

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM
SYNTHESIS OF HIGHWAY PRACTICE

143

**UNIFORMITY EFFORTS IN OVERSIZE/
OVERWEIGHT PERMITS**

TRANSPORTATION RESEARCH BOARD
National Research Council

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NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM **143**
SYNTHESIS OF HIGHWAY PRACTICE

UNIFORMITY EFFORTS IN OVERSIZE/OVERWEIGHT PERMITS

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The needs for highway research are many, and the National Cooperative Highway Research Program can make significant contributions to the solution of highway transportation problems of mutual concern to many responsible groups. The program, however, is intended to complement rather than to substitute for or duplicate other highway research programs.

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PREFACE

A vast storehouse of information exists on nearly every subject of concern to highway administrators and engineers. Much of this information has resulted from both research and the successful application of solutions to the problems faced by practitioners in their daily work. Because previously there has been no systematic means for compiling such useful information and making it available to the entire highway community, the American Association of State Highway and Transportation Officials has, through the mechanism of the National Cooperative Highway Research Program, authorized the Transportation Research Board to undertake a continuing project to search out and synthesize useful knowledge from all available sources and to prepare documented reports on current practices in the subject areas of concern.

This synthesis series reports on various practices, making specific recommendations where appropriate but without the detailed directions usually found in handbooks or design manuals. Nonetheless, these documents can serve similar purposes, for each is a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems. The extent to which these reports are useful will be tempered by the user's knowledge and experience in the particular problem area.

FOREWORD

*By Staff
Transportation
Research Board*

This synthesis will be of interest to administrators, permit directors, and others interested in efforts to achieve uniformity among states in the issuance of permits for oversize and overweight vehicles. Information is presented on the obstacles to uniformity as well as some examples of where uniformity has been achieved.

Administrators, engineers, and researchers are continually faced with highway problems on which much information exists, either in the form of reports or in terms of undocumented experience and practice. Unfortunately, this information often is scattered and unevaluated, and, as a consequence, in seeking solutions, full information on what has been learned about a problem frequently is not assembled. Costly research findings may go unused, valuable experience may be overlooked, and full consideration may not be given to available practices for solving or alleviating the problem. In an effort to correct this situation, a continuing NCHRP project, carried out by the Transportation Research Board as the research agency, has the objective of reporting on common highway problems and synthesizing available information. The synthesis reports from this endeavor constitute an NCHRP publication series in which various forms of relevant information are assembled into single, concise documents pertaining to specific highway problems or sets of closely related problems.

The inconsistent requirements and practices among the states in the issuance of permits for oversize and overweight vehicles has placed a considerable burden on all concerned. This report of the Transportation Research Board discusses the reasons why there are differences among the states and describes some of the efforts that have been undertaken to achieve a degree of uniformity.

To develop this synthesis in a comprehensive manner and to ensure inclusion of significant knowledge, the Board analyzed available information assembled from numerous sources, including a large number of state highway and transportation departments. A topic panel of experts in the subject area was established to guide the researcher in organizing and evaluating the collected data, and to review the final synthesis report.

This synthesis is an immediately useful document that records practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As the processes of advancement continue, new knowledge can be expected to be added to that now at hand.

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Kenneth E. Cook, Transportation Economist, Transportation Research Board, assisted the NCHRP Project 20-5 Staff and the Topic Panel.

Information on current practice was provided by many highway and transportation agencies. Their cooperation and assistance were most helpful.

UNIFORMITY EFFORTS IN OVERSIZE/ OVERWEIGHT PERMITS

SUMMARY

The purpose of this synthesis is to summarize efforts directed at achieving national uniformity in the basic elements of oversize and overweight permit functions for nondivisible loads. Historically, each state highway and transportation agency has developed its own rules and regulations governing the movement of trucks. The reason for this diversity is based on physical concerns (including pavement life, bridge condition, and geometric requirements); public safety; economic factors; legal considerations; and political considerations.

This report summarizes the key results of research efforts on this topic over the past 20 years. It also describes six state-level efforts, three national-level efforts, and one industry-level effort aimed at developing common, multistate agreements. One state-level effort in particular appears to provide a positive experience in developing a common set of permit procedures. Five New England states (Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) signed an agreement on April 28, 1987, and expect to have a common set of permit procedures fully operational by early 1989.

The reasons it has been difficult to establish common permit procedures include the following:

From the State Perspective

- Physical, safety, economic, legal, and political concerns.
- Inadequate agency funding and staffing.
- Continuing changes in state policy.
- Inadequate data available for analyses.
- Pressure from the trucking industry.
- Concern about federal preemption.
- Absence of a solid constituency to establish uniformity.
- States' concern about reducing standards.
- National efforts have little chance for success.

From the Federal Perspective

- Limited degree of intervention is possible.
- Federal government prefers to have states take the lead.

From the Trucking Industry Perspective

- The industry is nonhomogeneous.

-Individual state-level motor carrier organizations are primarily concerned with intrastate situation.

-Regional differences.

-There may be an “illusion of uniformity,” because the trucking industry relies on private permit service organizations.

Among all the efforts aimed at achieving uniformity, only the five New England states working together within the context of the New England Transportation Consortium (NETC) have been able to achieve success in developing uniform permitting procedures. The reasons for that success include the following:

-Recognition of the importance of this issue by the chief administrative officers of the state DOTs.

-A set of issues was selected for resolution that all participants believed were critical and for which the probability of achieving success was very high.

-Full cooperation and participation was achieved by the technical-level individuals who are responsible for issuing permits.

-Within that framework of mutual cooperation, each state was willing to drop its “jurisdictional barriers.”

-The states presented a uniform position to the trucking industry.

-The NETC did not attempt to include *all* permit requirements within the regional agreement. Therefore, each state can deal with the exceptions in the usual way, and *no situation is excluded*.

-A concerted, centralized staff effort was funded to develop and implement this program.

-Everyone gained and no one lost anything from this agreement.

-The states believed that it is inevitable that uniform procedures will be required by the federal government, and that it is much more efficient for the states to take the lead before they are preempted.

The NETC experience illustrates that it is possible to achieve uniformity. However, it seems clear that it cannot be accomplished initially on a national scale. Rather, it should start out on a regional, or even subregional, basis as the NETC and the Commercial Vehicle Safety Alliance (CVSA) program were able to do. Then, it will require that the appropriate policy and political as well as technical interaction take place within as well as between regions.

CHAPTER ONE

PURPOSE

The purpose of this synthesis is to identify and summarize efforts directed at achieving national uniformity in the basic elements of the oversize/overweight permit function for non-divisible loads.

The inconsistent permit requirements and practices among the states have placed a considerable burden on all involved—the states and the trucking industry—and translate into additional time and costs for carriers and ultimately consumers. A number of current and past efforts have been focused on identifying areas where uniformity is desirable; but, with few exceptions, little progress has been made in achieving such a goal. Those efforts have been approached on both a nationwide basis and on a regional level.

The major areas where there is a need for uniformity are: (a) the permit application process, (b) safety and escort requirements and equipment, (c) operating restrictions, (d) routine envelope oversize permits, (e) routine envelope overweight permits, (f) state permit office operations, (g) compliance and enforcement, and (h) permit fee payment. This synthesis identifies

current practices and past efforts on this matter, and describes why there has been difficulty nationwide in achieving uniformity for items (a) through (h) above.

Numerous studies conducted on this topic for the past 20 years have all concluded that it would be beneficial to all parties if uniform procedures were established among the states. However, although there is a desire to do so, the parties involved have been unable to achieve that objective in most cases.

It is hoped that the information and experiences described in this document will provide the guidance needed to begin to take the steps necessary by all the required participants. These participants include both the policy- and the technical staff-level people in the executive as well as legislative branches of state government. They must also include the state-level and national-level members of the various trucking industry groups, national organizations that represent state government and the trucking industry, and the members of the various federal agencies who are involved with these matters.

CHAPTER TWO

BACKGROUND AND PROBLEM DEFINITION**BACKGROUND**

Truck travel in the United States is a significant, positive element of our national economy and well-being. However, trucks traveling on our nation's highways also represent a major operational challenge to both the trucking industry and the public agencies who administer and monitor truck transportation matters. State agencies have the primary responsibility for establishing and enforcing truck regulations. Those public agencies are concerned about the safety of motor vehicle travel, in general, and the short-term as well as the long-term impact that vehicles have on the physical condition of pavements and bridges. The trucking industry is motivated by the desire to move commodities safely, efficiently, quickly, and cheaply from origin to destination. Their ability to accomplish that objective, especially in an unregulated environment, presents a major challenge to the industry. Sometimes, the public-sector and private-sector objectives are not always fully comparable. This is especially true with regard to the matter of permit uniformity.

Historically, each state has developed its own rules and regulations governing the movement of trucks, independently of neighboring states. Consequently, there is great diversity among the states in this regard. There are some examples in which two or more states cooperate in the establishment and enforcement of some trucking regulations, but that practice is limited throughout the country.

The differences that exist between states include the following:

- Weight limits
- Height limits
- Width limits
- Length limits
- Permit application procedures
- Permit forms
- Safety regulations
- Enforcement procedures
- Terms and conditions
- State and local public agencies who have a responsibility for dealing with truck travel.

Each of the above general categories of activities can also be subdivided into a number of more detailed subactivities as well.

Several previous studies on this subject have attempted to quantify the economic inefficiencies to the trucking industry that have occurred as a result of this diversity in state trucking regulations. For example, in *NCHRP Report 198 (1)*, it was reported that nonuniformity in state laws related to motor vehicle sizes and weights is costing the American public between

\$1.6 billion and \$2.8 billion annually. (This was reported in February 1979.) That report also concluded that the lack of uniformity results in the unnecessary use of between 400 million and 875 million gallons of motor vehicle fuel annually. Further, it was reported that nonuniformity also results in additional noise and air pollution caused by the rerouting of trucks that is often required.

On the other hand, the state agencies responsible for administering truck regulations argue that it is their responsibility to protect the physical integrity of highway pavements and bridges and to ensure that all motor vehicles travel public highways within the limits of safety guidelines that have been established within their states. There have been numerous studies at the national and state levels that have attempted to quantify all of those factors as well (see the Bibliography for a list of many of those studies).

Unfortunately, it has been difficult to achieve a consensus on the optimal motor vehicle regulations that will satisfy the objectives of both the trucking industry and the state agencies. This has resulted in a continuing debate concerning all the issues alluded to above.

This synthesis is limited in scope because it deals with a summary of the efforts that have been directed at achieving interstate uniformity with regard to the issuance of permits for nondivisible oversize/overweight permits. However, the experience with that issue should be of value to those dealing with the broader range of issues mentioned above.

REASONS WHY THERE ARE DIFFERENT REGULATIONS AMONG THE STATES

There are physical, safety, economic, legal, and political reasons that form the basis for the existence of nonuniformity in oversize/overweight regulations from state to state. Each state has performed its own analyses and has adopted its own set of acceptable practices, and those practices have been in existence for many years. There are no accepted common analysis criteria that could provide a basis for uniformity on weight limits. In the absence of such common criteria, each state continues to deal with this issue independently. *NCHRP Report 198* documents those reasons, and they are summarized below.

Physical Concerns

The major reasons for the diversity in size and weight limits are based on each individual state's concern for the physical condition of its highway system, including:

1. Pavement life concerns
2. Bridge condition
3. Geometric requirements

The following is a brief description of why each of those concerns is of importance to this subject (from *NCHRP Report 198* (1)).

Pavement Life Concerns

The service lives of highway pavements, both asphalt and portland cement concrete, are influenced by axle weights and numbers of axle load repetitions. Highways are initially designed to withstand a specific number of load repetitions of a specified magnitude for a selected future period of time—the anticipated service life.

When a highway is properly designed and constructed, it presumably will require only routine surface maintenance throughout its service life, provided that expected number of axle load repetitions and axle weights is not exceeded. In other words, it will not be damaged by the traffic it is *designed* to support. However, allowable weights have increased, and the number of larger permitted vehicles is increasing in most states.

Cost increases associated with the design of new pavements or bridges are not the only concern of state agencies when permitted axle loadings are increased. For moderate increases in load, the increment in cost of new pavements or bridges may be small. However, the continuous use of increased axle loads placed on existing pavements designed for less loading will shorten their service lives; this results in increased maintenance and rehabilitation costs.

Bridge Concerns

Highway structures are subject to potential damage from vehicle size and weight characteristics in different ways than are roadway surfaces. In the case of bridges, it is a combination of axle load and axle spacing that must be accommodated both in bridge design and subsequent use of the structure. This combination is specified by a bridge formula that is commonly used to regulate and control the loads that can be safely applied to the structure; it defines the combination of permissible gross vehicle weight, axle loads, and axle spacings.

States are justifiably concerned about the magnitude of structural problems that will result from changes in vehicle size and weight provisions. A large number of bridges on arterial highway systems are already deficient in one respect or another. The problem of existing bridge deficiencies is very large in every state and generally beyond the present fiscal resources of the states to correct within a short period of time.

Geometric Requirements

In considering whether to permit vehicle dimension increases, a state must consider the extent to which existing geometrics will accommodate larger vehicles. Highway geometrics involve such factors as lane widths, turning radius of curves, vertical clearances, intersection design, climbing lanes, and the like. As

vehicle sizes increase, the operating limits of the existing geometrics may be exceeded. For example, vehicles can only attain a certain width before they protrude into another lane, or they can only reach a certain length before they can no longer negotiate a curve or intersection without encroaching on a shoulder, another lane, or a curb.

Public Safety

States must consider whether vehicle size and weight increases will affect the public safety. Some of the areas in which public safety might be affected have already been discussed, in that bridge deficiencies can have safety impacts along with any inability of trucks to keep entirely within their lanes or otherwise properly negotiate highway configurations. There also is the question of braking performance of large and heavy vehicles. Also, longer vehicles will require more time to pass, increasing exposure to oncoming traffic. There are considerations relative to the “road spray” from certain combinations in inclement climatic conditions that may affect vision. As passenger-vehicle sizes decrease while truck sizes increase, the question of whether injury and fatality rates and numbers will change must be addressed.

Economic Factors

In each of the categories previously discussed, changes in vehicle sizes and weight levels may affect the costs necessary to construct, maintain, or reconstruct highways. One of the main problems faced by state transportation authorities when highway cost increases occur, even though they may be entirely justifiable from an economic standpoint, is that the benefits seldom put money directly into the funds from which the highways are built and maintained. Commercial transportation cost savings, for example, ultimately affect consumer prices but do not increase highway funds.

National and state legislatures are not always willing to increase fuel taxes and other highway user charges (which represent the major source of revenues for arterial highways) in proportion to highway costs.

The extent to which the public will either benefit or be harmed is an important but unresolved issue when considering truck sizes and weights. To the extent that more uniform permits will result in greater sizes or weights, transportation cost savings will accrue because the capability to move greater loads will result in fewer trips to move the same amount of goods. Energy consumption will also be reduced. But many states are reluctant to increase sizes and weights for those purposes, because of the potential adverse results that could occur.

The initial disposition of such transportation cost savings is not clear. In some cases, shipping costs may be reduced. In other cases, the rate of shipping cost increases may be slowed. Savings that are immediately realized might be used for purchase of more efficient equipment. In the long run, because of the competitive situation, the public would benefit. However, there is a disparity of views on this point as well.

Legal Considerations Leading to Diversity

There are a number of legal issues that have led to significant differences among states in their dealings with truck weight and size matters. Following is a brief summary of the more significant ones.

Statutory Omissions or Ambiguities

The trucking industry has taken full advantage of loopholes that exist in the size and weight laws of several states, and this serves to further diversify limits among the states. This has led to confusion within individual states and more questions concerning an appropriate multistate position. Some of those loopholes include:

- Lift axles (in some states, not in others)
- Dummy axles
- Grandfather clauses
- Interpretations that vary periodically

Legal Interpretations

Interpretations of the law can differ among states, and this contributes to diversity. For example, most states restrict the type of combination vehicle that can operate within their boundaries by restricting the number of units that can be included in the combination. States that commonly restrict doubles usually limit permissible combinations to two units, which normally are considered to be the tractor and semitrailer. However, in one state, a tractor-semitrailer combination may be legally interpreted to be one unit, which has allowed the addition of another trailer for the operation of a double combination within the two unit confines of the law. The 1982 Surface Transportation Assistance Act (STAA) allowed longer combination vehicles (LCVs) to use a designated system in each state, which was also subject to varying interpretations in individual states.

Short-Term Laws

In a number of states, laws or regulations have been passed that were intended to be short-term but have never been rescinded. These may apply to such things as the movement of energy resources, where weight limits are "temporarily" increased during energy shortages, and to the movement of highway building materials during the construction of highways.

Laws and regulations originally intended to be temporary generally involve allowing greater axle or gross weights. Failure to rescind the laws can result in serious reductions in pavement life.

Enforcement

The extent to which a state enforces its size and weight limits contributes informally to size and weight diversities among states. This applies especially to weight enforcement, because

lengths and permissible combinations are readily apparent and, therefore, more easily enforceable.

States develop reputations relative to level of enforcement. In those states that have low enforcement levels, there tends to be a high percentage of overweight trucks, especially if contiguous states have less restrictive limits. In effect, states that do not enforce their limits may have more liberal limits than their laws and regulations reflect.

Political Aspects of Nonuniformity

A separate book could be written on the political factors that have affected size and weight laws in individual states. The political diversity within and between individual states has resulted in significant difficulty in reaching multistate agreements. Some of the factors that are relevant include:

- Existing legislation in some states that is responsive primarily to local interests;
- Organized opposition to size and weight increases from a variety of sources, such as automobile clubs;
 - Competition between truck and rail groups;
 - Public attitudes concerning equity with regard to who should pay for design, construction, and repair of highways and bridges;
- Inconsistent demands by the trucking industry from state to state; and
- Economic competition between states.

PREVIOUS STUDIES UNDERTAKEN TO DEAL WITH THE PROBLEMS OF NONUNIFORMITY

This section presents the most important findings, conclusions, and recommendations that have been made in previous studies and efforts to establish uniformity with regard to truck sizes and weights. This summary clearly illustrates that although serious consideration has been given to this problem for 20 years, we are still far from achieving the objectives of uniformity.

1968 FHWA Study (2)

In 1968 the Federal Highway Administration (FHWA) published an extensive report entitled "Economics of the Maximum Limits of Motor Vehicle Dimensions and Weights." This two-volume report was the result of several exhaustive studies involving truck sizes and weights and their effects on the general economy and on the roadways themselves. In the final summary of the report, the authors noted two areas needing improvement. The first was "the lack of uniformity among the states in maximum limits on dimension and weight, and its unfavorable consequences to the costs of highway transportation." The second factor was "the high percentage of vehicles with overweight axles and excessive gross weights. Overloading combined with liberal enforcement tolerances, higher legal limits for certain commodities, and unprecedented issuing of special permits for trips made by overdimension and overweight vehicles actually have nearly the same effects on pavement as would be expected from an increase in legal limits without tolerance and without legal exceptions for hauling certain local commodities."

1969 HRB Report (3)

In 1969 the then Highway Research Board published *NCHRP Report 80*, entitled *Oversize-Overweight Permit Operation on State Highways*. Two of the objectives of this report were (a) to study in depth the characteristics of oversize/overweight permit operations on U.S. highways, including characteristics of laws, procedures, and permit movements, and (b) to develop a national inventory of permits issued during a one-year period, with an appropriate breakdown of permit features. In preparing this report the authors sampled the permit populations of the 48 contiguous states and the District of Columbia. The study concluded that the most important problem at that time was the variance in laws, regulations, and philosophies that governs whether permits will be issued for different kinds and configurations of truck movements.

The recommendations for immediate action included the following:

1. The American Association of State Highway Officials (AASHO) (now AASHTO, the American Association of State Highway and Transportation Officials) should develop a national policy for uniformity between the states on oversize and overweight permits.
2. Permit authorities should take the lead in forming, by regions, permanent committees composed of representatives of the regional states and representatives of the regional permit user interests, to develop joint recommendations for improving uniformity of oversize/overweight permit administration.
3. Laws and regulations controlling sizes and weights on the Interstate system should be made uniform throughout the country.

1979 TRB Study (1)

In 1979 the Transportation Research Board (TRB) published *NCHRP Report 198* on the subject of truck sizes and weights, entitled *State Laws and Regulations on Truck Size and Weight*. The purpose of this report was to investigate the then current state laws and regulations regarding size and weight, to investigate the benefits and advantages of increased uniformity among the states, and to propose alternatives for achieving this uniformity. The authors' findings included the following:

1. Nonuniformity in state size and weight laws costs the American public from \$1.6 billion to \$2.8 billion annually.
2. Nonuniformity also results in the use of an additional 400 million to 875 million gallons of motor fuel per year as truckers attempt to avoid the most restrictive states.

Their recommendations for improving the situation included:

1. A three-level organizational approach to provide the capability for fully implementing uniformity in size and weight regulations. The three levels are:
 - a. A national AASHTO committee to coordinate uniformity initiatives;
 - b. Regional AASHTO committees to do the same for the region, concentrating on regional issues that might not gain national approval;

- c. Meetings or committees of representatives of adjacent states to further the uniformity requirements of the local area.
2. Adoption of a uniform set of legal limits by the 48 contiguous states that would include common dimensions, weights, axle loads, tire pressure, and a gross-weight bridge formula applied to total wheel base and/or axle groups.

The authors concluded that implementation of these common legal limits by all the states would provide "optimal uniformity"; that is, the greatest savings in transportation costs for the fewest and smallest changes in state regulation.

1980 TRB Synthesis (4)

In 1980 the TRB also published a Synthesis of Highway Practice entitled *Motor Vehicle Size and Weight Regulations, Enforcement, and Permit Operations*. That report synthesized the current practices of the states and provided recommendations for improvement and further research. The synthesis found:

1. Great differences between the states in both the levels of vehicle size and weight enforcement, and its effectiveness in controlling violators.
2. That the differences in permit issuance between the states had a greater impact on those affected than enforcement differences.
3. That permit requirements that are difficult to comply with reduce a state's ability to control the size and weight of vehicles, as some truck operators will risk getting caught rather than comply with the permit requirements.
4. If voluntary action is not taken by the states, the federal government may have reason to become involved in the interests of interstate commerce, as most of the arterial routings are on the federal-aid systems.

The report recommended that:

1. The recommendations outlined in the earlier TRB report, *Oversize-Overweight Permit Operation on State Highways*, be implemented;
2. Fine schedules with deterrent effect be implemented in all states; and
3. State authorities, through AASHTO and the National Governors' Association, and with the assistance of the FHWA, develop a model of uniform practices similar to the uniform traffic laws developed in the 1950s.

1981 U.S. DOT Report (5)

In August 1981, pursuant to the 1978 STAA, the Department of Transportation submitted a report to the Congress entitled "An Investigation of Truck Size and Weight Limits." The purpose of this report was to examine the need for, and the desirability of, uniformity in maximum truck size and weight limits throughout the United States. The report also covers several complementary issues, including state enforcement and permit practices. Most of the findings relating to overweight or oversize

trucks came from a 1979 Government Accounting Office (GAO) report entitled "Excessive Truck Weight: An Expensive Burden We Can No Longer Support."

The DOT report concluded that:

1. Many states devote only minimal resources to weight enforcement;
2. Most fines and penalties are too low to deter violators;
3. State agencies enforce weight laws on only 40 percent of the highways, and very little at all in urban areas.
4. As many as 12 states may be issuing permits for divisible loads in accordance with policies that were not in effect in 1956 and thus not grandfathered.
5. Up to 22 percent of fully or partially loaded trucks exceed state weight limits.
6. Nondivisible loads do not account for a high percentage of overloads, nor do commodities for which legal exceptions have been granted.

