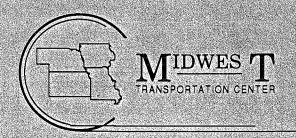
ECONOMIC REGULATION OF INTRASTATE TRUCKING: AN IN-DEPTH EXAMINATION OF IOWA, KANSAS, MISSOURI AND NEBRASKA

This report was prepared as part of Year Two of the project, "The Changing Role of Freight Transportation Modes and Intermodal Freight," Sponsored by the Midwest Transportation Center.

Midwest Transportation Center August, 1992



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ECONOMIC REGULATION OF INTRASTATE TRUCKING: AN IN-DEPTH EXAMINATION OF IOWA, KANSAS, MISSOURI AND NEBRASKA

Final Report August, 1992

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[Research reported is part of a larger project titled "The Changing Role of Freight Transportation Modes and Intermodal Freight"]

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EXECUTIVE SUMMARY

This report documents part of a two year research project which sought to document changes to surface freight industries, to surface freight infrastructure, and to governmental regulation of the surface freight industry in the midwest that occurred during the 1980s and early 1990 and to recommend policy direction for the future. The first year of the project, "The Changing Role of Freight Transportation Modes and Intermodal Freight," produced a document which largely documents changes and the condition of the motor carrier and railroad industries in Federal Region VII (Iowa, Kansas, Missouri, and Nebraska) during the 1980s. The first year's report was broad and containing a wealth of background information. During the second year, the research team focused on two very specific issues:

- The role of public assistance in the promotion of local rail services for economic development purposes. More specifically, an investigation of public investments in midwestern shortline and intermodal facilities to determine criteria which may make these small and site specific investment effective promoters of economic development.
- The condition and functions of intrastate regulation and the impacts of changes to intrastate regulation in Federal Region VII. This portion of the project conducted a detailed investigation of intrastate regulation in each of the four states in Region VII.

This report is devoted to the former topic. The later issues is documented in a report available from the Midwest Transportation Center, "Public Sector Participation In Local Rail Service Projects With An Economic Development Focus."

Introduction

Legislation permitting the Federal preemption of state economic regulation of intrastate trucking service is now being considered by Congress. This proposed legislation has generated concern about the importance of states' rights, has generated both opposition and support among members of the trucking industry, and has created concern from labor interests and citizens of small, rural communities about the effects of additional deregulation of the trucking industry.

This report addresses this public policy issue primarily from the perspective of the states of Iowa, Kansas, Missouri and Nebraska. The focus of the study was on the nature

and extent of the economic regulation of intrastate trucking now being practiced in these four states. The current regulatory practices of Iowa, Kansas, Missouri, and Nebraska were described and the substantive changes in these practices since 1980 were identified in the project's first-year report. The first-year report described the agencies responsible for regulating intrastate trucking, how each state classifies motor carriers for regulatory purposes, entry and rate regulatory practices, and non-economic regulation by each of the four states.

The research conducted in the preparation of this report consisted of three major components. First, additional efforts were made to understand the nature and degree of economic regulation of intrastate trucking in Iowa, Kansas, Missouri and Nebraska. Second, the most significant studies on state economic regulation of intrastate trucking and regulatory reform of intrastate trucking were reviewed and summarized. Third, in order to address certain issues that had not been addressed or addressed adequately and to identify the most important germane issues that still need to be researched, a day long workshop on economic regulation of intrastate trucking was held in Kansas City, Missouri on July 8, 1991. This report summarizes the first two components and reports on the workshop in summary form in an appendix.

Administration of Economic Regulation of Intrastate Trucking: Iowa, Kansas, Missouri and Nebraska

Regulatory staff members in each state were interviewed to determine how the economic regulation of intrastate motor carriage was actually administered. By examining the actual practices of the regulatory agencies in these four states, and the resources allocated to them, the differences between the economic regulation that is actually being administered by the agencies and the economic regulation that the statutory law and regulations would suggest can be identified and analyzed. This examination allows a better understanding of the benefits and costs of the current regulatory practices and the potential impacts, both positive and negative, of changes in the regulatory policy for intrastate trucking.

The degree and nature of economic regulation of intrastate trucking depend not only upon the statutes, regulations promulgated from these statutes, and the interpretation of these

regulations by the regulatory agencies and the courts, but also on the resources and foci of the regulatory agencies. Questions concerning the size of staff and focus of the enforcement efforts were asked of regulators in each of the four states.

Review of Studies on Intrastate Regulation and Deregulation

Over the last decade, several studies examining the effects of economic regulation and deregulation of trucking at the state level have been conducted. These studies have addressed a wide array of issues but have focused on the effects of regulation or deregulation with respect to rate levels, amount of discrimination among shippers, particularly between shippers of different sizes and locations (rural areas versus urban areas), and economic viability of carriers, and the quality and quantity of motor carrier service.

Fourteen studies primarily addressing the impacts of state economic regulation of intrastate trucking and fifteen studies addressing the effects of deregulation at the state level were identified and reviewed. The list of studies reviewed is not exhaustive but does provide to most significant research on the issue to date. A variety of research methodologies and several different states are represented by these studies. The states covered by the studies on the impacts of regulation of intrastate trucking include Texas, Michigan, and Oregon. States covered in the deregulation studies include Florida, Arizona and New Jersey. The results (carrier impacts, shipper impacts, and miscellaneous findings) are the focus of the review in the report while more detailed summaries of each of the studies are provided in appendices.

Conclusions and Implications

The major conclusions from the examination of how economic regulation of intrastate trucking is actually administered are:

much less economic regulation of intrastate trucking in Iowa, Kansas and Missouri exists now than existed in 1980,

- limited regulation of motor carrier service exists because of the lack of statutory standards, lack of staff, and/or because there are few complaints from shippers about motor carrier service, and
- members of regulatory staffs administering economic regulation of intrastate trucking are becoming increasingly involved in related areas such as safety regulation and registration.

The most important conclusions from the review of the studies on the effects of regulation of intrastate trucking and the impacts of deregulation at the state level are:

- deregulation of intrastate trucking reduced the profitability of those motor carriers providing intrastate service,
- shippers using intrastate trucking service have benefitted from deregulation due to the combination of lower rates and service at least equal to the level provided under regulation,
- although some evidence was found indicating shippers in urban areas gained more than shippers in small, rural communities, the differences in impacts on these two types of shippers were small and some studies found no differences, and
- The cost of maintaining economic regulation of intrastate trucking may be substantial.

The implications of these findings on developing the appropriate public policy with respect to regulation of intrastate trucking are not clear. Clearly, the fears that shippers in small, rural communities will face higher rates and lowers level of service appear to be overstated. On the other hand, the fact that three of the four states examined have already reduced the degree to which they regulate intrastate trucking suggests that the significant benefits that some researchers have projected if states deregulated their intrastate trucking may be overstated.

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CHAPTER I INTRODUCTION

Twelve years after the Motor Carrier Act of 1980 substantially reduced federal economic controls over interstate trucking, forty-two states continue to administer economic regulation of intrastate trucking service. For the past several years, legislation has been introduced in Congress which would eliminate all state economic regulation of intrastate trucking or at least the regulation of interstate carriers providing intrastate service. Deregulation of intrastate trucking is a significant public policy issue not only because it is currently before Congress for consideration, but also because it has generated concern about the importance of states' rights, has produced both support and opposition among the members of the trucking industry, and has created concern from labor and citizens of small, rural communities about the effects of additional deregulation.

This two-year research project addressed this public policy issue primarily from the perspective of the states of Iowa, Kansas, Missouri and Nebraska. Although the project reviewed the literature on the impacts of regulation and deregulation of intrastate trucking, the focus of the study was on the nature and extent of the economic regulation of intrastate trucking now being practiced in these four states. The premise underlying this study was that the impact of deregulation of intrastate trucking on the shippers and carriers in these four states would depend largely on how much of the trucking firms' behavior is now controlled by economic regulation.

The current regulatory practices of Iowa, Kansas, Missouri, and Nebraska were described and the substantive changes in these practices since 1980 were identified in the project's first-year report.² Based upon information from statutory law, regulations and other secondary sources, the first-year report described the agencies responsible for regulating intrastate trucking, how each state classifies motor carriers for regulatory purposes, entry and rate regulatory practices, and non-economic regulation by each of the four states.

The first-year research found that since 1980, both Kansas and Missouri formally evaluated the need for continued economic regulation but reached different conclusions. Kansas moved to reregulate in line with the Interstate Commerce Commission's (ICC)

current regulations while Missouri adopted certain procompetitive features with the overall intention of continuing economic regulation. Iowa and Nebraska had few substantive statutory changes. Iowa, however, has modified its administrative rules and practices, resulting in the relaxation of its regulatory stance while Nebraska continues its traditional approach of maintaining a highly regulated environment for the intrastate trucking industry.

The research in the second-year of the project consisted of three major components. First, additional efforts were made to understand the nature and degree of economic regulation of intrastate trucking. Information from interviews of regulatory personnel was used to examine the actual administration of intrastate regulation by each of the four states in the region. The findings of this research effort are reported in the next section. Second, the most significant studies on state economic regulation of intrastate trucking and regulatory reform of economic regulation of intrastate trucking were reviewed and summarized. The general findings of this review are discussed in third part of this report and the individual summaries are provided in Appendices A and B. Third, in order to address certain issues that had not been addressed or addressed adequately, to identify the most important germane issues that still need to be researched, and to provide a mechanism for a rational discussion of this policy issue, a day long workshop on economic regulation of intrastate trucking was held in Kansas City, Missouri on July 8, 1991. The summary of the presentations and discussions at that workshop is provided in Appendix C.

CHAPTER II ADMINISTRTATION OF ECONOMIC REGULATION OF INTRASTATE TRUCKING: IOWA, KANSAS, MISSOURI AND NEBRASKA

In the second year of the project, additional efforts were made to understand the nature and degree of economic regulation of intrastate trucking. Research into the actual administration of intrastate regulation by each of the four states in the region was undertaken. Regulatory staff members in each state were interviewed to determine how the economic regulation of intrastate motor carriage was actually administered. As has been noted with the implementation of the Motor Carrier Act of 1980, the degree and nature of regulatory reform at the federal level depended upon the attitudes of the ICC commissioners and staff members and the resources available to the ICC to administer and enforce the remaining regulations. By examining the actual practices of the regulatory agencies in these four states, and the resources allocated to them, the differences between the economic regulation that is actually being administered by the agencies and the economic regulation that the statutory law and regulations would suggest can be identified and analyzed. This examination allows a better understanding of the benefits and costs of the current regulatory practices and the potential impacts, both positive and negative, of changes in the regulatory policy for intrastate trucking.

Degree and Nature of Administration of Regulation

The nature and scope of economic regulation of trucking are usually discussed in the context of four major areas: (1) entry and exit, (2) rates, (3) service, and (4) mergers and acquisitions. The interviews of state officials were structured to address each of these areas except the last--mergers and acquisitions. Questions about regulatory policy with respect to compensated intercorporate hauling were also asked. In addition, the interviews explored selected areas of regulation that are outside these traditional areas of economic regulation.

Regulation of Service

A series of related questions were asked about the degree to which intrastate motor carrier service was regulated by the states. The fundamental question is whether there is a common carrier service obligation for intrastate trucking firms which requires more of the regulated carrier than what would be expected from an unregulated, profit-maximizing firm. Related questions are: (1) If a common carrier service obligation exists, does it vary according to type of carrier? (2) Has either the regulatory agency or case law developed an operational definition of the service required by the service obligation? (3) To what degree does the regulatory agency enforce the common carrier service obligation? (4) What are the penalties to a common carrier for not meeting its common carrier service obligation?

The regulatory administrators interviewed in three states--Iowa, Missouri and Nebraska--indicated that a common carrier service obligation existed. Regulators in Nebraska and Missouri cited explicitly or indicated implicitly the statutory foundation for such an obligation. Nebraska regulators provided the most precise definition and citation indicating that the regular route carriers are required to serve the points along their routes on a regular basis. Missouri regulators responded by stating that a carrier has the responsibility for providing service. Iowa regulators indicated that certificated carriers are required to serve all points they have authority to serve. In contrast, regulators in Kansas indicated that there once was a common carrier service obligation although nothing existed in the statutes which defined the obligation.

Neither court cases nor regulations prescribing what the common carrier service obligation requires of the carrier were revealed in the research. For example, no state has a regulation or guidelines on the issue of frequency of service required of a common carrier. Regulators in Missouri indicated that the statutes are very vague on service requirements with no identification of required service frequency. Regulators in Nebraska stated that they have never received a complaint from a shipper claiming that service was not frequent enough.

Regulators in Iowa indicated that a regulation of frequency of service once existed, but no longer does. In fact, routes and schedules have not been filed by carriers for over thirty years in Iowa. Iowa regulators noted that the frequency of service is set by the carrier based on the volume of freight moved from a specific point. The operating certificates in

Iowa simply state that the carrier has the authority and responsibility to serve all points in Iowa. The Iowa Code references the requirements set by the ICC, which Breen and Allen examined and determined that frequency of service was not addressed by the ICC before 1980.³

None of the four states are actively enforcing the service obligations of their intrastate motor carriers. Kansas reduced its service obligation when it moved to a less stringent entry requirement. Essentially, Kansas has no service obligations to enforce. Each of the states either stated or implied that the lack of enforcement essentially reflected the lack of need to enforce—each state receives few or no complaints about carriers not serving particular communities.

The solution to service problems normally does not involve the application of penalties to the carriers. Three states (Iowa, Kansas, and Missouri) have the option of suspending or revoking (or threatening to suspend or revoke) a carrier's operating authority if the carrier is found not to be serving its authorized points. None of the states had used this option, however. Missouri apparently has the additional option of assessing fines for the carrier although there never has been a situation where this has been needed. The normal resolution of service problems by a common carrier involved the informal handling of the situation by the regulator with the involved shipper and carrier. In a few cases, substitute carriers were brought in to provide the requested service.

Regulation of Entry

The four states vary somewhat in their regulation of entry with respect to both the applications from carriers to enter the industry or a market and the administration of regulations to keep non-common carriers from encroaching on common carriers' markets. Kansas has the most liberal entry policy with respect to common carriers. As a matter of practice, entry into the trucking industry in Kansas is virtually unregulated. If the carrier has a line of credit at a bank and does not have a poor safety record, it will be granted authority to enter the industry. Protests by existing carriers are normally futile. Most less-than-truckload (LTL) carriers applying for authority in Kansas are granted statewide authority for whatever commodity class for which they apply. Carriers not wanting statewide authority

are granted irregular route authority from requested areas to all parts of the state. The Kansas Corporation Commission receives about 150 to 200 applications for authority per year. About 65 percent to 75 percent of the applications are for new authority and 20 percent of the total applications deal with general commodity authority. Most (98 percent to 99 percent) of the applications are approved either in part or in total. Before the change in the Kansas regulatory policy in the early 1980s, 20 percent to 30 percent were denied.

In practice, Iowa and Missouri appear to have developed liberal policies in the area of entry regulation. There are very few carriers that do not have statewide authority in Iowa. In the past, carriers did not have statewide authority and had to interline or illegally serve outside the territory of their operating certificates to meet their shippers' needs. Furthermore, of the very few applications by firms to serve intrastate traffic in Iowa, only one of the last ten applications was rejected. This application was rejected because of a lack of equipment and a lack of financial stability. Information from Missouri regulators indicated a liberal entry policy based upon the percentage of applications which were granted. Unlike Iowa, most of the common carriers are regular route in nature. Some are irregular route carriers, however, which are granted authority on a county by county basis or even parts of counties. Missouri regulators indicated that truckload (TL) carriers typically have statewide authority. In contrast, no LTL carriers are granted statewide authority but, as a practical matter, some more established carriers have obtained statewide authority by combining different operating authorities granted to them over time.

Entry regulations in Nebraska are the most strict of the four states and have not changed substantially since 1980. Only one carrier has authority to serve all commodities throughout the state. All other carriers have some type of restrictions, either territory or commodity specific. On the other hand, 80 percent of the carriers that apply for intrastate authority in Nebraska receive the authority sought.

Regulation of Rates

Although the four states are similar with respect to their rate regulatory policies, Nebraska has the most restrictive policy in the rates and ratemaking area. Iowa, Kansas, and Missouri allow discounting. Iowa and Kansas appear to have a policy of readily accepting discounts if they are filed with the state regulatory agency. On the other hand, Missouri's policy with respect to discounting has certain constraints. Discounting is not allowed in Nebraska.

Arbitraries are not allowed in any of the four states. In Iowa arbitraries were allowed at one time. Missouri regulators thought that arbitraries would be considered discriminatory and therefore not permitted by the state's regulatory statutes. Iowa regulators view discounts as a type of reverse arbitrary in the sense that shippers in small communities are not offered the deep discounts.

All of the four states grant antitrust immunity to carriers participating in rate bureaus. A variety of rate bureaus exists in the four states to accommodate the needs of the different types of carriers. The general commodity carriers in Iowa, Kansas and Nebraska use the Middle West Freight Bureau to publish many of their rates. In each of the states, however, regulators indicated that carriers can and do file their own tariffs and bypass the rate bureaus. In Iowa and Nebraska, the majority of rates are filed individually, not through a rate bureau. Missouri regulators were of the opinion that rate bureaus did not provide much of a service to their state's carriers.

