicle weights on the interstate system to the 117,000 pound maximum.

Wyoming's three major interstate highways overlapped major primary highways in the state when the interstate system was created. The unavailability of alternative routes to most of these highways forced some use of the interstate system by the majority of traffic in Wyoming. This situation has made the GVW laws for the interstate system the controlling factor for truck sizes on all systems.

Wyoming's economy is highly dependent on mineral production. The coal fields, oil and gas fields, trona patch, refineries, and power plants are located in areas adjacent to interstate highways. The transportation of these minerals is provided by pipelines, railroads, and trucks. Pipelines and railroads are