1985 FHWA Report on State Practice (6)

The 1985 annual report by the FHWA to the Congress on overweight vehicles, entitled "Overweight Vehicles—Penalties and Permits: An Inventory of State Practices," provides an excellent summary of the activities of the different states in the area of overweight vehicle operations and enforcement. In the last report, published in December 1985, the FHWA notes that truck weight enforcement activities continue to increase nationwide. In FY 1984 more than 100 million trucks were weighed, representing an 11.3 percent increase over FY 1983. Citations for overweight truck violations totaled 674,386 in FY 1984, an increase of 14.8 percent. Citations for exceeding the requirements of the federal bridge formula increased 58.1 percent to 164,211.

The FHWA attributed the continuing increase in enforcement actions to the direct result of the initiation and use of the annual truck weight enforcement plan required from each state. The requirement for such a plan ensures that each state approaches the problem of overweight trucks in a systematic manner, annually reviewing the progress made in the previous year and placing more emphasis on those parts of the plan proving weaker than the others.

The FHWA also identified three problem areas that still need solving. The first is the interpretation of grandfather rights under the 1956 and 1974 STAAs. The proliferation of state grandfather claims has a direct bearing on two practices that, if uncontrolled, can have serious pavement deterioration implications: issuance of divisible load permits and federal bridge formula enforcement. The second problem area is the operational problem of trying to find the overweight truck before it can avoid the weigh station, and the third is the problem of weak penalties for those violators that are issued citations.

The proposed solutions for the operational problems include increased use of portable and semiportable scales and the implementation of administrative, instead of judicial, procedures for dealing with weight law violations. To better understand the total magnitude of the overweight truck problem, the FHWA has joined with several of the states in developing comprehensive plans for measuring the extent of overweight vehicles and their relationship to pavement damage in the state. Eventually the

FHWA wants to expand this program to all the states so that each state will regularly consider the relationship between its truck weight policies and the condition of its highways.

1985 FHWA Report on Legal Issues (7)

In July 1985 the FHWA published a report that closely examined the question of what happens to a truck weight violator after being caught. Entitled "Overweight Trucks—The Violation and Adjudication Process: Umbrella of Compliance," the purpose of this report was to analyze the adjudication process of overweight vehicle violations to identify the major factors that influence its effectiveness. The authors found the following five factors to present the most significant problems in the adjudication process:

1. Judges: Many judges do not appreciate the gravity of the truck overweight problem, and they generally view the offense as benign and insignificant.

2. Prosecutors: Like the judges, many prosecutors have little understanding of the truck overweight problem, and often fail to effectively prosecute these cases.

3. Wrong Defendant: The defendant is usually the truck driver, not the owner or shipper, who is the one most likely to profit from overweight shipments. To be effective, the penalties for overweight violations must reach the ones most likely to profit from the violation.

4. Ineffective Penalties: The fines specified in the laws of most states are too low when compared with the gains to be made from operating overweight. They do not deter overweight operation.

5. Criminal Courts: Most states still define weight violations as a crime. Thus, these cases are thrown into a crowded court system where they are readily classified with the minor traffic law offenses the court handles. This classification may preclude recognition of the appropriate status of overweight truck offenses.

The authors' recommendations for improving the situation include the following:

1. Judges: A training program to increase judicial awareness should be developed and presented as part of the existing structure of judicial education.

2. Prosecutors: Attorneys from the State Attorney General's office or from the State Department of Transportation should be assigned to assist local prosecutors with overweight truck cases, or to intervene in these cases wherever such action is warranted.

3. Wrong Defendant: For those states that continue to keep the adjudication of these cases in the criminal courts, the authors recommend implementing a law presuming the holder of the motor carrier certificate to be the one responsible for the overweight violation. The strongest recommendation, however, is to remove the adjudication process from the criminal courts and replace it with an administrative assessment system, as outlined below.

4. Ineffective Penalties: Fines should be realistically related to the cost of overweight truck operations and sufficiently high so as to deter overweight operations.

5. Criminal Courts: Remove the overweight vehicle adjudication process from the criminal courts and replace it with an administrative system. This system should have the following provisions:

- a. Presumption of damage caused by overweight.
- b. Immediate assessment of penalty.
- c. Immediate payment of assessment.
- d. Impoundment of vehicle if payment is not immediate or at least guaranteed.
- e. Due process provided by opportunity for hearing before magistrate when seizure is contemplated, and opportunity for a full hearing with judicial review at a later date.
- f. No criminal prosecutions for overweight violations.

1985 U.S. DOT Report to Congress on Longer Combination Vehicles (8)

The 1982 STAA required the Department of Transportation to report to the Congress on "The Feasibility of a Nationwide Network for Longer Combination Vehicles." This LCV study was completed and sent to Congress in June 1985.

The primary federal constraint preventing the use of LCVs at the present time is the limit of 80,000 pounds gross weight on the Interstate system. States with grandfathered weight limits and states with higher limits on their state roads already allow these vehicles to operate. However, there are still many unresolved issues. Questions relating to the cost of changing highway geometrics to accommodate LCVs, the safety of LCVs, and the effects of modal shifts between highway and rail still need to be addressed in more detail.

The final conclusion of the report was that "there is no compelling evidence that LCVs are so desirable that increased Federal intrusion into state size and weight regulation authority is justified at this time."

SUMMARY OF PREVIOUS STUDIES

The research summarized above covers about 20 years of study of the problems associated with legal vehicle limits and oversize and overweight vehicles. Throughout this period there were several findings that kept repeating themselves from one study to another. They are:

1. The lack of uniformity between the states, both in legal limits and in permit operations, represents a major problem to interstate commerce. It has resulted in substantial economic loss to all parties concerned, both public and private.

2. Overweight trucks are a major factor to be evaluated in determining life-cycle costs for roadway pavements and bridges.

3. Enforcement of state weight regulations has not achieved the desired results, for many complicated reasons.

The recommendations for solving these problems have also repeated themselves over the years. They include:

1. Establishment of nationally uniform limits on the Interstate system.

2. Formation of regional committees to formulate policies for developing uniform legal limits and permit regulations within a region.

3. Establishment of a system of fines that will deter violations of oversize and overweight laws.

4. A more systematic evaluation of the costs and benefits of various policies concerning truck permits, including a better understanding of how these policies affect all parties concerned.

The 1982 STAA implemented some of the recommendations outlined above for the Interstate system and other designated federal-aid primary routes. However, there is still much work to be done in the other areas. Of major concern to the states is their desire to maintain autonomy in regulating motor vehicle travel. However, in the absence of the ability of individual states to take actions in order to establish uniformity in some critical areas, the federal government may continue to do so.

The obvious question is: Given the apparent agreement that the states should take the actions necessary to achieve uniformity in some aspects of truck travel, why haven't they?

As discussed earlier in this chapter, there are physical, safety, economic, legal, and political reasons that have prevented the establishment of uniform state procedures for dealing with oversize and overweight trucks. Each of those five individual categories is complicated in and of itself. When all five categories are considered together, the complexity of the problem is overwhelming.

Chapter Three of this report summarizes the apparent reasons why uniformity has been difficult to achieve; Chapter Four describes the current efforts to achieve uniformity; in Chapter Five an assessment of future prospects for achieving uniformity is made; and Chapter Six provides a summary and conclusions.

CHAPTER THREE

THE REASONS THAT UNIFORMITY HAS BEEN DIFFICULT TO ACHIEVE

INTRODUCTION

There is no question that the diversity in issuing permits for oversize and overweight trucks has created numerous economic, political, and physical difficulties with regard to truck travel, particularly for trucks moving commodities across state lines. However, it has been virtually impossible to achieve uniformity for almost any aspect of the problem.

From the industry perspective this diversity inhibits the ability of individuals and companies to operate as efficiently as they believe they can and should. Consequently, there are continuing efforts to change individual state statutes and regulations, which can often be counterproductive.

At the state level, the various state agencies are reluctant to change their statutes and regulations unless they are convinced that the changes will not jeopardize their primary agency objectives. However, there is a continuing debate concerning the impacts of changes desired by the trucking industry.

At the national level there is continuing pressure by the trucking industry to establish standards for interstate truck travel. However, the states are reluctant to give up any of their traditional state authority in this regard. So, there is often a debate between the states and the federal government concerning the appropriate roles and responsibilities of the national government. Two recent examples of this debate illustrate the point. The first resulted from the requirement in the STAA of 1982 to establish a national network for LCVs on the Interstate system and an access network to that system (8). The second example concerns the establishment of a national operator's permit system for truck operators (9).

The purpose of this chapter is to summarize the reasons why it has not been possible to achieve the uniformity that both the public sector and the private sector appear to desire. The following sections summarize those reasons from the perspective of state government, the federal government, and the motor carrier industry.

This summary of reasons is based on interviews with individuals in each category, information from the literature, and the experience of the NCHRP panel that was formed to develop this synthesis.

THE STATE PERSPECTIVE

Although there has been a very explicit desire on the part of state government to achieve interstate uniformity, there have been few instances where that uniformity has been achieved.

The reasons for this inability to achieve that desirable goal are numerous.

The combination of physical, safety, economic, legal, and political reasons that were described earlier in Chapter Two are very real and very important impediments to achieving uniformity. Each of these reasons is difficult to resolve individually, and they are extremely complex when taken in combination. A few comments on each are worth summarizing and expanding on.

Physical Concerns

The industry constantly pushes the states to increase size and weights, and the states continually resist. A major reason for this dilemma is the *absence of solid, reliable, acceptable data on damage* caused by heavy vehicles and the assignment of fair and equitable costs to design and repair facilities appropriately.

Safety Concerns

The physical, structural, and geometric limits of highways are constraints that must be recognized. The safety of the motoring public and the continuing physical integrity of the highway system must be considered carefully in developing standards.

Again in the absence of solid, reliable data and analysis each state has dealt with these issues individually. One major uniform action taken in this regard has been the formation of the Commercial Vehicle Safety Alliance. This illustrates that, given the right circumstances, it is possible to achieve uniformity.

Economic Concerns

The trucking industry would like to move the largest loads possible in order to improve economic efficiency. However, the costs to design and build more cost-effective highway systems rest with state government, which does not necessarily receive the financial resources needed for efficient highway construction. This is because of the complicated federal and state funding mechanisms that are in place, which constrain the options available to a state highway or transportation agency.

There is an urgent need to obtain the data needed to undertake the appropriate analyses required to determine a fair allocation of costs and benefits.

Legal Concerns

Each state will always have its own individual state laws and administrative procedures, and there is nothing that will change that situation. Thus, any attempt at achieving uniformity must recognize that reality.

Political Reasons

The trucking industry represents an important political constituency in each state and on a national basis. As in the case of every other economic, social, environmental, or other special-interest group, those interests are considered in the context of other state and national needs. Thus, a well-informed public is necessary in order to make decisions through the political process that are in the best public interest.

Other Reasons

Other reasons why it has not been possible to achieve uniformity between states are equally complex. They include the following:

1. **Inadequate funding and staffing levels.** Each state organization having the responsibility for issuing permits for oversize and overweight vehicles is generally understaffed and has limited funds. Therefore the state often can just about keep up with day-to-day responsibilities. There is little time to devote to changing procedures, even if those changes could result in more efficient operations over the long term.

2. **Continuing changes in policy.** There is often a frequent turnover in top policy-level positions in state government. Therefore, policy is constantly being reevaluated and new policies developed.

3. **Inadequate data available for analysis.** As alluded to above, there is an absence of solid, reliable data to provide a good basis for making changes that may be appropriate. Thus, in the absence of new and reliable analysis it is safer to continue to use tried and true procedures.

4. **Pressure from the industry.** There is a continuous pressure by the trucking industry to push toward the physical and safety limits of the highway system. There is a natural and understandable reluctance on the part of state government to resist such movement because of the uncertainty of the consequences.

5. **The concern about federal preemption.** Each state views its role as being central to the manner in which travel is monitored and regulated on its state highways. There is a continuous concern that federal guidelines or mandates do not adequately consider state needs. Therefore, there is a natural and understandable concern on the part of state government in this regard. The provisions for larger trucks contained in the STAA of 1982 are an excellent illustration of this point.

6. **Absence of a solid constituency to establish uniformity.** When a particular transportation issue becomes important enough, for economic, safety, or other reasons, then a constituency develops to change current practice or recent decisions. That constituency has not yet developed. The industry may have a false illusion of uniformity, because they often use a permit service that handles all (or part) of the administrative details. The state officials who administer the programs have

learned to cope with a situation on which they may desire to improve, but for which resources to do so are very limited.

7. **States' concern about reducing their standards.** Individual states that use relatively stricter requirements are reluctant to modify them in order to achieve uniformity, particularly if the state believes it may be compromising safety or the physical integrity of the highway system. It is reluctant to become more lenient simply to achieve uniformity with other states.

8. **National efforts have little chance for success.** There are very significant regional transportation differences that exist because of differences in climate, population density, traffic density, rate of growth, etc. Therefore, any efforts made to achieve uniformity must be attempted by groups of states that have many of these characteristics in common—at least a common economic bond through geographic proximity.

THE FEDERAL PERSPECTIVE

The federal government is concerned with the interstate movement of people and goods by all modes. Where impediments to efficient interstate travel appear to exist, then the federal government has traditionally intervened. However, experience has also shown that there is a limit to the degree of intervention possible.

In the case of oversize and overweight permit vehicles (and for many other motor carrier issues as well), significant pressure has been placed on Congress and the federal government to establish uniformity. The federal government, principally the FHWA, would prefer to have the states act on their own, and is reluctant to take preemptive action. However, guidelines developed on a national basis in a cooperative manner, in particular the AASHTO guidelines on oversize/overweight permits, have not provided the incentive needed to achieve national uniformity desired.

The Congress has established requirements for size and weight that have caused great consternation at the state level. However, when funds have been established to provide an incentive for taking uniform action on a national level there have been positive results. The best example of this is the formation of the CVSA. The work being done by the National Governors' Association (NGA) is another good example, where a combination of federal and state funds is being used to achieve national uniformity on taxation issues.

THE TRUCKING INDUSTRY PERSPECTIVE

The trucking industry is a large, diverse group of individuals and organizations. There are many small carriers who are primarily concerned with oversize/overweight permits for intrastate travel. There are also larger companies, state organizations, and the national-level American Trucking Associations (ATA) who are equally concerned. Although the ATA is a large umbrella lobby group that represents the broad interests of the industry, it does not make policy for the individual state organizations or the individual companies or operators.

The Specialized Carriers and Rigging Association (SCRA) claims that they "...represent approximately 85 percent of the carriers in the United States who require about 99 percent of all permits for non-divisible oversize and overweight loads" (10).

SCRA is a trade association representing the interests of commercial motor carriers engaged in the transportation of legal oversize and overweight commodities. The SCRA Board of Directors has identified the lack of uniform permit laws to be its number one problem. SCRA has worked for many years to achieve uniformity in the interstate administration of those permits.

There appears to be substantial effort by the individual state-level organizations to establish regulations that will most favorably affect these local operators. This is understandable. However, the individual state associations may not always agree from state to state on what is in their mutual best interests. Thus, the lack of full agreement on the part of individual state trucking associations may lead to many unresolved interstate issues.

SUMMARY

In summary, there are many practical, understandable reasons why it has been difficult to achieve uniformity in establishing procedures for oversize/overweight permits for nondivisible loads. However, in this particular case, there seem to be few real impediments to achieving that objective; that is, if a concerted effort can be mounted to do so. But, it will take dedicated staff time and a willingness for individuals and the trucking industry to drop their "jurisdictional barriers" for that purpose.

The example of the agreement reached by the NETC offers some very instructive lessons, as summarized in the next chapter.

CHAPTER FOUR

SUMMARY OF PREVIOUS AND ONGOING EFFORTS TO ACHIEVE UNIFORMITY AMONG STATES

INTRODUCTION

The purpose of this chapter is to describe specific examples of multistate efforts to achieve uniformity in the several aspects of truck travel that are relevant to this synthesis. The descriptions include six state-level activities, three national-level efforts, and one industry-level effort. A summary of the key facts and contacts related to those efforts is given in Table 1.

THE NEW ENGLAND TRANSPORTATION CONSORTIUM (11-13)

Background of the Consortium

Five New England states have formed the NETC. The purpose of the Consortium is to pool the financial, professional, and academic resources of the region and to focus those resources on the development of substantially improved methods for dealing with the common problems associated with the rehabilitation, reconstruction, and operation of the highway system in New England. The five participating states are Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Discussions are currently under way with the state of Connecticut concerning its possible participation in the common truck permit procedures.

A policy committee, which includes the chief administrative officer of each of the five participating states' DOTs, selected two projects for initial funding by the NETC in 1986/87. They were:

1. An investigation of technologies to more accurately assess the condition of concrete bridge decks.
2. The development of a common regional system for issuing permits for nondivisible oversize and overweight trucks engaged in interstate travel.

For each topic a state-level technical research committee was formed to develop the scope of work and to guide the work undertaken. Following is a summary of the work accomplished with regard to the development of a common set of truck permit procedures. The Massachusetts Institute of Technology, Center for Transportation Studies provided the technical and administrative resources required to undertake this activity.

Statement of the Problems to Be Addressed

There are approximately one million trucks registered in the six New England states, of which about 10 percent are engaged in interstate travel. The scope of the NETC project was limited to those trucks that are engaged in interstate travel, and not to those that do not cross state boundaries.

There were numerous inconsistencies among the New England states in the issuance of permits for oversize and overweight vehicles. (This applies to trucks whose travel is exclusively within the boundaries of a state, as well as to those trucks that travel across state borders.) Those problems can be categorized into the following general areas:

1. Dimensional limits (width, length, height)
2. Weight limits
3. Permit procedures and fees
4. Safety requirements
5. Enforcement procedures

The reasons for these inconsistencies are in many instances historical, and based on the individual needs and experiences of the individual sovereign states. However, the consequences of this situation reached the point at which five of the New England states decided to act uniformly, to the degree possible, in order to achieve some consistency between states. The advantages of achieving such an objective are numerous to a number of state government agencies within each state, to the motor vehicle industry, to the motoring public, and ultimately to the taxpayer and consumer. A longer-term economic benefit will also be realized by taxpayers, consumers, the state agencies, and the motor vehicles industry.

The Technical Committee formed to develop the common permit procedures included one representative from each of the five states, a representative from the Region One Office of FHWA, and staff assistance from the MIT Center for Transportation Studies.

The Technical Committee met during 1985 and 1986 in order to clearly identify the problems to be addressed and the opportunities for achieving consensus on the development of common procedures.

During the course of the various meetings with the representatives from each state, there was a general consensus that the major problems facing their departments that this project should address included the following topics (not in any particular priority order):

TABLE 1
SUMMARY OF EFFECTS TO ACHIEVE UNIFORMITY

Group	States	Date	Purpose	Contact	Status
<u>State-Level Actions</u>					
New England Transportation Consortium	Maine, Mass., N.H., R.I., Vt.	4/28/87 (initial agreement)	Common procedures for oversize and overweight vehicles engaged in interstate travel	Robert Hogan, Maint. Engineer, N.H. Dept. of Transportation (Chairman, NETC Truck Permit Committee), 603-271-2693	Five states have signed an agreement and are taking the regulatory and administrative steps required to implement it. Each state is establishing enabling legislation, to be followed by regulatory hearings and procedures. Expect full implementation in early 1989.
Multi-State Highway Transportation Agreement	Several western states, including California, Idaho, Oregon, Utah, and others	1/1/79	To establish uniform size and weight standards in interstate travel	Contact each state	Not active
Western Association of State Highway and Transportation Officials	Alaska, Ariz., Calif., Colorado, Hawaii, Idaho, Montana, Nevada, N.M., N.D., Oregon, S.D., Texas, Utah, Wash., Wyoming			R. G. Adams, Deputy Dir., Caltrans, and Chairman, WASHTO Subcommittee on Highway Transport, 916-445-7892	Discussion stage
Mississippi Valley Conference of State Highway and Transportation Officials	Ill., Ind., Iowa, Kans., Mich., Minn., Mo., Nebr., Ohio, Okla., Wis.			Harry Price, Wis. DOT, 608-266-2375, and Dennis Ehlert, Iowa DOT, Division of Motor Carrier Services, 515-281-5664	Discussion stage
The Commercial Vehicle Safety Alliance	46 states, D.C., and 10 Canadian provinces as of 10/1/88	Late 1970s	To implement common procedures for roadside safety inspection of trucks. It does <u>not</u> include permit procedures. However, the program is included because its experience is of great value in exploring successful and unsuccessful efforts at uniformity.	Russell Fiste, Executive Director, 202-775-8658	The program is fully operational in 46 states (and D.C.) and in ten Canadian provinces.

- Concern for major adverse effects of overweight trucks on bridge strength and overall structural integrity;
 - Permits for double bottom trucks and 48 ft semitrailers for access off the Interstate systems, and the definition of a "terminal";
 - Methods and policies for divisible and nondivisible loads;
 - Problems of trucks exceeding the allowable width and length standards;
 - Mobile and modular home transportation issues;
 - The transport of oversize trusses;
 - Enforcement issues;
 - Questions of the most appropriate fees and fines;
 - The difference in procedures and time requirements to obtain permits from state to state;
 - The problems of different standards in each state, requiring multistate permits;
- Questions concerning the extent and nature of engineering analysis required in advance of providing permits for unusual loads;
 - The difficulties of modifying or changing state statutes, as opposed to department regulations (it is much easier to change regulations);
 - The role of state government versus local government in issuing permits (preemption issues), and the possible role of the federal government;
 - The concept of "one-stop shopping" or a "regional permit center" for fuel tax, permits, weight allowances, etc., both within states and for interstate travel. Concern was expressed that if the states do not take action, then the federal government might preempt the states;
 - Several agencies having overlapping responsibilities (as is

TABLE 1
SUMMARY OF EFFECTS TO ACHIEVE UNIFORMITY (Continued)

Group	States	Date	Purpose	Contact	Status
<u>National-Level Actions</u>					
AASHTO Subcommittee on Highway Transport			To develop a set of uniform guidelines for oversize and overweight vehicles	William Druhan, AASHTO, 202-624-5800, and R. G. Adams, Caltrans, 916-445-7892	Guidelines have been completed and distributed, but they are advisory only. The latest document is "Guide for Maximum Dimensions and Weights of Motor Vehicles and for the Operation of Nondivisible Load Oversize and Overweight Vehicles", prepared by the AASHTO Subcommittee on Highway Transport. It was officially adopted by AASHTO in 1987.
AASHTO Task Force on Uniform Permitting System for Overweight Truck Shipment of Spent Nuclear Fuel, in cooperation with the U.S. Department of Energy			To develop uniform procedures for transporting overweight loads of spent nuclear fuel	R. G. Adams, Deputy Dir., Caltrans, and Chairman of the AASHTO Task Force, 916-445-7892	Task Force is meeting but no agreement has been developed.
National Governors' Association			Develop common procedures for truck taxing methods and other issues of common concern to the states	Ralph Craft, 202-624-5300	Programs are actively under way.
<u>Industry Efforts at Uniformity</u>					
Specialized Carriers and Rigging Association			This Association has developed a "Uniform Overdimensional/Overweight Permits Policy"	Eugene Brymer, Executive Director, 2200 Mill Road, Alexandria, Virginia 22314; or William Rieck, Vice President	Finalized

the case in most states), which makes the permit process very complicated;

- The basis on which the standards were established for weight limits.

The above concerns cover a broad range of problems. Not every state shared all these concerns. However, there were a number of areas that were of common concern and that would provide the basis for future activity. From among the large number of potential topics the Technical Committee decided to identify only those manageable areas that showed the highest probability of success in being implemented. They are described below.

The Agreed-Upon Procedures Established for Oversize and Overweight Truck Permits for Nondivisible Loads

Based on the analysis of the common issues of concern with regard to the interstate travel of oversize and overweight trucks

in New England, the five participating states established the following common procedures for *nondivisible* loads. (A copy of the signed agreement is included in Appendix A.)

1. Common Safety Requirements

The states adopted a common set of safety regulations (based on the AASHTO guidelines), which include specifications for flags, signs, lights, escort vehicles, convoy speed, days and hours of operation, travel during inclement weather, and use of travel lanes. This action will greatly simplify the burden on each state and on shippers and truck operators as well.