Intercorporate Hauling Regulation

The type of regulation the state has with respect to compensated intercorporate hauling can have a significant impact on private carriers' opportunities to improve the efficiencies of their fleets. As the result of the Motor Carrier Act of 1980, the ICC permits compensated intercorporate hauling between and among non-transportation companies within the same corporate family that operate private fleets. About half of the states, however, do not recognize compensated intercorporate hauling on intrastate traffic. If a movement is considered intrastate commerce, and takes place within a state that does not allow compensated intercorporate hauling operations, the private carrier is required to obtain authority from the state as a regulated for-hire carrier in order to serve its affiliated companies.

Iowa and Kansas essentially use the compensated intercorporate hauling regulation that the ICC uses. In contrast, both Nebraska and Missouri require that in any case in

which funds are exchanged in an intercorporate haul, the private carrier must acquire the required operating authority and charge published rates.

State Regulatory Agencies-Resources and Foci

The degree and nature of economic regulation of intrastate trucking depend not only upon the statutes, regulations promulgated from these statutes, and the interpretation of these regulations by the regulatory agencies and the courts, but also on the resources and foci of the regulatory agencies. Questions concerning the size of staff and focus of the enforcement efforts were asked of regulators in each of the four states. Unsolicited comments about the full scope of the agencies' regulatory responsibilities provided additional insights into the behavior of the regulatory agencies.

The findings with respect to size of staff indicate that the regulatory staff in each of the four states assigned to intrastate trucking is small. In three of the states, staffs have been reduced since 1980. There is a correlation between the size of staff and the amount of intrastate regulation administered by the state. Kansas, which has the least amount of regulation, has only one person assigned to rate regulation. In fact, only about 40 percent of this person's time is allocated to rate regulation with the remaining portion allocated to rail line abandonment and motor carrier safety issues. The field staff in Kansas consists of three individuals who are mainly dedicated to conducting safety compliance reviews. These individuals are in charge of regulating 1,600 carriers that have intrastate authority in Kansas.

Iowa has five individuals who administer the economic regulations for intrastate motor carrier operations. The responsibilities of these five individuals are split among regulating the certificated carriers (including liquid carriers), truck operators (truckload carriers), and contract carriers. Iowa has only one person from its total of five has any field responsibilities. However, the Iowa Department of Transportation motor vehicle enforcement officers (mostly incharge of safety and size-weight enforcement) also have economic regulatory enforcement responsibilities.

The Missouri Division of Transportation employs 75 staff members, 25 are field inspectors who are primarily involved in safety inspections at terminals. With respect to

motor carriers, there are nine regulatory auditors that check permits and operating authorities and rates, three administrative judges, three investigatory attorneys, three managers, and one division director. In the 1989-1990 time period, these individuals were in charge of regulating 852 purely intrastate carriers and 1,008 carriers having both intrastate and interstate operating authorities for points in Missouri.

Nebraska, the most highly regulated of the four states, has a staff of three to administer the regulation of rates. Seven deputy officers are in charge of enforcing rates and checking carriers which might be hauling goods without authority or beyond the scope of their authority. The chief enforcement officer is a lawyer who has a personal staff of two.

In each of the states, the staff members of the agency in charge of administering economic regulation of intrastate trucking are becoming increasingly involved in related activities such as administering motor carrier safety regulations. Missouri involves its staff in safety regulations and sees a greater future role for its staff in this area. The commission in Kansas views its program as more safety related than anything else. The staffs in Iowa and Nebraska attach the economic regulatory administration to the enforcement and administration of related activities such as insurance requirements, maintaining control over taxation, and vehicle licensing and permitting.

Overall Findings

The examination of how economic regulation of intrastate trucking operations is actually administered in these four states produced three major findings. First, there is much less economic regulation of intrastate trucking in three of these four states in 1990 than there was in 1980. De facto deregulation has occurred because of budget reallocations. One of the regulators interviewed concluded that economic regulation of carriers is not being done anymore in the state because of the inadequate staff. Nebraska, with its more traditional regulatory environment, is an exception.

Second, regulation of service is virtually non-existent. The statutory requirements are clearly stated in only two of the states and these requirements provide only minimal standards of behavior--serving those communities listed in the operating authority. Furthermore, no

case law could be located that established standards. Even if common carrier service obligations standards existed, the states appeared to lack the staffs required to monitor and enforce the service obligations. Possibly most significant, it appears that shippers in these states tend not to complain about the motor carrier service they receive.

Third, staff members currently involved in the increasingly less demanding task of administering economic regulation of intrastate trucking, either see their role as supportive of related missions of taxing, licensing and permitting or regulating safety, or they are already involved in these areas. Both the agencies' missions and staff members appear to have been moving more and more toward the safety regulation area since 1980. Several of the states' regulatory staff members saw less need or a reduced mandate to protect, from an economic perspective, either the shipper or the investments of the carriers.

Implications for Regulatory Reform or Deregulation

The interviews with the regulatory staffs in Iowa, Kansas, Missouri and Nebraska suggest that deregulation of intrastate trucking in these four states would have minimal impact on the size of state government bureaucracies in these states, that service to small communities would likely be unaffected, and that the overall positive impacts of deregulation might be limited. Each of these are discussed in detail.

Impact on Regulatory Bureaucracies

One possible source of inertia in deregulating at the state level is the concern about the potential loss of employment by those individuals in state government currently administering economic regulations of intrastate trucking. This research strongly suggests that only a few persons would be affected by dramatically changing the economic regulatory environment for intrastate trucking. Given the multiple responsibilities of most of the likely affected staff members in these states, and the expanded responsibilities in administering safety regulations in these states, the termination of economic regulation would not necessarily eliminate their positions. The social costs associated with the disruption and

possible dislocation of the lives of the regulators most likely affected by deregulation would be minimal.

Impact on Service to Small Communities

The concern expressed about the potential adverse impacts on the nature and cost of trucking service to small, rural communities in a deregulated environment is a legitimate one. It was a major concern when the Motor Carrier Act of 1980 was being debated in Congress. This concern is based upon three premises: (1) much of the trucking service to rural communities is inherently unprofitable and thus rural towns would receive little or no service under deregulation; (2) carriers cross-subsidize their unprofitable service to rural towns with the excess profits on more profitable traffic allowed and facilitated by economic regulations; and (3) many small towns receive service only because the regulated carriers are fulfilling their common carrier obligation to serve.

A substantial amount of research on federal regulation of motor carriers has tended to refute or at least diminish the value of each of these premises. This research on Iowa, Kansas, Missouri and Nebraska provides some insights on the value of these premises in the context of state regulation of intrastate trucking.

This research on how Iowa, Kansas, Missouri and Nebraska regulate intrastate trucking did not directly address the profitability issue. Neither were carriers interviewed. The information collected from the regulatory agencies in how they actually administer state economic regulations of trucking, however, strongly suggests that carriers have the opportunity to adjust their level of service in all four states and probably their rates in three of the states to make their service profitable. As noted above, Kansas has no service obligations, and the other states have very general service obligations. The service obligations allow substantial amount of managerial discretion with respect to the quantity and quality of service (e.g., frequency of service) by motor common carriers. Iowa regulators reported that frequency of service is set by the carrier based upon the volume of freight moved from that specific point. Iowa regulators also suggested that carriers have the ability, under its current regulatory scheme, to charge higher rates to small communities through selective discounting to their shippers. In short, common carrier behavior required by the

service obligations are not distinguishable from profit-maximizing behavior with respect to various dimensions of quality and quantity of service. On the other hand, in Iowa, Missouri and Nebraska, the common carrier service obligation does require the motor carrier to serve all customers located at points on its operating authority. Thus, more is required of these carriers than what one would expect from unregulated profit-maximizing motor carriers.

These regulatory agencies have two basic mechanisms to promote trucking service to small, rural communities. First, the agency can enforce the common carrier obligation to serve, which apparently the common carriers in these states have as a quid pro quo for receiving operating authority. It does not appear, however, that any of these three states have adequate resources to enforce the service obligation to guarantee some type of trucking service by regulated carriers. The second mechanism for inducing carriers to serve rural communities is through the development of a cross subsidy scheme as implemented through rate regulation. Although this issue was not directly addressed in the interviews, Missouri regulators indicated that there are no efforts currently to require or encourage cross-subsidization. The essentially free entry policy in Kansas would not allow the regulatory agency to permit excess profits for carriers on their more profitable routes to cross subsidize their services to small communities. As noted above, shippers have very few complaints about service by intrastate motor carriers. Kansas regulators, in fact, indicated that shippers do not submit complaints about service failures since they know that there are other carriers that want their business.

Positive Impacts of Deregulation

Given the limited extent to which three of the states (Iowa, Kansas, and Missouri) actually regulate intrastate trucking, it is likely that most of the trucking firms providing intrastate trucking are behaving as unregulated profit-maximizing firms currently. Accordingly, a change in policy in three of these states to enact total deregulation is likely to have only a minimal effect on the behavior of the trucking firms. Thus, the significant benefits that researchers have projected if the states deregulate their intrastate trucking may not be realized in three of the four states--Iowa, Kansas and Missouri. This is not to suggest that savings would not be realized because of some efficiency gains due to changes in

both marketing and operations by for-hire and private carriers. The administrative cost savings, however, will likely be minimal since small staffs now exists and much of their time is allocated to cognate areas.

CHAPTER III REVIEW OF STUDIES OF INTRASTATE REGULATION AND DEREGULATION

A substantial literature exists on the effects of the economic regulation and economic deregulation of the motor carrier industry at the federal level. Although the examination of these studies on regulation and regulatory reform at the federal level can be useful to illustrate possible impacts of changes in the state regulation of intrastate trucking, studies on the effects of economic regulation and deregulation at the state level are more relevant and can provide more insights on the possible impacts of changes in state regulatory environments.

Over the last decade, several studies examining the effects of economic regulation and deregulation of trucking at the state level have been conducted. These studies have addressed a wide array of issues but have focused on the effects of regulation or deregulation with respect to rate levels, amount of discrimination among shippers, particularly between shippers of different sizes and locations (rural areas versus urban areas), and economic viability of carriers, and the quality and quantity of motor carrier service.

Fourteen studies primarily addressing the impacts of state economic regulation of intrastate trucking and fifteen studies addressing the effects of deregulation at the state level were identified and reviewed. The list of studies reviewed is not exhaustive but does provide the most significant research on the issue to date. A variety of research methodologies and several different states are represented by these studies. The purpose of this section is to provide a brief review of these studies with the results categorized with respect to carrier impacts, shipper impacts and miscellaneous impacts including the differential impacts on rural and urban shippers. Although limitations of selected studies are noted in the individual reviews presented in Appendices A and B, this review of the studies will not discuss the limitations and focus only on the basic findings.

Studies on the Effects of Regulation of Intrastate Trucking

Fourteen studies were reviewed (See Appendix A for the studies reviewed). Two studies were comprehensive in the sense that their approach involved most of the 48 contiguous states. Most of the studies focused on one state with five studies investigating the impacts in Texas and three studies examining the impacts of intrastate regulation in Oregon. Three other states--Minnesota, Ohio and Michigan--were the foci of three different studies. Of the studies indicating funding sources, four were supported by the U.S. Department of Transportation while the Texas Agricultural Experiment Station supported two of the projects addressing the issue in Texas. A variety of research methodologies were utilized, ranging from reviews of previous studies, to case studies, case analyses, and econometric modelling. These results of these studies will be reviewed in the context of three categories: impacts on carriers, impacts on shippers, and miscellaneous findings or impacts.

Impacts on Carriers

Seven of the studies directly addressed the issue of impacts of regulation on the motor carrier industry. The studies examining the effects of the regulations in Texas found that the state entry regulations made it difficult for firms, particularly new firms, to enter new markets (Pustay), and that profits appeared to have been enhanced given that the rates are in excess of costs (Schuster). One study involving Texas (Weinstein and Gross) and one involving Michigan (Morash and Wagenheim) found that traffic had shifted from regulated intrastate common carriers to unregulated private carriers or less regulated contract carriage. The study conducted in Michigan (Morash and Wagenheim) reported that market concentration had not been prevented by intrastate regulation.

Impact on Shippers

Eight of the studies directly examined the effects of intrastate regulation on shippers. Three of the studies examining the shipper impacts in Texas (Schuster; Fuller, Makus, and Lamkin; and Weinstein and Gross) concluded that rates tended to be higher than they would be under a deregulated environment. One study which focused on agricultural shippers in

Texas (Schuster) found that all of the agricultural shippers were hurt by regulation, with meat and poultry producers especially hurt. The other study focusing on Texas (Makus and Fuller) found no difference between the quality of service provided by regulated carriers and unregulated carriers based upon a survey of fruit and vegetable shippers. Loss and damage was the only service characteristic on which regulated intrastate carriers out performed unregulated intrastate carriers. The study conducted on the Michigan regulatory system (Morash and Wagenheim) found that interstate rates with discounts were lower than intrastate rates on more than 90 percent of the shipments. The interstate rate advantage was most prevalent on larger shipments involving longer hauls and lower rated commodities having greater product density. In a study of the Minnesota intrastate trucking regulatory system, more than 40 percent of the manufacturers found the results of rate regulation of intrastate carriers to be satisfactory and only 25 percent found them to be unsatisfactory. On the other hand, almost half of the grain elevators found rate regulation to be unsatisfactory. In a comprehensive study of the effects of intrastate trucking regulation (Allen, Preechemetta, Shao, and Singer), interstate rates were found to be lower in 20 of the 37 states analyzed. In the other 17 states, no statistically significant differences were found.

Miscellaneous Findings

Several of the studies estimated the costs to the state or nation of state regulation of intrastate trucking. The comprehensive study of 37 states (Allen, Preechemetta, Shao, and Singer) estimated the aggregate impact of state regulation in the 20 states in which intrastate rates were determined to be higher than interstate rates on comparable movements to be 2.863 billion dollars per year. One study of intrastate trucking regulation in Texas (Schuster) estimated that deregulation in that state would increase the incomes of agricultural producers by nearly 40 million dollars. Most of that income would be a transfer from the providers of the transportation service. In another study in Texas (Weinstein and Gross), the total annual burden of intrastate regulation to businesses and consumers was estimated to be one billion dollars. This study indicated that thousands of jobs in wholesaling and distribution have been relocated in states bordering on Texas because of the lower interstate trucking rates. The study of Michigan's intrastate trucking regulation (Morash and

Wagenheim) concluded intrastate regulation may actually deter producers from locating in the state. Furthermore, because of the competitive pressures from the less regulated interstate motor carriers, intrastate regulation has not been successful in protecting the state trucking industry in terms of employment. The two Oregon studies have substantially differing conclusions. One study (White) estimated the total costs of intrastate regulation to be more than 100 million dollars when transportation plus inventory costs are included in the estimate. The other study (Dolan) concluded that continued growth of the Oregon economy was in part dependent on intrastate regulation. This conclusion was based on a number of findings including that intrastate rates were lower than discounted interstate rates, regulation is needed to prevent loss of service to rural communities, and discrimination in rates and service to rural communities.

Studies on the Effects of Deregulation of Intrastate Trucking

Of the fifteen studies reviewed, eight involved an examination of the effects of the deregulation of intrastate trucking in Florida (See Appendix B for the studies reviewed). Arizona was addressed in three of the studies. California, which partially deregulated and then reregulated intrastate trucking during the 1980s, was the focus of two of the studies. South Dakota, which implemented substantial regulatory reform of intrastate trucking in the early 1980s, was examined in another study. Of the studies indicating funding sources, five were supported by the U.S. Department of Transportation, one by the American Trucking Associations, Inc., and one in part by the University of Kentucky. As in the studies of the effects of regulation of intrastate trucking, a variety of research methodologies were utilized in these studies. In several of the studies, surveys were used to obtain carriers' and shippers' views on the impacts of deregulation.

Impacts on Carriers

Eleven of the studies directly addressed the issue of impacts of deregulation on carriers by examining all or at least one of the following: effects on profitability, ratemaking practices, rate structures and service offerings. In several of the studies focusing on Florida

and Arizona (Freeman, 1982; and Freeman and Beilock, 1984)--which deregulated totally in 1980 and 1982, respectively--carriers surveyed indicated that deregulation had increased the amount competition they faced and that most of the increased competition came from new or out-of-state carriers. In one study (Freeman and Beilock, 1984), a majority of carriers in Florida indicated profit declines after deregulation. Nearly half of these carriers believed their depressed rates were due to deregulation. In two of the studies on the impacts of reductions in regulatory oversight in California (Frey, Krolick, and Tontz; and Frey, Krolick, Nidiffer, and Tontz), competition was found to have increased with a greater variety of rates being offered. A substantial number of carriers reported a decrease in their nominal rates. More carriers reported lower profits than higher profits after the regulatory change. Some carriers also reported delaying maintenance procedures and switching to their own employees for maintenance work.