2. Interstate Communications Network for State Communication:

The states identified a single contact person within each state as a single point of communication for all interstate contacts for state agencies. That person will not have access to *all* information that a sister state may need, but that person has the ability to direct an inquiry to the right location, and has access to relevant information. At some future time a computer linkup

between the states may also be developed. This action will save significant time at the state agency level and greatly enhance communications between the states.

3. Establishment of an Issuing State Concept for Certain Oversize and Overweight Vehicles:

It was agreed that for specific permit types a single permit will be issued by a single state and honored in all other participating states for interstate travel on designated highways. Figure 1 illustrates how the concept works. The basic procedure is as follows:

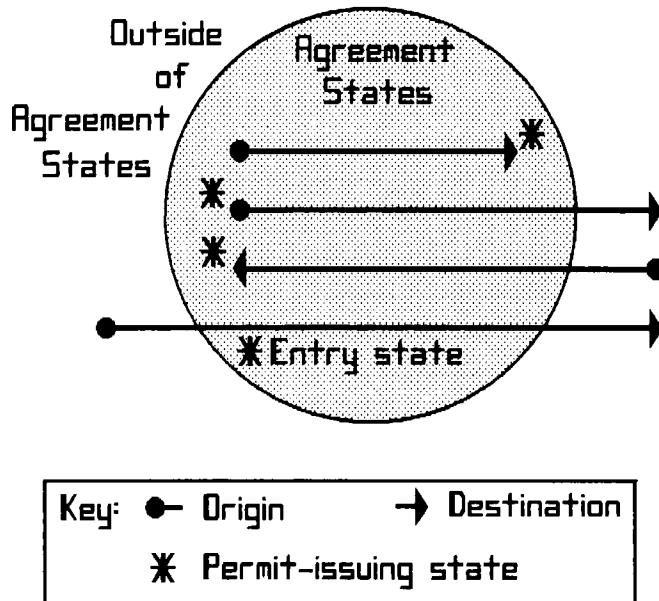


FIGURE 1 Issuing-state concept for permits within the NETC.

(a) For trips where the origin and destination are within the agreement states, the state of destination will issue the permit.

(b) For trips where the origin is in one of the agreement states and the destination outside the agreement states, the state of origin will issue the permit.

(c) For trips where the origin is outside the agreement states and the destination is inside the agreement states, the state of destination will issue the permit.

(d) For trips having both origin and destination outside the agreement states, the entry state will issue a single permit.

4. Envelope Vehicle for Routine Oversize Permits

It is estimated that about 80 to 90 percent of all interstate permits issued in New England for oversize trucks fall into the following categories:

- (a) Width: 14 ft or less
- (b) Length: 90 ft or less
- (c) Height: 13 ft 6 in. or less (the legal limit)

Therefore, the states adopted a policy that uses the issuing-state concept to routinely issue permits for loads 14 ft wide and 90 ft long, or less, that are also within the legal height limit. In all cases, the permit issued will *designate the state highways* that can be used in *each* state. For permits requested in excess of the "envelope" described above, each state will deal with that request separately.

There is one exception to the oversize permit that has been made for mobile or modular homes. In that case *only* an additional 6 in. overhang will be allowed for an eave or gutter, on the right-hand shoulder side of the highway. This exception will make the maximum width for modular or mobile homes 14 ft 6 in.

5. Envelope Vehicle For Routine Overweight Permits

It is estimated that about 80 to 90 percent of all interstate permits issued in New England are for overweight trucks having a gross weight of 130,000 lb or less, traveling on five or more axles. However, in some states requests for overweight permits for gross weights that exceed 108,000 (and up to 130,000) lb must first be approved by a structural engineer. Consequently, the states agreed that the issuing-state concept will be employed for issuing permits for overweight trucks that have a nondivisible gross weight of 108,000 lb or less, traveling on five or more axles.

6. Regional Highway Network

The agreement states have developed a regional highway network as the designated routes over which the envelope vehicles are permitted to travel in accordance with the agreement. When the base state issues a multistate permit, the permit will designate the route(s) within each state over which that specific truck and/or load may travel. No other routes may be used to make the trip for which a multistate permit has been issued.

7. Common Permit Form

A single permit was developed that will be issued by the issuing state for travel in all the agreement states required by the envelope vehicle. The permit form is included in Appendix A. This permit will be valid for five days, for use by the permitted vehicle. The common permit form will be used only to issue permits in accordance with the agreement. For any required permit travel not covered by the agreement, the truck operator must obtain individual state permits.

8. Fee Collection and Distribution

Each state will continue to establish its own fee system, and nothing in the agreement affects those individual state actions. When an issuing state issues a multistate permit, the truck operator will pay to the issuing state *the total* of the fees for each state through which the truck will travel. Periodically, as established in administrative procedures, each of the agreement states will distribute the fees collected in their states (when they acted as the issuing state) to each of the other states.

9. Enforcement Procedures

Each state will continue to enforce its own individual regulations, with consideration to the above common procedures. The states do not expect any new problems to occur (after an appropriate transition period), but that the same kinds of difficulties will be encountered as is currently the case.

Current Status of the NETC Common Truck Permit Process

The five-state agreement was signed on April 28, 1987, at the annual meeting of the Northeastern Association of State Highway and Transportation Officials (NASHTO) in Newport, R.I. The states intend to have the agreement in full operation by early 1989. All states have enacted enabling legislation, and the necessary regulatory proceedings, public hearings, administra-

tive and accounting procedures, maps, and guidelines were to be completed by the end of 1988.

Summary of the NETC Agreement

The five-state truck permit procedures developed by the NETC represent the first regional agreement developed and implemented in the United States. The reasons for the success of this program include the following:

1. Recognition by the chief administrative officers of the five state DOTs that there are numerous common regional problems that can and should be addressed and resolved in a mutually beneficial way. By pooling resources rather than addressing their problems individually, it is possible to achieve more success.
2. A set of issues was selected for resolution that all participants believed were critical, and for which the probability of achieving success was very high.
3. Full cooperation and participation by the technical-level individuals who are responsible for issuing permits was an essential factor in achieving success.
4. Within that framework of mutual cooperation, each state was willing to drop its "jurisdictional barriers" because the potential regional common good was perceived to far exceed what might otherwise be possible.
5. The states presented a uniform position to the trucking industry, thereby establishing a firm yet fair approach to dealing with this issue.
6. The NETC did not attempt to include *all* permit requirements within the regional agreement. It is estimated that the "envelope vehicle" agreement includes perhaps 80 to 90 percent of the cases to be experienced. Therefore, each state can deal with the exceptions in the usual way. Therefore, *no situation is excluded*.
7. A concerted, centralized staff effort was funded to develop and implement this program. It is unlikely that it could have occurred otherwise.
8. Everyone gained and no one lost anything from this agreement. Both the states and the trucking industry have an easier process to deal with. The taxpayers and consumers should benefit as a result of more cost-effective procedures being employed. Finally, the agreement does not exclude any kind of oversize or overweight load. If such a load exceeds the envelope vehicle limits, then it is handled individually by each state.
9. The states believed that it is inevitable that uniform procedures will be required by the federal government, and that it is much more efficient for the states to take the lead before they are preempted.

The five New England states believe that this project was very successful. Consequently, they are in the process of examining other truck-related issues for common resolution.

THE MULTI-STATE HIGHWAY TRANSPORTATION AGREEMENT (14)

Background

In a continuing effort to establish uniformity in the application of motor vehicle regulations, several western states developed an agreement in the late 1970s, which became effective on Jan-

uary 1, 1979. (The agreement states include California, Idaho, Oregon, and Utah. It was not possible to determine if other states were currently involved.)

Participation in this agreement was open to all states that would be interested in joining. The agreement provided for the formation of a committee that would meet at least once each year to carry out its provisions. The representatives on that committee are jointly appointed and serve at the pleasure of the President/Chairman of the House and Senate Chambers of each state legislature.

Problems to Be Addressed

The Multi-State Agreement recognizes that:

1. Highway transportation is the major mode for the movement of people and goods in the western states.
2. The uniform application of state vehicle regulations and laws may result in a reduction of pollution, congestion, fuel consumption, and related transportation costs, which are necessary to permit increased productivity.
3. There is a need to encourage uniformity among participating jurisdictions in vehicle size and weight standards.
4. There is a need to encourage uniformity, insofar as possible, of administrative procedures in the enforcement of recommended vehicle size and weight standards.
5. There is a need to provide means for the encouragement and utilization of research to formulate the objectives of the agreement.

Objectives of the Multi-State Agreement

The objectives of this group are:

1. To obtain safer, more efficient, and more economical transportation by motor vehicles among the participating jurisdictions.
2. In the event the operation of a vehicle, or combination of vehicles, would result in withholding or forfeiture of federal-aid funds, the operation of such vehicle, or combination of vehicles, shall be authorized under special permit authority by each participating jurisdiction that can legally issue such permits.
3. The authority of any participating jurisdiction to issue special permits for the movement of any vehicle, or combination of vehicles, having dimensions or weights, or both, in excess of the maximum statutory limits in each participating jurisdiction shall not be affected.
4. It is the further objective of the participating jurisdictions to facilitate and expedite the operation of any vehicle, or combination of vehicles, among the participating jurisdictions. To that end, the participating jurisdictions agreed, through their designated representatives, to meet and cooperate in the consideration of vehicle size- and weight-related matters including, but not limited to, the development of uniform enforcement procedures; additional vehicle size and weight standards; operational standards; agreements or compacts to facilitate regional application and administration of vehicle size and weight standards; uniform permit procedures; uniform application forms; rules and regulations for the operation of vehicles, including equipment requirements, driver qualifications and op-

erating practices; traffic safety and highway maintenance; and such other matters as may be pertinent.

5. In recognition of the desire for a degree of national uniformity of size and weight regulations, it is the further objective of the participating jurisdictions to encourage the development of broad, uniform size and weight standards on a national basis under this agreement that are compatible with national standards.

Current Status

The Multi-State Agreement is still technically in effect. However, there have been no formal procedures developed or implemented to date. The designated committee meets annually, but no formal actions have been taken.

Summary

The intent of the Multi-State Agreement recognizes the need and desirability of establishing uniform procedures for oversize and overweight permits. However, it does not provide for the agency and industry efforts nor the funding required to implement its objectives. Furthermore, the most significant technical and political participants are not involved with this program.

THE WESTERN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (WASHTO) (15)

Background

There has been continuing discussion among the western states concerning the need for permit uniformity. Since 1985, a group of six states (Idaho, Montana, Nevada, Oregon, Utah, and Washington) has been working on the development of an agreement for uniformity. They outlined the differences between the six states, then outlined the steps and the changes in state laws required to establish uniform procedures. However, individual state actions did not take place.

That six-state effort was expanded through the formation of a WASHTO Subcommittee on Highway Transport, which includes all the 17 states of WASHTO.

Problems to Be Addressed

The WASHTO Subcommittee on Highway Transport met twice in 1987 (May 13–14, 1987, and October 20–21, 1987), and discussed a broad range of truck-related issues. The subcommittee established as its purpose “. . . to identify and discuss major motor carrier industry-related transportation issues within the WASHTO region, to define actions and solutions, improve coordination and communication, and to recommend policies to the WASHTO Standing Committee on Engineering and Operations.”

The subcommittee's mission statement includes the following:

1. Encourage uniformity among the WASHTO states regarding statutes and regulations and their effects on the transport industry.

2. Encourage uniformity within the WASHTO states in vehicle size and weight standards for legal as well as permit loads.

3. Serve as a forum to review AASHTO's proposed policies on transport issues from a WASHTO perspective.

4. Examine ways to increase productivity within the motor carrier industry.

5. Promote safety and safe vehicle operation by way of uniform administrative procedures in the application of the Commercial Vehicle Inspection Program.

6. Encourage the understanding of research and testing in any aspect of vehicle size and weight or vehicle components when appropriate or sufficient research or testing has not been undertaken.

7. Maintain liaison with all segments of the motor carrier industry to improve understanding between state highway and transport industry officials and to promote uniformity on various industry-related transportation issues.

8. Review and monitor studies, proposals, and federal and state regulations related to highway transport as they affect WASHTO member departments and provide a forum for the exchange of ideas and information.

9. Maintain close communication with law enforcement officials to improve mutual understanding of motor carrier transport issues, to assist in developing administrative and statutory procedures, and to encourage enforcement of trucking size and weight regulations.

10. Maintain WASHTO intercommittee liaison with regard to the aspects of design engineering of highway facilities for truck size and weight considerations.

Objectives of this Effort

The subcommittee agreed that truck size and weight uniformity should be its number one priority for action. A size and weight uniformity task force was mobilized to concentrate on this topic. In addition, the subcommittee adopted a resolution on this subject, which was subsequently approved by the WASHTO chief administrative officers on June 17, 1987. In that resolution, it was “. . . Resolved, the CAOs, individually and collectively, recognize and endorse the need for uniformity of size and weight laws and regulations among the WASHTO states and will support the effort of the subcommittee to achieve said uniformity in a timely manner.”

Current Status

As of December 1987, the subcommittee and task force are working on the project. They met again in the spring of 1988 to discuss progress.

THE MISSISSIPPI VALLEY CONFERENCE OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (MVCSHTO)

Background

Several states within the MVCSHTO regions have informally discussed the potential for a joint effort in five areas:

1. Communications between states
2. Oversize and overweight permit forms and fees
3. The identification of an envelope vehicle
4. Coordination of fuel and registration permits
5. Computer routing for truck travel

However, the MVCSHTO has taken no formal action on these areas.

Status

The discussions are still informal at this stage, and there is no timetable for further action.

THE COMMERCIAL VEHICLE SAFETY ALLIANCE (CVSA) (16)

Background

In the late 1970s and early 1980s a group of western states joined together to establish a uniform system for doing roadside physical safety inspections of commercial motor vehicles. That effort was so successful that it gradually spread eastward across the United States and into Canada. As of September 1988, there are 46 states, the District of Columbia, and 10 of the 12 Canadian provinces that are members of the CVSA.

Although this program is not directly related to oversize and overweight permits, it does represent a successful multistate effort to achieve uniformity in dealing with commercial motor vehicle carriers. Therefore, it is included in this synthesis as an example of an achievement that provides some useful examples.

Problems Addressed

Before the formation of the CVSA, each state established its own individual safety inspection requirements. Each individual truck was required to meet individual state requirements and to be inspected in each state individually. Further, the administration of this safety program was different in each state. Sometimes it was administered by one agency (such as the state police), but there were states in which several organizations shared the responsibilities. This caused communication and administrative problems.

The individual state practices led to obvious inefficiencies for individual states, for the trucking industry, and for consumers and taxpayers.

Procedures Established

The CVSA has established a common set of procedures that accomplish the following:

1. The same safety standards and inspection standards and procedures.
2. Reciprocity among all the participating states. When a truck is inspected, a decal is issued that is good for 90 days and honored in all states.
3. Uniformity within each state, whereby interstate as well as intrastate procedures are the same.

4. Application to hazardous material inspection as well as other commodities.

5. Availability of federal funds on an 80/20 matching basis from the FHWA to finance this national program. (\$50 million was available for FY 1987 for the entire Motor Carrier Assistance Program, from which dues of \$2,000 per state per year are reimbursed.)

Current Status

The CVSA is in full operation, with an executive director located in Washington, D.C.

Summary

There was an obvious common need for uniformity in this case, which was generated by a group of individual states starting a program that eventually will include all of the United States and Canada.

A major incentive for this program was also provided by the funds made available through the STAA of 1982, and subsequent appropriations to the states.

MISCELLANEOUS STATE EFFORTS TO ACHIEVE UNIFORM PROCEDURES FOR COMMERCIAL MOTOR VEHICLE TRAVEL

Chapter Two briefly describes some of the more relevant studies and research projects that have been undertaken since 1969. The issues associated with the regulation of commercial motor vehicle carriers have been a national and state concern for some time, and many of those issues still must be resolved.

There have been several efforts with regard to the establishment of uniform procedures for dealing with commercial motor vehicles, beyond what has been included earlier in this chapter. These are listed below, for the information of the reader:

1. "WASHTO—Uniform Mobile and Modular Home Transportation Regulations," Western Association of State Highway and Transportation Officials, 1978 (17).

Comment Although these guidelines were developed they were never implemented.

2. Northeastern Association of State Highway and Transportation Officials (NASHTO) (18).

Comment The latest policy position by NASHTO was adopted at its annual meeting on April 26–28, 1987, in Newport, R.I. However, see the section in this chapter concerning the NETC, and the common procedures established by five states.

3. New England Governors' Conference, Inc. (NEGC) (19).

The six New England states, through the NEGC, are working toward a policy on regional uniformity and cooperative efforts in addressing all areas related to the trucking industry that affect all the states within the New England region. The priority areas in this regard include:

- (1) Taxation
- (2) Safety
- (3) Cost alleviation
- (4) Reasonable access

- (5) Uniform truck weight and registration requirements
- (6) Uniform penalties for overweight trucks

THE AASHTO SUBCOMMITTEE ON HIGHWAY TRANSPORT—GUIDE FOR THE STATES (20)

Background

For several years, AASHTO has developed and continually revised its "Guide for Maximum Dimensions and Weights of Motor Vehicles and for the Operation of Nondivisible Load Oversize and Overweight Vehicles." The latest revision is dated August 1987, and it was officially adopted by AASHTO on that date.

Current Status

The AASHTO guidelines are included in Appendix B. Following is a statement of the purpose and intent of the document.

It is the opinion of the American Association of State Highway and Transportation Officials that adoption by all states of uniform standards governing the dimensions and weights of motor vehicles operating over the highway is necessary for the following reasons:

- (a) To promote the safety of highway transportation.
- (b) To promote efficiency and economy in both the intrastate and interstate operation of motor vehicles.
- (c) To establish and stabilize the basis for regulation of the many relations between the dimensions and weights of motor vehicles and the strengths and capacities of compatible highways.

The recommended guide has been designed to these ends and it constitutes a recommendation for the consideration of appropriate legislative bodies having the responsibilities of motor vehicle regulatory legislation. It is hoped that the states will make their respective codes of motor vehicle laws consistent with this guide to effect uniform motor transportation conditions throughout the nation.

It is recognized that existing "grandfather rights" held by the states would be difficult to roll back in the short term, but the ultimate goal for all states should be the achievement of uniformity as set forth in the guide.

It is the intent of the American Association of State Highway and Transportation Officials that the limits prescribed for vehicles shall be:

- (a) Maximum limits that are inclusive of all enforcement, weighing, scale, or other tolerances.
- (b) Enacted in all states as soon as possible for roads and bridges on the completed portions of the National System of Interstate and Defense Highways and other routes on the National Network for trucks.
- (c) Enacted in all states for all roads and bridges on other routes or systems after an engineering determination has been made by the state transportation or highway departments that the roads and bridges of these routes or systems over which such operations are to be authorized are sufficiently adequate in geometric capacity and structural capability to accommodate such operations safely and economically.

- (d) Maximum limits, which are not to be exceeded in the laws of any state, during such period as this guide shall remain in effect.

The guide provides for regulation of vehicles in regular operation, for regulation of overweight and oversize vehicles operated by special permit, for issuance of special permits including assessment of permit fees, and for highway movements essential to the national defense.

Summary

Although the AASHTO guidelines were developed with the intention that they be used by the states, they are only guidelines and not a mandate. Thus, each state or region may use them as a point of departure, but there is still much work to be accomplished in achieving the uniformity desired.

It is interesting to note that in the preparation of the agreement reached by the NETC, the AASHTO guidelines were used as the basis for preparing the final agreement. Relatively minor modifications were made to meet the unique characteristics of New England and to deal with unusual circumstances. However, for the most part the AASHTO guidelines were used.

THE AASHTO/DOE COOPERATIVE ACTION ON UNIFORM PERMITTING OF OVERWEIGHT SPENT NUCLEAR FUEL (21, 22)

Background

An AASHTO Task Force on Truck Size and Weight Regulation has been established to work with the U.S. Department of Energy (DOE) in developing guidelines for the transportation of spent nuclear fuel using state highways. Its mission is to address the following issues:

1. Make recommendations for revisions to the AASHTO Policy on Truck Size and Weight.
2. Monitor compliance of member states in adopting limits recommended in the AASHTO Policy on Truck Size and Weight.
3. Study feasibility and develop guidelines for routine uniform oversize permits for loads up to a specified oversize limit for issuance of permits on a nationwide or regional basis.
4. Cooperate and coordinate with DOE on studying the feasibility of a uniform state permitting system for operating overweight truck shipments of spent nuclear fuel. Coordinate with the Subcommittee on Highway Transport's Task Force on Transportation of Hazardous Materials/Waste.

The Office of Civilian Radioactive Waste Management (OCRWM) of DOE is responsible for the development of a transportation system to support the nuclear waste repository program, which is to begin operation in the late 1990s. A crucial question to be answered early in the planning process involves the type of packaging to be developed. This is partly dependent on the preferred mode of transport. A number of modal alternatives are available to OCRWM, including highway, rail, and barge, or intermodal arrangements employing any combination of these. The relative importance of these modes will be influ-

enced greatly by congressional action on a proposal to be submitted by DOE to develop an integrated waste management system involving a monitored retrievable storage (MRS) facility. DOE will take this into consideration when making its final decisions on preferred modes and the mix of cask types to be developed.

Regardless of the MRS decision, it is certain that highway shipments will play an important role. About 30 percent of nuclear reactors expected to be in operation by the year 2000 will not have rail access. Except for those few sites located on navigable water, the only alternative will be the highway mode.

Casks used for highway shipment of spent nuclear fuel are characterized by an extremely low payload-to-weight ratio. Thus, overweight truck casks offer the only alternative for substantially increasing highway shipment productivity.

A study has been undertaken by DOE to identify and analyze the legal, political, administrative, and operational issues that could affect a DOE decision to develop an overweight truck cask fleet. A secondary purpose is to provide sufficient background and detailed information, so that it can serve as a useful resource document for DOE staff on the topic of highway weight control and state permit limits and operations.

Problems to Be Addressed

The use of overweight truck casks offers the promise of substantially reducing the number of truck shipments required for the nuclear waste repository program, with potential reductions in transportation cost and risk. However, overweight truck shipments entail a number of institutional issues that will have to be carefully considered by DOE before it makes a decision to base its truck fleet on legal-weight or overweight casks.

Issues that could affect the use of overweight truck shipments to nuclear waste repositories are grouped into three categories. The first set of issues involves a number of federal and state concerns that make up the political environment in which DOE must seek support for the development of an overweight truck cask fleet. First among these concerns is the relationship between the deterioration of the nation's highways and bridges and damage caused by heavy trucks. These factors will affect the manner in which states will deal with the idea of routine overweight nuclear waste shipments.

The second set of issues involves state permitting, which presents more difficulty than the general political environment discussed above. Administrative difficulties involving state permitting, such as nonuniform procedures, must be addressed.

The third set of issues involves DOE policy and repository program considerations. Congressional oversight committees have strongly criticized federal agencies' use of overweight shipments. Partly in response to this, DOE established a policy in 1978 that discourages the use of overweight shipments of any commodity unless the load is nondivisible and no other mode of transport is available.

The last issue relating to program considerations is the loss of control by DOE over the nuclear waste shipments. States would have the additional shipment control that comes with overweight permitting. Most state overweight permits specify routes, speeds, times, duration, fee, and minimum financial responsibility, and some may require escorts and more frequent inspections. Vehicle weight regulation and enforcement is almost

entirely a state and local function, with little direct federal involvement. In short, once a shipment is covered by a state overweight permit, it is subject to almost total control of state weight authorities. It is possible that the umbrella of federal preemption associated with hazardous material transportation would be seriously diminished once vehicle weight becomes an issue.

Current Status

The Office of Transportation Systems and Planning, Battelle Memorial Institute, is under contract to the DOE to analyze the situation and to develop recommendations for consideration by DOE, the states, and other affected individuals and organizations.

The following recommendations were made to DOE by Battelle and involve possible activities to address key issues discussed above. The feasibility and acceptance of overweight truck shipments to nuclear waste repositories will be continually reexamined over the next several years as new information becomes available from these activities.