Impacts on Shippers

Most of the studies addressing the shipper impacts of deregulation in Florida found that intrastate rates had decreased and services had either remained the same or improved for the majority of shippers. The studies using econometric models to measure the effect on rate levels in Florida concluded that deregulation resulted in lower intrastate rate levels. One study of the impacts in Florida (Bolten, Conn and Smith) found that the shippers had no change in their degree of satisfaction with the rates charged after deregulation compared with their satisfaction with rates charged before deregulation. In one study of the impacts in Arizona (Freeman and Beilock, 1984), a majority of shippers saw increased competition in the trucking industry but fewer service options. About 50 percent of the shippers did indicate an overall service improvement after deregulation. The two studies of the experiences after regulatory reform in California (Frey, Krolick, and Tontz; and Frey, Krolick, Nidiffer, and Tontz) reported increased shipper satisfaction with their motor carrier services and rates after deregulation. Many shippers faced decreases in nominal rates after deregulation. Twice as many shippers indicated that overall service had improved as the number of shippers reporting a decrease in service (measured by promptness and availability).

Miscellaneous Findings

The studies addressing the California experience (Frey, Krolick, and Tontz; and Frey, Krolick, Nidiffer, and Tontz) found that the large shippers, and shippers located in urban areas, received more of the benefits of regulatory change, in terms of both decreased rates and improved service, than did the small shippers and shippers located in rural areas. In the studies of Arizona and Florida (e.g., Beilock and Freeman, 1987), both large and small shippers were found to have been treated the same under deregulation, as were rural and urban shippers. Although shippers in urban areas might have received slightly larger discounts, service to small, rural areas was found not to have been eroded under deregulation in Florida or Arizona. Two studies (Winston, Corsi, Grimm, and Evans; and Allen, Berardino, Phillips, Preechametta, and Shao) estimated the annual benefits of deregulation of intrastate trucking to be 1.2 billion dollars (in 1977 dollars) and 2.7 billion dollars (in 1989 dollars), respectively.

Final Observations

The list of studies reviewed is not exhaustive but does contain almost all of the major studies of the impacts of either regulation of intrastate trucking or deregulation/regulatory reform at the state level. As noted, a variety of research methodologies have been employed in these studies. Texas has been studied the most to determine the effects of strict regulation, and Florida and Arizona have been the focus of investigations to determine the effects of deregulation. Although problems can be found with both the methodologies and samples used, the results tend to support certain conclusions. Clearly, for-hire carriers have felt increased competition as the result of deregulation which has resulted in lower rates and lower profit levels. Shippers overall have benefitted from the lower rates. Conclusions about service levels and differential treatment of rural and urban shippers are more difficult to infer from these studies. The estimate of the amount of the benefits in the form of lower rates resulting from deregulation depends upon the ability of the researcher to compare interstate rates and intrastate rates on similar movements. These studies, along with the increasing use of confidential, contract rates, suggest that more research on the data and

methodological requirements to solve this problem of determining the rates on comparable interstate and intrastate moves.

CHAPTER IV CONCLUSIONS

Both the examination of how economic regulation of intrastate trucking operations is actually administered in the states of Iowa, Kansas, Missouri and Nebraska and the review of studies on regulation and deregulation of intrastate trucking produced some general findings. The workshop generated more questions than answers. The examination of how economic regulation of intrastate trucking is actually administered found:

- much less economic regulation of intrastate trucking in Iowa, Kansas and Missouri exists now than existed in 1980,
- limited regulation of motor carrier service exists because of the lack of statutory standards, lack of staff, and/or because there are few complaints from shippers about motor carrier service, and
- members of regulatory staffs administering economic regulation of intrastate trucking are becoming increasingly involved in related areas such as safety regulation and registration.

Most of the studies on the effects of regulation of intrastate trucking and the impacts of deregulation at the state level found:

- deregulation of intrastate trucking reduced the profitability of those motor carriers providing intrastate service,
- shippers using intrastate trucking service have benefitted from deregulation due to the combination of lower rates and service at least equal to the level provided under regulation,
- although some evidence was found indicating shippers in urban areas gained more than shippers in small, rural communities, the differences in impacts on these two types of shippers were small and some studies found no differences, and
- The cost of maintaining economic regulation of intrastate trucking may be substantial.

The implications of these findings on developing the appropriate public policy with respect to regulation of intrastate trucking are not clear. Clearly, the fears that shippers in

small, rural communities will face higher rates and lowers level of service appear to be overstated. On the other hand, the fact that three of the four states examined have already reduced the degree to which they regulate intrastate trucking suggests that the significant benefits that some researchers have projected if states deregulated their intrastate trucking may be overstated. For these three states (Iowa, Kansas and Missouri) the administrative cost savings will likely be minimal since they have small staffs that are already involved in other administrative matters. In addition, the rates and service levels now being offered in these three states are likely to approximate those provided by unregulated profit-maximizing trucking firms.

ENDNOTES

- 1. See John D. Schulz, "Bush administration weighs in on latest push for truck deregulation," <u>Traffic World</u>, (April 6, 1992) pp. 21 and 23, and John D. Schulz, "Motor deregulation bill reintroduced; two TL carriers announce their support," <u>Traffic World</u>, (March 4, 1991) pp. 10-11.
- 2. Maze, Thomas H., Clyde K. Walter and Benjamin J. Allen, <u>The Changing Role of Freight Transportation Modes and Intermodal Freight</u>, Final Report, Midwest Transportation Center, (October, 1990).
- 3. Dennis A. Breen, and Benjamin J. Allen, "Common Carrier Obligations and the Provision of Motor Carrier Service to Small Rural Communities", Quarterly Review of Economics and Business, Vol. 20, No. 4 (Winter 1980), p. 90.
- 4. For current estimates of savings if all of the states deregulated intrastate trucking, see Bruce Allen, Arayah Preechemetta, Gang Shao, and Scott Singer, The Impact of State Economic Regulation of Motor Carriage on Intrastate and Interstate Commerce, Washington D.C.: U.S. Department of Transportation, (May, 1990).

APPENDIX A REVIEW OF STUDIES ON THE EFFECTS OF ECONOMIC REGULATION OF INTRASTATE TRUCKING

Allen, W. Bruce, Arayah Preechemetta, Gang Shao, and Scott Singer, <u>The Impact of State Economic Regulation of Motor Carriers on Intrastate and Interstate Commerce</u>, Washington, D.C.: U.S. Department of Transportation, May 1990. (Funding Source: U.S. Department of Transportation, Contract No. DOT-T-90-12)

PURPOSE OF STUDY:

To show the cost impact of the remaining motor carrier regulation in the states that still impose such regulation, as well as the impacts of such regulation on interstate commerce.

STATE(S) EXAMINED:

Most of the states still being regulated

RESEARCH METHODOLOGY:

The analysis links the standard economic welfare model of the benefits attributed to lower prices to consumers to the U.S. Multiregional Input-Output Model.

Motor carrier class rates for interstate and intrastate moves (allowing for discounts) were collected for the most common commodity categories in 37 states.

Differences between interstate and intrastate rates were then used as exogenous price changes for the input-output model. The input-output analysis enabled the examination of the impact of an exogenous price change on the economic system it models; a change in the price of transporting input M will change the price of M, and the price of N will change because it uses M, etc.

FINDINGS:

Impacts of Regulation on Motor Carriers

Not directly examined.

Impacts of Regulation on Shippers

Interstate rates were found to be lower in 20 of the 37 states analyzed--including Iowa. In the other 17 states, no significant differences were found. This may be because the latter states have liberal regulation or they use regulatory process to hold rates down.

Miscellaneous Findings

The aggregate impact on state regulation in NH, MA, RI, NY, PA, WV, GA, AL, MS, KY, IL, MN, IA, SD, OK, TX, NM, NV, WA, and LA is 2.863 billion dollars per year. Of that amount 2.252 billion dollars were in those states while the remaining amount of 611 million dollars was the impact on the remaining 31 states in the analysis. This suggests that the benefits side of federal preemption is 611 million dollars. The costs of federal preemption need to be estimated for comparison. Texas and Illinois accounted for 26.5 percent and 15.6 percent of the impact, respectively.

ADDITIONAL COMMENTS:

Some of the underlying assumptions and dates of the models used should be noted. The basic input-output model used is the 1977 version which reflects a substantially different economy.

The study provides important information on the amount of intrastate trucking. The study concludes that in terms of tonnage, approximately two-thirds of all truck tonnage of manufactured goods shipped in the U.S. is intrastate. That percentage would be lower if calculated in terms of ton-miles.

These percentages are presented by state. For the four states in Region VII, the percentages are (by one of several measures--for-hire): Iowa (20 percent), Kansas (31 percent), Missouri (19 percent), and Nebraska (20 percent).

Information is also provided on the size of state budgets for state economic regulation of trucking(Iowa--150,000 dollars, Kansas--650,000 dollars, Missouri--1,800,000 dollars, and Nebraska--200,000 dollars.

Beilock, Richard, and James Freeman, "Motor Carrier Perceptions of Intrastate Motor Carrier Regulations and Regulators." <u>ICC Practitioners' Journal</u>, Vol. 51, No. 3 (March-April, 1984), pp. 240-244. (Funding Source: None indicated)

PURPOSE OF STUDY:

To report the results of a telephone survey of trucking associations in the 48 contiguous states regarding the appropriateness and effectiveness of intrastate motor carrier regulation and administration.

STATE(S) EXAMINED:

All states

RESEARCH METHODOLOGY:

Survey method was used with limited statistical analysis.

FINDINGS:

Impacts of Regulation on Motor Carriers

Not directly examined

Impacts of Regulation on Shippers

Not directly examined

ADDITIONAL COMMENTS:

The study did not focus on the effects of regulation or deregulation on carriers, shippers, etc. It focused more on the perceptions of motor carriers about the quality of their regulatory agencies.

The major findings are that continued intrastate regulation is supported by the majority of associations and that almost 90 percent of the associations assess their regulatory agencies as doing at least an average job.

An ancillary survey of state agencies indicated that six states have eliminated (at the time of this study) or are moving toward elimination of economic regulation of trucking, 10 states are easing regulations in line with federal initiatives, 29 states are not changing, and two states are moving toward stricter regulations.

Poor enforcement is considered to be the biggest problem. In terms of entry, the principal concern is that new authority is too easy to obtain.

Major conclusion is that while a majority of associations support continued intrastate regulation, there is considerable dissatisfaction with various aspects of the rules and, especially, with the manner by which they are administered.

Dolan, Dick, <u>Benefits of Economic Regulation of Oregon Intrastate Motor Carriers</u>, Salem, Oregon: Oregon Public Utility Commission, November 1988. (Funding Source: None indicated but study prepared for the Oregon Public Utility Commission)

PURPOSE OF STUDY:

To respond to and refute the report prepared by Evan White which recommended that intrastate trucking regulation in Oregon be eliminated.

STATE(S) EXAMINED:

Oregon

RESEARCH METHODOLOGY:

The study essentially relied upon existing studies to support the view that intrastate regulation of trucking has few costs and substantial benefits.

FINDINGS:

Impacts of Regulation on Motor Carriers

Not directly examined

Impacts of Regulation on Shippers

Not directly examined

Miscellaneous Findings

Continued economic regulation of intrastate trucking is asserted to be important to the continued growth of the Oregon economy because of a number of factors including: (1) Oregon rate comparisons prove intrastate rates to be lower than the discounted level of published interstate rates; (2) rural areas do not receive adequate service and are the victims of rate discrimination in a deregulated environment; (3) the safety record of deregulated motor carriers is worse than that of regulated carriers, and (4) economic regulation enhances the state's ability to collect highway funds under its weight-distance tax.

A California study cited indicated that its deregulation experiment in the early 1980s had devastating effects to the industry and had impaired intrastate commerce. As a result California reinstituted rate regulation. West Virginia returned to traditional rate regulation in 1987 after a six-year experiment with deregulation.

ADDITIONAL COMMENTS:

No new research is actually reported in this report. Studies supporting the view of continued regulation are cited and those opposing that view are critiqued. Most of the study reviews the effects of deregulation at the interstate level.

Dolan's earlier study (pro-continuation of regulation at the intrastate level) published in August, 1987 is included in this report.

Several additional studies were identified in the study--one concerning Texas and one concerning California.

Fuller, Stephen, Larry D. Makus, and Jack T. Lamkin, Jr., "Effect of Intrastate Motor Carrier Regulation on Rates and Service: The Texas Experience." <u>Transportation Journal</u>, Vol. 23, No. 1 (Fall, 1983), pp. 16-30. (Funding Source: Texas Agricultural Experiment Station Project 3376)

PURPOSE OF STUDY:

To evaluate the impact of transportation regulation on the agricultural sector in Texas.

STATE(S) EXAMINED:

Texas

RESEARCH METHODOLOGY:

Data from secondary sources and primary sources (surveys) were used in the study. The rate component of the study used regression analysis with regulation as a dummy variable to determine impact. The service component used the Z-test to determine any significant differences.

Paper reports on research carried out to: (1) compare Texas regulated agricultural carrier and exempt interstate carriers carrier rates to identify any disparity in rate structures; (2) compare Texas agricultural shippers and receivers' perceptions of quality of service provided by the regulated and unregulated agricultural carriers to determine whether the regulated carrier provides superior service; and (3) compare small and large-volume shippers and receivers impressions of quality of service offered by the regulated and unregulated agricultural carrier to determine whether small-volume shippers perceive discriminatory service by the unregulated carrier.

FINDINGS:

Impacts of Regulation on Motor Carriers

Not directly examined

Impacts of Regulation on Shippers

Regulated intrastate rates exceed unregulated rates over comparable mileage for some Texas-produced commodities. Statistically significant differences were found for five of the nine categories. Some exceptions exist like cantaloupe which had lower regulated rates. The other three categories had mixed results depending upon distance, etc.

No difference was found in a survey of three Texas shipper groups (fruit and vegetable shippers, cattle feedyards, feed manufacturers) between the quality of service provided by regulated

carriers and unregulated carriers. Smaller firms had the same perceptions as those of the large firms regarding the quality of service (various dimensions examined). This result diminishes the argument that small shippers will be discriminated against in terms of quality of service.

Overall, these findings suggest that the dichotomy in agricultural motor carrier regulation may lead to geographical price discrimination against some in-state agricultural shippers and may unnecessarily increase marketing system costs.

Harper, Donald V., "Economic Regulation of For-Hire Trucking in the 1980s: The Case of Minnesota." <u>Transportation Practitioners Journal</u>, Vol. 52, No. 1 Fall, 1984), pp. 69-92. (Funding Source: None indicated)

PURPOSE OF STUDY:

To evaluate economic regulation of intrastate for-hire motor trucking by the State of Minnesota in the period from 1977 to the present (about 1983).

STATE(S) EXAMINED:

Minnesota

RESEARCH METHODOLOGY:

Twelve personal interviews were conducted among government officials, individual shippers, motor trucking companies, and shipper and carrier trade associations to provide background information. Mail questionnaires were sent to 50 manufacturers and 50 country grain elevators. The manufacturers ranged in size from about ten employees to more than 10,000 and were located in all parts of the state, including both urban and rural areas.

Specific aspects of economic regulation evaluated were entry control, rate regulation, the effect of regulation on the quality of service, the effect on the extent of use of for-hire motor truck transportation, the impact of regulation on the adequacy of information available to shippers, the enforcement of regulation, and the effect of regulation on the management of transportation by the shipper.

FINDINGS:

Impacts of Regulation on Motor Carriers

Not directly examined

Impacts of Regulation on Shippers

Most manufacturers thought the Public Utility Commission's entry policy was about right. Grain elevators were much more divided on the issue and were overall more critical. More than half of the manufacturers saw an increase in the number of regulated intrastate for-hire motor carriers available for them. Most of the grain elevators preferred deregulation because of the increase in efficiency. A plurality of the manufacturers saw benefits in rates and service with deregulation.

About half of the manufacturers thought rate regulation was satisfactory with the right amount control (not too restrictive and not too liberal). In contrast, almost half of the grain elevators thought that rate regulation was too restrictive.

Most of the manufacturers thought service was good and almost 80 percent of the manufacturers thought service had improved over the time period. Grain elevators were less positive.

Both manufacturers and grain elevators increased their use of private transportation with grain elevators using private transportation more frequently.

Most of the manufacturers thought they had adequate information on rates and services available but most received their information from sales people, not the regulatory system.

Although many shippers thought that enforcement of service and rate regulations was good, almost a fourth of the grain elevators said regulated rates were not being adhered to.

Overall evaluation of regulation: Forty-two percent of the manufacturers said the results (rates and entry) of regulation had been satisfactory, one-quarter said it not been satisfactory, and one-quarter did not know. Grain elevators were less enthusiastic about regulation. Almost one-half said it had not been satisfactory.

Miscellaneous Findings

The study does not make a clear case for continuance of the present system of economic regulation of motor truck transportation for manufacturers in Minnesota nor does it make such a case for its elimination or even reform. It does make a strong case for reform or elimination of regulation of truck transportation used by grain shippers.

The author notes, however, that the manufacturers would probably have had less support for continuance of regulation if the Public Utility Commission had not been so liberal in recent years and if the state DOT's enforcement of operating authority provisions and rates were more effective.

The author notes that economic regulation of for-hire intrastate motor trucking is to some extent a non-issue among manufacturers and country elevators, and thus there is no concerted effort to eliminate regulation. Carriers will not seek elimination. The trucking industry is strong politically in the state.

Makus, Larry, and Stephen Fuller, "Motor Carrier Regulation and Its Impact on Service: An Analysis of Texas Fresh Fruit and Vegetable Shippers." <u>Southern Journal of Agricultural Economics</u>, Vol. 15, No. 2 (December, 1983), pp. 21-26. (Funding Source: Texas Agricultural Experiment Station)

PURPOSE OF STUDY:

To evaluate the impact of transportation regulation on the agricultural sector in Texas.