Recommendations include the following:

1. Establish a management-level working group on overweight nuclear shipments composed of DOE, AASHTO, FHWA, and carrier representatives to address the following key problems that will probably require formal resolution:

Interpretation of the divisibility of a multi-element spent fuel cask.

Legal interpretation of the ability of states to issue divisible load permits for operation on the federal-aid system.

The need to obtain near unanimity among states on maximum allowable permit weights and vehicle configurations. The need for virtual certainty among all states that repetitive overweight truck permits will be available and state permitting policy will be consistent over time.

2. Proceed with early planning to develop overweight cask designs along with legal-weight truck casks, rail casks, and other cask concepts.

3. Reexamine current DOE overweight truck policy and consider lifting self-imposed restrictions for commercial nuclear waste relating to availability of other modes.

4. Conduct an audit of off-system bridge and highway limitations for each reactor and repository site.

5. Conduct detailed case analysis of an overweight shipping campaign. This would allow the documentation of the state permit approval and issuance process, scheduling considerations, time and route restrictions, occupational exposure times, turnaround times, and costs involved with overweight shipments for detailed comparison with legal-weight shipments.

The AASHTO Task Force on Uniform State Permitting System for Overweight Truck Shipment of Spent Nuclear Fuel is now meeting regularly to discuss this matter. At those meetings the problems and possible solutions are discussed. However, no formal conclusions have been reached. The task force will continue to meet in order to address these issues.

THE NATIONAL GOVERNORS' ASSOCIATION (NGA) (23)

Background

The enactment of the Motor Carrier Act of 1980, which substantially reduced federal truck regulation, highlighted the concerns of the motor carrier industry about the lack of uniformity in state taxation procedures. Recognizing these issues, states have worked to develop a forum to address the uniformity issue. The governors assigned a high priority to the effort by designating some of their best tax, budget, and transportation officials to form a working group to make recommendations. To complete its planning effort, the Working Group on State Motor Carrier Procedures also developed a joint project with the federal government.

On January 15, 1985, the NGA initiated a study of Uniform State Procedures for Motor Carrier Taxation and Regulation under a cooperative agreement with the FHWA. The objectives of the study as designated by the working group were:

- to identify, together with states and representatives of the motor carrier industry, policies and procedures by which states, as a group, can simplify motor carrier taxation and registration requirements and gain greater uniformity among the states in the filing, reporting, and record-keeping forms, practices, and procedures used to administer these requirements; and
- to develop a promotional plan and support program to encourage individual states to implement such recommended policies and procedures.

An International Registration Plan has been developed, which focuses exclusively on vehicle registration. Procedures for other interstate motor carrier taxes, especially for state fuel use tax reporting, impose considerable administrative burdens on states and significant compliance requirements on interstate motor carriers. The administrative complexity and compliance problems of fuel use tax reporting are particularly acute. Although the requirements of any one state do not necessarily create a burden on interstate motor carriers, the multiplicity and lack of uniformity among the states has resulted in a fuel use tax registration and reporting system of enormous complexity.

The current NGA program does not deal with the question of uniform permitting procedures, which is the topic of this synthesis. However, the objective of that NGA effort is to achieve greater uniformity in a broader sense with regard to the interaction between government and the trucking industry. Therefore, it is important to note that effort in this report, as it will provide some useful experiences.

Current Status

The motor fuel tax is a significant source of highway funds in all states. To ensure the equitable allocation of state fuel taxes, states have established registration and reporting systems for interstate motor carriers. Together, these administrative systems are referred to as fuel use taxation. Under the tax, once a miles-per-gallon rate is established, mileage is used as the measure of fuel consumption and, therefore, tax liability. Motor carriers are required to register for fuel tax payment and file quarterly or other periodic tax returns in the 46 states that

require fuel use tax reporting, obtain cab cards from 36 of these states, and file fuel use tax bonds in 17 states in order to ensure payment of the tax. (Eight additional states require bonds of carriers with a poor compliance record.) In addition, carriers must buy external decals from 28 states in order to provide evidence of having complied with the registration requirement of fuel use taxation.

The NGA Working Group on State Motor Carrier Procedures has identified three priority options for promoting uniformity in motor fuel use tax registration and reporting. Option I examines the consequences of eliminating fuel use tax reporting entirely. Improvements that could be made to the existing system of fuel use tax reporting are assessed in Option II. The third option defines and evaluates the benefits and concerns of an issuing-state approach to motor fuel use tax registration and reporting. Recommendations have been adopted by the working group and endorsed by the governors regarding each of the three options.

Summary

The NGA Working Group on State Motor Carrier Procedures has undertaken a project to achieve administrative uniformity of state motor carrier procedures. The goal is to increase the efficiency and effectiveness of state motor carrier taxation and regulation procedures.

The interstate motor carrier industry finds the existing system of state procedures administratively complex. Although the procedures of any one individual state may not create a burden on the industry, a problem is created with the lack of uniformity that exists among the states. Interstate motor carriers must comply with multiple special requirements of each state where they operate.

During the past year, state officials and motor carrier advisers have worked to find solutions to the concerns of the industry and alternatives to improve, ease, and simplify state administrative procedures. The recommendations of the working group and the policy adopted by the governors constitute a consensus agenda to improve state motor carrier taxation and regulation procedures. When implemented, the group's recommendations will benefit the states and the motor carriers through reduced administrative costs and increased efficiency.

There are currently eight items on the consensus agenda:

1. Establish State Motor Carrier Advisory Committees
2. Join the International Registration Plan
3. Adopt the Uniform Fuel Use Tax Reporting Form
4. Follow the Six Point Plan for Fuel Use Tax Reporting
5. Join the Base State Agreement for Fuel Use Tax Reporting
6. Develop Increased Uniformity in Mileage-Based Tax Procedures
7. Eliminate Retaliatory Taxes
8. Simplify State Procedures

SPECIALIZED CARRIERS AND RIGGING ASSOCIATION (SCRA) AND THE AMERICAN TRUCKING ASSOCIATIONS (ATA) (10, 24-26)

Background

According to the SCRA, it represents about 85 percent of all carriers in the United States who require about 99 percent of

all permits for nondivisible oversize and overweight trucks (10). SCRA has a Permit Policy developed through joint meetings with state highway officials and motor carriers (24). It is included in Appendix C.

The SCRA and ATA efforts are representative of the trucking industry's desire to achieve uniformity. The ATA publishes several documents on a regular basis to assist the trucking industry in dealing with the difficulties associated with the wide diversity of requirements from state to state. For example, those publications include:

1. "Driver's Guide to Oversize/Overweight Permits" (25). This contains a state-by-state description of permit requirements (217 pages).

2. "SCR&A Permit Manual" (26). Contains state-by-state information on legal size and weight limits, special axle weight

limits, permit types and costs, escort needs, flags and signs, mobile crane operations, fines and penalties, etc.

Current Status

The trucking industry continues to work with individual states and national organizations (e.g., AASHTO, NGA, FHWA) in their efforts to achieve uniformity.

Summary

There is a clear consensus among representatives from the states and the industry that the benefits to be derived by establishing uniform procedures for oversize/overweight vehicles are substantial.

FUTURE PROSPECTS FOR ACHIEVING UNIFORMITY

The movement of commodities by commercial motor vehicles throughout the nation is an essential economic need. Yet, motor carriers encounter many expensive and complex regulatory requirements in their mission of moving those commodities. Further, each state also encounters great expense and complexity in the administration of tax and regulatory procedures. There are mutually burdensome and serious problems experienced by state government and the motor carrier industry caused by nonuniform, duplicative, and inconvenient practices both within and between states.

AASHTO has gone to great lengths in trying to address these issues. AASHTO has prepared a set of detailed guidelines for the purpose of achieving uniformity in the permitting process.

The NGA, in cooperation with the U.S. Department of Transportation, is attempting to simplify the fuel use taxing system and to make it more equitable. That is a major effort that is now proceeding and that could provide an incentive for dealing with other issues, including the permitting process.

The CVSA has established the first national program for dealing with one important element in the state regulation of motor carriers. As described in Chapter Four, there is now in place a uniform system for roadside safety inspections. This action was motivated by a common need to address an urgent problem, and it resulted in a very effective program.

The NETC has established a five-state agreement for the implementation of a common set of procedures for issuing permits for oversize and overweight trucks. This is the first agreement of its type in the nation. It is based on what appear to be common principles that all states should be able to agree on. It illustrates the potential for achieving success in this area on a regional basis, and it provides a good model for other regions to consider. There may be enough in common among regions to provide the incentive for a growing national agreement, such as that achieved by the CVSA.

Although there have been some limited successful examples of achieving some degree of permit uniformity, there are still many areas of work required to establish easier, less burdensome, more cost-effective procedures for the states and motor carrier industry to follow.

According to a report prepared by the Center For Policy Research, NGA, there are basically five major highway use tax and regulation requirements that states place on interstate motor carriers (27):

1. Vehicle registration
2. Fuel use tax reporting

3. Operating authority fees and requirements
4. Various other highway-related taxes (e.g., mileage-based taxes, property taxes, and gross receipts taxes)
5. Oversize/overweight regulations

The same NGA report indicates that the major procedural problems faced by the motor carriers include:

- Multiple number of state agencies that independently administer the requirements in a particular state
- Lack of a central motor carrier information center
- Complex applications and tax returns
- Slow turnaround in processing and issuing license plates, decals, and other required forms and credentials

Recently the NGA Working Group on State Motor Carrier Procedures has recommended a number of actions to improve state procedures to address those problems in each state:

1. Establish a motor carrier advisory committee
2. Establish a motor carrier information center
3. Centralize the motor carrier's point of contact
4. Simplify state fines
5. Combine tax or application forms for two or more requirements
6. Create a multipurpose trip permit

There have been numerous studies and recommendations concerning the regulation of motor carriers over the past two decades, as reported in this synthesis. However, a topic that has not received adequate attention is the increasing trend toward the international shipment of goods and the multi-modal companies (e.g., ocean vessels, rail, truck combinations) that are now and will be increasingly involved with commodity flow. It is likely that international shipments will add even more complexity to an already difficult situation.

In conclusion, past experience indicates that we cannot deal with all these issues all at once. Each is complicated in and of itself. Therefore, each must be addressed separately. However, there appears to be some common basis for achieving the goal of developing a common set of procedures for the issuance of permits for nondivisible oversize and overweight vehicles. State government officials, state trucking organizations, and the national organizations representing both groups must continue to find the common ground desired.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

This report has provided a summary description of:

- Past efforts undertaken over the past 20 years to achieve uniformity in developing common permit procedures for non-divisible oversize/overweight vehicles engaged in interstate travel;
- Current efforts under way to achieve these objectives, including a description of a few success stories (most notably in New England);
- The reasons why there is a problem in developing uniform procedures;
- Why previous efforts have not always been successful; and
- A summary of the actions that might be undertaken by state highway and transportation agencies who desire to develop common permit procedures.

Virtually every study that has been undertaken on this topic has concluded that it is in everyone's best interest to simplify and unify the permit procedures for interstate truck travel between the states. However, except for the example of five New England states that have joined in the NETC, there has been little success in reaching that goal. Following is a summary of the reasons that appear to have caused this impasse. It is based on conclusions drawn from interviews with individuals directly involved with this matter, information from the literature, and the experiences of the NCHRP panel that was formed to develop this synthesis:

1. There may not be a clearly defined constituency from either the state or industry perspective; this may exist because:
 - The trucking industry may have an "illusion of uniformity" because they rely on private permit service companies to obtain permits.
 - The state officials responsible for issuing permits have learned to make the best of the situation.
 - There is no *urgent* economic or safety issue to resolve.
2. The most appropriate level of people in state government may not be actively involved in this effort:
 - A consistent and continuing policy initiative must come from the chief administrative officers of the state highway or transportation agency, in order to provide a policy and political incentive for action.
 - The "technical-level people" who are responsible for administering the program must be committed to working out the details.
3. The "trucking industry" is a very diverse and poorly defined, nonhomogeneous "group," characterized by:
 - A few large trucking companies who carry the majority of tonnage.

A very large number of small companies or individuals who carry a smaller proportion of tonnage.

Individual state organizations that are concerned primarily with intrastate issues in their own states.

4. Individual states that may be more rigid than others in the allowance of oversize or overweight vehicles are reluctant to join in an agreement with other states, fearing that they will have to adversely compromise their standards.

5. There often exists a traditional suspicious and sometimes adversarial relationship between government agencies and the trucking industry.

6. When state technical-level people are given the assignment for developing uniformity-based procedures, they may not be able to see the broader picture within which such an agreement might be possible.

7. The trucking industry appears to favor their traditional approach of dealing with individuals, within individual states, to achieve individual objectives.

8. The benefits to a particular truck operator of carrying an overweight or oversize load illegally (i.e., without a permit or with a permit that is not accurate) may exceed the costs of getting caught.

9. The probability of an operator being caught carrying an illegal oversize or overweight load may be very small and therefore worth the risk.

10 Even if an illegal load is discovered on the highway, the fines may be too low to be a deterrent.

The obstacles to success, as noted above, are numerous. Some are definable, others are more speculative. However, the five New England states that joined to form the NETC to deal with a number of common surface transportation problems have addressed these issues successfully. Therefore, that experience offers the best example of what is required to develop a common set of permit procedures. Those actions include:

1. Recognition by the chief administrative officers of the state DOTs that there are numerous common regional problems that can and should be addressed and resolved in a mutually beneficial way. By pooling resources rather than addressing their problems individually, it is possible to achieve more success.
2. A set of issues was selected for resolution that all participants believed were critical and for which the probability of achieving success was very high.
3. Full cooperation and participation by the technical-level individuals who are responsible for issuing permits was an essential factor in achieving success.
4. Within that framework of mutual cooperation, each state was willing to drop its "jurisdictional barriers" because the

potential regional common good was perceived to far exceed what might otherwise be possible.

5. The states presented a uniform position to the trucking industry, thereby establishing a firm yet fair approach to dealing with this issue.

6. The NETC did not attempt to include permit requirements within the regional agreement. It is estimated that the "envelope vehicle" agreement includes perhaps 80 to 90 percent of the cases to be experienced. Therefore, each state can deal with the exceptions in the usual way, and *no situation is excluded*.

7. A concerted, centralized staff effort was funded to develop and implement this program. It is unlikely that it could have occurred otherwise.

8. Everyone gained and no one lost anything from this agreement. The states and the trucking industry have an easier process to deal with. The taxpayers and consumers should benefit as a result of more cost-effective procedures being employed.

9. The states believed that it is inevitable that uniform procedures will be required by the federal government, and that it is much more efficient for the states to take the lead before they are preempted.

Another example of success in achieving uniformity is the

CVSA program for roadside safety inspections. That success was achieved because:

- There was a specific, limited, recognizable, mutually agreeable objective to be achieved.
- The trucking industry and the states agreed on the importance of resolving the issue.
- There were funds available to develop and implement the program.
- It started small, in one part of the nation, and spread gradually throughout the United States and Canada. Thus, it was not viewed as an overwhelming burden or unmanageable task.
- There was a specific dedicated staff formed with the resources needed to get the job done.

The NETC experience illustrates that it is possible to achieve uniformity. However, it seems clear that it cannot be accomplished initially on a national scale. Rather, it should start out on a regional, or even subregional, basis as the NETC and the CVSA program were able to do. Then, it will require that the appropriate policy and political as well as technical interaction take place within as well as between regions.

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APPENDIX A

**AGREEMENT TO IMPLEMENT A COMMON SET OF PROCEDURES
FOR ISSUING PERMITS FOR NONDIVISIBLE OVERSIZE AND
OVERWEIGHT TRUCKS ENGAGED IN INTERSTATE TRAVEL**

October 1, 1988

Endorsement Page

30

FINAL

The New England Transportation Consortium
Maine, Massachusetts, New Hampshire,
Rhode Island and Vermont

We, the undersigned, endorse the common set of procedures described in this document. We shall implement the common set of procedures for issuing permits for non-divisible oversize and overweight trucks engaged in interstate travel within the boundaries of the Agreement States.

Developed In Cooperation With
The Federal Highway Administration
and

The American Association of
State Highway and Transportation Officials
and

The Massachusetts Institute of Technology

Dana F. Connors, Commissioner, Maine DOT
Chairperson, NETC Policy Committee

Date

Jane F. Garvey, Commissioner, Mass. DPW

Date

Wallace E. Stickney, Commissioner, NH DOT

Date

Matthew J. Gill, Jr., Director, RI DOT

Date

Susan C. Crampton, Secretary,
Vermont Agency of Transportation

Date

The NETC Truck Permit Committee

The State Members

Mr. Robert Hogan, Chairperson, Truck Permit Committee
Maintenance Engineer
New Hampshire Department of Transportation

Mr. Douglas McCobb
Engineer of Traffic
Maine Department of Transportation

Mr. Joseph McCarthy
Permits Engineer
Massachusetts Department
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Mr. John Mattuchio, Mgr.
Maint. Information Systems
Massachusetts Department
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Mr. John Di Tomasso
Coordinator, Highway Safety Programs
Rhode Island Department of Transportation

Ms. Mary McDonald
Policy Coordinator
Department of Motor Vehicles
Vermont Agency of
Transportation

Ms. Linda McAllister
Department of Motor
Vehicles
Vermont Agency of
Transportation

FHWA Representative

Mr. Stan Gee
FHWA Region 1 Office

Massachusetts Institute of Technology

Mr. Thomas F. Humphrey
NETC Program Coordinator

1.0 Purpose of This Agreement

1.1 Introduction

Five of the New England States (Maine, Massachusetts, New Hampshire, Rhode Island and Vermont) have formed the New England Transportation Consortium (NETC) to pool the resources of the region in the development of substantially improved methods for dealing with common, high priority transportation problems. One of the first such problems to be addressed has been the need to develop more uniform and equitable procedures for issuing permits for non-divisible over-size and overweight trucks engaged in interstate travel.

There are about one million trucks registered in the six New England states, of which nearly 10 percent are engaged in interstate travel. This Agreement applies only to those trucks engaged in oversize and/or overweight interstate travel. It is estimated that when the common procedures described in this document are implemented, they will improve the overall efficiency within each state. However, because each state will continue to receive all the receipts from each permit issued to allow those trucks to travel on their highways, they will each continue to receive the same amount of revenues as they would if they were issuing the permits themselves.

The implementation of the procedures contained in this document will ease the burden of the trucking industry in obtaining the approvals required to move non-divisible over-size and overweight trucks across state borders. This will also

substantially reduce some of the administrative burdens currently being experienced by shippers and operators alike.

1.2 Purpose

The purpose of this Agreement is to clearly define the common procedures that will be used to issue permits for certain non-divisible oversize and overweight trucks. Upon endorsement by the states who are a party to this Agreement, each state will take the internal state actions required to implement the common procedures. It is the intent of the states that these common procedures be placed into operation on January 1, 1989.

This initial Agreement has been developed by five of the New England States, as noted above. However, its provisions have been established in a way that allows for other states, both inside and outside New England, and Canadian Provinces, to become signatories to the Agreement as well.

2.0 Definitions

2.1 Envelope Vehicles

The envelope vehicles to be included in this Agreement shall include any non-divisible oversize or overweight vehicle which falls within the following limits:

- Length: 90 feet or less
- Height: 13 feet - 6 inches or less

Width: 14 feet - 0 inches or less, except for modular or mobile homes. In that case, an additional 6 inch overhang for eave(s) will be allowed. The greater overhang shall be on the right-hand shoulder side of the highway, making the maximum dimension for this particular case 14 feet - 6 inches.

Weight: 108,000 pounds or less, traveling on five or more axles.

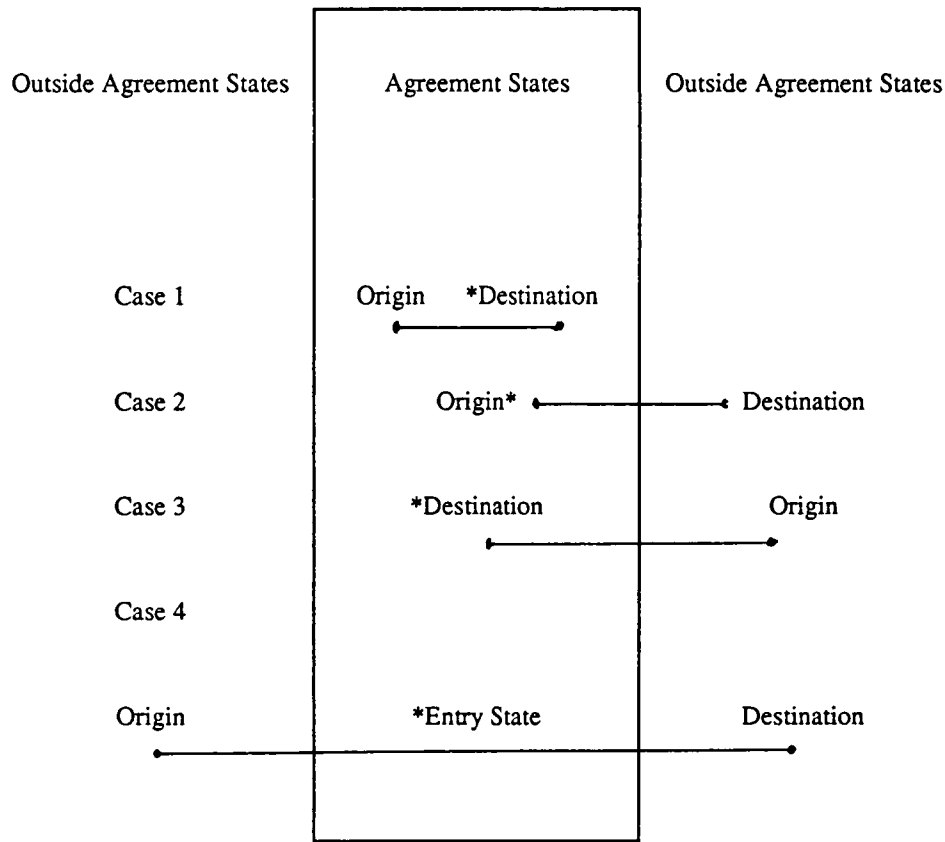
Envelope vehicles will be issued permits by the Issuing State (as defined below) to travel on specified, designated routes (as defined below) within the Agreement region. Operators of vehicles exceeding any limitation of the envelope vehicle must obtain separate permits from each state in which travel will occur, in accordance with state permit procedures.

2.2 Issuing State Concept

2.2.1 For One Way Trips

For specific permit types that include the envelope vehicle, one state, the Issuing State, will issue the permit and collect fees for all states through which a specific vehicle will travel. The following chart and the accompanying explanation illustrates how the concept will work:

THE ISSUING STATE CONCEPT



*Issuing State

- Case 1: For trips where the origin and destination are both within the Agreement States, the *state of destination* will issue the permit.
- Case 2: For trips where the origin is in the Agreement States and the destination outside, the *state of origin* will issue the permit.
- Case 3: For trips where the origin is outside the Agreement States and the destination is inside, the *state of destination* will issue the permit.
- Case 4: For trips where both the origin and destination are outside the Agreement States, the *entry state* will issue the permit.

2.2.2 Special Return Trips

Although multi-state permits are for single trips only, it may be advantageous to the trucking industry and the state permit offices to issue a special return trip permit in one transaction for certain situations. The Issuing State permit office must be consulted when such a situation occurs.

2.3 Regional Highway Network

The Agreement states have developed a regional state highway network as the designated state administered routes over which the envelope vehicles are permitted to travel in accordance with this Agreement. When the Issuing State issues a multi-state permit, the permit will designate the route(s) within each state over which that specific truck and/or load may travel. No other routes may be used in order to make the trip for which a multi-state permit has been issued.

A Regional Highway Network Map showing the designated system is included as Appendix A to this document.

The attached map in Appendix A also indicates and describes the current restrictions that are in place for the regional network. A dashed route indicates where some envelope vehicles may be further restricted temporarily at this time. A dot-dash route signifies authorized routes with time-of-day restrictions, and a dotted route is for Toll Roads (Maine Turnpike and Massachusetts Turnpike) where separate additional permits are required. In addition, some urbanized

areas are subject to certain restrictions, as described in Section 5.0 of this Agreement.