STATE(S) EXAMINED:

Texas

Research Methodology:

Paper reports on research carried out to: (1) compare Texas agricultural shippers and receivers' perceptions of quality of service provided by the regulated and unregulated agricultural (interstate) carriers to determine whether the regulated carrier provides superior service; and (2) compare small and large-volume shippers and receivers impressions of quality of service offered by the regulated and unregulated agricultural carriers to determine whether small-volume shippers perceive discriminatory service by the unregulated carriers.

Data from surveys were used in the study. Surveys were sent to 116 Texas firms involved in shipping fresh fruits and vegetables. These firms represent about 95 percent of all shippers. Fifty-five responses were returned. Questions addressed 14 characteristics of service and eight different items about possible effects of deregulation were examined. The sample was split into large and small shippers to address the issue of discriminatory service. The service component used the Z-test to determine any significant differences.

FINDINGS:

Impacts of Regulation on Motor Carriers

Not directly examined

Impacts of Regulation on Shippers

No difference was found in a survey of shipper groups (fruit and vegetable shippers) between the quality of service provided by regulated carriers and unregulated carriers. Loss and damage was the only characteristic of service which indicated better treatment by regulated carriers.

Smaller firms had the same perceptions as those of the large firms regarding the quality of service (various dimensions examined). This result diminishes the argument that small shippers will be discriminated against in terms of quality of service.

Overall, these findings suggest that the dichotomy in agricultural motor carrier regulation may lead to geographical price discrimination against some in-state agricultural shippers and may unnecessarily increase marketing system costs.

Shippers also thought that changing to a deregulated environment would improve the quality of service.

Morash, Edward A., and George D. Wagenheim, "State Regulation of Motor Carriers in a Deregulated Transportation Environment." <u>Transportation Journal</u>, Vol. 30, No. 3 (Spring, 1991), pp. 39-56. (Funding Source: None indicated)

PURPOSE OF STUDY:

To examine the effects the changes in the Federal regulations of motor carriers will have on state attempts to continue regulating intrastate transportation markets and what the effects might be on the state economies.

STATE(S) EXAMINED:

Michigan

RESEARCH METHODOLOGY:

The authors review some of the classic location models literature and more applied literature to determine the importance of transportation as a factor in location of plants, etc.

To address the major research question as to the relationships between interstate deregulation and state regulation of intrastate transportation, four steps were taken which focused on an intensive investigation of a major border state (Michigan). First, "matched city pair" methodology was employed with a large segmented sample to compare rates for interstate shipments with intrastate rates for similar or "matched" shipments. The second phase investigated the status and condition of intrastate carriers over time relative to interstate carriers operating in the same market in terms of numbers and types of carriers, equipment utilization, and industry performance. The third phase attempted to measure the likely transportation savings from future state deregulation proposals. The final phase utilized a computerized regional economic model to simulate the impact on the state's economy of any deregulation savings identified in the previous phase.

FINDINGS:

Impacts of Regulation on Motor Carriers

Intrastate carriage has maintained or declined in an industry that has grown substantially over the same time period. There has been a shift away from common carriage to contract and common restricted (a type of common carrier) within the intrastate category. Intrastate regulation has not prevented market concentration from increasing in the intrastate trucking industry.

Impacts of regulation on Shippers

Based upon comparisons of interstate and intrastate rates on similar movements with different sizes, etc. totaling to 3,000 rates, interstate rates were lower than intrastate rates in slightly more than 25 percent of cases before discounts, and after relevant discounts, interstate rates were lower than comparable intrastate rates in over 92 percent of shipment cases. Rate differentials range from a few cents per 100 pounds to over five dollars per 100 pounds or a differential in transportation charges of approximately 50 percent. Interstate carriers have a particular rate advantage over intrastate rates for longer hauls, for lower rated commodities that have greater product density, and for larger shipments.

Transportation savings of 86.6 million dollars annually were calculated. This amount reflects 20 percent of the present total intrastate revenues.

Miscellaneous Findings

Intrastate regulation may actually deter producers from locating in a state. The relatively greater decline of trucking employment suggests that intrastate trucking regulation has not been successful in protecting the state trucking industry in terms of employment.

A 20 percent drop in rates would result in about 1,300 new jobs and 36 million dollars more in personal income in 1990 and 2,700 new jobs and 162 dollars million (current dollars) in personal income by the year 2000.

Newly established companies, smaller than the established but most important in terms of providing economic growth for states, will likely be most adversely affected by intrastate regulation since they are likely to be faced with class rates.

Interstate deregulation has created insurmountable difficulties for state attempts at regulating intrastate motor carriage and has placed both state carriers and transportation users at a competitive location disadvantage relative to potential locations in other states.

McMullen, B. Starr, and Philip Schary, "Intrastate Regulation and Interstate Motor Carriers." Proceedings of the Annual Meeting of the Transportation Research Forum, Vol. XXVII, No. 1 (1986), pp. 193-197. (Funding Source: None indicated)

PURPOSE OF STUDY:

To determine empirically whether continued intrastate regulation can achieve higher rates and profit than would be possible in a less regulated environment in the presence of a less regulated interstate market.

STATE(S) EXAMINED:

Oregon

RESEARCH METHODOLOGY:

A case study approach was used on trucking firms in the state of Oregon for the years 1979-1984. Oregon Public Utility Commission (PUC) data were used. The Oregon PUC practices the traditional regulation of trucking although in recent rate cases it has started comparing Oregon intrastate rates with intrastate rates in other states and interstate rates. Data for about 30 carriers were gathered for a total sample of 185 observations for the pooled data set. Revenue per ton-mile was used as the dependent variable for rates. Variables were added to the equation to account for different types of service. To capture the differential impact of intrastate regulation on rates, the variable which divided Oregon tons by the total tons carried by the firm was included in the equation. Operating profit per ton-mile was used as the profitability measure.

FINDINGS:

Impacts of Regulation on Motor Carriers

The variable for indicating the degree of traffic carried within the state of Oregon was found to be significant and had a positive coefficient. This meant (tentative evidence) that intrastate regulation allowed carriers to obtain higher rates on intrastate than on comparable interstate traffic.

With respect to cost, the same variable in the cost function again had a positive coefficient and was significant meaning that Oregon intrastate regulation increased cost significantly.

Finally, the coefficient of the same variable in the profit function was negative, meaning that Oregon state regulation, while successful in elevating rates, is not able to maintain profits for intrastate carriers in the present regulatory structure.

Impacts of Regulation on Shippers

Not directly examined

Miscellaneous Findings

If the goal of state regulation is to insure service to small communities, it may be possible to design programs specifically aimed at service to small communities without the harmful effects of existing regulatory policies.

Pustay, Michael W., "Intrastate Motor Carrier Regulation in Texas." <u>The Logistics and Transportation Review</u>, Vol. 19, No. 2, (1983), pp. 141-162. (Funding Source: U. S. Department of Transportation, Contract No. DTRS-5680-C-0006)

PURPOSE OF STUDY:

To describe the current state of regulation in Texas. In addition, to discuss the policy of the Texas Railroad Commission with respect to promoting service to small communities.

STATE(S) EXAMINED:

Texas

RESEARCH METHODOLOGY:

Descriptive study of the institutions involved in regulating intrastate trucking in Texas. Data on entry regulations and on carriers serving small communities in Texas, and in South Dakota, Ohio and Florida were also collected to determine the degree to which Texas' highly regulated system promotes small community trucking service.

FINDINGS:

Impacts of Regulation on Motor Carriers

Entry into the general commodity segment of the industry is difficult, based upon the number and nature of entry applications approved by the commission in Texas. New firms are less successful than existing firms in seeking new markets through market expansion.

Carriers were able to exit markets very easily. They did have to file for a voluntary suspension of service.

Carriers seeking new markets in the contract carrier area or the specialized commodity carrier area were more active and successful than carriers in the general commodity area.

Impacts of Regulation on Shippers

Shippers in small communities were found to have fewer carriers serving them than small community shippers did in the three comparison states of Florida, Ohio and South Dakota.

Small community service appears to be profitable given that carriers invest the time and money to petition the commission to gain entry into these markets, plus they pay for operating routes to serve these small communities.

The complaint system used by the Texas commission works reasonably well. Once a complaint is received, the staff appears able to obtain satisfaction for wronged shippers.

Miscellaneous Findings

The evidence does not support the view that cross-subsidization of small community service is practiced in Texas. As noted above, comparisons with other states with various degrees of economic regulation do not support the view that cross-subsidy results from Texas' regulation of intrastate trucking.

ADDITIONAL COMMENTS:

The study provides a good overview of the nature of the Texas system of regulating intrastate trucking. The Texas system, which includes the commission actually setting rates, not simply approving them, and where hearings on rates and entry are held even in cases where no protests are filed, is considered to be one of the most restrictive systems in the country.

Pustay, Michael W., "Regulation of the Intrastate Motor Freight Industry in Ohio." <u>ICC Practitioners' Journal</u>, Vol. 50, No. 4 (May-June, 1983), pp. 415-432. (Funding Source: U.S. Department of Transportation, Contract No. DTRS-5680-C-00006)

PURPOSE OF STUDY:

To describe the current state of regulation in Ohio as a means of filling the void in the literature regarding intrastate motor freight regulation. The study will provide information useful to researchers wishing to develop comparative analyses of the impacts of regulatory reforms at the federal level and in other intrastate jurisdictions.

STATE(S) EXAMINED:

Ohio

RESEARCH METHODOLOGY:

The research is descriptive in nature and relies on case law and data provided by the Ohio Public Utility Commission. No survey data were gathered.

FINDINGS:

Impacts of Regulation on Motor Carriers

Carriers are free to compete through the use of price, and they often do. The burden of proof in a rate reduction case is on the commission to demonstrate that the rate change is undue, unjust, or discriminatory. The existing case law makes it difficult for the commission to demonstrate that a rate reduction is illegal.

Entry policies are very restrictive especially with respect to general commodity carriers. A certificate of public convenience and necessity is required. Protests are common. Most awards are for small routes.

Impacts of Regulation on Shippers

Not directly examined

Miscellaneous Findings

It appears that carriers are willing to provide intrastate service to small communities. Carriers have petitioned the commission for rights to serve small communities and have paid for certificates to serve small communities.

No coercion or cross-subsidization is practiced by the commission. Small community service is viewed as profitable by motor carriers serving them.

ADDITIONAL COMMENTS:

This article provides a good review of the nature and state of economic regulation of intrastate trucking in Ohio at the time period described.

Schuster, Allan, D., "The Effects of Intrastate Motor Carrier Regulation Upon the Texas Agricultural Industry." <u>Proceedings of the Annual Meeting of the Transportation Research Forum</u>, Vol. XXIV, No. 1 (1983), pp. 461-472. (Funding Source: None indicated)

PURPOSE OF STUDY:

To determine the economic impact upon Texas agricultural producers of the economic regulation by the State of Texas of intrastate agricultural transportation movements.

STATE(S) EXAMINED:

Texas

RESEARCH METHODOLOGY:

A comparison was made between the costs which should have been incurred and the prices paid for specific transportation movements, in both intrastate and interstate environments, to determine any cost penalty which might exist from the current system of regulation of intrastate trucking in Texas. In addition, transportation movement strategies were hypothesized which would typically occur if the movements of agricultural products were exempt from regulation. This allowed the estimation of the total economic impact on producers.

Major producers were contacted to determine a list of agricultural commodities and traffic lanes on which significant movements are made. Long, medium and short haul movements were included. Three Texas Railroad Commission tariffs were used: one for animals and animal feeds, one for fresh fruits and vegetables, and one for chill-pack poultry. The rates contained in these tariffs were compared with the revenue needs of the specialized carriers now serving producers in Texas, and also were compared with the more efficient owner-operators that tend to provide this service in other jurisdictions.

FINDINGS:

Impacts of Regulation on Motor Carriers

Profits appeared to have been enhanced given that the rates are substantially in excess of the revenue needs. Profits were about 80 percent higher than revenue needs in the case of chilled poultry. The greatest difference is in the less than 300 mile shipment or the most likely intrastate shipment.

Owner-operators would get most of the traffic if this type of traffic was removed from economic regulation.

Impacts of Regulation on Shippers

Shippers would benefit if owner-operators were allowed to carry their commodities which would happen under deregulation. All of the agricultural producers are hurt but those producing meat and poultry are especially hurt.

Rates are much higher than they would be under deregulation.

Miscellaneous Findings

Meat and poultry shippers in neighboring states were abetted by the high intrastate rates.

The total cost (penalty) resulting from regulation is estimated to be about 38 million dollars in 1981. This reflects about 40 percent of the amount agricultural producers paid for the transportation of agricultural products and about 4 percent of total income of all Texas agricultural producers.

Cost penalties result from both inefficiency costs and costs arising due to resource misallocation. The higher costs due to inefficiency results from restrictions in the operating authorities, the commission's using costs supplied by the carriers in rate cases, and shifting of some of the costs from their interstate operations to the intrastate side to justify the higher rates. The misallocation results from too little being transported by owner-operators and too much by private carriers due to the lack of options.

There is an income transfer from the agricultural shippers to the providers of the transportation service. It has also caused an income transfer between various components of the trucking industry with the specialized carriers receiving most of the income transfer and owner-operators, normal common carriers, and private carriers losing on the transfer.

U.S. Department of Transportation, <u>Impact of State Regulation on the Package Express Industry</u>, September, 1990.

PURPOSE OF STUDY:

To respond to Section 341 of the 1990 DOT Appropriations Act which requires the Department of Transportation to undertake a study of the impact of state regulation on the rates, routes, and services of the package express industry.

STATE(S) EXAMINED:

All states

RESEARCH METHODOLOGY:

This study was based on the analysis of findings and methodologies from other studies. No new research was conducted.

The study included four components. First, how the individual states regulated intrastate trucking was examined. Second, seven express package carriers and their trade associations, which represent three different modes of transportation and account for a substantial majority of the industry total output, were interviewed. Third, other studies of the impacts of trucking regulation were reviewed. Fourth, alternative research methodologies were explored.

FINDINGS:

Impacts of Regulation on Motor Carriers

The study identified six areas in which state regulatory policy has increased industry cost: (1) entry regulation, (2) rate regulation, (3) operating restrictions, (4) enforcement, (5) potential enforcement problems, and (6) regulatory instability.

Entry regulation: This type of regulation has forced some carriers to spend substantial amounts of money and time to obtain permission to enter markets, has kept some carriers out of certain markets, and has forced carriers to operate inefficiently.

Rate regulation: There are filing costs and costs associated with regulatory lag.

Operating Restrictions: Weight restrictions can limit the type of packages that can be handled by the carrier.

Enforcement: State searches of vehicles to determine if there are any intrastate packages on the truck disrupt the carriers' operations.

Potential enforcement problems: Problems could be created for express carriers operating warehouses for spare parts, for example.

Regulatory instability: A number of states have recently vacillated on their regulatory policy which creates problems.

Impacts of Regulation on Shippers

Not directly examined

Miscellaneous Findings

The U.S. DOT developed eight policy options for consideration ranging from doing nothing to enacting a bill now in Congress which would deregulate all trucking and preempt state regulation.

ADDITIONAL COMMENTS:

The study provides good information on the amount of state regulation now practiced and on the express industry. Much of the regulatory reform has already taken place in the form of deregulation of air-truck service, liberal regulation of interstate movements, and liberal regulation of interstate bus service. Information is provided on the amount of interstate and intrastate express shipments. Each state's regulatory policy and programs are very briefly reviewed and categorized as moderate or strict. The amount of intrastate package service in terms of revenue is also provided.

Weinstein, Bernard L., and Harold T. Gross, "Transportation and Economic Development: The Case for Reform of Trucking Regulation in Texas." (unpublished) Center for Economic Development, University of North Texas, February, 1987. (Funding Sources: None indicated)

PURPOSE OF STUDY:

To discuss problems and policy options related to the tightly regulated intrastate trucking industry in Texas. The emphasis is on the impacts of regulation on economic development in Texas.

STATE(S) EXAMINED:

Texas

Research Methodology:

Published data on the intrastate motor carrier industry, rates by interstate and intrastate movements, and economic arguments are used to estimate the impact of the regulation of intrastate trucking on the trucking industry, shippers using truck, and on economic development of Texas. Anecdotal evidence is used to show negative impact of intrastate regulation.

FINDINGS:

Impacts of Regulation on Motor Carriers

More private trucking fleets are used because of the high costs of using common and contract carriers. A higher percentage of companies operate their own fleets in Texas than in most other states. Restrictions on backhauling in Texas cause a large number of trucks to be on the road.

Impacts of Regulation on Shippers

Slightly more than half the shippers surveyed identified shipping costs as the second most critical factor affecting their company's performance, after product demand. Nearly three-fourths of the respondents reported that the price-competitiveness of their products was affected adversely by the differential between intra- and interstate shipping rates.

Interstate rates for similar moves were lower in almost all cases when the discounted interstate rate was used in the comparison.

"A conservative estimate" is that the current direct burden of intrastate trucking regulation on Texas' businesses and consumers is about one billion dollars annually if one assumes intrastate rates are 30 percent higher than they should be.

Miscellaneous Findings

Foregone state and local revenue from an overly-regulated trucking industry is conservatively estimate to be about 230 million dollars per year.

Current practice of the Texas Railroad Commission (TRC) in requiring applicants to demonstrate "inadequacy" on the part of existing carriers as a condition for a route approval should be dropped. The relaxation of economic regulation should be accompanied by more stringent safety regulation and inspections for both existing and new carriers.

White, Evan D., <u>Economic Regulation of Oregon Intrastate Trucking</u>: A <u>Policy Evaluation</u>, Salem Oregon: Oregon Public Utility Commission, November, 1988. (Funding Source: None indicated)

PURPOSE OF STUDY:

To examine the need and costs of continued regulation of intrastate trucking by the Oregon Public Utility Commission (PUC) and the potential benefits if Oregon deregulated.

STATE(S) EXAMINED:

Oregon

RESEARCH METHODOLOGY:

The study relied upon published studies of related issues.

FINDINGS:

Impacts of Regulation on Motor Carriers

Not directly examined

Impacts of Regulation on Shippers

Not directly examined

Miscellaneous Findings

Arguments against deregulation are examined with the following results:

Economic regulation is not needed to prevent monopolistic pricing because trucking is one of the most competitive industries with low entry costs. Economic regulation is not needed to prevent destructive competition because of the lack of entry barriers. Economic regulation is not needed to prevent "unjust discrimination" because shippers have alternatives and, in fact, regulation increases or at least facilitates discrimination by reducing the competitive alternatives and sanctioning cartel ratemaking. Economic regulation does not assure small community service based upon findings that small community service was not subsidized under interstate regulation and that regulation actually reduces the options available to small community shippers. Economic regulation does not assure trucking safety, based upon finding that trucking safety has improved over the last ten years at the interstate level.

Two levels of costs of maintaining economic regulation are provided. One level (ten to 20 million dollars per year) is based upon the estimated administrative costs from the government's

perspective and the shippers and carriers, plus the inefficiencies associated with empty backhauls and underloaded vehicles by private and exempt carriers. The second level (100 million dollars per year) is based upon an assumed 2 percent decrease in Oregon's five billion dollors annual logistics costs (transportation plus inventory). This is based upon the Delaney study of the effects on logistics costs of interstate deregulation.

Oregon regulation has benefitted established carriers and a small segment of organized labor--at the expense of consumers and workers in other Oregon industries.

Pro-competitive reform policies should be adopted for all segments of the Oregon trucking industry. Pricing freedom should be granted consistent with the removal of entry barriers and operational restrictions, and the withdrawal of antitrust immunity.

ADDITIONAL COMMENTS:

No new research was undertaken in this study. It relies upon completed studies and some assumptions of how they apply to the Oregon situation.

The study provides a good description of the Oregon trucking industry and the nature of the regulation in Oregon (traditional ICC regulation). The study notes that compensated intercorporate hauling is not allowed as it is at the federal level and single source leasing is not allowed.

APPENDIX B REVIEW OF STUDIES ON THE EFFECTS OF REGULATORY REFORM OF INTRASTATE TRUCKING

Allen, W. Bruce, Frank J. Berardino, Joseph Phillips, Arayah Preechameta, and Gang Shao, "Measuring the Impact of Intrastate Deregulation of Motor Carriage on the States." <u>Journal of the Transportation Research Forum</u>, Vol. XXX, No. 2 (1990): pp. 406-414. (Funding Source: None indicated)

PURPOSE OF STUDY

To address the question: "What would be the benefits, from the view of intrastate commerce, of deregulating the states which currently are practicing strict entry and strict rate regulation?

STATE(S) EXAMINED:

37 regulated states

RESEARCH METHODOLOGY:

The paper attempts to measure only the intrastate impacts of the benefits--not the interstate impacts. The analysis combines the welfare trapezoid measure of societal welfare of Posner with the price model of input-output analysis.

In the spring of 1987, class rates for interstate and intrastate moves were collected for all classes 50 through 150, for all weights, and for all states except those deregulated plus Hawaii, Montana, and Wyoming. States were grouped into two categories. In one group, rates were collected for triads with one common point in the state to two different destinations of equal distance and size but one in-state and one out-of-state. In the other, no common point was made but simply destinations of equal distance with no accounting for size. Discounts were applied to both interstate (40 percent) and intrastate (varied from 0 to 47.5 percent). A regression was run for each state for intrastate rates and for interstate rates for a variety of classes and weights.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Not directly examined

Impacts of Regulatory Reform on Shippers

Not directly examined

Miscellaneous Impacts

Impact of state regulation aggregates to 2.7 billion dollars over all sectors in the 20 states where intrastate rates were higher than interstate rates. Texas contributed 34.1 percent of this total and Illinois contributed 22.3 percent. Both states are heavily regulated (de jure and de facto) and are states with large intrastate traffic bases. The major economic sectors that would benefit from further deregulation would be: grain mill products, other food products, motor vehicles and parts, other transportation and utilities, and services.

States with losses due to intrastate regulation are: AL, GA, IL, IA, KY, LA, MA, MN, MS, NV, NH, NM, NY, OK, PA, RI, SD, TX, WA, and WV.

Among the other 17 states, some are states which are de facto loose in their regulatory structures, e.g., Maryland. Others would be characterized as tough regulatory states, e.g., Nebraska. The authors conjecture that these states are pro-consumer, shipper states and depressing rates.

An argument for federal preemption of state regulation is supported.

ADDITIONAL COMMENTS:

Some of the underlying assumptions and dates of the models used should be noted. The basic input-output model used is the 1977 version which reflects a substantially different economy.

Allen, W. Bruce, Steven Lonergan and David Plane, <u>Examination of the Unregulated Trucking Experience in New Jersey</u>, Washington D.C.: U.S. Department of Transportation, December, 1979. (Funding Source: U.S. Department of Transportation, Contract: DOT-OS-70064)

PURPOSE OF STUDY:

To give a profile of the intrastate motor carrier industry in the state of New Jersey and to examine various explanations concerning rate behavior, service levels, carrier types, etc., in regulated versus unregulated environments.

STATE(S) EXAMINED:

New Jersey

RESEARCH METHODOLOGY:

Surveys of shippers and carriers, large and small firms in both categories, were conducted. The survey included questions about rates, service, and perceptions about the desirability of deregulation.

A significant portion of the study involved interviews with traffic managers. Four hundred fifty-four large firms (250+ employees) and 276 small firms (20 to 249 employees) were sent surveys.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Attempts were made to contact 735 carriers identified as carriers based in New Jersey (hard to do because of lack of data due to no regulation). Of these, 416 completed the telephone survey, 14 returned written questionnaires.

Eighty-one percent of the respondents of the survey held ICC certificates or permits and 19 percent were non-ICC certificated carriers.

ICC certificated carriers serving New Jersey were larger and older than the non-ICC certificated firm.

The non-ICC regulated carriers exhibited lower operating ratios than the ICC firms. Explanations of this lower operating ratio include non-union status and the selectivity which they use over traffic handled.

ICC-carriers and non-ICC carriers exhibited very similar results in terms of percent of operations LTL vs. TL.

Forty-five percent on non-certified and almost 70 percent of the certified carriers utilize the Middle Atlantic Conference (MAC) tariff in setting rates.

Two types of carriers were found--those that actively seek intrastate business (primarily the non-certified carriers and smaller, regionally oriented certified carriers) and those that are involved with intrastate trucking only as an "offshoot" of their interstate business (such as larger, nationally oriented carriers). The latter group is involved only nominally in intrastate hauling and usually holds strictly to MAC rates.

Fifty-seven percent of all carriers favored no more regulation within New Jersey. Nearly 50 percent of the ICC certificated carriers thought entry into the field was difficult which was surprising to the researchers.

Impacts of Regulatory Reform on Shippers

A very high percentage of all New Jersey generated traffic is interstate. The percentage of intrastate traffic is higher for smaller shippers and more LTL oriented. Most shippers used both New Jersey and ICC carriers.

Lower rates were being paid for shipments in the unregulated New Jersey environment than for comparable interstate shipments. Mean savings ranged from 9.7 percent to 15.2 percent for large shippers and 8.5 percent to 11.4 percent for small shippers.

The level of service was consistently rated excellent by shipping firm traffic managers, with 97 percent of all shippers contacted reporting the service to be as good as or better than the interstate service they receive.

Almost all shippers wanted to maintain the unregulated environment although they were somewhat split on the desirability of full or partial deregulation.

Miscellaneous Impacts

The New Jersey regulatory scheme, that is, no regulation, works. Both larger and smaller shippers benefit with lower rates and better service.

Beilock, Richard, and James Freeman, "Carrier and Shipper Perceptions of Motor Carrier Deregulation in Florida." <u>Proceedings of the Annual Meeting of the Transportation Research Forum</u>, Vol. XXIII, No. 1 (1982), pp. 250-257. (Funding Source: None indicated)

PURPOSE OF STUDY:

To see if deregulation of intrastate trucking in Florida was a success or a failure and to see if the results offer insights into the desirability of adopting such measures in other states or at the federal level.

STATE(S) EXAMINED:

Florida

RESEARCH METHODOLOGY:

Three groups were surveyed in May, 1981: (1) shippers--320 questionnaires with 160 returned, (2) for-hire carriers (both common and contract)--154 questionnaires with 98 responses, and (3) private carriers --166 questionnaires sent with 52 responses. Each carrier had to be in business before and after 1980.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

About half of the carriers preferred regulation. Only ten percent of the private carriers preferred regulation.

Only about 40 percent thought that deregulation had been responsible for reduced profits.

About a third of all carriers indicated rate reductions had occurred since deregulation.

About a half of the carriers (and 80 percent of the household goods carriers) indicated that they have altered their methods of setting rates. Many of these indicated that discounts were being offered after deregulation. A variety of methods were now being used, including cost based, to meet competition, based on rate bureau level, or across-the-board rate increases.

Those favoring deregulation were less apt to be using the traditional methods of setting prices. Household goods carriers increased the amount of price discrimination.

Impacts of Regulatory Reform on Shippers

Only ten percent percent of the shippers preferred regulation. About 60 percent thought that rates had been lower due to deregulation. About a third of the shippers indicated that they had received special deals in rates since deregulation.

More shippers indicated service improvements than indicated service declines. Small shippers were found to have a few more problems in the service areas than the large shippers and also had fewer opportunities for rate discounts. Overall, however, there was not much difference in the treatment of the two groups.

Miscellaneous Findings

Eighty percent of the for-hire carriers thought competition had increased. About half of the shippers and private carriers thought competition had increased.

Service levels to small communities and rural areas had not eroded. Actually a higher percentage of shippers in the rural areas were offered discount rates and better service after deregulation.

Although there are a lot of qualifications due in large part to the brief amount of time between deregulation and the time of the survey, the authors concluded that overall deregulation has been a success and should serve as a positive example to other states and to the federal government in their deliberations regarding deregulation.

Beilock, Richard, and James Freeman, "The Effect on Rate Levels and Structures of Removing Entry and Rate Controls on Motor Carriers." <u>Journal of Transport Economics and Policy</u>, Vol. XXI, No. 2 (May, 1987), pp. 167-188. (Funding Source: None indicated)

PURPOSE OF STUDY:

To examine the impacts of intrastate deregulation in Arizona and Florida on the prices paid for motor carrier service.

STATE(S) EXAMINED:

Arizona Florida

RESEARCH METHODOLOGY:

Six hypotheses tested (if deregulated):

- 1. Overall rates will fall because of increased competition due to free entry.
- 2. Rates per mile will fall due to improved load factors.
- 3. Cargo-based rate differentials will lessen due to loss of rate discipline from collective ratemaking.
- 4. Rate differentials based on shipment size will increase due to the elimination of regulator's ability to moderate this.
- 5. Urban-rural rate differentials will increase due to (see 4).
- 6. Rates will become more variable due to elimination of rate review process.

The sample time period for Arizona was January, 1980 to October, 1984, and for Florida, January, 1979 to October, 1984.

Twelve traffic lanes in Arizona and twenty lanes in Florida were selected.

Rate information for Arizona included rates for 19 large and midsize carriers and for Florida, rates for the four largest intrastate carriers (which carried 75 percent of traffic) were used.

Hypotheses 2 through 5 were examined by use of reduced form model to explain rates. Variables were included that attempted to capture the route convenience factor. Hypotheses 1 (average rate levels) and 6(rate variability) were addressed by comparing intrastate rates with corresponding interstate rates.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Study looked at rates only.

The rate equations are highly significant, and each explains three quarters or more of the variation in rate levels.

Hypothesis 1 - average rates

Strong evidence that deregulation resulted in lower rate levels. Average intrastate rate levels were lower on most routes after deregulation and all dropped relative to interstate rates after deregulation.

Hypothesis 2 - rates per mile

After deregulation the rate-distance gradient in Arizona became 33 percent lower. No shift downward took place in Florida but its rate-distance gradient was 20 percent lower than it was in Arizona post-deregulation. The results are consistent with, but do not prove, increased efficiencies.

Hypothesis 3 - rate differentials based on cargo value

Contrary to the authors' expectations, little or no change took place in rate differentials. They note that recent theoretical research indicates that price discrimination structures may exist after collective ratemaking because of several factors including imperfect information.

Hypothesis 4 - rate differentials on shipment size

Contrary to expectations of increased premiums on small shipments due to less competition and perceived cross-subsidy, the premium paid for small shipments decreased in both states-significant decreases of five to six percent. The results suggest that there was no cross-subsidy before deregulation in either state.

Hypothesis 5 - rate differentials based on the remoteness of route

In Arizona, the premium paid for remote service decreased sharply since deregulation—a premium was paid before deregulation. No cross-subsidy existed unless rural to urban. In Florida, no appreciable change took place since deregulation; before deregulation, these remote areas commanded lower rates. There is some difficulty in explaining these findings but no area is far from interstate or turnpike and premiums were paid possibly by urban shippers because of traffic congestion.

Hypothesis 6 - rate variability

In Arizona, reductions in both the frequency and the size of rate changes occurred. In Florida, the average size of the rate changes fell since deregulation but the frequency has increased.

Impacts of Regulatory Reform on Shippers

Not directly examined

Miscellaneous Impacts

Under a wide range of conditions, motor common carrier regulations can be removed with largely salutary effects on rates and without injuring those groups (small shipment shippers and rural areas).

ADDITIONAL COMMENTS:

This article appears to be based upon the work done by Beilock and Freeman under DOT contract no. DTRS-5683-C-00032.

Beilock, Richard, and James Freeman, <u>The Impact of Motor Carrier Deregulation on Freight Rates in Florida and Arizona</u> (Final Report). Washington D.C.: U.S. Department of Transportation, April, 1985. (Funding Source: U.S. Department of Transportation, Contract: DTRS-5683-C-00032)

PURPOSE OF STUDY:

To gain additional evidence on what happens to motor carriage when regulations are removed by focusing on what has happened to rates in the pre-and post-deregulation time periods.

STATES(S) EXAMINED:

Arizona Florida

RESEARCH METHODOLOGY:

Three levels of analysis were used: graphical, statistics developed via univariate analysis, and multivariate analysis. The statistics highlighted rate levels and the stability of rates in the preand post-deregulation periods. Interstate rates were employed for both comparison and control.

The sample time period for Arizona was January, 1980 to October, 1984, and for Florida, January, 1979 to October, 1984.

Twelve traffic lanes in Arizona and twenty traffic lanes in Florida were used. Ideally, traffic lanes running from urban to urban, urban to rural/small community, and rural/small community to rural/small community were sought.

The commodity classes used were on general freight

Different shipment sizes were used for the two states to reflect the normal differences in shipment size.

In Arizona, rates for 18 carriers were used and in Florida, rates for the four largest intrastate carriers were used. Freight auditors and consultants in both states provided the rate information.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Study looked at rates only.

Arizona:

Average rates did not vary greatly along most routes with average rates being lower in the post deregulation period for half of the routes. Interstate rates (regulated) on all routes rose faster than intrastate rates (unregulated). Not all rates decreased with lower weight and rural shipments benefitting more than high weight, urban shipments.

The rate-distance gradient was greatly reduced suggesting that distance-related economies resulted from deregulation. Rate differentials between commodity classes, which is a form of value of service pricing, remained. Also contrary to expectations, the premium paid per unit weight for small shipments declined since deregulation. The premium paid prior to deregulation for service to remote areas largely disappeared. Both in terms of frequency and size of rate changes, the variability has been lower in Arizona since deregulation--both in absolute terms and in comparison with corresponding interstate rates. Note that published rates were used, however.

Entry and exit into markets by motor carriers were examined. For all routes, as many or more carriers were found subsequent to deregulation as were found before.

Florida:

The findings were very similar to the ones in Arizona. Unlike Arizona, Florida did not see any drop in the rate-distance gradient suggesting that the pre-deregulation commodity and area restrictions were not as constraining as they were in Arizona. Also, in Florida, no premiums were paid for service to remote areas in either the pre-deregulation or post-deregulation time period. The frequency of rate changes increased in Florida since deregulation.

Impacts of Regulatory Reform on Shippers

Florida: Not directly examined

Arizona: Not directly examined

Miscellaneous Findings

Deregulation has been beneficial in Arizona and Florida with some qualifications. The benefits to shippers are clear. They are mixed for carriers but their worst fears have not been realized and the intrastate motor carrier systems have survived.