Each time a temporary restriction must be put into effect, and when the restriction is ready for removal from the map, the individual state will notify the other Agreement States as quickly as possible of that event.

When the Issuing State issues a multi-state permit for an envelope vehicle, there is no need to obtain permission from another state or states when all the conditions of this Agreement are being met and the designated Regional Highway Network is being used.

2.4 Access Highway Network

Within each state there is a need for the envelope vehicle to travel to and from the Regional Highway Network in order to gain access between its origin and destination. Each state has identified an Access Highway Network, which connects the most likely points of origin or destination of non-divisible oversize or overweight loads (for the envelope vehicles) to the Regional Highway Network. The Access Highway Network is available in each State Permit Office.

The Issuing State may issue a permit for an envelope vehicle to use the Access Highway Network in another state or states, without seeking approval from the other states. The access routes will also be designated on the multi-state permit. However, if a truck operator must gain access to a point which is not accessible on the approved network, the Issuing State

will contact the appropriate state for special instructions to gain that access. By mutual agreement under unusual circumstances the origin state may issue the multi-state permit.

2.5 Designated Routes

Each state will designate those routes over which the envelope vehicles may be routed by other participating states (i.e., both the green regional routes and the yellow access routes).

Each state is responsible for amending routes as required by construction, etc., and notifying all other participating states of detours or alternate routes no later than *ten (10) working days* prior to the changes taking effect, unless an emergency situation occurs which would not allow for that action.

The state issuing permits for travel will authorize travel only on those routes designated by the participating states. When issuing a Case 1 permit where the origin state is a member of this Agreement, then the permit issuing state will coordinate local origin routing with the permit office of the origin state. Coordination is not required for local origin routing in cases where the permit is issued to a major generator of permit loads and the local origin routing has been previously approved for envelope size loads.

The multi-state permit contains a space on which the acceptable routes of travel will be clearly designated, for a specific vehicle (tractor and trailer). No deviation from the

designated route is allowed, unless an approved alternative route is required as determined by a particular state. When a particular load must use highways under local jurisdiction (off the State Highway System), the truck operator must obtain the local permits required. Section 2.6, below, provides more details.

2.6 Permit Requirements for Routes Encompassing

Turnpikes and Streets or Highways Under Local Jurisdiction

The procedures described in this document apply to highways under the jurisdiction of the *state agencies* that are parties to the Agreement. Thus, if a particular trip covered under this multi-state Agreement requires a permitted truck to use a turnpike (in Maine, Massachusetts, or New Hampshire) or streets or highways under the jurisdiction of a town, city, or county, the truck operator must obtain those additional necessary permits as the current practice requires.

However, in the case of the three turnpikes, as shown in dotted green on the designated system, some important changes have occurred which will further simplify the overall procedures:

1. **Maine:** TO BE DETERMINED
2. **Massachusetts:** There is no longer a need to apply for a permit 30 days in advance. The permit will be issued at the toll gate at the time of entry.

3. **New Hampshire:** The NH Turnpikes are under the jurisdiction of the NH Department of Transportation, so a separate permit is not required.

When a permit is issued by the Issuing State, and part of the trip incorporates a turnpike or a local street that requires a separate permit, the permit form will indicate that requirement.

2.7 Common Permit Form

A single permit will be issued by the Issuing State for travel in all the Agreement states required by the envelope vehicle. The Common Permit Form is included as Appendix B to this Agreement. This single permit trip will be valid for five working days, for use by the permitted vehicle (tractor and trailer).

Based on the experience of the states, and an analysis of limited data, we have concluded there is a relatively low frequency of current requests for substituting hauling components after a permit has been issued. Therefore, handwritten substitutions for the tractor and/or trailer will be allowed only for such extraordinary circumstances that may be required by mutual agreement upon communication by telephone with the Issuing State permit office. The names of both parties will be exchanged as well as the reason provided for the requested change, and each party will note this modification on their respective copies of the permit. Those

extraordinary circumstances will almost always be caused by a mechanical failure.

Similarly, it is not anticipated that there will be a need for extending the time period beyond five working days. However, extensions for very short periods will be granted for extenuating circumstances, normally not exceeding one day or for a specific day, by mutual agreement via telephone and handwritten modifications. The names of both parties will be exchanged as well as the reason provided for the requested change, and each party will note this modification on their respective copies of the permit.

The Common Permit Form will be used only to issue permits in accordance with this Agreement. For any required permit travel not covered by this Agreement, the truck operator must obtain individual state permits.

The permit must be carried by the operator of the vehicle at all times, and must be available for inspection in each Agreement state.

2.8 Fee Collection and Distribution

Each state will provide a current fee schedule to each of the other Agreement States.

Each state will continue to establish its own fee system, and nothing in this Agreement will affect those individual state actions.

When the Issuing State issues a multi-state permit, the truck operator will pay to the Issuing State the total of the fees for each state through which the truck will travel.

Periodically, as established in administrative procedures, each of the Agreement States will distribute the fees collected in their states (when they acted as the Issuing State) to each of the other states.

3.0 The Procedures in Brief

When all of the procedures required to implement this program are in place, the following briefly describes how they will operate.

- A. The trucking industry, permit service companies and all interested parties will be given a copy of the regional highway network map and a summary of the requirements for operating envelope vehicles under this Agreement. Each truck driver using these procedures is strongly encouraged to carry a copy of the map on board the permitted vehicle.
- B. Workshops and public meetings will be held for the purpose of describing the new procedures, and to answer questions.
- C. The truck operator requiring a multi-state permit for a non-divisible overweight or oversize vehicle that falls within the limits of this Agreement will contact the Issuing State and request a permit for a specific trip

(with a specific origin and destination) and for a specific vehicle.

D. If the vehicle and the highway route required to make the trip fall entirely within the limits of this Agreement, the Issuing State will:

- Issue the multi-state permit, using the common permit form.
- Collect the fees, that are the sum of all the individual fees of each state through which the envelope vehicle will travel.
- Designate the specific routes that can be used, by a specific vehicle.

E. If one (or more) of the requirements of this common procedure are not met for one or more states, then the Issuing State will require the truck operator to obtain individual state permits in those states where the requirements cannot be met.

F. After receiving the multi-state permit, the truck operator must then comply with all the safety requirements described in Section 4.0 of this Agreement.

G. Each state will be responsible for the enforcement of the non-divisible oversize and overweight laws within its own boundaries. The multi-state permit will be valid in each state for which it has been issued. However, if the requirements of the permit have been violated in a particular state, the individual requirements of that state will be enforced. Any fines collected within that state

will continue to be retained in that state with no reimbursement being made to any other state (including the Issuing State).

4.0 Common Safety Regulations

4.1 Introduction

This section establishes a single set of safety requirements for envelope vehicles engaged in interstate travel within the Agreement States' area. They are basically the same as those recommended by AASHTO. The purpose of establishing these common procedures is to provide for ease in operation for the trucking industry and enforcement by the states.

4.2 Flags

All warning flags will be either red or orange fluorescent and at least 18 inches square. Flags will be clean enough to distinguish the color of the flag from a reasonable distance.

All warning flags will be secured by at least one corner or mounted on a staff. There are two circumstances requiring the use of flags:

1. Overwidth loads - at least two (2) and up to six (6) flags will be mounted at the widest extremity of the load, depending upon the load configuration (see Figure 1 at the end of this document); and
2. Overlength loads or loads with rear-or front-end overhang in excess of four (4') feet will display one

flag at the end of the overhang if less than two (2') feet wide, and two flags if the overhang is over two (2') feet wide (see Figure 2 at the end of this document).

4.1 Signs for Oversized Loads

The wording for the sign will be: **OVERSIZE LOAD**. The sign size will be as follows:

1. For Load Vehicles

Size:	Not less than 7 feet long and 18 inches high
Color:	Black letters on yellow background
Letter Size:	Not less than 10 inches high with approximately 1.4 inch brush stroke
Location:	Front of vehicle and rear of load

2. For Escort Vehicles

Size:	Not less than 5 feet long and 12 inches high
Color:	Black letters on yellow background
Letter Size:	Not less than 10 inches high with approximately 1.4 inch brush stroke
Location:	Front or rear of escort vehicle as appropriate

Upon delivery of the oversized load, all signs on load and escort vehicles shall be removed or covered, so that they are no longer visible.

4.4 Lights

1. For Load Vehicles - no special lighting is required on load vehicles. However, load vehicles will travel with low beam headlights on at all times.
2. For Escort Vehicles - flashing yellow lights shall be in operation above the highest point of the vehicle and visible from the front and rear. Escort vehicles will also travel with low beam headlights on at all times.

4.5 Escort Vehicles

Escort vehicles are required to accompany permitted vehicles under the guidelines in this paragraph. Escort vehicles will be the size of a *compact size car or larger*. The drivers of escort vehicles will maintain visual and two-way radio contact with the permitted vehicle at all times. When one escort is required, it shall *precede* a load on undivided highways and *follow* the load on divided highways. Following is a description of escort vehicle requirements. Escort vehicle requirements will be generally the same on both four-or-more lane divided highways and on two-lane roads on the designated system as follows:

Overwidth

No escort is required for overall widths less than 12'0". One escort vehicle is required for overall width of 12'0" or more.

Overlength

No escort vehicle is required for overlength of less than 80'0" or more. One escort is required for overlength of 80'0" or more.

Overhang

No escort vehicle is required if overhang is less than 15'0" with proper flags displayed. One escort vehicle is required if the overhang is 15'0" or more.

There may be some special circumstances where a second escort vehicle will be required for safety reasons, but such occurrences are anticipated to be infrequent. As an example, on a two-lane, undivided highway, two escorts will be required when the overhang is 15'0" or more to the rear, and where the width is 12'0" or more.

4.6 Spacing Between Permitted Vehicles

There shall be a minimum spacing of 1,000 (one thousand) feet between any oversize permitted vehicles travelling in the same direction.

4.7 Speed

Permit vehicles must travel a safe speed and obey any special speed restrictions for permit vehicles established by the state in which they are travelling. (See Section 5.0 for Special Conditions.)

4.8 Days of Travel

Permit travel is authorized during approved hours on Monday through Friday. No permit travel on Saturday or Sunday is authorized under the Agreement. (Weekend travel in states which allow it must be coordinated individually between the carrier and that respective state.) Permit travel is not allowed on specified holidays.

A list of individual state holiday periods on which permit travel is restricted will be published annually by each state and will be sent to all state permit issuing offices well in advance of January 1 of the year in which the holidays occur. (See Section 5.0 for Special Conditions.)

4.9 Hours of Travel

Permit vehicles may travel on designated routes from 30 minutes prior to sunrise, until 30 minutes after sunset. *No* night-time travel is authorized except for envelope vehicles which are overweight *only* and are capable of traveling with the traffic flow and are not restricted to daylight travel time. (See Section 5.0 for Special Conditions.)

4.10 Inclement Weather

No travel is allowed when road conditions, weather conditions, or visibility make traveling hazardous to the operator or to the driving public. Vehicles which are underway when inclement weather occurs must exit the road at the first

available location and park in a safe place until the weather clears, or until the road conditions improve.

4.11 Use of Travel Lanes

When two or more lanes are available in one direction, vehicles in excess of 12'0" wide shall travel in the right lane, except in an emergency or to comply with any other restriction established by the state in which they are travelling.

5.0 Special Conditions

5.1 Introduction

The following special conditions apply to the procedures described above:

1. Holidays
2. Hours of Travel
3. Detours
4. Vermont and Rhode Island Fuel and Insurance Requirement
5. Registered Vehicle Weight

They are described in more detail in the following sections.

5.2 Holiday Restrictions

Each of the Agreement States shares certain holiday dates, but there are some differences. Prior to January 1 of each year, each state will make available a list of observed holidays. That information will include those dates on which

no travel is permitted, and certain Holidays on which the State Permit Offices are closed.

5.3 Hours of Travel

The exceptions to the hours of travel described in Section 4.9 are as follows:

Maine: Movement of loads exceeding the legal limits will not be permitted on Saturdays during the months of July and August only. (Note: Saturday travel is not permitted under these Common Permit Procedures, but may be permitted by individual state permit procedures.)

Massachusetts: (1) On that portion of Route I-93 between Route I-95 in Canton and the intersection of Routes I-93 and State Route 3 in Quincy, travel daylight hours except between 7:00 am to 9:00 am and after 3:30 pm. (2) On that portion of Route I-95 between Canton and the intersection of State Route 1 in Peabody, travel daylight hours except between 7:00 am to 9:00 am and after 3:30 pm. (3) This permit does not authorize travel on Route I-93 north of Exit 15 in the City of Boston and only authorizes travel south of Exit 15 on Route I-93 (Southeast Expressway) during daylight hours only except between 7:00 am to 9:00 am and after 3:30 pm. (4) In the area within State Route 128 (shown as shaded on the Regional Highway Network Map), there will be no travel with loads in excess of 12 feet 0 inches wide between 7:00 am and 9:00 am, and after 3:30 pm.

New Hampshire: Movements will not be made if vision is obscured by fog or inclement weather, or pavement unsafe for travel due to slippery winter conditions.

Rhode Island: For mobile or modular homes over 12' wide, for construction equipment over 13' wide, and for cranes, the following travel restrictions apply:

The allowable time periods will be between sunrise and 7:00 am, and between 9:00 am and 3:30 pm on all of I-195 and I-95 from the MA/RI State Line to Route 37.

Vermont: Permits will not be issued for movements in excess of 108,000 lbs., or over 10'6" wide, or over 100' feet long on Saturdays, Sundays, and Friday afternoons between July 1st and Labor Day or legal holidays. (Note: Saturday or Sunday travel is not permitted under these Common Permit Procedures, but may be permitted by individual state permit procedures.)

5.4 Detours

A major operational detail is the need for each state to notify all other Agreement States of construction or other detours well in advance. Emergency detours will also be made known to all Agreement States as quickly as possible. This is necessary in order to indicate allowable routings on the common permit form.

All construction detours will be well signed in advance of the detour site, and the routing off the major route (i.e., usually an Interstate or Primary) will also be clearly marked.

5.5 Vermont Fuel and Rhode Island and Vermont Insurance Requirements

Vermont statutes and regulations require that each registered truck using Vermont highways must display a Vermont fuel decal or plate; the vehicle must have on file a insurance certificate number for oversize and/or overweight vehicles only. Rhode Island requires that all trucks using Rhode Island highways must have on file an insurance certificate number.

The Issuing State must include those numbers on the Common Permit Form. It is the responsibility of the permit applicant to provide the numbers for that purpose.

5.6 Registered Vehicle Weight For Massachusetts Registered Vehicles Only

In some instances, the registered vehicle weight for a truck that will have an oversize or overweight load is less than the weight of the load being carried. Therefore, the permit applicant must be certain that the necessary approvals are obtained in advance of the trip.

In consideration of the fee paid, the registered weight of the permitted vehicle is deemed to be increased to the weight and conditions shown on the Common Permit Form *except in Massachusetts*. For permitted vehicles travelling in Massachusetts, the Massachusetts registered vehicle must be *registered* for its total gross weight.

6.0 Actions Required by the States

Each state will take the following actions within their respective states that will allow for the implementation of this Agreement.

1. Enact enabling legislation to authorize the appropriate officials of each Agreement State to implement the program.
2. Establish a fee schedule.
3. Establish administrative procedures to collect and distribute fees collected by the Issuing State, based upon a common set of principles.

7.0 Base State Accounting and Transmittal of Fees

The Issuing State shall maintain records for all permits issued in that state, as described in the Administrative Procedures, by the states.

Each Issuing State shall also maintain records of funds received from and transmitted to other jurisdictions. Such records shall identify permit fees and remittances for each permit issued.

A uniform account number system shall be adopted and used by all Agreement States as specified in the Administrative Procedures manual.

Each state shall forward all funds received to the appropriate states periodically. Reports are required even if no funds are collected. The fund transmittal shall include a remittance listing for each state.

8.0 Adoption of Administrative Procedures

The NETC Truck Permit Committee shall have the responsibility of developing and maintaining an administrative procedures manual, which shall contain procedures and forms. The Administrative Procedures Manual and subsequent changes to it shall be approved and adopted by the Policy Committee. All member states shall comply with the procedures in this manual. Before the manual and revisions to it become effective, they must be approved by the member states.

Adoption of administrative procedures requires approval of at least 3/4 of the member states. Proposed administrative procedures shall be placed in writing and distributed to every member state for review. The review period shall not exceed 60 days.

At the conclusion of the review period, the Chairman of Policy Committee shall distribute the proposed procedure for balloting. Each ballot shall contain the proposed procedure, comments submitted by member states and the earliest and latest voting dates which shall begin the first day after distribution and end not more than 30 days later.

Each state shall place its vote in writing. Failure of a state to vote shall be construed to be a vote of approval of the proposed procedure.

Adopted procedures shall become a part of this agreement and shall be placed in writing in the Administrative Procedures Manual.

Unless otherwise specified, the effective date of an adopted procedure shall be 30 days after the final date for voting.

9.0 Procedures for Entering into or Withdrawal from this Agreement

A state applying for membership to this Agreement shall submit the prescribed adopting resolution to the Chairman of the Policy Committee for balloting by member states.

Membership shall not be granted unless the adopting resolution receives unanimous approval from all member states. Failure of states to submit their votes on the ballot for new membership within 60 days after receipt shall be deemed to constitute approval of the application for membership. Ballots shall be mailed, return receipt requested, to each member state by the Chairman of the Policy Committee.

Membership shall become effective no sooner than two complete calendar quarters after approval of the application, unless the new and all current members agree to an earlier effective date which shall be stated in the adopting resolution.

A member may withdraw from the Agreement by giving at least two full calendar quarters' written notice to all member states. However, cancellation by one state shall not affect this Agreement among the other states.

10.0 Procedures for Amendments

Any member state through an authorized person may propose amendments to this Agreement.

The proposed amendment shall be placed in writing and circulated for comment to the member states. The comment period

shall be at least 90 days from the date of distribution and shall include at least one open meeting of the Policy committee. At the conclusion of the review period, the proposed amendment may be distributed for balloting. Each ballot shall contain the proposed amendment and comments submitted in writing by member states.

Adoption of an amendment to this agreement requires ratification by 3/4 of the member states.

Amendments shall not be effective for at least one year from the date of notice of adoption. Amendments to be effective at an earlier date require concurrence by all member states.

Proposed amendments which have not received sufficient ballots to determine ratification or rejection within two years from the date ballots were distributed shall be void.

Decisions regarding interpretations of any question at issue relating to this agreement shall be reached by agreement of 3/4 of the member states using the procedures as specified for adoption of amendments in this article.

Votes on amendments or interpretations must be cast by the Chief Administrative Officer or a delegate named in writing by the Chief Administrative Officer of each state.

11.0 Periodic Review of this Agreement

This Agreement and the results of the implementation of this program will be reviewed formally at least once annually by the Policy Committee. Modifications may be made to the procedures as the system is being implemented by the states, through actions developed by the Truck Permit Technical Committee.

12.0 State Contacts

For further information on any of the items contained in this document, please contact the following offices.

Maine Department of Transportation

(207) 289-2967

Massachusetts Department of Public Works

(617) 973-7796

New Hampshire Department of Transportation

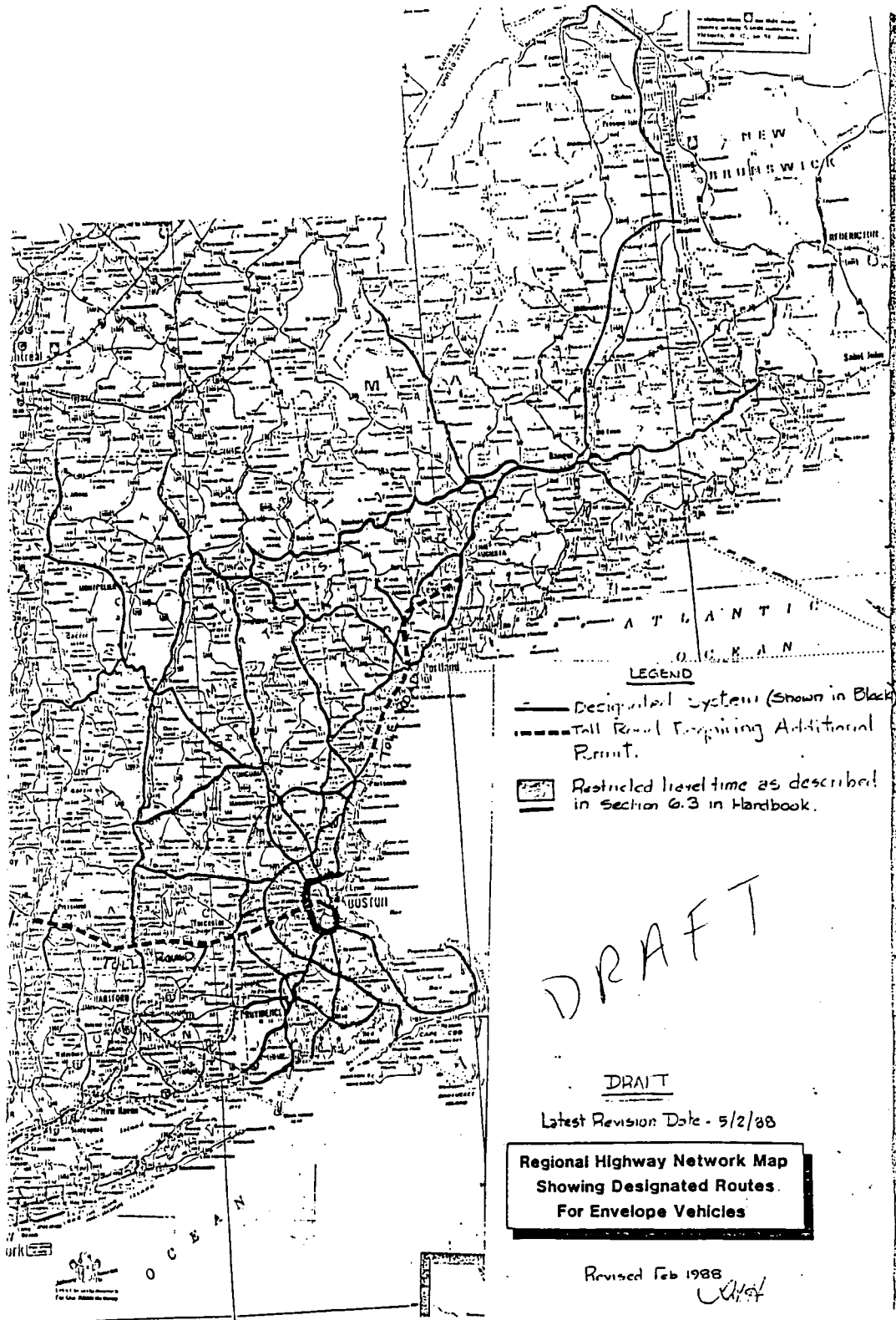
(603) 271-2691

Rhode Island Department of Transportation

(401) 277-3175 or -3176

Vermont Agency of Transportation

(802) 828-2070



Legend
 [Symbol] Designated System
 [Symbol] Toll Road
 [Symbol] Restricted Travel Time

LEGEND

- Designated System (shown in Black)
- - - Toll Road Requiring Additional Permit.
- [Shaded Box] Restricted travel time as described in Section 6.3 in Handbook.

DRAFT

DRAFT

Latest Revision Date - 5/2/88

**Regional Highway Network Map
 Showing Designated Routes
 For Envelope Vehicles**

Revised Feb 1988
Waf

**STANDARD APPLICATION AND PERMIT FORM FOR INTERSTATE TRAVEL
FOR NON-DIVISIBLE OVERSIZE &/or OVERWEIGHT LOADS**

APPLICATION

1. Applicant _____		2. Telephone No. _____	
3. Mailing Address _____		4. Municipality _____	5. State _____ 6. Zip Code _____
7. Object To Be Moved 8. (If mobile/modular home, show Make, Year, Color, & Serial #) _____			
9. Origin: Municipality/State _____		10. Destination: Municipality/State _____	
11. Routing			FOR PERMIT OFFICE ONLY
State _____		Routes _____	
a. _____	_____	State Fee	\$ _____
b. _____	_____		_____
c. _____	_____		_____
d. _____	_____		_____
12. Vehicle and load max. dimensions			TOTAL FEE
Max Height	Max Width	Max Length	Front Overhang
ft. in.	ft. in.	ft. in.	ft. in.
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Make _____		Registration _____	Registr. Wgt. _____
No. Axles _____			
<input type="checkbox"/> Truck			
<input type="checkbox"/> Truck-Tractor			
<input type="checkbox"/> Semi-Trailer			
<input type="checkbox"/> Trailer(tag-along)			
Max Vehicle or Combination Gross Weight _____			
Insurance Certificate No.:		Fuel Decal/Plate No.:	
Vermont _____		Vermont _____	
Rhode Island _____		(Non-Vt. Reg. Only) _____	

PERMIT

/ / @ : : / / -
 Issue Date Time Expiration Date Issue State & Permit No.

Authorization and permission is hereby granted to move your vehicle as described in detail above in the application. Movements shall be made in compliance with the Special Provisions below and the General Provisions listed on the backside of the route map which shall apply as if fully written herein. Movements shall be made only within the limits of the routes stated in the above application. Permit shall be void if limitations and/or restrictions are exceeded.

Special Provisions: _____ Escorts Required. _____

In consideration of the fee paid the registered weight of this vehicle is deemed to be increased to the weight and conditions shown on this permit, except for vehicles registered and traveling in Massachusetts, which must be registered for the vehicle gross weight.

NOTE:
Failure to comply with all individual Agreement State and municipal laws, rules, and regulations invalidates this permit. All bridge weight and height limits, as posted must be observed.

Type Payment _____ Issuing Official _____ () _____ Telephone _____

By _____ Authorized Permit Official _____ (State Seal)

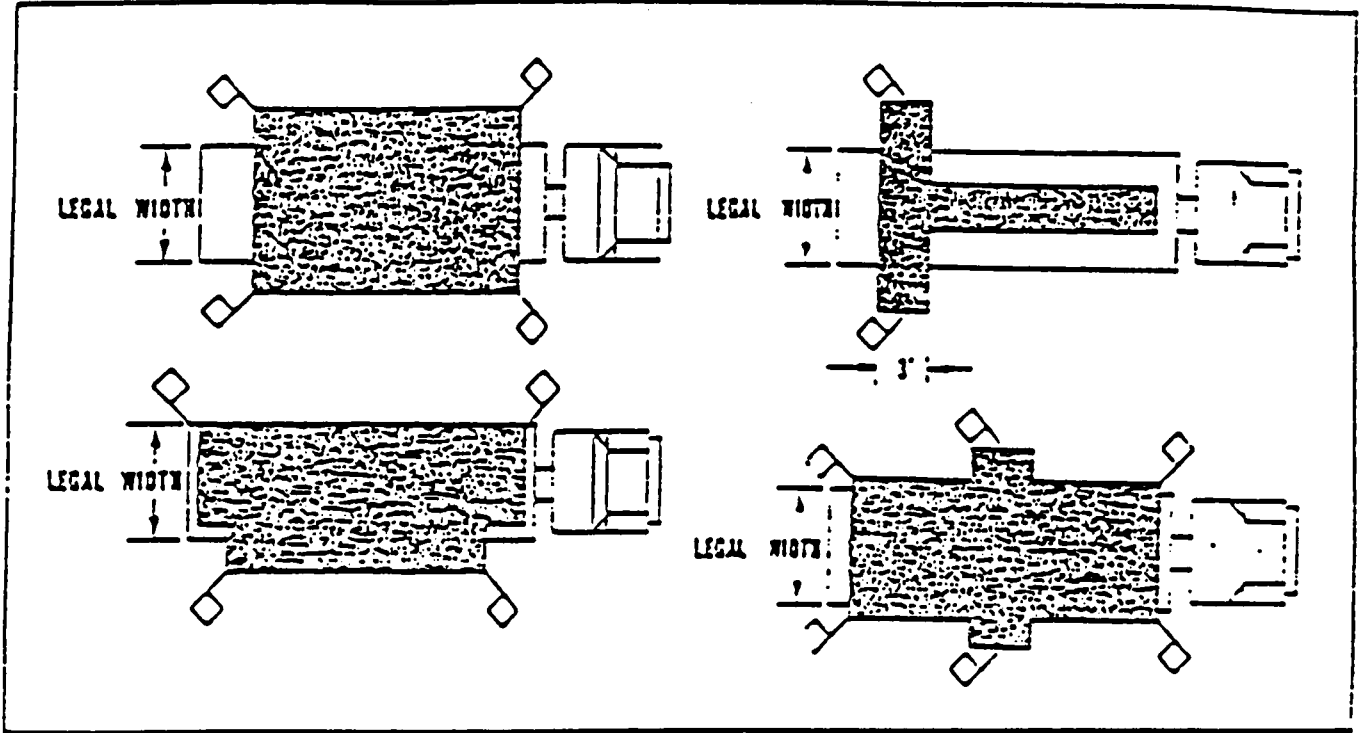


FIGURE A-1 Warning flags on overwidth loads. (Note: Use of flags is not to increase the overall load width.)

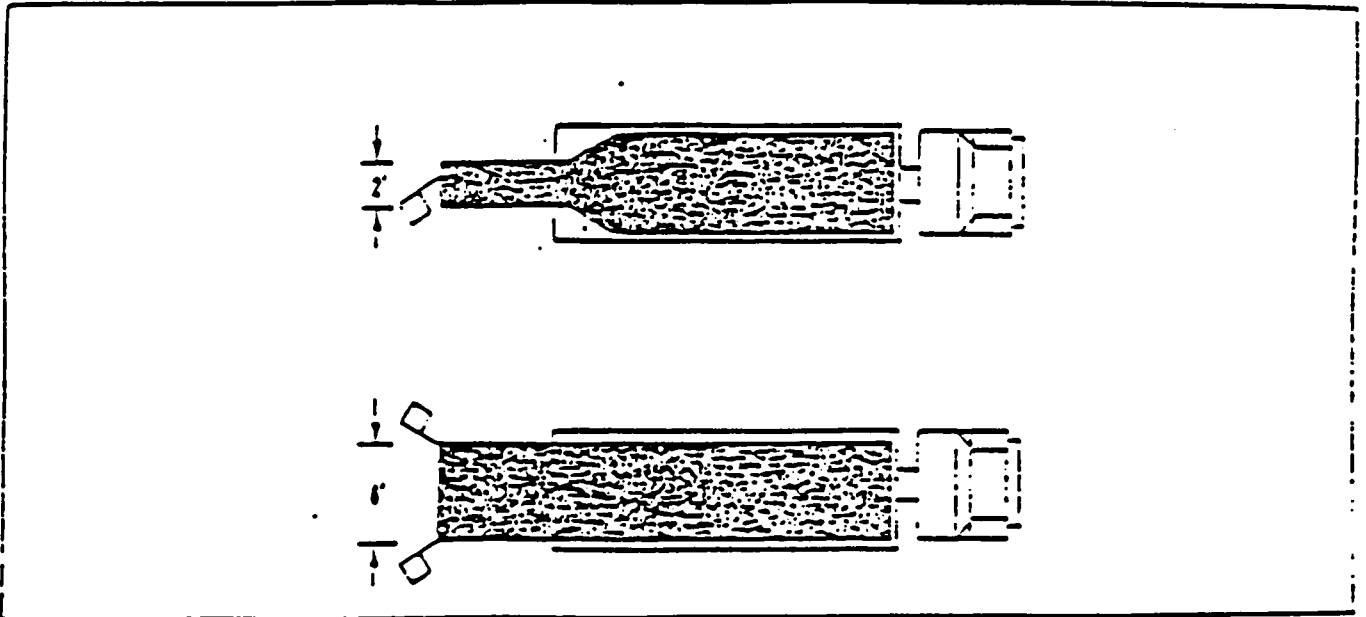


FIGURE A-2 Warning flags on overlength loads or loads with a rear end overhang of more than 4 ft. (Note: Use of flags is not to increase the overall load width.)

APPENDIX B

GUIDE FOR MAXIMUM DIMENSIONS AND WEIGHTS OF MOTOR VEHICLES AND FOR THE OPERATION OF NONDIVISIBLE LOAD OVERSIZE AND OVERWEIGHT VEHICLES

Prepared by the Subcommittee on Highway Transport

The American Association of State
Highway and Transportation Officials

Officially Adopted by the American Association of
State Highway and Transportation Officials
Revised April 1987

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FOREWARD

The Subcommittee on Highway Transport was organized to investigate and evaluate the various transportation needs that should be served by the highway system of the United States; determine the degree to which these needs are met by the highway system in its current state of improvement, under existing regulatory laws; and recommend such policies, regulations, laws, and practices as may contribute to improve the efficiency of highway transportation with due regard for the conservation and cost of the highway plant.

In November 1932, the association adopted its first policy concerning maximum dimensions, weights, and speeds of motor vehicles. At the 1944 annual meeting of AASHTO, the Transport Committee gave initial consideration to a revision of the 1932 policy and the substitute recommendations adopted May 27, 1942, applicable for the duration of the war emergency. The 1932 Policy and 1942 substitute recommendations were formulated into a new policy which was adopted April 1, 1946. At its June 27, 1956 meeting, the AASHTO Executive Committee directed the Transport Committee to present a new recommended policy on Vehicle Dimensions and Weights at the conclusion of the AASHTO road test. Such policy was published on December 7, 1964 and revised January 15, 1968, February 23, 1973, and February 18, 1974.

The guide presented here is the result of the AASHTO Executive Committee's directive that a new guide be prepared in light of the significant truck size and weight law changes from the Surface Transportation Assistance Act of 1982.

In preparing the guide, the committee considered historic trends in motor vehicle use; in traffic volumes; in vehicle weights, types, and composition; in state regulatory limitations; and in geometric capacities and structural capabilities of the highway system. Use was made of the results of the series of road tests, particularly of the AASHTO road test administered by the Highway Research Board of the National Academy of Sciences under sponsorship of the American Association of State Highway Officials. Consideration was given to the requirements of national defense with respect to both existing road and bridge capacity and probable future developments. Also, the committee utilized the information developed from certain special studies and related researches conducted by the Federal Highway Administration and the states.

The formal statements and testimony of the following groups have been considered in formulation of the guide and its earlier editions: Automotive Manufacturers Association, Truck-Trailer Manufacturers Association, National Association of Motor Bus Operators, American Petroleum Institute, Rubber Manufacturers Association, Society of Automotive Engineers, American Trucking Associations, American Automobile Association, Mobile Homes Manufacturers Association, Mobile Home Dealers National Association, National Highway Users Conference, National Automobile Transporters Association, Construction Industries Manufacturers Association, Private Truck Council of America, Automotive Safety Foundation, Department of Defense, Department of Housing and Urban Development, and the Heavy Specialized Carriers Conference.

The guide was prepared with the assistance of the AASHTO Subcommittees on Design and Bridges and Structures and in cooperation with the Federal Highway Administration, as related to its responsibility in making recommendations to the Congress with respect to maximum desirable vehicle dimensions and weights called for under Section 108 of the Federal-Aid Highway Act of 1956.

PURPOSE AND INTENT OF THE RECOMMENDED GUIDE

It is the opinion of the American Association of State Highway and Transportation Officials that adoption by all states of uniform standards governing the dimensions and weights of motor vehicles operating over the highway is necessary for the following reasons:

- (a) To promote the safety of highway transportation.
- (b) To promote efficiency and economy in both the intrastate and interstate operation of motor vehicles.
- (c) To establish and stabilize the basis for regulation of the many relations between the dimensions and weights of motor vehicles and the strengths and capacities of compatible highways.

The recommended guide set forth herein has been designed to these ends and it constitutes a recommendation for the consideration of appropriate legislative bodies having the responsibilities of motor vehicle regulatory legislation. It is hoped that the states will make their respective codes of motor vehicle laws consistent with this guide to effect uniform motor transportation conditions throughout the nation.

It is recognized that existing "grandfather rights" held by the states would be difficult to roll back in the short term, but the ultimate goal for all states should be the achievement of uniformity as set forth in the guide.

INTENT

It is the intent of the American Association of State Highway and Transportation Officials that the limits herein prescribed for vehicles shall be:

- (a) Maximum limits which are inclusive of all enforcement, weighing, scale, or other tolerances.
- (b) Enacted in all states as soon as possible for roads and bridges on the completed portions of the National System of Interstate and Defense Highways and other routes on the National Truck Network.
- (c) Enacted in all states for all roads and bridges on other routes or systems after an engineering determination has been made by the state transportation or highway departments that the roads and bridges of these routes or systems over which such operations are to be authorized are sufficiently adequate in geometric capacity and structural capability to accommodate such operations safely and economically.
- (d) Maximum limits, which are not to be exceeded in the laws of any state, during such period as this guide shall remain in effect.

The guide provides for regulation of vehicles in regular operation, for regulation of overweight and oversize vehicles operated by special permit, for issuance of special permits including assessment of permit fees, and for highway movements essential to the national defense.

It is recommended that the Congress continue to set a ceiling on vehicle weights and sizes similar to the pattern set in Section 127 of Title 23, U.S. Code, Highways and the Surface Transportation Assistance Act of 1982, but incorporating maximum controls from this recommended AASHTO guide, with the individual states continuing to establish motor vehicle weight and size legislation and regulations under that ceiling.

CHAPTER 1.00 DEFINITIONS

Words and Phrases Defined. In this chapter, the following words and phrases have the meaning specified:

- (1) AXLE: The common axis of rotation of one or more wheels whether power-driven or freely rotating, and whether in one or more segments, and regardless of the number of wheels carried thereon.
- (2) AXLE GROUP: An assemblage of two or more consecutive axles considered together in determining their combined load effect on a bridge or pavement structure.
- (3) AUTOMOBILE TRANSPORTER: Any vehicles or combination designed and used exclusively for the transport of assembled highway vehicles.
- (4) BUS: A motor vehicle designed primarily for the transportation of persons rather than property and having a passenger-carrying capacity of 10 or more persons, other than a taxicab constructed and designed for transporting persons for commercial purposes.
- (5) CARGO: The items or freight to be moved; including items placed on or in a vehicle, towed by a vehicle, or a vehicle itself.
- (6) CONNECTING MECHANISM: An arrangement of parts interconnecting two or more consecutive axles to the frame of a vehicle in such a manner as to equalize the load between axles.
- (7) DROMEDARY UNIT: A load carrying compartment on a truck-tractor located between the cab and the fifth wheel.
- (8) GROSS WEIGHT: The weight of a vehicle and/or combination of vehicles plus the weight of any load thereon.
- (9) HEIGHT: The total vertical dimension of a vehicle above the ground surface including any load and load-holding device thereon.
- (10) LENGTH: The total longitudinal dimension of a single vehicle, a trailer, or a semi-trailer. Length of a trailer or semi-trailer is measured from the front of the cargo-carrying unit to its rear, exclusive of all overhang, safety or energy efficiency devices, including air conditioning units, air compressors, flexible fender extensions, splash and spray suppressant devices, bolsters, mechanical fastening devices, and hydraulic lift gates.
- (11) LOAD: A weight or quantity of anything resting upon something else regarded as its support.
- (12) MOTOR VEHICLE: A vehicle which is self-propelled or propelled by electric power obtained from overhead trolley wires, but not operating upon rails.
- (13) NATIONAL TRUCK NETWORK: Those interstate and other federal-aid primary highways on which commercial vehicles of the dimensions authorized by the STAA of 1982 are allowed to operate.

(14) OPERATOR: Every person who drives or is in actual physical control of a motor vehicle upon a highway or who is exercising control over or steering a vehicle being towed by a motor vehicle.

(15) OWNER: A person, other than a lien-holder, having the property in or title to a vehicle, including a person entitled to the use and possession of a vehicle subject to a security interest in another person, but excluding a lessee under a lease not intended as security.

(16) PAVEMENT STRUCTURE: The combination of subbase, base course, and surface course placed on an earth subgrade to support the traffic load and distribute it to the roadbed.

(17) QUADRUM AXLE: Any four consecutive axles whose extreme centers are not more than 192 inches apart and are individually attached to or articulated from, or both, a common attachment to the vehicle including a connecting mechanism designed to equalize the load between axles.

(18) REGULAR OPERATION: The movement over highways of vehicles, vehicle combinations, and loads thereon, subject to the recommended limitations contained in this guide governing maximum weights and dimensions for motor vehicles and loads thereon.

(19) SCALE TOLERANCE: An allowable variation in the static weight of an axle load in accordance with, but not exceeding the precision of the scale involved.

(20) SEMI-TRAILER: Every single vehicle without motive power designed for carrying property and so designed in conjunction and used with a motor vehicle that some part of its own weight and that of its own load rests or is carried by another vehicle and having one or more load-carrying axles.

(21) SINGLE AXLE: An assembly of two or more wheels whose centers are in one transverse vertical plane or may be included between two parallel transverse planes 40 inches apart extending across the full width of the vehicle.

(22) SPECIAL PERMIT: A written authorization to move or operate on a highway a vehicle or vehicles with or without a load of size and/or weight exceeding the limits prescribed for vehicles in regular operation.

(23) SPECIAL PERMIT APPLICANT: An individual, firm, partnership, corporation, or association making application for a special permit to transport a vehicle, vehicles, and/or load which is oversize or overweight and under whose authority and responsibility such vehicle or load is transported.

(24) STEERING AXLE: The axle or axles of a motor vehicle or combination of vehicles by which the same is guided or steered.

(25) STINGER-STEERED AUTOMOBILE TRANSPORTER: A truck-tractor semi-trailer combination where the fifth wheel is located on a drop frame behind and below the drive axle of the power unit. In this configuration, vehicles are carried behind or both behind and above the cab of the power unit, as well as on the semi-trailer.

(26) TANDEM AXLE: Any two axles whose centers are more than 40 inches but not more than 96 inches apart and are individually attached to or articulated from, or both, a common attachment to the vehicle including a connecting mechanism designed to equalize the load between axles.

(27) TIRE, PNEUMATIC: A tire of rubber or other resilient material which depends upon compressed air for support of a load.

(28) TRAILER: Every single vehicle without motive power designed for carrying property wholly on its own structure, drawn by a motor vehicle which carries no part of the weight and load of the trailer on its own wheels and having two or more load carrying axles.

(29) TRAVELED WAY: The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

(30) TRIDUM AXLE: Any three consecutive axles whose extreme centers are not more than 144 inches apart, and are individually attached to or articulated from, or both, a common attachment to the vehicle including a connecting mechanism designed to equalize the load between axles.

(31) TRIPLE SADDLE MOUNT: A combination of four truck-tractors where the front axle of second truck-tractor is mounted on the fifth wheel of the lead truck-tractor, the front axle of the third truck-tractor is mounted on the fifth wheel of the second truck-tractor, and the front axle of the fourth truck-tractor is mounted on the fifth wheel of the third truck-tractor; and with the rear wheels of the second, third, and fourth truck-tractors trailing on the ground behind the operating motor unit.

(32) TRUCK: A single unit motor vehicle used primarily for the transportation of property.

(33) TRUCK TRACTOR: A motor vehicle used primarily for drawing other vehicles and not so constructed as to carry a load other than a part of the weight of the vehicle and load so drawn.

(34) TURNING PATH: The path of a designated point on a vehicle making a specified turn.

(35) TURNING TRACK WIDTH: The radial distance between the turning paths of the outside of the outer front tire and the outside of the rear tire which is nearest the center of the turn.

(36) VARIABLE LOAD SUSPENSION AXLES: Axles which can be regulated by the driver of the vehicle. These axles are controlled by hydraulic and air suspension systems, mechanically, or by a combination of these methods.

(37) VEHICLE: 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 stationary rails or tracks.

(38) VEHICLE COMBINATION: An assembly of two or more vehicles coupled together for travel upon a highway.

(39) WIDTH: 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.

CHAPTER 2.00 VEHICLES IN REGULAR OPERATION

2.01 SCOPE

The provisions of this chapter governing width, height, length, permissible loads, and performance limits shall apply to vehicles serving in regular operation, as defined in Chapter 1.00. Vehicles operated under the terms of special permits are covered in Chapter 3.00.

2.02 NOTATION

Figure 1 shows silhouettes of most basic commercial vehicle types in regular operation as designated by code based on axle arrangement. The first digit indicates the number of axles of the truck or truck-tractor. The letter "S" indicates a semi-trailer, and the digit immediately following an "S" indicates the number of axles on the semi-trailer. Any digit, other than the first in a combination, when not preceded by an "S", indicates a trailer and the number of its axles. For instance, a 2-S2 combination is a two-axle truck-tractor with a tandem-axle semi-trailer. A 3-S1-2 combination is a three-axle truck-tractor with a tandem rear axle, a semi-trailer with a single axle, and a full trailer with two single axles.

2.03 WIDTH

No vehicle using completed sections of the National Truck Network shall exceed a width of 102 inches.

2.04 HEIGHT

No vehicle shall exceed a height of 13 feet, 6 inches.

2.05 LENGTH

2.05.1 No single truck shall have an overall length in excess of 40 feet.

2.05.2 No single two-axle or three-axle bus shall have an overall length in excess of 40 feet.

2.05.3 No single semi-trailer shall have an overall length in excess of 48 feet.

2.05.4 Individual trailer length in a twin combination. (This item under study.)

2.05.5 Overall length of twin combinations off the National Truck Network. (This item under study.)

2.05.6 No other combination of vehicles shall consist of more than two trailing units, except for triple saddle mount configurations.

2.06 TIRE PRESSURE (This item is under study.)

TYPICAL VEHICLE TYPES

SINGLE-UNIT TRUCKS

2 AXLE / 6 TIRE TRUCK



3 AXLE TRUCK



COMBINATION TRUCKS

Trucks and Trailers

TWO AXLE TRUCK
WITH ONE AXLE TRAILER
2-1



TWO AXLE TRUCK
WITH TWO AXLE TRAILER
2-2



TWO AXLE TRUCK
WITH THREE AXLE TRAILER
2-3



THREE AXLE TRUCK
WITH TWO AXLE TRAILER
3-2



THREE AXLE TRUCK
WITH THREE AXLE TRAILER
3-3



Tractors and Semi-Trailers

TWO AXLE TRACTOR
WITH ONE AXLE SEMI-TRAILER
2S1



TWO AXLE TRACTOR WITH
ONE TWO AXLE SEMI-TRAILER
2S2



THREE AXLE TRACTOR
WITH ONE AXLE SEMI-TRAILER
3S1



THREE AXLE TRACTOR
WITH TWO AXLE SEMI-TRAILER
3S2



TWO AXLE TRACTOR
WITH ONE AXLE SEMI-TRAILER
AND TWO AXLE TRAILER
2S1-2



TWO AXLE TRACTOR
WITH TWO AXLE SEMI-TRAILER
AND TWO AXLE TRAILER
2S2-2



THREE AXLE TRACTOR
WITH ONE AXLE SEMI-TRAILER
AND TWO AXLE TRAILER
3S1-2



THREE AXLE TRACTOR
WITH TWO AXLE SEMI-TRAILER
AND TWO AXLE TRAILER
3S2-2



FIGURE B-1 Common commercial vehicle types as designated by code based on axle arrangements.

2.07 MAXIMUM PERMISSIBLE WEIGHTS

2.07.1 Single-Axle Weight: The total gross weight imposed on the highway by the wheels of any one single axle of a vehicle shall not exceed 20,000 pounds, including any and all weight tolerances.

2.07.2 Tandem-Axle Weight: The total gross weight imposed on the highway by a tandem axle shall not exceed 34,000 pounds, including any and all weight tolerances.