ADDITIONAL COMMENTS:

The study contains a solid background section on some of the conceptual and theoretical issues related to the expected results of deregulation of transportation.

Blair, Roger D., David L. Kaserman, and James T. McClave, "Motor Carrier Deregulation: The Florida Experiment." The Review of Economics and Statistics, Vol. LXVII, No. 1, (February, 1986), pp. 159-164. (Funding Source: None indicated)

PURPOSE OF STUDY:

To examine the impact of deregulation of intrastate motor carriers on the prices charged for motor transport service in Florida.

STATES(S) EXAMINED:

Florida

RESEARCH METHODOLOGY:

A model of the determinants of the supply price of trucking service, including characteristics of the products being shipped, cost-related characteristics, and other factors were employed.

The model attempted to shed light on three empirical issues: (1) to test the hypothesis that the removal of regulatory constraints on pricing and entry reduces the rates charged; (2) to document the persistence of price differentials between product classifications in an unregulated competitive environment; and (3) to test the hypothesis that, with deregulation, the price decreases in large markets exceed those in small markets.

The analysis was based on data on rates and shipment characteristics for ten intrastate carriers before and at three points in time after deregulation. More than 27,000 observations were in the data base. The time period of observations was from 1980 to 1982. Regression and econometric models were used.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

All issues examined pertained to rates. First, the analysis found that deregulation resulted in an average reduction in rates on the order of 14 percent. Second, price differentials across product classification, while somewhat diminished, continued to persist in the industry after deregulation. Third, and less conclusive than findings one and two, some evidence showed that cross-subsidization from larger markets to smaller markets could have taken place under state regulation.

Impacts of Regulatory Reform on Shippers

Not directly examined

Miscellaneous Findings

Though not conclusive, one inference might be that smaller markets might be treated somewhat adversely vis-a-vis larger markets under deregulation.

Bolten, Steven, Robert L. Conn, and Jay A. Smith, "Florida Motor Carrier Deregulation: The Immediate Effect of Sudden Deregulation from the Perspective of Shippers/Receivers in Small Communities." <u>Preprint Papers--Conference on Regulatory Reform in Surface Transportation</u>. (Washington D.C.: U.S. Department of Transportation), June 1983, pp. 48-78. (Funding Source: American Trucking Associations, Inc.)

PURPOSE OF STUDY:

To attempt to find evidence on the impact of deregulation on small communities.

STATE(S) EXAMINED:

Florida

RESEARCH METHODOLOGY:

A small community is defined as one with less than 5,000 in population and 10 miles from an interstate highway and with one manufacturing plant.

Researchers chose three communities to conduct an in-depth analysis of impacts. A total of 30 respondents were used in the three communities with retail, wholesale and manufacturing or mining represented. Persons actually responsible for the firm's shipping and receiving were interviewed. Small and relatively large shippers were included with some firms having sales greater than 20 million dollars annually. Firms with total costs comprised of 20 percent transportation costs were included but most were five percent or less. The questionnaires concentrated on LTL trucking.

Because some responses could not be used for a variety of reasons, a total of only 20 responses were analyzed.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Not directly examined

Impacts of Regulatory Reform on Shippers

Service:

Preponderance of no change responses to most of the questions was the most striking feature gathered from the respondents (in response to questions on both service and rates impact).

Service frequency was found not to have changed by a majority of shippers. More shippers reported using the same number of carriers as before deregulation. No shipper was left without service.

No basic change in the satisfaction of shippers with respect to loss and damage experience, loading and unloading experience, and claims problems.

Prices:

Most shippers saw no change in their ability to get carrier rate information in advance.

More shippers reported that they had no change in their degree of satisfaction with the rates now charged compared with those charged under regulation. About an equal number of shippers had experienced rate decreases and rate increases.

Rate negotiation and shuffling among carriers by shippers and receivers appear to have begun.

The more remote the community, the greater tendency was found for rate increases.

Miscellaneous Findings

Not directly examined

Dempsey, Paul Stephen, "The Empirical Results of Deregulation: A Decade Later, and The Band Played On." <u>Transportation Law Journal</u>, Vol. XVII, No. 1 (1988), pp. 31-100 (pages 81-92 devoted to intrastate economic deregulation issues). (Funding Source: None indicated)

PURPOSE OF STUDY:

To indicate the negative aspects of deregulation of all modes at both the federal and state level.

STATE(S) EXAMINED:

In part, California, Ohio and West Virginia

RESEARCH METHODOLOGY:

The paper takes a conceptual approach with no original empirical work being undertaken. It reviews other studies and reports on testimony of shippers and carriers.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

The California Commission is cited to note that rate deregulation in California has had a serious adverse impact upon the motor carrier industry. In addition, the Commission reported that the number of owner-operators had been reduced, and for-hire carriers were no longer able to maintain vehicle replacement programs because they couldn't obtain financing.

Impacts of Regulatory Reform on Shippers

A California study is cited to observe that service to shippers has declined since deregulation. A report from Ohio is referenced noting that state's concern with partial deregulation effects on service availability.

Miscellaneous Findings

A California study is cited to note that drivers operated excessive hours because of rate cutting, maintained multiple books, drove overloaded vehicles, and drove at excessive speeds. An Ohio Commission report cited indicated that truck safety might be adversely affected by partial deregulation.

A West Virginia Commission report is cited stating that service deterioration and higher prices for its small and rural communities had resulted from its partial deregulation.

Freeman, James W., "A Survey of Motor Carrier Deregulation in Florida: One Year's Experience." <u>ICC Practitioners Journal</u>, Vol. 50, No. 1 (November-December, 1982), pp. 51-75. (Funding Source: University of Kentucky Research Committee)

PURPOSE OF STUDY:

To analyze the experiences in Florida to determine how shippers and carriers perceive the effects of deregulation.

STATES(S) EXAMINED:

Florida

RESEARCH METHODOLOGY:

A survey method, with questionnaires being sent to shippers, for-hire carriers and private carriers, was employed. Surveys were sent out approximately one year from time of deregulation. The researcher acknowledged that the time period is too short to determine definite results. A response rate of about 50 percent was achieved from each of these groups with about 150 shippers, 51 for-hire carriers, and 61 private carriers returning useable questionnaires.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

For-Hire Carriers:

Sixty percent of carriers preferred regulation. Larger carriers preferred regulation more than small carriers.

Eighteen percent believed that deregulation had caused large negative effects on their profits, 31 percent indicated a negative effect and 31 percent indicated a positive effect on profits.

Thirty percent of the carriers had withdrawn from intrastate freight markets since deregulation.

Responses on rate levels and tariff innovations varied sharply. Respondents were split on issue of rate increases or rate decreases resulting from new found freedoms. Those favoring deregulation were more likely to base rates on costs while the others reacted to their competitor's rates.

Private Carriers:

About two-thirds of the private carriers preferred deregulation. Only ten percent opted for regulation.

There was general agreement that competition had increased after deregulation. Increased competition had come from new carriers, non-Florida carriers moving into Florida intrastate traffic, and private carriers seeking backhauls (in that order of importance).

Private carriers perceived no clear pattern of effect on common carrier service.

Most firms believed that deregulation had no impact on their (private carriers') profits.

Carriers had become more involved in marketing. They were using their drivers primarily but now were using "front door" marketing (drivers use the "back door" approach).

Impacts of Regulatory Reform on Shippers

Slightly more than half of the shippers perceived increased competition. About 90 percent of the respondents thought that deregulation had not increased the difficulty of shipping or receiving freight. Nearly 90 percent were satisfied with deregulation.

No statistically significant difference among respondents of different sizes was found. Shippers located away from major metropolitan areas and major highways were much more likely to prefer deregulation than other shippers.

No clear consensus emerged about whether deregulation had brought about an improvement in service levels on intrastate traffic. No shipper ended the year with fewer carriers than it had prior to deregulation after deregulation.

Most shippers thought that deregulation had caused freight rates to be lower than they would have been under regulation. Very few shippers (three percent) had negotiated contracts with carriers in the first year.

Miscellaneous Findings

The fears that most indicated were not realized: small towns and communities have not lost service and shippers have not experienced service failures.

Most carriers had not instituted the practice of price discrimination and indicated little interest in doing so.

Large intrastate and interstate carriers have been the big winners. The large interstate carriers, with terminals and salespeople in place, can offer 30 to 60 percent discounts on northbound traffic to balance loads.

Larger shippers and shippers with northbound traffic have benefitted.

Several carriers indicated pooling and interlining have become more difficult as individual contracts have to be entered into with other carriers.

Carriers need to take advantage of new freedoms and experiment and innovate--they had not done so in the first year to any substantial extent.

Other states should consider deregulation but certain aspects of Florida's situation should be noted: few interstate carriers in Florida had intrastate authority and few intrastate carriers had interstate authority.

Freeman, James, and Richard Beilock, <u>The Effects of Transportation Deregulation on Motor Carrier Service in Florida and Arizona</u>. Washington D.C.: U.S. Department of Transportation, May, 1984. (Funding Source: U.S. Department of Transportation, Contract: DTRS-5682-C-00022)

PURPOSE OF STUDY:

To examine the effects of deregulation in these two states in order to analyze what would happen if total deregulation were to occur at the national level.

STATES(S) EXAMINED:

Arizona Florida

RESEARCH METHODOLOGY:

Surveys were conducted in both states. Shippers and carriers (including private carriers in Florida) were in the sample. In Arizona, 1982 and 1984 data were collected; in Florida, 1981, 1982 and 1984 data were collected. Sample sizes ranged from 19 to 144.

The purpose of surveys was to ascertain the perceptions of shippers and carriers concerning deregulation. No attempt was made to determine the actual changes in rates and service levels.

The samples in the second and third years were weighted toward shippers and receivers in outlying areas.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Florida:

Private carriers: The consensus from these carriers is that they favored deregulation. Less than half of the carriers, however, were taking advantage of new freedoms. The size of private carriers had no significant influence on perceptions of effects of deregulation. The researchers note that private carriers are in a no-lose situation with deregulation. They can take advantage of new freedoms to gain backhauls, and can use either common carrier service or their own service depending upon what happens to service and rates under deregulation.

For-hire carriers: These carriers were less favorably disposed toward deregulation than were shipper and receivers and private carriers. Fifty percent of the carriers in each survey year indicated a desire to return to regulation. Most of the increased competition was from new or out-of-state carriers. A plurality of carriers in early surveys and a majority in later surveys indicated declines in profit. Small carriers were more successful than the larger firms in maintaining profits. Those seeing depressed rates due to deregulation rose from 21 percent in

the early survey to 47 percent in 1984 survey. Household goods carriers, though initially less opposed to deregulation than other carriers, became the least supportive in the later survey after seeing reduced rates and profits.

Arizona:

Only 33 percent of the for-hire carriers desire to return to regulation, much less than the percent of carriers in Florida. A majority of carriers see deregulation as exerting a moderating influence on rates. About 25 percent of the carriers pulled out of some markets and about half changed the way they set rates--now basing them more on competitive conditions and the cost of providing service. Small firms (less than five million dollars in operating revenues) were more successful in keeping rate levels up than were large firms.

Impacts of Regulatory Reform on Shippers

Florida: Three times as many shippers indicated increases in service as indicated decreases. The majority found no change in speed of service, overall service levels, and difficulty in arranging carriage. The majority of shippers (in all three surveys) perceived that deregulation had held down rates.

Arizona: Only five percent of the respondents expressed a desire to return to regulation. Three-fourths saw increased competition but fewer service options. No recorded instances of a total lack of motor carrier service was noted. About 50 percent of the shippers believed that overall service quality had improved (up from 33 percent in a pre-deregulation survey). About 50 percent felt that rates were lower due to deregulation.

Miscellaneous Findings

Large and small shippers were treated basically the same under deregulation. By large majorities, both small and large shippers, supported deregulation in Florida and Arizona. Large shippers were more likely to be offered discounts than smaller ones, however.

In both Florida and Arizona, the majority of urban and rural shippers supported deregulation. In Florida, urban shippers were offered a few more deals, but almost all other measures of deregulation's effects indicated no urban-rural difference. The results in Arizona do show significant differences between urban and rural shippers with respect to rates, overall service, and competition for freight. Only 11 rural shippers responded to the survey, however.

ADDITIONAL COMMENTS:

The authors note the difference between the situations in the two states. Arizona shippers and carriers had a long lead time to plan for deregulation; Florida deregulated overnight. Arizona has only two population centers of any size.

All the surveys used are included in the report.

Frey, N. Gail, Reuben H. Krolick, Leone Nidiffer, and Jay L. Tontz, "Effects of Reregulation of the California Intrastate Trucking Industry." <u>Transportation Journal</u>, Vol. 24, No. 3 (Spring 1985), pp. 4-17. (Funding Source: None indicated)

PURPOSE OF STUDY:

To determine the effects of reregulation on the California intrastate motor freight industry and to compare the results with those predicted by existing regulatory literature and the stated goals of the Public Utility Commission.

STATE(S) EXAMINED:

California

RESEARCH METHODOLOGY:

More than 7,000 questionnaires were mailed in December 1983, about three years after reregulation occurred which substantially deregulated intrastate trucking in California. Survey questions were designed to measure changes in rates, rate flexibility, services, quality, and options which occurred since reregulation in 1980. Shippers were asked: (1) if they had experienced new offerings from their regular firms or from firms seeking their business, (2) what their expectations were regarding future effects of reregulation, and (3) what level of state control on routes and rates they preferred.

More than 500 surveys were returned. About half of the firms were manufacturing firms and about a third represented firms engaged in wholesale. Retail represented about 16 percent of the firms. Urban and rural, LTL and TL shippers were represented.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Carriers were found to be more competitive than they were before April 1980 when reregulation took place. About 70 percent of the shippers were offered lower rates. Carriers competed more on price than on any other aspect of business.

Carriers were offering a greater variety of rates. There was a greater variation in rates after reregulation.

Impacts of Regulatory Reform on Shippers

Shippers dealt with fewer carriers under reregulation due to the fact that route constraints on carriers no longer existed.

Rates declined as a result of reregulation. About 70 percent of the shippers found that carriers were offering lower-priced services. Truckload (TL) rates were declining more pervasively than less-than-truckload (LTL) rates. More shippers expected rates to be reduced in the future than expected than to increase.

Shippers found more services offered. About half of the shippers found that overall quality of services increased or remained unchanged. Only 14 percent indicated a decrease in service.

Future elimination of routes was anticipated by almost one-third of the respondents, while 26 percent expected new routes to be added.

Those shippers expecting beneficial effects outnumbered those anticipating negative effects by a strong margin. More than 50 percent favored complete elimination of state controls over routes and rates.

Rates will not necessarily go up or services down in rural areas but shippers in rural areas will not be treated quite as well as their urban counterparts.

Miscellaneous Findings

Large shippers making TL shipments were given more decreased rate opportunities than small shippers. The same was true for LTL shippers. The percentage of firms reporting an increase in the overall quality of service rose with firm size. More of the largest shippers reduced their number of carriers than did the small shippers.

A higher percentage of urban firms than rural firms experienced decreased rates. Also, more rural firms than urban firms experienced increased rates.

A higher percentage of urban firms than rural firms switched to for-hire trucking from private trucking, reflecting the better rates and services offered to the urban shippers.

Frey, N. Gail, Reuben H. Krolick, and Jay L. Tontz, "The Impact of Motor Carrier Deregulation: California Intrastate Agricultural Products." <u>The Logistics and Transportation Review</u>, Vol. 22, No. 3 (September 1986): pp. 259-276. (Funding Source: None indicated)

PURPOSE OF STUDY:

To examine the economic effects of deregulation of the intrastate shipments of fresh fruits and vegetables (FF & V) in California.

STATES(S) EXAMINED:

California

RESEARCH METHODOLOGY:

The authors worked with the Monitoring Unit of the California Public Utility Commission Transportation Division and used its data base (ongoing) plus its survey data and special studies to test a number of hypotheses. The carriers and services examined tended to be those from "shed to market" not from "field to shed" which have never been regulated. "Field to shed" carriers were also included, however, which would tend to understate the effects of deregulation. The deregulation of FF & V took place in July 1983.

The surveys were sent to 3,444 shippers, stores, and others--235 surveys were usable. Of 1487 surveys sent to carriers, 213 were useable. This sample was split between LTL and TL carriers.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Rates: Changes between 1983 and 1985: 36.9 percent (LTL) and 38.1 percent (TL) of carriers reported decreases in rates which would translate into more than 90 percent in terms of decreased real rates. Smaller firms reported fewer rate decreases (statistically significant).

Carriers reported changing their rates more frequently with larger carriers changing more often than smaller carriers. Carriers reported less uniform rates across carriers under deregulation.

Service: Not examined

Costs: Carriers reported switching to non-union drivers, although not many were using union workers initially. Carriers, particularly the larger firms, were also switching some of their business to sub-haulers.

Reduction in maintenance costs: Some (not many) firms reported delaying maintenance procedures. Many carriers started using their own employees for maintenance work.

Carrier profitability: The number of carriers reporting lower profits outnumbered those reporting increased profits by 2.5 to one. Reasons given for lower profits were more competition, increased non-labor costs, decreased FF & V traffic due to economic conditions.