2.07.3 Maximum Permissible Axle Group Weights: The total gross weight in pounds imposed on the highway by any group of two or more consecutive axles on a vehicle or combination of vehicles, shall not exceed the value give in Table I, corresponding to the distance in feet between the extreme axles of the group measured longitudinally to the nearest foot. (The following general formula was used in preparing Table I.)

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

where W = Maximum weight in pounds carried on any group of two or more axles computed to the nearest 500 pounds, including any and all weight tolerances.

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.

2.07.4 Maximum Permissible Vehicle Gross Weight: The total gross weight imposed on the highway by a vehicle or combination of vehicles with two or more consecutive axles, shall be determined by the application of the maximum permissible axle group weights presented in Table I (Exception: 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 such consecutive sets of tandem axles is 36 feet or more, unless more weight could have been legally operated prior to December 16, 1974, over a shorter axle spread distance.) It shall be the responsibility of each state to interpret and integrate the maximum permissible gross axle group weights for checking individual axle weights and total gross vehicle weights at monitoring scales.

2.07.5 Weight Reductions: The maximum single-axle, tandem-axle, and axle-group weights recommended in paragraphs 2.07.1, 2.07.2, and 2.07.3 are subject to reduction at the discretion of the appropriate highway authorities.

TABLE B-1
PERMISSIBLE GROSS LOADS FOR VEHICLES IN REGULAR OPERATION

Based on weight formula $W = 500 \left(\frac{LN}{N-1} + 12N + 36 \right)$ modified ¹

Tandem Axle Weight
(see pages 4 & 5)

Distance in feet between the extremes of any group of 2 or more consecutive axles	[Bridge table B] Maximum load in pounds carried on any group of 2 or more consecutive axles ¹							
	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 and less	34,000	34,000						
More than 8	38,000	42,000						
9	39,000	42,500						
10	40,000	43,500						
11		44,000						
12		45,000	50,000					
13		45,500	50,500					
14		46,500	51,500					
15		47,000	52,000					
16		48,000	52,500	58,000				
17		48,500	53,500	58,500				
18		49,500	54,000	59,000				
19		50,000	54,500	60,000				
20		51,000	55,500	60,500	66,000			
21	Example (see page 9)	51,500	56,000	61,000	66,500			
22		52,500	56,500	61,500	67,000			
23		53,000	57,500	62,500	68,000			
24		54,000	58,000	63,000	68,500	74,000		
25		54,500	58,500	63,500	69,000	74,500		
26		55,500	59,500	64,000	69,500	75,000		
27		56,000	60,000	65,000	70,000	75,500		
28		57,000	60,500	65,500	71,000	76,500	82,000	
29		57,500	61,500	66,000	71,500	77,000	82,500	
30		58,500	62,000	66,500	72,000	77,500	83,000	
31		59,000	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	79,000	85,000	90,500
34			64,500	69,000	74,500	80,000	85,500	91,000
35			65,500	70,000	75,000	80,500	86,000	91,500
36		Exception* (see page 10)	66,000	70,500	75,500	81,000	86,500	92,000
37			66,500	71,000	76,000	81,500	87,000	93,000
38			67,500	71,500	77,000	82,000	87,500	93,500
39			68,000	72,500	77,500	82,500	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	74,000	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	96,500
45			72,000	76,000	81,000	86,000	91,500	97,500
46			72,500	76,500	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	79,000	84,000	89,000	94,500	100,000
51			76,000	80,000	84,500	89,500	95,000	100,500
52			76,500	80,500	85,000	90,500	95,500	101,000
53			77,500	81,000	86,000	91,000	96,500	102,000
54			78,000	81,500	86,500	91,500	97,000	102,500
55			78,500	82,500	87,000	92,000	97,500	103,000
56		Interstate Gross Weight Limit (see page 4)	79,500	83,000	87,500	92,500	98,000	103,500
57			80,000	83,500	88,000	93,000	98,500	104,000
58				84,000	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	105,500

¹ The permissible loads are computed to the nearest 500 pounds. The modification consists in limiting the maximum load on any single axle to 20,000 pounds.

² The following loaded vehicles must not operate over H15-44 bridges: 3-S2 (5 axles) with wheelbase less than 38 feet; 2-S1-2 (3 axle) with wheelbase less than 45 feet; 3-3 (6 axle) with wheelbase less than 45 feet; and 7-, 8-, and 9-axle vehicles regardless of wheelbase.

*Federal law allows 68,000 pounds.

CHAPTER 3.00 ISSUANCE OF TRUCK PERMITS AND RESTRICTIONS

3.01 ELIGIBILITY FOR PERMITS

Oversize and overweight permits should generally be restricted to vehicles and loads which exceed legal size and weight but which cannot be reasonably divided, broken down, or dismantled to conform with the legal limitations. To avoid impeding commerce, such vehicles and loads would be permitted to travel but would be subject to any special or additional requirements imposed by the Truck Permit Issuing Office. The following exceptions may be made:

- (a) Vehicles which must travel in emergency situations may have some of the permit restrictions waived.
- (b) If a loaded commodity creates a single overdimension, two or more commodities may be transported as one load if this is requested in the permit application and if the legal weights are not exceeded.
- (c) While overweight permits would generally not be issued for more than one object, each state may allow overweight permits for certain divisible commodities, provided it is essential and in the best interest of the state or nation by reason of an emergency, unusual circumstances, natural catastrophes or disasters.

3.02 TYPES OF PERMITS

In order to provide for all the vehicles and loads which qualify for permits, at least two major types of permits should be made available: (1) Overweight permits and (2) oversize permits. These permits should have two subtypes: (a) single trip and (b) multiple trips. Those vehicles and loads which exceed both the legal weight and size will require both an overweight permit and an oversize permit before they may be moved. (These permits may be combined on a single form.)

Overweight permits for a vehicle and indivisible load may exceed legal maximum single axle weight, tandem axle weight, axle group weight, and vehicle gross weight. If the load is divisible, the legal maximum single axle weight, tandem axle weight, and axle group weight may not be exceeded.

Oversize permits should be for a vehicle and indivisible load which exceeds legal maximum width, length, height, or projecting load.

Maximum dimensions and weights under permit are to be determined by each state.

Single trip overweight and oversize permits are to be valid for a single trip. Multiple trip overweight and oversize permits may be issued for such number of trips or period of time as each state may determine. Routing for either single trip or multiple trip permits can be depicted as either on a specific route or on a network system.

3.03 PERMIT ISSUANCE

States should work toward centralized computerized permit systems, and neighboring states with mutually agreed-upon limits should consider regional permit issuance.

The permit office should operate during normal business hours and at such other times as the permit office deems necessary.

Since efficient methods of obtaining and issuing permits are one of the keys to an effective permit operation, a state's permit office should utilize at least the following methods of issuance to truckers: (1) wire services, (2) walk-in service, and (3) mail service. Charge accounts are also encouraged and should be used when possible.

The wire services are one of the fastest yet most expensive ways for applicants to obtain permits. This method is the fastest for applicants based at some distance from the state through which the permit movement will travel. The applicant will request a permit and give all pertinent information by wire or telephone. The permit would then be transmitted within a short period of time to the location requested by the applicant. The wire service would charge the applicant the state permit fee plus a service fee. The permit office and wire service companies will need to make prior arrangements on fees to be charged and forms to be transmitted.

Permits should also be available at permit offices for walk-in applicants and those who request permits through the mail. If the applicant has provided all the necessary information, the permit could either be issued on the spot or sent by return mail. (Figure 2.)

Another method which speeds up the issuance of permits for the applicant involves the use of prepaid forms or permits. (Figure 3.) These forms or permits could be available as books of forms. The permit forms would be sold in advance for a specific fee. A practical example is the single trip oversize permit, since this fee in many states is constant for all sizes of vehicles and loads. Prepaid forms or permits would be paid for when acquired and then filled out by the applicant when needed. One way to prevent misuse of such forms is to require the applicant to telephone the permit office and relay all information on the proposed permit before using it. This procedure would allow the permit office to approve, review, and route such movements in the same manner as other permits, yet it would allow the applicant to proceed immediately after the telephone call. Another way of checking such forms or permits would be to have an enforcement officer verify the permit through a field or central office.

Charge accounts are also a quick way to facilitate permit issuance. Charge accounts could be set up with either a surety bond or an advance deposit. This would allow applicants to charge oversize and overweight permits up to the amount for which they are bonded or up to their deposit amount.

3.04 INFORMATION REQUIRED ON PERMITS

The applicant should provide at least the following information prior to issuance of a permit:

1. The name and mailing address of the mover.
2. A brief description of the vehicle or load being hauled; for example, "mobile crane", "steel tank", "Lima 550 motor crane", etc.
3. The serial number or an identification number for unlicensed equipment and mobile homes.
4. The make or model, license number, and state of license for a truck or truck-tractor moving a load.
5. The license number and state of license for a trailer or semi-trailer.
6. The origin and destination of the load. If the movement will originate out-of-state or will travel out of the state, it will only be necessary to require the location at which it enters or leaves the state.
7. The applicant preferred route, although this may be modified by the permit office.
8. The dates movement begins and ends.
9. For an overweight vehicle and load: The distance to be traveled, the number of axles on the vehicle or vehicle combination, the axle weights, the axle spacing, and the total vehicle or vehicle combination weight.
10. For an overlength, overwidth, or overheight vehicle and load: The respective length, width, or height.
11. For loads over the legal projecting load: The amount of front-end overhang or rear-end overhang.
12. Additional information required by a particular state.

Forms should not be larger than the size acceptable for transmission by the wire services. (Figures 2, 3, and 4.)

PERMIT COST: _____		OVERSIZE AND/OR OVERWEIGHT PERMIT			PERMIT #: P12345	
ISSUING DATE: _____						
PERMISSION IS HEREBY GRANTED TO:						
MAILING ADDRESS		CITY		STATE		ZIP CODE
TO MOVE OR HAUL:				MOBILE HOME SERIAL #		
VEHICLE MAKE OR MODEL	SERIAL NUMBER	TRUCK LICENSE #	STATE	TRAILER LICENSE #	STATE	
MOVEMENT FROM:			MOVEMENT TO:			
VIA HIGHWAY NUMBERS:						
DATE MOVEMENT BEGINS		DATE MOVEMENT ENDS		EXTENSIONS OR REVISIONS		
MAXIMUM HEIGHT __ FT. __ IN.	MAXIMUM WIDTH __ FT. __ IN.	MAXIMUM LENGTH __ FT. __ IN.	MAXIMUM FRONT OVERHANG __ FT. __ IN.	MAXIMUM REAR OVERHANG __ FT. __ IN.		
MAXIMUM DISTANCE __ MI.	MAXIMUM VEHICLE OR VEHICLE COMBINATION WEIGHT __ LBS.	VEHICLE TYPE	AXLE TYPES* AND WEIGHTS			
			1. TYPE WEIGHT	2. TYPE WEIGHT	3. TYPE WEIGHT	4. TYPE WEIGHT
			LBS.	LBS.	LBS.	LBS.
			LBS.	LBS.	LBS.	LBS.
			LBS.	LBS.	LBS.	LBS.
AXLE SPACING						
1st to 2nd	2nd to 3rd	3rd to 4th	4th to 5th	5th to 6th	6th to 7th	7th to 8th
__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.
RESTRICTIONS:						
<input type="checkbox"/> ESCORT-- PRIVATE STATE POLICE			<input type="checkbox"/> MAXIMUM SPEED __ MPH			
<input type="checkbox"/> NO MOVEMENT __ SAT. __ SUN. __ HOLIDAYS			<input type="checkbox"/> RED WARNING FLASCS IN DAYLIGHT			
<input type="checkbox"/> NO NIGHT MOVEMENT			<input type="checkbox"/> WARNING SIGNS--BOTH DAY AND NIGHT			
<input type="checkbox"/> NO MOVEMENT IN SEVERELY MODERATELY INCLEMENT WEATHER			<input type="checkbox"/> WARNING LIGHTS--AT NIGHT AND IN INCLEMENT WEATHER			
ADDITIONAL RESTRICTIONS OR REMARKS:						
TYPE OF PAYMENT			PERMIT ISSUING OFFICIAL			
TRUCK COPY FOR PERMIT OFFICE FILE COPY)						
PERMIT OFFICE ACCOUNTING COPY						
PERMIT OFFICE FILE COPY FOR PERMIT OFFICE DISCARD COPY)						

* The type would be single, tandem, tridum, quadrum, etc.

FIGURE B-2 Regular permit form.

CONTROL #: A23456		PREPAID OVERSIZE PERMIT			PERMIT #: P-	
PREPAID \$8.00*		ISSUING DATE: _____				
PERMISSION IS HEREBY GRANTED TO:						
MAILING ADDRESS		CITY		STATE		ZIP CODE
TO MOVE OR HAUL:				MOBILE HOME SERIAL #		
VEHICLE MAKE OR MODEL	SERIAL #	TRUCK LICENSE #	STATE	TRAILER LICENSE #	STATE	
MOVEMENT FROM:			MOVEMENT TO:			
VIA HIGHWAY NUMBERS:						
DATE OF MOVEMENT		EXTENSIONS OR REVISIONS				
MAXIMUM HEIGHT __ FT. __ IN.	MAXIMUM WIDTH __ FT. __ IN.	MAXIMUM LENGTH __ FT. __ IN.	MAXIMUM FRONT OVERHANG __ FT. __ IN.	MAXIMUM REAR OVERHANG __ FT. __ IN.		
RESTRICTIONS:						
<input type="checkbox"/> ESCORT PRIVATE STATE POLICE			<input type="checkbox"/> MAXIMUM SPEED __ MPH			
<input type="checkbox"/> NO MOVEMENT __ SAT. __ SUN. __ HOLIDAYS			<input type="checkbox"/> RED WARNING FLASCS - DAYLIGHT			
<input type="checkbox"/> NO NIGHT MOVEMENT			<input type="checkbox"/> WARNING SIGNS - DAY AND NIGHT			
<input type="checkbox"/> NO MOVEMENT IN SEVERELY MODERATELY INCLEMENT WEATHER			<input type="checkbox"/> WARNING LIGHTS - AT NIGHT AND IN INCLEMENT WEATHER			
ADDITIONAL RESTRICTIONS OR REMARKS						
PERMIT ISSUING OFFICIAL						
TRUCK COPY						
PERMIT OFFICE COPY						
CUSTOMER'S FILE COPY						

* The actual cost of the permit shall be based on state requirements. The \$8.00 fee printed here is not intended to be a recommendation.

FIGURE B-3 Prepaid permit form.

CONTROL # 834567		OVERSIZE AND/OR OVERWEIGHT PERMIT		PERMIT # P- _____	
AMOUNT CHARGED TO BOND: _____				ISSUING DATE: _____	
PERMISSION IS HEREBY GRANTED TO:					
MAILING ADDRESS		CITY		STATE ZIP CODE	
TO MOVE OR HAUL:			MOBILE HOME SERIAL #		
VEHICLE MAKE OR MODEL	SERIAL NUMBER	TRUCK LICENSE #	STATE	TRAILER LICENSE #	STATE
MOVEMENT FROM			MOVEMENT TO		
VIA HIGHWAY NUMBERS:					
DATE MOVEMENT BEGINS		DATE MOVEMENT ENDS		EXTENSIONS OR REVISIONS	
MAXIMUM HEIGHT __ FT. __ IN.	MAXIMUM WIDTH __ FT. __ IN.	MAXIMUM LENGTH __ FT. __ IN.	MAXIMUM FRONT OVERHANG __ FT. __ IN.	MAXIMUM REAR OVERHANG __ FT. __ IN.	
MAXIMUM DISTANCE __ MI.	MAXIMUM VEHICLE OR VEHICLE COMBINATION WEIGHT __ LBS.	VEHICLE TYPE	AXLE TYPES* AND WEIGHTS		
			1. TYPE WEIGHT	4. TYPE WEIGHT	
			2. TYPE WEIGHT	5. TYPE WEIGHT	
			3. TYPE WEIGHT	6. TYPE WEIGHT	
AXLE SPACING					
1st to 2nd	2nd to 3rd	3rd to 4th	4th to 5th	5th to 6th	6th to 7th
__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.	__ FT. __ IN.
RESTRICTIONS:					
<input type="checkbox"/> ESCORT-- PRIVATE STATE POLICE			<input type="checkbox"/> MAXIMUM SPEED ___ MPH		
<input type="checkbox"/> NO MOVEMENT ___ SAT. ___ SUN. ___ HOLIDAYS			<input type="checkbox"/> RED WARNING FLAGS IN DAYLIGHT		
<input type="checkbox"/> NO NIGHT MOVEMENT			<input type="checkbox"/> WARNING SIGNS--BOTH DAY AND NIGHT		
<input type="checkbox"/> NO MOVEMENT IN SEVERELY MODERATELY INCLEMENT WEATHER			<input type="checkbox"/> WARNING LIGHTS--AT NIGHT AND IN INCLEMENT WEATHER		
ADDITIONAL RESTRICTIONS OR REMARKS:					
PERMIT ISSUING OFFICIAL					
○		TRUCK COPY		○	
○		PERMIT OFFICE COPY		○	
○		CUSTOMER'S FILE COPY		○	

* The type would be single, tandem, tridum, quadrum, etc.
 FIGURE B-4 Charge account permit form.

3.05 DAYS AND HOURS OF OPERATION

Due to the amount of highway traffic on holidays, vehicles and loads requiring oversize and overweight permits should be prohibited from traveling on these days. States may prohibit permit movements on Saturdays and Sundays if they desire. Prohibited holidays should include New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. Movement of such vehicles and loads would also be prohibited on any other days when such movements may substantially affect the safety of the motoring public.

Overdimensional and, when necessary for safety reasons, vehicles and loads requiring overweight permits may be prohibited from traveling at night. This restriction shall apply from 30 minutes after sunset to 30 minutes before sunrise.

3.06 INCLEMENT WEATHER

No movement should be permitted when road conditions, weather conditions, or visibility make traveling hazardous to the operator or the driving public. If a permitted vehicle is underway when inclement weather occurs, the driver should be required to proceed to a safe place off the roadway and park until the weather clears. During inclement weather, officers may require that the vehicle be parked off the roadway until conditions warrant safe travel.

3.07 SPEED LIMITS

Permit movements may travel at the posted maximum speed limits unless specifically prohibited by the permit.

3.08 ROUTING

Vehicles and loads requiring permits should be routed around highway construction and maintenance projects and around structurally unsound bridges or roadways in a way that would create the least hazard and inconvenience to both the mover and the traveling public.

Each state, in conjunction with its border states and/or geographical compact states, may work to establish mutually acceptable connecting routes.

3.09 GROSSLY OVERWEIGHT OR OVERSIZE

A permit will not be issued when the permitting authority determines that, due to structural or geometric restrictions, undue road and/or bridge damage will result from any oversize or overweight vehicle.

3.10 ESCORTS

Movements on two-lane highways would be required to have escorts if the vehicle and load exceeds twelve (12) feet in width. Movements on multilane highways would be required to have escorts if the vehicle and load exceeds fourteen (14) feet in width. States may require more restrictive conditions on urban high-volume multi-lane highways.

Actual dimensions should be adopted by each state after consultation with bordering states. More restrictive requirements should be imposed when the lane width is less than 12 feet.

An escort vehicle should be able to escort only one oversize vehicle or load. The escort vehicle should be behind an overlength vehicle or load. It should be behind an overwidth vehicle or load on a multilane highway and in front of an overwidth vehicle or load on a two-lane highway. The states may, on a regional basis, adopt more stringent requirements for those loads that may be escorted.

More restrictive requirements for multilane highways may be imposed by states because of construction activity or to discourage violators using a combination of two-lane and multilane highways.

3.11 WARNING FLAGS

Required warning flags should be in evidence during daylight hours. Red or orange fluorescent warning flags are recommended and should be at least 18 inches square. Flags should be securely fastened by at least one corner or securely mounted on a staff.

The permit office should require warning flags on vehicles and loads which exceed legal width. These vehicles and loads would be required to bear two flags at the widest extremities of the vehicle or load. (Figure 5.)

Flags should also be required on vehicles and loads which exceed legal length or which have a rear-end overhang in excess of the legal limit. There should be a single flag at the extreme rear if the overlength or projecting part is two feet wide or less. Two flags should be required if the overlength or projecting portion is wider than two feet, and the flags should be located to indicate maximum width. (Figure 6.)

3.12 WARNING LIGHTS

Warning lights are required for night operation. The lights will be installed as shown in Figures 7 and 8.

3.13 WARNING SIGNS

Required warning signs should be in evidence during all movements. Warning signs should be at least 7 feet long and 18 inches high. The sign's background should be yellow with black lettering. Letters should be at least 10 inches high with a 1.41 inch brush stroke. Note: If Series E Modified is used, the brush stroke is to be two inches.

The permit authority should require vehicles and loads exceeding 10 feet in width to display two signs with the wording "OVERSIZE LOAD".

One sign should be on the front of the vehicle. The other should be on the rear of the load; however, if the sign cannot be attached to or is not legible on the load, then the sign should be attached to the rear of the vehicle itself. (Figure 9.)

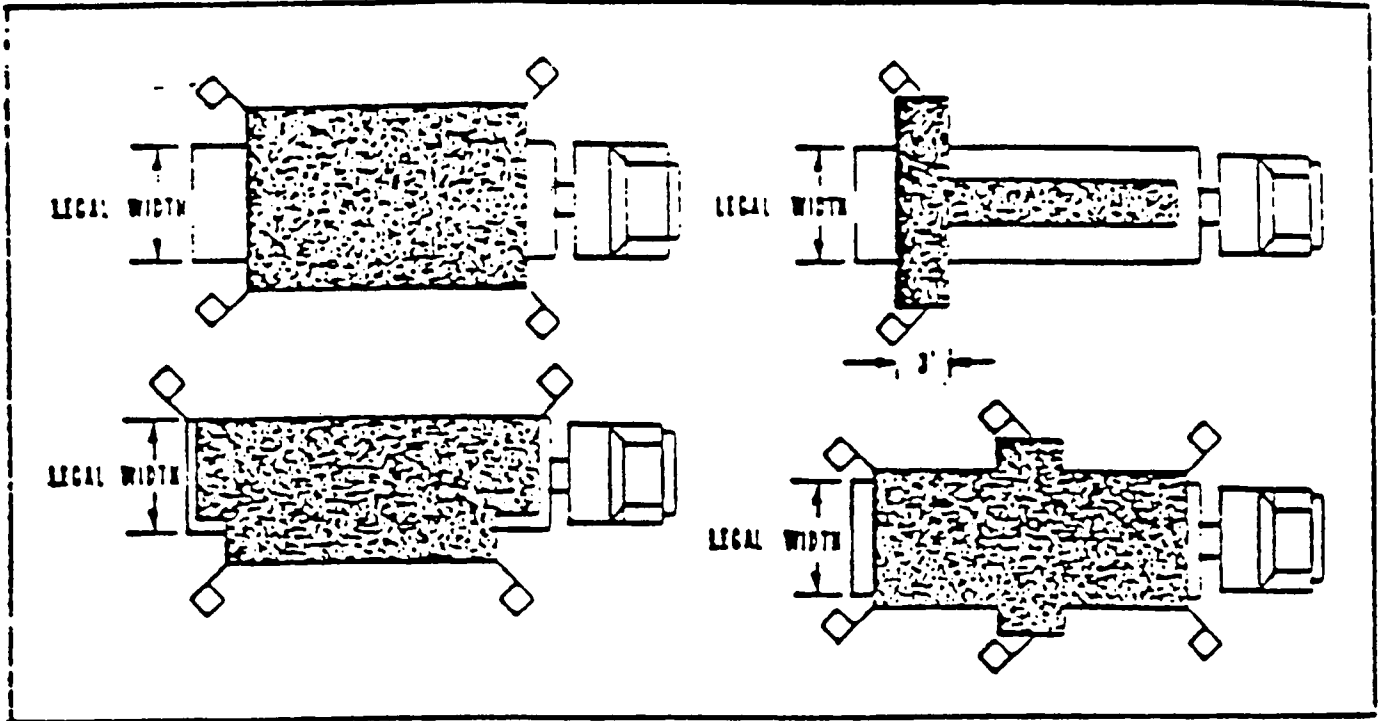


FIGURE B-5 Warning flags on overwidth loads. (Note: Use of flags is not to increase the overall load width.)