Impacts of Regulatory Reform on Shippers:

Rates: Both LTL shippers (23.6 percent) and TL shippers (30.8 percent) reported decreased nominal rates and about 60 percent LTL shippers and 70 percent TL shippers faced decreased rates in real terms. Shippers attributed these decreased rates to increased competition and their ability to negotiate rates.

No statistical difference was found between the percentage of small shippers reporting higher nominal rates and large shippers reporting higher rates.

A higher percentage of shippers (both TL and LTL) indicated that rates changed more frequently under deregulation than under regulation. Shippers perceived less uniform rates across carriers after deregulation of FF & V. Shippers did not find it more difficult to obtain rate information under deregulation.

Service: Quality of pre-1983 was maintained. Twice as many shippers indicated that overall service had improved as the number of shippers indicating a decrease in service as measured by promptness and availability.

No statistical difference was found between large and small shippers with respect to service.

Private carriage: Shippers indicated no shift to private carriage; only 12 percent were using private carriage at the start of time period, and did not have much equipment

Pustay, Michael, "Intrastate Motor Carrier Regulatory Reform in South Dakota." <u>Transportation Practitioners Journal</u>, Vol. 52, No. 1 (Fall, 1984), pp. 93-107. (Funding Source: U.S. Department of Transportation, Contract No. DTRS-5680-C-00006)

PURPOSE OF STUDY:

To assess the initial impact of regulatory reform in South Dakota. The article describes the post regulatory reform state of regulation in South Dakota and also provides information to researchers who wish to develop comparative analyses of the impact of regulatory reform.

STATES(S) EXAMINED:

South Dakota

RESEARCH METHODOLOGY:

Descriptive type of study that reviews entry applications and rate structures in South Dakota after regulatory reform was implemented in July, 1981.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Intrastate rates were lower than comparable interstate rates in South Dakota. Complaints increased from carriers about the unauthorized services being provided.

Impacts of Regulatory Reform on Shippers

No complaints were received after regulatory reform on service, damage, or claims issues.

Miscellaneous Findings

Essentially no entry in Class A (regular route common carriers) and little in Class B (irregular route common carriers) for five years before regulatory reform in 1981. After regulatory reform, substantial increase in entry applications in all classes.

Little reason to believe that motor carrier service to small communities will decrease. The rate of rurally-oriented Class B applications has increased substantially since the 1981 amendments on entry as has general commodity applications.

ADDITIONAL COMMENTS:

South Dakota has very little intrastate traffic. Although there are 30 intrastate carriers in Class A traffic, three major interstate carriers account for 90 percent of Class A freight revenue.

South Dakota intrastate traffic, however, accounts for only about two to three percent of revenues for these three carriers.

New entry standards in South Dakota relaxed entry substantially and placed the burden of proof on protestants. The fact that issuing of a permit would divert revenue or traffic from an existing carrier shall not be the sole reason of the Commission for denying a permit. The new law also prohibited the commission from restricting the activities of the contract carriers (class C) and the number of shippers with which they can contract.

Pustay, Michael W., "The Small Community Service Issue: The Impact of State and Federal Regulation," <u>Proceedings of the Transportation Research Forum</u>, Vol. XXVI, No. 1 (1985), pp. 350-356. (Funding Source: U.S. Department of Transportation, Contract No. DTRS-5681-C-00029)

PURPOSE OF STUDY:

To determine the impact of deregulation (federal and state) on the level of service offered to small communities.

STATE(S) EXAMINED:

Florida, Maine, South Dakota, Wisconsin, Minnesota, New Mexico, Ohio, and Texas

RESEARCH METHODOLOGY:

Non-survey data were used. Eight states were selected to examine in detail. Four of the states have not substantively relaxed their motor carrier regulations (Texas, Ohio, Minnesota, and New Mexico) and four of the states have relaxed or totally deregulated (South Dakota, Florida, Maine, and Wisconsin). Comparisons were made across time and states to determine the changes in pattern of service offered to communities in these eight states so that the effects of deregulation can be assessed. The years 1976, 1982, and 1984 were selected. For each state, a sample of 50 communities with less than 2000 people was created. To obtain the level of advertised service offered (not authorized which could be higher), the National Highway and Airway Carriers and Routes guide was used. The guide reports whether the carrier provides interstate service, intrastate service, or both.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Not directly examined

Impacts of Regulatory Reform on Shippers

Not directly examined

Miscellaneous Findings

Relaxation of intrastate regulation appears to have increased motor carrier service to the sampled small communities. Wisconsin also saw service improvements while slight service declines between 1976 and 1984 were found in Maine and South Dakota. States not deregulating fared less well with service declines in all states except Ohio.

All eight states saw increases in the level of service offered with two states that deregulated-Wisconsin and Florida-- experiencing the largest increases.

ADDITIONAL COMMENTS:

The measure of service is simplistic which is acknowledged by the author.

Winston, Clifford, Thomas M. Corsi, Curtis Grimm, and Carol A. Evans, <u>The Economic Effects of Surface Freight Transportation</u>. Washington, D.C.: The Brookings Institution, 1990, pp. 59-60. (Funding Source: None indicated)

PURPOSE OF STUDY:

To estimate the economic effects of deregulation of intrastate rates to determine the validity of the assertion that deregulation of the intrastate trucking rates would have economic effects comparable to those of interstate trucking deregulation and lead to lower rates. (Most of the study addressed the impacts of deregulation at the federal level.)

STATE(S) EXAMINED:

All states with economic regulation of intrastate trucking

RESEARCH METHODOLOGY:

Estimated economic effects by using a LTL rate equation they developed in their research of interstate trucking and predicted deregulated rates for individual intrastate movements. Sixty LTL intrastate shipments from California and Nebraska were obtained. No effects of deregulation were found for TL movements.

FINDINGS:

Impacts of Regulatory Reform on Motor Carriers

Not directly examined

Impacts of Regulatory Reform on Shippers

Deregulated rates were 30 percent lower than the actual regulated rates, which amounted to at least a 1.2 billion dollars (1977 dollars) aggregate gain to shippers from intrastate deregulation.

Miscellaneous Findings

Actual benefits of deregulation at the state level would be larger because shippers would reduce any inefficiencies they incurred in plant location and shipping patterns to avoid excessive intrastate rates.

APPENDIX C SUMMARY OF WORKSHOP ON REGULATORY REFORM OF INTRASTATE TRUCKING

Kansas City, Missouri July 8, 1991

INTRODUCTION

Workshop Welcome

Thomas Maze, Director, Midwest Transportation Center

This workshop on regulatory reform of the intrastate trucking industry is part of a major twoyear study entitled "The Changing Role of Freight Transportation Modes and Intermodal Freight" sponsored by the Midwest Transportation Center (Center). This project is part of a research program which has the theme of developing transportation alternatives for a region undergoing substantial change.

This workshop, and the research related to it, evolved out of research activities in the first year and a larger workshop held in Kansas City in late 1989 by this same research team. Directed by participants of the 1989 workshop to continue work on the issue of state regulation of trucking, the research team focused its second-year efforts on undertaking a comprehensive literature review and on interviewing personnel in regulatory agencies in Iowa, Kansas, Missouri and Nebraska.

Program Overview

Benjamin J. Allen, Professor of Transportation and Logistics, Iowa State University

The purpose of the first-year research effort was to ascertain the nature and scope of economic regulation of motor carriers and railroads in the four states in Federal Region VII (Iowa, Kansas, Missouri, and Nebraska) and the degree to which changes in the regulatory environment had occurred since 1980. With respect to trucking, the first-year research indicated that Kansas had reregulated somewhat in line with Interstate Commerce Commission (ICC) changes while Missouri adopted certain procompetitive features with the overall intention of continuing regulation. Iowa and Nebraska had few substantive statutory changes. Iowa, however, modified its administrative rules and practices with a net effect of relaxing its regulatory stance while Nebraska continued its traditional approach.

Based upon the findings of the first-year effort, and the direction provided by the workshop in Kansas City in 1989, the research team decided to focus the second-year effort on exploring the

impact of state regulation of motor carriers on the competitiveness of the region. The second-year effort contains three major components. First, how economic regulations are actually administered by each of the four states was examined. The preliminary findings are: (1) the amount of regulation in each state except for Nebraska appears to be substantially less than what it was in 1980. These changes resulted from changes in statutory law in Kansas, and budget cutbacks and staff reassignments in Iowa and Missouri; (2) limited regulation of motor carrier service appears to exist because of lack of service problems, statutory standards, lack of staff, and/or because there are no complaints from shippers; and (3) members of staffs previously involved in administering economic regulation of intrastate trucking have been reassigned to related areas such as safety and registration. Second, all studies on state regulation and regulatory reform were reviewed and summarized. Third, the relationship between economic regulation of intrastate trucking and competitiveness of the state was examined to see whether a firm's decision to locate in a particular state would be affected by the nature of the state's regulation of intrastate motor carrier service. No significant findings were uncovered.

This workshop has three goals: (1) to address certain issues that have not been addressed or addressed adequately, (2) to identify the most important issues that still need to be researched, and (3) to provide a mechanism for a rational discussion of a topic that is viewed by many as controversial.

PLENARY SESSION

Presentation by Mr. Robert V. Delaney, Executive Vice President, Cass Logistics, Inc.

Mr. Delaney addressed the issue of the relationship between economic deregulation of transportation and the costs of the logistics system in the United States. The inferences of the relationship between efficiencies in the logistics system and the need to deregulate the remaining 42 states still regulating intrastate trucking were also highlighted.

Mr. Delaney defined business logistics as the management of inventory whether in motion or at rest. Inventory is in motion when it is being transported into production, moving through work in process, or being delivered to its point of consumption. Inventory is at rest when in storage.

The U.S. business logistics system costs were 600 billion dollars in 1990 or about 11 percent of Gross National Product (GNP). The most inefficient year for logistics was 1981 when its costs comprised 14.7 percent of GNP. The best year was 1987 when logistics costs comprised 10.8 percent of GNP. Logistics costs have stood on that plateau for the past five years.

He reviewed the components of 1990 business logistics costs. The annualized investment in inventory that was required to support manufacturing and trade during 1990 was 805 billion dollars. Total inventory costs of 221 billion dollars included 66 billion dollars in interest, 84 billion dollars in taxes, obsolescence, depreciation, and 61 billion dollars in warehousing.

Transportation is the second major category of costs. The engine that drives efficiency of business logistics is the trucking industry. In 1990 transportation costs amounted to 352 billion dollars with trucking accounting for 277 billion dollars of that total.

The sources of the 65 billion dollars savings are reductions in carrying costs associated with holding inventory, 30 billion dollars reduction in trucking costs, and five billion dollars reduction in railroad costs.

Why did this happen? Because the transportation services under regulation were so poor and so fragmented that more inventory was held at more locations to maintain customer service. The nominal ratio of inventory to final sales in current dollars declined from 1980 to 1990. In 1980, it exceeded 26 percent, declined to 20 percent in 1986 and 1987, and was below that in 1990.

What did deregulation give us? It gave us 6,000 carriers with 48-state operating authority. Before 1980 there were none. It gave us more efficient, more reliable delivery service. Adding the improved forecasting and more effective communications, we had a decided increase in the velocity of inventory investment. The transit time and, accordingly, the lead time required for replenishment were reduced significantly. These changes reduced the amount of inventory held by 200 billion dollars. Savings of 30 billion dollars results from having 200 billion dollars less inventory investment times the 15 percent minimum carrying costs.

Standard and Poors shows that price compression in the truckload (TL) sector began in 1980, followed by the less-than-truckload (LTL) sector in 1984. Private carriage became more efficient with empty miles reduced by two-thirds and net operating costs reduced by 35 percent. A 20 percent reduction in rates creating a savings of 30 billion dollars is a conservative estimate.

Railroading saved five billion dollars which Mr. Delaney also believed was a conservative estimate. In 1981 the rail cost per ton-mile was 4.2 cents and the return on investment was less than 2 percent. The decline by 1988 was by one-third to 2.6 cents per ton-mile. The rate of return increased about to seven percent.

Logistics contributed to disinflation in our economy. According to the Consumer Price Index, inflation was below four percent during the Reagan years as logistics productivity increased until 1986. Since 1986 both the Reagan Administration and the Bush Administration produced legislation calling for the deregulation by 42 states of the trucking industry.

Mr. Delaney concluded by noting that we are living in a fast changing times world. Success requires speed and adaptivity. Logistics has reached a productivity stalemate--no progress has been made since 1986. The goal should be to drive logistics cost below ten percent of GNP and try to keep it there. Transportation cost can be reduced by another ten percent through competition. Intrastate commerce no longer exists. It is a global economy.

Presentation by Mr. Thomas Myers, Manager of the Transportation Division, Illinois Commerce Commission

Mr. Myers addressed several issues including the problems associated with deregulation, the changes made in the regulatory environment in Illinois, and the findings and assumptions of the recent study by Professor Bruce Allen.

Mr. Myers indicated that the promises of deregulation have been oversold to legislators. There are problems in other industries which have been deregulated, e.g., airlines, savings and loans, cable TV, phone service and intercity bus transport.

There are several problems associated with deregulation, including service to rural communities, social costs associated with the high number of bankruptcies, and negative impacts on safety.

Mr. Myers indicated his view that there is a very clear and close link to the question of financial duress of the industry and deregulation. He feels that the U.S. DOT has long ago conceded the linkage between economic deregulation and safety. In 1980 Illinois began the administrative deregulation experiment by the ICC. The U.S. DOT went to Congress in 1983 asking for money for the motor carrier assistance program. Clearly the U.S. DOT recognizes the linkage.

He said that he was not suggesting that trucking industry executives operate unsafely intentionally, or with any kind of malicious intent. But for the same reason the railroads had to defer maintenance before 1980, many of the trucking companies are now facing exactly the same situation.

The Bruce Allen study refers to monopoly rents which the trucking industry was taking in under regulation. These monopoly rents are in part what goes into maintaining a decent safety program.

With respect to rural service, Mr. Myers noted that sometimes states view economic development of rural areas as an important state goal. He believes it is a legitimate one. The argument is that since interstate deregulation, we haven't had a loss of trucking service to rural areas. In his view, the reason there has not been a diminution of service is because of the continued existence of intrastate regulation.

He is puzzled why the people who advocate deregulation aren't more concerned about the increased concentration in the trucking industry that has occurred since deregulation. Fewer carriers are carrying more of the traffic.

Mr. Myers addressed the background and nature of the changes made in the Illinois regulatory environment in the 1980s. The trucking industry said we have to have some regulation. Particularly, because the state role had not increased since ICC vacated the regulatory field, the states were left in a position where they had to assume such roles. Illinois started a compliance advisory service. It started a rate review and rate auditing program. It contracted with a costing

consultant. It gave a heavy emphasis to computerized operations and started its own newsletter. Rulemakings were started and the minimum rate order was eliminated. Documentation was simplified and the terminal area exemptions were expanded.

Mr. Myers also commented on the U.S. Department of Transportation study conducted by Professor Bruce Allen. The Allen study indicated that the Illinois Commerce Commission held rates 25 to 35 percent above the interstate level, adding 446 million dollars a year in extra costs.

The Illinois Commerce Commission's study found no validity to the Allen report. First, Illinois has one of the most extensive terminal area rate exempt zones in the country with at least 50 percent for-hire traffic in Illinois being rate exempt. Second, Illinois has a file on use (New York Stock type rate review) which only reviews rates of technical compliance with our tariffs circular. Third, because of Illinois's central location, and because of the ICC rulings on what constitutes interstate traffic, Illinois' intrastate carriers have had a tremendous increase in competition from interstate carriers. Illinois could not require our carriers to have a higher rate than their competitors. Fourth, most traffic moves at commodity rates (and not class rates) which are very much tailored to the shippers' needs. Fifth, and most importantly, Illinois allows discounts which the Allen report assumes the Illinois doesn't. The Illinois Commerce Commission's study found the state's intrastate rates lower than the base interstate rate and lower than the discount interstate rate about two-thirds of the time.

The main conclusion is that Illinois shippers probably pay among the lowest freight rates in the country. Is the interstate rate the standard that we should use as a standard of excellence that the state should emulate? No! Given the large and increasing number of bankruptcies, and the safety concerns that flow from bankruptcies, the interstate rate is entirely too low.

Discussion of <u>The Impact of State Economic Regulation of Motor Carriage on Intrastate</u> and <u>Interstate Commerce</u>

Dr. Edward Rastatter of the U.S. Department of Transportation was scheduled to participate at the conference and review the U.S. DOT funded study by Bruce Allen and its critique [footnote]. The review of the critique of the Allen study and the U.S. DOT rebuttal of the critique were provided by Ben Allen of Iowa State University.

The Virginia State Corporation Commission requested that The National Regulatory Research Institute critique The Impact of State Economic Regulation of Motor Carriage on Intrastate and Interstate Commerce prepared by Professor Bruce Allen of the University of Pennsylvania under contract with the U.S. DOT. Professor Douglas Jones of Ohio State University conducted the critique. That review came up with three major findings to rebut the Allen study. The U.S. DOT also produced a reply of the rebuttal.

1. The critique's first finding was that the measure of welfare, or the loss to society due to economic regulation, was grossly overstated because of the way it was measured. The

traditional way to measure the loss associated with higher rates due to regulation reasons is the deadweight loss. The Allen study used the Posner trapezoid which includes both the deadweight loss and the producer surplus. The producer surplus is normally considered an income transfer from shippers to carriers. The U.S. DOT replied that, because state regulation requires substantial legal and lobbying costs to maintain, the carrier doesn't get the producer surplus and thus it is lost.

- 2. The critique's second finding was that the Allen study used a static analysis and assumed that in all 20 states in which intrastate rates were assumed to be higher than interstate rates, deregulation and its impacts would occur immediately. The critique's position was that not all states would deregulate at the same time and if they did, there would be a lag effect. The U.S. DOT replied that under the bills pending in Congress, federal preemption would be instituted and thus all states would be deregulated at the same time. Furthermore, the lags are short, based upon the findings in Florida and Arizona where most of the impacts of state deregulation were felt within one year.
- 3. The critique's third finding inquired about the 17 states where the intrastate rates were possibly lower. Should those benefits be subtracted from the losses (or costs) associated with economic regulation? The U.S. DOT replied that in many of those 17 states economic regulation was considered to be moderate or liberal. The lower rates in these states might have resulted from economic forces.

BREAKOUT SESSION A

Facilitator: Ben Allen, Iowa State University

Participants: Sheridan Garrison, Arkansas Freightways, Inc.

Charlie Rosas, Farmland Industries David Shrock, Iowa State University

George Michaleson, Middlewest Freight Bureau

Ed Ward, Central Freight Lines Kathy Burris, Hallmark Cards Scott Pikovsky, Hyman Freightways Robert Delaney, CASS Logistics, Inc.

Scott Weiser, Iowa Motor Truck Association

Karin Sevde, Iowa State University

Discussion:

The discussion addressed many topics associated with the two basic issues. First, there is a lack of knowledge or understanding of how economic regulation actually affects certain types of trucking operations. Second, if economic deregulation at the state level is enacted, are there some transitional issues that need to be addressed and resolved.

One issue discussed was the status of trucking regulation in the state of Texas. Texas had a very rigid entry and economic regulation. In 1988, administrative actions instituted a zone of rate deviation. The change in the LTL structure of rates provided a free zone in which you could establish rates five percent above or below what the Texas Railroad Commission prescribed as the ongoing or base rate. A 25 percent deviation was allowed for TL trucking. The base rate was set by the Texas Railroad Commission at a level based upon the industry cost of doing business. About 30 percent all of the truck revenue and/or tonnage in Texas now moves under deviation rates. The remaining 70 percent is moving at applicable base rates.

There are advantages of the new regulatory system in Texas to the public. It requires continuation of service to all authorized points, including rural areas. It requires the continuance of overnight service. It has a prescribed rate structure of which the public is fully aware. Likewise, it removes the opportunity to subsidize a discounted piece of business by not allowing a carrier a higher rate than what the firm's operating costs are on some other piece of business.

The entry requirements were also changed. Previously, the applicant was required to show a willingness to serve the public and that it was able to provide that service. Now the existing carrier must prove that it is providing sufficient service. The requirements still provide protection of the investment of the existing carrier.

Another issue that was identified is the need to separate between LTL and TL service when examining the issue of state regulation of trucking. The amount of intrastate traffic apparently

varies between the TL and LTL sectors. The economics and operations are different. The regulatory impact and regulatory need are different for the TL and LTL sectors.

The effects of deregulation have been very different for the two sectors. TL rates went down very quickly and substantially. Many of the TL carriers which were unionized went out of business. LTL carriers dropped their TL businesses.

The TL sector matches the economic model that the deregulation economists cited when they described the trucking industry. Entry and exit are relatively easy. The industry so responded to competition that it has driven the wages down to a point where you can't keep drivers. Deregulation has driven the costs and prices down in the TL industry.

LTL service is a different type of service. Each of the four states in Federal Region VII has many communities that receive only a small number of shipments per day. Most of the shippers in small communities need daily service to stay in business. To be competitive they need daily, overnight service. To maintain that service, it is not true that ten carriers can operate as cheaply as one. Several expressed the view that the continued good trucking service to small communities is due to state economic regulation.

The impact of deregulation at the state level on service to small communities was also discussed. If one state were deregulated and not others, those carriers now serving small communities would face stiffer competition and some costs might go up because of the loss of some of the carrier's traffic. Deregulating all of the states in a region, however, was viewed by several participants as helping small communities because of the resulting more efficient operations.

Another issue discussed was the impact of state regulation on the level of rates. The issue of the availability of accurate data to make comparisons between interstate and intrastate rates was discussed in this context.

Two other issues received limited coverage due to time constraints. One issue addressed how deregulation at the intrastate level should be implemented if a political decision is made to deregulate. The other issue concerned the amount of compliance costs the state economic regulations generate for the trucking firms. The facilitator indicated that he would bring these issues to the general afternoon session for further discussion.

BREAKOUT SESSION B:

Facilitator: C. K. Walter, Iowa State University

Participants: Thomas Myers, Illinois Commerce Commission

Michael Crum, Iowa State University

Mary Turkington, Kansas Motor Carriers Association Barbara Meeks, Iowa Department of Transportation Lisa Peterson, Minnesota Trucking Association

Stephen Walker, Missouri Dept. of Economic Development

Richard Howe, Adams, Howe, and Zoss, P.C., Attorneys at Law

Eugene Fraise, Iowa State Senator

John Schmidt, Nebraska Public Services Commission

Tom Maze, Iowa State University

Issue: What is the extent of state regulation?

Iowa: Iowa requires a certificate of public convenience and necessity for its regular route common carriers. Financial stability is considered as an entry requirement. Uncontested entry application takes 40 to 45 days. Iowa has several different classes of carriers with different types of economic regulation for each.

Kansas: The law hasn't changed much since 1982 when the public convenience and necessity standard was dropped and the fit, willing and able standard was adopted. Entry requirements have been very easy since 1982. The state still requires annual reports, tariffs and insurance. If authority is denied, it is usually because of past safety violations.

Missouri: The state regulates TL and LTL carriers differently. There is only a fit, willing and able standard and a good safety record required for TL carriers. Dual authority is allowed. LTL entrants still face a public convenience and necessity standard and entry into LTL is still highly regulated.

Nebraska: The state requires a carrier to file for authority and requires a finding of public need and necessity. Like Iowa, if the application is not protested, it takes about 45 days to get authority. If the application is protested, it is up to the applicant to prove the need for providing the service.

Minnesota: Minnesota's classification system is similar to Iowa's with regular route and irregular route carriers. Minnesota has only nine regular route carriers left in the state. Their rates are strictly regulated along with petroleum carriers. Irregular route carriers have a simple a tariff filing basis.

Issue: How have the regulations changed since 1980? How were the changes implemented?

Missouri: The state made significant changes in 1986 by putting the burden of proof on the intervenor instead of the applicant and by allowing TL carriers to be contract carriers as well. Similar to the state of Nebraska, it took about 90 days for the changes to be implemented. The changes were driven by shippers, carriers, and the general public--not the Motor Carrier Act of 1980.

Nebraska: The state has deregulated rates for sand and gravel operators but not entry. In Nebraska, it took about 3 to 4 months to implement the changes for the sand and gravel operators alluded to earlier. Contractors convinced the legislature that rates were too high on all sand and gravel for road construction and that the state was paying too high a bill.

Kansas: Some changes came fast and some came slowly.

Iowa: In 1980 Iowa shifted the burden of proof from the applicant to the protestant. This change brought in a good set of carriers.

Minnesota: Economic regulation hasn't changed much since 1957. The next legislative session will bring about some major changes in our regulatory scheme.

Illinois: A law was passed in 1980 with respect to entry. The Commercial Transportation Law was passed in 1986. Several laws were passed since then dealing with the administration of trucking regulation in Illinois. The impetus of change came from the trucking industry.

Issue: What are the goals (objectives) of the regulation in the various states? How much do they vary?

Most of the states had goals similar to those found in Nebraska: to recognize and preserve the inherent advantages of mode and foster sound economic conditions in transportation in the public interest and to promote adequate, economical, and efficient service with reasonable rates without unjust discrimination, undue preferences or advantages or unfair practices. Iowa included a concern about small communities and rural areas in its goals. Kansas placed an emphasis on safety. Illinois also considered economic development as a goal.

Issue: How do states attempt to maintain service to small communities? Do states ever force a carrier to provide the service? Do you ever hold it out as a carrot when granting authority?

Comment: Several participants expressed the view that a lot of communities have lost service. This is one of the prices of a deregulated environment. If there is no incentive for carriers to serve small communities, and a commission is not there to encourage them through rate and other regulation, they are going to withdraw service.

Missouri: The state does it by looking at the number of carriers serving a particular area, by making sure that their rates are reasonable, and by making sure that the carriers having authority to serve actually serve the community. Carriers complain that their rates for rural delivery don't meet their costs. Missouri believes that a regulated utility must take the good with the bad. Cross-subsidy is practiced in Missouri. Missouri doesn't require carriers to take authority they don't ask for but the carriers will go through these towns.

Iowa: Carriers serving small communities which apply for their rate increases have certain aspects of their operations which are unprofitable and others that are profitable. No one tells them to discontinue service to small communities or compels them. The rate approved provides sufficient return for both profitable and unprofitable portions of the market they serve.

Nebraska: Even irregular route authority carriers are obligated to serve all points in Nebraska.

Minnesota: On occasion a carrier has come in and wants to serve an area and the transportation regulation board requires that to have what is requested, the carrier is required to serve another market. Regular route carriers have a mandate to serve all the points on their authority within a seven-day period.

Issue: With reduced staff, how can states monitor small community service? Are shippers and receivers in small towns coming forward and saying that they are not being served?

Iowa: Prior to 1986, small town shippers were heard from all the time. Since the Transportation Regulatory Administration (TRA) was eliminated in the mid 1980s, not much has been heard. With deregulation at the interstate level and with the elimination of the TRA, many people apparently believe there is nothing being done in this area. The laws and regulations pertinent to intrastate regulation were transferred to other agencies, not eliminated.

Minnesota: Many shippers apparently do not know what the state's regulatory system can do for them. There aren't many shipper complaints.

Comment: Shipper complaints are handled through a number of channels. Chambers of commerce get a lot of inquiries. It is not that these questions aren't being asked.

Comment: Shippers in small communities are not knowledgeable about transportation. Shippers are confused about rates, etc.

General Afternoon Session: Reports from the Two Breakout Sessions

Report from Breakout Session A

No conclusions were reached nor was a consensus asked for on the issues. The following are some of the issues the session addressed.

<u>Issue #1</u>--If we do deregulate at the state level, it should be done by all of the states. There was a concern if Iowa, for example, deregulated and no other state in the region did, it would serve as a vacuum to draw in carriers from other states. There was no consensus on whether or not deregulation at the state level should take place.

Comment: The policy of the American Trucking Associations, Inc., (ATA) and the Regular Route Common Carrier (RRCC) policy positions are totally opposed to any federal preemption of state regulation.

Comment: One benefit of states regulating on their own is that they can choose the portion most important to them to regulate. An "all or nothing" approach would diminish that considerably.

Comment: The problem of implementing state deregulation piecemeal is that carriers and shippers don't know how to operate. No critical mass is created to generate economies of scale. If you implement it across the board, the people who are operations oriented would price accordingly and offer service accordingly. You would be worse off piecemeal.

<u>Issue #2</u>--If you did deregulate at the state level, would your unit costs increase or decrease? The question requires further research. Increased efficiency might result from combining loads and better utilizing terminals, but the thinner traffic lanes would provide a countervailing force.

Related to this is the issue of dynamic costs: regulation might impede innovation and technological change. These are not new arguments.

<u>Issue #3</u>--The distinction between LTL and TL should be made. Many of the studies have either combined those or have not looked at one component. By aggregating these two types of operations, you might be disguising many of the insights.

<u>Issue #4</u>--What are the compliance costs to carriers and shippers' private carriers? How much are they? The subgroup did not address this in detail.

Comment: An irregular route carrier coming into Iowa with ten tractor trailer units and filing for authority would spend about 100 dollars. That would be for the regulatory fee receipts that they would carry in the vehicle which would identify the type of authority they have for intrastate service in Iowa. Entry costs in most states are not significant.

Comment: It is hard to separate economic and safety regulation. If you were to regulate for safety, how much would your costs reduce anyway? As far as the economic regulation costs are concerned, the entry fees are minimal. The real cost to the carrier comes from the Bingo stamps.

Comment: States want to regulate intrastate trucking. They want to know who is coming through the state. They feel it is their responsibility. There is a difference of opinion on how much information is needed. The ICC has made a complete mockery of the tariff system. It doesn't monitor the insurance filings. The state feels the obligation to the people in the state to know who these carriers are and whether or not they have insurance.

Issue #5--What can we learn from the economic regulatory scheme used by the State of Texas? A description was provided of the regulation in Texas at the present time and the recent changes made to the regulatory system. A second, related issue is how does one get good data to compare interstate rates with intrastate rates. The results of the Nebraska experience are relevant. Reports are consistent with respect to lower rates on intrastate trucking traffic in Nebraska.

Comment: Nebraska has taken a position that the operating ratio should be 93. Tariffs are prescribed by Nebraska. Rates between two points will be the same for all carriers. Rate increases or commodity rate decreases are carrier driven. Why are rates low? Carriers are being fair to themselves and to the general public. Nebraska does not allow discounting. Nebraska doesn't have the 100 to 200 percent increases which are then eaten away by discounts. Nebraska has allowed 5 to 7 percent increases.

Comment: Aren't commodity rates a form of discounting? Does anyone think that interstate rate levels that are accurate are available? Contract rates are increasingly used and there is no information on contract rates.

Comment: The average discount at the federal level is now about 40 percent. Texas is lower than Nebraska. Texas is getting about 70 percent discounts. The costs are so low in Nebraska because of limited entry. With open entry, there is an over abundance of service to every town, splitting the traffic and raising the cost of performing LTL service.

Comment: The freight bills indicate that rates are not lower in Texas. Look at the behavior of shippers in terms of where they locate their warehouses.

<u>Issue #6</u>--What would happen to the service levels at small communities if deregulation occurred at the state level? What would be the price-service tradeoffs available to the shipper?

Comment: If a carrier has a rural area to serve, it is not cost effective to serve it regularly, but it is mandated that the area be served anyway. If you completely deregulate, it might take three

weeks to get what the shippers want because the carriers will wait until they get a truckload. Now, big cities subsidize rural areas.

Comment: This issue goes to the whole area of private trucking and small communities. Even with mandatory service under regulation, you wouldn't get service. The type of regulation at the state level does not control service.

Comment: Any carrier serving all of its authority was a rarity. One of the big arguments against deregulation was service to small communities. The opposite was true. In Arkansas, service to several small communities picked up after deregulation.

Comment: One could argue that state regulation insures that small communities get service.

Comment: A lot of studies shows otherwise. All studies show that the small communities are not getting hurt.

Report from Breakout Session B

The breakout session started with a discussion of the extent of regulation in each state. The most important revelations from this breakout session are the following:

<u>Issue #1</u>--The requirements among the states are similar but the staffs are different. Iowa has a staff of 3 people while Nebraska has a staff of 14 or 15 although only a few participate.

Comment: Does the size of the staff determine if the agency responds to complaints or the agency monitors activities? By monitoring is meant reviewing annual reports, going out and collecting data, or taking a proactive position.

Comment: Shippers don't generally come before the agency. They don't have the time or don't know what kind of information is available to them.

<u>Issue #2</u>--Small community service under deregulation remains an issue.

Comment: An important research issue is finding out if, in fact, shippers in small communities are being served, and how they feel about regulation. What kind of regulation would be helpful to them? Ask the shipper as opposed to the agencies involved.

Comment: How many complaints do state agencies receive? What are the agencies doing to let shippers, particularly small shippers, know that there is an agency if they have a problem.

Comment: Since 1980, Iowa has published each year a directory called "Moving Freight in Iowa." It shows who has authority to provide service and discusses the regulatory agency and to whom the shipper can go for help. This may explain why the Iowa DOT is not hearing from

the small communities. They may be hearing the answers from within their own communities.

Comment: A number of complaints do come from other carriers concerning unlawful carriage. Inquiries about available transportation go to any number of agencies beyond the regulatory agencies. Chambers of Commerce and economic development agencies get lots of inquiries.

General Comments

Comment: Under the general scheme of regulation, shippers don't have the option of lower price as opposed to a greater service.

Comment: Under the general scheme of regulation, pricing was controlled at a level which would provide some profit to the carrier. In the free market system, you are saying that price is everything and that man is greedy and will take what he can get. If you get nothing, so be it.

Comment: Carriers have to sell the value aspects of our business. Someone can always provide the service at a lower price. The final analysis is what is best for the shippers and consumer public.

Comment: The vast majority of the shippers want the carriers to make a profit. There has to be some competition in the business, but competition in trucking has reached a point in many cases where it is undesirable. Some limitation on low cost pricing is absolutely necessary. Opening up entry completely has been a mistake. Working models of effective regulation exist in Nebraska and Texas.

ENDNOTE

1. Bruce W. Allen, Arayah Preechemetta, Gang Shao, and Scott Singer, <u>The Impact of state Economic Regulation of Motor Carriers on Intrastate and Interstate Commerce</u>(Washington, D.C.: U.S. Department of Transportation, May 1990).