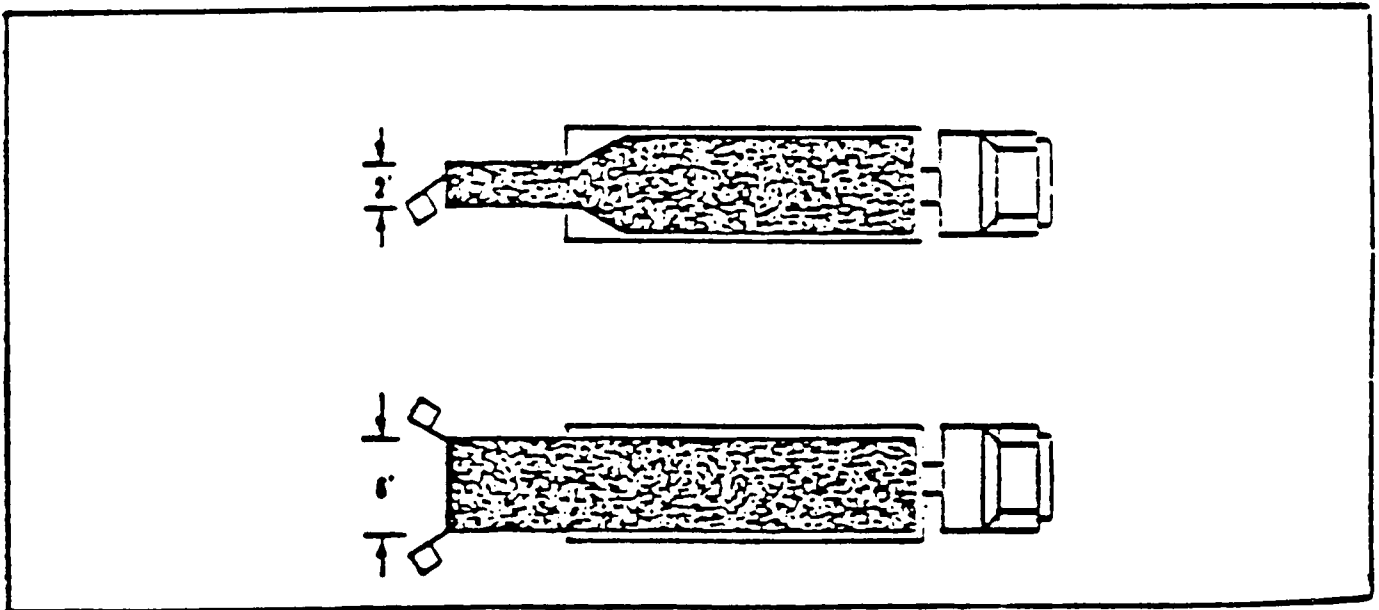


FIGURE B-6 Warning flags on overlength loads or loads with a rear end overhang of more than 4 ft. (Note: Use of flags is not to increase the overall load width.)

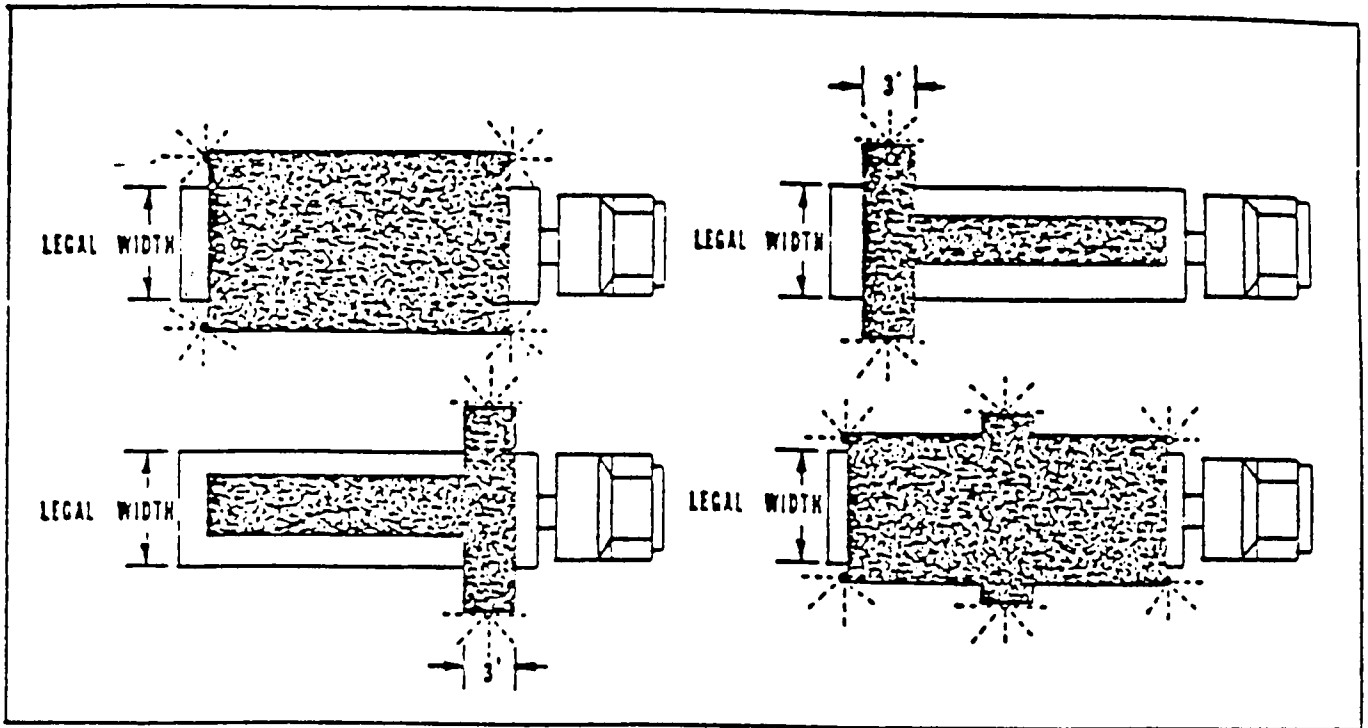


FIGURE B-7 Warning lights on overwidth loads when desired.

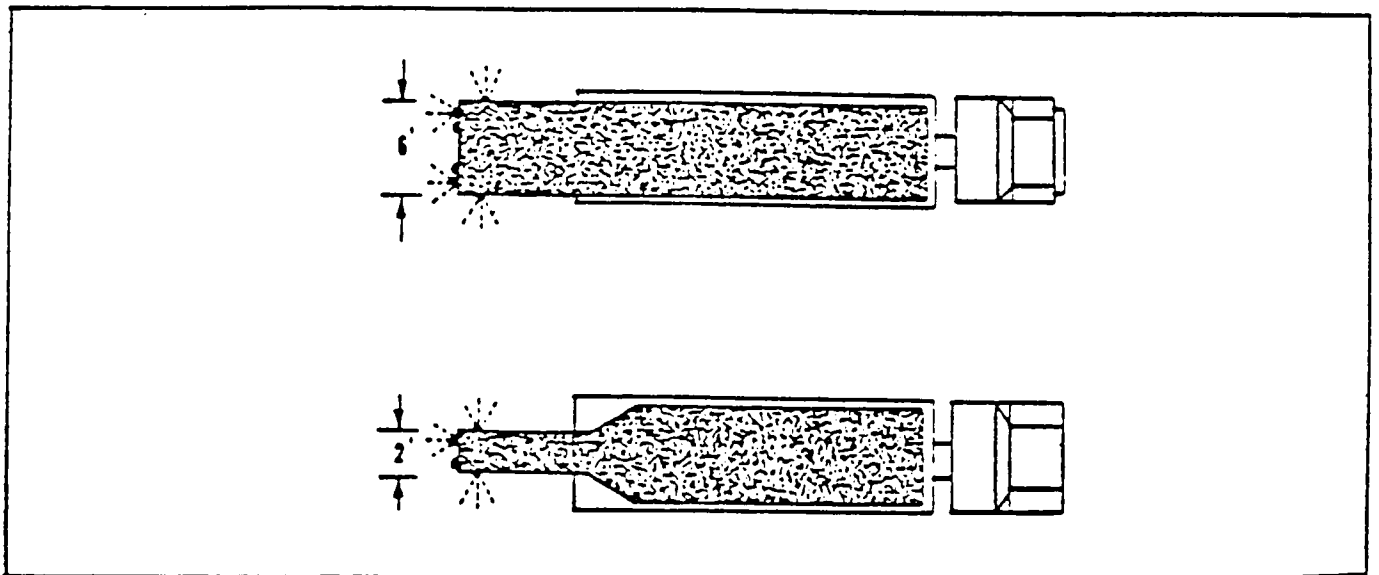


FIGURE B-8 Warning lights on overlength load or loads with a rear end overhang of more than 4 ft.

	Legend;
	Red light
	Amber light

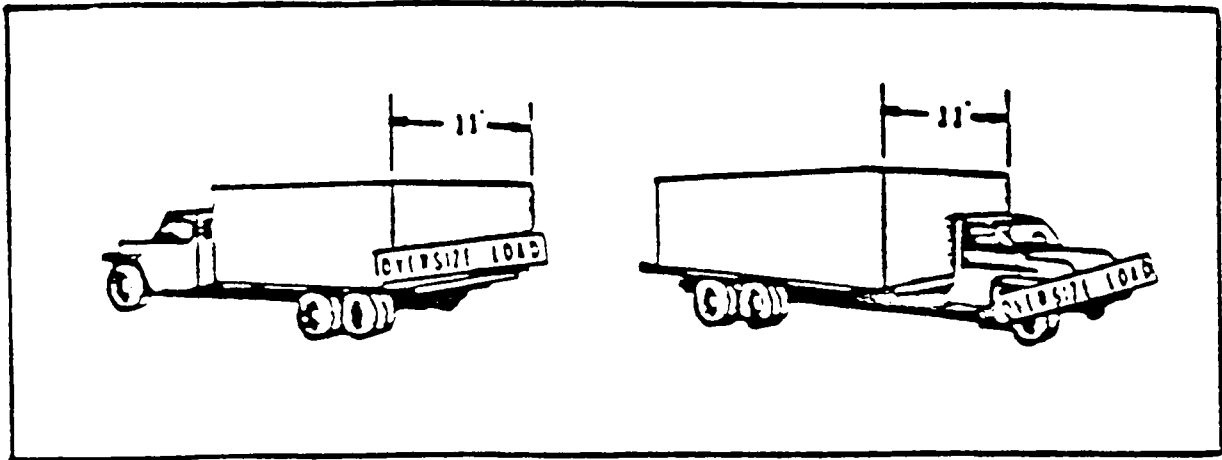


FIGURE B-9 Warning signs on loads more than 10 ft wide.

Vehicles and loads exceeding a state's legal front-end overhang should be required to display one sign with the wording "OVERSIZE LOAD". This sign should be on the front of the vehicle. (Figure 10.)

Vehicle and loads exceeding legal length or rear overhang should be required to display two signs with the wording "OVERSIZE LOAD". One sign should be on the rear of the overlength or overhanging part of the load; however, if the sign cannot be attached or is not legible here, then the sign should be attached to the rear of the vehicle itself. The other sign should be attached to the front of the vehicle. (Figure 11.)

Escort vehicles should display a sign on the roof that is at least five feet long and 12 inches high with eight-inch-high letters.

3.14 COORDINATION OF PERMIT OFFICE OPERATIONS WITH THOSE OF OTHER GOVERNMENTAL AGENCIES

One of the most important governmental groups with which a truck permit office will have lines of communication is the officers in the field who enforce size, weight, and permit laws. These officers will be able to compare permits to the vehicles and loads for which the permits are issued. Enforcement officers should contact the permit office for the disposition of permit movements in violation, since officials at the permit office will be best informed on how to handle these movements.

3.15 PERMITS FOR OTHER GOVERNMENTAL AGENCIES

All federal, state, and local governmental agencies should be required to obtain oversize and overweight permits; however, the permit fee may be dismissed. Governmental vehicles and loads also need to be routed around weak bridges and roadways, and required to have escorts. Each state may decide to exempt emergency vehicles according to the unique needs of their area.

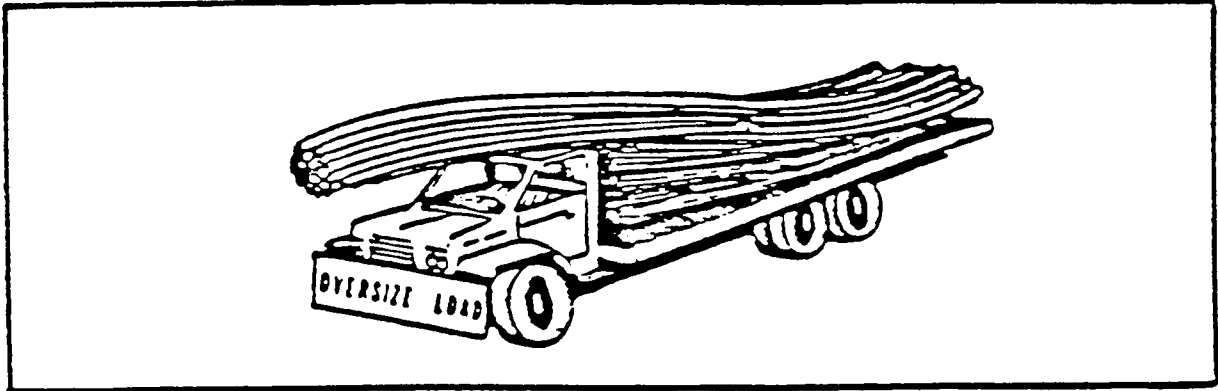


FIGURE B-10 Warning signs on loads over legal front end overhang.

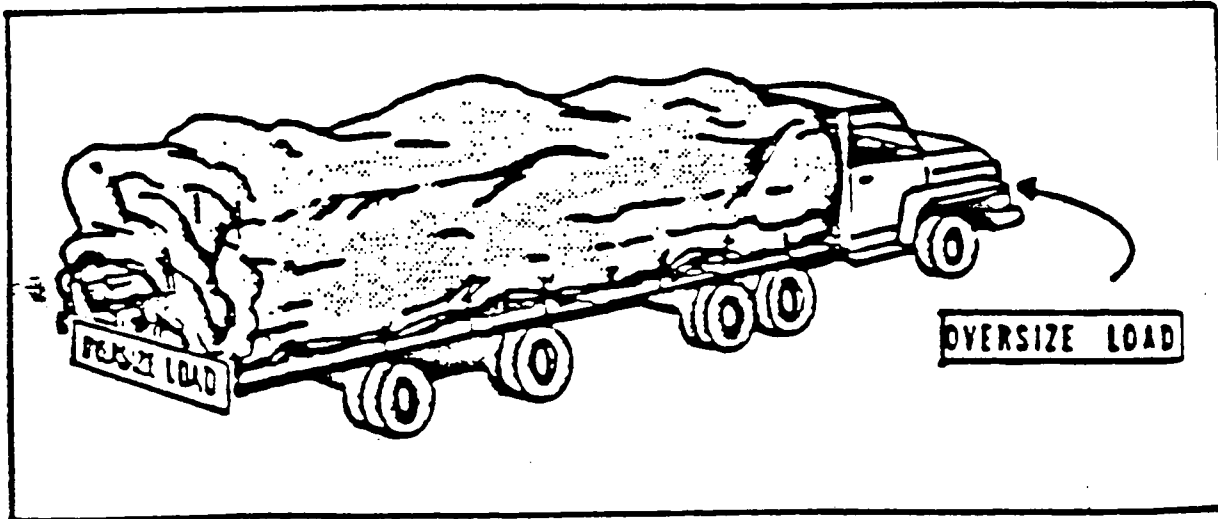


FIGURE B-11 Warning signs on loads overlength or with rear end overhang.

CHAPTER 4.00 NATIONAL DEFENSE

4.01 STATE PROCEDURES

It is recommended that each State Department of Transportation or Highways establish procedures to permit highway movements in excess of legal limits which are essential to national defense.

4.02 MILITARY CERTIFICATION

It is the intent of this guide on movements essential to national defense that the Department of Defense shall be the sole certifying agency during peacetime for all movements by any national agency declared essential to the national defense. During a national emergency, movements essential to national defense would be far greater in scope and; those not under direct control of one of the military departments or Department of Defense agencies would be certified by the appropriate emergency transportation authority.

4.03 JOINT POLICIES (AASHTO AND DEPARTMENT OF DEFENSE)

4.03.1 Except to meet overriding military necessity, no vehicular movement which exceeds any legal weight or dimension limitation, nor any other special military movement, will be undertaken over public highways unless prior permission is secured from the state authorities concerned. Necessary permits for short-distance local movements not under the jurisdiction of states will be obtained from local governments in accordance with applicable regulations and ordinances.

4.03.2 If movements of oversized or overweight vehicles that are militarily owned or operated are in the interest of national defense but cannot be certified as essential to national defense, designated military representatives may discuss the matter with designated state representatives concerned. If a permit is approved by the proper issuing authority of a given state without regard to the military essentiality of the movement, this approval will be accepted by the military departments as evidence that such movement in the state of issue is within the provisions of the laws of such state governing civilian cargo movements.

4.03.3 Permits for oversized or overweight movements which may be applied for by a commercial carrier and approved by a state issuing authority in a given state without regard to the military character of the cargo will be accepted by the military departments as evidence that such movements in the state of issue are within the provisions of the laws of that state governing civilian cargo movements. However, if it is essential to national defense that an oversized or overweight movement be made by highway, under no condition shall carriers be authorized to certify the military necessity of such a movement to state authorities.

4.04 PROCEDURES FOR IMPLEMENTING JOINT POLICIES

4.04.1 Each state will designate an official (and alternates, if desired) authorized to issue permits for oversized, overweight, or other special military movements on public highways.

4.04.2 The Army, Navy, Air Force, and Marine Corps will designate a limited number of officials authorized to request permits for oversized, overweight, or other special military movements on public highways.

4.04.3 The Commander, Military Traffic Management and Terminal Service, Department of the Army, will maintain a directory showing the name(s) of the individual(s) in each state authorized to issue permits, together with a list of officials within the Department of Defense authorized to request permits, and will furnish current copies of same to all states and to Department of Defense agencies.

4.04.4 Authorized military representatives will determine whether a movement by the highway is essential to national defense and will make necessary certifications to the appropriate state authorities.

4.04.5 Authorized military representatives will, when applying to state representatives for permits of oversized, overweight, or other special vehicular movements, furnish such information as may be necessary to enable the state representatives to make a reasonable evaluation of the effects of the movements of the highway facilities and traffic involved.

CHAPTER 5.00 HIGHWAY MOVEMENT OF MILITARY TRACKED VEHICLES

5.00 NATIONAL POLICY

The rapid deployment capability of military units is essential to the nation's security. Road marching of tracked vehicles can, under certain circumstances, result in significant time savings for unit deployments, thus enhancing the strategic mobility of combat forces. In the event of a national emergency or in a defense contingency requiring rapid deployment of military units, the Military Traffic Management Command will notify the Chief Administrative Officer in the respective state of any requirement to road march tracked vehicles. Such road marches will be preplanned and coordinated between the military unit and the State Department of Transportation or State Highway Department to determine effect on bridges, pavements, and traffic operation. From time to time, it will be prudent to conduct exercises of such road marches; however, exercises will not be carried out without the approval of state officials. Normal permit procedures will apply, and repair of damage to highway facilities will be defense financed.

APPENDIX C

DRAFT POLICY OF SPECIALIZED CARRIERS AND RIGGING ASSOCIATION IN CONJUNCTION WITH THE AMERICAN TRUCKING ASSOCIATIONS

**SPECIALIZED CARRIERS & RIGGING ASSOCIATION
2200 MILL ROAD, SUITE 616, ALEXANDRIA, VIRGINIA 22314**

UNIFORM OVERDIMENSIONAL/OVERWEIGHT PERMIT POLICY

1. Any state which, based on safety considerations has established limits in excess of those found in this proposal, should continue such limitations and practices.

2. Routine Issue

- a. Height - Limited by route only.
- b. Length - No permit needed if legal in all dimensions up to 65' long on non-designated roads.
Routine issue up to 120'.
- c. Weight - Routine issue for combinations not to exceed 22,000 lbs. per axle and/or combination weights as follows:
 - Single - 22,000 lbs.
 - Tandem - 46,000 lbs.
 - Tri - 60,000 lbs.
 Gross vehicle weight not to exceed 120,000 lbs.
- d. Width - Routine issue up to 14' wide. (Nebraska and Maryland are the only states that do not comply with this level.)

3. Uniform Permit Application Form & Availability

A uniform application form for permits is to be used by every state which shall be valid on a single trip for a minimum of 5 days excluding holidays. There shall also be a system in every state in which revisions or extensions may be obtained without charge to the carrier. Exception to this would be if the change in weight produces a change in the fee due, the fee would be charged. A proposed uniform application form is attached.

4. Book Permits & Self-Issue

Each state shall also authorize the use of book permits issued in books of tens, to be effective for one year. The permits shall consist of three parts - the original to accompany the load, the second copy to remain in the truck operator's office and the third copy to be sent immediately to the state agency following validation.

Self-issue permit shall be good for all routine issue permits. Information will be called into the state and a permit number will then be issued.

Blanket Permits, issued for vehicles not exceeding 100' in length, 14' in height, 12' in width or 100,000 gross weight.

5. Uniform Signs

Required load signs should be the following dimensions: 7' wide by 18" high with black letters 1 1/2" wide and 10" high on yellow background reading "OVERSIZE LOAD." No additional markers, lighting or identification shall be required.

6. Escort Vehicle Requirements

- a. Length - One rear escort after 90' overall length on less than 4-lane highways and after 110' on 4 or more lane highways.
- b. Width - One escort required on all roads when in excess of 13'0". Additional escort required on less than 4-lane highways when in excess of 14' wide.
- c. Height - One escort required in excess of 14'6" loaded height.
- d. Weight - No routine escort service required.
- e. Escort vehicles shall be equipped with two roof mounted 18" red flags. Whenever the vehicle is escorting a load requiring the overdimensional load sign, the escort shall display a bumper-mounted yellow 14" x 5' sign reading "OVERSIZE LOAD" with black letters 8" high and 1 1/2" wide. Wherever special lights are required, a revolving amber dome light, meeting the requirements of SAE J845, mounted in the center of the vehicle roof, shall meet the state's special lighting requirements.

7. Periods of Travel Under Permit

- a. Overweight loads only: overweight loads that are not overdimensional and can flow with the traffic; although still subject to permit requirements, and overweight loads, not in excess of 120,000 pounds gross weight shall not be restricted as to travel time.
- b. Overdimensional loads: daylight hours only. Daylight hours are defined as one half hour before sunrise to one half hour after sunset.

Vehicles under permit shall be prohibited from travel on the following holidays: New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas.

8. Permit Fees and Payment

Wherever permit fees are required, such fees shall be established at reasonable levels. Payment of those fees shall be allowed either through an escrow account or charge account protected by reasonable security.

9. Flag Uniformity

Four 18" square red flags will be mounted on the four corner extremities of an overdimensional load. (As of October 31, 1986, all states now meet this uniform requirement.)

Revised 10/16/88

SPECIALIZED CARRIERS & RIGGING ASSOCIATION

PROPOSED UNIFORM PERMIT APPLICATION FORM

Date:

Company Name:

Address, City & State:

Load Description Make & Model:

Tractor Year & Make:

License #:

ST:

Trailer Make:

License #:

ST:

Trailer Make:

License #:

ST:

Overall Dimensions Length:

Width:

Height:

Gross Weight:

of Axles:

Spacings:

Total Bridge:

Axle Group Weights:

Tire Sizes:

Origin:

Destination:

Routes:

Effective Dates:

Special Account #'s:

Special Provisions:

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The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. Robert M. White is president of the National Academy of Engineering.

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